9

SEVENTH

BIENNIAL REPORT

OF THE

STATE ENGINEER

TO THE

GOVERNOR OF UTAH

1909-1910

Tribune-Republican Printing Company
Salt Lake City
1911

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LETTER OF TRANSMITTAL.

Salt Lake City, Utah, November 30, 1910.

Honorable William Spry,

Governor of Utah.

Sir:—In accordance with Section 1265, Compiled Laws of Utah, 1907, the seventh biennial report of the work of the State Engineer's office is herewith respectfully submitted.

CALEB TANNER,
State Engineer.

SEVENTH BIENNIAL REPORT

OF THE

STATE ENGINEER

For the Years 1909 and 1910.

WORK OF THE DEPARTMENT AND RECOMMENDATIONS:

ENGINEER'S OFFICE. As heretofore, the principal work of the State Engineer's office, during the period covered by this report, has been with the business relating to applications for the unappropriated public water of the state. Practically all of the revenue of the State Engineer's office has been derived from applications for water and the business incidental thereto. The majority of the engineering and office force under the control of the State Engineer has been engaged in the direct or auxiliary business of applications for water.

The number of applications filed exceed in number those received during the preceding biennium. The fee book for the two years just closing shows that the income of the office, almost entirely from applications, is more than double the income for the period covered by the last report.

In respect to the amount of business handled and also in respect to the amount of revenue turned into the state treasury, the State Engineer's office has made, for these two years, a record for an endeavor of the accomplishments of any office like period since the establishment of the office. For the first time in its history there has been turned into the state treasury, as revenues from the office, a sum in excess of the appropriations for its maintenance.

While the business of applications for water still remains first, the business relating to proofs of construction of works built to bring the water to a beneficial use and proofs of beneficial use of the water is steadily growing in volume.

In addition to the work attendant upon and growing out of the application for and the appropriation of the public waters, the State Engineer's office has since 1903, been engaged in the survey of the natural streams of the state, the irrigation ditches, the irrigated lands, the power canals, and other diversions of the public waters for beneficial purposes, in those sections of the state where rights to the use of water had not been adjudicated by the courts, or where if adjudications had been made, the adjudications were partial, not having covered systematically and finally the whole situation, and settled definitely the whole problem. Attention thus far has been given to localities where adjudications were entirely absent, or where the judicial adjustments were so incomplete, as to leave the water rights in a condition of uncertainty.

In pursuance of this work, the area irrigated from the Logan River in Cache County, was surveyed during the season of 1909, and in addition to the rights for irrigation, all other rights to the use of the waters of Logan River, were made a subject of official investigation and report. During the period of this field work, a careful record of the flow of the several canals supplying this section with water for irrigation and other purposes was kept, particular effort being made to get the relationship (for each diverting channel) between the quantity of water diverted and the quantity that reached the place of actual use.

During the latter part of 1909, work was begun on the Virgin River in the southeastern part of the state. The field examinations on that stream covering the main river and all its tributaries, has been completed. A record of the use of water on this river, as far as it was reasonably practicable to obtain, for the seasons of 1910 has been made. The natural streams have been measured and a continuous record of their flow obtained at points that seemed most desirable to throw light upon questions of the use of the

water. One of these measuring stations is located on the Virgin River at Virgin City, and two on the Clara Creek tributary, viz: at Hunt's Ranch, four miles above Central, Washington County; and at the lower end of the Clara Field, just above the confluence of the Clara Creek with the Virgin near Saint George.

Each diverting canal or ditch has been measured at least once, to determine the capacity. On many of the important canals, a continuous record of flow has been kept. Hundreds of springs have been measured, some used for irrigation, some for domestic and municipal purposes and some for the watering of stock.

While the irrigated area on the Virgin is much less than that of the Logan, the irrigated tracts are so scattered and much of the country so difficult of access, that the cost of the survey per acre in this section will be greater than the cost in the more compact Logan area.

RESERVOIR SURVEYS. Incidental to this work of surveying the irrigated lands and measuring the water appropriated and unappropriated, the law provides that the water sheds supplying the water should be examined, for the purpose of locating all feasible storage possibilities with the view of determining the expense and cost of storage. Following this direction of the law, one surveying party was detailed to make a reconnaissance of the southern part of the state, to map the storage sites where storage appeared practicable, and to collect and assemble such other data as would bear upon the feasibility, amount and cost of storage.

In addition there was to be prepared for each reservoir site surveyed, a statement giving the area tributary thereto and the stream flow available for storage wherever records were available. In the absence of stream flow information, there was to be prepared some approximate run-off data, based upon such rain fall records as were to be had. The detailed report of the engineer in charge of this work is to be found in the later pages of this volume.

USE OF ENGINEER'S DATA BY COURTS. None of the material collected by the State Engineer in the hydrographic surveys thus far made, has as yet been put to the use contemplated by the irrigation law, the reason being that the legislature has been averse to appropriating money outright for the litigation of the undetermined water rights of the citizens of the state. This disposition is grounded upon the fact that in many parts of the state where the courts have adjudicated the water rights, the appropriators have not only paid the expense of the court proceedings, but have also paid for the collection and presentation of all the physical data that has been submitted to the court in the course of the litigation. The legislative representatives from districts which now have their water rights judicially fixed, take the position that the state having collected all the physical data for adjudication purposes has done sufficient. In the view of these legislators, the water users cannot reasonably ask more from the state than is given by the hydrographic survey, since the fact is that this is much more than the state has done heretofore for any other appropriators of the public water.

The irrigation committees of the last legislature expressed a willingness to recommend the appropriation of a fixed sum to be used as a revolving fund to take care of the court proceedings, the state appropriation to be used in paying the court expenses attendant upon these adjudications while such adjudications were in progress, at the conclusion of the judicial action, the court costs to be distributed among the litigants in proportion to their water rights, said sum to be collected in the same manner as the regular taxes and to go back into the state treasury for use over again for like purposes. This legislation was antagonized by certain representatives from Weber County, in the interests of which district the law was suggested. By reason of that antagonism, the measure failed to receive favorable consideration from the committees to which it was referred.

The extension of the hydrographic surveys to other parts of the state within the last two years, with the express understanding that the litigation expenses would probably have to be paid by the interested people, it is

expected will result in legislation that will make available for practical use, the accumulations of data that have been made on the Weber, the Logan, and the Virgin rivers.

STATE RESERVOIRS. As engineering advisor and constructing director for the State Land Board, the State Engineer has supervised an expenditure of $460,000 taken from the Reservoir Land Grant Fund, for the construction of storage reservoirs and other irrigation works. A considerable portion of this sum has been used during the biennium just closing. This responsibility has called for a considerable field and office force, which although under the control of the State Engineer, has been paid from the funds of the Reservoir Land Grant.

It is worthy of note, that so far as new irrigation development is concerned, for the period covering the years 1906-1910, the State Land Board, by the use of the Reservoir Land Grant Fund, has directly and indirectly contributed more to building new irrigation works than the whole sum of private and corporate effort over the entire state within the same period. The total contribution of the state to these purposes exceeds $650,000.

ROADS. The last legislature enacted a comprehensive road law, which after some essential preliminaries, has during the latter half of the present year, reached a stage where actual road construction is under way. The State Engineer by statutory provision, is a member of the State Road Commission, and since the organization of the Commission in 1909, has acted as its secretary.

SURVEYS FOR STATE INSTITUTIONS. The appropriation bill four years ago provided: "All necessary surveys for state institutions shall be under the direction and by the State Engineer, without additional charge." This provision contemplates that the State Engineer should make all the surveys and supply plans, etc., as per the requirements of the several public institutions of the state. No funds,

however, were provided by the legislature at that time, nor since, for carrying into execution this provision. The only source from which means might be diverted to such purposes, is the State Engineer's Contingent Fund, which in the appropriation bill of 1907 was $1,000, and in the appropriation bill of 1909 was $3,000. While the amount contained in 1909 is considerably larger than the appropriations theretofore, additional charges were fastened by the legislature upon this fund outside of traveling expenses of the State Engineer, viz: rent of office, which actually consumes $2,000 of the appropriation. This leaves a sum, as can be seen without the necessity of particularizing further, which if it were all spent in taking care of the traveling expenses of the engineer for two years, in his necessary and lawful movements about the state, to discharge properly the business of his office, would to say the most, be little enough for the purpose.

If it were the expectation that the State Engineer in *propria persona* must undertake and execute all which this provision of the statute contemplates, and which is not an unreasonable deduction from the words "and by the State Engineer," it is not a reasonable expectation and is not to be realized as a matter of practicable business and economic common sense. Because of the terms of the statute quoted above, some business friction has been experienced between the office of the State Engineer and the official boards of some of the public institutions. This difficulty might be removed, by striking from the law the words: "without additional compensation," and making an appropriation for the specific purpose of doing the surveying and engineering work for the public institutions.

CAREY ACT WITHDRAWALS. In a somewhat fragmentary way, the State Engineer has acted with the Land Board in the proceedings that attend the reception of applications for the withdrawal of public lands for reclamation purposes under the Carey Act. The State Engineer's connection with this business has frequently been purely perfunctory. There is no requirement as in many other "Carey Act" states, that a substantial investigation of the proposals and applications be

made by the State Engineer. It has been deemed sufficient in some cases to give an official paper of about the following tenor, concerning projects involving tens of thousands of acres of land, and requiring for the construction of the reclamation works, great sums of money:

"It appears after examination of the application of John Doe, together with the maps, proposals and explanatory material attached thereto, that it is the intention of the applicant to reclaim ..... acres of desert land in ..... County.

"According to the statement of the applicant, the land to be reclaimed is desert, the irrigation constructions feasible, the water supply sufficient and the relation of selling price to cost reasonable."

Manifestly a statement like or comparable to the above, is without instruction and has usefulness only as a formal compliance with official routine. It contributes nothing except to placate official formality.

In reports of this kind, where there is a total absence of official substance, the practical results from their use would seem to weaken the case of the applicant rather than to add strength to or prompt consideration for his request for withdrawal, and this result probably is experienced before the bureaus of the federal government that must pass affirmatively upon these matters before such withdrawals are granted. Not only this, but such reports would seem to act as a source of weakness when such projects are presented to the investing public for its interest and support.

In this respect, the practice of the Land Board should be strengthened so as to make the report of the engineer by requirement as exhaustive and conclusive as practically obtainable.

Some of these Carey Act matters have been unduly hurried. This objection should be cured by insisting upon sufficient time for the officers of the state to go into every phase of the proposal, and in cases where it is deemed advisable, particularly where the information of the applicant is incomplete, to make the time ample for a sufficient field examination, to gather the information necessary to pass an intelligent judgment in the premises.

In some cases, as might be expected, the Engineer's office has been equipped with all the information reasonably required or obtainable upon the proposition. In such cases, the reports based upon substantial official data, has given a very desirable foundation upon which to rest conclusions and recommendations concerning the business.

The interests of the state and the interests of the applicant will always be best served by having the information full and the analysis of the information fairly made. Full information and a fair analysis of the same, make it clear that the state intends to be provident of its interests and reputation. Such thoroughness serves best the legitimate interests of the applicant and most desirable of all, it tends to protect the man who must finally bear all the burden of the reclamation.

To guard the interests of the settler under Carey Act projects, the Land Board has on occasions provided that before the acceptance of completed works, an examination and favorable report must be had from the State Engineer. This is particularly commendable where the works are of considerable magnitude and of such a character that a technical examination of their sufficiency is advisable before the constructing corporation is discharged from liability.

BRIDGES. The appropriation bill of 1909 provided for the construction of four bridges as follows: Over the Sevier River at Marysvale, over the Green River at Greenriver City, connecting Emery and Grand counties, over the Green River at Jensen, Uintah County, and over the San Juan River at the Narrows, San Juan County.

The expenditure of the appropriations made for these purposes was placed in the hands of the commissioners of the several counties, the following provision, however, being appended: "Providing that plans and specifications for the above bridges shall first be approved by the State Engineer."

In accordance with this enactment, plans for all these bridges were approved by the State Engineer in 1909. Of these bridges, two have been completed, viz: at Marys-

vale and at the Narrows of the San Juan River; one is nearly completed at Greenriver, Emery County; and one is in course of construction at Jensen, Uintah County.

Representatives of the bridge constructing companies have considered this law unnecessarily onerous and measurably unjust. The law and the procedure of the county commissioners practically requires that each bidder must present complete plans, specifications and detailed drawings with his bid, when such is made to the county commissioners having responsible charge of the work. The plans, specifications and detailed drawings must then be submitted to the State Engineer for his approval. In order to fill the requirements of the State Engineer's office, this material must be furnished in duplicate, the maps, plans and details being on tracing linen. In the ordinary practice of bridge contractors, this is an extraordinary, unusual and an expensive requirement, representing a great departure from the ordinary practice heretofore accepted for doing this class of business in this and adjoining states.

Some of the objections of the bridge companies would be removed if the county commissioners would determine from their negotiations with the competing bridge companies, what company was to build the bridge, the accepted bid being contingent upon the successful bidder furnishing plans, specifications and detailed drawings, approved by the State Engineer.

IRRIGATION DISTRICT LAW. During the last session of the legislature, a district irrigation law was passed, derived practically from a like law in operation in the State of Colorado, concerning which the State Engineer of that state writes as follows in 1909: (See 14th Biennial Report, State Engineer of Colorado, pages 47 and 48.)

"Sufficient time may not have elapsed from which to judge the operation of these districts, and what may properly be expected from them. The difficulties that have been encountered by the first year's operations were not confined solely to those to be expected in bringing the area into cultivation, but were greatly increased by the temporary character and inferior methods of constructing the works of the irrigation system. Even at this early stage, outlays and repairs have been found necessary, necessitating an additional expenditure of

money to bring them to a condition of usefulness, and so the farmers could derive some benefit from them.

From the great prices paid for the amount and class of work done for the districts, it is reasonable to expect that the system should be completed and be in good working order for the uses and purposes of storing and distributing water when it is turned over to the district, but in some instances the district has been deprived of water on account of the mistakes discovered when the water was first turned through the canals, due to the inattention given to constructive details. * * * * * * * *

In view of this great amount of bonds to be issued, which are to be presented to the public for purchase and investment, it is my opinion that the interest and credit of the state are involved, and it should protect its citizens against any possibility of a failure of any enterprise initiated under the provision of its laws, to which end an examination and report should be made by the State Engineer upon the questions.

1. The permanency and adequacy of the water in the source of supply, for the full irrigation of the lands in the district, so as not to include any more land than the supply of water obtainable will be sufficient for its proper irrigation, and so as to reduce to a minimum, the prorating or rotation provision of the statute.

2. The feasibility of the project, which would also include the capacity of the proposed works of the reservoir, ditches and laterals, as to their adequacy to impound or carry the volume of water necessary for the irrigation of the land included in the district, also the design and material used in construction of the structures appurtenant to the system together with an estimate of cost of the entire system, showing that a reasonable expenditure will be sufficient for all the purposes of the district and upon which the bond issue is to be based.

If this information was obtained and the report made by an official of the state, it would place the bonds upon a much more favorable basis, attract the attention of bond houses and probably secure the sale of the bonds at the price mentioned in the statute, for cash. * * * * * * * * *

Since the publication of the last biennial report, there have been seven new irrigation districts formed. These seven districts have voted a total bond issue of $7,067,000 on 247,000 acres of land. The amount of bonds sold is $1,670,000.

The experience of Colorado will be profitable to Utah, only if the weaknesses of the irrigation district law discovered by its operations there are eliminated from its prototype in Utah.

RECOMMENDATIONS AS TO LEGISLATION.

1. The present salary of the State Engineer was fixed by statute several years ago, when the requirements as to service performed were vastly less than at present. Each legislature has directed the State Engineer to per-

form additional work beyond that contemplated in the statute creating the office. These responsibilities are so varied in character and involve great interests. The expenditures of large sums of money in the construction of great public works, together with the multitude of irrigation and engineering questions of great concern to the welfare of the state, which come into his hands for solution or adjustment, make the office of State Engineer of first importance. In consideration of these facts, it is respectfully recommended that Section 1262 of the irrigation law be amended to read as follows:

"The State Engineer shall receive a salary of $3,600 per annum, payable, etc."

2. The irrigation statute should be amplified in the features that have reference to the apportionment of water. Colorado and Wyoming, which have an administration of the public waters like that contemplated by our statute, have had an extended experience with this administrative feature of their laws. The statutory necessities developed by actual experience in these states, should point the way this state should go in order to obtain administrative efficiency.

3. The State Board of Land Commissioners on June 16, 1908, acquired an application for water from the Otter Creek Reservoir Company, No. 296 of the State Engineer's files. This application was approved February 1, 1906, four years being given for the completion of the work. Subsequently the time was extended to February 1, 1911. The State Supreme Court in the case of Pool vs. the Utah County Light & Power Company, (see page 191), has held that the State Engineer has no discretion, under the law governing this application, to extend the time for completion beyond a maximum of five years. In order to safe-guard the interests of the state in the matter of this application, upon which vitally depends the success of the Pinte Irrigation Project, the legislature should amend Section 1288x13, Session Laws of Utah, 1909, last paragraph, to read as follows:

"It is further provided, that in the case of the works constructed by the United States Reclamation Service,

the *State of Utah*, or municipal corporations, the State Engineer may, for good cause shown, extend the time for completion of construction and application to beneficial use, beyond the limits specified in this section."

4. Much of the land to be reclaimed by the use of the Reservoir Land Grant Fund is state land, selected under some of the federal land grants, which were granted to the state in the Enabling Act. Generally, as the statute provides, and following the rules of the Land Board, lands are selected from these several grants for citizens of the state at a standard price of $2.50 per acre. When selected lands are reclaimed by use of the Reservoir Land Grant Fund, and sold at a greater sum than $2.50 per acre, it is inevitably at the expense of the Reservoir Land Grant Fund, which in this respect would not receive even justice as compared with selections for individuals. If it should occur that having been selected for reclamation by use of the Reservoir Land Grant Fund, it subsequently becomes impracticable to realize $2.50 an acre net for the land, the Land Grant Fund suffers because part of its land was selected for reclamation by use of the Reservoir Land Grant Fund. The Reservoir Land Grant Fund, therefore, in justice should receive any increment in values over what the lands would bring if selected for private citizens. It should also stand the loss, if any, that comes to such selected land by reason of its being selected for reclamation by the use of said Reservoir Fund. The statute governing the action of the Land Board in this business, should provide that whenever lands are selected for irrigation and reclamation by the use of the Reservoir Land Grant Fund, that the said selected lands shall be paid for from the Reservoir Land Grant Fund, at a price of $2.50 per acre, the moneys so realized to go to the various grants from which the selections were made, said money being divided among these several grants in the same proportion as the selection of lands for said purpose.

RECOMMENDATIONS AS TO APPROPRIATIONS FOR THE YEARS 1911-1912.

For necessary Irrigation Contingent Expenses; salaries of stenographers, engineers, recorders, calculators, and draftsmen; for preparing maps and records and tabulating water claims	$30,000.00
For State Engineer's Contingent Expenses, rent of offices and necessary traveling expense	4,000.00
For surveys of public institutions	1,000.00
Total expenditures for the direct uses of the State Engineer's office	$35,000.00
For the purpose of carrying into effect the provisions of Chapter 98, Session Laws of Utah, 1909, there should be appropriated annually the sum of $3,000, making the total for this purpose	$ 6,000.00

Co-operation with the United States Geological Survey in gathering water statistics is desirable, in order to obtain the best results. It prevents duplication of work, the field covered under co-operative arrangement is larger and the results more systematic.

The waters of Utah are one of the chief assets of the state. Upon the use of this resource to the fullest extent economically attainable, rests mainly the future growth of the commonwealth. While the fullest use of our unused waters is therefore of the highest importance, to be safely accomplished and profitably maintained, development resting upon the economical and complete utilization of this resource must be founded upon substantial information, based upon actual measurements and observations.

The scope of this work of determining our water supply should be enlarged. The best interests of the state require this. The field of water supply information should be extended to cover the little known and not readily accessible sections where the natural opportuni-

ties for agricultural enterprise and power development may be large, but where the facts concerning the water supply are meager or entirely wanting—those sections where little has been done and much remains yet to do before full practicable utilization is realized.

The amount recommended to be appropriated aggregates for the biennium $2,000 more than the appropriation of 1909-1910. This sum, however, is not more than sufficient to accomplish the work necessary to be done in this state in the measurement of our streams. The appropriation is contingent upon the general government appropriating the same amount, to be used for this purpose exclusively in the State of Utah.

Fund for the adjudication of water rights, to be used as a permanent revolving fund, which shall be known as the "ADJUDICATION OF WATER RIGHTS FUND" $ 8,000.00

For the purpose of advancing the money required for the expenses of district judges, compensation and expenses of referees and compensation and expenses of stenographers, as provided in Sections 1272 to 1285, inclusive, Compiled Laws of Utah, 1907, there is hereby appropriated and set apart from any moneys in the general fund in the state treasury, the sum of $8,000, to be known as the "ADJUDICATION OF WATER RIGHTS FUND," which shall be a permanent fund and which shall be used only for the payment of expenses as provided herein.

The sums allowed by the State Board of Examiners, upon certificate of the proper district judge to the State Auditor, for expenses and services paid from the "ADJUDICATION OF WATER RIGHTS FUND" as herein provided, shall at the conclusion of a water adjudication, be certified by the State Auditor to the judge and clerk of the court in which said adjudication has been made and the same shall constitute a part of the costs and disbursements in said cause. The court, at the time of entry of final judgment in said cause, shall adjudge and determine the proportionate amount of such cost of adjudication, to be paid by each of the parties of said action; and the respective sums so apportioned are hereby declared

to be a lien upon the lands and water rights of the said parties, and the said respective sums shall be entered by the auditors of the proper counties upon the assessment roll of the county in which the property is situated opposite the names of the parties respectively required to pay the same, and said sums shall be collected in the same manner and at the same time as other taxes are collected, and shall be placed in a separate fund, to be remitted to the State Treasurer at the same time that other taxes are remitted and to be placed by said treasurer in the "ADJUDICATION OF WATER RIGHTS FUND."

FEES.

The fee register of the State Engineer's office for the period January 1, 1909, to November 30, 1910, shows the sources of revenue to be as follows:

For examining and filing applications	$33,996.51
For recording and approving applications	1,825.00
For examining and filing notices of protest	647.50
For examining and filing written proofs of appropriation	123.00
For examining and filing maps, etc., to accompany written proofs of appropriation	580.00
For issuing certificates of appropriation	74.00
For examining and filing plans and specifications	488.40
For field service performed	70.00
For examining and filing affidavits	1,146.00
For making search of records	112.80
For making certified copies	666.15
For making blue prints	31.50
For miscellaneous purposes	36.20
For examining and filing application for change of point of diversion	88.50
For recording papers of assignment	75.30
Making a total of	$39,960.86

EXPENDITURES.

IRRIGATION CONTINGENT.

For the necessary irrigation contingent expenses for the years 1909-1910, there was appropriated the sum of $25,000. Expenditures have been as follows:

Maintenance of the State Engineer's office for assistants, stenographers, draftsmen, copyists and for supplies and instruments	$14,002.30
Survey of the Logan River	3,738.77
Survey of the Virgin River	5,462.70
Reservoir surveys	1,287.00
Total	$24,490.77

STATE ENGINEER'S CONTINGENT.

For the contingent expenses, rent of office and necessary traveling expenses of the State Engineer, $3,000 was appropriated. Expenditures are as follows:

Rent of office	$ 1,863.00
Traveling expense, State Engineer	472.78
Supplies	143.45
State Road Commission expenses	505.69
Balance	15.08
	$ 3,000.00

HYDROGRAPHIC SURVEYS.

The sum of $2,000 annually was appropriated by the last legislature, contingent upon the United States making a like appropriation, the whole to be expended within the state for the collection of data pertaining to the water supply of the state, particularly the gaging of the streams of the state, maintaining and compiling observation of fluctuations of their flow, assembling this data for publication so as to present in printed form all the data possible pertaining to water supply.

In pursuance of this agreement, the state will have expended the whole sum appropriated, the government having already made corresponding appropriations for the purpose specified in Chapter 98 of the Session Laws of Utah, 1909.

The control of these expenditures has practically been in the hands of the district engineer of the Water Resources Branch of the United States Geological Survey for this district, the State Engineer acting only in a consulting and advisory capacity.

By the use of this money, the observation of stream flow has been extended to parts of the state that have been absolutely barren of water supply records of any kind. Such streams as the San Rafael, the Fremont, the Beaver, the Clara and the Virgin. While these extensions have been made, at the same time all the stations established prior to 1909 have been maintained.

Summary of Applications Made Between November 30, 1908, and November 30,1910.

IRRIGATION

DRAINAGE AREA.	No. of Applications	Water Applied for		Area to be Irrigated
		Cu. ft. per sec.	Acre ft.	
Bear River	14	3,058.35	125	167,065.16
Colorado River	128	4,275.80	938,564	1,078,024.15
Green River	248	8,586.59	1,195,829	2,203,452.04
Great Salt Lake	71	497.40	83,480	205,599.94
Sevier River	215	2,816.52	472,073.6	339,988.51
Utah Lake—Jordan River	112	2,661.365	125,785	722,847.31
Weber River	21	1,238.08	100,000	490,766.00
Totals	809	23,134.105	2,895,251.6	5,207,743.11

POWER

DRAINAGE AREA.	Number of Application	Water Applied for		Horse Power to be Generated.
		Cu. ft. per sec.	Acre ft.	
Bear River	12	815		16,475.00
Colorado River	5	180	5,000	4,530.00
Green River	21	20,950		446,971.00
Great Salt Lake	22	251	750	10,304.00
Sevier River	30	761.50	7,997	28,654.00
Utah Lake—Jordan River	99	2,988.75	3,959	124,581.80
Weber River	27	2,645	262,020	118,776.00
Totals	216	28,591.25	279,726	750,291.80

Summary of Applications—Continued.

MINING

DRAINAGE AREA	No. of Applications	Water Applied for	
		Cu. ft. per sec.	Acre ft.
Bear River			
Colorado River	6	520	
Green River	1	1	
Great Salt Lake	12	20.55	
Sevier River	12	14.90	
Utah Lake—Jordan River	7	5.825	
Weber River			
Totals	38	562.275	

DOMESTIC AND MUNICIPAL

DRAINAGE AREA	No. of Applications	Water Applied for	
		Cu. ft. per sec.	Acre ft.
Bear River	5	4.815	
Colorado River	2	1.75	
Green River	10	6.06	47
Great Salt Lake	22	17.98	
Sevier River	14	9.12	
Utah Lake—Jordan River	33	39.54	2,387
Weber River	11	12.676	
Totals	97	91.941	2,434

Summary of Applications—Continued.

STOCK WATERING

DRAINAGE AREA	No. of Applications	Water Applied for	
		Cu. ft. per sec.	Acre ft.
Bear River	3	.50	
Colorado River	52	4.63	
Green River	73	10.66	20.102
Great Salt Lake	8	2.35	
Sevier River	80	107.18	2.00
Utah Lake–Jordan River	4	1.07	
Weber River	5	.33	
Totals	225	126.72	22.102

MISCELLANEOUS

DRAINAGE AREA	No. of Applications	Water Applied for	
		Cu. ft. per sec.	Acre ft.
Bear River	2	11.5	
Colorado River	2	1.20	
Green River	9	22.31	196
Great Salt Lake	3	21.00	
Sevier River	13	112.50	60,000
Utah Lake—Jordan River	51	793.061	
Weber River	2	5.00	
Totals	82	945.571	60.196

TABLES

Applications to Appropriate Water

Arranged for Each Drainage-area

IN ORDER OF PRIORITY

Applications to Appropriate Water from the Weber River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Weber River	Willard Young	Salt Lake City	Irrigation	1000		8	4 N	2 E	Morgan	Dec.	17	1908	2190
Weber River	Weber Res., Power and Irrigation Co.	Coalville, Utah	Irrigation		75,000	*	*	*	Weber	Dec.	17	1908	2191
Weber River	Weber Res., Power and Irrigation Co.	Coalville, Utah	Power	300	75,000	10 11 14 15	6 N	8 E	Weber	Dec.	17	1908	2192
Weber River	Knight Power Co., Assignee, Thos. L. Allen	Coalville, Utah	Power	500		8	4 N	2 E	Morgan	Dec.	17	1908	2193
Weber River	Weber Res., Power and Irrigation Co.	Provo, Utah	Power	150		1 20 21	1 S 1 N 1 N	7 E 8 E 8 E	Summit	Jan.	4	1909	2209
Weber River	Sidney M. Bamberger Assignee, Louis D. Farnsworth	Coalville, Utah	Power		160,000	4	3 N	4 E	Summit	Feb.	11	1909	2270
Weber River	Willard Young	Salt Lake City Salt Lake City	Power Irrigation	300	25,000	30 8	5 N 4 N	1 E 2 E	Davis Morgan and Summit	Feb. Feb.	13 13	1909 1909	2271 2272
Cold Water Creek	Eva P. Lewis	Ogden, Utah	Irrigation	6		19 24	6 N	1 E	Weber	Mar.	2	1909	2306
Thornton Spring and Barrett Canyon	William Bailey	North Ogden, Utah	Irrigation	.5		16	7 N	1 W	Weber	Mar.	4	1909	2308
Weber River	Willard Young	Salt Lake City	Power	500		8	4 N	2 E	Morgan	Mar.	16	1909	2322
Spring	Anson Thornton	North Ogden, Utah	Irrigation	1		27	7 N	1 W	Weber	Apr.	12	1909	2362
Spring	Carrie A. Zimmerman	Ogden, Utah	Domestic	1		26 27 34 35	6 N	1 W	Weber	Apr.	12	1900	2363
Cold Water Creek	Eva P. Lewis	Ogden, Utah	Domestic	6		19 24	6 N	1 E	Weber	Apr.	22	1909	2389
Cold Water Creek	Eva P. Lewis	Ogden, Utah	Power	6		19 24	6 N	1 E	Weber	Apr.	22	1909	2390

*Note.—Application No. 2191 has four points of diversion: North Ogden Canal—Sec. 22 T. 6 N. R. 1 W: Harrisville Canal—Sec. 21 T. 6 N. R., 8 W. Plain City Canal—Sec. 19 T. 6. N. R. 1 W: Fremont Park Canal—Sec. 23 T. 6 N. R. 2 W. S. L. M.

APPLICATIONS TO APPROPRIATE WATER FROM THE WEBER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Rice Creek	Rice Creek Irrigation Co.	North Ogden, Utah	Power	10		20 21 28 29	7 N	1 W	Weber	May	10	1909	2423
Smith and Morehouse Ck.	Knight Power Co., Assignee, Thos. L. Allen	Provo, Utah	Power	6000		1	1 S	7 E	Summit	May	13	1909	2432
Gildersleve Lost Creek	John S. Turner	Croyden, Utah	Irrigation			26 35	5 N	4 E	Morgan	June	1	1909	2476
Joseph Combe Spring	Joseph Combe	Uintah, Utah	Stockwatering	.02		14	5 N	1 W	Uintah	June	5	1909	2484
Burch Creek	B. P. Critchlow	Ogden, Utah	Power	10		14	5 N	1 W	Weber	July	29	1909	2606
White Pine Canyon Creek	Western Monitor Mining Company	Salt Lake City	Power	3		18 19	2 S	4 E	Summit	Aug.	2	1909	2610
Weber River	Moses W. Taylor	Salt Lake City	Power	100		36	1 N	6 E	Summit	Aug.	4	1909	2615
Weber River	Davis & Weber Counties Canal Company	Ogden, Utah	Power	300		30	5 N	1 E	Davis	Oct.	6	1909	2721
Weber River	Davis & Weber Counties Canal Company	Ogden, Utah	Irrigation	215		30	5 N	1 E	Davis	Oct.	9	1909	2722
Spring	Utah State Industrial School	Ogden, Utah	Irrigation	2			Spring		Weber	Oct.	23	1909	2762
Springs	Utah State Industrial School	Ogden, Utah	Power	2			Springs		Weber	Oct.	23	1909	2763
Weber River	Knight Power Co., Assignee, R. E. Allen	Provo, Utah	Power	30		8	1 S	7 E		Oct.	28	1909	2773
Ogden River	L. B. Spencer	Ogden, Utah	Power	5		13 18 19 24	7 N	3 & 4 E	Weber	Nov.	3	1909	2784
Ogden River	L. B. Spencer	Ogden, Utah	Power	20		23	7 N	3 E	Weber	Nov.	3	1909	2785
Lewis Canyon Water	Thomas Rees	Coalville, Utah	Irrigation	4		7	2 N	5 E	Summit	Nov.	6	1909	2795
Cooper's Spgs. Nos. 1, 2, 3	W. D. Brown et al	Rockport, Utah	Stockwatering	.10		7	1 S	5 E	Summit	Nov.	11	1909	2805
Springs	James Salisbury	Rockport, Utah	Irrigation	1		5 7 8	1 S	5 E	Summit	Nov.	13	1909	2814

APPLICATIONS TO APPROPRIATE WATER FROM THE WEBER RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	G. L. Beker	Ogden, Utah	Domestic	.15		20	6 N	1 E	Weber	Nov.	22	1909	2829
Spring	G. L. Beker	Ogden, Utah	Domestic	.016		20	6 N	1 E	Weber	Nov.	22	1909	2830
Springs	William Boyer	Coalville, Utah	Irrigation	.33		8	2 N	5 E	Summit	Dec.	1	1909	2850
Chalk Creek	Moses W. Taylor	Coalville, Utah	Power	20		12	2 N	5 E	Summit	Dec.	3	1909	2853
Springs	W. D. Brown, et al	Rockport, Utah	Stockwatering	.05		7	1 S	5 E	Summit	Dec.	7	1909	2857
Kents Canyon Springs	Worthy & Chas. Gibbons	Rockport, Utah	Stockwatering	.05		6	1 S	5 E	Summit	Dec.	7	1909	2858
Hardscrabble Creek	L. B. McCornick	Salt Lake City	Power	15		34	3 N	2 E	Morgan	Dec.	8	1909	2861
Springs	James Vernon, et al	Rockport, Utah	Domestic	.1		5	1 S	5 E	Summit	Jan.	18	1910	2919
	Utah State Industrial School	Ogden, Utah	Power	2		Springs			Weber	Jan.	19	1910	2920
Springs	Utah State Industrial School	Ogden, Utah	Irrigation	2		Springs			Weber	Jan.	19	1910	2921
Cedar Hollow Spring	Geo. T. Stenhouse	Morgan, Utah	Irrigation	.25		24	4 N	2 E	Morgan	Jan.	29	1910	2952
Weber River	Knight Power Co., Assignee, T. L. Allen	Provo, Utah	Power	150		32	4 N	4 E	Morgan and Summit	Feb.	9	1910	2981
Weber River	Knight Power Co., Assignee, T. L. Allen	Provo, Utah	Power		12,000	20 21	1 N	8 E	Summit	May	7	1910	2982
Allgood Springs	Coalville Waterworks and Power Company	Coalville, Utah	Domestic	3.5		7	2 N	5 E	Summit	Feb.	28	1910	3029
Springs	Ogden Canyon Resort Co.	Ogden, Utah	Domestic	.16		17	6 N	1 E	Weber	Mar.	1	1910	3037
Ogden River	H. J. Craven	Ogden, Utah	Power	20		23	7 N	3 E	Weber	Mar.	2	1910	3040
Ogden River	H. J. Craven	Ogden, Utah	Power	20	20	1 6 31 36	6 & 7 N	3 & 4 E	Weber	Mar.	2	1910	3041
Springs	Emil H. Anderson	Ogden, Utah	Irrigation	1		34	6 N	1 W	Weber	Mar.	29	1910	3093
Springs	Jacob Lundberg	Marion, Utah	Miscellaneous	3		6	2 S	6 E	Summit	April	1	1910	3100
Willow Spring	William Davis	Henefer, Utah	Domestic	.2		3	3 N	4 E	Summit	April	20	1910	3145
Springs	W. P. Foster	Ogden, Utah	Domestic	1		23	6 N	1 W	Weber	May	10	1910	3204
Springs	Utah State Industrial School	Ogden, Utah	Irrigation	2		9	6 N	1 W	Weber	May	23	1910	3251
Springs	Utah State Industrial School	Ogden, Utah	Power	2		9	6 N	1 W	Weber	May	23	1910	3252

APPLICATIONS TO APPROPRIATE WATER FROM THE WEBER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Ogden River	Ogden City Corp.	Ogden, Utah	Power	80	9,000	34							
Ogden River	Ogden City Corp.	Ogden, Utah	Power	100		35	7 N	3 E	Weber	Sept.	20	1910	3329
Spring Weber Co.	Anson Thornton	North Ogden, Utah	Irrigation	1		34	7 N	3 E	Weber	June	23	1910	3330
Spring Morgan Co.	Utah Light & Railway Co	Salt Lake City	Miscellaneous	2		27	7 N	1 W	Weber	June	29	1910	3342
						28							
Spring Weber Co.	James E. Halverson	Ogden, Utah	Irrigation	.2		29	5 N	1 E	Morgan	July	16	1910	3403
Springs	James E. Halverson	Ogden, Utah	Domestic	.2			Springs		Weber	Aug.	2	1910	3430
Slough	Marie D. Wattes	Ogden, Utah	Irrigation	.5			Springs		Weber	Aug.	2	1910	3431
Springs	W. P. Foster	Ogden, Utah	Irrigation	1		20	6 N	2 W	Weber	Aug.	4	1910	3437
Spring	George H. Bond	Morgan, Utah	Irrigation	.3		23	6 N	1 W	Weber	Oct.	4	1910	3538
Spring	William H. Rich	Morgan, Utah	Domestic	.5		16	3 N	2 E	Morgan	Nov.	2	1910	3574
Atwood Spring	William Atwood	Murray, Utah	Stockwatering	.11		16	3 N	2 E	Morgan	Nov.	7	1910	3588
						12	2 S	4 E	Summit	Nov.	14	1910	3598

Applications to Appropriate Water from the Bear River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Blacksmith Fork River	A. P. Hanson	Salt Lake City	Power	10		1	10 N	2 E	Cache	Jan.	11	1909	2216
Blacksmith Fork River	V. P. Strange	Salt Lake City	Power	60		4	10 N	2 E	Cache	Jan.	20	1909	2230
Spring Creek	Charles A. Walker	Salt Lake City	Irrigation	1.16		30	10 N	2 W	Box Elder	Jan.	23	1909	2236
Spring	James Quayle	Logan, Utah	Irrigation	.25		34	12 N	1 E	Cache	Jan.	27	1909	2239
Swan Creek	Alonzo L. Cook	Fish Haven, Idaho	Power	45		5	14 N	5 E	Rich	Jan.	30	1909	2247
Bear River	Frank Aufdemorte, et al	Knight, Wyoming	Irrigation	15		22	2 N	10 E	Summit	Feb.	2	1909	2264
Spring	H. O. Thompson, et al	Clarkston, Utah	Domestic	.015		34	14 N	2 W	Cache	Feb.	10	1909	2269
Underground Water	Valentine Jensen Irrigation Co.	Brigham, Utah	Irrigation	.78		23	9 N	2 W	Box Elder	Feb.	24	1909	2293
Spring	N. J. Nielson, et al	Hyrum, Utah	Miscellaneous	1.5		12	10 N	2 E	Cache	Mar.	25	1909	2334
Spring Creek	Isaac S. Smith	Logan, Utah	Miscellaneous	10		22	12 N	2 E	Cache	April	30	1909	2393
Mud Springs	Geo. G. McFarland	Ogden, Utah	Stockwatering	.1		31	9 N	3 E	Cache	May	8	1909	2411
Wheat Grass Spring	Geo. G. McFarland	Ogden, Utah	Stockwatering	.3		31	9 N	3 E	Cache	May	8	1909	2412
Bear River	William Newbrough	Evanston, Wyoming	Irrigation	2000		23 24 25 26	13 N	2 W	Rich and Cache	June	3	1909	2470
Blacksmith Fork River	Alexander M. Hill	Wellsville, Utah	Power	115		1	10 N	2 E	Cache	June	26	1909	2542
Corinne Canal System and Woods Creek	Malvina Christensen	Brigham, Utah	Irrigation	3.5		1	9 N	3 W	Box Elder	Oct.	21	1909	2761
Box Elder Creek	Brigham City	Brigham, Utah	Power	28		21	9 N	1 W	Box Elder	Nov.	5	1909	2793
Birch Canyon Springs	Hyde Park Municipality	Hyde Park, Utah	Domestic	.75		25	12 N	1 E	Cache	Jan.	26	1910	2946
Maple Hollow Spring	James Bails	Hyde Park, Utah	Stockwatering	.1		31	13 N	2 E	Cache	Feb.	4	1910	2970
Spring	Wm. H. Thornton	Plymouth, Utah	Domestic	.05		34	14 N	3 W	Box Elder	Mar.	17	1910	3075
Cold Water Canyon Water	Abinade Tolman	Honeyville, Utah	Irrigation	1		27	11 N	2 W		Mar.	28	1910	3092
Blacksmith Fork River	H. C. Baker, et al	Ogden, Utah	Power	200		3	10 N	2 E	Cache	May	6	1910	3192
Springs	Paradise Town Corp.	Paradise, Utah	Domestic	2		27 29	10 & 11 N	2 E	Cache	May	6	1910	3193
Dewey Spring	Justin D. Call	Brigham, Utah	Irrigation	4		17	11 N	2 W	Box Elder	June	13	1910	3297
Blacksmith Fork River	August Lind	Logan, Utah	Irrigation				Blacksmith Fork						
Bear River	Ethel Danielson	Knight Wyoming	Irrigation	.66 4.5			River Bear River		Cache Summit	June June	14 23	1910 1910	3299 3327
Sheep Creek and Springs	Sylvester V. Grow	Huntsville, Utah	Irrigation	.5		34	9 N	4 E	Cache	June	23	1910	3328

APPLICATIONS TO APPROPRIATE WATER FROM THE BEAR RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Cold Water Canyon Spgs.	Israel Hunsaker, et al	Brigham, Utah	Power	2		33	11 N	2 W	Box Elder	July	2	1910	3363
Cold Water Canyon Spgs.	Israel Hunsaker	Brigham, Utah	Domestic	2		33	11 N	2 W	Box Elder	July	2	1910	3364
Creek	Jacob W. Peart, et al	Randolph, Utah	Irrigation		125	5	10 N	6 E	Rich	July	16	1910	3465
Bear River	Olit Cronquist	Logan, Utah	Irrigation	15		36	13 N	1 W	Cache	Aug.	5	1910	3439
Bear River	C. H. Solier	Evanston, Wyoming	Power	50		26	2 N	10 E	Summit	Aug.	8	1910	3443
Swan Creek	Alonzo L. Cook	Fish Haven, Idaho	Power	45		5	14 N	5 E	Rich	Aug.	16	1910	3462
Swan Creek	Alonzo L. Cook	Fish Haven, Idaho	Power	45		5	14 N	5 E	Rich	Sept.	6	1910	3489
Spring Branch	H. C. Baker, et al	Ogden, Utah	Power	10		17	10 N	1 W	Cache	Sept.	6	1910	3492
Three Mile Creek	Ola Sonne	Logan, Utah	Irrigation	12		29	12 N	1 W	Cache	Sept.	16	1910	3500
Spring and Paradise Creek	H. C. Baker, et al	Ogden, Utah	Power	50		15 16	9 N	2 E	Cache	Sept.	20	1910	3510
Bear River	Knight Power Co.	Provo Utah	Power	200		30	3 N	10 E	Summit	Nov.	21	1910	3620

Applications to Appropriate Water from the Great Salt Lake Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Christy Spring	Reuben T. Winslow	Ogden, Utah	Domestic	1		10	6 N	19 W	Box Elder	Dec.	22	1908	2196
Mt. Mayd Tunnel	Bingham Central Mining Company	Salt Lake City	Mining	.25		34	3 S	3 W	Salt Lake	Dec.	24	1908	2197
Chokecherry Springs	Wm. Carson	Garfield, Utah	Mining	.2			Chokecherry Spg.		Tooele	Dec.	30	1908	2203
Middle Canyon Creek	Wm. L. Irvine	Three Forks, Montana	Power	10		26	3 S	4 W	Tooele	Jan.	4	1909	2208
Spring	A. L. Wight, et al	Perry, Utah	Irrigation	.4		2	8 N	2 W	Box Elder	Jan.	6	1909	2211
Spring	Phillip Fiddler	Grantsville, Utah	Irrigation	.2		32	2 S	5 W	Tooele	Jan.	15	1909	2222
Wild Cat Creek	John H. Kroencke	Yost, Utah	Irrigation	1		8	14 N	15 W	Box Elder	Jan.	15	1909	2223
Muddy Pass & Rocky Cks.	Geo. W. Kelly, et al	Ibapah, Utah	Irrigation	3		4	11 S	19 W	Tooele and Juab	Jan.	18	1909	2224
Middle, North and South Lost Creeks	Neff Brothers	Salt Lake City	Irrigation	15		24	4 S	8 W	Tooele	Jan.	19	1909	2228
Spring	Promontory-Curlew Land Co., Assignee, William S. Muir	Logan, Utah	Domestic	.1		12	9 N	7 W	Box Elder	May	15	1909	2238
Buckskin Springs	David H. Toyn, et al	Grouse Creek, Utah	Domestic	.25		32	12 N	18 W	Box Elder	Jan.	27	1909	2240
Pine Canyon Creek	International Smelting & Refining Co.	Salt Lake City	Mining	4		21	3 S	3 W	Tooele	Jan.	28	1909	2241
Deep Creek	E. J. Kearns, et al	Salt Lake City	Irrigation		50,000	7	6 S	18 W	Tooele and Juab	Feb.	3	1909	2255
Farmington Creek	No. Cottonwood Irrigation & Water Co., Assignee John A. Bourne	Farmington, Utah	Irrigation	10		17	3 N	1 E	Davis	May	6	1909	2262
Ricks or Ford Creek	Geo. M. Cannon Co.	Salt Lake City	Irrigation	5		5	2 N	1 E	Davis	May	9	1909	2267
Raft River or Johnson Creek	Century Gold Mining and Milling Co.	Salt Lake City	Power	4		3	13 N	15 W	Box Elder	Feb.	25	1909	2299
Deep Creek	John A. Erekson, Assignee John C. Hicks	Salt Lake City	Irrigation	10		7	6 S	18 W	Tooele	June	1	1909	2305
Springs	Thos. DeLaMare	Tooele, Utah	Power	1		16	4 S	3 W	Tooele	Mar.	5	1909	2310
Lagoon Salt Springs	Frank A. Boscoe	Salt Lake City	Miscellaneous	10		6 7	4 S	19 W	Tooele	Mar.	8	1909	2313

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
North Willow Creek	T. R. & W. L. Ellerbeck	Salt Lake City	Power	15		21	3 S	6 W	Tooele	Mar.	11	1909	2318
Cold Spring	C. T. Stewart, et al	Ibapah, Utah	Stockwatering	.05		6	10 S	18 W	Tooele	Mar.	20	1909	2326
Greasewood Spring	C. T. Stewart, et al	Ibapah, Utah	Stockwatering	.03		7, 23, 24, 25							
						26	9 S	19 W	Tooele	Mar.	20	1909	2327
Deep Creek	John U. Hicks	Salt Lake City	Power	10	750	7	6 S	18 W	Tooele	June	4	1909	2335
Settlement Canyon Creek	Tooele City Water Co.	Tooele, Utah	Domestic	2		34	3 S	4 W	Tooele	Mar.	29	1909	2340
Settlement Canyon Creek	Tooele City Water Co., Assignee, A. F. Doremus	Tooele, Utah	Irrigation	4		33	3 S	4 W	Tooele	Mar.	29	1909	2341
Middle Canyon Creek	Oquirrh Water Co., Assignee, A. F. Doremus	Tooele, Utah	Domestic	5.5		26, 35	3 S	4 W	Tooele	Mar.	29	1909	2342
Emigrant Spring	Arthur Bateson	Logan, Utah	Domestic	.25		18	14 N	11 W	Box Elder	Mar.	30	1909	2343
Two Salt Springs	John U. Hicks	Salt Lake City	Irrigation	25		7	4 S	19 W	Tooele	June	9	1909	2344
Chokecherry Spring and Spring	William Carson	Fairfield, Utah	Mining	.2		Chokecherry Spg. and Spring.			Tooele	Mar.	31	1909	2345
Salt Springs	E. T. Merritt, et al	Salt Lake City	Irrigation	200		6	5 S	18 W	Tooele	Apr.	2	1909	2348
South Willow Creek	C. E. Green	Tooele, Utah	Power	10		26	3 S	6 W	Tooele	Apr.	12	1909	2361
Wayside Spring	O. H. Barrus, et al	Grantsville, Utah	Irrigation	.5		32	2 S	5 W	Tooele	Apr.	26	1909	2383
Springs	Jesse B. Grover	Park Valley, Utah	Irrigation	1		30	13 N	13 W	Box Elder	Apr.	28	1909	2387
Springs	Alonzo J. Stookey	Clover, Utah	Irrigation	.5		3, 4	7 S	6 W	Tooele	Apr.	29	1909	2391
Springs	Edward J. Holtman	Park Valley, Utah	Irrigation	.8		11, 34	12 & 13 N	12 W	Box Elder	May	15	1909	2426
Spring and Dry Hollow Creek	Geo. M. Cannon Co.	Salt Lake City	Irrigation	5		32	3 N	1 E	Davis	May	18	1909	2441
Lime Kiln Canyon Spring	James J. Buswell	Salt Lake City	Irrigation	.5		Lime Kiln Canyon Spring			Tooele	May	21	1909	2448
Box Canyon Creek	Daniel F. Harding	Willard, Utah	Irrigation	.5		26	8 N	2 W	Box Elder	May	24	1909	2455
Spring	David Neff	Calder's Utah	Irrigation	2.5		22	4 S	8 W	Tooele	May	28	1909	2462
Grouse Creek	Cornelius J. Burke, et al	Lucin, Utah	Irrigation	10		10	7 N	18 W	Box Elder	May	28	1909	2464

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Soldiers Canyon Springs	J. H. Cook	Salt Lake City	Power	10		35							
Settlement Canyon Creek	Thos. DeLaMare	Tooele, Utah	Power	2		36	4 S	4 W	Tooele	June	4	1909	2482
St. Jeor Spring	Walter M. Stookey	Salt Lake City	Irrigation	.5		33	3 S	4 W	Tooele	June	5	1909	2485
Stookey Spring	Walter M. Stookey	Salt Lake City	Irrigation	.25		20							
						21	6 S	6 W	Tooele	June	5	1909	2486
Maple Spring	Promontory Mining Co., Assignee, B. D Siegfus, et al	Salt Lake City	Mining	.5		20	6 S	6 W	Tooele	June	5	1909	2487
Springs	Hyrum Adams	Layton, Utah	Domestic	.75		21	7 N	5 W	Box Elder	June	5	1909	2488
						23							
Serviceberry Creek	Alonzo J. Stookey	Clover, Utah	Irrigation	1		24	4 N	1 W	Davis	July	7	1909	2558
Pump Spring	Joseph H. Cook	Salt Lake City	Mining	.5		4	6 S	6 W	Tooele	July	9	1909	2561
Silver Spring	Joseph H. Cook	Salt Lake City	Mining	.8			Pump Spring		Tooele	July	12	1909	2563
Springs and Shearing Corral Springs	Leroy Badger	Naf, Idaho	Irrigation	.5		33	Silver Spring		Tooele	July	12	1909	2564
Simpson's Springs	Joseph Householder	American Fork, Utah	Domestic	.1			15 N	13 W	Box Elder	July	30	1909	2607
Short and Long Creeks	Daniel Beus	Yost, Utah	Irrigation	5		11	Simpson's Springs		Tooele	Aug.	3	1909	2611
Grouse Creek and Spring	Charles C. Torn	Grouse Creek, Utah	Irrigation	2		20	14 N	17 W	Box Elder	Aug.	5	1909	2617
Munsee Spring	Jos. & Chas. McKellar	Wendover, Utah	Irrigation	2		12	13 N	17 W	Box Elder	Aug.	6	1909	2620
						33	3 &						
Trout Creek	Fred B. Jones, et al	Salt Lake City	Power	10		4	4 N	19 W	Box Elder	Sept.	2	1909	2665
Wash	Mrs. Elsie Buswell	Salt Lake City	Irrigation			5	13 S	18 W	Juab	Sept.	2	1909	2667
Short, Long and South Creeks	Daniel Beus	Yost, Utah	Irrigation	2.5	320	17	3 S	5 W	Tooele	Sept.	24	1909	2705
					10	10							
Settlement Canyon Creek	Tooele City Water Co.	Tooele, Utah	Domestic	4		11	14 N	17 W	Box Elder	Sept.	14	1909	2706
Granite Creek	Geo. W. Morehouse	Callao, Utah	Irrigation	10		33	3 S	4 W	Tooele	Sept.	29	1909	2714
Middle Canyon Creek	A. W. Gallacher	Salt Lake City	Power	6		29	12 S	17 W	Juab	Oct.	11	1909	2738*
Middle and Joe Lee Cks.	John Gilbert	Grouse Creek, Utah	Irrigation	.5		9	4 S	3 W	Tooele	Oct.	13	1909	2745*
Upper Trough Spring	Robt. H. Towers	Mammoth, Utah	Domestic	.1		18	12 N	17 W	Box Elder	Oct.	14	1909	2747
Lower Trough Spring	Robt. H. Towers	Mammoth, Utah	Domestic	.1		16	10 S	4 W	Tooele	Oct.	19	1909	2752
Middle Canyon Creek	A. W. Gallacher	Salt Lake City	Power	6		16	10 S	4 W	Tooele	Oct.	19	1909	2753*
Johnson Creek	Jos. Lee & G. K. Lloyd	Ibapah, Utah	Irrigation	8			4 S	3 W	Tooele	Oct.	21	1909	2760
Spring	Irving O. Austin	Salt Lake City	Mining	6		32	11 S	19 W	Juab	Oct.	25	1909	2766
							Spring		Box Elder	Nov.	1	1909	2778

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA.—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	Joseph K. W. Bracken	Salt Lake City	Irrigation	2.5		1	7 S	7 W	Tooele	Nov.	6	1909	2794
Dairy Valley Creek	James Douglas	Etna, Utah	Irrigation	6		4	10 N	18 W	Box Elder	Nov.	8	1909	2800
Dunn Creek	Utah Doctor Gold Mining & Milling Co.	Salt Lake City	Power	10		6	13 N	13 W	Box Elder	Nov.	11	1909	2808
Dunn Creek	Utah Doctor Gold Mining & Milling Co.	Salt Lake City	Mining	5		6	13 N	13 W	Box Elder	Nov.	11	1909	2809
Serviceberry Creek	Alonzo J. Stookey	Clover, Utah	Irrigation	1		4	6 S	6 W	Tooele	Nov.	16	1909	2816
Spring	Charles E. France	Centerville, Utah	Irrigation	1		32	3 N	1 E	Davis	Nov.	23	1909	2831
Trout Creek	Fred B. Jones, et al	Salt Lake City	Power	10		5	13 S	18 W	Juab	Nov.	24	1909	2832
Rock Spring	Julia A. Tripp	Callao, Utah	Stockwatering	.5		32	10 S	17 W	Tooele	Nov.	24	1909	2834
Big Spring	S. J. & W. M. Stookey, et al	Salt Lake City	Miscellaneous	10		8 9 16 17	1 S	7 W	Tooele	Nov.	30	1909	2848
Dry Hollow Spring	Geo. A. Blanthorn	Grouse Creek, Utah	Stockwatering	.011		9	12 N	18 W	Box Elder	Dec.	3	1909	2854
White's Spring	B. L. Cutler	Salt Lake City	Mining	1		35	9 S	12 W	Tooele	Dec.	15	1909	2877
Spring	Oscar W. Carlson	Salt Lake City	Mining	2		Spring			Box Elder	Dec.	20	1909	2885
Granite Creek	Lorn D. Briscoe	Yost, Utah	Irrigation	3		34	15 N	17 W	Box Elder	Dec.	27	1909	2893
Granite Creek	Willis Moulton	Yost, Utah	Irrigation	3		24	15 N	17 W	Box Elder	Dec.	27	1909	2894
Spring	C. M. & J. F. Peterson	Geneva, Utah	Domestic	.08		19	11 N	6 W	Box Elder	Jan.	8	1910	2908
Raft River	Ralph S. Fessenden	Glenn's Ferry, Idaho	Irrigation		20.000	5 6 31 32	15 & 16 S	26 E	Box Elder	Jan.	10	1910	2909
Grouse Creek and Thousand Spring Creek	Clayton Archibald, et al	Lucin, Utah	Irrigation	10		10	7 N	18 W	Box Elder	Jan.	27	1910	2749
Engineer Spring	Promontory-Curlew Land Company	Logan, Utah	Domestic	.015		24	11 N	6 W	Box Elder	Jan.	31	1910	2956
Dale Creek	Geo. G. McFarland	Centerville, Utah	Irrigation	2	360	17	2 N	1 E	Davis	Feb.	1	1910	2964
Springs	Wm. M. Bostaph	Ogden, Utah	Stockwatering	1		1 36	7 & 8 N	6 W	Box Elder	Feb.	15	1910	3000
Springs	Wm. M. Bostaph	Ogden, Utah	Irrigation	1		36	8 N	6 W	Box Elder	Feb.	15	1910	3001
Squaw Springs	C. M. Clay	Ogden, Utah	Irrigation	1		23	7 N	6 W	Box Elder	Feb.	21	1910	3011

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Raft River and Clear Cr'k	Benjamin Willmore	Naf. Idaho	Irrigation	3		1	14 N	13 W	Box Elder	Feb.	23	1910	3018
Faust Creek	S. J. Stookey	Salt Lake City	Irrigation	10		3 4 9							
Daniel Creek	Geo. G. McFarland	Centerville, Utah	Power	10		10 17	7 S 2 N	5 W 1 E	Tooele Davis	Mar. Mar.	5 11	1910 1910	3048 3060
Three Mile Creek	Phillip Quayle & Co.	Brigham, Utah	Power	4		7	8 N	1 W	Box Elder	Mar.	11	1910	3064
Springs	Willard City Corp.	Willard, Utah	Domestic	.33		23	8 N	2 W	Box Elder	Mar.	15	1910	3071
Box Elder Creek	Joseph F. Hansen	Brigham, Utah	Power	28		20	9 N	1 W	Box Elder	Mar.	28	1910	3090
Promontory Big House Spring	Promontory-Curlew Land Company	Logan, Utah	Domestic	.005		30	11 N	6 W	Box Elder	Apr.	6	1910	3106
Sink Springs	A. R. Burke	Brigham, Utah	Domestic	.5		3	10 N	2 W	Box Elder	Apr.	9	1910	3115
Cedar Spring	Mark A. Johnson, et al	Clover, Utah	Stockwatering	.01		34 35	8 S	7 W	Tooele	June	18	1910	3117
Middle Canyon	Paul Droubay	Erda, Utah	Power	5		26 35	3 S	4 W	Tooele	Apr.	11	1910	3121
Spring	Middle Canyon Irrigation Company	Tooele, Utah	Irrigation	5		26	3 S	4 W	Tooele	Apr.	18	1910	3138
Springs	May R. Taylor	Farmington, Utah	Miscellaneous	1		Springs			Davis	Apr.	19	1910	3143
Mill Creek	Starrett Pump & Mfg. Co.	Salt Lake City	Power	50		31	2 N	1 E	Davis	Apr.	25	1910	3151
Mill Creek	Starrett Pump & Mfg. Co.	Salt Lake City	Irrigation	50		Mill Creek			Davis	Apr.	25	1910	3164
Kinney Creek	Leslie L. Goddard	Salt Lake City	Irrigation	10	150	33	2 N	1 E	Davis	May	5	1910	3190
Dive Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation	10		4 8	14 N	12 W	Box Elder	May	9	1910	3199
Clear Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation	10		1 & 29	14 N	13 W	Box Elder	May	9	1910	3200
Rice Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation	5		31 13	14 N	12 & 13 W	Box Elder	May	9	1910	3201
Deep Creek	Roy Bullen	Logan, Utah	Irrigation		5000	7	14 N	8 W	Box Elder	May	26	1910	3253
Mill Creek	Leslie L. Goddard	Salt Lake City	Power	10		33	2 N	1 E	Davis	May	27	1910	3258
Mill Creek	Leslie L. Goddard	Salt Lake City	Irrigation		1000	33	2 N	1 E	Davis	May	27	1910	3259
Springs	Parley R. Paskett	Grouse Creek, Utah	Irrigation	.25		3	12 N	18 W	Box Elder	May	31	1910	3262
Mud Spring	Promontory-Curlew Land Company	Logan, Utah	Domestic	.1		12	9 N	6 W	Box Elder	June	2	1910	3272

APPLICATION TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Stud Horse Canyon Spgs.	G. Georgetta	Ibapah, Utah	Stockwatering	.5			13 S	19 W	Juab	June	3	1910	3274
Spring	Effie L. Foote	Nephi, Utah	Domestic	.1		22	10 S	4 W	Tooele	June	3	1910	3277
Springs of Clear Creek	Andrew G. Lundstrom	Logan, Utah	Irrigation	8		1 & 29	14 N	13 W	Box Elder	June	4	1910	3286
Granite Creek	Fred C. Parker	Trout Creek, Utah	Irrigation	10		33	12 S	17 W	Juab	June	13	1910	3298
Spring	Wallace A. Clay	Brigham, Utah	Domestic	.25		10	6 N	5 W	Box Elder	June	14	1910	3301
Granite Creek	Willow Springs Mining Company	Salt Lake City	Power	10		2 3 34 35	12 & 13 S	18 W	Juab	June	21	1910	3320
Pine Creek	Samuel S. Ross	Twin Falls, Idaho	Irrigation	2		33	15 N	17 W	Box Elder	June	24	1910	3331
Pine Creek	Samuel J. Ross	Yost, Utah	Irrigation	2		33	15 N	17 W	Box Elder	June	24	1910	3332
Spring	James M. Elliott	Clear Creek, Utah	Domestic	.25		8	14 N	12 W	Box Elder	June	27	1910	3338
Springs	Albert Rose	Kelton, Utah	Domestic	.2		10	12 N	12 W	Box Elder	June	30	1910	3358
Pine Creek	David Beus	Yost, Utah	Irrigation	2		32 33	15 N	17 W	Box Elder	July	9	1910	3378
Clear Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation		6000	1	14 N	13 W	Box Elder	July	11	1910	3380
Farmington Creek	S. S. Howard, et al	Farmington, Utah	Power	20		15	3 N	1 E	Davis	July	18	1910	3406
Spring	Dennis J. Sheehan	Ogden, Utah	Irrigation	.5		36	8 N	6 W	Box Elder	July	18	1910	3407
Springs	O. A. Parmley	Ogden, Utah	Irrigation	.5		31	8 N	5 W	Box Elder	July	18	1910	3408
Springs	Geo. G. McFarland	Centerville, Utah	Irrigation	1		17	2 N	1 E	Davis	July	19	1910	3409
Rock Springs	Henry C. Meyerhoffer	Salt Lake City	Stockwatering	.25		21	5 S	7 W	Tooele	Sept.	14	1910	3497
Cottonwood Springs	Henry C. Meyerhoffer	Salt Lake City	Irrigation	1		34	5 S	7 W	Tooele	Sept.	14	1910	3498
Settlement Canyon Creek	A. F. Doremus	Salt Lake City	Domestic	2			Settlement Canyon Spring		Tooele	Sept.	20	1910	3511
Corral Canyon Spring	Jas. W. Hall, et al	Naf, Idaho	Irrigation	1		34	15 N	13 W	Box Elder	Sept.	22	1910	3513
Spring	Wm. W. Willey	Bountiful, Utah	Irrigation	.5		19	2 N	1 E	Davis	Oct.	25	1910	3550
Ford or Ricks Creek	Geo. M. Cannon Co.	Salt Lake City	Power	10		5	2 N	1 E	Davis	Nov.	3	1910	3576
Ford or Ricks Creek	Geo. M. Cannon Co.	Salt Lake City	Irrigation	.5		5	2 N	1 E	Davis	Nov.	3	1910	3577
Spring	H. J. Mair, et al	Callao, Utah	Mining	.1			Spring		Tooele	Nov.	17	1910	3612
Johnson Creek	Jerry Daly, Jr.	Ogden, Utah	Irrigation	9.5		5	15 N	15 W	Box Elder	Nov.	18	1910	3614
Deer Spring	Bradford P. Hardy	St. John, Utah	Irrigation	.5		27	5 S	7 W	Tooele	Nov.	19	1910	3618
Ophir Creek	T. A. Butterfield	Harriman, Utah	Irrigation	10	640	7	6 S	4 W	Tooele	Nov.	25	1910	3635
	Lawrence M. Jacobson	Willard, Utah	Irrigation	1		26	8 N	2 W	Box Elder	Oct.	28	1910	3643

Applications to Appropriate Water from the Colorado River Drainage Area.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Sand Springs	Arthur Johnson	Kanab, Utah	Stockwatering	.08			Sand Springs		Kane	Dec.	5	1908	2181
North Canyon	Wm. E. Chatwin	Tropic, Utah	Irrigation	1		30	36 S	2 W	Garfield	Dec.	29	1908	2200
Degraw Springs	Jesse N. Johnson	Johnson, Utah	Stockwatering	.16		22	42 S	5 W	Kane	Jan.	2	1909	2207
Pahreah Creek	Hosea Merrill	Tropic, Utah	Irrigation	1.5		36	36 S	3 W	Garfield	Jan.	5	1909	2210
Kanarra Creek	Joseph S. Williams	Kanarra, Utah	Irrigation	4		26	37 S	12 W	Iron	Jan.	11	1909	2217
Curtis Creek	Green River Valley Land and Water Co.	Salt Lake City	Irrigation	1000	200000		22 S	6 E	Emery	Jan.	22	1909	2233
Three Pine Creek and Heath Wash	Hyrum Leany, et al	Leeds, Utah	Irrigation	2		26 27	41 S	14 W	Washington	Jan.	23	1909	2235
Solomon Creek	Thos. J. Jones	Emery, Utah	Irrigation	10		25	25 S	5 E	Sevier	Jan.	30	1909	2248
Fort Pierce Wash	David R. Moss, et al	St. George, Utah	Irrigation	10		36	43 S	15 W	Washington	Feb.	3	1909	2256
Fremont River	Fremont Irrigation Co.	Loa, Utah	Irrigation		3500	17	27 S	3 E	Sevier	Feb.	19	1909	2288
Birch Springs	R. L. Turner	Hanksville, Utah	Irrigation	5			Birch Springs			Feb.	20	1909	2289
Oak Creek Springs	Lorenzo Turner	Hanksville, Utah	Irrigation	3			Oak Creek Spgs.			Feb.	20	1909	2290
Fremont River	Don C. Robbins, Trustee	Salt Lake City	Irrigation	2000		14 15 22 23	9 S	7 E	Wayne	Feb.	20	1909	2291
Dirty Devil or Fremont River	John H. Curlew	Loa, Utah	Irrigation	15		16	29 S	8 E	Wayne	Mar.	4	1909	2307
Oak and Pleasant Creeks	William Bown, Jr.	Notom, Utah	Irrigation	30	5000		Unsurveyed		Garfield	Mar.	4	1909	2309
Trackite or Slate Creeks	Robison and Turner	Giles, Utah	Irrigation	10			Unsurveyed		Garfield	Mar.	13	1909	2321
Last Chance Creek	Alonzo Brinkerhoff	Emery, Utah	Irrigation	10			Last Chance Ck.		Wayne	Mar.	16	1909	2323
Last Chance Creek	Alonzo Brinkerhoff	Emery, Utah	Irrigation	10			Last Chance Ck.		Wayne	Mar.	16	1909	2324
South Creek	Peter Steel	Giles Utah	Irrigation	4			Unsurveyed		Garfield	Mar.	27	1909	2338
Potato Spring	James W. Imlay	Hurricane, Utah	Irrigation	.2		20	40 S	10 W	Washington	Apr.	2	1909	2351
Tom Pearce Wash	Thos. H. Gardner, et al	St. George, Utah	Irrigation	20		26	40 S	16 W	Washington	Apr.	13	1909	2366
Santa Clara Creek	Clarence S. Jarvis, et al	Provo, Utah	Power	30		6	42 S	16 W	Washington	Apr.	13	1909	2367
Santa Clara Creek	Clarence S. Jarvis, et al	Provo, Utah	Irrigation	30			42 S	16 W	Washington	Apr.	13	1909	2368
Spring	Wm. T. Jolley, et al	Tropic, Utah	Irrigation	1.5		36	36 S	3 W	Garfield	Apr.	19	1909	2373
Henrieville Creek	A. G. Partner, et al	Henrieville Utah	Irrigation	4		12	37 S	2 W	Garfield	Apr.	17	1909	2374
Yellow Creek	Seth Johnson, Sr.	Cannonville, Utah	Irrigation	1.5		1	38 S	3 W	Garfield	Apr.	17	1909	2375
Blue Spring	Willis C. Little	Kanab, Utah	Stockwatering	.01		34	42 S	3 W	Kane	Apr.	17	1909	2376
Blue Springs	Wm. A. Ford	Kanab, Utah	Stockwatering	.004		19	42 S	3 W	Kane	Apr.	20	1909	2394

APPLICATION TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.

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Indian Spring	Wm. A. Ford	Kanab, Utah	Stockwatering	.08		25	42 S	4 W	Kane	May	1	1909	2395
Cliff Springs	James W. Chadburn	Enterprise, Utah	Irrigation	1		12	39 S	16 W	Washington	May	3	1909	2400
Halls Creek	Eliza J. Smith	Thurber, Utah	Irrigation	5			Unsurveyed		Garfield	May	10	1909	2420
Halls Creek	Sarah Smith	Thurber, Utah	Irrigation	5			Unsurveyed		Garfield	May	10	1909	2421
Halls Creek	Thos. W. Smith	Thurber, Utah	Irrigation	2.5			Unsurveyed		Garfield	May	10	1909	2422
Halls Creek	Thomas Smith	Thurber, Utah	Irrigation	2.5			Unsurveyed		Garfield	May	11	1909	2427
Falls Hollow and Grass Valley Creek	Robt. Gardner	Pine Valley, Utah	Irrigation	10		29	38 S	14 W	Washington	May	18	1909	2442
Fremont River	Samuel Newhouse	Salt Lake City	Irrigation		480000	14							
						15							
						22							
						23	29 S	7 E	Wayne	May	21	1909	2446
Camanche & Pace's Creeks	Henry A. Pace	New Harmony	Irrigation	10		16	38 S	13 W	Washington	May	27	1909	2459
Dairy Spring	J. B. Showalter	Panguitch, Utah	Stockwatering	.14			Dairy Spring		Garfield	May	28	1909	2465
Pole Spring	J. B. Showalter	Panguitch, Utah	Stockwatering	.16			Pole Spring		Garfield	May	28	1909	2466
Virgin River	J. M. Lauritzen	St. George, Utah	Irrigation	10		21	42 S	14 W	Washington	June	4	1909	2479
Kanarra, Dry, and Camp Creeks	Wm. W. Roundy	Kanarra, Utah	Irrigation	6		31	38 S	12 W	Iron	June	4	1909	2481
Kanarra Creek	Paul Arnold Graff	Kanarra, Utah	Irrigation	2		35	37 S	12 W	Iron	June	4	1909	2483
Pace Canyon Creek	Robt. A. Kirker, Agent	New Harmony, Utah	Miscellaneous	1		32	37 S	13 W	Iron or Washington	June	8	1909	2493
Springs	W. D. Wilcock	Escalante, Utah	Irrigation	1		34	35 S	3 E	Garfield	June	9	1909	2497
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		2525		Pleasant & Oak Ck		Garfield	June	14	1909	2507
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		1895		"		Garfield	June	14	1909	2507a
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		315		"		Garfield	June	14	1909	2507b
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		265		"		Garfield	June	14	1909	2507c
Sheep Creek	James N. Henderson	Cannonville, Utah	Irrigation	1		2	38 S	3 W	Garfield	June	18	1909	2521
Harmony Creek	Robt. A. Kirker, Agent	New Harmony, Utah	Miscellaneous	20		32	37 S	13 W	Washington	June	24	1909	2540
Pine Valley and Water Canyon Creeks	New Castle Reclamation Company	Salt Lake City	Irrigation	.20	12500	29	39 S	14 W	Washington	June	29	1909	2546
Springs	Francis Prince	New Harmony, Utah	Irrigation	5		8	38 S	13 W	Washington	July	9	1909	2560
						14							
Santa Clara Creek	Escalante Mining and Milling Co.	Modena, Utah	Power	35		11	39 S	16 W	Washington	Sept.	24	1909	2562

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.—Continued.

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Langston Spring No. 1	C. C. Wallace	Toquerville, Utah	Stockwatering	.1		10	39 S	11 W	Washington	July	12	1909	2565
Langston Spring	C. C. Wallace	Toquerville, Utah	Stockwatering	.1		10	39 S	11 W	Washington	July	12	1909	2566
Three, Pine, & Quail Spgs.	John A. Parker	Joseph, Utah	Irrigation	6		17							
Seaman Spring	Frank Wilson	Kanab, Utah	Stockwatering	.03		36	40 S	14 W	Washington	July	15	1909	2574
Alva Wash	Scott Barney	Escalante, Utah	Irrigation	2.5		3	43 S	4 W	Kane	July	15	1909	2576
Long Valley Creek	James W. Thaxton	Mt. Carmel, Utah	Irrigation	1		35	35 S	3 E	Garfield	July	23	1909	2592
Virgin River	Virgin Valley Reclamation Co., Assignee, N. T. Porter	Salt Lake City	Irrigation	30	5000	19	41 S	7 W	Kane	July	28	1909	2605
J. W. Glazier & Sons Springs	J. W. Glazier & Sons	Kanab, Utah	Stockwatering	.125		21 28	41 S	12 W	Washington	Aug.	5	1909	2618
Lick Spring	J. W. Glazier & Sons	Kanab, Utah	Stockwatering	.25			Glazier & Sons Springs		Kane	Aug.	16	1909	2636
Lick Springs, Pine Valley & Grass Valley Creeks	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	5000	30	Lick Spring 38 &	14 &	Kane	Aug.	16	1909	2637
Boulder Creek	C. A. Hansen et al	Boulder, Utah	Irrigation	3		14 24	39 S	15 W	Washington	Aug.	16	1909	2638
Hunters Creek	Maggie Bennett	Garland, Utah	Irrigation	2.66		25 11	33 S	4 E	Garfield	Aug.	20	1909	2649
Santa Clara Creek	Samuel Knight	Santa Clara, Utah	Irrigation	6		14	37 S	12 W	Iron	Aug.	23	1909	2656
Virgin River	J. Lauritzen	St. George, Utah	Irrigation	500	100000	8 14 15 22	42 S	16 W	Washington	Aug.	30	1909	2660
Rio Virgin	Thomas Judd	La Verkin, Utah	Power	110		23 19	42 S 41 S	9 W 12 W	Washington Washington & Kane	Sept.	1	1909	2664
Zions Creek	J. M. Lauritzen	St. George, Utah	Irrigation	500			41 S	10 W	Washington	Sept.	4	1909	2671
Short Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10			Short Creek		Washington	Sept.	8	1909	2673
Pine Valley Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	3000	14	39 S	14 & 15 W	Washington	Sept.	8	1909	2674
Alvey Wash or False Crk.	R. E. Wilson	Escalante, Utah	Irrigation	3.67		17 21				Sept.	9	1909	2675
Mud Springs	Hyrum C. Jacobson	Pine Valley, Utah	Irrigation	1	4	28 12 13	35 S 39 S	3 E 16 W	Garfield Washington	Sept. Nov.	10 19	1909 1909	2678 2694

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Virgin River	Virgin Valley Reclamation Co., Assignee, N. T. Porter	Salt Lake City	Irrigation	10	15000	25 30 31							
Pine Valley & Water Canyon Creeks	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	15000	36 30	41 S 38 &	12 W 14 &	Washington	Sept.	23	1909	2701
Spring	Albert E. Miller	St. George, Utah	Domestic	.25		14 3	39 S 42 S	15 W 16 W	Washington Washington	Sept. Sept.	28 29	1909 1909	2711 2712
Jarris Spring	Ernest & Wm. A. Nelson	St. George, Utah	Irrigation	.25		30	42 S	15 W	Washington	Oct.	6	1909	2723
Wash. Saw Mill Canyon, Grass Valley & Pinto Creeks	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	1500	29 32	38 S	14 W	Washington	Oct.	7	1909	2724
South Spring	Geo. O. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2727
Big Spring	Geo. O. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2728
Sam Jadd Spring	Geo. A. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2729
Five Trough Spring	Geo. A. Holt	Enterprise, Utah	Stockwatering	.15		14	37 S	16 W	Washington	Oct.	7	1909	2730
Six Trough Spring	Jas. A. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2731
Quail or Harrisburg Crks	V. A. Tanney	Salt Lake City	Irrigation	10		23	41 S	14 W	Washington	Oct.	18	1909	2749
Birch Spring	Ira Heaton	Alton, Utah	Irrigation	.25		35	38 S	6 W	Kane	Oct.	20	1909	2755
Eagle Creek	Robert E. Laughter	Green River, Utah	Mining	2		Eagle Creek			Garfield	Oct.	20	1909	2756
Kolob or Big Creek	Virgin Valley Reclamation Co., Assignee, New Castle Reclamation Co	Salt Lake City	Irrigation	10	4500	25 30 31 36	41 S	12 W	Washington & Iron	Nov.	6	1909	2796
Birch Spring	A. D. Findley	Kanab, Utah	Stockwatering	.2		25	38 S	6 W	Kane	Nov.	8	1909	2798
Spring	H. C. Jolley	Glendale, Utah	Stockwatering	.01		26	40 S	9 W	Kane	Nov.	11	1909	2802
Spring	H. C. Jolley	Glendale, Utah	Stockwatering	.01		27	40 S	9 W	Kane	Nov.	11	1909	2803
Spring	Benjamin Hamblin	Kanab, Utah	Stockwatering	.025		20	39 S	4 W	Kane	Nov.	11	1909	2810
Spring	Nephi Hamblin	Kanab, Utah	Stockwatering	.01		31	39 S	4 W	Kane	Nov.	11	1909	2811
Spring	Walter W. Bowler	Enterprise, Utah	Irrigation	2		10	37 S	18 W	Washington	Nov.	15	1909	2815
Spring	H. C. Jolley	Glendale, Utah	Stockwatering	.005		24	40 S	9 W	Kane	Nov.	18	1909	2819
Seep	H. C. Jolley	Glendale, Utah	Stockwatering	.01		13	40 S	9 W	Kane	Nov.	18	1909	2820
Clear Creek Bed Seep	H. C. Jolley	Glendale, Utah	Stockwatering	.03		13 24	40 S	9 W	Kane	Nov.	18	1909	2821

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Three Pine & Quail Crks.	John A. Parker	Joseph, Utah	Irrigation	8		17 36	40 S	14 W	Washington	Nov.	22	1909	2827
Cottonwood Wash	Josephus Riding, et al	St. George, Utah	Irrigation	1		14 23	42 S	16 W	Washington	Nov.	22	1909	2828
Middleton Wash	Leonard S. Conger	St. George, Utah	Irrigation	1		16 31	42 S	15 W	Washington	Nov.	26	1909	2837
Virgin River	Virgin Valley Reclamation Co., Assignee, N. T. Porter	Salt Lake City	Irrigation	60	20000	25 30 31		12 &					
Long Valley Creek	James W. Thaxton	Mt. Carmel, Utah	Irrigation	1		36	41 S	13 W	Washington	Nov.	26	1909	2838
Pine Valley Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	30	2500	19 29	41 S 39 S	7 W 14 W	Kane Washington	Nov. Nov.	29 30	1909 1909	2839 2847
Rio Virgin	Thomas Judd	La Verkin	Power		5000	19	41 S	12 W	Washington	Dec.	11	1909	2869
Rasp or Blind Lake	John H. Curfew	Loa, Utah	Irrigation		500		30 S	5 E	Wayne	Dec.	13	1909	2872
Short Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10			Short Creek		Washington	Dec.	16	1909	2882
Spring	Robt. G. McQuarrie	St. George, Utah	Irrigation	10			Spring		Washington	Dec.	22	1909	2889
North Creek	James Humphries	Virgin, Utah	Irrigation	.66		23	4 S	12 W	Washington	Dec.	27	1909	2892
Poll Canyon Creek	Fred'k C. Jensen, et al	Monticello, Utah	Irrigation	5		34	33 S	23 E	San Juan	Dec.	29	1909	2898
Santa Clara Creek	Clarence Jarvis, et al	Provo, Utah	Irrigation		1500		42 S	16 W	Washington	Jan.	5	1910	2905
Volcanic Wash	J. M. Lauritzen, Assignee, John T. Morse	St. George, Utah	Irrigation	1		15	42 S	16 W	Washington	Jan.	15	1910	2914
Volcanic Wash	Heber F. Emry, et al	St. George, Utah	Irrigation	1		15	42 S	16 W	Washington	Jan.	15	1910	2915
Kane Spring	Wm. S. Smith, et al	Glendale, Utah	Stockwatering	.1			Kane Spring		Kane	Jan.	19	1910	2922
Pine Valley Creek or Santa Clara Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	10000	6	39 S	15 W	Washington	Jan.	21	1910	2927
Beaver Dam Wash	J. M. Lauritzen	St. George, Utah	Irrigation	50			Beaver Dam		Washington	Jan.	22	1910	2929
Beaver Dam Wash	J. M. Lauritzen	St. George, Utah	Irrigation	10	3000		Wash		Washington	Jan.	22	1910	2930
Parashont Spring	Hans C. Sorensen, et al	Mt. Carmel, Utah	Stockwatering	.06			Parashont Spring		Kane	Jan.	24	1910	2938
Chris Spring	Fred W. Heaton	Orderville, Utah	Stockwatering	.1			Chris Spring		Kane	Jan.	24	1910	2939
Harris Springs No. 1 to No. 10 inclusive	Edward Carroll	Orderville, Utah	Stockwatering	.1			43 S	8 W	Kane	Jan.	24	1910	2940
Sand Springs No. 1, 2, & 3	Edward Carroll, et al	Orderville, Utah	Stockwatering	.05			43 S	7 W	Kane	Jan.	24	1910	2941
N. E. Harris Spring	Isiah L. Bowers	Orderville, Utah	Stockwatering	.1			N. E. Harris Spg.		Kane	Jan.	24	1910	2942
Willow Spring	Hyrum W. Stephens	Mt. Carmel, Utah	Stockwatering	.05			Willow Spring		Kane	Jan.	24	1910	2943
Spring	Samuel Knight	Santa Clara, Utah	Irrigation	1	100	15	42 S	16 W	Washington	Jan.	28	1910	2950

APPLICATION TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Joseph S. Thompson	St. George, Utah	Stockwatering			24	43 S	13 W	Washington	Jan.	31	1910	2957
West Woolley Spring	D. D. Rust	Kanab, Utah	Stockwatering	.1		36	43 S	6 W	Kane	Feb.	8	1910	2979
East Woolley Spring	Israel H. Chamberlain	Kanab, Utah	Stockwatering	.1		36	43 S	6 W	Kane	Feb.	8	1910	2980
Berry Spring	W. F. Gates	St. George, Utah	Irrigation	5		1	42 S	14 W	Washington	Feb.	10	1910	2991
Kane Springs	J. B. Showalter	Panguitch, Utah	Stockwatering	.16		6	36 S	1 E	Garfield	Feb.	24	1910	3020
Poll Springs	J. B. Showalter	Panguitch, Utah	Stockwatering	.1		6	36 S	1 E	Garfield	Feb.	24	1910	3021
Ash Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10	1000	2	40 S	13 W	Washington	Mar.	2	1910	3039
South Ash Creek	Andrew F. Gregerson	Leeds, Utah	Irrigation	4		2	40 S	13 W	Washington	Mar.	19	1910	3081
Ash Creek	J. M. Lauritzen	St. George, Utah	Irrigation	40	4000	2	40 S	13 W	Washington	Mar.	28	1910	3089
Arch Canyon Creek	Jas. K. Yoakum	Bluff City, Utah	Irrigation	8			Arch Canyon Ck.		San Juan	Apr.	7	1910	3109
Mill Hollow Seeps Rio Virgin River	John Chamberlain	Orderville, Utah	Stockwatering	.1		6	40 S	6 W	Kane	Apr.	7	1910	3111
Lone Pine Seeps Rio Virgin River	E. J. Chamberlain	Orderville, Utah	Stockwatering	.08		31	39 S	6 W	Kane	Apr.	7	1910	3112
Comb Wash	Jas. K. Yoakum	Bluff City, Utah	Irrigation		960		Comb Spring		San Juan	Apr.	8	1910	3114
Ash Creek	J. M. Lauritzen	St. George, Utah	Irrigation	40		2	40 S	13 W	Washington	Apr.	9	1910	3120
La Sal Creek	Robert C. Clark	Moab, Utah	Irrigation	50	10000	17	28 S	25 E	San Juan	Apr.	16	1910	3133
Ash Creek	W. W. Roundy	Kanarra, Utah	Irrigation	4		36	38 S	13 W	Washington	Apr.	19	1910	3142
San Juan River	C. H. Spencer	Oljato, Utah	Mining	250			San Juan River		San Juan	Apr.	22	1910	3150
Schun Pah	Willis C. Little	Kanab, Utah	Irrigation	1.5		6	41 S	4½ W	Kane	June	29	1910	3153
Spring	Ogden San Juan Oil Co.	Ogden, Utah	Irrigation	2		22	40 S	19 E	San Juan	Apr.	29	1910	3177
Le Verkin Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10		1	40 S	13 W	Washington	May	3	1910	3187
Hart Draws	Mrs. Jean Christensen et al	Monticello, Utah	Irrigation	10		14	33 S	22 E	San Juan	May	4	1910	3189
Santa Clara Creek	Clarence S. Jarvis et al	Provo, Utah	Irrigation	20	5000		Santa Clara Creek		Washington	May	7	1910	3196
Quail Springs	James E. Jewell	St. George, Utah	Mining	10			Quail Springs		Washington	May	11	1910	3213
Quail Springs	Herbert G. Cannon	Salt Lake City	Mining	5			Quail Springs		Washington	May	12	1910	3216
Beaver Dam Wash	James E. Jewell	Afton, Wyoming	Power	5			Beaver Dam Wash		Washington	May	12	1910	3217
Birch Spring	John Findlay	Kanab, Utah	Stockwatering	.02			Birch Spring		Kane	May	14	1910	3221
Maxwell Creek	J. M. Lauritzen	St. George, Utah	Irrigation	3		22	43 S	10 W	Washington	May	23	1910	3241
Hog Ranch	Geo. L. Riddle	Escalante, Utah	Irrigation	2		20	34 S	2 E	Garfield	May	26	1910	3249
Sawyer Springs	Richard A. Thorley	Cedar City, Utah	Irrigation	2.66		36	38 S	13 W	Washington	May	31	1910	3263
Pine Canyon Water	Thos. Spencer	Escalante, Utah	Irrigation	1		18	36 S	1 E	Garfield	May	31	1910	3265
North Creek	Otto A. Lundin	St. George, Utah	Irrigation	20			North Creek		Washington	June	3	1910	3275

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Birch & Cottonwood Cr'k.	Joseph Robison	Giles, Utah	Irrigation	10		3	29 S	10 E		June	4	1910	3280
Bowl Creek	John G. Elder	Hanksville, Utah	Irrigation	10		21	28 S	11 E		June	4	1910	3285
	Elisha Lee	Virgin, Utah	Irrigation	2		3	40 S	11 W		June	9	1910	3288
Recapture Creek	Walter C. Lyman	Grayson, Utah	Irrigation	100		11	36 S	22 E	San Juan	June	17	1910	3312
Oak Springs	Anne G. Lauritzen	St. George, Utah	Irrigation	1		26	43 S	10 W	Washington	June	20	1910	3315
Cottonwood Wash	Hyrum Perkins	Bluff, Utah	Irrigation	10		24	40 S	21 E	San Juan	June	22	1910	3322
Cottonwood Springs	J. M. Lauritzen	St. George, Utah	Irrigation	1		12	43 S	11 W	Washington	June	23	1910	3326
Virgin River	Virgin River Irr. Co., Assignee, J. M Lauritzen	St. George, Utah	Irrigation	10		15	42 S	9 W	Kane	July	9	1910	3377
Virgin River	Virgin River Irr. Co., Assignee, J. M. Lauritzen	St. George, Utah	Irrigation	10		15	42 S	9 W	Kane	July	9	1910	3379
Upper Ditch from Virgin River & North Creek	Sylvester Earl	Virgin, Utah	Domestic	1.5		23	41 S	12 W		July	11	1910	3382
Strawberry, Swains and Kanab Creeks	N. T. Porter	Salt Lake City	Irrigation	30	10000	16	43 S	6 W	Kane	July	12	1910	3393
Cottonwood Creek Spring	O. B. Berryland	Gunnison, Utah	Irrigation	10			38 S	2 W	Kane	July	13	1910	3394
Grape Vine Pass Spring	Wm. Turnbeaugh	Washington, Utah	Irrigation	1		6	42 S	14 W	Washington	July	20	1910	3410
Le Verkin Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10			38 S	11 & 12 W	Iron & Washington	July	26	1910	3415
Virgin River	Virgin River Irri. Co., Assignee, J. M. Lauritzen	St. George, Utah	Irrigation	10		10	42 S	9 W	Kane	July	26	1910	3416
Pine Spring	John J. Esplin	Orderville, Utah	Stockwatering	.06			43 S	8 W	Kane	July	29	1910	3420
Willow Spring	Israel H. Esplin	Orderville, Utah	Stockwatering	.05			40 S	8 W	Kane	July	29	1910	3421
Jimmie Creek Spring	James Esplin	Orderville, Utah	Stockwatering	.04			40 S	8 W	Kane	July	29	1910	3422
Dirty Devil River or Muddy Creek	Emery County Land and Water Co.	Rochester, Utah	Irrigation		1000	22	21 S	6 E	Sanpete	Aug.	1	1910	3427
Kanab Creek	J. M. Lauritzen	St. George, Utah	Irrigation	100		11	40 S	6 W	Kane	Aug.	3	1910	3434
Cave Spring	Brigham Carpenter, et al	Bloomington, Utah	Stockwatering	.02		3	43 S	17 W	Washington	Aug.	3	1910	3435
Vance Springs	Joseph W. Carpenter	Pine Valley, Utah	Irrigation	1		36	38 S	16 W	Washington	Aug.	3	1910	3436

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Kanab, Swain, Strawberry and Duck Creeks	Virgin Valley Reclamation Co.	Salt Lake City	Irrigation	100	10000		Kanab Creek, etc.		Kane	Aug.	17	1910	3440
South and Dugout Creeks	Frank A. Robison	Giles, Utah	Irrigation	4			So. & Dugout Cks.		Garfield	Aug.	15	1910	3455
Corral Hollow Seeps	Charles R. Pugh	Kanab, Utah	Stockwatering	.008		32	39 S	5 W	Kane	Aug.	26	1910	3472
Squaw Creek & Bull Rush	John Johnson	Tropic, Utah	Stockwatering	.5		2	39 S	4 W	Kane	Aug.	29	1910	3475
Bull Valley	John Johnson	Tropic, Utah	Irrigation	.5		2	39 S	4 W	Kane	Aug.	29	1910	3476
Le Verkin Creek	J. D. Williams, et al	Kanarra, Utah	Irrigation	10		5	38 S	11 W	Iron	Sept.	17	1910	3505
Colorado River	Charles H. Spencer	Oljato, Utah	Mining	250			Colorado River		San Juan	Oct.	6	1910	3525
Spring	Andrew F. Gregerson	St. George, Utah	Irrigation	5			Spring		Washington	Oct.	7	1910	3528
Beaver Dam Wash	Andrew F. Gregerson, et al	St. George, Utah	Mining	3			Beaver Dam Wash		Washington	Oct.	15	1910	3541
Fremont River	Taylor Irrigation Co.	Loa, Utah	Irrigation		4000	9	27 S	3 E	Sevier	Oct.	27	1910	3553
North Ash Creek	Elizabeth Roundy	Kanarra, Utah	Irrigation	2.5		36	38 S	13 W	Washington	Oct.	27	1910	3554
North Ash Creek	Sarah S. Thorley	Cedar City, Utah	Irrigation	2.5		36	38 S	13 W	Washington	Oct.	27	1910	3555
Poll Canyon Creek	Charles A. Burr	Monticello, Utah	Irrigation	2		34	33 S	23 E	San Juan	Oct.	29	1910	3559
Pahreah Creek	O. G. Anderson	Cannonville, Utah	Irrigation	1		12	37 S	3 W	Garfield	Nov.	14	1910	3599
Spring	James W. Imlay	Hurricane, Utah	Stockwatering	.2		29	40 S	10 W	Washington	Nov.	14	1910	3600
Spring	James W. Imlay	Hurricane, Utah	Stockwatering	.2		6	40 S	10 W	Washington	Nov.	14	1910	3601
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.007		12	40 S	10 W	Kane	Nov.	18	1910	3615
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.011		12	40 S	10 W	Kane	Nov.	18	1910	3616
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.022		13	40 S	10 W	Washington	Nov.	22	1910	3633
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.02		13	40 S	10 W	Washington	Nov.	22	1910	3634

Applications to Appropriate Water from the Sevier River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Bailey Station Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	1		4	32 S	16 W	Iron	Dec.	1	1908	2175
Jackson Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	1		4	32 S	16 W	Iron	Dec.	1	1908	2176
Iron Spring	T. D. Jackson et al	Lund, Utah	Irrigation	20		18	35 S	12 W	Iron	Nov.	13	1908	2180
Iron Springs Creek	Henrietta L. Hintze	Cedar City, Utah	Irrigation		80	6	35 S	12 W	Iron	Dec.	8	1908	2183
Lucky Boy Springs	Beaver Carbonate Mining Company	Salt Lake City	Mining	.25		13	27 S	13 W	Beaver	Dec.	9	1908	2185
Uvada Wash and Gold Springs Wash	Thomas A. Thorley	Cedar City, Utah	Irrigation	10	100	1	35 S	17 & 18 W	Iron	Mar.	2	1909	2186
Spring Juab Co.	Orson H. Pierce	Levan, Utah	Irrigation	.1		23	16 S	1 W	Juab	Dec.	15	1908	2189
San Pitch Fork	Wm. D. Livingston	Salt Lake City	Irrigation		8500	32	18 S	2 E	San Pete	Dec.	17	1908	2194
Spring	John J. G. Webster	Cedar City, Utah	Stockwatering	.2			32 S	17 W	Iron	Dec.	21	1908	2195
Dry Creek	Henry C. Lund, assignee												
	L. P. Hill	Salt Lake City	Irrigation	10	100	22	28 S	2½ W	Piute	Dec.	26	1908	2198
Salina Creek	Salina Roller Mill Co.	Salina, Utah	Power	25		1	22 S	1 E	Sevier	Jan.	8	1909	2214
Beaver River	Beaver River Power Co.	Provo, Utah	Power	40	7500	28	29 S	6 W	Beaver	Jan.	21	1909	2232
Last Chance Creek	Joseph Olsen	Emery, Utah	Irrigation	10		13	25 S	5 E	Sevier	Jan.	30	1909	2249
Eight Mile Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	.5		31	33 S	18 W	Iron	Feb.	5	1909	2261
Willow Spring	Alma Magleby	Monroe, Utah	Stockwatering	.5		36	28 S	15 W	Beaver	Feb.	10	1909	2268
Sevier Rivier	Jumbo Plaster & Cement Co.	Sigurd, Utah	Power	150		19	22 S	1 W	Sevier	Feb.	15	1909	2274
Shoal Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation		85000	8	37 S	17 W	Iron & Washington	Feb.	16	1909	2276
Shoal Creek	New Castle Reclamation Company	Salt Lake City	Irrigation	100		9	37 S	17 W	Iron & Washington	Feb.	16	1909	2277
Blue Spring Creek, Deer Bunker and Twin Lake Creeks	John L. Sevy et al	Panguitch	Miscellaneous		60000	7	36 S	7 W	Garfield & Iron	Feb.	24	1909	2294
Blue Springs	John L. Sevy et al	Panguitch	Power	25		18	36 S	7 W	Garfield	Feb.	24	1909	2295
Blue Spring Creek, Deer Creek and Bunker Creek	John L. Sevy et al	Panguitch	Power	40		7	36 S	7 W	Iron & Garfield	Feb.	24	1909	2296
Blue Spring Creek, Deer Bunker and Twin Lakes Creeks	John L. Sevy et al	Panguitch	Irrigation		50000	32	34 S	5 W	Garfield & Iron	Feb.	24	1909	2297
Natural Lake or Reservoir	A. O. Adams et al	Salt Lake City	Irrigation		2000	8 or 17	33 S	14 W	Iron	Feb.	24	1909	2298
Shoal Creek	New Castle Reclamation Company	Salt Lake City	Irrigation	40		16	37 S	17 W	Washington	Feb.	25	1909	2300

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.- Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Shoal Creek & Branches	New Castle Reclamation Co.	Salt Lake City	Irrigation		5000	16	37 S	17 W	Washington	Feb.	25	1909	2301
Willow, Lucky Boy and Quaking Asp Springs	Beaver Carbonate M. Co.	Salt Lake City	Mining	.125		13	27 S	13 W	Beaver	Feb.	27	1909	2302
Spring	Gold Reef Mining Co.	Elsinore Utah	Domestic	125			Spring		Beaver	Mar.	1	1909	2304
Manti City Creek	N. P. Madsen	Manti, Utah	Irrigation	4		18	18 S	3 E	Sanpete	Mar.	5	1909	2311
Beaver River	A. L. Fotheringham	Beaver, Utah	Irrigation	150	20000	17	27 S	10 W	Beaver	Mar.	6	1909	2312
Pine Creek & North Creek	J. M. Lauritzen	St. George, Utah	Irrigation		7500	11	26 S	7 W	Beaver	Mar.	9	1909	2314
Cottonwood	Jos. E. Jones, et al	Enterprise, Utah	Irrigation	8		13	37 S	17 W	Washington	Mar.	10	1909	2316
Cove and Pine Creeks	Cove & Pine Creek Res. Co.	Elsinore, Utah	Irrigation	20	640	28	25 S	8 W	Millard	Mar.	11	1909	2319
Coal Creek	Kumen L. Jones	Cedar City, Utah	Irrigation	2.66		3	36 S	11 W	Iron	Mar.	12	1909	2320
Fremont River	Don C. Robbins, Trustee	Salt Lake City	Irrigation	1000	150000	24 or 25	28 S	9 E	Wayne	Mar.	19	1909	2325
Last Chance Creek	Hilda M. Olsen	Emery, Utah	Irrigation	10	90		Last Chance Ck.		Sevier	Mar.	25	1909	2333
Santa Clara Creek	Samuel Knight	Santa Clara Utah	Irrigation	6		8	42 S	16 W	Washington	Mar.	26	1909	2336
Kane Springs & Cottonwood Creek	Daniel D. Dunton	Paragoonah, Utah	Irrigation	.25			Kane Spring and Cottonwood Creek		Iron	Mar.	29	1909	2339
Beaver River	Ray S. Bowman	Salt Lake City	Power	10		1	29 S	5 W	Beaver	Apr.	1	1909	2347
Spring	New Castle Reclamation Co.	Salt Lake City	Domestic	1		26	36 S	16 W	Iron	Apr.	2	1909	2349
Main Canyon	Gottlieb Schmutz	New Harmony, Utah	Irrigation	10			Main Canyon		Washington	Apr.	5	1909	2352
Twin Spring Creek	Seth M. Jones	Enterprise, Utah	Irrigation	2.5		13	37 S	17 W	Washington	Apr.	5	1909	2353
Surplus Waters	Thos A. Thorley	Cedar City, Utah	Irrigation	2	100	1	34 & 35 S	18 W	Iron	Mar.	26	1909	2360
Atchison Creek	Joseph S. Grow	Salt Lake City	Mining				Atchison Creek		Beaver	Apr.	13	1909	2364
Cove Creek	J. M. Lauritzen	St. George, Utah	Irrigation	1		30	25 S	6 W	Millard	Apr.	16	1909	2372
Six Mile Creek	Alexander Jennings	Gunnison, Utah	Power	20		36	18 S	2 E	San Pete	Apr.	23	1909	2381
Six Mile Creek	Cove Creek Coal Co.	Sterling, Utah	Power	20		35	18 S	2 E	San Pete	Apr.	23	1909	2382
Salina Creek & Gooseberry Creek	Alexander Jennings	Gunnison, Utah	Power	30		1	22 S	1 E	Sevier	Apr.	27	1909	2385
Grass Valley Creek and Pinto Creek	Grass Valley Irr. Co.	Salt Lake City	Irrigation	25		16	36 S	15 W	Iron	Apr.	27	1909	2386
Spring	Beaver River Power Co.	Provo, Utah	Miscellaneous	2		24	29 S	6 W	Beaver	Apr.	29	1909	2392
Chris' Creek	Andres Hanson	Ephraim, Utah	Irrigation	5		33	15 S	1 W	Juab	May	1	1909	2397
Fiddler's Canyon	Daniel Stephens	Cedar City, Utah	Irrigation	4		36	35 S	11 W	Iron	May	3	1909	2399
Pass Creek	Myron S. Jones	Enoch, Utah	Irrigation	2.5		31	34 S	10 W	Iron	May	3	1909	2401

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.--Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Coal Creek	Northfield Res. & Irrigation Co.	Cedar City, Utah	Irrigation	10		11	36 S	11 W	Iron	May	6	1909	2405
Broad Hollow Springs	Andrew L. Lamoreaux	Panguitch, Utah	Irrigation	2		4	37 S	5 W	Garfield	May	7	1909	2408
Pine Creek & North Creek	Escalante L. & W. Co	Escalante, Utah	Irrigation	70	6400	8 & 11	35 S	3 & 2 E	Garfield	May	8	1909	2414
Eight Mile Creek	S. A. Greenwood	Salt Lake City	Irrigation	20		27 or 34	18 S	4 W	Millard	May	8	1909	2415
Spring	Wilford Day	Parowan, Utah	Stockwatering	.016		18	32 S	15 W		May	10	1909	2416
Coal Creek	John Chatterly et al	Cedar City, Utah	Irrigation	5		11	36 S	11 W	Iron	May	10	1909	2419
Coal Creek	Old Ft. & Old W. Field Res. & Irri. Co.	Cedar City, Utah	Irrigation	5		33	35 S	11 W	Iron	May	10	1909	2419a
Jamson Spring	Gray Rock Mining Co	Eureka, Utah	Irrigation	.1		22	10 S	2 W	Utah	May	12	1909	2430
Tintic Valley	James L. Stark	Salt Lake City	Irrigation	1		35	10 S	3 W	Juab	May	13	1909	2433
Burdue Spring	Eureka Mining Co.	Eureka, Utah	Irrigation	.12		21	10 S	2 W	Utah	May	13	1909	2434
Ten Mile Creek	State Board Land Com.	Salt Lake City	Miscellaneous	8		29	28 S	3 W	Piute	May	14	1909	2435
Little Pinto Creek	Sebastian Auering	New Harmony, Utah	Irrigation	2		22	37 S	14 W	Iron	May	14	1909	2436
Hell's Kitchen Creek	James Frost	Ephraim, Utah	Irrigation	3		24	17 S	1 W	San Pete	May	17	1909	2438
Coal Creek	Coal Creek M. & N. W. F. Res. & Irr. Co	Cedar City, Utah	Irrigation	10		5	35 S	11 W	Iron	May	19	1909	2445
Spring	James M. Ide & Sons	Oasis, Utah	Irrigation	1		14	19 S	3 W	Millard	May	22	1909	2450
Antelope Springs	James M. Ide	Oasis, Utah	Irrigation	2			Antelope Springs		Millard	May	22	1909	2451
Coyote Creek	Bench Irrigation Co	Coyote, Utah	Irrigation	13		19	31 S	1 W	Garfield	May	6	1909	2452
Dry Canyon Creek	Homer McCarty	Richfield, Utah	Irrigation	10		22	28 S	2½ W	Piute	May	21	1909	2453
Tibadore Creek	Homer McCarty	Richfield, Utah	Irrigation	8		27	28 S	2½ W	Piute	May	24	1909	2454
Lime Kiln Wash	William T Owens	Panguitch, Utah	Irrigation	3		17	34 S	4½ W	Garfield	July	14	1909	2456
Monroe Creek	Richfield City	Richfield, Utah	Power	10		25	25 S	3 W	Sevier	May	27	1909	2461
Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	.1		31	33 S	18 W	Iron	May	28	1909	2463
Badger Hole	E. W. Clay	Salt Lake City	Stockwatering	.02			23 S	19 W	Beaver	May	29	1909	2467
Cottonwood Seep	E. W. Clay	Salt Lake City	Stockwatering	.01			23 S	19 W	Beaver	May	29	1909	2468
Cobb Spring	E. W. Clay	Salt Lake City	Stockwatering	.01			23 S	19 W	Beaver	May	29	1909	2469
Spring Iron County	Moroni Corry	Cedar City, Utah	Stockwatering	2		1, 6, 7, 12 & 18	37 S	10 & 11 W	Iron	June	1	1909	2471
Rock and Prospect Creeks	Riley Young	Mahonri, Utah	Irrigation	1 5		32	33 S	2 W	Garfield	June	1	1909	2472
Dry Creek Canyon	Andrew Brown	Monroe, Utah	Irrigation	2.5		17	26 S	3 W	Sevier	June	1	1909	2473
Timber Canyon Creek	Niels Kelson	Ephraim, Utah	Irrigation	3		14	17 S	1 W	Sanpete	June	1	1909	2474

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Twin Creek	A. H. Poulson et al	Mt. Pleasant, Utah	Irrigation	5		13	15 S	4 E	Sanpete	June	7	1909	2490
Twin Creek	A. H. Poulson et. al	Mt. Pleasant, Utah	Irrigation	5		13	15 S	4 E	Sanpete	June	7	1909	2490a
Chalk Creek	D. C. Mahedy et al	Fillmore, Utah	Power	10			Chalk	Chalk	Millard	June	8	1909	2496
Chalk Creek	James A. Melville	Fillmore, Utah	Irrigation	3		26	20 S	5 W	Millard	June	10	1909	2498
City Creek	Edwin E. Sprague et al	Junction, Utah	Irrigation	6.66		32	29 S	3 W	Piute	June	10	1909	2499
South Cedar Ridge Creek	Emma Hayes	Richfield, Utah	Irrigation	3		28	22 S	2 W	Sevier	June	10	1909	2501
North Cedar Ridge Creek	Elesa Stillman	Richfield, Utah	Irrigation	5		22	22 S	2 W	Sevier	June	10	1909	2502
Beaver River	John F. Berkheimer	Milford, Utah	Irrigation	9		5 & 8	29 S	10 W	Beaver	June	10	1909	2505
Chalk Creek	John C. Kelly	Fillmore, Utah	Irrigation	2		13	21 S	5 W	Millard	June	14	1909	2506
Chalk Creek	D. C. Mahedy, et al	Fillmore, Utah	Power	10			Chalk	Creek	Millard	June	15	1909	2508
Manning Creek	Homer McCarty	Richfield, Utah	Irrigation	20			28 S	3 W	Piute	June	16	1909	2511
Cottonwood Creek	Homer McCarty	Richfield, Utah	Irrigation	3		4	29 S	2½ W	Piute	June	16	1909	2512
Sand Wash	George N. Church	Panguitch, Utah	Irrigation	3		6	34 S	4 W	Garfield	June	16	1909	2537
Sanpitch River	Lewis Larson	Manti, Utah	Irrigation	2		18	19 S	2 E	Sanpete	June	24	1909	2538
Pine Creek	Lewis S. Hills	Salt Lake City	Irrigation		1000		28 S	16 W	Beaver	June	25	1909	2541
Summit Creek	Herbert White, et al	Summit, Utah	Irrigation	14		25	31 S	10 W	Iron	July	6	1909	2553
Summit Creek	Herbert White, et al	Summit, Utah	Irrigation	3		25	34 S	10 W	Iron	July	6	1909	2553a
Summit Creek	Herbert White, et al	Summit, Utah	Irrigation	8			34 or 35 S	10 W	Iron	July	6	1909	2553b
Sevier River	J. A. Bell	Marysvale, Utah	Irrigation	10		16	26 S	3 W	Sevier	July	12	1909	2567
Bunker, Twin Lake, Blue Spring & Deer Creeks	Blue Springs Fish and Reservoir Co.	Panguitch, Utah	Miscellaneous	40		7	36 S	7 W	Garfield and Iron	July	13	1909	2572
Little Cricket Spring	Walter T. Coffman	Salt Lake City	Mining	.02			20 S	9 W	Millard	July	17	1909	2578
Springs Sevier County	Monroe Light, P. & M. Co	Monroe, Utah	Power	10		23	25 S	3 W	Sevier	July	21	1909	2589
Spring	New Castle Reclamation Co.	Salt Lake City	Domestic	.5		36	36 S	16 W	Iron	July	23	1909	2591
Spring	Central Waterworks Co.	Monroe, Utah	Domestic	.5		25	24 S	3 W	Sevier	July	26	1909	2595
Springs	Richard A. Thorley	Cedar City, Utah	Irrigation	1.33		12	32 S	16 W	Iron	July	26	1909	2600
Baker Creek	F. D. Clark, et al	Provo, Utah	Irrigation	8		36	20 S	20 W	Millard	July	27	1909	2601
Cow Canyon Springs	Juab Development Co.	Nephi, Utah	Irrigation	1		19	16 S	2 W	Juab	Aug.	3	1909	2613
Broad Canyon Spring	James Overson et al	Leamington, Utah	Stockwatering	.1		3	15 S	4 W	Juab	Aug.	4	1907	2616
Potato Patch, Mud & Cottonwood Springs & Willow Creek Spring	G. W. Nebeker	Richfield, Utah	Irrigation	.5		21	23 S	1 W	Sevier	Aug.	18	1909	2644
Corn Creek	Hyrum Prows	Kanosh, Utah	Irrigation	4	3		Corn	Creek	Millard	Aug.	19	1909	2645

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Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Meadow Springs	Peter F. Bullock	Cedar City, Utah	Stockwatering	.5		33	31 S	16 W	Iron	Aug.	20	1909	2650
Monroe Creek	Parley Magleby	Richfield, Utah	Irrigation	10		22	25 S	3 W	Sevier	Aug.	21	1909	2653
Cedar Creek	Cedar Creek High Water Irrigation Co.	Mt. Pleasant, Utah	Irrigation	20		30	15 S	5 E	Sanpete	Aug.	23	1909	2655
Seeps in Alvey Wash	H. N. Cowles, et al	Escalante, Utah	Irrigation	1.5		25	35 S	3 E	Garfield	Sept.	7	1909	2672
Warm Creek	Albert J. Bishop	Smithfield, Utah	Irrigation	2.5		4	16 S	19 W	Millard	Sept.	10	1909	2677
Springs	Olson Bros.	Manti, Utah	Stockwatering	.1		3	18 S	3 E	Sanpete	Sept.	13	1909	2687
Kane Springs & Cottonwood Canyon Spring	Daniel D. Dunton	Paragoonah, Utah	Irrigation	.25			Kane Spg. & Cottonwood Can. Spg.		Iron	Sept.	20	1909	2695
Springs	Albin F. Palm	Provo, Utah	Mining	.25			Springs		Beaver	Sept.	20	1909	2696
South Cedar Ridge Creek	Emma Hays	Richfield, Utah	Irrigation	3		28	22 S	2 W	Sevier	Sept.	21	1909	2698
North Cedar Ridge Creek	Elesa Stillman	Richfield, Utah	Irrigation	5		22	22 S	2 W	Sevier	Sept.	21	1909	2699
South Cedar Ridge Creek	Emma Hays	Richfield, Utah	Irrigation	5		28	22 S	2 W	Sevier	Sept.	21	1909	2700
Spring	A. J. McMullen	Salt Lake City	Mining	.25			Spring		Beaver	Sept.	23	1909	2702
Dog Valley Canyon	Anthony Paxton, Jr.	Kanosh, Utah	Irrigation	3		32	24 S	6 W	Millard	Oct.	4	1909	2719
Mountain Springs	Richard A. Thorley	Cedar City, Utah	Stockwatering	.33		12	32 S	16 W	Iron	Oct.	7	1909	2726
Pine Grove Creek	John & Caroline Ryan	Salt Lake City	Irrigation	4		28	28 S	16 W	Beaver	Oct.	8	1909	2733
Surplus Water from Uvada & Gold Springs Washes & Modena Pipe Line Washes	Thos. A. Thorley	Cedar City, Utah	Irrigation	10		1	35 S	19 W	Iron	Oct.	8	1909	2735
Pine Creek	Daniel C. Mahedy	Salt Lake City	Irrigation	10		15	22 S	4 W	Millard	Oct.	9	1909	2736
Monroe Creek	J. L. & A. L. Quist	Richfield, Utah	Irrigation	4		22	25 S	3 W	Sevier	Oct.	13	1909	2742
Maple Spring	George J. Wolfe	Fillmore Utah	Irrigation	4		10	22 S	4 W	Millard	Oct.	13	1909	2743
Hop Creek, Coop Creek and Spring	Geo. McCune et al	Eureka, Utah	Irrigation	3		12	12 S	3 W	Juab	Oct.	13	1909	2744
Granite Spring	J. F. Tolton	Beaver City, Utah	Stockwatering	.66		21	28 S	10 W	Beaver	Oct.	19	1909	2751
Wm. Woods Spring	John W. Meyers	Minersville, Utah	Stockwatering	1.5		33	28 S	15 W	Beaver	Oct.	20	1909	2757
Sullivan Springs Creek	R. H. Cowan	Robinson, Utah	Irrigation	3			11 S	3 W	Juab	Nov.	26	1909	2758
Hop Spring Creek and Hop Spring	W. E. Ivie	Robinson, Utah	Irrigation	5			11 S	3 W	Juab	Oct.	20	1909	2759
Dunnins, Whiskey and Giles Creeks	Fredrick L. Sumpter et al	Salt Lake City	Irrigation	10		20	18 S	4 W	Millard	Oct.	26	1909	2767
Spring Juab County	George McCune	Eureka, Utah	Stockwatering	.1			12 S	2 W	Juab	Oct.	28	1909	2771
Three Mile Canyon	O. J. Salisbury	Salt Lake City	Mining	.33			Three Mile Canyon		Piute	Oct.	30	1909	2775
Atchison Creek	Utah Gold & Copper Mining Co.	Salt Lake City	Mining	.50			Atchison Creek		Beaver	Nov.	1	1909	2777
Spring	Conrad Haight	Cedar City, Utah	Stockwatering	.8		16	35 S	14 W	Iron	Nov.	2	1909	2779

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Manti City Creek	Manti Light & Power Co.	Manti, Utah	Power	10		11	18 S	3 E	Sanpete	Nov.	3	1909	2783
Sevier River	Belnap Power Co., Assignee, H. E. Smith	Duluth, Minn.	Power	100		29 & 6	26 & 27 S	3 & 4 W	Piute	Nov.	5	1909	2791
Corner Spring	Edward Nazer	Monroe	Irrigation	.2		3	26 S	3 W	Sevier	Nov.	11	1909	2804
Coal Creek	Wm. R. Palmer	Cedar City, Utah	Irrigation	50		10	36 S	11 W	Iron	Nov.	17	1909	2817
Cottonwood Creek	C. J. Petgen	Pittsburg, Pa.	Power	10		32	27 S	4 W	Piute	Nov.	19	1909	2825
Dual Spring Basin	Frank J. Christensen	Kanosh, Utah	Irrigation	3		32	23 S	5 W	Millard	Nov.	24	1909	2833
Shoal Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	40		16	37 S	17 W	Washington	Nov.	26	1909	2835
Sevier River	C. L. Elder, et al	Kingston, Utah	Irrigation	8		33	33 S	2 W	Garfield	Nov.	26	1909	2836
Sevier River	D. B. Mackintosh	Salt Lake City	Irrigation		10000	29	17 S	8 W	Sevier	Nov.	29	1909	2840
Corn Creek	James A. Faust, et al	Salt Lake City	Irrigation	10		Corn Creek			Millard	Nov.	30	1909	2845
Coal Creek	Kumen L. Jones	Cedar City, Utah	Irrigation	25		33	35 S	11 W	Iron	Dec.	2	1909	2851
Coop Springs Creek	James J. Burke	Salt Lake City	Irrigation	10		31	11 S	2 W	Juab	Dec.	2	1909	2852
Bertleson Ditch, Dorford Creek & Monroe Creek	J. E. Magleby, et al	Monroe, Utah	Irrigation		500	22	25 S	3 W	Sevier	Dec.	4	1909	2856
Atchison Creek	Utah Gold & Copper Mining Co.	Salt Lake City	Power	.50		Atchison Creek			Beaver	Dec.	7	1909	2859
Pine (Bullion) Creek	Tom Ferrosson	Salt Lake City	Power	15		34	27 S	4 W	Piute	Dec.	7	1909	2860
Pleasant Creek	John Hasler	Mt. Pleasant, Utah	Irrigation	.5		6	15 S	5 E	Sanpete	Dec.	9	1909	2867
Shagga Upper & Lower Springs	Lyman A. Shephard	Beaver, Utah	Stockwatering	.5		35	27 S	8 W	Beaver	Dec.	13	1909	2873
Pine Creek	Almon D. Robison	Fillmore	Irrigation	2		4	22 S	4 W	Millard	Dec.	14	1909	2874
Black Knoll Springs	John H. Ford	Sigurd, Utah	Miscellaneous	20		12	23 S	2 W	Sevier	Dec.	15	1909	2881
San Pitch River & Six Mile Creek	Frank L. Copening	Provo, Utah	Irrigation		5000	32	18 S	2 E	Sanpete	Dec.	20	1909	2884
Spring Iron County	Thomas Lawrence, Jr.	Cedar City, Utah	Domestic	.425		14	36 S	11 W	Iron	Dec.	20	1909	2886
Twin Creek	Cedar Creek High Water Irrigation Co.	Mt. Pleasant, Utah	Irrigation	20		19	15 S	5 E	Sanpete	Dec.	30	1909	2899
Pleasant Creek	Mt. Pleasant City	Mt. Pleasant, Utah	Power	10		4	15 S	5 E	Sanpete	Dec.	30	1909	2900
Springs	N. A. Farry	Marysvale, Utah	Irrigation	10		18 & 19		3 W	Sevier	Jan.	3	1910	2902
Cedar Springs & Hop Canyon	Henry M. Miller	Nephi, Utah	Stockwatering		90	Cedar Springs & Hop Canyon			Juab	Jan.	7	1910	2906
Dry Canyon Creek	Henry M. Miller	Nephi, Utah	Stockwatering		90	Dry Canyon			Juab	Jan.	7	1910	2907
Eight Mile Creek	James Lewis	Holden, Utah	Irrigation	8		27 or 34	18 S	4 W	Millard	Jan.	14	1910	2911

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Sevier River	D. B. Brinton	Murray, Utah	Power	97		1	17 S	2 W	Juab	Apr.	23	1910	2913
Flat Canyon	N. J. Bates, et al	Richfield, Utah	Irrigation	10		17	24 S	3 W	Sevier	Jan.	21	1910	2928
Lime Kiln Wash	John E. Myers, et al	Panguitch, Utah	Irrigation	2		23	34 S	5 W	Garfield	Jan.	29	1910	2953
Manning Creek	Mary W. McCarty	Richfield, Utah	Irrigation	10		12	28 S	3 W	Piute	Jan.	31	1910	2955
Manning Creek	Edgar C. McCarty	Marysvale, Utah	Irrigation	3		12	28 S	3 W	Piute	Feb.	1	1910	2961
Summit Creek or Santaquin Creek	E. O. Bylund	Santaquin, Utah	Irrigation	2		Summit Creek			Utah	Feb.	1	1910	2962
Sevier River	D. B. Mackintosh	Salt Lake City	Irrigation			6	18 S	7 E	Sevier	Feb.	3	1910	2967
Braffits Creek	Ann Pratt	Summit, Utah	Irrigation	4	5000	3 or 10	35 S	10 W	Iron	Feb.	4	1910	2971
onroe Creek	N. J. Bates	Richfield, Utah	Irrigation	10		22	25 S	3 W	Sevier	Feb.	4	1910	2972
Manning Creek	Henry C. Lund	Salt Lake City	Irrigation	40		1	28 S	3 W	Piute	Feb.	14	1910	2993
Springs	John H. Ford	Sigurd, Utah	Miscellaneous	30		33	23 S	2 W	Sevier	Feb.	15	1910	2998
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		11	33 S	18 W	Iron	Feb.	16	1910	3002
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		10	33 S	18 W	Iron	Feb.	16	1910	3003
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		11	33 S	18 W	Iron	Feb.	18	1910	3004
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		19	32 S	17 W	Iron	Feb.	18	1910	3005
Spring Iron County	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		14	33 S	18 W	Iron	Feb.	18	1910	3006
Pine Creek	Cascade Gold M. & M. Co.	Marysvale, Utah	Power	10		32	27 S	4 W	Piute	Feb.	21	1910	3012
Clear Creek Canyon	Joseph & Cove Highland Canal Co.	Joseph, Utah	Irrigation	10		31	25 S	4 W	Sevier	Feb.	23	1910	3016
Summit Creek	Isaac F. Langford, et al	Summit, Utah	Irrigation	5		35	34 S	10 W	Iron	Feb.	25	1910	3024
Spring	Neilson B. Dalley	Summit, Utah	Domestic	.5		31	34 S	9 W	Iron	Feb.	26	1910	3026
City Creek	Mary E. Empy, et al	Junction, Utah	Irrigation	1.33		32	29 S	3 W	Piute	Feb.	26	1910	3028
Eight Mile Creek	Western Resources Promotion Co.	Salt Lake City	Irrigation	3		27 or 34	18 S	4 W	Millard	Feb.	28	1910	3032
Eight Mile Creek	Western Resources Promotion Co.	Salt Lake City	Irrigation	10		27 or 34	18 S	4 W	Millard	Feb.	28	1910	3033
Springs	Frank Westbrook	Hatton, Utah	Irrigation	.5		11	23 S	5 W	Millard	Mar.	2	1910	3034
City Creek	William H. Lake	Junction, Utah	Irrigation	.8		32	29 S	3 W	Piute	Mar.	2	1910	3038
City Creek	Thomas E. King, et al	Junction, Utah	Irrigation	.93		22	29 S	3 W	Piute	Mar.	5	1910	3042
Red Butte Springs	James S. Emett	Anabella, Utah	Domestic	1		4	25 S	2 W	Sevier	Mar.	5	1910	3044
Daniel's Canyon Creek	M. O. Packard, et al	Springville, Utah	Power	15		30	25 S	1 E	Sevier	Mar.	5	1910	3045
Corn Creek	James Cortsen	Kanosh, Utah	Power	6		34	23 S	5 W	Millard	Mar.	8	1910	3053

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Beaver River Power Company	Provo, Utah	Miscellaneous	2		24	29 S	6 W	Beaver	Mar.	9	1910	3054
Deseret Springs	Robert L. Nolf	Modena, Utah	Irrigation	5	100	25	34 S	19 W	Iron	Mar.	10	1910	3055
Maple Springs	M. A. Orton, et al	Parowan, Utah	Stockwatering	.1		34	34 S	9 W	Iron	Mar.	10	1910	3058
Wide Canyon & Middle Canyon	Frank T. Slaughter, et al	Kanosh, Utah	Irrigation	4	4	23	23 S	5 W	Millard	Mar.	11	1910	3061
Spring	James A. Low, et al	Beaver, Utah	Stockwatering	1		34	31 S	7 W	Iron	Mar.	11	1910	3063
Corner Springs	William Nordgren	Monroe, Utah	Irrigation	1		4	26 S	3 W	Sevier	Mar.	14	1910	3066
Willow Springs	D. J. Williams	Greenville, Utah	Stockwatering	.04		23	30 S	10 W	Beaver	Mar.	14	1910	3067
Big Maple Spring	D. J. Williams	Greenville, Utah	Stockwatering	.05		23	30 S	10 W	Iron	Mar.	14	1910	3068
Wire Grass Spring	D. J. Williams	Greenville, Utah	Stockwatering	.01		23	30 S	10 W	Iron	Mar.	14	1910	3069
Dry Hollow Creek Lake Fork Creek, Le Barron Creek	Beaver River Power Co.	Provo, Utah	Power	10	497	3, 17 & 19	29 & 30 S	5 W	Beaver	Mar.	15	1910	3070
Monroe Creek	Monroe Town	Monroe, Utah	Power	8		23	25 S	3 W	Sevier	Mar.	17	1910	3074
Spring Creek	John Z. Alger	Enterprise, Utah	Irrigation	10	100	14	37 S	17 W	Washington	Mar.	18	1910	3076
Nelson Creek	Mary W. McCarty	Richfield, Utah	Irrigation	3	200	4	28 S	2½ W	Piute	Mar.	15	1910	3077
Cottonwood Creek	Homer McCarty	Richfield, Utah	Irrigation	10		9	29 S	2½ W	Piute	Mar.	15	1910	3078
Water Cress Spring	Mary W. McCarty	Richfield, Utah	Irrigation	5	30	3	28 S	2½ W	Piute	Mar.	15	1910	3079
Spring, Branch Canyon Spring	George E. LeFevre	Minersville, Utah	Stockwatering	.04		13	28 S	10 W	Beaver	May	12	1910	3082
Red Canyon Spring													
Trough Spring	Clarence Richards	Parowan, Utah	Stockwatering	.086S		33	34 S	9 W	Iron	Mar.	26	1910	3091
Rock Corral Spring	George E. LeFevre	Minersville, Utah	Stockwatering	.2		13	28 S	10 W	Beaver	Apr.	2	1910	3101
Sevier River	Richlands Irrigation Co.	Salt Lake City	Irrigation	112	6000	6	18 S	7 W	Sevier	Apr.	4	1910	3102
Seepage Sevier County	Henry Peterson	Richfield, Utah	Irrigation	10		33	23 S	2 W	Sevier	Apr.	6	1910	3107
State Line Wash	John L. Sevy	Panguitch, Utah	Stockwatering		60		State Line	Wash	Iron	Apr.	8	1910	3113
Summit Creek	Mathew H. Dalley	Cedar City, Utah	Irrigation	5			35 S	9 or 10 W	Iron	Apr.	10	1910	3116
Cottonwood Creek	G. T. Holladay	Salt Lake City	Irrigation	10		7	33 S	2 W	Piute	Apr.	11	1910	3122
Dry Creek	Joseph A. Smith	Monroe Utah	Irrigation	10		17	26 S	3 W		Apr.	11	1910	3123
Duck Lake, Duck, Swains, Strawberry & Kanab Creek	N. T. Porter	Salt Lake City	Irrigation	30	10000	16	42 S	6 W	Garfield and Kane	Apr.	11	1910	3124
Dry Wash	George R. Johnson	Coyote, Utah	Irrigation	10	110	25	30 S	2 W	Piute	Apr.	12	1910	3125
Cedar Creek & Twin Cr'k	Cedar Creek & Twin Cr'k Res. Co.	Mt. Pleasant, Utah	Irrigation		1000	29 & 30	15 S	5 E	Sanpete	Apr.	14	1910	3130

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Branch Cr'k, Branch Cr'k Springs & Shirts Cr'k	D. R. Beebe, et al	Provo, Utah	Irrigation	10		1, 30 & 32	30 & 33 & 34 S	2 & 3 W	Garfield	Apr.	14	1910	3131
Pioneer Creek	L. E. Pratt	Salt Lake City	Irrigation		125	25	20 S	4 W	Millard	May	18	1910	3132
Birch Creek, Horse Creek	E. A. Beebe, et al	Junction, Utah	Irrigation	7		35	33 S	2 W	Garfield	Apr.	16	1910	3135
Beaver River	Barclay John	Clear Lake, Utah	Irrigation	50		21 or 28	20 S	8 W	Beaver and Millard	Apr.	18	1910	3137
Hunt Creek & Tom Best Spring	Hosea Merrell, et al	Topic, Utah	Irrigation	5		36	34 S	3 W	Garfield	Apr.	21	1910	3147
Rock Canyon Wash	Ole Olsen	Castle Dale, Utah	Irrigation	4		16	19 S	8 E	Emery	Apr.	21	1910	3148
Red Creek	F. C. N. Graydon	St. George, Utah	Irrigation		3000	4	34 S	8 W	Iron	Apr	22	1910	3155
Little Salt Lake	F. C. N. Graydon	St. George, Utah	Irrigation		5000	36	33 S	10 W	Iron	Apr.	22	1910	3156
Rush Lake Flood Water	F. C. N. Graydon	St. George, Utah	Irrigation		5000	30	33 S	11 W	Iron	Apr.	22	1910	3157
Center Creek	F. C. N. Graydon	St. George, Utah	Irrigation		5000	13	34 S	9 W	Iron	Apr.	22	1910	3158
Little Creek	F. C. N. Graydon	St. George, Utah	Irrigation		1000	27	33 S	8 W	Iron	Apr.	22	1910	3159
Summit Creek	F. C. N. Graydon	St. George, Utah	Irrigation		1000	36	34 S	10 W	Iron	Apr.	22	1910	3160
Hunt Creek	Ezra T. Rappley, Jr.	Tropic, Utah	Irrigation	3.5		35	34 S	3 W	Garfield	Apr.	25	1910	3165
Tom Best Spring	Ezra T. Rappley	Tropic, Utah	Irrigation			35	34 S	3 W	Garfield	Apr.	25	1910	3167
Norton Creek	James S. Emett	Annabella, Utah	Irrigation	.5		5	25 S	2 W	Sevier	July	27	1910	3171
Maple Creek	Geo. C. Morrison	Richfield, Utah	Irrigation	1		27	24 S	2 W	Sevier	Apr.	26	1910	3172
Cliff Spring	Geo. C. Morrison	Richfield, Utah	Irrigation	.5		28	24 S	2 W	Sevier	Apr.	26	1910	3173
Triangle Canyon Creek	Frank Warner	Fillmore, Utah	Irrigation	1		9	22 S	7 W	Millard	Apr.	28	1910	3174
Spring Creek	Frank Warner	Fillmore, Utah	Irrigation	.1		9	22 S	4 W	Millard	Apr.	28	1910	3175
Otter Creek	Chas. V. Moorhouse	Junction, Utah	Irrigation	1.25		12	29 S	2 W	Piute	Apr.	29	1910	3176
Shirts Creek	Francis W. Middleton	Hamilton, Utah	Irrigation	8		35 or 36	36 S	12 W	Iron	May	4	1910	3188
Springs Sevier County	Junius F. Ogden, et al	Richfield, Utah	Irrigation	1		28	23 S	2 W	Sevier	May	6	1910	3191
Coal Creek	Thos. D. Roche, et al	Cedar City, Utah	Irrigation	16		34	35 S	11 W	Iron	May	10	1910	3205
Upper Nephi Spring	Terry Brothers	Enterprise, Utah	Stockwatering	.1			36 S	19 W	Iron	May	11	1910	3207
Lower Parker Canyon Spr.	Terry Brothers	Enterprise, Utah	Stockwatering	.2		8	37 S	18 W	Washington	May	11	1910	3208
Upper Parker Canyon Spr.	Terry Brothers	Enterprise, Utah	Stockwatering	.1		8	37 S	18 W	Washington	May	11	1910	3209
Nephi Spring	Terry Brothers	Enterprise, Utah	Stockwatering	.3			36 S	19 W	Iron	May	11	1910	3210
Little Mud Springs	John Chambers	Silver City, Utah	Domestic	.05		13	11 S	4 W	Juab	May	13	1910	3220
Spring Beaver County	Chas. R. Woodbury	Beaver, Utah	Irrigation	1		14	26 S	7 W	Beaver	May	14	1910	3222
Spring Beaver County	George Bradshaw	Beaver, Utah	Stockwatering	.1		23	26 S	7 W	Beaver	May	14	1910	3223
Maple Spring	Stubb Brothers	Parowan, Utah	Stockwatering	.33		3 or 34	34 or 35 S		Iron	May	16	1910	3225

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Coal Creek	D. S. Pendeton, et al	Cedar City, Utah	Irrigation	41.83		34	35 S	11 W	Iron	May	9	1910	3231
Utada & Gold Springs Wash	Thos. A. Thorley	Cedar City, Utah	Irrigation	22		6	35 S	18 W	Iron	May	18	1910	3233
Spring	R. R. Hill, et al	Fayette, Utah	Domestic	1		13	19 S	2 W	Millard	May	20	1910	3235
Lee Ditch & Lyons Ditch	James Bertleson, et al	Marysvale, Utah	Irrigation	1		19	27 S	3 W	Piute	May	20	1910	3237
North Spring	F. T. Slaughter	Salt Lake City	Stockwatering	.1			North Spring		Juab	May	23	1910	3238
Basin Spring	F. T. Slaughter	Salt Lake City	Stockwatering	.1			Basin Spring		Millard	May	23	1910	3239
Lower Spring	F. T. Slaughter	Salt Lake City	Stockwatering	.05			Lower Spring		Millard	May	23	1910	3240
Smith Spring	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.1		30	32 S	17 W	Iron	May	24	1910	3242
Hamlin Spring	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.08		19	32 S	17 W	Iron	May	24	1910	3243
Pine Springs	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.02		4	32 S	16 W	Iron	May	24	1910	3244
Bannion Spring	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.04		4	33 S	18 W	Iron	May	24	1910	3245
Root Spring	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.06		4	32 S	16 W	Iron	May	24	1910	3246
Rock Canyon Spring	Ira W. Hatch	Panguitch, Utah	Irrigation	1		16	36 S	16 S	Garfield	May	27	1910	3254
Coal Creek	Wm. H. Grimshaw, et al	Cedar City, Utah	Irrigation	20		34	35 S	11 W	Iron	May	27	1910	3255
Clay Creek	Hans Hermanson	Elsinore, Utah	Irrigation	5		32	34 S	2 W	Garfield	May	28	1910	3260
Coal Creek	John R. Wood	Cedar City, Utah	Irrigation	8		34	35 S	11 W	Iron	May	31	1910	3266
Rock Spring	A. D. Findlay	Kanab, Utah	Stockwatering	.2		25	38 S	6 W	Kane	June	1	1910	3270
San Pedro et al pipe line overflow	William A. Bond	Modena, Utah	Irrigation	.5		1	35 S	19 W	Iron	June	1	1910	3271
Deer Creek	A. K. Farnsworth	Provo, Utah	Miscellaneous	10		7	36 S	7 W	Iron	June	3	1910	3276
Glenwood Springs	Thomas Brown	Richfield, Utah	Irrigation	10		35	23 S	2 W	Sevier	June	4	1910	3278
Glenwood Springs	Thomas Brown	Richfield, Utah	Power	10		35	23 S	2 W	Sevier	June	4	1910	3279
Spring	R. N. Jensen	Sigurd, Utah	Irrigation	2		6	23 S	1 W	Sevier	June	6	1910	3282
Desert Spring Channel	Robert L. Nolf	Modena, Utah	Mining	.5		23	34 S	19 W	Iron	June	6	1910	3284
Cottonwood Creek	Sarah C. Hales	Junction, Utah	Irrigation	6		20	33 S	2 W	Garfield	June	10	1910	3292
Spring	Herbert P. Haight	Cedar City, Utah	Stockwatering	.04		22	35 S	14 W	Iron	June	15	1910	3302
Spring	Richard A. Thorley	Cedar City, Utah	Stockwatering	.04		12	32 S	16 W	Iron	June	16	1910	3307
Braffits Creek	John Lee Jones	Enoch, Utah	Irrigation	3		3	35 S	10 W	Iron	June	16	1910	3308
Braffits Creek	Ida W. Jones	Enoch, Utah	Irrigation	4		3	35 S	10 W	Iron	June	16	1910	3309
South Creek	Wm. Adair, et al	Tropic, Utah	Irrigation	4		27	34 S	2 W	Garfield	June	16	1910	3310
Meadow Spring	John Ryan, et al	Salt Lake City	Irrigation	3		31	28 S	15 W	Beaver	June	17	1910	3314

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Pleasant Creek	W. D. Candland	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	June	20	1910	3318
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	June	22	1910	3323
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10			Pleasant Creek		Sanpete	June	22	1910	3324
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Power	20		5	15 S	5 E	Sanpete	June	23	1910	3325
Spring	John M. Griffith	Minersville, Utah	Stockwatering	100		13	28 S	10 W	Beaver	June	29	1910	3347
South Cove Spring	James Bullock	Cedar City, Utah	Stockwatering	.03		4	32 S	16 W	Beaver	June	29	1910	3348
East Cove Spring	James Bullock	Cedar City, Utah	Stockwatering	.006		4	32 S	16 W	Beaver	June	29	1910	3349
Big Pinto Spring	James Bullock	Cedar City, Utah	Stockwatering	.05		4	32 S	16 W	Iron	June	29	1910	3350
Little Pinto Spring	James Bullock	Cedar City, Utah	Stockwatering	.1		4	32 S	16 W	Beaver	June	29	1910	3351
North Cove Spring	James Bullock	Cedar City, Utah	Stockwatering	.025		4	32 S	16 W	Beaver	June	29	1910	3352
Calloway Spring	N. Calloway	Richfield, Utah	Domestic	1		26	23 S	3 W	Sevier	July	5	1910	3367
Herrins Hole	John H. Payne	Glenwood, Utah	Irrigation	5		23	23 S	2 W	Sevier	July	5	1910	3368
Red Creek	Red Creek Res. & Canal Co.	Paragoonah, Utah	Irrigation		900	7	34 S	7 W	Iron	July	8	1910	3370
South Chalk Creek	L. W. Roash	Gunnison, Utah	Power	10		35	21 S	4 W	Millard	July	11	1910	3381
Preuss Valley or Wah Wah Valley Waters	H. F. Sutton, et al	Salt Lake City	Irrigation		1500	8	27 S	13 W	Beaver	July	12	1910	3391
Bullion Creek	H. J. Thoma	Pittsburg, P. A.	Mining	10		32	27 S	4 W	Piute	July	15	1910	3401
Rock Wash	John Z. Alger, Jr.	Enterprise, Utah	Irrigation	4	30	15	36 S	17 W	Iron	July	15	1910	3402
Branch Cr'k., Branch Cr'k Springs & Shirts Cr'k.	D. E. Beebe, et al	Provo, Utah	Irrigation	10		1, 30 & 32	30, 33 34 S	2 & 3 W	Garfield	July	16	1910	3404
Sevier River	Samuel Ottis Hill	Salt Lake City	Irrigation	2.5		1	18 S	8 W	Millard	July	27	1910	3419
Warm Creek	Charles W. Phillips	Gandy, Utah	Irrigation	4		4	16 S	19 W	Millard	Aug.	10	1910	3444
Horse Creek	J. W. Young, et al	Coyote, Utah	Irrigation	8		2	34 S	2 W	Garfield	Aug.	12	1910	3453
Bob Patterson Stream	H. J. Cox, et al	Beaver, Utah	Irrigation	1	44880	25	24 S	6 W		Aug.	24	1910	3470
Mud Spr. Canyon Water	E. A. Burton, et al	Parowan, Utah	Stockwatering	.16			Mud Sp. Can.	Wat'r	Iron	Aug.	29	1910	3473
Hawkins Wash	Clement Tebbs	Panguitch, Utah	Stockwatering	.1		11	32 S	5 W	Garfield	Aug.	29	1910	3474
Fish Creek	Hyrum Spencer, et al	Indianola, Utah	Irrigation	5		1	12 S	4 E	Sanpete	Aug.	29	1910	3477
Lower Canyon Spring	James Bullock	Cedar City, Utah	Stockwatering	.03		31	33 S	18 W	Iron	Aug.	30	1910	3479
Cabin Spring	James Bullock	Cedar City, Utah	Stockwatering	.03		31	33 S	18 W	Iron	Aug.	30	1910	3480
Springs	J. S. Hanks, et al	Parowan, Utah	Irrigation	.5		1 & 36	36 S	9 W	Iron	Aug.	31	1910	3484
Monroe Creek	Jacob Marleby	Monroe, Utah	Irrigation	6	80	15	25 S	3 W	Sevier	Sept.	1	1910	3486
Warm Creek	Charles A. Phillips	Gandy, Utah	Irrigation	1.5		4	16 S	19 W	Millard	Sept.	6	1910	3486
Cottonwood Canyon	H. D. Barles	Parowan, Utah	Irrigation	.5	1.6	1	33 S	9 W	Iron	Sept.	8	1910	3493

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Pine Creek	Jacob W. Young	Marysvale, Utah	Power	10		33	27 S	4 W	Piute	Sep.	12	1910	3496
Sevier Creek	J. W. Young et al	Johns Valley, Utah	Irrigation	12		31	34 S	2 W	Garfield	Sep.	16	1910	3501
Granite Spring	J. F. Tolton	Beaver Utah	Irrigation	.66		21	28 S	10 W	Beaver	Sep.	16	1910	3503
Spring	Daniel C. Harris	Silver City, Utah	Domestic	.01		4	11 S	2 W	Juab	Sep.	19	1910	3506
Mud Spring Wash	Joseph B. Dalton et al	Parowan, Utah	Stockwatering				Mud Spring Wash		Iron	Sep.	24	1910	3514
Spring	Alex Jennings	Nephi, Utah	Domestic	1		7	22 S	3 E	Sevier	Sep.	24	1910	3515
Wah Wah Range	Charles I. Clements	Minersville, Utah	Stockwatering	.25	2	33	22 S	15 W	Beaver	Sep.	20	1910	3516
Wah Wah Range	Charles I. Clements	Minersville, Utah	Stockwatering	.5		33	22 S	15 W	Beaver	Sep.	20	1910	3517
First Spring, Dry Creek.													
Oak Creek	Oak Creek Irrigation Co.	Oak City, Utah	Irrigation	.5		9	17 S	4 W	Millard	Oct.	5	1910	3523
Springs	Winslow R. Walker	Oak City, Utah	Irrigation	1		9	17 S	4 W	Millard	Oct.	5	1910	3524
Spring	L. N. Marsden	Parowan, Utah	Stockwatering	.15		36	31 S	15 W	Iron	Oct.	6	1910	3526
Spring	J. K. Paramore	Parowan, Utah	Stockwatering	.10		29	31 S	14 W	Iron	Oct.	6	1910	3527
Seepage	Herman and John Bayles	Parowan, Utah	Stockwatering	.08			Seepage		Beaver	Oct.	10	1910	3533
Little Sulphur Springs	Murray Sheep Co.	Burbank, Utah	Stockwatering	.06			Little Sulphur Sps		Beaver	Oct.	12	1910	3535
Sevier East Fork	Jedidia Adair et al	Salt Lake City	Irrigation	14			Sevier East Fork		Garfield	Oct.	17	1910	3542
Spring	T. W. Jones et al	New Castle, Utah	Stockwatering	.1		28	36 S	15 W	Iron	Oct.	26	1910	3552
Deseret Springs Water Channel	Robert L. Nolf	Modena, Utah	Stockwatering	3		23	34 S	19 W	Iron	Oct.	28	1910	3558
Birch Spring	Sophia G. Page	Pinto, Utah	Stockwatering	.1		21	37 S	14 W	Iron	Oct.	31	1910	3562
Cottonwood Creek	A. J. Sargent	Junction, Utah	Irrigation	6		19	28 S	3 W	Piute	Oct.	31	1910	3564
Oak Creek	Frederic R. Lyman	Oak City, Utah	Domestic	1		9	17 S	4 W	Millard	Nov.	1	1910	3565
Dry Creek	Frederic R. Lyman	Oak City, Utah	Domestic	1		9	17 S	4 W	Millard	Nov.	1	1910	3566
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Power	20		5	15 S	5 E	Sanpete	Nov.	1	1910	3567
Wide Mouth Canyon	Western Resources Promotion	Salt Lake City	Irrigation	10		31	23 S	6 W	Millard	Nov.	4	1910	3578
Gap Canyon Drainage	Jasper Stubbs et al	Parowan, Utah	Stockwatering	.125		28	33 S	10 W	Iron	Nov.	5	1910	3579
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	Nov.	10	1910	3590
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	Nov.	10	1910	3591
Big Springs & Snake Crk	Andrew A. Cahoon	Salt Lake City	Irrigation	30		31	21 S	19 W	Millard	Nov.	16	1910	3606
Antelope Springs	Andrew A. Cahoon	Salt Lake City	Stockwatering	.25			Antelope Springs		Millard	Nov.	16	1910	3607
Deer Creek	J. E. Jolley et al	Coyote, Utah	Irrigation	7.5		22	32 S	2 W	Garfield	Nov.	17	1910	3610
Little Meadow Stream	David Dunsire	Coyote, Utah	Irrigation	1		24	30 S	2 W	Piute	Nov.	17	1910	3611
Fiddlers Canyon	Daniel Stephens	Cedar City, Utah	Irrigation	2		36	35 S	11 W	Iron	Nov.	19	1910	3617
Lake Creek	E. A. Sherman	Ogden, Utah	Irrigation	1.5		10	29 S	5 W	Beaver	Nov.	21	1910	3619

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Cottonwood Spring	Walter James et al	Blackrock, Utah	Stockwatering	.05			Cottonwood Spg.		Beaver	Nov.	19	1910	3212
Carney Spring	Walter James et al	Blackrock, Utah	Stockwatering	.03			Carney Spring		Beaver	Nov.	19	1910	3623
Mt. Home Spr. or Seep	Walter James et al	Blackrock, Utah	Stockwatering	.03			Mt. Home Spring		Beaver	Nov.	19	1910	3624
Sand Spring	Walter James et al	Blackrock, Utah	Stockwatering	.03			Sand Springs		Beaver	Nov.	19	1910	3625
Beers Tunnel	Walter James et al	Blackrock, Utah	Stockwatering	.02			Beers Tunnel		Beaver	Nov.	19	1910	3626
Cowboy Spring	Walter James et al	Blackrock, Utah	Stockwatering	.02			Cowboy Spring		Beaver	Nov.	19	1910	3627
Forked Springs?	Walter James et al	Blockrock, Utah	Stockwatering	.05		36	23 S	19 W	Beaver	Nov.	19	1910	3628
Cob Spring	Walter James et al	Blackrock, Utah	Stockwatering	.03			Cob Spring		Beaver	Nov.	19	1910	3629
Victor Spring	Walter James et al	Blackrock, Utah	Stockwatering	.02			Victor Spring		Beaver	Nov.	19	1910	3630
Bob Patterson Creek	H. J. Cox et al	Beaver, Utah	Irrigation		125	23	29 S	7 W	Beaver	Nov.	23	1910	3637
Ten Mile Creek	Homer McCarty	Richfield, Utah	Irrigation	10			Ten Mile Creek		Piute	Nov.	25	1910	3638
Ten Mile Creek	Homer McCarty	Richfield, Utah	Irrigation	10			Ten Mile Creek		Piute	Nov.	25	1910	3639
Oak Springs	William F. Carson	Junction, Utah	Irrigation	2		7	29 S	3 W	Piute	Nov.	25	1920	3640
Swasey Springs	Andrew A. Cahoon	Salt Lake City	Stockwatering	1			Swasey Spring		Millard	Nov.	26	1910	3641
Pleasant Creek	Andrew C. Madsen	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	Nov.	28	1910	3642
Rice Canyon Creek	Fred W. Snow	Stateline, Utah	Mining	.5			Rice Canyon		Iron	Nov.	29	1910	3644
Pine Creek	Jacob W. Young	Marysvale, Utah	Mining	1		33	27 S	4 W	Piute	Nov.	30	1910	3646

Applications to Appropriate Water from the Utah Lake-Jordan River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Hard Lick Spring	Gilbert Lloyd	Riverton, Utah	Irrigation	1		12	4 S	2 W	Salt Lake	Dec.	3	1908	2179
Provo River	Joseph B. Keeler	Provo, Utah	Power	100		24	6 S	2 E	Utah	Dec.	9	1908	2184
Provo River	Provo City	Provo, Utah	Power	100		7	6 S	3 E	Utah	Dec.	14	1908	2187
Little Cottonwood Creek	R. E. Caldwell	Salt Lake City	Power	25		12	3 S	1 E	Salt Lake	Dec.	28	1908	2199
Dry Creek	John F. Tobin	Salt Lake City	Power		500	24	3 S	1 E	Salt Lake	Dec.	28	1908	2201
Dry Creek	John F. Tobin	Salt Lake City	Power	10		24	3 S	1 E	Salt Lake	Dec.	28	1908	2202
Jordan River	Hyrum Bennion	Murray, Utah	Power	60		14	2 S	1 W	Salt Lake	Dec.	30	1908	2204
Spanish Fork River	Spanish Fork Co-operative Inst.	Spanish Fork, Utah	Power	60		33	8 S	3 E	Utah	Jan.	7	1909	2213
Little Cottonwood Creek	George Kay	Murray, Utah	Irrigation	5		3	3 S	1 E	Salt Lake	Jan.	8	1909	2215
Silver Lake Creek	J. C. Jensen	Provo, Utah	Power	20		Silver Lake Creek			Utah	Jan.	20	1909	2229
Deer Creek	Deer Creek Copper and Gold Mining Co.	Salt Lake City	Power	15		Deer Creek			Utah	Feb.	2	1909	2253
Spanish Fork River	U. S. Reclam. Service	Provo, Utah	Irrigation	300		2	9 S	3 E	Utah	Feb.	4	1909	2259
Spanish Fork River	U. S. Reclam. Service	Provo, Utah	Power	400		2	9 S	3 E	Utah	Feb.	4	1909	2260
Currant Creek	Utah Lake Land & Water Power Co.	Elberta, Utah	Power	25		1	11 S	1 W	Utah	Feb.	8	1909	2264
Little Cottonwood Creek	Murray City Corporation	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	Feb.	17	1909	2279
Spring Creek	W. B. Erekson, et al	Murray, Utah	Miscellaneous	75		2	4 S	4 E	Wasatch	Feb.	18	1909	2281
Spring Creek	W. B. Erekson, et al	Murray, Utah	Miscellaneous	200		11	4 S	4 E	Wasatch	Feb.	18	1909	2282
Spring	H. L. Lipton, et al	Payson, Utah	Mining			Spring			Utah	Feb.	18	1909	2286
Jordan River	Arthur Murphy	Salt Lake City	Power	20		32	2 S	3 E	Salt Lake	Feb.	23	1909	2292
Springs	Samuel Russell et al	Salt Lake City	Domestic	3		20	1 S	1 E	Salt Lake	Mar.	20	1909	2328
Utah Lake	Joseph R. Murdock, Assignee Jos. B. Keeler	Provo, Utah	Irrigation	40		35	5 S	1 W	Utah	Mar.	24	1909	2331
Spring	Knight Investment Co.	Provo, Utah	Power	.25		13	10 S	1 E	Utah	Mar.	24	1909	2332
Subterranean Stream	P. W. C. Hathenbruck	Provo, Utah	Power	8		8	7 S	3 E	Utah	Mar.	26	1909	2337
Spring	B. W. Ashton	Salt Lake City	Domestic	8		Spring			Salt Lake	Apr.	2	1909	2350
Silver Lake Creek	J. C. Jensen	Provo, Utah	Power	20		Silver Lake Creek			Utah	Apr.	8	1909	2358
Hidden Treasure Spring	E. J. Raddatz, et al	Salt Lake City	Mining	1.5		10 S		2 W	Utah	Apr.	13	1909	2365
Big Cottonwood Creek	Giles Mining & Milling Co.	Salt Lake City	Power	20		16 22 23 26 27	2 S	3 E	Salt Lake	Apr.	13	1909	2369

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE-JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month.	Day	Year	
Spring	W. H. Stout	Murray Utah	Irrigation	1		35	1 S	1 E	Salt Lake	Apr.	9	1909	2377
Upper and Lower Springs	Provo Valley Trout Co.	Murray Utah	Miscellaneous	100		2	4 S	4 E	Wasatch	Apr.	21	1909	2379
American Fork Creek	J. H. Bigger, Trustee	Salt Lake City	Power	20		21	3 S	3 E	Utah	Apr.	26	1909	2384
Springs	Charles D. Harding	Salt Lake City	Domestic	.25		4	1 S	2 E	Salt Lake	Apr.	28	1909	2388
Spring	E. O. Bylund	Santaquin, Utah	Stockwatering	.06		31	9 S	2 E		May	1	1909	2398
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	8		22	4 S	4 E	Wasatch	May	6	1909	2404
Mill Pond Springs	R. Leo Bird	Provo, Utah	Miscellaneous	4		28	7 S	3 E	Utah	May	7	1909	2410
Twin Springs	Arthur Murphy	Salt Lake City	Irrigation	5			Twin	Springs	Tooele	May	8	1909	2413
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	12		22	4 S	4 E	Wasatch	May	11	1909	2424
Subterranean Stream	F. W. C. Hathenbruck	Provo, Utah	Irrigation	8		8	7 S	3 E	Utah	May	15	1909	2425
Dry Herd Canyon	Gray Rock Mining Co.	Eureka, Utah	Irrigation	1		22	10 S	2 W	Utah	May	12	1909	2429
Spring	George Price	Charleston, Utah	Miscellaneous	5		10	4 S	4 E	Wasatch	May	17	1909	2439
Spring	Erick Ericsson	Salem, Utah	Irrigation	2		30	9 S	3 E	Utah	May	17	1909	2440
Little Cottonwood Creek	Murray City Corporation	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	May	19	1909	2444
Bear Canyon Spring	John H. Dixon	Payson, Utah	Irrigation	2		2 3 34 35	9 & 10 S	2 E	Utah	May	22	1909	2449
Spring	Utah County Light and Power Co.	American Fork, Utah	Domestic	.25		8 6	4 S	2 E	Utah	May	26	1909	2458
Fort Canyon Creek	James W. Vance, et al	Alpine, Utah	Power	35		7 33	4 S 2 S	2 E 1 W	Utah Salt Lake	June June	1 2	1909 1909	2475 2477
Spring	James H. Jensen	Murray, Utah	Domestic	.1			Pinion	Canyon	Utah	June	3	1909	2478
Pinion Canyon	Tintic Delmar Mining Company	Provo	Mining	1		9 10 8 9 16 17	10 S	2 W	Utah	June	7	1909	2491
Spring	J. W. Beasle	Provo	Miscellaneous	.25									
Petetneet Creek	Wm. D. Dixon, et al	Payson, Utah	Power	8									
School House Springs	Lehi and Alpine Cities	Lehi and Alpine, Utah	Domestic	5		7	9 S 4 S	2 E 2 E	Utah Utah	June June	8 8	1909 1909	2494 2495

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	J. A. Holdaway	Provo, Utah	Power	10		12	4 S	1 E	Utah	June	10	1909	2504
American Fork River	Bernard Christensen, et al	American Fork, Utah	Power	20		32	4 S	2 E	Utah	June	15	1909	2510
White Pine, Red Pine & Red Bird Creeks	Henry C. Lund	Salt Lake City	Power	23		10	3 S	2 E	Salt Lake	June	16	1909	2513
Upper, Peterson Basin & Thomas Fork Springs	Mt. Olympus Fruit & Live-stock Farm Co.	Salt Lake City	Irrigation	6		1	2 S	1 E	Salt Lake	June	17	1909	2515
Fort Creek	Leuraine L. Park	Salt Lake City	Power	10		7	4 S	2 E	Utah	June	22	1909	2529
Dry Creek	Provo Reservoir Co.	Provo, Utah	Irrigation	20		17	4 S	2 E	Utah	June	23	1909	2531
American Fork River	Provo Reservoir Co.	Provo, Utah	Irrigation	50		32	4 S	2 E	Utah	June	23	1909	2532
Dry Creek	Provo Reservoir Co.	Provo, Utah	Irrigation	10		13	4 S	1 E	Utah	June	23	1909	2533
Springs	Koran L. Morris	Salt Lake City	Irrigation	1.5		35	1 S	1 E	Salt Lake	June	24	1909	2539
Utah Lake	Francis D. Brown	Salt Lake City	Irrigation	8.75		18	6 S	1 E	Utah	June	28	1909	2543
Big Hollow Creek	Utah-Idaho Sugar Co.	Salt Lake City	Irrigation	10		26	5 S	1 W	Utah	June	29	1909	2545
McRae Canyon	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	June	30	1909	2547
Perdue Spring	J. Preston Creer	Spanish Fork, Utah	Miscellaneous	1		Perdue Spring				July	1	1909	2550
Currant Creek	Geo. McCune, et al	Eureka & Nephi, Utah	Power			22 23 26 27	10 S	1 W	Juab and Utah	July	7	1909	2556
Wire Grass Spring	R. D. Wadley, et al	Pleasant Grove, Utah	Domestic	.25		32	4 S	2 E	Utah	July	8	1909	2557
Broad Canyon Spring	J. L. Smith	Eureka, Utah	Miscellaneous	.125		21 22 27 28	10 S	2 W	Utah	July	12	1909	2568
Maple Canyon	T. R. Kelly	Springville, Utah	Power	10		7	8 S	4 E	Utah	July	12	1909	2569
Spring	Bingham Metal Mining Company	Salt Lake City	Power	2		16	4 S	3 W	Tooele	July	12	1909	2571
Salt Creek	C. F. Hoffman	Salt Lake City	Power	18		6	13 S	2 E	Juab	July	14	1909	2573
Provo River	C. E. Loose, et al	Provo, Utah	Irrigation	10		34	5 S	3 E	Utah	July	15	1909	2575
Big Cottonwood Creek	H. L. Thomas	Salt Lake City	Power	30		7 8 17 18	2 S	3 E	Salt Lake	July	19	1909	2579

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Little Cottonwood Creek	H. L. Thomas	Salt Lake City	Power	20		10 12	3 S	1 & 2 E	Salt Lake	July	19	1909	2580
Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	20.		10 12	3 S	1 & 2 E	Salt Lake	July	19	1909	2581
Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		7	2 S	2 E	Salt Lake	July	19	1909	2582
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	15		7 8 17 18	2 S	3 E	Salt Lake	July	19	1909	2583
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	30		18	2 S	3 E	Salt Lake	July	19	1909	2584
East Hammon Gorge Crk	J. C. Jensen	Provo, Uthh	Power	10	1000	7	4 S	2 E	Utah	July	20	1909	2586
Curio Canyon	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		27	1 N	2 E	Salt Lake	July	21	1909	2587
Little Mountain Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	July	21	1909	2588
Greely & Black Shale Spgs	John W. Taylor et al	Provo, Utah	Miscellaneous	.8		8 9 16 17 19 20 29 30	9 S	2 W	Utah	July	23	1909	2593
Springs	Eugenia N. Stokes	Salt Lake City	Irrigation	2		26	1 S	1 E	Salt Lake	July	23	1909	2594
Jordan River	Phoenix Mining Co.	Bingham, Utah	Mining	2		34	3 S	3 W	Salt Lake	July	26	1909	2596
Snake Creek	Knight Power Co., Assimee Snake Creek Power Co.	Provo, Utah	Power	10		12	3 S	3 E	Wasatch	July	26	1909	2598
Snake Creek	Knight Power Co., Assimee, Snake Creek Power Co.	Provo, Utah	Power	10		12	3 S	3 E	Wasatch	July	26	1909	2599
Big Willow Creek	Thos. A. Starrh et al	Salt Lake City	Power	5		23	3 S	1 E	Salt Lake	July	27	1909	2602
North Dry Creek	Thos. A. Starrh et al	Salt Lake City	Power	7		23	3 S	1 E	Salt Lake	July	27	1909	2603
Spring Creek	J. W. Boyer	Murray, Utah	Miscellaneous	10		8	2 S	1 E	Salt Lake	July	28	1909	2604

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued,

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Smarts Hollows Springs	Samuel A. Cornwall	Murray, Utah	Domestic	.5		35	1 S	1 E	Salt Lake	Aug.	3	1909	2612
Spring	A. A. Noon et al	Provo, Utah	Domestic	.02		21							
						22	10 S	2 W	Utah	Aug.	4	1909	2614
Maple or Bone Canyon Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	Aug.	5	1909	2619
Jordan River	Joseph R. Murdock	Heber, Utah	Irrigation	160		26	4 S	1 W	Utah & Salt Lake	Aug.	6	1909	2621
Mill Creek	Oscar W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	Aug.	7	1909	2622
Cress Spring and Creeks	John H. McEwan	Provo, Utah	Irrigation	2		6							
						7	5 S	4 E	Wasatch	Aug.	7	1909	2623
Deer Creek	John H. McEwan	Provo, Utah	Irrigation	2		6							
						7	5 S	4 E	Wasatch	Aug.	7	1909	2624
Spring	George E. Airis	Salt Lake City	Irrigation	55		35	1 S	1 E	Salt Lake	Aug.	16	1909	2633
Spring	George E. Airis	Salt Lake City	Irrigation	.035		35	1 S	1 E	Salt Lake	Aug.	16	1909	2634
Ellen Spring	Rainbow Trout Co., Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		25							
						26							
						35							
						36	5 S	3 E	Utah	Aug.	16	1909	2639
Pine, Bog & Rhoda Spgs.	Rainbow Trout Co., Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		25							
						26							
						35							
						36	5 S	3 E	Utah	Aug.	16	1909	2640
South Fork Provo River	Rainbow Trout Co., Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		25							
						26							
						35							
						36	5 S	3 E	Utah	Aug.	16	1909	2641
South Fork Provo River	Rainbow Trout Co., Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		25							
						26							
						35							
						36	5 S	3 E	Utah	Aug.	16	1909	2642
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	20		22	2 S	3 E	Salt Lake	Aug.	18	1909	2643
Mill Pond Spring	State of Utah	Salt Lake City	Miscellaneous	7		28	7 S	3 E	Utah	Aug.	20	1909	2646
Spring Creek	State of Utah	Salt Lake City	Power	7		28	7 S	3 E	Utah	Aug.	20	1909	2647

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Dry Creek	Charles Roby	Salt Lake City	Power	15		24	3 S	1 E	Salt Lake	Aug.	20	1909	2648
Mill Pond Springs	Lydia A. Holdaway et al	Provo, Utah	Power	21		28	7 S	3 E	Utah	Aug.	20	1909	2651
Mill Pond Springs	Lydia A. Holdaway et al	Provo, Utah	Miscellaneous	21		28	7 S	3 E		Aug.	20	1909	2652
Spring	No. Bingham Consolidated Mining Co.	Bingham, Utah	Miscellaneous	.008		34	2 S	2 W	Salt Lake	Aug.	24	1909	2658
City Creek	Robt. J. Robinson	Salt Lake City	Power	15		20	1 N	1 E	Salt Lake	Aug.	30	1909	2663
Spring	West Prince of Wales Mining Co.	Salt Lake City	Domestic	.25		32	2 S	3 E	Salt Lake	Sep.	2	1909	2666
Snake Creek Tributary	Knight Power Co., Assignee, Snake Creek Power Co.	Provo, Utah	Power	2		17	3 S	4 E	Wasatch	Sep.	9	1909	2676
Lime and High Springs	Hyrum Baird et al	Provo, Utah	Miscellaneous	6		25 26 31 35 36	5 S	3 & 4 E	Utah	June	20	1910	2683
Snake Creek	Snake Creek Power Co	Provo, Utah	Power	24		17	3 S	4 E	Wasatch	Sep.	13	1909	2684
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	9		17	2 S	3 E	Salt Lake	Sep.	13	1909	2685
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	7		17	2 S	3 E	Salt Lake	Sep.	13	1909	2686
Jordan River	Utah Light & Railway Co.	Salt Lake City	Miscellaneous	10		2	1 S	1 W	Salt Lake	Sep.	13	1909	2688
Big Cottonwood Creek	The Progress Co	Murray, Utah	Power	100		25	2 S	1 E	Salt Lake	Sep.	15	1909	2692
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal	Power		408.5	7 8 17							
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		18	2 S	3 E	Salt Lake	Sep.	20	1909	2693
Spring	Gus J. Henrold	Eureka, Utah	Domestic	.1		18	2 S	3 E	Salt Lake	Sep.	21	1909	2697
Kellyon Canyon Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		3	10 S	3 W	Juab	Sep.	28	1909	2710
Little Mountain Springs	Charles D. Harding	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Sep.	29	1909	2713
American Fork Creek	John Y. Smith, Jr.	Salt Lake City	Power	10		33	1 N	2 E	Salt Lake	Sep.	30	1909	2717
						21	3 S	3 E	Utah	Oct.	7	1909	2725

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs & Parleys Canyon Creek	S. J. Stookey	Salt Lake City	Irrigation	2		21	1 S	1 E	Salt Lake	Oct.	8	1909	2732
Springs	Gus J. Henriod	Eureka, Utah	Domestic	.1		16	10 S	4 W	Tooele	Oct.	11	1909	2737
Deer Creek	T. J. Yates	Salt Lake City	Power	30		19	4 S	4 E	Wasatch	Oct.	18	1909	2750
Parley's Canyon Creek Springs	Ray VanCott, et al	Salt Lake City	Domestic	5		20	1 S	1 E	Salt Lake	Oct.	23	1909	2764
Spring	S. A. Langton, et al	Salt Lake City	Irrigation	1		28	1 N	1 E	Salt Lake	Oct.	26	1909	2769
Spring	German E. Ellsworth	Chicago, Ill	Irrigation	.75		28 to 32	9 S	2 E	Utah	Oct.	27	1909	2770
Salt Creek	Nephi City Corp.	Nephi, Utah	Power	40		1	13 S	1 E	Juab	Oct.	28	1909	2774
North Dry Creek	Charles Roby	Salt Lake City	Power		392	24	3 S	1 E	Salt Lake	Nov.	2	1909	2780
Little Cottonwood Creek	Samuel Russell	Salt Lake City	Power	25		7	3 S	2 E	Salt Lake	Nov.	5	1909	2792
Mill Creek	Oscar W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	Nov.	8	1909	2799
Boulder Creek	Washington Irr. Co.	Kamas, Utah	Irrigation	25	500	7		6 & 7 E	Summit	Nov.	12	1909	2812
Boulder Creek	Washington Irr. Co.	Kamas, Utah	Irrigation	25	500	12	3 S	7 E	Summit	Nov.	12	1909	2813
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation			7		6 & 7 E					
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Miscellaneous	10		12	3 S	7 E	Summit	Nov.	12	1909	2813
						8	4 S	2 E	Utah	Nov.	18	1909	2822
						7							
						8							
						17							
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation			18	4 S	2 E	Utah	Nov.	18	1909	2823
Springs	John L. Ellerson, et al	Mona, Utah	Domestic	.1		8	4 S	2 E	Utah	Nov.	18	1909	2824
Water Hollow	Nephi Irrigation Co.	Nephi, Utah	Irrigation	15		15	11 S	1 W	Juab	Nov.	30	1909	2846
Hilberg & Hemsley Spgs.	O. W. Carlson	Salt Lake City	Domestic	2		4	13 S	2 E	Juab	Dec.	4	1909	2855
Salt Creek	Nephi Irrigation Co.	Nephi, Utah	Irrigation	11		29	1 S	1 E	Salt Lake	Dec.	9	1909	2868
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		610	25	2 S	1 E	Salt Lake	Jan.	22	1910	2878
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		100	25	2 S	1 E	Salt Lake	Dec.	15	1909	2879
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		150	25	2 S	1 E	Salt Lake	Dec.	15	1909	2880
Spring	S. A. Langton, et al	Salt Lake City	Miscellaneous	.1		28	1 N	1 E	Salt Lake	Dec.	21	1909	2887
Spring	Jessup Thomas	Heber, Utah	Irrigation	1		23	4 S	5 E	Wasatch	Dec.	27	1909	2891

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		927	25	2 S	1 E	Salt Lake	Jan.	22	1910	2895
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		200	25	2 S	1 E	Salt Lake	Dec.	28	1909	2896
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		400	25	2 S	1 E	Salt Lake	Dec.	28	1909	2897
Overflow Telluride Power Co	Louis R. McCornick	Salt Lake City	Miscellaneous	.025		35	3 S	3 W	Salt Lake	Jan.	3	1910	2901
Spring	Ed. C. Mecham	Provo, Utah	Miscellaneous	4		31	5 S	4 E	Utah	Feb.	9	1910	2904
Big Cottonwood Creek	Utah Mines Coalition	Salt Lake City	Power	17		27	2 S	3 E	Salt Lake	Jan.	13	1910	2910
Utah Lake	Jas. W. Wade	Salt Lake City	Irrigation	5		4	8 S	1 W	Utah	Jan.	17	1910	2916
Mill Creek	Mill Creek Power Co.	Salt Lake City	Power	20		33	1 S	2 E	Salt Lake	Jan.	14	1910	2912
Utah Lake	James Clove	Provo, Utah	Power	5.4		31	6 S	1 E	Utah	Jan.	18	1910	2918
Artesian Wells	Charles Crane	Salt Lake City	Domestic	.89		18	2 S	1 E		Jan.	21	1910	2923
Spring Creek	R. Leo. Bird	Provo, Utah	Miscellaneous	20		29	7 S	3 E		Jan.	24	1910	2944
Santaquin Creek	E. O. Bylund	Santaquin, Utah	Power	15			Santaquin Creek		Utah	Jan.	24	1910	2945
Bunnell Fork	A. J. Sprague, et al	Provo, Utah	Miscellaneous	10		25							
						36	5 S	4 E	Utah	Jan.	27	1910	2947
Spring	C. E. Thacker	Charleston, Utah	Miscellaneous	4		22	4 S	4 E	Wasatch	Jan.	27	1910	2948
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	8		22	4 S	4 E	Wasatch	Jan.	28	1910	2951
Little Spring Creek	Springville City Corp.	Springville, Utah	Domestic	5		35	7 S	3 E	Utah	May	31	1910	2965
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	12		22	4 S	4 E	Wasatch	Feb.	2	1910	2966
Provo River	A. E. Snow	Spanish Fork, Utah	Power	100		12	6 S	2 E	Utah	Feb.	8	1910	2975
Maple Canyon Creek	W. D. Harrington	Provo, Utah	Power	10			8 S	3 & 4 E	Utah	Feb.	8	1910	2976
Salt Creek	Parley P. Christison	Nephi, Utah	Power	15		4	13 S	1 E	Juab	Feb.	10	1910	2990
Spring	Independent Water Co.	Bingham, Utah	Miscellaneous	.003		35	3 S	3 W	Salt Lake	Feb.	14	1910	2994
Mill Creek	D. B. Brinton	Murray, Utah	Power	15		36	1 S	1 E	Salt Lake	Feb.	14	1910	2995
Hills Ponds Drain	Charles Christenson	Murray, Utah	Miscellaneous	10		31	1 S	1 E	Salt Lake	Feb.	15	1910	2997
Mill Creek	Oscar W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	Feb.	15	1910	2999
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation	10		7							
						8							
						17							
						18	4 S	2 E	Utah	Feb.	18	1910	3009
Chipman Creek	Benjamin Pullmer	Alpine, Utah	Irrigation	4		7							
						8							
						17							
						18	4 S	2 E	Utah	Feb.	18	1910	3010

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

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Jordan River	Utah Gas & Coke Co.	Salt Lake City	Miscellaneous	1		2	1 S	1 W	Salt Lake	Feb.	21	1910	3015
Spring Creek	Progress Co.	Murray, Utah	Irrigation	10		16	2 S	1 E	Salt Lake	Feb.	23	1910	3017
Springs	W. L. Hays, et al	Pleasant Grove, Utah	Power	10			Springs		Juab	Feb.	25	1910	3023
North Dry Creek	James P. Jensen	Sandy, Utah	Irrigation	2		12	3 S	1 E	Salt Lake	Feb.	26	1910	3025
Fairfield Spring	John L. McKinney	Fairfield, Utah	Irrigation	15		29							
						33	6 S	2 W	Utah	Feb.	26	1910	3027
Maple or Slate Jack Spg.	J. W. Vest, et al	Mona, Utah	Stockwatering	.1			10 S	1 W	Utah	Feb.	28	1910	2035
Utah Lake & Warm Spgs.	Wm. G. Williams	Provo, Utah	Irrigation	5		2	8 S	1 E	Utah	Mar.	5	1910	3043
Smarts Hollow Springs	Samuel A. Cornwall	Murray, Utah	Domestic	.5		35	1 S	1 E	Salt Lake	Mar.	5	1910	3046
Salt Creek	Enoch Burton, et al	Nephi, Utah	Power	25		3	13 S	1 E	Juab	Mar.	8	1910	3050
Allcorn Spring	Geo. E. Kay	Mona, Utah	Stockwatering	.5			10 S	1 W	Utah	Mar.	8	1910	3051
Rock Spring	Reuben Kay	Mona, Utah	Stockwatering	.5			10 S	1 W	Utah	Mar.	8	1910	3052
Spring	E. O. Byland	Santaquin, Utah	Stockwatering	.01		31	9 S	2 E	Utah	Mar.	10	1910	3056
Utah Lake	Evan A. Angley	Salt Lake City	Irrigation	1.5		31							
						32	6 S	1 E	Utah	Mar.	10	1910	3057
Springs	Joseph E. Sair	American Fork, Utah	Irrigation	.5		20	4 S	2 E	Utah	Mar.	15	1910	3073
Spring Hollow Spring	F. R. Chandler	Salt Lake City	Irrigation	.5		11	1 S	1 E	Salt Lake	Mar.	19	1910	3080
Tanners Pond	Clarence L. Tanner	Murray, Utah	Miscellaneous	10		16	2 S	1 E	Salt Lake	Mar.	22	1910	3083
City Creek	Francis M. Lyman, Jr.	Salt Lake City	Power	20		11							
						12							
						13							
						14	1 N	1 E	Salt Lake	Mar.	24	1910	3087
Box Elder Stream	Joseph R. Murdock	Heber, Utah	Miscellaneous	10		17	4 S	2 E	Utah	Mar.	31	1910	3095
Santaquin Creek	Knight Power Co., Assignee, Knight Investment Co.	Provo, Utah	Power	25		19	10 S	2 E	Utah	Apr.	1	1910	3096
Snake & Lavina Creeks	Knight Power Co., Assignee, Snake Creek Power Co.	Provo, Utah	Power	25		17	3 S	4 E	Wasatch	Apr.	1	1910	3097
Spring	Knight Power Co., Assignee, Knight Investment Co.	Provo, Utah	Miscellaneous	.25		13	10 S	1 E	Utah	Apr.	1	1910	3098
Salt Creek	Nephi City Corp.	Nephi, Utah	Power	40		6	13 S	2 E	Juab	Apr.	1	1910	3099
Jamison Spring & Spring	Henry Miller	Elberta, Utah	Irrigation	1		10							
						15	10 S	2 W	Utah	Apr.	6	1910	3108

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Spring Branch and Dry Canyon Creek	Cyrus G. Gatrell	Salt Lake City	Domestic	.35		22							
Springs	L. R. Thomas	Salt Lake City	Irrigation	1		27	1 N	1 E	Salt Lake	Apr.	16	1910	3134
Vanders Pond	Charles S. Vander	Salt Lake City	Miscellaneous	5		22	1 N	1 E	Salt Lake	Apr.	20	1910	3144
Vanders Pond	Charles S. Vander	Salt Lake City	Miscellaneous	10		20	1 S	1 E		Apr.	21	1910	3146
Spring	Soren K. Jorrensen	Salt Lake City	Irrigation	1		20	1 S	1 E	Salt Lake	Apr.	21	1910	3149
City Creek, Emigration Canyon, Big and Little Cottonwood Creeks	St. Joseph Water and Irrigation Co., Assignee, Harry S. Joseph	Salt Lake City	Irrigation	15		33	1 S	1 E	Salt Lake	Apr.	26	1910	3169
Utah Lake	Fera Decker	Provo, Utah	Irrigation	20		11	1 N	1 W	Salt Lake & Davis	Apr.	26	1910	3170
Springs	Clear Springs Trout and Poultry Company	Salt Lake City	Power	6		17	8 S	1 E	Utah	May	2	1910	3180
Spring and Utah Lake	Fera Decker	Provo, Utah	Irrigation	10		20	1 S	1 E	Salt Lake	May	21	1910	3181
Little Cottonwood Creek	Samuel Russell	Salt Lake City	Power	20		10							
Hot Springs Lake	Harry S. Joseph	Salt Lake City	Irrigation	20		11	8 S	1 E	Utah	May	2	1910	3183
Utah Lake	Joseph W. Gates	Salt Lake City	Irrigation	2.66		2	3 S	1 E	Salt Lake	May	3	1910	3184
Cedar Fort Creek	John M. Dalton	Salt Lake City	Irrigation	2		14	1 N	1 W	Salt Lake & Davis	May	3	1910	3185
						31	6 S	1 E	Utah	May	4	1910	3186
						3							
						4							
						9							
Mill Pond Springs	John E. Riddle et al	Springville, Utah	Irrigation	21		10	6 S	2 W	Utah	May	6	1910	3194
Springs	Milson R. Pratt	Salt Lake City	Irrigation	.25		28	7 S	3 E	Utah	May	7	1910	3195
Spring	Preston G. Peterson	Provo, Utah	Miscellaneous	.5		Springs			Salt Lake	May	9	1910	3197
Utah Lake	Joseph Warhurst	Salt Lake City	Irrigation	2.66		11	8 S	1 E	Utah	May	9	1910	3202
Utah Lake	Benjamin F. Anderson	Salt Lake City	Irrigation	2.66		31	6 S	1 E	Utah	May	11	1910	3211
Mill Creek	O. W. Carlson	Salt Lake City	Irrigation	10		31	6 S	1 E	Utah	May	11	1910	3212
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation	4		36	1 S	1 E	Salt Lake	May	16	1910	3224
						7							
						8							
						17							
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation	10		18	4 S	2 E	Utah	May	16	1910	3227
						7							
						8							
						17							
						18	4 S	2 E	Utah	May	16	1910	3228

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Big Cottonwood Creek	Camden Riley	Salt Lake City	Power	3			Big Cottonw'd Ck.		Salt Lake	May	16	1910	3229
American Fork Creek	C. W. Earl	Lehi, Utah	Power	20	750		American Fk. Ck		Utah	May	17	1910	3230
Provo River	Knight Power Co., Assignee, Knight Investment Co.	Provo, Utah	Power	200		15	3 S	7 E	Utah	June	3	1910	3272
City Creek	Brigham Young University Assignee Karl Keeler	Provo, Utah	Power	10		30	6 S	3 E	Utah	May	28	1910	3261
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	9			Big Cottonw'd Ck.		Salt Lake	June	1	1910	3267
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	13			Big Cottonw'd Ck.		Salt Lake	June	1	1910	3269
Summit Creek	Summit Creek Irr. and Canal Co., Assignee E. O. Bylund	Santaquin, Utah	Irrigation	9		11	10 S	1 E	Utah	June	10	1910	3273
Jordan River	Nate Rockhill	Lehi, Utah	Irrigation	180		22	1 N	1 W	Salt Lake	June	6	1910	3281
Little Cottonwood Creek	Joseph Ulmer	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	June	8	1910	3287
American Fork Creek	Jed J. Mercer	American Fork, Utah	Power		500		American Fk. Ck.		Utah	June	10	1910	3290
Red Pine & Little Cottonwood Creeks	Rainbow Mining Co.	Salt Lake City	Power	2.5		10	3 S	2 E	Salt Lake	June	10	1910	3293
Springs	Louis Fugal et al	Mona, Utah	Irrigation	3			Springs			June	11	1910	3294
Wash Canyon	Louis Fugal, et al	Mona, Utah	Mining	.125			Wash Canyon		Juab	June	11	1910	3295
Jordan River	Utah Light & Ry. Co.	Salt Lake City	Miscellaneous	55		2	1 S	1 W	Salt Lake	June	14	1910	3300
Springs	W. L. Hays, et al	Pleasant Grove, Utah	Irrigation	10			Springs		Juab	June	15	1910	3303
Mountain Top Spring	Mountain Heights Summer Home Co.	Salt Lake City	Irrigation	1		23	1 N	2 E	Salt Lake	June	15	1910	3305
Little Cottonwood Creek	Frank B. Stephens	Salt Lake City	Miscellaneous	50.		28	2 S	1 E	Salt Lake	June	15	1910	3311
Deer Creek	C. W. Earl	Lehi, Utah	Power	10			Deer Creek		Utah	June	20	1910	3316
Summit Creek	E. O. Bylund	Santaquin, Utah	Power	10		11	10 S	1 E	Utah	June	21	1910	3321
Bunnel Fork	Alfred J. Sprague	Provo, Utah	Power	10		36	5 S	3 E	Utah	June	25	1910	3334
Springs	Alfred J. Sprague	Provo, Utah	Miscellaneous	10		36	5 S	3 E	Utah	June	25	1910	3335
Shales Spring	M. N. Bird	Springville, Utah	Domestic	.8		28							
						29							
						32							
						33	9 S	1 E	Utah	June	27	1910	3337

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Slough Creek	Charles Crane	Salt Lake City	Miscellaneous	5		18	2 S	1 E	Salt Lake	June	28	1910	3340
Jordan River	Utah Gas & Coke Co.	Salt Lake City	Miscellaneous	1		2	1 S	1 W	Salt Lake	June	29	1910	3341
Summit Creek	E. O. Bylund	Santaquin, Utah	Irrigation	3		Summit Creek			Utah	June	30	1910	3360
Big Cottonwood Creek	W. L. Hardwood	Salt Lake City	Power	30		7 8 17 18	2 S	3 E	Salt Lake	July	1	1910	3361
Utah Lake	M. G. Sacrider	Salt Lake City	Irrigation	2.5		34	7 S	1 W	Utah	July	2	1910	3362
Spring	John O. Edwards	Charleston Utah	Miscellaneous	15		15	4 S	4 E	Wasatch	July	5	1910	3365
	Henry Robins	Murray, Utah	Miscellaneous	3		17	2 S	1 E	Salt Lake	July	8	1910	3371
Little Cottonwood Creek	Peter VanWalkenberg, et al	Sandy, Utah	Irrigation		160	2	3 S	1 E	Salt Lake	July	11	1910	3384
South Fork Creek	Rainbow Trout Co.	Provo, Utah	Power	40		25 26 35 36	5 S	3 E	Utah	July	11	1910	3385
Shingle Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		26	4 S	1 W	Summit	July	11	1910	3386
Shingle Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		3	3 S	7 E	Summit	July	11	1910	3387
Beaver Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		26	4 S	1 W	Summit	July	11	1910	3388
Beaver Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		21 31	2 S	6 E	Summit	July	11	1910	3389
Summit Creek	Summit Creek Irr. and Canal Co.	Santaquin, Utah	Irrigation	4		13	10 S	1 E	Utah	July	11	1910	3390
Provo River	Knight Power Co.	Provo, Utah	Power	200		7	5 S	4 E	Utah	July	12	1910	3392
Big Cottonwood Creek	Milton S. Hamilton	Oakland, California	Power		408.5	7 8 17 18	2 S	3 E	Salt Lake	July	14	1910	3397
Jordan River and Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		7	3 S	2 E	Salt Lake	July	14	1910	3398
Springs	Summit Creek Irr. and Canal Co.	Santaquin, Utah	Irrigation	13		Springs			Utah	July	14	1910	3399
Dairy Fork	J. E. Smith	Kern, Cal.	Miscellaneous	1		21 22 27 28	10 S	5 E	Utah	July	15	1910	3400

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East Warm Creek	Geo. McCune	Nephi, Utah	Irrigation	5		28 29 32 33	9 S	1 E	Utah	July	22	1910	3412
Spring	Emigration Mt. Home Co.	Salt Lake City	Domestic	.75		32	1 N	2 E	Salt Lake	July	22	1910	3414
Spring	St. Joseph Water and Irr. Co.	Salt Lake City	Irrigation	1		13	1 N	1 W	Salt Lake	July	26	1910	3417
Slate Canyon Water	F. W. C. Hathenbruck	Provo, Utah	Power	8		8	7 S	3 E	Utah	July	26	1910	3418
Utah Lake	F. M. Lyman, et al	Salt Lake City	Irrigation	50		35	5 S	1 W	Utah	July	29	1910	3421
Little Cottonwood Canyon Creek	William Thornton, et al	Salt Lake City	Irrigation	10			Little Cottonwood Canyon Creek		Salt Lake	Aug.	2	1910	3428
Provo River	Burt and Carlquist	Salt Lake City	Irrigation	1000	120000	7 29 & 36	1 N 2 & 4 S	6 & 4 E	Wasatch	July	23	1910	3429
Freeman Gulch Spring	Bingham Canyon Town	Bingham, Utah	Domestic	.08		22 23 26 27	3 S	3 W	Salt Lake	Aug.	3	1910	3433
Little Cottonwood Creek	William Thornton, et al	Salt Lake City	Power	20		32	2 S	3 E	Salt Lake	Aug.	5	1910	3438
Little Cottonwood Creek	D. J. Williams	Salt Lake City	Irrigation	10	2000	11	3 S	1 E	Salt Lake	Aug.	11	1910	3445
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation	10		7 8 17 18	4 S	2 E	Utah	Aug.	11	1910	3446
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation	4		7 8 17 18	4 S	2 E	Utah	Aug.	11	1910	3447
Springs	Edgar W. Druce	Salt Lake City	Domestic	.25		35	2 S	3 E	Salt Lake	Aug.	12	1910	3448
Hilberg & Hemsley Spgs.	O. W. Carlson	Salt Lake City	Domestic	2		29	1 S	1 E	Salt Lake	Aug.	12	1910	3449
Little Cottonwood Creek & Red Pine Lake	Peter Van Walkenberg, et al	Sandy, Utah	Irrigation		400	10 11 27	2 S	1 & 2 E	Salt Lake	Aug.	12	1910	3450

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Little Cottonwood Creek and Minnie Lake	Peter VanWalkenberg, et al	Sandy, Utah	Irrigation		150	2 32	2 S	1 & 3 E	Salt Lake	Aug.	12	1910	3451
Little Cottonwood Creek & White Pine Lake	Peter VanWalkenberg et al	Sandy, Utah	Irrigation		1550	10 28	2 S	1 & 2 E	Salt Lake	Aug.	12	1910	3452
Drainage	Hyrum Christensen	Spanish Fork, Utah	Irrigation	.2		19	8 S	3 E	Utah	Aug.	13	1910	3454
Curio Canyon	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		27	1 N	2 E	Salt Lake	Aug.	20	1910	3465
Parley's Creek	Francis M. Lyman, Jr.	Salt Lake City	Power	30			Parley's Creek		Salt Lake	Aug.	23	1910	3468
West Canyon Wash	Nate Rockhill	Lehi, Utah	Irrigation	5		26	5 S	1 W	Utah	Aug.	24	1910	3471
Black Slough Creek and S. L. City Surplus Canal	H. A. Heath	Salt Lake City	Miscellaneous	20		1	1 N	2 W	Salt Lake	Aug.	31	1910	3485
Spring	M. A. West	Salt Lake City	Domestic	.5		27	2 N	2 E	Salt Lake	Sept.	3	1910	3487
Bear Gulch Creek	Utah Leasing Co.	Salt Lake City	Mining	1		2	4 S	3 W	Salt Lake	Sep.	6	1910	3491
Little Cottonwood Creek	G. W. R. H. Irr. Co	Murray, Utah	Power	5		16	2 S	1 E	Salt Lake	Sept.	17	1910	3504
Emigration Creek	Walter D. Buntin	Salt Lake City	Irrigation	1		15	1 S	1 E	Salt Lake	Sept.	19	1910	3508
Provo River	James A. Knight	Woodland, Utah	Power	150		21	3 S	7 E	Summit and Wasatch	Sept.	19	1910	3509
Brigham Fork	Gilman E. Eastman	Salt Lake City	Mining	.2			Brigham Fork		Salt Lake	Sep.	21	1910	3512
Spring Branch American Fork Creek	American Fork City, et al	American Fork, Utah	Irrigation		400		Spring Branch		Utah	Sept.	28	1910	3518
Spring Creek	George Y. Wallace	Salt Lake City	Power	4		2	2 S	1 E	Salt Lake	Sept.	30	1910	3520
Tanners Pond & Spring Creek	George E. Reese	Salt Lake City	Miscellaneous	10		16	2 S	1 E	Salt Lake	Oct.	1	1910	3522
Provo River	Ed. C. Mecham	Provo, Utah	Power	40		31	5 S	4 E	Utah	Oct.	7	1910	3529
Burrs Fork Creek	Chas. D. Harding	Salt Lake City	Domestic	1		27	1 N	2 E	Salt Lake	Oct.	10	1910	3534
Coon Canyon Creek	Bingham & Garfield R. R. Co.	Salt Lake City	Miscellaneous	1		14	2 S	3 W	Salt Lake	Oct.	12	1910	3536
Little Cottonwood Creek	Kay and Bagley	Murray, Utah	Irrigation	2.5		3	3 S	1 E	Salt Lake	Oct.	14	1910	3540
	Charles E. Miles	Payson, Utah	Irrigation	2		11	10 S	1 E	Utah	Oct.	25	1910	3549
Ferguson Canyon Creek	Claude H. Goodsell	Salt Lake City	Irrigation	1		25	2 S	1 E	Salt Lake	Oct.	28	1910	3557
East Fork Creek	Mountain Heights Summer Home Co.	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Nov.	1	1910	3568

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE-JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Bear Fork Creek	Gray Trust Co.	Salt Lake City	Irrigation	.5		22	1 N	2 E	Salt Lake	Nov.	1	1910	3569
North Fork Creek	Gray Trust Co.	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Nov.	1	1910	3570
Burrs Fork Creek	Gray Trust Co.	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Nov.	1	1910	3571
Ferguson Canyon Creek	J. C. Williams	Murray, Utah	Irrigation	3		25	2 S	1 E	Salt Lake	Nov.	3	1910	3580
Seven Mile Pass Wash	George E. Howe, et al	Salt Lake City	Irrigation	10			7 Mile Pass Wash		Utah	Nov.	7	1910	3583
Howe Canon Wash	Geo. E. Howe, et al	Salt Lake City	Irrigation		125		Howe Canon Wash		Utah	Nov.	7	1910	3584
North Dry Fork	Utah Phil. M. Dev. Co.	Salt Lake City	Power	10		12	3 S	1 E	Salt Lake	Nov.	14	1910	3597
Emigration Creek	Walter D. Buntin	Salt Lake City	Domestic	2.5			Emigration Creek		Salt Lake	Nov.	14	1910	3605
Spring Creek	State of Utah	Salt Lake City	Power	7		28	7 S	3 E	Utah	Nov.	17	1910	3608
Mill Pond Springs	State of Utah	Salt Lake City	Miscellaneous	7		28	7 S	3 E	Utah	Nov.	17	1910	3609
Provo River	Knight Power Co.	Provo, Utah	Power	200		34	2 S	5 E	Wasatch	Nov.	21	1910	3621
Emigration Creek	H. E. Herman	Salt Lake City	Irrigation	20			Emigration Creek		Salt Lake	Nov.	25	1910	3636
Utah Lake	Murray City Corp.	Murray, Utah	Irrigation	50			Utah Lake		Utah	Nov.	30	1910	3645

Applications to Appropriate Water from the Green River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Grand River	Jas. C. Armstrong	Salt Lake City	Irrigation	20		22	21 S	24 E	Grand	Dec.	3	1908	2177
Grand River	Jas. C. Armstrong	Salt Lake City	Irrigation	20		14	20 S	25 E	Grand	Dec.	3	1908	2178
Sowers Creek	Willard E. Cox	Myton, Utah	Irrigation	2.25		6	5 S	3 W	Wasatch	Dec.	5	1908	2182
San Rafael	Jansen E. Noble	Salt Lake City	Irrigation	2000		24	19 S	10 11 E	Emery	Dec.	15	1908	2188
Desert Lake	F. F. Noyes	Helper, Utah	Irrigation	3		32	16 S	11 E	Emery	Dec.	31	1908	2205
Lake Fork Creek	C. E. Hill, et al	Roosevelt, Utah	Irrigation	4		8	1 S	4 W	Wasatch	Jan.	2	1909	2206
Lake Fork Creek	Joseph T. Henrie	Manti, Utah	Irrigation	2		22	1 S	4 W	Wasatch	Jan.	6	1909	2212
Green River	Island Home Irri. Co	Green River, Utah	Irrigation	5		32	20 S	16 E	Grand	Jan.	12	1909	2219
Sunnyside Wash	Chas. Albert Pierson	Sunnyside, Utah	Irrigation	2.25		9	15 S	13 E	Carbon	Jan.	13	1909	2220
Green River	Green River Dev. Co. and A. W. Hille, Assignees, A. C. Honore	Provo, Utah	Irrigation	2000		Green River			Emery and Grand	Jan.	13	1909	2221
Green River	Samuel J. Fell	Salt Lake City	Irrigation	1		22	21 S	16 E	Grand	Jan.	18	1909	2225
Taby Creek	Roy Gilman	Stockmore, Utah	Irrigation	.25		24	1 S	8 W	Wasatch	Jan.	18	1909	2226
Springs	L. D. & Mead Crandall	Springville, Utah	Irrigation	2		36	8 S	1 W		Jan.	19	1909	2227
Lake Fork Branch	John J. Noyes et al	Myton, Utah	Irrigation	12.5		20	2 S	3 W	Watatch	Jan.	11	1909	2231
Uintah River	John J. Nielsen	Vernal, Utah	Irrigation	2.33		23	1 N	1 W	Uintah	Jan.	22	1909	2234
Springs and Drainage	Isabell M. Hacking	Vernal, Utah	Irrigation	1.5		12	3 S	20 E	Uintah	Jan.	26	1909	2237
Cottonwood and West-water Creeks	Grand Valley Fruit and Water Co. Assignee, Wm F. Marrs, et al	Denver, Colo.	Irrigation		28000	19	20 S	25 E	Grand	Jan.	28	1909	2242
West Cottonwood Creek	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colo.	Irrigation		6000	19	20 S	25 E	Grand	Jan.	28	1909	2243
West Water Creek	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colo.	Irrigation		4000	3 19	20 S	25 E	Grand	Jan.	28	1909	2244
Bitter Creek	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colo.	Irrigation		6000	1	20 S	25 E	Grand	Jan.	28	1909	2245
Gordon Creek	N. G. Mathis, et al	Price, Utah	Irrigation	4		10	14 S	9 E	Carbon	Jan.	29	1909	2246
Drainage Water	Vernal City	Vernal, Utah	Miscellaneous	3		23	4 S	21 E	Uintah	Jan.	30	1909	2250
Sunnyside or Cottonwood Wash	Sunnyside, Res. L. L. & S. Co.	Sunnyside, Utah	Irrigation		600	6	15 S	13 E		Feb.	1	1909	2251

APPLICATIONS TO APPROPRIATE WATER FROM THE GREENRIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Lake Fork River	George Sumers	Myton, Utah	Irrigation	2.66		33	2 S	3 W	Watatch	Feb.	1	1909	2252
Gordon Creek	N. G. Mathis et al	Price Utah	Irrigation	6		10	14 S	9 E	Carbon	Feb.	3	1909	2257
Cottonwood Creek	C. L. Allen	Salt Lake City	Power	100		15	18 S	7 E	Emery	Feb.	4	1909	2258
Green River	Robert Z. McCoy	Encampment, Wyo.	Irrigation	90		1	5 S	23 E	Uintah	Feb.	8	1909	2263
Green River	Lorin I. Long	Green River, Utah	Power	10		3	20 S	16 E	Grand	Feb.	8	1909	2265
Price River	Limone Donato	Helper, Utah	Irrigation	1		12	13 S	9 E	Carbon	Feb.	8	1909	2260
Burnt Fork	Emma J. Saddler et al	Burnt Fork, Wyo.	Irrigation	8		31	3 N	17 E	Summit	Feb.	13	1909	2273
Black Fork	Ft. Bridger Land and Water Co.	Salt Lake City	Irrigation		25000	5	15 N	115 W					
Green River	Vernon C. Ward	Green River	Irrigation	1000	*80000		6 Prin. 16 S	Mer. 17 E	Summit Emery and Grand	July	3	1909	2275
Cottonwood Creek	C. L. Allen	Salt Lake City	Power	60		15	18 S	7 E	Emery	Feb.	17	1909	2278
Uintah River	Adolpha Sessions	Hayden, Utah	Irrigation	2.5		23	1 N	1 W	Uintah	Feb.	17	1909	2280
Grand River	Grand Valley Fruit and Water Co. Assignee, W. F. & G. O. Marrs	Denver, Colorado	Irrigation		15000		20 S	25 E	Grand	Feb.	18	1909	2283
Lake Fork River	Wm. S. Smalley	Myton, Utah	Irrigation	2.66		20	2 S	3 W	Wasatch	Feb.	18	1909	2284
Duchesne River	George Cluff	Theodore, Utah	Irrigation	99.4		30	2 S	5 W	Wasatch	Feb.	18	1909	2285
Spring	Jacob F. Huff	Cedar View, Utah	Domestic	.1		9	1 S	2 W	Wasatch	Feb.	19	1909	2287
Green River	Milton Simon	Salt Lake City	Irrigation	5		22	21 S	16 E	Emery	Mar.	1	1909	2303
Duck Lake & Georges P'k	Ferron Ck. Irr. & Res. Co.	Ferron, Utah	Irrigation		528	7 8				Mar.	9	1909	2315
Huntington Creek	Lewis S. Trapp et al	Rock Springs, Wyo.	Irrigation		20000	13 10	20 S 17 S	7 E 8 E	Sanpete Emery	Mar.	10	1909	2317
Willow Creek	R. W. Crockett	Price, Utah	Irrigation	200			Willow	Creek	Carbon	Mar.	22	1909	2329
Strawberry River	Wm. J. Williams	Theodore, Utah	Irrigation	2.66		3	4 S	6 W	Wasatch	Mar.	22	1909	2330
Sheep Creek	Ammon Nebeker et al	Manila, Utah	Irrigation	50		2	2 N	18 E	Uintah	Apr.	1	1909	2346
Lodge Pole Creek	Ammon Nebeker et al	Manila, Utah	Irrigation	10		2	2 N	18 E	Uintah	Apr.	6	1909	2354
Huntington Creek	Geo. A. Snow, Assignee Henry C. Lund	Salt Lake City	Irrigation	150	5500	6	17 S	8 E	Emery	Apr.	7	1909	2355
Huntington Creek	Geo. A. Snow, Assignee Henry C. Lund	Salt Lake City	Irrigation		4000	6	17 S	8 E	Emery	Apr.	8	1909	2356
Pinicle Wash	Willard E. Christenson	Price, Utah	Domestic	.5		13	14 S	9 E	Carbon	Apr.	8	1909	2357
Waste Ditch	W. H. Davis	Price, Utah	Irrigation	1		25	13 S	9 E	Carbon	Apr.	8	1909	2359
Duchesne River	John A. Fortie	Theodore, Utah	Irrigation	7		29	2 S	5 W	Wasatch	Apr.	16	1909	2370
											16	1909	2371

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Duchesne River	Sallie M. Calvert	Myton, Utah	Irrigation	2.66		26	3 S	1 W	Wasatch	Apr.	19	1909	2378
Grand River	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colorado	Power	10000			21 S	25 E	Grand	Apr.	22	1909	2380
Cottonwood Creek	Electric Power & Milling Co.	Orangeville, Utah	Power	20		24	18 S	7 E	Emery	May	1	1909	2396
Duchesne River	Ouray Irrigation Co	Ouray, Utah	Irrigation	8		3	4 S	2 E	Uintah	May	3	1909	2402
Duchesne River	F. H. Lott	Myton, Utah	Irrigation	500		5	4 S	4 W	Wasatch	May	5	1909	2403
Seymour Springs	Louis Kabell	Vernal, Utah	Stockwatering	1		28	2 S	24 E	Uintah	May	7	1909	2406
Mill Creek	Wm. V. Wright et al	Palisade, Colorado	Irrigation		1367		26 S	22 E	Grand	May	7	1909	2407
Bull Hollow	Edward C. Jensen	Cleveland, Utah	Irrigation		2000	33	17 S	10 E	Emery	May	6	1909	2409
Cottonwood Spring	Grant Squirer	Cisco, Utah	Irrigation	1		26	19 S	23 E	Grand	May	10	1909	2417
Cottonwood Creek	Grant Squirer	Cisco, Utah	Irrigation	6		19	19 S	23 E	Grand	May	10	1909	2418
Ashley Creek	Joseph Paulson, Assignee David Mackay et al	Jensen, Utah	Irrigation	8		23	5 S	22 E	Uintah	May	11	1909	2428
Green River	John T. Pepe et al	Salt Lake City	Irrigation	10		19		23 &					
Dry Gulch Wash	Chas. A. Milligan et al	Independence, Utah	Irrigation	4.5		24	4 S	24 E	Uintah	May	12	1909	2431
Squaw Springs	Wm. S. Ashton	Vernal, Utah	Stockwatering	1		27	2 S	1 W	Wasatch	May	14	1909	2437
San Rafael River	R. M. Eldred	Greenriver, Utah	Irrigation	3		21	2 S	23 E	Uintah	May	18	1909	2443
Miller Creek	Edwin Wright	Salt Lake City	Irrigation		2000	23	23 S	14 E	Emery	May	20	1909	2446
Spring Branch	Maurice Lawson	Utahn, Utah	Irrigation		20	27	15 S	9 E		May	26	1909	2457
Indian Canyon Creek	David L. Price	Draper, Utah	Irrigation	2.67		12	2 S	8 W	Wasatch	May	27	1909	2460
Uinta River	Frank Orser et al	Whiterocks, Utah	Irrigation			31	4 S	5 W	Wasatch	June	4	1909	2480
Ferron Creek	C. L. Allen & Co.	Orangeville, Utah	Power	20		25	1 N	1 W	Uinta	June	7	1909	2489
Spring	Martin J. Cleary	Soldier Summit, Utah	Irrigation	1		7	20 S	7 E	Emery	June	8	1909	2492
Grimes Wash	Charles R. Curtis	Orangeville, Utah	Irrigation	1		25	10 S	7 E	Utah	June	10	1909	2500
Lake Fork	J. C. Anderson	Boneta, Utah	Irrigation	2		14	18 S	7 E	Emery	June	10	1909	2503
Price River	Chas. McPherson et al	Winter Quarters, Ut'h	Stockwatering	50		28	1 S	4 W	Wasatch	June	15	1909	2509
Courthouse Box Spring	J. E. Brown	Moab, Utah	Stockwatering	.001	.001	15	17 S	1 E	Emery	June	16	1909	2514
CourthouseSeep	J. E. Brown	Moab, Utah	Stockwatering	.003	.003		Courthouse B. Sp.		Grand	June	17	1909	2516
							Courhouse Seep		Grand	June	17	1909	2517

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Chas. A. Johnson	Moab, Utah	Stockwatering	.01					Grand	June	17	1909	2518
Willow Spring	Chas. A. Johnson	Moab, Utah	Stockwatering	.01			Willow Spring		Grand	June	17	1909	2519
Seven Mile Seep	Fannie M. Brown	Moab, Utah	Stockwatering	.01	.01		Seven Mile Seep		Grand	June	17	1909	2520
Seven Mile Wash Spring	James A. Dubois	Moab, Utah	Stockwatering	.01			7 Mile Wash Spg.		Grand	June	18	1909	2522
Upper Spring	James A. Dubois	Moab, Utah	Stockwatering	.0005			Upper Spring		Grand	June	18	1909	2523
Dry Gulch Creek	Dry Gulch Irr. Co.	Roosevelt, Utah	Irrigation	33		25	1 S	2 W	Wasatch	June	21	1909	2524
Dry Gulch Creek	Dry Gulch Irr. Co.	Roosevelt, Utah	Irrigation	27		16	2 S	1 W	Wasatch	June	21	1909	2525
Dry Gulch Creek	Dry Gulch Irr. Co.	Roosevelt, Utah	Irrigation	50		14	1 S	2 W	Wasatch	June	21	1909	2526
Neck Spring	P. Crout	Moab, Utah	Stockwatering	.01	.01		Neck Spring		Grand	June	22	1909	2527
Horsethief Spring	P. Crout	Moab, Utah	Stockwatering	.01	.01		Horsethief Spring		Grand	June	22	1909	2528
Spring Canyon Spring	Wm. A. Doak	Montrose, Colo.	Stockwatering	.005	.005		Spg. Canyon Spg.		Grand	June	23	1909	2534
Little Spring Canyon	Wm. A. Doak	Montrose, Colo.	Stockwatering	.007	.007		Little Spg. Canyon		Grand	June	23	1909	2535
Dead Man Spring	May A. Doak	Montrose, Colo.	Stockwatering	.08	.08		Dead Man Spring		Grand	June	23	1909	2536
Uinta River	David J. Peterson, et al	Hayden, Utah	Irrigation	11.4		23	1 N	1 W	Uinta	June	5	1909	2544
Lake Fork	John Holfeltz, et al	Vernal, Utah	Irrigation	10		33	2 S	3 W	Wasatch	July	1	1909	2548
Sheep Creek	P. G. Wall	Manila, Utah	Irrigation	100		3	2 N	18 E	Uintah	July	1	1909	2549
Dutch John Spring	Walter B. Dunton	Rock Springs, Wyo.	Irrigation	.5		1	2 N	22 E	Uintah	July	2	1909	2551
Desert Lake Wash	B. R. McDonald, Assignee Heber Howard, et al	Desert Lake, Utah	Irrigation	2		32	16 S	11 E	Emery	Aug.	23	1909	2552
Springs	F. N. Cameron	Salt Lake City	Miscellaneous	.25		7	13 S	10 E	Carbon	July	6	1909	2554
Duchesne River	Samuel J. Maxwell	Stockmore, Utah	Irrigation	1		10	1 S	8 W	Wasatch	July	6	1909	2555
Springs or Price River	Leon S. Shearer	Denver, Colo.	Irrigation		500	13							
						14	11 S	8 E	Utah	July	9	1909	2559
Uintah River	Geo. E. Young	Vernal, Utah	Irrigation	13		5	1 S	1 E	Uintah	July	12	1909	2570
Huntington Creek	P. E. & L. W. Johnson	Huntington, Utah	Power	100		8	17 S	8 E	Emery	July	16	1909	2577
La Sal Creek	Gertrude W. Carpenter	La Sal, Utah	Irrigation	5		25	28 S	24 E	San Juan	July	19	1909	2585
Price River	North-West Co., Assignee E. Warren Stees	Salt Lake City	Irrigation		18000	16	17 S	13 E	Emery	July	22	1909	2590
						34	15 S	8 E	Carbon	July	26	1909	2597
Spring Carbon Co.	Watt Angler	Price, Utah	Irrigation	.5		25	1 S	2 E	Wasatch	July	30	1909	2608
Huntsman's Spring	E. C. Huntsman	Cedarview, Utah	Irrigation	.5									
Lake Fork River	Farnsworth Canal & Res. Co.	Boneta, Utah	Irrigation	37.5		33	2 N	5 W	Wasatch	July	31	1909	2609
West, Middle, East and Beaver Creeks	Ed. H. Parkison	Encampment, Wyo.	Irrigation		100000	29	3 N	16 E		Aug.	13	1909	2625

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.5		22	3 N	18 E	Uintah	Aug.	14	1909	2626
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.25		14	3 N	18 E	Uintah	Aug.	14	1909	2627
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.5		24	3 N	18 E	Uintah	Aug.	14	1909	2628
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.025		23	3 N	18 E	Uintah	Aug.	14	1909	2629
Spring	Peter G. Wall	Salt Lake City	Irrigation	.5		22	3 N	18 E	Uintah	Aug.	14	1909	2630
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.5		24	3 N	18 E	Uintah	Aug.	14	1909	2631
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.1		26	3 N	18 E	Uintah	Aug.	14	1909	2632
Uintah	Orlando H. Bracken	Randlett, Utah	Irrigation	3.5		35	2 S	1 E	Uintah	Aug.	16	1909	2635
Green River	Alfred Powell	Vernal, Utah	Irrigation	1		21	6 S	21 E	Uintah	Aug.	23	1909	2654
Spring	Keith Smith	Linwood, Utah	Irrigation	.16		23	3 N	23 E	Uintah	Aug.	23	1909	2657
Green River	John T. Pope	Ogden, Utah	Irrigation	10		24	4 S	23 E	Uintah	Aug.	24	1909	2659
Limestone Spring	Mary E. Hacking	Vernal, Utah	Stockwatering	.5		18	1 S	23 E	Uintah	Aug.	30	1909	2661
Limestone Spring	John S. Hacking	Vernal, Utah	Irrigation	2		18	1 S	23 E	Uintah	Aug.	30	1909	2662
Lake Fork	C. C. Parsons, Jr.	Salt Lake City	Power	50		23	3 N	5 W	Wasatch	Sep.	3	1909	2668
Uintah River	C. C. Parsons, Jr.	Salt Lake City	Power	125		11	3 N	3 W	Wasatch	Sep.	3	1909	2669
Lake Fork	C. C. Parsons, Jr.	Salt Lake City	Power	20		8	3 N	4 W	Wasatch	Sep.	3	1909	2670
Green River	H. E. Silliman	Winfield, Kansas	Irrigation	15		16	20 S	16 E	Grand	Sep.	11	1909	2679
Green River	H. E. Silliman	Winfield, Kansas	Irrigation	5		32	20 S	16 E	Grand	Sep.	11	1909	2680
Currant Creek	Fruitland Water Co	Salt Lake City	Irrigation	60		35	2 S	10 W	Wasatch	Sep.	11	1909	2681
White Rock Creek	E. D. R. Thompson	Salt Lake City	Irrigation	3.42		23	1 S	1 E	Uintah	Sep.	13	1909	2682
San Rafael River	E. M. Eldred	Green River, Utah	Irrigation	3		23	23 S	14 E	Emery	Sep.	15	1909	2691
Spring	R. L. Marmion	White Rocks, Utah	Domestic	1		18	2 N	1 E	Uintah	Sep.	24	1909	2703
White Rocks River	R. L. Marmion et al	White Rocks, Utah	Irrigation	5		9	2 N	1 E	Uintah	Sep.	24	1909	2704
Minnie Creek	Charles Thornburg	Soldier Summit, Utah	Irrigation	3		36	5 S	9 W	Wasatch	Sep.	24	1909	2707
Avintaquin Creek So. Fk.	Alberta Singleton	Soldier Summit, Utah	Irrigation	2		6	6 S	8 W	Wasatch	Sep.	24	1909	2708
Unnamed Wash	Raymond J. Walker	Denver, Colorado	Irrigation	10		36	2 S	1 E	Uintah	Sep.	24	1909	2709
Cottonwood Spring	Grant Squirer	Cisco, Utah	Irrigation	.5		26	19 S	23 E	Grand	Sep.	29	1909	2715
Cottonwood Creek	Grant Squirer	Cisco, Utah	Irrigation	4		18	19 S	23 E	Grand	Sep.	29	1909	2716
Cottonwood Spgs. Wash	Lenora A. Epperson	Greenriver, Utah	Irrigation	2.25		24	21 S	15 E	Emery	Oct.	2	1909	2718
Price River	E. Warren Stees	Salt Lake City	Irrigation	800	2000.00	22	17 S	13 E	Emery	Oct.	5	1909	2720
Meeks Springs	Maurice Lawson	Utahn, Utah	Irrigation	2.33		24	2 S	8 W	Wasatch	Oct.	8	1909	2734
Gordon Creek	John F. Williamson	Salt Lake City	Miscellaneous	2		17							
						18							
						19	13 S	8 E	Carbon	Oct.	12	1909	2739

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Gordon Creek	John F. Williamson	Salt Lake City	Miscellaneous	4		17 18 19	13 S	8 E	Carbon	Oct.	12	1909	2740
Deep and Geyser Creeks	Samuel M. Rowley et al	Paradox, Colorado	Irrigation	50		10 26 & 34	27 S	25 E	Grand	Oct.	12	1909	2741
Little Grand Spring	W. L. Thompson	Greenriver, Utah	Stockwatering	.02		17	22 S	18 E	Grand	Oct.	14	1909	2746
Huntington River	Castle Valley Coal Co	Salt Lake City	Power	150		22	16 S	7 E	Emery	Oct.	18	1909	2748
Deep Creek	Guy A. Long	Roosevelt, Utah	Irrigation	1.25		17	1 N	2 E	Uintah	Oct.	19	1909	2751
Spring	Charles Humes	Heber, Utah	Irrigation	5		15	3 S	9 W	Wasatch	Oct.	25	1909	2765
Price River	North-West Co	Chicago, Ill.	Irrigation		210000	22	17 S	13 E	Emery	Oct.	26	1909	2768
Big and Little Brush C'ks	Aurin T. Sheldon, et al	Vernal, Utah	Irrigation	30	1299	25	4 S	22 E	Uintah	Mar.	14	1910	2772
Duchesne River	Herbert V. Frazier, et al	Utahn, Utah	Irrigation	2		4	1 S	8 W	Wasatch	Nov.	1	1909	2776
Black Fork	Uinta Development Co	Evanston, Wyoming	Irrigation		5000	5	.5 N	115 W 6 Prin. Mer.	Summit	Nov.	2	1909	2781
Black Fork	Uinta Development Co	Evanston, Wyoming	Irrigation		6600	5	15 N	115 W 6 Prin. Mer.	Summit	Nov.	2	1909	2782
Spring	Albert E. Provansal	Colton, Utah	Stockwatering	.4		28	5 S	9 W	Wasatch	Nov.	4	1909	2786
Spring	Albert E. Provansal	Colton, Utah	Stockwatering	.2		28	5 S	9 W	Wasatch	Nov.	4	1909	2787
Spring	Albert E. Provansal	Colton, Utah	Domestic	.2		28	5 S	9 W	Wasatch	Nov.	4	1909	2788
Spring	Albert E. Provansal	Colton, Utah	Domestic	.4		28	5 S	9 W	Wasatch	Nov.	4	1909	2789
Lake Fork Lake or Moonlight Lake	Ephraim McMillan, Sr.	Heber, Utah	Irrigation	37		18	2 N	5 W	Wasatch	Nov.	5	1909	2790
Lake Fork Creek	Hughrene O'Neil	Myton, Utah	Irrigation	2.66		20	2 S	3 W	Wasatch	Nov.	6	1909	2797
Brumley Creek	R. L. Winbourn	Moab, Utah	Irrigation	1			26 S	24 E	Grand	Nov.	10	1909	2801
Sego Lily Gulch	William Gibson	Vernal, Utah	Irrigation		400	23	3 S	21 E	Uintah	Nov.	11	1909	2806
Red Wash	William Gibson	Vernal, Utah	Irrigation		400	23	3 S	21 E	Uintah	Nov.	11	1909	2807
Rock Creek	Blue Bench Canal & Reservoir Co	Theodore, Utah	Irrigation	24		12	2 S	6 W	Wasatch	Nov.	18	1909	2818
Mill Creek	Spanish Valley Water & Land Co. Assignee W. W. Taylor	Chicago, Ill.	Irrigation		15000	35	26 S	22 E	Grand	Nov.	20	1909	2826
Spring	Phil Pico Land & Livestock Co	Manila, Utah	Stockwatering	.25		2	2 N	18 E	Uinta	Nov.	30	1909	2841

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Phil Pico Land and Live Stock Co.	Manila, Utah	Irrigation	.5		35	3 N	18 E	Uintah	Nov.	30	1909	2842
Spring	Phil Pico Land and Live Stock Co.	Manila, Utah	Irrigation	.5		35	3 N	18 E	Uintah	Nov.	30	1909	2843
Spring	Phil Pico Land and Live Stock Co.	Manila, Utah	Irrigation	.25		3	2 N	18 E	Uintah	Nov.	30	1909	2844
Springs	John Siddoway	Vernal, Utah	Irrigation	.5		23	2 S	23 E	Uintah	Dec.	1	1909	2849
Range Creek	Utah Fuel Co.	Salt Lake City	Miscellaneous	.813	196	36	14 S	14 E	Carbon	Dec.	8	1909	2862
Range Creek	Utah Fuel Co.	Salt Lake City	Domestic	.193	47	36	14 S	14 E	Carbon	Dec.	8	1909	2863
Range Creek	Utah Fuel Co.	Salt Lake City	Irrigation	3			14 & 15 S	14 & 15 E	Carbon	Dec.	8	1909	2864
Range Creek	Utah Fuel Co.	Salt Lake City	Irrigation	.994	158	36	14 S	14 E	Carbon	Dec.	8	1909	2865
Red Creek	Clinton H. Carey	Fruitland, Utah	Irrigation	14		25	2 S	9 W	Wasatch	Dec.	8	1909	2866
Cottonwood Creek	Electric Power & Milling Co.	Orangeville, Utah	Power	40		14	18 S	7 E	Emery	Dec.	13	1909	2871
Smiths Fork Creek	Uinta Development Co.	Evanston, Wyo.	Irrigation		3500	7	14 N	115 W 6 Prin. Mer.	Summit	Dec.	15	1909	2875
Smiths Fork Creek	Uinta Development Co.	Evanston, Wyo.	Irrigation		1000	5	15 N	115 W 6 Prin. Mer.	Summit	Dec.	15	1909	2876
Lake Fork	Joel S. Wilson	Alexander, Utah	Irrigation	2.66		21	1 N	4 W	Wasatch	Dec.	18	1909	2883
Price River	James Martella	Helper, Utah	Irrigation	.33		24	13 S	9 E	Carbon	Dec.	22	1909	2888
Sowers Canyon	Sowers Antelope Res. Co.	Theodore, Utah	Irrigation		100	33 34	5 S	5 W	Wasatch	Dec.	23	1909	2890
Spring	Peter G. Wall, Assignee, George M. Bacon	Salt Lake City	Irrigation	.5		22	3 N	18 E	Uintah	Jan.	17	1910	2917
Nash Wash	Grand Valley Fruit and Water Co.	Denver, Colo.	Irrigation	10		32	21 S	23 E	Grand	Jan.	21	1910	2924
Danish Wash	Grand Valley Fruit and Water Co.	Denver, Colo.	Irrigation	10		6	21 S	24 E	Grand	Jan.	21	1910	2925
Cisco Wash	Grand Valley Fruit and Water Co.	Denver, Colo.	Irrigation	20		15	21 S	23 E	Grand	Jan.	21	1910	2926
Court House Seep	J. E. Brown	Moab, Utah	Stockwatering	.01		Court House Seep Spring			Grand	Jan.	24	1910	2931
Spring	C. A. Johnson	Moab, Utah	Stockwatering	.01					Grand	Jan.	24	1910	2932
Upper Spring	James A. Dubois	Moab, Utah	Stockwatering	.01		Upper Spring			Grand	Jan.	24	1910	2933
Courthouse Box Spring	J. E. Brown	Moab, Utah	Stockwatering	.01		Ct. House Box Spg			Grand	Jan.	24	1910	2934
Willow Spring	C. A. Johnson	Moab, Utah	Stockwatering	.01		Willow Spring			Grand	Jan.	24	1910	2935

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Seven Mile Wash Spring	James A. Dubois	Moab, Utah	Stockwatering	.01			7 Mile Wash Spg.		Grand	Jan.	24	1910	2936
Seven Mile Seep	Pannie M. Brown	Moab, Utah	Stockwatering	.02			Seven Mile Seep.		Grand	Jan.	24	1910	2937
Hereford Wash	Peter G. Wall	Salt Lake City	Irrigation	4		26	3 N	19 E	Uintah	Jan.	31	1910	2954
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		500	21	2 N	18 E	Uintah	Feb.	1	1910	2958
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		450	21	2 N	18 E	Uintah	Feb.	1	1910	2958a
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		2603	21	2 N	18 E	Uintah	Feb.	1	1910	2958b
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		1415	21	2 N	18 E	Uintah	Feb.	1	1910	2958c
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		744	25	2 N	17 E	Uintah	Feb.	1	1910	2959
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		353	25	2 N	17 E	Uintah	Feb.	1	1910	2959a
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		235	25	2 N	17 E	Uintah	Feb.	1	1910	2960
San Rafael River	Alfred Forsman	Greenriver Utah	Irrigation	1		32	21 S	14 E	Emery	Feb.	1	1910	2963
Pack Creek	A. M. Robertson et al	Moab, Utah	Irrigation	6		26	26 S	22 E	Grand	Feb.	3	1910	2968
Pack Creek	Moab Land Co. et al	Moab, Utah	Irrigation	6		26							
						27							
						22							
						23	26 S	22 E	Grand	Feb.	3	1910	2969
Springs	A. D. VanWagonen	Sunnyside, Utah	Stockwatering	.5			Springs		Emery	Feb.	7	1910	2974
Grand River	John J. Anderson	Cisco, Utah	Irrigation	6		34	21 S	24 E	Grand	Feb.	8	1910	2977
Lake Fork Creek	H. C. Means	Ft. Duchesne, Utah	Power	60		20	2 S	3 W	Wasatch	Feb.	8	1910	2978
Little Spring Canyon Spg.	Wm. A. Doak	Montrose, Colorado	Stockwatering	.02			Little Sp. Can. Sp.		Grand	Feb.	9	1910	2983
Spring Canyon Spring	Wm. A. Doak	Montrose, Colorado	Stockwatering	.02			Spring Canyon Sp.		Grand	Feb.	9	1910	2984
Neck Spring	P. Crout	Moab, Utah	Stockwatering	.02			Neck Spring		Grand	Feb.	9	1910	2985
Horse Thief Spring	P. Crout	Moab, Utah	Stockwatering	.02			Horse Thief Sp.		Grand	Feb.	9	1910	2986
Dead Man Spring	Mary J. Doak	Montrose, Colorado	Stockwatering	.08			Dead Man Spring		Grand	Feb.	9	1910	2987
Spring	Walter B. Dunton	Rock Springs, Wyo	Stockwatering	.14		3	2 N	21 E	Uintah	Feb.	10	1910	2988
Spring	Walter B. Dunton	Rock Springs, Wyo	Stockwatering	.16		3	2 N	21 E	Uintah	Feb.	10	1910	2989
Huntington Creek	Enterprise Canal Ass'n	Huntington, Utah	Irrigation	15		9	17 S	8 E	Emery	Feb.	11	1910	2992
Whiterocks River	Christian Mooseman	Whiterocks, Utah	Irrigation	12		5	1 N	1 E	Uintah	Feb.	14	1910	2996
Uinta River	Hattie Kinyon	Whiterocks, Utah	Irrigation	2.5		1	1 S	1 W	Uinta	Feb.	18	1910	3007
Uinta River	E. L. Oaks, et al	Whiterocks, Utah	Irrigation	12		23	1 N	1 W	Uinta	Feb.	18	1910	3008
Fork Spgs. Lake Canyon	James E. Van	Theodore, Utah	Irrigation	.8		31	5 S	7 W	Wasatch	Feb.	21	1910	3013

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Uintah River	O. S. Stout	Whiterocks, Utah	Irrigation	2.5		23	1 N	1 W	Uintah	Feb.	21	1910	3014
Price River	T. H. Aupland	Helper, Utah	Irrigation	.26		24	13 S	9 E	Carbon	Feb.	24	1910	3019
Uintah River	Mary L. Naylor	Whiterocks, Utah	Irrigation	2.5		23	1 N	1 W	Uintah	Feb.	24	1910	3022
San Rafael River	J. M. Snow	Salt Lake City	Irrigation	10		27	22 S	14 E	Emery	Feb.	28	1910	3030
San Rafael River	J. M. Snow	Salt Lake City	Irrigation	10		27	22 S	14 E	Emery	Feb.	28	1910	3031
Gordon Creek	Domenico Milano	Price, Utah	Irrigation	4		10	14 S	9 E	Carbon	Mar.	1	1910	3036
Dry Fork Ashley Creek	Uintah Realty & Investment Co.	Vernal, Utah	Irrigation	124			3 S	19 E	Uintah	Mar.	5	1910	3047
Johnson Spring	Thomas B. Foy	Moab, Utah	Stockwatering	.02		6	26 S	22 E	Grand	Mar.	8	1910	3049
Uintah River	Orlando H. Bracken	Randlett, Utah	Irrigation	3.5		35	2 S	1 E	Uintah	Mar.	11	1910	3059
Uintah River	Cedar View Irr. Co.	Cedarview, Utah	Irrigation	60		31	2 N	1 W	Uintah	Mar.	11	1910	3062
Cottonwood Wash	Sunnyside Res. Irr. Land & Stock Co.	Sunnyside, Utah	Irrigation		1600	6	15 S	13 E	Carbon	Mar.	14	1910	3065
Uintah River	John H. O'Driscoll	Hayden, Utah	Irrigation	2.66		23	1 N	1 W	Uinta	Mar.	15	1910	3072
Willow Creek	Uteland Mining Co.	Ouray, Utah	Power	10		24	9 S	19 E	Uintah	Mar.	23	1910	3084
Willow Creek	V. C. Wightman	Ouray, Utah	Power	10		24	9 S	19 E	Uintah	Mar.	23	1910	3085
Pack Creek	Emma S. McConkie	Moab, Utah	Irrigation	3		26	26 S	22 E	Grand	Mar.	23	1910	3086
Placer Creek	Arthur D. Bird	Salt Lake City	Irrigation	10			Placer Creek		Grand	Mar.	26	1910	3088
Springs	Lucian D. and Mead Crandall	Stockmore, Utah	Irrigation	4.6	30	36	1 S	8 W	Wasatch	Mar.	30	1910	3094
Sears Springs	Wm. Luckinbill	Bridgeport, Utah	Irrigation	2.5		23	1 N	24 E	Uintah	Apr.	4	1910	3103
Spring	John Johnson	Green River, Utah	Irrigation	1		3	21 S	14 E	Emery	Apr.	4	1910	3104
Huff Spring	Alonzo Brinkerhoff	Emery, Utah	Stockwatering	.1		33	17 S	10 E	Emery	Apr.	5	1910	3105
Cottonwood Creek	Grand Valley Fruit and Water Co.	Denver, Colo.	Irrigation	10		30	20 S	25 E	Grand	Apr.	7	1910	3110
Wimmer Spring	Fera L. Young	Huntington, Utah	Stockwatering	.1			Wimmer Spring		Emery	Apr.	9	1910	3118
Bob Hill Spring	M. S. Black	Huntington, Utah	Stockwatering	.1			Bob Hill Spring		Emery	Apr.	9	1910	3119
La Sal Creek	Andrew G. Tangreen, et al	Moab, Utah	Irrigation	10		17	28 S	25 E	San Juan	Apr.	13	1910	3126
Coyote Creek	Andrew G. Tangreen, et al	Moab, Utah	Irrigation	1		9							
						16	29 S	24 E	San Juan	Apr.	13	1910	3127
Indian Canyon Creek	Millard L. Chaffin	Leavenworth, Kas.	Irrigation	2.5		28	5 S	6 W	Wasatch	Apr.	13	1910	3128
Spring	James H. McGuire	Whiterocks, Utah	Irrigation	2		6	1 S	1 W	Wasatch	Apr.	14	1910	3129
Cottonwood Spring	Edward Kendall	Vernal, Utah	Miscellaneous	.25		16	4 S	20 E	Uintah	Apr.	16	1910	3136
Cottonwood Spring	Snellen Johnson	Vernal, Utah	Stockwatering	.25		30	3 S	20 E	Uintah	Apr.	19	1910	3139
Chicken Spring	Snellen Johnson	Vernal, Utah	Stockwatering	.25		30	3 S	20 E	Uintah	Apr.	19	1910	3140

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East Birch Spring	Geo. C. Julious	Vernal, Utah	Stockwatering	.25		31	3 S	20 E	Uintah	Apr.	19	1910	3141
Spring	Independent Coal & Coke Co.	Salt Lake City	Domestic	3		4	13 S	10 E	Carbon	Apr.	22	1910	3152
Spring Branch	Peter J. Naab	Fruitland, Utah	Irrigation	.66		30	2 S	7 W	Wasatch	Apr.	22	1910	3154
Huntington Creek	Geo. A. Snow	Salt Lake City	Irrigation		10000	9 16	17 S	8 E	Emery & Sanpete	Apr.	23	1910	3161
Huntington Creek	Geo. A. Snow	Salt Lake City	Irrigation		5500	9 16	17 S	8 E	Emery	Apr.	23	1910	3162
Red Creek	Clinton H. Carey	Fruitland, Utah	Irrigation	18.66		31	2 S	8 W	Wasatch	Apr.	23	1910	3163
Warren Creek	Chas. M. Taylor	Bridgeport, Utah	Irrigation	1.5		27	2 N	24 E	Uintah	Apr.	25	1910	3166
Miller Creek	George M. Miller	Huntington, Utah	Irrigation	10	1000	29	15 S	9 E	Carbon	Apr.	25	1910	3168
Cottonwood Wash	Dennis Barry	Myton, Utah	Irrigation		320	29	3 S	1 E	Uintah	Apr.	30	1910	3178
San Rafael River	John W. Smith	Green River, Utah	Irrigation	8		26	23 S	14 E	Emery	Apr.	30	1910	3179
Lake Fork River	Charles Milne	Myton, Utah	Irrigation	2		2	3 S	3 W	Wasatch	May	9	1909	3198
Spring	R. L. Kirk	Moab, Utah	Stockwatering	.2		18	16 S	19 E	Grand	May	10	1909	3203
Middle Beaver Creek	H. J. Gregory et al	Lone Tree, Wyoming	Irrigation	20		31 32	3 N	16 E	Summit	May	10	1910	3206
Spring	W. A. Shideler	Marrs, Utah	Irrigation	.5		2	21 S	24 E	Grand	May	11	1910	3214
Brumley Creek	R. L. Winbourn et al	Moab, Utah	Irrigation	2		1	27 S	23 E	San Juan	May	12	1910	3215
Fish Canyon Creek	Irvin Branch	Wellington, Utah	Irrigation	5		32	13 S	12 E	Carbon	May	10	1910	3218
Spring	Milford B. Farnsworth	Hiawatha, Utah	Irrigation	2		34	15 S	8 E	Carbon	May	13	1910	3219
Coats or Granite Creek	A. D. Wall	Denver, Colorado	Irrigation	60		31	21 S	26 E	Grand	May	16	1910	3224
Cottonwood Creek	Walter S. Dayton	Marrs, Utah	Irrigation	10			Cottonwood Creek		Grand	May	17	1910	3232
Willow Creek	William L. Jones	Price, Utah	Irrigation	2.66		12	13 S	9 E	Carbon	May	19	1910	3234
Spring	Rufus E. Lawton	Heber, Utah	Irrigation	3		31	2 S	7 W	Wasatch	May	21	1910	3236
Dry Gulch Creek	J. E. Strain	Roosevelt, Utah	Irrigation	11.5		24	1 N	3 W	Wasatch	May	21	1910	3248
Whiterocks River and Deep Creek	Uinta Realty and Investment Co	Vernal, Utah	Irrigation	150		5 8	1 S	1 & 2 E	Uintah	May	27	1910	3256
Dry Fork	Uinta Realty and Investment Co	Vernal, Utah	Irrigation	10			3 S	19 E	Uintah	May	27	1910	3257
Little Red Creek	Rollie G. Baum	Midway, Utah	Irrigation	.7.43		3 13	2 S	10 W	Wasatch	May	31	1910	3264
Lake Fork River	B. L. Dart	Myton, Utah	Power	60		20	2 S	3 W	Wasatch	Feb.	8	1910	3268
Price River	F. L. Rager	Salt Lake City	Power	20		32	11 S	9 E	Carbon	June	6	1910	3283
Jesson Wash	James Thomsen	Greenriver, Wyo.	Irrigation	3.75		30	3 N	20 E	Uintah	June	9	1910	3289

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Brown's or Coal Canyon Wash	A. C. Snyder	Elgin, Utah	Irrigation	.05		15	21 S	16 E	Grand	June	10	1910	3291
Spring	Mat Andler	Hiawatha	Irrigation	.5		34	15 S	8 E	Carbon	June	11	1910	3296
San Rafael River	August C. Dahlstrom	Eureka, Utah	Irrigation	2		32	21 S	14 E	Emery	June	15	1910	3301
Duchesne River	John L. Nowland	Myton, Utah	Irrigation	140		1	4 S	4 W	Wasatch	June	16	1910	3306
Currant Creek	Louis Sweat et al	Heber, Utah	Irrigation	48.75		27	2 S	10 W	Wasatch	June	18	1910	3313
Birch Spring	Snellen Johnson	Vernal, Utah	Irrigation	.25		36	3 S	19 E	Uintah	June	20	1910	3317
Whiterocks River	Ralph S. Marimon	Whiterocks, Utah	Irrigation	2.5		6	2 N	1 E	Uintah	June	21	1910	3319
Spring Canyon Burnt Tree Gulches	John Arronco	Kenilworth, Utah	Mining	1		1	13 S	8 E	Carbon	June	25	1910	3333
Grand River	Mrs. Augusta Devine	Marrs, Utah	Irrigation	10		14	21 S	24 E	Grand	June	27	1910	3336
Green River	Augustine Kendall	Rock Springs, Wyo.	Irrigation	10		22	2 N	24 E	Uintah	June	27	1910	3339
White Sage Springs	Joseph Hay et al	Rock Springs, Wyo.	Stockwatering	.1		15	3 S	25 E	Uintah	June	29	1910	3343
Cottonwood Spring	Joseph Hay et al	Rock Springs, Wyo.	Stockwatering	.1		6	3 S	25 E	Uintah	June	29	1910	3344
Spring Creek	Joseph Hay et al	Rock Springs, Wyo.	Irrigation	.25		19							
						30	3 S	25 E	Uintah	June	29	1910	3345
White Sage Spring Creek	Joseph Hay et al	Rock Springs, Wyo.	Stockwatering	.1		15	3 S	25 E	Uintah	June	29	1910	3346
Big Spring	Heber Moon	Hanna, Utah	Irrigation	1.3		17	1 N	8 W	Wasatch	June	29	1910	3353
Soldier Creek	Erastus Anderson et al	Price, Utah	Irrigation	10			14 S	11 E	Carbon	June	29	1910	3354
Springs	A. D. VanWagonen	Sunnyside, Utah	Stockwatering	.5		Springs			Emery	June	29	1910	3355
Spring	James Liddell	Sunnyside, Utah	Stockwatering	.5		12	14 S	13 E	Carbon	June	29	1910	3356
Green River	Uinta Irr. & Power Co	Salt Lake City	Power		10000	24	4 S	23 E	Uintah	June	30	1910	3357
Mill Creek and Pack or Brumley Creek	Spanish Valley Water & Land Co	Salt Lake City	Irrigation	50	1000	36	26 S	22 E	San Juan	July	5	1910	3359
Hill Creek	J. C. Nelson	Salt Lake City	Irrigation	10		25	11 S	19 E	Uintah	July	6	1910	3366
Lake Fork Creek	Farmer's Irrigation Co	Alexander, Utah	Irrigation	96		21	1 N	4 W	Wasatch	July	6	1910	3369
East Trough Spring	Orson Hyde	Heber, Utah	Stockwatering	.05		16	2 N	21 E	Uintah	July	8	1910	3372
West Trough Spring	Orson Hyde	Heber, Utah	Stockwatering	.05		16	2 N	21 E	Uintah	July	8	1910	3373
Mud or Chokecherry Spg.	Orson Hyde	Heber, Utah	Stockwatering	.05		5	2 N	21 E	Uintah	July	8	1910	3374
Beaver Creek	John F. Williamson	Salt Lake City	Miscellaneous	3		7	13 S	8 E	Carbon	July	9	1910	3375
Beaver Creek	John F. Williamson	Salt Lake City	Miscellaneous	7		7	13 S	8 E	Carbon	July	9	1910	3376

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Marcine Wash	C. H. Gibbs	Salt Lake City	Irrigation	10	847	4	16 S	11 E	Emery	July	11	1910	3383
Sagers Wash	Harry G. Ballard	Thompsons, Utah	Stockwatering	.02		4	21 S	21 E	Grand	July	13	1910	3395
Cottonwood Spring	Harry G. Ballard	Thompsons, Utah	Stockwatering	.01		16	20 S	21 E	Grand	July	13	1910	3396
Deer Creek	James H. Mayes	Salt Lake City	Miscellaneous	3		10	17 S	7 E	Emery	July	21	1910	3411
Smith's Fork	Uintah Development Co.	Evanston, Wyo.	Irrigation		1400	7							
						8	14 N	115 W					
							6 Prin.	Mer.	Summit	July	15	1910	3113
Klondike Wash	F. B. Hammond, Jr.	Moab, Utah	Irrigation		2500	31	23 S	20 E	Grand	Aug.	1	1910	3425
Yellow Cat Spring	F. B. Hammond, Jr.	Moab, Utah	Stockwatering	.01			23 S	20 E	Grand	Aug.	1	1910	3426
Miners Basin Creek	Vernon Snavely	Castleton, Utah	Irrigation	2.3			25 S	23 E	Grand	Aug.	3	1910	3432
Spring	Fred J. Wint	Marrs, Utah	Domestic	.08		35	20 S	24 E	Grand	Aug.	8	1910	3441
Natural Lake	Clarence L. Johnson	Roosevelt, Utah	Irrigation		320	6	2 N	6 W					
						8	1 S	4 W	Wasatch	Aug.	8	1910	3442
King Spring, and Spring	Albert M. Rogers, et al	Moab, Utah	Irrigation	.25		1	26 S	21 E	Grand	Aug.	16	1910	3456
Canyon Spring	Albert M. Rogers, et al	Moab, Utah	Irrigation	.5		1	26 S	21 E	Grand	Aug.	16	1910	3457
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.03		17	13 S	16 E	Carbon	Aug.	16	1910	3458
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.02		32	13 S	16 E	Carbon	Aug.	16	1910	3459
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.04		28	13 S	15 E	Carbon	Aug.	16	1910	3460
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.01		22	14 S	16 E	Carbon	Aug.	16	1910	3461
Deep Creek	Leomma A. Shields	Park City, Utah	Irrigation	3.3		22	3 S	10 W	Wasatch	Aug.	17	1910	3463
Spring	Geo. Canfield	Marrs, Utah	Domestic	.09		35	20 S	24 E	Grand	Aug.	18	1910	3464
Lake Fork River	Francis M. Ross, et al	Myton, Utah	Irrigation	17.3		33	2 S	3 W	Wasatch	Aug.	20	1910	3466
Sears Spring	William Luckinbill	Bridgeport, Utah	Irrigation	2.5		23	1 N	24 E	Uintah	Aug.	22	1910	3467
Steer Ridge Springs	W. D. Thompson	Green River, Utah	Stockwatering	.02		10	18 S	19 E	Grand	Aug.	23	1910	3469
San Rafael River Fork	Andrew W. Dowd	Sunnyside, Utah	Irrigation	6		10	23 S	14 E	Emery	Aug.	29	1910	3478
Green River	E. J. Jeremy	Salt Lake City	Irrigation	3		28	1 N	9 W	Uintah	Aug.	31	1910	3481
Duchesne River	Ethan J. Jeremy	Salt Lake City	Irrigation			27	1 N	9 W	Wasatch	Aug.	31	1910	3482
Grand River	Grand Mutual Dev. Co.	Denver, Colo.	Irrigation	100		16	21 S	25 E	Grand	Aug.	31	1910	3483
Ruple Spg. & Cherry Spg.	Arthur E. Ruple, et al	Vernal, Utah	Stockwatering		20	2							
						3	2 S	25 E	Uintah	Sept.	3	1910	3488
Hart Draw	Hart Draw Land & Irrigation Co.	Moab, Utah	Irrigation	21		17	31 S	23 E	San Juan	Sept.	12	1910	3494
Whiterocks River	Charles M. Collins, et al	Taft, Utah	Irrigation	9.5		6	1 N	1 W	Uintah	Sept.	12	1910	2495

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Duchesne River	Orson T. Hilsken	Tabby, Utah	Irrigation	4.33		32	1 S	7 W	Wasatch	Sept.	14	1910	3499
Crescent and Ten Mile Washes	Grand Valley Land and Mineral Co.	Indianapolis, Ind.	Irrigation		3000	27	22 S	19 E	Grand	Sept.	16	1910	3502
Miller Wash	Peter Frandsen	Price, Utah	Stockwatering	.1			Miller Wash		Carbon	Sept.	19	1910	3507
Duchesne River	Knight Power Co.	Provo, Utah	Power	50		2	3 N	9 W	Wasatch	Sept.	29	1910	3519
Duchesne River	Knight Power Co.	Provo, Utah	Irrigation	50		2	3 N	9 W	Wasatch	Oct.	1	1910	3521
Willow Creek	Grant Squirer	Cisco, Utah	Irrigation	2		1	19 S	20 E		Oct.	8	1910	3530
Spring	Ralph T. Lindblade	Fruitland, Utah	Domestic	.5		19	3 S	7 W	Wasatch	Oct.	10	1910	3532
	Edward Wipple	Vernal, Utah	Stockwatering	.25		1	3 S	25 E	Uintah	Oct.	14	1910	3539
Spring	Peter Olsen	Moroni, Utah	Irrigation	.111		24	14 S	3 E	Sanpete	Oct.	17	1910	3543
Beaver Creek	Wm. O. Sodergreen	Elk Mountain, Wyo.	Irrigation	1.53		18	3 N	16 E	Summit	Oct.	17	1910	3544
Coal Creek	Ralph S. Michel	Chicago, Ill	Miscellaneous	2		16	13 S	8 E	Carbon	Oct.	19	1910	3545
Duchesne River	Chas. E. Westover	Theodore, Utah	Irrigation	.5		13	3 S	5 W	Wasatch	Oct.	22	1910	3546
Nine Mile or Minnie Maud Creek	Preston Nutter	Price, Utah	Irrigation	5		27	11 S	18 E	Uintah	Oct.	22	1910	3547
Icelander Creek	R. M. Palmer, et al	Wellington, Utah	Irrigation	.25		1	15 S	13 E	Carbon	Oct.	22	1910	3548
Wastewater Seepage	Fred H. Neumeyer	Whiterocks, Utah	Irrigation	3		35	1 N	1 E	Uintah	Oct.	26	1910	3551
South Fork Spring	William Moore	Vernal, Utah	Irrigation	1			South Fork Spg.		Uintah	Oct.	28	1910	3556
Soldier Creek	John W. Rockhill	Heber, Utah	Irrigation	2		8	4 S	10 W	Wasatch	Oct.	31	1910	3560
Soldier Creek	Wm. A. Rockhill	Heber, Utah	Irrigation	2		29	3 S	10 W	Wasatch	Oct.	31	1910	3561
Strawberry River and Indian Creek	U. S. Reclam. Service	Washington, D. C.	Irrigation		60000	4 9 17 21	4 S	11 W		Oct.	31	1910	3563
Daniels Spring	Ben Daniels	Jensen, Utah	Stockwaterlng	.1			Daniels Spring		Uintah	Nov.	2	1910	3572
Billings Spring	Ben Daniels	Jensen, Utah	Stockwatering	.125			Billings Spring		Uintah	Nov.	2	1910	3573
Lake Fork	Wm. A. Johnston	Boneta, Utah	Irrigation	11		21	1 S	4 W	Wasatch	Oct.	6	1910	3575
Cottonwood Creek	David Smith	Salt Lake City	Irrigation	5		29	4 S	4 W	Wasatch	Nov.	7	1910	3581
Cottonwood Creek	David Smith	Salt Lake City	Irrigation	5		15	4 S	4 W	Wasatch	Nov.	7	1910	3582
Cottonwood Creek	Fred T. Warner	Myton, Utah	Irrigation	4		29	4 S	4 W	Wasatch	Nov.	7	1910	3585
Red Creek & Spg. Branch	Joseph H. Kershaw	Fruitland, Utah	Irrigation	2		13	2 S	9 W	Wasatch	Nov.	7	1910	3586
Rabbit Gulch	Peater Barboglio	Tabby, Utah	Irrigation	1.5	40	26	3 S	6 W	Wasatch	Nov.	7	1910	3587
Tabby Spring	J. H. Hardy	Roosevelt, Utah	Irrigation	2		21	5 S	5 W	Wasatch	Nov.	9	1910	3589

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Diamond or Jones Hole Creek	Henry Praefke	Vernal, Utah	Power	15		1	3 S	25 E	Uintah	Nov.	10	1910	3592
Diamond or Jones Hole Creek	Henry Praefke	Vernal, Utah	Power	30		12	3 S	25 E	Uintah	Nov.	10	1910	3593
Lonesome Spring & Creek	J. C. Jensen	Heber, Utah	Irrigation	10		5	4 S	9 W	Wasatch	Nov.	10	1910	3594
Spring	L. H. Milton	Woodside, Utah	Stockwatering	.002		3	17 S	14 E	Emery	Nov.	11	1910	3595
Spring	Nels Monson	Woodside, Utah	Stockwatering	.001		3	17 S	14 E	Emery	Nov.	11	1910	3596
Lake Fork River	Oliver H. Clark	Vernal, Utah	Irrigation	1		5	1 S	4 W	Uintah	Nov.	15	1910	3602
Spring	John Barbieri	Tabby, Utah	Irrigation	6		1	2 S	8 W	Wasatch	Nov.	16	1910	3603
Red and Birch Creeks	George Muir	Heber, Utah	Irrigation	2.66			Red & Birch Cr'ks		Wasatch	Nov.	16	1910	3604
Trail Creek	John S. Hacking	Vernal, Utah	Irrigation	2		11	6 S	25 E	Uintah	Nov.	18	1910	3613
Beaver Creek	G. A. Richards	Colton, Utah	Irrigation	5		4	13 S	8 E	Carbon	Nov.	21	1910	3631
Beaver Creek	F. E. Murray	Salt Lake City	Irrigation	5		4	13 S	8 E	Carbon	Nov.	21	1910	3632

TABLES

Applications to Appropriate Water

Arranged for Each Drainage-area

IN ALPHABETICAL ORDER

Applications to Appropriate Water from the Weber River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Allgood Springs	Coalville Waterworks and Power Company	Coalville, Utah	Domestic	3.35		7	2 N	5 E	Summit	Feb.	28	1910	3029
Atwood Spring	William Atwood	Murray, Utah	Stockwatering	.11		12	2 S	4 E	Summit	Nov.	14	1910	3598
Burch Creek	B. P. Critchlow	Ogden, Utah	Power	10		14	5 N	1 W	Weber	July	29	1909	2606
Cold Water Creek	Eva P. Lewis	Ogden, Utah	Irrigation	6		19							
Cold Water Creek	Eva P. Lewis	Ogden, Utah	Domestic	6		24 19	6 N	1 E	Weber	Mar.	2	1909	2306
Cold Water Creek	Eva P. Lewis	Ogden, Utah	Power	6		24 19	6 N	1 E	Weber	Apr.	22	1909	2389
Cooper's Spgs. Nos. 1, 2, 3	W. D. Brown, et al	Rockport, Utah	Stockwatering	.10		24	6 N	1 E	Weber	Apr.	22	1909	2390
Chalk Creek	Moses W. Taylor	Coalville, Utah	Power	20		7	1 S	5 E	Summit	Nov.	11	1909	2805
Cedar Hollow Spring	Geo. T. Stenhouse	Morgan, Utah	Irrigation	.25		12	2 N	5 E	Summit	Dec.	3	1909	2853
Gildersleve Lost Creek	John S. Turner	Croyden, Utah	Irrigation			24 26	4 N	2 E	Morgan	Jan.	29	1910	2952
Hardscrabble Creek	L. B. McCornick	Salt Lake City	Power	15		35	5 N	4 E	Morgan	June	1	1909	2476
Joseph Combe Spring	Joseph Combe	Uintah, Utah	Stockwatering	.02		34	3 N	2 E	Morgan	Dec.	8	1909	2861
Kents Canyon Springs	Worthy & Chas. Gibbons	Rockport, Utah	Stockwatering	.05		14	5 N	1 W	Uintah	June	5	1909	2484
Lewis Canyon Water	Thomas Rees	Coalville, Utah	Irrigation	4		6	1 S	5 E	Summit	Dec.	7	1909	2858
Ogden River	L. B. Spencer	Ogden, Utah	Power	5		7 13 18	2 N	5 E	Summit	Nov.	6	1909	2795
Ogden River	L. B. Spencer	Ogden, Utah	Power	20		19 24	7 N	3 & 4 E	Weber	Nov.	3	1909	2784
Ogden River	H. J. Craven	Ogden, Utah	Power	20		23	7 N	3 E	Weber	Nov.	3	1909	2785
Ogden River	H. J. Craven	Ogden, Utah	Power	20	20	23 1 6	7 N	3 E	Weber	Mar.	2	1910	3040
Ogden River	Ogden City Corp.	Ogden, Utah	Power	80	9,000	31 36 34	6 & 7 N	3 & 4 E	Weber	Mar.	2	1910	3041
Ogden River	Ogden City Corp.	Ogden, Utah	Power	100		35 34	7 N 7 N	3 E 3 E	Weber Weber	Sept. June	20 23	1910 1910	3329 3330

APPLICATIONS TO APPROPRIATE WATER FROM THE WEBER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Rice Creek	Rice Creek Irrigation Co.	North Ogden, Utah	Power	10		20							
						21							
						28							
						29	7 N	1 W	Weber	May	10	1909	2423
Spring	Anson Thornton	North Ogden, Utah	Irrigation	1		27	7 N	1 W	Weber	Apr.	12	1909	2362
Spring	Carrie A Zimmerman	Ogden, Utah	Domestic	1		26							
						27							
						34							
						35	6 N	1 W	Weber	Apr.	12	1909	2363
Smith and Morehouse Ck.	Knight Power Co., Assignee, Thos. L. Allen	Provo, Utah	Power		6000	1	1 S	7 E	Summit	May	13	1909	2432
Spring	Utah State Industrial School	Ogden, Utah	Irrigation	2			Spring		Weber	Oct.	23	1909	2762
Springs	Utah State Industrial School	Ogden, Utah	Power	2			Springs		Weber	Oct.	23	1909	2763
Springs	James Salisbury	Rockport, Utah	Irrigation	1		5							
						7							
						8	1 S	5 E	Summit	Nov.	13	1909	2814
Spring	G. L. Becker	Ogden, Utah	Domestic	.15		20	6 N	1 E	Weber	Nov.	22	1909	2829
Spring	G. L. Becker	Ogden, Utah	Domestic	.016		20	6 N	1 E	Weber	Nov.	22	1909	2830
Springs	William Boyer	Coalville, Utah	Irrigation	.33		8	2 N	5 E	Summit	Dec.	1	1909	2850
Springs	W. D. Brown, et al	Rockport, Utah	Stockwatering	.05		7	1 S	5 E	Summit	Dec.	7	1909	2857
	James Vernon, et al	Rockport, Utah	Domestic	.1		5	1 S	5 E	Summit	Jan.	18	1910	2919
Springs	Utah State Industrial School	Ogden, Utah	Power	2			Springs		Weber	Jan.	19	1910	2920
Springs	Utah State Industrial School	Ogden, Utah	Irrigation	2			Springs		Weber	Jan.	19	1910	2921
Springs	Ogden Canyon Resort Co.	Ogden, Utah	Domestic	.16		17	6 N	1 E	Weber	Mar.	1	1910	3037
Springs	Emil H. Anderson	Ogden, Utah	Irrigation	1		34	6 N	1 W	Weber	Mar.	29	1910	3093
Springs	Jacob Lundberg	Marion, Utah	Miscellaneous	3		6	2 S	6 E	Summit	April	1	1910	3100
Springs	W. P. Foster	Ogden, Utah	Domestic	1		23	6 N	1 W	Weber	May	10	1910	3204
Springs	Utah State Industrial School	Ogden, Utah	Irrigation	2		9	6 N	1 W	Weber	May	23	1910	3251

APPLICATIONS TO APPROPRIATE WATER FROM THE WEBER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	Utah State Industrial School	Ogden, Utah	Power	2		9	6 N	1 W	Weber	May	23	1910	3252
Spring	Anson Thornton	North Ogden, Utah	Irrigation	1		27	7 N	1 W	Weber	June	29	1910	3342
Spring	Utah Light & Railway Co.	Salt Lake City	Miscellaneous	2		28							
						29	5 N	1 E	Morgan	July	16	1910	3403
Spring	James E. Halverson	Ogden, Utah	Irrigation	.2			Springs		Weber	Aug.	2	1910	3430
Springs	James E. Halverson	Ogden, Utah	Domestic	.2			Springs		Weber	Aug.	2	1910	3431
Slough	Marie D. Wattes	Ogden, Utah	Irrigation	.5		20	6 N	2 W	Weber	Aug.	4	1910	3437
Springs	W. P. Foster	Ogden, Utah	Irrigation	1		23	6 N	1 W	Weber	Oct.	4	1910	3538
Spring	George H. Bond	Morgan, Utah	Irrigation	.3		16	3 N	2 E	Morgan	Nov.	2	1910	3574
Spring	William H. Rich	Morgan, Utah	Domestic	.5		16	3 N	2 E	Morgan	Nov.	7	1910	3588
Thornton Spring and Barrett Canyon	William Bailey	North Ogden, Utah	Irrigation	.5		16	7 N	1 W	Weber	Mar.	4	1909	2308
Weber River	Willard Young	Salt Lake City	Irrigation	1000		8	4 N	2 E	Morgan	Dec.	17	1908	2190
Weber River	Weber Res., Power and Irrigation Co.	Coalville, Utah	Irrigation		75,000	*	*	*	Weber	Dec.	17	1908	2191
Weber River	Weber Res., Power and Irrigation Co.	Coalville, Utah	Power	300	75,000	10							
						11							
						14							
						15	6 N	8 E	Weber	Dec.	17	1908	2192
Weber River	Weber Res., Power and Irrigation Co.	Coalville, Utah	Power	500		8	4 N	2 E	Morgan	Dec.	17	1908	2193
Weber River	Knight Power Co., Assignee, Thos. L. Allen	Provo, Utah	Power	150		1	1 S	7 E					
						20	1 N	8 E					
						21	1 N	8 E	Summit	Jan.	4	1909	2209
Weber River	Weber Res., Power and Irrigation Co.	Coalville, Utah	Power		160,000	4	N	4 E	Summit	Feb.	11	1909	2270
Weber River	Sidney M. Bamberger Assignee, Louis D. Farnsworth	Salt Lake City	Power	300		30	5 N	1 E	Davis	Feb.	13	1909	2271
Weber River	Willard Young	Salt Lake City	Irrigation		25,000	8	4 N	2 E	Morgan and Summit	Feb.	13	1909	2272

*Note.—Application No. 2191 has four points of diversion: North Ogden Canal—Sec. 22 T. 6 N. R. 1 W: Harrisville Canal—Sec. 21 T. 6 N. R., 8 W. Plain City Canal—Sec. 19 T. 6. N. R. 1 W: Fremont Park Canal—Sec. 22 T. 6 N. R. 2 W. S. L. M.

APPLICATIONS TO APPROPRIATE WATER FROM THE WEBER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Weber River	Willard Young	Salt Lake City	Power	500		8	4 N	2 E	Morgan	Mar.	16	1909	2322
White Pine Canyon Creek	Western Monitor Mining Company	Salt Lake City	Power	3		18							
Weber River	Moses W. Taylor	Salt Lake City	Power	100		19 36	2 S 1 N	4 E 6 E	Summit Summit	Aug. Aug.	2 4	1909 1909	2610 2615
Weber River	Davis & Weber Counties Canal Company	Ogden, Utah	Power	300		30	5 N	1 E	Davis	Oct.	6	1909	2721
Weber River	Davis & Weber Counties Canal Company	Ogden, Utah	Irrigation	215		30	5 N	1 E	Davis	Oct.	6	1909	2722
Weber River	Knight Power Co., Assignee, R. E. Allen	Provo, Utah	Power	30		8	1 S	7 E	Summit	Oct.	28	1909	2773
Weber River	Knight Power Co., Assignee, T. L. Allen	Provo, Utah	Power	150		32	4 N	4 E	Morgan and Summit	Feb.	9	1910	2981
Willow Spring	Knight Power Co., Assignee, T. L. Allen	Provo, Utah	Power		12,000	20							
	William Davis	Henefer, Utah	Domestic	.2		21 3	1 N 3 N	8 E 4 E	Summit Summit	May April	7 20	1910 1910	2982 3145

Applications to Appropriate Water from the Bear River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Blacksmith Fork River	A. P. Hanson	Salt Lake City	Power	10		1	10 N	2 E	Cache	Jan.	11	1909	2216
Blacksmith Fork River	V. P. Strange	Salt Lake City	Power	60		4	10 N	2 E	Cache	Jan.	20	1909	2230
Bear River	Frank Aufdemorte, et al	Knight, Wyoming	Irrigation	15		22	2 N	10 E	Summit	Feb.	2	1909	2251
Bear River	William Newbrough	Evanston, Wyoming	Irrigation	2000		23							
						24							
						25			Rich and				
Blacksmith Fork River	Alexander M. Hill	Wellsville, Utah	Power	115		26	13 N	2 W	Cache	June	3	1909	2470
Box Elder Creek	Brigham City	Brigham, Utah	Power	28		1	10 N	2 E	Cache	June	26	1909	2542
Birch Canyon Springs	Hyde Park Municipality	Hyde Park, Utah	Domestic	.75		21	9 N	1 W	Box Elder	Nov.	5	1909	2793
Blacksmith Fork River	H. C. Baker, et al	Ogden, Utah	Power	200		25	12 N	1 E	Cache	Jan.	26	1910	2946
Blacksmith Fork River	August Lind	Logan, Utah	Irrigation			3	10 N	2 E	Cache	May	6	1910	3192
							Blacksmith Fork						
Bear River	Ethel Danielson	Knight, Wyoming	Irrigation	.66			River		Cache	June	14	1910	3290
Bear River	Olif Cronquist	Logan, Utah	Irrigation	4.5			Bear River		Summit	June	23	1910	3327
Bear River	C. H. Solier	Evanston, Wyoming	Power	15		36	13 N	1 W	Cache	Aug.	5	1910	3439
Bear River	Knight Power Co.	Provo, Utah	Power	50		26	2 N	10 E	Summit	Aug.	8	1910	3443
Corinne Canal System and Woods Creek	Malvina Christensen	Brigham, Utah	Irrigation	200		30	3 N	10 E	Summit	Nov.	21	1910	3620
Cold Water Canyon Water	Abinade Tolman	Honeyville, Utah	Irrigation	3.5		1	9 N	3 W	Box Elder	Oct.	21	1909	2761
Cold Water Canyon Spgs.	Israel Hunsaker, et al	Brigham, Utah	Power	1		27	11 N	2 W		Mar.	28	1910	3062
Cold Water Canyon Spgs.	Israel Hunsaker	Brigham, Utah	Domestic	2		33	11 N	2 W	Box Elder	July	2	1910	3363
Creek	Jacob W. Peart, et al	Randolph, Utah	Irrigation	2		33	11 N	2 W	Box Elder	July	2	1910	3364
Dewey Spring	Justin D. Call	Brigham, Utah	Irrigation		125	5	10 N	6 E	Rich	July	16	1910	3105
Mud Springs	Geo. G. McFarland	Ogden, Utah	Stockwatering	4		17	11 N	2 W	Box Elder	June	13	1910	3297
Maple Hollow Spring	James Balls	Hyde Park, Utah	Stockwatering	.1		31	9 N	3 E	Cache	May	8	1909	2411
Spring Creek	Charles A. Walker	Salt Lake City	Irrigation	.1		31	13 N	2 E	Cache	Feb.	4	1909	2070
Spring	James Quayle	Logan, Utah	Irrigation	1.16		30	10 N	2 W	Box Elder	Jan.	22	1909	2236
Swan Creek	Alonzo L. Cook	Fish Haven, Idaho	Power	.25		34	12 N	1 E	Cache	Jan.	27	1909	2239
Spring	H. O. Thompson, et al	Clarkston, Utah	Domestic	45		5	14 N	5 E	Rich	Jan.	30	1909	2247
Spring	N. J. Nielson, et al	Hyrum, Utah	Miscellaneous	.015		34	14 N	2 W	Cache	Feb.	10	1909	2269
Spring Creek	Isaac S. Smith	Logan, Utah	Miscellaneous	1.5		12	10 N	2 E	Cache	Mar.	25	1909	2334
Spring	Wm. H. Thornton	Plymouth, Utah	Domestic	10		22	12 N	2 E	Cache	April	30	1909	2393
				.05		34	14 N	3 W	Box Elder	Mar.	17	1910	3075

APPLICATIONS TO APPROPRIATE WATER FROM THE BEAR RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	Paradise Town Corp.	Paradise, Utah	Domestic	2		27 29	10 & 11 N	2 E	Cache	May	6	1910	3193
Sheep Creek and Springs	Sylvester V. Grow	Huntsville, Utah	Irrigation	.5		34	9 N	4 E	Cache	June	23	1910	3328
Swan Creek	Alonzo L. Cook	Fish Haven, Idaho	Power	45		5	14 N	5 E	Rich	Aug.	16	1910	3462
Swan Creek	Alonzo L. Cook	Fish Haven, Inaho	Power	45		5	14 N	5 E	Rich	Sept.	6	1910	3489
Spring Branch	H C. Baker, et al	Ogden, Utah	Power	10		17	10 N	1 W	Cache	Sept.	6	1910	3492
Spring and Paradise Creek	H. C. Baker, et al	Ogden, Utah	Power	50		15 16	9 N	2 E	Cache	Sept.	20	1910	3510
Three Mile Creek	Ola Sonne	Logan, Utah	Irrigation	12		29	12 N	1 W	Cache	Sept.	16	1910	3500
Underground Water	Valentine, Jensen Irrigation Co.	Brigham, Utah	Irrigation	.78		23	9 N	2 W	Box Elder	Feb.	24	1909	2293
Wheat Grass Spring	Geo. G. McFarland	Ogden, Utah	Stockwatering	.3		31	9 N	3 E	Cache	May	8	1909	2412

Applications to Appropriate Water from the Great Salt Lake Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Buckskin Springs	David H. Toyn, et al	Grouse Creek, Utah	Domestic	.25		32	12 N	18 W	Box Elder	Jan.	27	1909	2240
Box Canyon Creek	Daniel F. Harding	Willard, Utah	Irrigation	.5		26	8 N	2 W	Box Elder	May	24	1909	2155
Big Spring	S. J. & W. M. Stookey, et al	Salt Lake City	Miscellaneous	10		8 9 16							
Box Elder Creek	Joseph F. Hansen	Brigham, Utah	Power	28		17	1 S	7 W	Tooele	Nov.	30	1909	2848
Christy Spring	Reuben T. Winslow	Ogden, Utah	Domestic	1		20	9 N	1 W	Box Elder	Mar.	28	1910	3090
Chokecherry Springs	Wm. Carson	Fairfield, Utah	Mining	.2		10	6 N	19 W	Box Elder	Dec.	22	1908	2196
Cold Spring	C. T. Stewart, et al	Ibapah, Utah	Stockwatering	.05		6	Chokecherry Spg.		Tooele	Dec.	30	1908	2203
Chokecherry Spring and Spring	William Carson	Fairfield, Utah	Mining	.2		7	10 S	18 W	Tooele	Mar.	20	1909	2326
Cedar Spring	Mark A. Johnson, et al	Clover, Utah	Stockwatering	.01		34	Chokecherry Spg. and Spring.		Tooele	Mar.	31	1909	2345
Clear Creek	Pacific Land & Water Co	Logan, Utah	Irrigation	10		35 1 &	8 S	7 W	Tooele	June	18	1910	3117
Clear Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation		6000	29 1	14 N 14 N	13 W 13 W	Box Elder Box Elder	May July	9 11	1910 1910	3200 3380
Cottonwood Springs	Henry C. Meyerhoffer	Salt Lake City	Irrigation	1		34	5 S	7 W	Tooele	Sept.	14	1910	3498
Corral Canyon Spring	Jas. W. Hall, et al	Naf, Idaho	Irrigation	1		34	15 N	13 W	Box Elder	Sept.	22	1910	3513
Deep Creek	E. J. Kearns, et al	Salt Lake City	Irrigation		50,000	7	6 S	18 W	Tooele and Juab	Feb.	3	1909	2255
Deep Creek	John A. Erekson, Assignee John U. Hicks	Ibapah, Utah	Irrigation	10		7	6 S	18 W	Tooele	June	1	1909	2305
Deep Creek	John U. Hicks	Salt Lake City	Power	10	750	7	6 S	18 W	Tooele	June	4	1909	2335
Dairy Valley Creek	James Douglas	Etna, Utah	Irrigation	6		4	10 N	18 W	Box Elder	Nov.	8	1909	2800
Dunn Creek	Utah Doctor Gold Mining & Milling Co.	Salt Lake City	Power	10		6	13 N	13 W	Box Elder	Nov.	11	1909	2808
Dunn Creek	Utah Doctor Gold Mining & Milling Co.	Salt Lake City	Mining	5		6	13 N	13 W	Box Elder	Nov.	11	1909	2809

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Dry Hollow Spring	Geo. A. Blanthorn	Grouse Creek, Utah	Stockwatering	.011		9	12 N	18 W	Box Elder	Dec.	3	1909	2854
Dale Creek	Geo. G. McFarland	Centerville, Utah	Irrigation	2	360	17	2 N	1 E	Davis	Feb.	1	1910	2964
Daniel Creek	Geo. G. McFarland	Centerville, Utah	Power	10		17	2 N	1 E	Davis	Mar.	11	1910	3060
Dive Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation	10		4 8	14 N	12 W	Box Elder	May	9	1910	3199
Deep Creek	Roy Bullen	Logan, Utah	Irrigation		5000	7	14 N	8 W	Box Elder	May	26	1910	3253
Deer Spring	Bradford P. Hardy	St. John, Utah	Irrigation	.5		27	5 S	7 W	Tooele	Nov.	19	1910	3618
Emigrant Spring	Arthur Bateson	Logan, Utah	Domestic	.25		18	14 N	11 W	Box Elder	Mar.	30	1909	2343
Engineer Spring	Promontory-Curlew Land Company	Logan, Utah	Domestic	.015		24	11 N	6 W	Box Elder	Jan.	31	1910	2956
Farmington Creek	No. Cottonwood Irrigation & Water Co., Assignee John A. Bourne	Farmington, Utah	Irrigation	10		17	3 N	1 E	Davis	May	6	1909	2262
Faust Creek	S. J. Stookey	Salt Lake City	Irrigation	10		3 4 9 10	7 S	5 W	Tooele	Mar.	5	1910	3048
Farmington Creek	S. S. Howard, et al	Farmington, Utah	Power	20		15	3 N	1 E	Davis	July	18	1910	3406
Ford or Ricks Creek	Geo. M. Cannon Co.	Salt Lake City	Power	10		5	2 N	1 E	Davis	Nov.	3	1910	3576
Ford or Ricks Creek	Geo. M. Cannon Co.	Salt Lake City	Irrigation	.5		5	2 N	1 E	Davis	Nov.	3	1910	3577
Greasewood Spring	C. T. Stewart, et al	Ibapah, Utah	Stockwatering	.03		23 24 25 26	9 S	19 W	Tooele	Mar.	20	1909	2327
Grouse Creek	Cornelius J. Burke, et al	Lucin, Utah	Irrigation	10		10	7 N	18 W	Box Elder	May	28	1909	2464
Granite Creek	Geo. W. Morehouse	Callao, Utah	Irrigation	10		29	12 S	17 W	Juab	Oct.	11	1909	2738
Granite Creek	Lorn D. Briscoe	Yost, Utah	Irrigation	3		34	15 N	17 W	Box Elder	Dec.	27	1909	2893
Granite Creek	Willis Moulton	Yost, Utah	Irrigation	3		24	15 N	17 W	Box Elder	Dec.	27	1909	2894
Grouse Creek and Thousand Spring Creek	Clayton Archibald, et al	Lucin, Utah	Irrigation	10		10	7 N	18 W	Box Elder	Jan.	27	1910	2949
Granite Creek	Fred C. Parker	Trout Creek, Utah	Irrigation	10		33 2	12 S	17 W	Juab	June	13	1910	3298
Granite Creek	Willow Springs Mining Company	Salt Lake City	Power	10		3 34 35	12 & 13 S	18 W	Juab	June	21	1910	3320

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Johnson Creek	Jerry Daly, Jr.	Ogden, Utah	Irrigation	9.5		5	15 N	15 W	Box Elder	Nov.	18	1910	3614
Johnson Creek	Jos. Lee & G. K. Lloyd	Ibapah, Utah	Irrigation	8		32	11 S	19 W	Juab	Oct.	25	1909	2766
Kinney Creek	Leslie L. Goddard	Salt Lake City	Irrigation	10	150	33	2 N	1 E	Davis	May	5	1910	3190
Lagoon Salt Springs	Frank A. Roscoe	Salt Lake City	Miscellaneous	10		6							
						7	4 S	19 W	Tooele	Mar.	8	1909	2313
Lime Kiln Canyon Spring	James J. Buswell	Salt Lake City	Irrigation	.5		Lime Kiln Canyon Spring							
									Tooele	May	21	1909	2448
Lower Trough Spring	Robt. H. Towers	Mammoth, Utah	Domestic	.1		16	10 S	4 W	Tooele	Oct.	19	1909	2753
Mt. Mayd Tunnel	Bingham Central Mining Company	Salt Lake City	Mining	.25		34	3 S	3 W	Salt Lake	Dec.	24	1908	2197
Middle Canyon Creek	Wm. L. Irvine	Three Forks, Montana	Power	10		26	3 S	4 W	Tooele	Jan.	4	1909	2208
Muddy Pass & Rocky Cks.	Geo. W. Kelly, et al	Ibapah, Utah	Irrigation	3		4	11 S	19 W	Tooele and Juab	Jan.	18	1909	2224
Middle, North and South Lost Creeks	Neff Brothers	Salt Lake City	Irrigation	15		24	4 S	8 W	Tooele	Jan.	19	1909	2228
Middle Canyon Creek	Oquirrh Water Co., Assignee, A. F. Doremus	Tooele, Utah	Domestic	5.5		26 35	3 S	4 W	Tooele	Mar.	29	1909	2342
Maple Spring	Promontory Mining Co., Assignee, B. D Siegfus, et al	Salt Lake City	Mining	.5		21	7 N	5 W	Box Elder	June	5	1909	2488
Munsee Spring	Jos. & Chas. McKellar	Wendover, Utah	Irrigation	2		12 33	3 & 4 N	19 W	Box Elder	Sept.	2	1909	2665
Middle and Joe Lee Cks.	John Gilbert	Grouse Creek, Utah	Irrigation	.5		18	12 N	17 W	Box Elder	Oct.	14	1909	2747
Middle Canyon	Paul Dronbay	Erda, Utah	Power	5		26	3 S	4 W	Tooele	Apr.	11	1910	3121
Mill Creek	Starrett Pump & Mfg. Co.	Salt Lake City	Power	50		31	2 N	1 E	Davis	Apr.	25	1910	3151
Mill Creek	Starrett Pump & Mfg. Co.	Salt Lake City	Irrigation	50		Mill Creek			Davis	Apr.	25	1910	3164
Middle Canyon Creek	A. W. Gallacher	Salt Lake City	Power	6		9	4 S	3 W	Tooele	Oct.	13	1909	2745
Middle Canyon Creek	A. W. Gallacher	Salt Lake City	Power	6			4 S	3 W	Tooele	Oct.	21	1909	2760
Mill Creek	Leslie L. Goddard	Salt Lake City	Power	10		33	2 N	1 E	Davis	May	27	1910	3258
Mill Creek	Leslie L. Goddard	Salt Lake City	Irrigation		1000	33	2 N	1 E	Davis	May	27	1910	3259
Mud Spring	Promontory-Curlew Land Company	Logan, Utah	Domestic	.1		12	9 N	6 W	Box Elder	June	2	1910	3272
North Willow Creek	T. R. & W. L. Ellerbeck	Salt Lake City	Power	15		21	3 S	6 W	Tooele	Mar.	11	1909	2318
Ophir Creek	T. A. Butterfield	Harriman, Utah	Irrigation	10	640	7	6 S	4 W	Tooele	Nov.	25	1910	3635

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Pine Canyon Creek	International Smelting & Refining Co.	Salt Lake City	Mining	4		21	3 S	3 W	Tooele	Jan.	28	1909	2241
Pump Spring	Joseph H. Cook	Salt Lake City	Mining	.5			Pump Spring		Tooele	July	12	1909	2563
Promontory Big House Spring	Promontory-Curlew Land Company	Logan, Utah	Domestic	.005		30	11 N	6 W	Box Elder	Apr.	6	1910	3106
Pine Creek	Samuel S. Ross	Twin Falls, Idaho	Irrigation	2		33	15 N	17 W	Box Elder	June	24	1910	3331
Pine Creek	Samuel J. Ross	Yost, Utah	Irrigation	2		33	15 N	17 W	Box Elder	June	24	1910	3332
Pine Creek	David Bens	Yost, Utah	Irrigation	2		32 33	15 N	17 W	Box Elder	July	9	1910	3378
Ricks or Ford Creek	Geo. M. Cannon Co.	Salt Lake City	Irrigation	5		5	2 N	1 E	Davis	May	9	1909	2267
Raft River or Johnson Creek	Century Gold Mining and Milling Co.	Salt Lake City	Power	4		3	13 N	15 W	Box Elder	Feb.	25	1909	2299
Rock Spring	Julia A. Tripp	Callao, Utah	Stockwatering	.5		32	10 S	17 W	Tooele	Nov.	24	1909	2834
Raft River	Ralph S. Fessenden	Glenn's Ferry, Idaho	Irrigation		20,000	5 6 31 32	15 & 16 S	26 E	Box Elder	Jan.	10	1910	2909
Raft River and Clear Crk	Benjamin Willmore	Naf, Idaho	Irrigation	3		1	14 N	13 W	Box Elder	Feb.	23	1910	3018
Rice Creek	Pacific Land & Water Co.	Logan, Utah	Irrigation	5		31 13	14 N	12 & 13 W	Box Elder	May	9	1910	3201
Rock Springs	Henry C. Meyerhoffer	Salt Lake City	Stockwatering	.25		21	5 S	7 W	Tooele	Sept.	14	1910	3497
Spring	A. L. Wight, et al	Perry, Utah	Irrigation	.4		2	8 N	2 W	Box Elder	Jan.	6	1909	2211
Spring	Philip Fiddler	Grantsville, Utah	Irrigation	.2		32	2 S	5 W	Tooele	Jan.	15	1909	2222
Spring	Promontory-Curlew Land Co., Assignee, William S. Muir	Logan, Utah	Domestic	.1		12	9 N	7 W	Box Elder	May	15	1909	2238
Springs	Thos. DeLaMare	Tooele, Utah	Power	1		16	4 S	3 W	Tooele	Mar.	5	1909	2310
Settlement Canyon Creek	Tooele City Water Co.	Tooele, Utah	Domestic	2		34	3 S	4 W	Tooele	Mar.	29	1909	2340
Settlement Canyon Creek	Tooele City Water Co., Assignee, A. F. Doremus	Tooele, Utah	Irrigation	4		33	3 S	4 W	Tooele	Mar.	29	1909	2341
Salt Springs	E. T. Merritt, et al	Salt Lake City	Irrigation	200		6	5 S	18 W	Tooele	Apr.	2	1909	2348
South Willow Creek	C. E. Green	Tooele, Utah	Power	10		26	3 S	6 W	Tooele	Apr.	12	1909	2361
Springs	Jesse B. Grover	Park Valley, Utah	Irrigation	1		30	13 N	13 W	Box Elder	Apr.	28	1909	2387

APPLICATIONS TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	Alonzo J. Stookey	Clover, Utah	Irrigation	.5		3							
Springs	Edward J. Holtman	Park Valley, Utah	Irrigation	.8		4	7 S	6 W	Tooele	Apr.	29	1909	2391
Spring and Dry Hollow Creek	Geo. M. Cannon Co.	Salt Lake City	Irrigation	5		11	12 &						
Spring	David Neff	Calder's Utah	Irrigation	2.5		34	13 N	12 W	Box Elder	May	15	1909	2426
Soldiers Canyon Spring	J. H. Cook	Salt Lake City	Power	10		32	3 N	1 E	Davis	May	18	1909	2441
Settlement Canyon Creek	Thos. DeLaMare	Tooele, Utah	Power	2		22	4 S	8 W	Tooele	May	28	1909	2462
St. Jeor Spring	Walter M. Stookey	Salt Lake City	Irrigation	.5		35							
Stookey Spring	Walter M. Stookey	Salt Lake City	Irrigation	.25		36	4 S	4 W	Tooele	June	4	1909	2482
Springs	Hyrum Adams	Layton, Utah	Domestic	.75		33	3 S	4 W	Tooele	June	5	1909	2485
Serviceberry Creek	Alonzo J. Stookey	Clover, Utah	Irrigation	1		20							
Silver Spring	Joseph H. Cook	Salt Lake City	Mining	.8		21	6 S	6 W	Tooele	June	5	1909	2486
Springs and Shearing Cor-ral Springs	Leroy Badger	Naf, Idaho	Irrigation	.5		20	6 S	6 W	Tooele	June	5	1909	2487
Simpson's Springs	Joseph Householder	American Fork, Utah	Domestic	.1		23							
Short and Long Creeks	Daniel Beus	Yost, Utah	Irrigation	5		24	4 N	1 W	Davis	July	7	1909	2558
Spring and Grouse Creek	Charles C. Toyn	Grouse Creek, Utah	Irrigation	2		4	6 S	6 W	Tooele	July	9	1909	2571
Short, Long and South Creeks	Daniel Beus	Yost, Utah	Irrigation	2.5	10		Silver Spring		Tooele	July	12	1909	2564
Settlement Canyon Creek	Tooele City Water Co.	Tooele, Utah	Domestic	4		33	15 N	13 W	Box Elder	July	30	1909	2607
Spring	Irving O. Austin	Salt Lake City	Mining	6			Simpson's Springs		Tooele	Aug.	3	1909	2611
Springs	Joseph K. W. Bracken	Salt Lake City	Irrigation	2.5		11	14 N	17 W	Box Elder	Aug.	5	1909	2317
Serviceberry Creek	Alonzo J. Stookey	Clover, Utah	Irrigation	1		20	13 N	17 W	Box Elder	Aug.	6	1909	2520
Spring	Charles E. France	Centerville, Utah	Irrigation	1		10							
Spring	Oscar W. Carlson	Salt Lake City	Mining	2		11	14 N	17 W	Box Elder	Sept.	14	1909	2706
Spring	C. M. & J. P. Peterson	Geneva, Utah	Domestic	.08		33	3 S	4 W	Tooele	Sept.	29	1909	2714
Springs	Wm. M. Bostaph	Ogden, Utah	Stockwatering	1			Spring		Box Elder	Nov.	1	1909	2778
						1	7 S	7 W	Tooele	Nov.	6	1909	2791
						4	6 S	6 W	Tooele	Nov.	16	1909	2816
						32	3 N	1 E	Davis	Nov.	22	1909	2831
							Spring		Box Elder	Dec.	20	1909	2885
						19	11 N	6 W	Box Elder	Jan.	8	1910	2908
						1	7 &						
						36	8 N	6 W	Box Elder	Feb.	15	1910	3000

APPLICATION TO APPROPRIATE WATER FROM THE GREAT SALT LAKE DRAINAGE AREA

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	Wm. M. Bostaph	Ogden, Utah	Irrigation	1		36	8 N	6 W	Box Elder	Feb.	15	1910	3001
Squaw Springs	C. M. Clay	Ogden, Utah	Irrigation	1		23	7 N	6 W	Box Elder	Feb.	21	1910	3011
Springs	Willard City Corp.	Willard, Utah	Domestic	.33		23	8 N	2 W	Box Elder	Mar.	15	1910	3071
Sink Springs	A. R. Burke	Brigham, Utah	Domestic	.5		3	10 N	2 W	Box Elder	Apr.	9	1910	3115
Spring	Middle Canyon Irrigation Company	Tooele, Utah	Irrigation	5		35 26	3 S	4 W	Tooele	Apr.	18	1010	3138
Springs	May R. Taylor	Farmington, Utah	Miscellaneous	1			Springs		Davis	Apr.	19	1910	3143
Springs	Parley R. Paskett	Grouse Creek, Utah	Irrigation	.25		3	12 N	18 W	Box Elder	May	31	1910	3202
Stud Horse Canyon Spgs.	G. Georgetta	Ibapah, Utah	Stockwatering	.5			13 S	19 W	Juab	June	3	1910	3274
Spring	Effie L. Foote	Nephi, Utah	Domestic	.1		22	10 S	4 W	Tooele	June	3	1910	3277
Springs of Clear Creek	Andrew G. Lundstrom	Logan, Utah	Irrigation	8		1 & 29	14 N	13 W	Box Elder	June	4	1910	3286
Spring	Wallace A. Clay	Brigham, Utah	Domestic	.25		10	6 N	5 W	Box-Elder	June	14	1910	3301
Spring	James M. Elliott	Clear Creek, Utah	Domestic	.25		8	14 N	12 W	Box Elder	June	27	1910	3338
Springs	Albert Rose	Kelton, Utah	Domestic	.2		10	12 N	12 W	Box Elder	June	30	1910	3358
Spring	Dennis J. Sheehan	Ogden, Utah	Irrigation	.5		36	8 N	6 W	Box Elder	July	18	1910	3407
Springs	O. A. Parmley	Ogden, Utah	Irrigation	.5		31	8 N	5 W	Box Elder	July	18	1910	3408
Springs	Geo. G. McFarland	Centerville, Utah	Irrigation	1		17	2 N	1 E	Davis	July	19	1910	3409
Settlement Canyon Creek	A. F. Dorenus	Salt Lake City	Domestic	2			Settlement Canyon Spring		Tooele	Sept.	20	1910	3511
Spring	Wm. W. Willey	Bountiful, Utah	Irrigation	.5		19	2 N	1 E	Davis	Oct.	25	1910	3550
Spring	H. J. Mair, et al	Callao, Utah	Mining	.1			Spring		Tooele	Nov.	17	1910	3612
Two Salt Springs	John U. Hicks	Salt Lake City	Irrigation	25		7	4 S	19 W	Tooele	June	9	1909	2314
Trout Creek	Fred B. Jones, et al	Salt Lake City	Power	10		4 5	13 S	18 W	Juab	Sept.	2	1909	2687
Trout Creek	Fred B. Jones, et al	Salt Lake City	Power	10		5	13 S	18 W	Juab	Nov.	24	1909	2832
Three Mile Creek	Phillip Quayle & Co.	Brigham, Utah	Power	4		7	8 N	1 W	Box Elder	Mar.	11	1910	3064
Upper Trough Spring	Robt. H. Towers	Mammoth, Utah	Domestic	.1		16	10 S	4 W	Tooele	Oct.	19	1909	2752
Wild Cat Creek	John H. Kroencke	Yost, Utah	Irrigation	1		8	14 N	15 W	Box Elder	Jan.	15	19.9	2223
Wayside Spring	O. H. Barrus, et al	Grantsville, Utah	Irrigation	.5		32	2 S	5 W	Tooele	Apr.	26	1909	2383
Wash	Mrs. Elsie Buswell	Salt Lake City	Irrigation		320	17	3 S	5 W	Tooele	Sept.	24	1909	2705
White's Spring	B. L. Cutler	Salt Lake City	Mining	1		35	9 S	12 W	Tooele	Dec.	15	1909	2877
	Lawrence M. Jacobson	Willard, Utah	Irrigation	1		26	8 N	2 W	Box Elder	Oct.	28	1910	3643

Applications to Appropriate Water from the Colorado River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Alva Wash	Scott Barney	Escalante, Utah	Irrigation	2.5		35	35 S	3 E	Garfield	July	23	1909	2592
Alvey Wash or False Creek	R. E. Wilson	Escalante, Utah	Irrigation	3.67		17, 21 & 28	35 S	3 E	Garfield	Sept.	10	1909	2678
Ash Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10	1000	2	40 S	13 W	Washington	Mar.	2	1910	3039
Ash Creek	J. M. Lauritzen	St. George, Utah	Irrigation	40	4000	2	40 S	13 W	Washington	Mar.	28	1910	3089
Arch Canyon Creek	Jas K. Yorkum	Bluff, Utah	Irrigation	8			Arch Canyon Ck.		San Juan	Apr.	7	1910	3109
Ash Creek	J. M. Lauritzen	St. George, Utah	Irrigation	40		2	40 S	13 W	Washington	Apr.	9	1910	3120
Ash Creek	W. W. Roundy	Kanarra, Utah	Irrigation	4		36	38 S	13 W	Washington	Apr.	19	1910	3142
Birch Springs	R. L. Turner	Hanksville, Utah	Irrigation	5			Birch Springs			Feb.	20	1909	2289
Blue Spring	Willis C. Little	Kanab, Utah	Stockwatering	.01		34	42 S	3 W	Kane	Apr.	17	1909	2376
Blue Springs	Wm. A. Ford	Kanab, Utah	Stockwatering	.004		19	42 S	3 W	Kane	Apr.	30	1909	2394
Boulder Creek	C. A. Hansen, et al	Boulder, Utah	Irrigation	3		24							
						25	33 S	4 E	Garfield	Aug.	20	1909	2649
Big Spring	George O. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2728
Birch Spring	Ira Heaton	Alton, Utah	Irrigation	.25		35	38 S	6 W	Kane	Oct.	20	1909	2755
Birch Spring	A. D. Findlay	Kanab, Utah	Stockwatering	.2		25	38 S	6 W	Kane	Nov.	8	1909	2798
Beaver Dam Wash	J. M. Lauritzen	St. George, Utah	Irrigation	50			Beaver Dam Wash		Washington	Jan.	22	1910	2929
Beaver Dam Wash	J. M. Lauritzen	St. George, Utah	Irrigation	10	3000		Beaver Dam Wash		Washington	Jan.	22	1910	2930
Berry Spring	W. F. Gates	St. George Utah	Irrigation	.5		1	42 S	14 W	Washington	Feb.	10	1910	2991
Beaver Dam Wash	James E. Jewel	Afton, Wyoming	Power	5			Beaver Dam Wash		Washington	May	12	1910	3217
Birch Spring	John Findlay	Kanab, Utah	Stockwatering	.02			Birch Spring		Kane	May	14	1910	3221
Birch and Cottonwood Creeks	Joseph Robison	Giles, Utah	Irrigation	10		3	29 S	10 E		June	4	1910	3280
Bowl Creek	John G. Ekker	Hanksville, Utah	Irrigation	10		21	28 S	11 E	Kane	June	4	1910	3285
Bull Valley	John Johnson	Tropic, Utah	Irrigation	.5		2	39 S	4 W	Kane	Aug.	29	1910	3476
Beaver Dam Wash	Andrew F. Greenson	St. George, Utah	Mining	3			Beaver Dam Wash		Washington	Oct.	15	1910	3511
Curtis Creek	Green River Valley Land and Water Co.	Salt Lake City	Irrigation	1000	200000		22 S	6 E	Emery	Jan.	22	1909	2233
Cliff Springs	James W. Chadburn	Enterprise, Utah	Irrigation	1		12	39 S	16 W	Washington	May	3	1909	2100
Camanche & Pace's Creeks	Henry A. Pace	New Harmony, Utah	Irrigation	10		16	38 S	13 W	Washington	May	27	1909	2459
Clear Creek Bed Seep	H. C. Jolley	Glendale, Utah	Stockwatering	.03		13							
						24	40 S	9 W	Kane	Nov.	18	1909	2821
Cottonwood Wash	Josephus Riding, et al	St. George, Utah	Irrigation	1		14							
						23	42 S	16 W	Washington	Nov.	22	1909	2828

APPLICATION TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Chris Spring	Fred W. Beaton	Orderville, Utah	Stockwatering	.1			Chris Spring		Kane	Jan.	24	1910	2939
Comb Wash	Jas. K. Yoakum	Bluff, Utah	Irrigation		960		Comb Wash		San Juan	April	8	1910	3114
Cottonwood Wash	Hyrum Perkins	Bluff, Utah	Irrigation	10		24	40 S	21 E	San Juan	June	22	1910	3322
Cottonwood Springs	J. M. Lauritzen	St. George, Utah	Irrigation	1		12	43 S	11 W	Washington	June	22	1910	3316
Cottonwood Creek Spring	O. B. Berglund	Gunnison Utah	Irrigation	10			38 S	2 W	Kane	July	13	1910	3394
Cave Spring	Brigham Carpenter, et al	Bloomington, Utah	Stockwatering	.02		3	43 S	17 W	Washington	Aug.	3	1910	3435
Corral Hollow Seeps	Charles R. Pugh	Kanab, Utah	Stockwatering	.008		32	39 S	5 W	Kane	Aug.	26	1910	3472
Colorado River	Charles H. Spencer	Oljato, Utah	Mining	250			Colorado River		San Juan	Oct.	6	1910	3525
Dexraw Springs	Jesse N. Johnson	Johnson, Utah	Stockwatering	.16		22	42 S	5 W	Kane	Jan.	2	1909	2207
Dirty Devil or Fremont River	John H. Curfew	Loa, Utah	Irrigation	15		16	29 S	8 E	Wayne	Mar.	4	1909	2307
Dairy Spring	J. B. Showalter	Panguitch, Utah	Stockwatering	.14			Dairy Spring		Garfield	May	28	1909	2465
Dirty Devil River or Muddy Creek	Emery County Lands Water Co.	Rochester, Utah	Irrigation		1000	22	21 S	6 E	Sanpete	Aug.	1	1910	3427
Eagle Creek	Robert E. Laughter	Green River, Utah	Mining	2			Eagle Creek		Garfield	Oct.	20	1909	2756
East Wooley Spring	Israel H. Chamberlain	Kanab, Utah	Stockwatering	.10		36	43 S	6 W	Kane	Feb.	8	1910	2980
Fort Pierce Wash	David B. Moss, et al	St. George, Utah	Irrigation	10		36	43 S	15 W	Washington	Feb.	3	1909	2256
Fremont River	Fremont Irrigation Co.	Loa, Utah	Irrigation		3500	17	27 S	3 E	Sevier	Feb.	19	1909	2288
Fremont River	Don C. Robbins, Trustee	Salt Lake City	Irrigation	2000		14 15 22 23	29 S	7 E	Wayne	Feb.	20	1909	2291
Falls Hollow and Grass Valley Creek	Robt. Gardner	Pine Valley, Utah	Irrigation	10		29	38 S	14 W	Washington	May	18	1909	2442
Fremont River	Samuel Newhouse	Salt Lake City	Irrigation		480000	14 15 22 23	29 S	7 E	Wayne	May	21	1909	2446
Five Trough Spring	Geo. O. Holt	Enterprise Utah	Stockwatering	.15		14	37 S	16 W	Washington	Oct.	7	1909	2730
Fremont River	Taylor Irrigation Co.	Loa, Utah	Irrigation		4000	9	27 S	3 E	Sevier	Oct.	27	1910	3553
Gape Vine Pass Spring	William Turnbeaugh	Washington, Utah	Irrigation	1		6	42 S	14 W	Washington	Juln	20	1910	3410
Henrieville Creek	A. G. Partner, et al	Henrieville Utah	Irrigation	4		12	37 S	2 W	Garfield	Apr.	17	1909	2374
Halls Creek	Eliza J. Smith	Thurber, Utah	Irrigation	5			Unsurveyed		Garfield	May	10	1909	2420
Halls Creek	Sarah Smith	Thurber, Utah	Irrigation	5			Unsurveyed		Garfield	May	10	1909	2421
Halls Creek	Thos. W. Smith	Thurber, Utah	Irrigation	2 5			Unsurveyed		Garfield	May	10	1909	2422

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Halls Creek	Thomas Smith	Thurber, Utah	Irrigation	2.5		Unsurveyed			Garfield	May	11	1909	2427
Harmony Creek	Robt. A. Kirker, Agent	New Harmony, Utah	Miscellaneous	.20		32	37 S	13 W	Washington	June	24	1909	2510
Hunters Creek	Maggie Bennett	Garland, Utah	Irrigation	2.66		11							
						14	37 S	12 W	Iron	Aug.	23	1909	2656
Harris Springs No. 1 to No. 10 inclusive	Edward Carroll	Orderville, Utah	Stockwatering	.1			43 S	8 W	Kane	Jan.	24	1910	2940
Hart Draws	Mrs. Jean Christensen et al	Monticello, Utah	Irrigation	10		14	33 S	22 E	San Juan	May	4	1910	3189
Hog Ranch	Geo. I. Riddle	Escalante, Utah	Irrigation	2		20	34 S	2 E	Garfield	May	26	1910	3219
Indian Spring	William A. Ford	Kanab, Utah	Stockwatering	.08		25	42 S	4 W	Kane	May	1	1909	2395
J. W. Glazier & Sons Springs	J. W. Glazier & Sons	Kanab, Utah	Stockwatering	.125		Glazier & Sons Springs			Kane	Aug.	16	1909	2636
Jarvis Spring	Ernest & Wm. A. Nelson	St. George, Utah	Irrigation	.25		30	42 S	15 W	Washington	Oct.	6	1909	2723
Jimmie Creek Spring	James Esplin	Orderville, Utah	Stockwatering	.04			40 S	8 W	Kane	July	29	1910	3422
Kanarra Creek	Joseph S. Williams	Kanarra, Utah	Irrigation	4		25	37 S	12 W	Iron	Jan.	11	1909	2217
Kanarra Creek, Dry Creek and Camp Creek	Wm. W. Boundy	Kanarra, Utah	Irrigation	6		31	38 S	12 W	Iron	June	4	1909	2481
Kanarra Creek	Paul Arnold Graff	Kanarra, Utah	Irrigation	2		35	37 S	12 W	Iron	June	4	1909	2483
Kolob or Big Creek	Virgin Valley Reclamation Co., Assignee, New Castle Reclamation Co	Salt Lake City	Irrigation	10	4500	25 30 31 36	41 S	12 W	Washington & Iron	Nov.	6	1909	2786
Kane Spring	Wm. S. Smith, et al	Glendale, Utah	Stockwatering	.1		Kane Spring			Kane	Jan.	19	1910	2922
Kane Springs	J. B. Showalter	Panguitch, Utah	Stockwatering	.16		6	36 S	1 E	Garfield	Feb.	24	1910	3020
Kanab, Swain, Strawberry and Duck Creeks	Virgin Valley Reclamation Co.	Salt Lake City	Irrigation	100	10000	Kanab Creek, etc.			Kane	Aug.	17	1910	3440
Kanab Creek	J. M. Lauritzen	St. George, Utah	Irrigation	100		11	40 S	6 W	Kane	Aug.	3	1910	3434
Last Chance Creek	Alonzo Brinkerhoff	Emery, Utah	Irrigation	10		Last Chance			Wayne	Mar.	16	1909	2323
Last Chance Creek	Alonzo Brinkerhoff	Emery, Utah	Irrigation	10		Last Chance			Wayne	Mar.	16	1909	2324
Langston Spring No. 1	C. C. Wallace	Toquerville, Utah	Stockwatering	.1		10	39 S	11 W	Washington	July	12	1909	2565
Langston Spring	C. C. Wallace	Toquerville, Utah	Stockwatering	.1		10	39 S	11 W	Washington	July	12	1909	2566
Lone Valley Creek	James W. Thatton	Mt. Carmel, Utah	Irrigation	1		19	41 S	7 W	Kane	July	28	1909	2605
Lick Spring	J. W. Glazier & Sons	Kanab, Utah	Stockwatering	.25		Lick Spring			Kane	Aug.	16	1909	2637
Lick Springs, Pine Valley & Grass Valley Creeks	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	5000	30 14	38 & 39 S	14 & 15 W	Washington	Aug.	16	1909	2638

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Long Valley Creek	James W. Tharton	Mt. Carmel, Utah	Irrigation	1		19	41 S	7 W	Kane	Nov.	29	1909	2339
Lone Pine Seeps Rio Virgin River	E. J. Chamberlain	Orderville, Utah	Stockwatering	.08		31	39 S	6 W	Kane	Apr.	7	1910	3112
La Sal Creek	Robert C. Clark	Moab, Utah	Irrigation	50	10000	17	28 S	25 E	San Juan	Apr.	16	1910	3133
Le Verkin Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10		1	40 S	13 W	Washington	May	3	1910	3187
Le Verkin Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10			38 S	11 & 12 W	Iron & Washington	July	26	1910	3415
Le Verkin Creek	J. D. Williams, et al	Kanarra, Utah	Irrigation	10		5	38 S	11 W	Iron	Sept.	17	1910	3505
Mud Springs	Hyrum C. Jacobson	Pine Valley, Utah	Irrigation	1	4	12							
						13	39 S	16 W	Washington	Nov.	19	1909	2694
Mill Hollow Seeps Rio Virgin River	John Chamberlain	Orderville, Utah	Stockwatering	.1		6	40 S	6 W	Kane	Apr.	7	1910	3111
Maxwell Creek	J. M. Lauritzen	St. George, Utah	Irrigation	3		22	43 S	10 W	Washington	May	23	1910	3241
Middleton Wash	Leonard S. Conger	St. George, Utah	Irrigation	1		16, 21	42 S	15 W	Washington	Nov.	26	1909	2837
North Canyon	Wm. E. Chatwin	Tropic, Utah	Irrigation	1		30	36 S	2 W	Garfield	Dec.	29	1908	2200
North Creek	James Humphries	Virgin, Utah	Irrigation	.66		23	4 S	12 W	Washington	Dec.	3	1910	3275
N. E. Harris Spring	Isiah L. Bowers	Orderville, Utah	Stockwatering	.1		North Creek			Washington	June	27	1909	2892
North Creek	Otto A. Lundin	St. George, Utah	Irrigation	20		N. E. Harris Spg.			Kane	Jan.	24	1910	2942
North Ash Creek	Elizabeth Roundy	Kanarra, Utah	Irrigation	2.5		36	38 S	13 W	Washington	Oct.	27	1910	3554
North Ash Creek	Sarah S. Thorley	Cedar City, Utah	Irrigation	2.5		36	38 S	13 W	Washington	Oct.	27	1910	3555
Oak Creek Springs	Lorenzo Turner	Hanksville, Utah	Irrigation	5		Oak Creek Spgs.				Feb.	20	1909	2290
Oak Creek and Pleasant Creek	William Bown, Jr.	Notom, Utah	Irrigation	30	500	Unsurveyed			Garfield	Mar.	4	1909	2309
Oak Springs	Anne G. Lauritzen	St. George, Utah	Irrigation	1		26	43 S	10 W	Washington	June	26	1910	3315
Pahreah Creek	Hosea Merrell	Tropic, Utah	Irrigation	1.5		36	36 S	3 W	Garfield	Jan.	5	1909	2210
Potato Spring	James W. Imlay	Hurricane, Utah	Irrigation	.2		20	40 S	10 W	Washington	Apr.	2	1909	2351
Pole Springs	J. B. Showalter	Panguitch Utah	Stockwatering	.16		Pole Spring			Garfield	May	28	1909	2466
Pace Canyon Creek	Robt. A. Kirker, Agent	New Harmony, Utah	Miscellaneous	1		32	37 S	13 W	Iron & Washington	June	8	1909	2493
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		2525	Pleasant & Oak Creeks			Garfield	June	14	1909	2507
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		1895	Pleasant & Oak Creeks.			Garfielb	June	14	1909	2507a
Pleasand and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		315	Pleasant & Oak Creeks.			Garfield	June	14	1909	2507b
Pleasant and Oak Creeks	William Bown, Jr.	Notom, Utah	Irrigation		265	Pleasant & Oak Creeks.			Garfield	June	14	1909	2507 c

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Pine Valley Creek and Water Canyon Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	20	12500	29	39 S	14 W	Washington	June	29	1909	2546
Pine Valley Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	3000	14	39 S	14 & 15 W	Washington	Sept.	9	1909	2675
Pine Valley & Water Canyon Creeks	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	15000	30 14	38 & 39 S	14 & 15 W	Washington	Sept.	28	1909	2711
Pine Valley Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	30	2500	29	39 S	14 W	Washington	Nov.	30	1909	2847
Poll Canyon Creek	Fred'k C. Jensen, et al	Monticello, Utah	Irrigation	5		34	33 S	23 E	San Juan	Dec.	29	1909	2898
Pine Valley Creek or Santa Clara Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	10000	6	39 S	15 W	Washington	Jan.	21	1910	2927
Parashont Spring	Hans C. Sorensen, et al	Mt. Carmel, Utah	Stockwatering	.06		Parashont Spring			Kane	Jan.	24	1910	2938
Poll Springs	J. B. Showalter	Panguitch, Utah	Stockwatering	.1		6	36 S	1 E	Garfield	Feb.	21	1910	3021
Pine Canyon Water	Thos. Spencer	Escalante, Utah	Irrigation	1		18	36 S	1 E	Garfield	May	31	1910	3205
Pine Spring	John J. Esplin	Orderville, Utah	Stockwatering	.06			43 S	8 W	Kane	July	29	1910	3120
Poll Canyon Creek	Charles A. Burr	Monticello, Utah	Irrigation	2		34	33 S	23 E	San Juan	Oct.	29	1910	3559
Pahreah Creek	O. G. Anderson	Cannonville, Utah	Irrigation	1		12	37 S	3 W	Garfield	Nov.	14	1910	3599
Quail or Harrisburg Crks	V. A. Tanney	Salt Lake City	Irrigation	10		23	41 S	14 W	Washington	Oct.	18	1909	2749
Quail Springs	James E. Jewell	St. George, Utah	Mining	10		Quail Springs			Washington	May	11	1910	3213
Quail Springs	Herbert G. Cannon	Salt Lake City	Mining	5		Quail Springs			Washington	May	12	1910	3216
Rio Virgin	Thomas Judd	La Verkin, Utah	Power	110		19	41 S	12 W	Washington & Kane	Sept.	4	1909	2671
Rio Virgin	Thomas Judd	La Verkin	Power		5000	19	41 S	12 W	Washington	Dec.	11	1909	2869
Rasp or Blind Lake	John H. Curfew	Loa, Utah	Irrigation		500		30 S	5 E	Wayne	Dec.	13	1909	2872
Recapture Creek	Walter C. Lyman	Grayson, Utah	Irrigation	100		11	36 S	22 E	San Juan	June	17	1910	3312
Sand Springs	Arthur Johnson	Kanab, Utah	Stockwatering	.08		Sand Springs			Kane	Dec.	5	1908	2181
Solomon Creek	Thomas J. Jones	Emery, Utah	Irrigation	10		25	25 S	5 E	Sevier	Jan.	30	1909	2248
South Creek	Peter Steel	Giles, Utah	Irrigation	4		Unsurveyed			Garfield	Mar.	27	1909	2338
Santa Clara Creek	Clarence S. Jarvis, et al	Provo, Utah	Power	30		6	42 S	16 W	Washington	Apr.	13	1909	2367
Santa Clara Creek	Clarence S. Jarvis, et al	Provo, Utah	Irrigation	30			42 S	16 W	Washington	Apr.	13	1909	2368
Spring	William T. Jolley, et al	Tropic, Utah	Irrigation	1.5		33	36 S	3 W	Garfield	Apr.	19	1909	2273

APPLICATION TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.

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				Cu. Ft. per sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Springs	W. D. Wilcock	Escalante, Utah	Irrigation	1		34	35 S	3 E	Garfield	June	9	1909	2497
Sheep Creek	Jas. N. Henderson	Cannonville, Utah	Irrigation	1		2	38 S	3 W	Garfield	June	18	1909	2521
Springs	Francis Prince	New Harmony, Utah	Irrigation	5		8	38 S	13 W	Iron & Washington	July	9	1909	2560
Santa Clara Creek	Escalante M. and M. Co.	Modena, Utah	Power	35		11 & 14	39 S	16 W	Washington	Sept.	24	1909	2562
Seaman Spring	Frank Wilson	Kanab, Utah	Stockwatering	.03		3	43 S	4 W	Kane	July	15	1909	2576
Santa Clara Creek	Samuel Knight	Santa Clara, Utah	Irrigation	6		8	42 S	16 W	Washington	Aug.	30	1909	2660
Short Creek	J. M. Lauritzen	St. George, Utah	Power	10		Short Creek			Washington	Sept.	8	1909	2674
Spring	Albert E. Miller	St. George, Utah	Domestic	.25		3	42 S	16 W	Washington	Sept.	29	1909	2712
South Spring	Geo. A. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2727
Sam Judd Spring	Geo. A. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2729
Six Trough Spring	Jas. A. Holt	Enterprise, Utah	Stockwatering	.1		14	37 S	16 W	Washington	Oct.	7	1909	2731
Spring	H. C. Jolley	Glendale, Utah	Stockwatering	.01		26	40 S	9 W	Kane	Nov.	11	1909	2802
Spring	H. C. Jolley	Glendale, Utah	Stockwatering	.01		27	40 S	9 W	Kane	Nov.	11	1909	2803
Spring	Benjamin Hamblin	Kanab, Utah	Stockwatering	.025		20	39 S	4 W	Kane	Nov.	11	1909	2810
Spring	Nephi Hamblin	Kanab, Utah	Stockwatering	.01		31	39 S	4 W	Kane	Nov.	11	1909	2811
Spring	Walter W. Bowler	Enterprise, Utah	Irrigation	2		10	37 S	18 W	Washington	Nov.	15	1909	2815
Spring	H. C. Jolley	Glendale, Utah	Stockwatering	.005		24	40 S	9 W	Kane	Nov.	18	1909	2819
Seep	H. C. Jolley	Glendale, Utah	Stockwatering	.01		13	40 S	9 W	Kane	Nov.	18	1909	2820
Short Creek	J. M. Lauritzen	St. George, Utah	Irrigation	10		Short Creek			Washington	Dec.	16	1909	2882
Spring	Robt. G. McQuarrie	St. George, Utah	Irrigation	10		Spring			Washington	Dec.	22	1909	2889
Santa Clara Creek	Clarence Jarvis, et al	Provo, Utah	Irrigation		1500		42 S	16 W	Washington	Jan.	5	1910	2905
Sand Springs No. 1, 2, & 3	Edward Carroll, et al	Orderville, Utah	Stockwatering	.05			43 S	7 W	Kane	Jan.	24	1910	2941
Spring	Samuel Knight	Santa Clara, Utah	Irrigation	1	100	15	42 S	16 W	Washington	Jan.	28	1910	2950
Spring	Joseph S. Thompson	St. George, Utah	Stockwatering			21	43 S	13 W	Washington	Jan.	31	1910	2957
South Ash Creek	Andrew F. Gregerson	Leeds, Utah	Irrigation	4		2	40 S	13 W	Washington	Mar.	19	1910	3081
San Juan River	C. H. Spencer	Oljato, Utah	Mining	250		San Juan River			San Juan	Apr.	22	1910	3150
Schun Pah	Willis C. Little	Kanab, Utah	Irrigation	1.5		6	41 S	4½ W	Kane	June	29	1910	3153
Spring	Ogden San Juan Oil Co.	Ogden, Utah	Irrigation	2		22	40 S	19 E	San Juan	Apr.	29	1910	3177
Santa Clara Creek	Clarence S. Jarvis et al	Provo, Utah	Irrigation	20	5000	Santa Clara Creek			Washington	May	7	1910	3196
Sawyer Springs	Richard A. Thorley	Cedar City, Utah	Irrigation	2.66		36	38 S	13 W	Washington	May	31	1910	3263
Strawberry, Swains and Kanab Creeks	N. T. Porter	Salt Lake City	Irrigation	30	10000	16	43 S	6 W	Kane	July	12	1910	3393

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
South and Dugout Creeks	Frank A. Robison	Giles, Utah	Irrigation	4			So. & Dugout Cks.		Garfield	Aug.	15	1910	3455
Squaw Creek & Bull Rush	John Johnson	Tropic, Utah	Stockwatering	.5		2	39 S	4 W	Kane	Aug.	29	1910	3475
Spring	Andrew F. Gregerson	St. George, Utah	Irrigation	5			Spring		Washington	Oct.	7	1910	3528
Spring	James W. Imlay	Hurricane, Utah	Stockwatering	.2		29	40 S	10 W	Washington	Nov.	14	1910	3600
Spring	James W. Imlay	Hurricane, Utah	Stockwatering	.2		6	40 S	10 W	Washington	Nov.	14	1910	3601
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.007		12	40 S	10 W	Kane	Nov.	18	1910	3615
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.011		12	40 S	10 W	Kane	Nov.	13	1910	3616
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.022		13	40 S	10 W	Washington	Nov.	22	1910	3633
Spring	David C. Bullock	Cedar City, Utah	Stockwatering	.02		13	40 S	10 W	Washington	Nov.	22	1910	3634
Three Pine Creek and Heath Wash	Hyrum Leaney et al	Leeds, Utah	Irrigation	2		26 & 27	41 S	14 W	Washington	Jan.	23	1909	2255
Trackite or Slate Creek	Robison and Turner	Giles, Utah	Irrigation	10			Unsurveyed		Garfield	Mar.	13	1909	2321
Tom Pearce Wash	Thos. H. Gardner, et al	St. George, Utah	Irrigation	20		26	40 S	16 W	Washington	Apr.	19	1909	2366
Three, Pine, & Quail Spgs	John A. Parker	Joseph, Utah	Irrigation	6		17							
Three Pine & Quail Crks.	John A. Parker	Joseph, Utah	Irrigation	8		36 17	40 S	14 W	Washington	July	15	1909	2574
Upper Ditch from Virgin River & North Creek	Sylvester Earl	Virgin, Utah	Domestic	1.5		36	40 S	14 W	Washington	Nov.	22	1909	2827
Virgin River	J. M. Lauritzen	St. George, Utah	Irrigation	10		23	41 S	12 W		July	11	1910	3382
Virgin River	Virgin Valley Reclamation Co., Assignee, N. T. Porter	Salt Lake City	Irrigation	30	5000	21 21 28	42 S	14 W	Washington	June	4	1909	2479
Virgin River	J. Lauritzen	St. George, Utah	Irrigation	500	100000	14 15 22 23	41 S	12 W	Washington	Aug.	5	1909	2618
Virgin River	Virgin Valley Reclamation Co., Assignee, N. T. Porter	Salt Lake City	Irrigation	10	15000	25 30 31 36	42 S	9 W	Washington	Sept.	1	1909	2664
							41 S	12 W	Washington	Sept.	23	1909	2701

APPLICATIONS TO APPROPRIATE WATER FROM THE COLORADO RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Virgin River	Virgin Valley Reclamation Co., Assignee, N. T. Porter	Salt Lake City	Irrigation	60	20000	25 30 31 36	41 S	12 & 13 W	Washington	Nov.	26	1909	2838
Volcanic Wash	J. M. Lauritzen, Assignee, John T. Morse	St. George, Utah	Irrigation	1		15	42 S	16 W	Washington	Jan.	15	1910	2914
Volcanic Wash	Heber F. Empy, et al	St. George, Utah	Irrigation	1		15	42 S	16 W	Washington	Jan.	15	1910	2915
Virgin River	Virgin River Irr. Co., Assignee, J. M Lauritzen	St. George, Utah	Irrigation	10		15	42 S	9 W	Kane	July	9	1910	3377
Virgin River	Virgin River Irr. Co., Assignee, J. M. Lauritzen	St. George, Utah	Irrigation	10		15	42 S	9 W	Kane	July	9	1910	3379
Vance Springs	Virgin River Irri. Co., Assignee, J. M. Lauritzen	St. George, Utah	Irrigation	10		10	42 S	9 W	Kane	July	26	1910	3416
Wash. Saw Mill Canyon	Joseph W. Carpenter	Pine Valley, Utah	Irrigation	1		36	38 S	16 W	Washington	Aug.	3	1910	3436
Grass Valley & Pinto Creeks	New Castle Reclamation Co.	Salt Lake City	Irrigation	10	1500	29 32	38 S	14 W	Washington	Oct.	7	1909	2724
Willow Spring	Hyrum W. Stephens	Mt. Carmel, Utah	Stockwatering	.05			Willow Spring		Kane	Jan.	24	1910	2943
West Woolley Spring	D. D. Rust	Kanab, Utah	Stockwatering	.1		36	43 S	6 W	Kane	Feb.	8	1910	2979
Willow Spring	Israel H. Esplin	Orderville, Utah	Stockwatering	.05			40 S	8 W	Kane	July	29	1910	3421
Yellow Creek	Seth Johnson, Sr.	Cannonville, Utah	Irrigation	1.5			38 S	3 W	Garfield	Apr.	17	1909	2375
Zions Creek	J. M. Lauritzen	St. George, Utah	Irrigation	500			41 S	10 W	Washington	Sept.	8	1909	2673
	Elisha Lee	Virgin, Utah	Irrigation	2		3	30 S	11 W		June	9	1910	3288

Applications to Appropriate Water from the Sevier River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Atchison Creek	Joseph S.Grow	Salt Lake City	Mining	1			Atchison Creek		Beaver	Apr.	13	1909	2364
Antelope Springs	James M. Ide	Oasis, Utah	Irrigation	2			Antelope Springs		Millard	May	22	1909	2451
Atchison Creek	Utah Gold & Copper Mining Co.	Salt Lake City	Mining	.5			Atchison Creek		Beaver	Nov.	1	1909	2777
Antelope Springs	Andrew A. Cahoon	Salt Lake City	Power	.5			Atchison Creek		Beaver	Dec.	7	1909	2859
Bailey Station Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	25			Antelope Springs		Millard	Nov.	16	1910	3607
Beaver River	Beaver River Power Co.	Provo, Utah	Stockwatering	1		4	32 S	16 W	Iron	Dec.	1	1908	2175
Blue Spring Creek, Deer Bunker and Twin Lake Creeks	John L. Sevy et al	Panguitch	Power	40	7500	28	29 S	6 W	Beaver	Jan.	21	1909	2232
Blue Springs	John L. Sevy et al	Panguitch	Miscellaneous		60000	7	36 S	7 W	Garfield & Iron	Feb.	24	1909	2294
Blue Spring Creek, Deer Creek and Bunker Creek	John L. Sevy et al	Panguitch	Power	25		18	36 S	7 W	Garfield	Feb.	24	1909	2295
Blue Spring Creek, Deer Bunker and Twin Lakes Creeks	John L. Sevy et al	Panguitch	Power	40		7	36 S	7 W	Iron & Garfield	Feb.	24	1909	2296
Beaver River	A. L. Fotheringham	Beaver, Utah	Irrigation		50000	32	34 S	5 W	Garfield & Iron	Feb.	24	1909	2297
Beaver River	Ray S. Bowman	Salt Lake City	Irrigation	150	20000	17	27 S	10 W	Beaver	Mar.	6	1909	2312
Broad Hollow Springs	Andrew L. Lamoreaux	Panguitch, Utah	Power	10		1	29 S	5 W	Beaver	Apr.	1	1909	2347
Burdue Spring	Eureka Mining Co.	Eureka, Utah	Irrigation	2		4	37 S	5 W	Garfield	May	7	1909	2408
Badger Hole	E. W. Clay	Salt Lake City	Irrigation	.12		21	10 S	2 W	Utah	May	13	1909	2434
Beaver River	John F. Berkhimer	Milford, Utah	Stockwatering	.02			23 S	19 W	Beaver	May	29	1909	2467
Bunker, Twin Lake, Blue Spring & Deer Creeks	Blue Springs Fish and Reservoir Co.	Panguitch, Utah	Irrigation	9		5							
			Miscellaneous	40		8	29 S	10 W	Beaver	June	10	1909	2505
Baker Creek	F. D. Clark, et al	Provo, Utah	Irrigation	8		7	36 S	7 W	Garfield and Iron	July	13	1909	2572
Broad Canyon Spring	James Overson, et al	Leamington, Utah	Stockwatering	.1		36	20 S	20 W	Millard	July	27	1909	2601
Berrieson Ditch, Dorford & Monroe Creeks	J. E. Markeby, et al	Monroe, Utah	Irrigation		500	3	15 S	4 W	Juab	Aug.	4	1909	2616
Black Knoll Springs	John H. Ford	Sigurd, Utah	Miscellaneous	20		22	25 S	3 W	Sevier	Dec.	4	1909	2856
Braffits Creek	Ann Pratt	Summit, Utah	Irrigation	4		12	23 S	2 W	Sevier	Dec.	15	1909	2881
						3 or 10	35 S	10 W	Iron	Feb.	4	1910	2971

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Big Maple Spring	D. J. Williams	Greenville, Utah	Stockwatering	.05		23	30 S	10 W	Iron	Mar.	14	1910	3068
Branch Cr'k, Branch Cr'k, Springs & Shirts Creek	D. R. Beebe, et al	Provo, Utah	Irrigation	10		1 30 32	32 33 & 34 S	2 & 3 W	Garfield	Apr.	14	1910	3131
Birch and Horse Creeks	E. A. Beebe, et al	Junction, Utah	Irrigation	7		35	33 S	2 W	Garfield	Apr.	16	1910	3135
Beaver River	Barclay John	Clear Lake, Utah	Irrigation	50		21 or 28	20 S	8 W	Beaver and Millard	Apr.	18	1910	3137
Basin Spring	F. T. Slaughter, et al	Salt Lake City	Stockwatering	.1		Basin Spring			Millard	May	23	1910	3239
Bannion Spring	Cedar Mercantile and Live Stock Co.	Cedar City, Utah	Stockwatering	.04		4	33 S	18 W	Iron	May	24	1910	3245
Burch Spring	A. D. Findlay	Kanab, Utah	Stockwatering	.2		25	38 S	6 W	Kane	June	1	1910	3270
Braffits Creek	John Lee Jones	Enoch, Utah	Irrigation	3		3	35 S	10 W	Iron	June	16	1910	3308
Braffits Creek	Ida W. Jones	Enoch, Utah	Irrigation	4		3	35 S	10 W	Iron	June	16	1910	3309
Big Pinto Spring	James Bullock	Cedar City, Utah	Stockwatering	.05		4	32 S	16 W	Iron	June	29	1910	3350
Bullion Creek	H. J. Thoma	Pittsburg, Pa.	Mining	10		32	27 S	4 W	Piute	July	15	1910	3401
Branch Cr'k., Branch Cr'k Spring & Shirts Creek	D. R. Beebe, et al	Provo, Utah	Irrigation	10		1 30 32	30 33 & 34 S	2 & 3 W	Garfield	July	16	1910	3404
Bob Patterson Stream	H. J. Cox, et al	Beaver, Utah	Irrigation	1	44880	25	24 S	6 W		Aug.	24	1910	3470
Birch Spring	Sophia G. Pare	Pinto, Utah	Stockwatering	.1		21	37 S	14 W	Iron	Oct.	31	1910	3562
Big Springs & Snake Cr'k.	Andrew A. Cahoon	Salt Lake City	Irrigation	30		31	21 S	19 W	Millard	Nov.	16	1910	3606
Beers Tunnel	Walter James, et al	Black Rock, Utah	Stockwatering	.02		Beers Tunnel			Beaver	Nov.	19	1910	2626
Bob Patterson Creek	H. J. Cox, et al	Beaver, Utah	Irrigation		125	23	29 S	7 W	Beaver	Nov.	23	1910	3637
Cottonwood	Jos. E. Jones, et al	Enterprise, Utah	Irrigation	8		13	37 S	17 W	Washington	Mar.	10	1909	2316
Cove and Pine Creeks	Cove & Pine Creek Res. Co.	Elsinore, Utah	Irrigation	20	640	28	25 S	8 W	Millard	Mar.	11	1909	2319
Coal Creek	Kumen L. Jones	Cedar City, Utah	Irrigation	2.66		3	36 S	11 W	Iron	Mar.	12	1909	2320
Cove Creek	J. M. Lauritzen	St. George, Utah	Irrigation	1		30	25 S	6 W	Millard	Apr.	16	1909	2372
Chris' Creek	Andres Hanson	Ephraim, Utah	Irrigation	5		33	15 S	1 W	Juab	May	1	1909	2397
Coal Creek	Northfield Res. & Irr. Co.	Cedar City, Utah	Irrigation	10		11	36 S	11 W	Iron	May	6	1909	2405
Coal Creek	John Chatterly, et al	Cedar City, Utah	Irrigation	5		11	36 S	11 W	Iron	May	10	1909	2419
Coal Creek	Old Fort & Old West Field Res. & Irri. Co.	Cedar City	Irrigation	5		33	35 S	11 W	Iron	May	10	1909	2419a

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

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Coal Creek	Coal Creek M. & N. W. F. Res. & Irr. Co.	Cedar City, Utah	Irrigation	10		5	35 S	11 W	Iron	May	19	1909	2445
Coyote Creek	Bench Irrigation Co.	Coyote, Utah	Irrigation	13		19	31 S	1 W	Garfield	May	6	1909	2452
Cottonwood Seep	E. W. Clay	Salt Lake City	Stockwatering	.01			23 S	19 W	Beaver	May	29	1909	2468
Cobb Spring	E. W. Clay	Salt Lake City	Stockwatering	.01			23 S	19 W	Beaver	May	29	1909	2469
Chalk Creek	D. C. Mabedy et al	Fillmore, Utah	Power	10			Chalk	Chalk	Millard	June	8	1909	2496
Chalk Creek	James A. Melville	Fillmore, Utah	Irrigation	3		26	20 S	5 W	Millard	June	10	1909	2498
City Creek	Edwin E. Sprague et al	Junction, Utah	Irrigation	6.66		32	29 S	3 W	Piute	June	10	1909	2499
Chalk Creek	John C. Kelly	Fillmore, Utah	Irrigation	2		13	21 S	5 W	Millard	June	14	1909	2506
Chalk Creek	D. C. Mabedy, et al	Fillmore, Utah	Power	10			Chalk	Creek	Millard	June	15	1909	2508
Cottonwood Creek	Homer McCarty	Richfield, Utah	Irrigation	3		4	29 S	2½ W	Piute	June	16	1909	2512
Cow Canyon Springs	Juab Development Co.	Nephi, Utah	Irrigation	1		19	16 S	2 W	Juab	Aug.	3	1909	2613
Corn Creek	Hyrum Prows	Kanosh, Utah	Irrigation	4	3		Corn	Creek	Millard	Aug.	19	1909	2645
Cedar Creek	Cedar Creek High Water Irrigation Co.	Mt. Pleasant, Utah	Irrigation	20		30	15 S	5 E	Sanpete	Aug.	23	1909	2655
Corner Spring	Edward Nazer	Monroe	Irrigation	.2		3	26 S	3 W	Sevier	Nov.	11	1909	2804
Coal Creek	Wm. R. Palmer	Cedar City, Utah	Irrigation	50		10	36 S	11 W	Iron	Nov.	17	1909	2817
Cottonwood Creek	C. J. Petgen	Pittsburg, Pa.	Power	10		32	27 S	4 W	Piute	Nov.	19	1909	2825
Corn Creek	James A. Faust, et al	Salt Lake City	Irrigation	10			Corn	Creek	Millard	Nov.	30	1909	2845
Coal Creek	Kumen L. Jones	Cedar City, Utah	Irrigation	25		33	35 S	11 W	Iron	Dec.	2	1909	2851
Coop Springs Creek	James J. Burke	Salt Lake City	Irrigation	10		31	11 S	2 W	Juab	Dec.	2	1909	2852
Clear Creek Canyon	Joseph & Cove Highland Canal Co.	Joseph, Utah	Irrigation	10		31	25 S	4 W	Sevier	Feb.	23	1910	3016
City Creek	Mary E. Empy, et al	Junction, Utah	Irrigation	1.33		32	29 S	3 W	Piute	Feb.	26	1910	3028
City Creek	William H. Lake	Junction, Utah	Irrigation	.8		32	29 S	3 W	Piute	Mar.	2	1910	3038
City Creek	Thomas E. King, et al	Junction, Utah	Irrigation	.93		22	29 S	3 W	Piute	Mar.	5	1910	3042
Corn Creek	James Cortsen	Kanosh, Utah	Power	6		34	23 S	5 W	Millard	Mar.	8	1910	3053
Cedar Springs & Hop Canyon	Henry M. Miller	Nephi, Utah	Stockwatering		90		Cedar Springs &	Hop Canyon	Juab	Jan.	7	1910	2906
Corner Springs	William Nordgren	Monroe, Utah	Irrigation	1		4	26 S	3 W	Sevier	Mar.	14	1910	3066
Cottonwood Creek	Homer McCarty	Richfield, Utah	Irrigation	10		9	29 S	2½ W	Piute	Mar.	15	1910	3078
Cottonwood Creek	G. T. Holladay	Salt Lake City	Irrigation	10		7	33 S	2 W	Piute	Apr.	11	1910	3122
Cedar Creek & Twin Cr'k	Cedar Creek & Twin Cr'k Res. Co.	Mt. Pleasant, Utah	Irrigation		1000	29 & 30	15 S	5 E	Sanpete	Apr.	14	1910	3130
Center Creek	F. C. N. Graydon	St. George, Utah	Irrigation		5000	13	34 S	9 W	Iron	Apr.	22	1910	3158

LICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Cliff Spring	Geo. C. Morrison	Richfield. Utah	Irrigation	.5		28	24 S	2 W	Sevier	Apr.	26	1910	3173
Coal Creek	Thos. D. Roche. et al	Cedar City. Utah	Irrigation	16		34	35 S	11 W	Iron	May	10	1910	3205
Coal Creek	D. S. Pendeton. et al	Cedar City. Utah	Irrigation	41.83		34	35 S	11 W	Iron	May	9	1910	3231
Coal Creek	Wm. H. Grimshaw, et al	Cedar City. Utah	Irrigation	20		34	35 S	11 W	Iron	May	27	1910	3255
Clay Creek	Hans Hermanson	Elsinore. Utah	Irrigation	5		32	34 S	2 W	Garfield	May	28	1910	3260
Coal Creek	John R. Wood	Cedar City. Utah	Irrigation	8		34	35 S	11 W	Iron	May	31	1910	3266
Cottonwood Creek	Sarah C. Hales	Junction. Utah	Irrigation	6		20	33 S	2 W	Garfield	June	10	1910	3292
Cabin Spring	James Bullock	Cedar City. Utah	Stockwatering	.03		31	33 S	18 W	Iron	Aug.	30	1910	3480
Cottonwood Canyon	H. D. Bayles	Parowan. Utah	Irrigation	.5	1.6	1	33 S	9 W	Iron	Sept.	8	1910	3493
Cottonwood Creek	A. J. Sargent	Junction. Utah	Irrigation	6		19	28 S	3 W	Piute	Oct.	31	1910	3564
Cottonwood Spring	Walter James et al	Blackrock. Utah	Stockwatering	.05		Cottonwood Spg.			Beaver	Nov.	19	1910	3622
Carney Spring	Walter James et al	Blackrock. Utah	Stockwatering	.03		Carney Spring			Beaver	Nov.	19	1910	3623
Cowboy Spring	Walter James et al	Blackrock. Utah	Stockwatering	.02		Cowboy Spring			Beaver	Nov.	19	1910	3627
Cob Spring	Walter James et al	Blackrock. Utah	Stockwatering	.03		Cob Spring			Beaver	Nov.	19	1910	3629
Dry Creek	Henry C. Lund. Assignee L. P. Hill	Salt Lake City	Irrigation	10	100	22	38 S	2½ W	Piute	Dec.	26	1908	2198
Dry Canyon Creek	Homer McCarty	Richfield. Utah	Irrigation	10		22	28 S	2½ W	Piute	May	24	1909	2453
Dry Canyon Creek	Andrew Brown	Monroe. Utah	Irrigation	2.5		17	26 S	3 W	Sevier	June	1	1909	2473
Dog Valley Canyon	Anthony Paxton. Jr.	Kanosh. Utah	Irrigation	3		32	24 S	6 W	Millard	Oct.	4	1909	2719
Duggins. Whiskey and Giles Creeks	Fredrick L. Sumpter et al	Salt Lake City	Irrigation	10		20	18 S	4 W	Millard	Oct.	26	1909	2767
Dual Spring Basin	Frank J. Christensen	Kanosh. Utah	Irrigation	3		32	23 S	5 W	Millard	Nov.	24	1909	2833
Dry Canyon Creek	Henry M. Miller	Nephi. Utah	Stockwatering		90	Dry Canyon			Juab	Jan.	7	1910	2907
Daniel's Canyon Creek	M. O. Packard. et al	Springville. Utah	Power	15		30	25 S	1 E	Sevier	Mar.	5	1910	3045
Deseret Springs	Robert L. Nolf	Modena. Utah	Irrigation	5	100	25	34 S	19 W	Iron	Mar.	10	1910	3055
Dry Hollow Creek Lake Fork Creek. Le Barron Creek	Beaver River Power Co.	Provo. Utah	Power	10	497	3, 17 & 19	29 & 30 S	5 W	Beaver	Mar.	15	1910	3070
Dry Creek	Joseph A. Smith	Monroe Utah	Irrigation	10		17	26 S	3 W		Apr.	11	1910	3123
Duck Lake. Duck. Swains. Strawberry & Kanab Creek	N. T. Porter	Salt Lake City	Irrigation	30	10000	16	42 S	6 W	Garfield and Kane	Apr.	11	1910	3124
Dry Wash	George R. Johnson	Coyote. Utah	Irrigation	10	110	25	30 S	2 W	Piute	Apr.	12	1910	3125
Deer Creek	A. K. Farnsworth	Provo. Utah	Miscellaneous	10		7	36 S	7 W	Iron	June	3	1910	3276
Desert Spring Channel	Robert L. Nolf	Modena. Utah	Mining	.5		23	34 S	19 W	Iron	June	6	1910	3284

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Deseret Springs Water Channel	Robert L. Nolf	Modena, Utah	Stockwatering	3		23	34 S	19 W	Iron	Oct.	28	1910	8558
Dry Creek	Frederic R. Lyman	Oak City, Utah	Domestic	1		9	17 S	4 W	Millard	Nov.	1	1910	8566
Deer Creek	J. R. Jolley et al	Coyote, Utah	Irrigation	7.5		22	32 S	2 W	Garfield	Nov.	17	1910	3610
Eight Mile Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	.5		31	33 S	18 W	Iron	Feb.	5	1909	2261
Eight Mile Creek	S. A. Greenwood	Salt Lake City	Irrigation	20		27 or 34	18 S	4 W	Millard	May	8	1909	2415
Eight Mile Creek	James Lewis	Holden, Utah	Irrigation	8		27 or 34	18 S	4 W	Millard	Jan.	14	1910	2911
Eight Mile Creek	Western Resources Promotion Co.	Salt Lake City	Irrigation	3		27 or 34	18 S	4 W	Millard	Feb.	28	1910	3032
Eight Mile Creek	Western Resources Promotion Co.	Salt Lake City	Irrigation	10		27 or 34	18 S	4 W	Millard	Feb.	28	1910	3033
East Cove Spring	James Bullock	Cedar City, Utah	Stockwatering	.006		4	32 S	16 W	Beaver	June	29	1910	3349
Fremont River	Don C. Robbins, Trustee	Salt Lake City	Irrigation	1000	150000	24 or 25	28 S	9 E	Wayne	Mar.	19	1909	2325
Fiddlers Canyon	Daniel Stephens	Cedar City, Utah	Irrigation	4		36	35 S	11 W	Iron	May	3	1909	2399
Flat Canyon	N. J. Bates, et al	Richfield, Utah	Irrigation	10		17	24 S	3 W	Sevier	Jan.	21	1910	2928
Fish Creek	Hyrum Spencer, et al	Indianola, Utah	Irrigation	5		1	12 S	4 E	Sanpete	Aug.	29	1910	3477
First Spring, Dry Creek, Oak Creek	Oak Creek Irrigation Co.	Oak City, Utah	Irrigation	.5		9	17 S	4 W	Millard	Oct.	5	1910	3523
Fiddlers Canyon	Daniel Stephens	Cedar City, Utah	Irrigation	2		36	35 S	11 W	Iron	Nov.	19	1910	3617
Forked Springs	Walter James et al	Blackrock, Utah	Stockwatering	.05		36	23 S	19 W	Beaver	Nov.	19	1910	3628
Grass Valley & Pinto Creeks	Grass Valley Irrigation Co.	Salt Lake City	Irrigation	25		16	36 S	15 W	Iron	Apr.	27	1909	2386
Granite Spring	J. F. Tolton	Beaver City, Utah	Stockwatering	.66		21	28 S	10 W	Beaver	Oct.	19	1909	2751
Glenwood Springs	Thomas Brown	Richfield, Utah	Irrigation	10		35	23 S	2 W	Sevier	June	4	1910	3278
Glenwood Springs	Thomas Brown	Richfield, Utah	Power	10		35	23 S	2 W	Sevier	June	4	1910	3279
Calloway Spring	N. Calloway	Richfield, Utah	Domestic	1		26	23 S	3 W	Sevier	July	5	1910	3367
Granite Spring	J. F. Tolton	Beaver Utah	Irrigation	.66		21	28 S	10 W	Beaver	Sep.	16	1910	3503

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Gap Canyon Drainage	Jasper Stubbs et al	Parowan, Utah	Stockwatering	.125		28	33 S	10 W	Iron	Nov.	5	1910	3579
Hell's Kitchen Creek	James Frost	Ephraim, Utah	Irrigation	3		24	17 S	1 W	San Pete	May	17	1909	2438
Hop Creek, Coop Creek and Spring	Geo. McCune et al	Eureka, Utah	Irrigation	3		12	12 S	3 W	Juab	Oct.	13	1909	2744
Hop Spring Creek and Hop Spring	W. E. Ivie	Robinson, Utah	Irrigation	5			11 S	3 W	Juab	Oct.	20	1909	2759
Hunt Ck. & Tom Best Spr	Hosea Merrell, et al	Topic, Utah	Irrigation	5		36	34 S	3 W	Garfield	Apr.	25	1910	3147
Hunt Creek	Ezra T. Rappley, Jr.	Tropic, Utah	Irrigation	3.5		35	34 S	3 W	Garfield	Apr.	25	1910	3165
Hamlin Spring	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.08		19	32 S	17 W	Iron	May	24	1910	3213
Herrins Hole	John H. Payne	Glenwood, Utah	Irrigation	5		23	23 S	2 W	Sevier	July	5	1910	3368
Horse Creek	J. W. Young, et al	Coyote, Utah	Irrigation	8		2	34 S	2 W	Garfield	Aug.	12	1910	3453
Hawkins Wash	Clement Tebbs	Panguitch, Utah	Stockwatering	.1		11	32 S	5 W	Garfield	Aug.	29	1910	3474
Iron Springs	T. D. Jackson et al	Lund, Utah	Irrigation	20		18	35 S	12 W	Iron	Nov.	13	1908	2180
Iron Springs Creek	Henrietta L. Hintze	Cedar City, Utah	Irrigation		80	6	35 S	12 W	Iron	Dec.	8	1908	2183
Jackson Spring	Peter B. Fife	Cedar City Utah	Stockwatering	1		4	32 S	16 W	Iron	Dec.	1	1908	2176
Jamson Spring	Gray Rock Mining Co	Eureka, Utah	Irrigation	.1		22	10 S	2 W	Utah	May	12	1909	2430
Kane Springs & Cottonwood Creek	Daniel D. Dunton	Paragoonah, Utah	Irrigation	.25			Kane Springs & Cottonwood Creek		Iron	Mar.	29	1909	2339
Kane Springs & Cottonwood Canyon Spring	Daniel D. Dunton	Paragoonah, Utah	Irrigation	.25			Kane Spg. & Cottonwood Can. Spg.		Iron	Sept.	20	1909	2695
Lucky Boy Spring	Beaver Carbonate Mining Co.	Salt Lake City	Mining	.25		13	27 S	13 W	Beaver	Dec.	9	1908	2185
Last Chance Creek	Joseph Olsen	Emery, Utah	Irrigation	10		13	25 S	5 E	Sevier	Jan.	30	1909	2249
Last Chance Creek	Hilda M. Olsen	Emery, Utah	Irrigation	10	90		Last Chance Creek		Sevier	Mar.	25	1909	2333
Little Pinto Creek	Sebastian Auering	New Harmony, Utah	Irrigation	2		22	37 S	14 W	Iron	May	14	1909	2486
Lime Kiln Wash	William T. Owens	Panguitch, Utah	Irrigation	3		17	34 S	4½ W	Garfield	July	14	1909	2156
Little Cricket Spring	Walter T. Coffman	Salt Lake City	Mining	.02			20 S	9 W	Millard	July	17	1909	2578
Lime Kiln Wash	John E. Myers, et al	Panguitch, Utah	Irrigation	2		23	34 S	5 W	Garfield	Jan.	29	1910	2963
Little Salt Lake	F. C. N. Graydon	St. George Utah	Irrigation		5000	36	33 S	10 W	Iron	Apr.	22	1910	3156
Little Creek	F. C. N. Graydon	St. George, Utah	Irrigation		1000	27	33 S	8 W	Iron	Apr.	22	1910	3159
Lower Parker Canyon Spr.	Terry Brothers	Enterprise, Utah	Stockwatering	.2		8	37 S	18 W	Washington	May	11	1910	3208
Little Mud Springs	John Chambers	Silver City, Utah	Domestic	.05		13	11 S	4 W	Juab	May	13	1910	3290
Lee Ditch & Lyons Ditch	James Bertleson, et al	Marysvale, Utah	Irrigation	1		19	27 S	3 W	Piute	May	20	1910	3237

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Lower Spring	F. T. Slaughter	Salt Lake City	Stockwatering	.05			Lower Spring		Millard	May	23	1910	3240
Little Pinto Spring	James Bullock	Cedar City, Utah	Stockwatering	.1		4	32 S	16 W	Beaver	June	29	1910	3351
Lower Canyon Spring	James Bullock	Cedar City, Utah	Stockwatering	.03		31	33 S	18 W	Iron	Aug.	30	1910	3479
Little Sulphur Springs	Murray Sheep Co.	Burbank, Utah	Stockwatering	.06			Little Sulphur Sps		Beaver	Oct.	12	1910	3535
Little Meadow Stream	David Dunsire	Coyote, Utah	Irrigation	1		24	30 S	2 W	Piute	Nov.	17	1910	3611
Lake Creek	E. A. Sherman	Ogden, Utah	Irrigation	1.5		10	29 S	5 W	Beaver	Nov.	21	1910	3619
Manti City Creek	N. P. Madsen	Manti, Utah	Irrigation	4		18	18 S	3 E	Sanpete	Nov.	5	1909	2311
Maine Canyon	Gottlieb Schmutz	New Harmony, Utah	Irrigation	10			Maine Canyon		Washington	Apr.	5	1909	2352
Monroe Creek	Richfield City	Richfield, Utah	Power	10		25	25 S	3 W	Sevier	May	27	1909	2461
Manning Creek	Homer McCarty	Richfield, Utah	Irrigation	20			28 S	3 W	Piute	June	16	1909	2511
Meadow Springs	Peter F. Bullock	Cedar City, Utah	Stockwatering	.5		33	31 S	16 W	Iron	Aug.	20	1909	2650
Meadow Creek	Parley Magleby	Richfield, Utah	Irrigation	10		22	25 S	3 W	Sevier	Aug.	21	1909	2653
Mountain Springs	Richard A. Thorley	Cedar City, Utah	Stockwatering	.33		12	32 S	16 W	Iron	Oct.	7	1909	2726
Monroe Creek	J. L. & A. L. Quist	Richfield, Utah	Irrigation	4		22	25 S	3 W	Sevier	Oct.	13	1909	2742
Maple Spring	George J. Wolfe	Fillmore Utah	Irrigation	4		10	22 S	4 W	Millard	Oct.	13	1909	2743
Manti City Creek	Manti Light & Power Co.	Manti, Utah	Power	10		11	18 S	3 E	Sanpete	Nov.	3	1909	2783
Manning Creek	Mary W. McCarty	Richfield, Utah	Irrigation	10		12	28 S	3 W	Piute	Jan.	31	1910	2955
Manning Creek	Edgar C. McCarty	Marysvale, Utah	Irrigation	3		12	28 S	3 W	Piute	Feb.	1	1910	2961
Monroe Creek	N. J. Bates	Richfield, Utah	Irrigation	10		22	25 S	3 W	Sevier	Feb.	4	1910	2972
Manning Creek	Henry C. Lund	Salt Lake City	Irrigation	40		1	28 S	3 W	Piute	Feb.	14	1910	2998
Maple Springs	M. A. Orton, et al	Parowan, Utah	Stockwatering	.1		34	34 S	9 W	Iron	Mar.	10	1910	3058
Monroe Creek	Monroe Town	Monroe, Utah	Power	8		23	25 S	3 W	Sevier	Mar.	17	1910	3074
Maple Creek	Geo. C. Morrison	Richfield, Utah	Irrigation	1		27	24 S	2 W	Sevier	Apr.	26	1910	3172
Maple Spring	Stubb Brothers	Parowan, Utah	Stockwatering	.33		3 or 34	34 or 35 S		Iron	May	16	1910	3225
Meadow Spring	John Ryan, et al	Salt Lake City	Irrigation	3		31	28 S	15 W	Beaver	June	17	1910	3314
Mud Spr. Canyon Water	E. A. Burton, et al	Parowan, Utah	Stockwatering	.16			Mud Sp. Can. Wat'r		Iron	Aug.	29	1910	3473
Monroe Creek	Jacob Magleby	Monroe, Utah	Irrigation	6	80	15	25 S	3 W	Sevier	Sept.	1	1910	3486
Mud Spring Wash	Joseph B. Dalton et al	Parowan, Utah	Stockwatering				Mud Spring Wash		Iron	Sep.	24	1910	3514
Mt. Home Spr. or Seep	Walter James et al	Blackrock, Utah	Stockwatering	.03			Mt. Home Spring		Beaver	Nov.	19	1910	3624
Natural Lake or Reservoir	A. O. Adams, et al	Salt Lake City	Irrigation		2000	8 or 17	33 S	14 W	Iron	Feb.	24	1909	2293

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

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North Cedar Ridge Creek	Elesa Stillman	Richfield, Utah	Irrigation	5		22	22 S	2 W	Sevier	June	10	1909	2502
North Cedar Ridge Creek	Elesa Stillman	Richfield, Utah	Irrigation	5		22	22 S	2 W	Sevier	Sept.	21	1909	2699
Nelson Creek	Mary W. McCarty	Richfield, Utah	Irrigation	3	200	4	28 S	2½ W	Piute	Mar	15	1910	3077
Norton Creek	James S. Emett	Annabella, Utah	Irrigation	.5		5	25 S	2 W	Sevier	July	27	1910	3171
Nephi Spring	Terry Brothers	Enterprise, Utah	Stockwatering	.3			36 S	19 W	Iron	May	11	1910	3210
North Spring	F. T. Slaughter	Salt Lake City	Stockwatering	.1			North Spring		Juab	May	23	1910	3238
North Cove Spring	James Bullock	Cedar City, Utah	Stockwatering	.025		4	32 S	16 W	Beaver	June	29	1910	3352
Otter Creek	Charles V. Morehouse	Junction, Utah	Irrigation	1.25		12	29 S	2 W	Piute	Apr.	29	1910	3176
Oak Creek	Frederic R. Lyman	Oak City, Utah	Domestic	1		9	17 S	4 W	Millard	Nov.	1	1910	3565
Oak Springs	William F. Carson	Junction, Utah	Irrigation	2		7	29 S	3 W	Piute	Nov.	25	1910	3640
Pine and North Creeks	J. M. Lauritzen	St. George, Utah	Irrigation		7500	11	26 S	7 W	Beaver	Mar.	9	1909	2314
Pass Creek	Myron S. Jones	Enoch, Utah	Irrigation	2.5		31	34 S	10 W	Iron	May	3	1909	2401
Pine Creek & North Creek	Escalante L. & W. Co	Escalante, Utah	Irrigation	70	6400	8 & 11		3 & 2 E	Garfield	May	8	1909	2414
Pine Creek	Lewis S. Hills	Salt Lake City	Irrigation		1000		35 S	28 S	Beaver	June	25	1909	2541
Potato Patch, Mud & Cottonwood Springs & Willow Creek Spring	G. W. Nebeker	Richfield, Utah	Irrigation	.5		21	22 S	1 W	Sevier	Aug.	18	1909	2644
Pine Grove Creek	John & Caroline Ryan	Salt Lake City	Irrigation	4		28	28 S	16 W	Beaver	Oct.	8	1909	2733
Pine Creek	Daniel C. Mahedy	Salt Lake City	Irrigation	10		15	22 S	4 W	Millard	Oct.	9	1909	2736
Pine (Bullion) Creek	Tom Fergusson	Salt Lake City	Power	15		34	27 S	4 W	Piute	Dec.	7	1909	2860
Pleasant Creek	John Hasler	Mt. Pleasant, Utah	Irrigation	.5		6	15 S	5 E	Sanpete	Dec.	9	1909	2867
Pine Creek	Almon D. Robison	Fillmore	Irrigation	2		4	22 S	4 W	Millard	Dec.	14	1909	2874
Pleasant Creek	Mt. Pleasant City	Mt. Pleasant, Utah	Power	10		4	15 S	5 E	Sanpete	Dec.	30	1909	2900
Pine Creek	Cascade Gold M. & M. Co.	Marysvale, Utah	Power	10		32	27 S	4 W	Piute	Feb.	21	1910	3012
Pioneer Creek	I. E. Pratt	Salt Lake City	Irrigation		125	25	20 S	4 W	Millard	May	18	1910	3132
Pine Springs	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.02		4	32 S	16 W	Iron	May	24	1910	3241
Pleasant Creek	W. D. Candland	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	June	20	1910	3318
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	June	22	1910	3323
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10			Pleasant Creek		Sanpete	June	22	1910	3324
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Power	20		5	15 S	5 E	Sanpete	June	23	1910	3325
Preuss Valley or Wah Wah Valley Waters	H. F. Sutton, et al	Salt Lake City	Irrigation		1500	8	27 S	13 W	Beaver	July	12	1910	3391

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Pine Creek	Jacob W. Young	Marysvale, Utah	Power	10		33	27 S	4 W	Piute	Sep.	12	1910	3496
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Power	20		5	15 S	5 E	Sanpete	Nov.	1	1910	3567
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	Nov.	10	1910	3590
Pleasant Creek	John H. Seely	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	Nov.	10	1910	3591
Pleasant Creek	Andrew C. Madsen	Mt. Pleasant, Utah	Irrigation	10		6	15 S	5 E	Sanpete	Nov.	28	1910	3642
Pine Creek	Jacob W. Young	Marysvale, Utah	Mining	1		33	27 S	4 W	Piute	Nov.	30	1910	3646
Rock and Prospect Creeks	Riley Young	Mahonri, Utah	Irrigation	1 5		32	33 S	2 W	Garfield	June	1	1909	2172
Red Butte Springs	James S. Emett	Anabella, Utah	Domestic	1		4	25 S	2 W	Sevier	Mar.	5	1910	3044
Red Canyon Spring	Clarence Richards	Parowan, Utah	Stockwatering	.0868		33	34 S	9 W	Iron	Mar.	26	1910	3091
Trough Spring	George E. LeFevre	Minersville, Utah	Stockwatering	.2		13	28 S	10 W	Beaver	Apr.	2	1910	3101
Rock Corral Spring	Ole Olsen	Castle Dale, Utah	Irrigation	4		16	19 S	8 E	Emery	Apr.	21	1910	3148
Rock Canyon Wash	F. C. N. Graydon	St. George, Utah	Irrigation		3000	4	34 S	8 W	Iron	Apr.	22	1910	3155
Red Creek	F. C. N. Graydon	St. George, Utah	Irrigation		5000	30	33 S	11 W	Iron	Apr.	22	1910	3157
Rush Lake Flood Water	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.06		4	32 S	16 W	Iron	May	24	1910	3246
Root Spring	Ira W. Hatch	Panguitch, Utah	Irrigation	1		16	36 S	16 S	Garfield	May	27	1910	3251
Rock Canyon Spring	Red Creek Res. & Canal Co.	Paragoonah, Utah	Irrigation		900	7	34 S	7 W	Iron	July	8	1910	3370
Red Creek	John Z. Alger, Jr.	Enterprise, Utah	Irrigation	4	30	15	36 S	17 W	Iron	July	15	1910	3402
Rock Wash	Fred W. Snow	Stateline, Utah	Mining	.5			Rice Canyon		Iron	Nov.	29	1910	3644
Rice Canyon Creek	Orson H. Pierce	Levan, Utah	Irrigation	.1		23	16 S	1 W	Juab	Dec.	15	1908	2189
Spring	Wm. D. Livingston	Salt Lake City	Irrigation		8500	32	18 S	2 E	Sanpete	Dec.	17	1908	2191
San Pitch Fork	John J. G. Webster	Cedar City, Utah	Stockwatering	.2			32 S	17 W	Iron	Dec.	21	1908	2195
Spring	Salina Roller Mills Co.	Salina, Utah	Power	25		1	22 S	1 E	Sevier	Jan.	8	1909	2214
Salina Creek	Jumbo Plaster & Cement Co.	Sigurd, Utah	Power	150		19	22 S	1 W	Sevier	Feb.	15	1909	2274
Sevier River	New Castle Reclamation Co.	Salt Lake City	Irrigation		85000	8	37 S	17 W	Iron & Washington	Feb.	16	1909	2276
Shoal Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	100		9	37 S	17 W	Iron & Washington	Feb.	16	1909	2277
Shoal Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	40		16	37 S	17 W	Washington	Feb.	25	1909	2300
Shoal Creek & Branches	New Castle Reclamation Co.	Salt Lake City	Irrigation		5000	16	37 S	17 W	Washington	Feb.	25	1909	3201

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						Spring							
Spring	Gold Reef Mining Co.	Elsinore, Utah	Domestic	.125					Beaver	Mar.	1	1909	2304
Santa Clara Creek	Samuel Knight	Santa Clara, Utah	Irrigation	6		8	42 S	16 W	Washington	Mar.	26	1909	2336
Spring	New Castle Reclamation Co.	Salt Lake City	Domestic	1		36	36 S	16 W	Iron	Apr.	2	1909	2349
Surplus Waters	Thomas A. Thorley	Cedar City, Utah	Irrigation	2	100	1	34 & 35 S	18 W	Iron	Mar.	26	1909	2360
Six Mile Creek	Alexander Jennings	Gunnison, Utah	Power	20		36	18 S	2 E	Sanpete	Apr.	23	1909	2381
Six Mile Creek	Cove Creek Coal Co.	Sterling, Utah	Power	20		35	18 S	2 E	Sanpete	Apr.	23	1909	2382
Salina & Gooseberry Cr'ks	Alexander Jennings	Gunnison, Utah	Power	30		1	22 S	1 E	Sevier	Apr.	27	1909	2385
Spring	Beaver River Power Co.	Provo, Utah	Miscellaneous	2		24	29 S	6 W	Beaver	Apr.	29	1909	2392
Spring	Wilford Day	Parowan, Utah	Stockwatering	.016		18	32 S	15 W		May	10	1909	2416
Spring	James M. Ide & Sons	Oasis, Utah	Irrigation	1		14	19 S	3 W	Millard	May	22	1909	2450
Spring	Peter B. Fife	Cedar City, Utah	Stockwatering	.1		31	33 S	18 W	Iron	May	28	1909	2463
Spring Iron County	Moroni Corry	Cedar City, Utah	Stockwatering	2		1, 6, 7, 12 & 18	37 S	10 & 11 W	Iron	June	1	1909	2471
South Cedar Ridge Creek	Emma Hayes	Richfield, Utah	Irrigation	3		28	22 S	2 W	Sevier	June	10	1909	2501
Sand Wash	George N. Church	Panguitch, Utah	Irrigation	3		6	34 S	4 W	Garfield	June	16	1909	2537
Sanpitch River	Lewis Larson	Manti, Utah	Irrigation	2		18	19 S	2 E	Sanpete	June	24	1909	2538
Summit Creek	Herbert White, et al	Summit, Utah	Irrigation	14		25	34 S	10 W	Iron	July	6	1909	2553
Summit Creek	Herbert White, et al	Summit, Utah	Irrigation	3		25	34 S	10 W	Iron	July	6	1909	2553a
Summit Creek	Herbert White, et al	Summit, Utah	Irrigation	8			34 or 35 S	10 W	Iron	July	6	1909	2553b
Sevier River	J. A. Bell	Marysvale, Utah	Irrigation	10		16	26 S	3 W	Sevier	July	12	1909	2567
Springs Sevier County	Monroe Light, P. & M. Co	Monroe, Utah	Power	10		23	25 S	3 W	Sevier	July	21	1909	2589
Spring	New Castle Reclamation Co.	Salt Lake City	Domestic	.5		36	36 S	16 W	Iron	July	23	1909	2591
Spring	Central Waterworks Co.	Monroe, Utah	Domestic	.5		25	24 S	3 W	Sevier	July	26	1909	2595
Springs	Richard A. Thorley	Cedar City, Utah	Irrigation	1.33		12	32 S	16 W	Iron	July	26	1909	2600
Seeps in Alvey Wash	H. N. Cowles, et al	Escalante, Utah	Irrigation	1.5		25	35 S	3 E	Garfield	Sept.	7	1909	2672

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Springs	Olsen Bros.	Manti, Utah	Stockwatering	.1		3	18 S	3 E	Sanpete	Sept.	13	1909	2687
Springs	Albin F. Palm	Provo, Utah	Mining	.25		Springs			Beaver	Sept.	20	1909	2696
South Cedar Ridge Creek	Emma Hays	Richfield, Utah	Irrigation	3		28	22 S	2 W	Sevier	Sept.	21	1909	2698
South Cedar Ridge Creek	Emma Hays	Richfield, Utah	Irrigation	5		28	22 S	2 W	Sevier	Sept.	21	1909	2700
Spring	A. J. McMullen	Salt Lake City	Mining	.25		Spring			Beaver	Sept.	23	1909	2702
Surplus Water from Uvada & Gold Springs Washes & Modena Pipe Line Washes	Thos. A. Thorley	Cedar City, Utah	Irrigation	10		1	35 S	19 W	Iron	Oct.	8	1909	2735
Sullivan Springs Creek	R. H. Cowan	Robinson, Utah	Irrigation	3			11 S	3 W	Juab	Nov.	26	1909	2758
Spring Juab County	George McCune	Eureka, Utah	Stockwatering	.1			12 S	2 W	Juab	Oct.	28	1909	2771
Spring	Conrad Haight	Cedar City, Utah	Stockwatering	.8		16	35 S	14 W	Iron	Nov.	2	1909	2779
Sevier River	Belnap Power Co., Assignee, H. E. Smith	Duluth, Minn.	Power	100		29 & 6	26 & 27 S	3 & 4 W	Piute	Nov.	5	1909	2791
Shoal Creek	New Castle Reclamation Co.	Salt Lake City	Irrigation	40		16	37 S	17 W	Washington	Nov.	26	1909	2835
Sevier River	C. L. Elder, et al	Kingston, Utah	Irrigation	8		33	33 S	2 W	Garfield	Nov.	26	1909	2836
Sevier River	D. B. Mackintosh	Salt Lake City	Irrigation		10000	29	17 S	8 W	Sevier	Nov.	29	1909	2840
Shades, Upper & Lower Springs	Lyman A. Shephard	Beaver, Utah	Stockwatering	.5		35	27 S	8 W	Beaver	Dec.	13	1909	2873
San Pitch River & Six Mile Creek	Frank L. Copening	Provo, Utah	Irrigation		5000	32	18 S	2 E	Sanpete	Dec.	20	1909	2884
Spring Iron County	Thomas Lawrence, Jr.	Cedar City, Utah	Domestic	.425		14	36 S	11 W	Iron	Dec.	20	1909	2886
Springs	N. A. Farry	Marysvale, Utah	Irrigation	10		18 & 19		3 W	Sevier	Jan.	3	1910	2902
Sevier River	D. B. Brinton	Murray, Utah	Power	97		1	17 S	2 W	Juab	Apr.	23	1910	2913
Summit Creek or Santaquin Creek	E. O. Bylund	Santaquin, Utah	Irrigation	2		Summit Creek			Utah	Feb.	1	1910	2962
Sevier River	D. B. Mackintosh	Salt Lake City	Irrigation		5000	6	18 S	7 E	Sevier	Feb.	3	1910	2967
Springs	John H. Ford	Sigurd, Utah	Miscellaneous	30		33	23 S	2 W	Sevier	Feb.	15	1910	2998
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		11	33 S	18 W	Iron	Feb.	16	1910	3002
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		10	33 S	18 W	Iron	Feb.	16	1910	3003
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		11	33 S	18 W	Iron	Feb.	18	1910	3004
Spring	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		19	32 S	17 W	Iron	Feb.	18	1910	3005
Spring Iron County	Cedar Sheep Ass'n.	Cedar City, Utah	Miscellaneous	.1		14	33 S	18 W	Iron	Feb.	18	1910	3006
Summit Creek	Isaac F. Langford, et al	Summit, Utah	Irrigation	5		35	34 S	10 W	Iron	Feb.	25	1910	3024

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Neilson B. Dalley	Summit, Utah	Domestic	.5		31	34 S	9 W	Iron	Feb.	26	1910	3026
Springs	Frank Westbrook	Hatton, Utah	Irrigation	.5		11	23 S	5 W	Millard	Mar.	2	1910	3034
Spring	Beaver River Power Company	Provo, Utah	Miscellaneous	2		24	29 S	6 W	Beaver	Mar.	9	1910	3054
Spring	James A. Low, et al	Beaver, Utah	Stockwatering	1		34	31 S	7 W	Iron	Mar.	11	1910	3063
Spring Creek	John Z. Alger	Enterprise, Utah	Irrigation	10	100	14	37 S	17 W	Washington	Mar.	18	1910	3076
Spring, Branch Canyon Spring	George E. LeFevre	Minersville, Utah	Stockwatering	.04		13	28 S	10 W	Beaver	May	12	1910	3082
Sevier River	Richlands Irrigation Co.	Salt Lake City	Irrigation	112	6000	6	18 S	7 W	Sevier	Apr.	4	1910	3102
Secpare Sevier County	Henry Peterson	Richfield, Utah	Irrigation	10		33	23 S	2 W	Sevier	Apr.	6	1910	3107
State Line Wash	John L. Sevy	Panguitch, Utah	Stockwatering		60		State Line Wash		Iron	Apr.	8	1910	3113
Summit Creek	Mayhew H. Dalley	Cedar City, Utah	Irrigation	5			35 S	9 or 10 W	Iron	Apr.	10	1910	3116
Summit Creek	P. C. N. Graydon	St. George, Utah	Irrigation		1000	36	34 S	10 W	Iron	Apr.	22	1910	3160
Spring Creek	Frank Warner	Fillmore, Utah	Irrigation	.1		9	22 S	4 W	Millard	Apr.	28	1910	3175
Shirts Creek	Francis W. Middleton	Hamilton Utah	Irrigation	8		35 or 36	36 S	12 W	Iron	May	4	1910	3188
Springs Sevier County	Junius F. Ogden, et al	Richfield Utah	Irrigation	1		28	23 S	2 W	Sevier	May	6	1910	3191
Spring Beaver County	Chas. R. Woodbury	Beaver, Utah	Irrigation	1		14	26 S	7 W	Beaver	May	14	1910	3222
Spring Beaver County	George Bradshaw	Beaver, Utah	Stockwatering	.1		23	26 S	7 W	Beaver	May	14	1910	3223
Spring	R. R. Hill, et al	Fayette, Utah	Domestic	1		13	19 S	2 W	Millard	May	20	1910	3235
Smith Spring	Cedar Mercantile & Live Stock Co.	Cedar City, Utah	Stockwatering	.1		30	32 S	17 W	Iron	May	24	1910	3242
San Pedro et al pipe line overflow	William A. Bond	Modena, Utah	Irrigation	.5		1	35 S	19 W	Iron	June	1	1910	3271
Spring	R. N. Jensen	Sigurd, Utah	Irrigation	.2		6	23 S	1 W	Sevier	June	6	1910	3282
Spring	Herbert P. Haight	Cedar City, Utah	Stockwatering	.04		22	35 S	14 W	Iron	June	15	1910	3302
Spring	Richard A. Thorley	Cedar City, Utah	Stockwatering	.04		12	32 S	16 W	Iron	June	16	1910	3307
South Creek	Wm. Adair, et al	Tropic, Utah	Irrigation	4		27	34 S	2 W	Garfield	June	16	1910	3310
Spring	John M. Griffith	Minersville, Utah	Stockwatering	100		13	28 S	10 W	Beaver	June	29	1910	3347
South Cove Spring	James Bullock	Cedar City, Utah	Stockwatering	.03		4	32 S	16 W	Beaver	June	29	1910	3348
South Chalk Creek	L. W. Roush	Gunnison, Utah	Power	10		35	21 S	4 W	Millard	July	11	1910	3381
Sevier River	Samuel Ottis Hill	Salt Lake City	Irrigation	2.5		1	18 S	8 W	Millard	July	27	1910	3419
Springs	J. S. Hanks, et al	Parowan, Utah	Irrigation	.5		1 & 36	36 S	9 W	Iron	Aug.	31	1910	3484

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.--Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Sevier River	J. W. Young et al	Johns Valley, Utah	Irrigation	12		31	34 S	2 W	Garfield	Sep.	16	1910	3501
Spring	Daniel C. Harris	Silver City, Utah	Domestic	.01		4	11 S	2 W	Juab	Sep.	19	1910	3506
Spring	Alex Jennings	Nephi, Utah	Domestic	1		7	22 S	3 E	Sevier	Sep.	24	1910	3515
Springs	Winslow R. Walker	Oak City, Utah	Irrigation	1		9	17 S	4 W	Millard	Oct.	5	1910	3524
Spring	L. N. Marsden	Parowan, Utah	Stockwatering	.15		36	31 S	15 W	Iron	Oct.	6	1910	3526
Spring	J. K. Paramore	Parowan, Utah	Stockwatering	.10		29	31 S	14 W	Iron	Oct.	6	1910	3527
Seepage	Herman and John Bayles	Parowan, Utah	Stockwatering	.08			Seepage		Beaver	Oct.	10	1910	3533
Sevier East Fork	Jedidia Adair et al	Salt Lake City	Irrigation	14			Sevier East Fork		Garfield	Oct.	17	1910	3542
Spring	T. W. Jones et al	New Castle, Utah	Stockwatering	.1		28	36 S	15 W	Iron	Oct.	26	1910	3552
Sand Spring	Walter James et al	Blackrock, Utah	Stockwatering	.03			Sand Springs		Beaver	Nov.	19	1910	3625
Swasey Springs	Andrew A. Cahoon	Salt Lake City	Stockwatering	1			Swasey Spring		Millard	Nov.	26	1910	3641
Twin Spring Creek	Seth M. Jones	Enterprise, Utah	Irrigation	2.5		13	37 S	17 W	Washington	Apr.	5	1909	2353
Tintic Valley	James L. Stark	Salt Lake City	Irrigation	1		35	10 S	3 W	Juab	May	13	1909	2433
Ten Mile Creek	State Board Land Com.	Salt Lake City	Miscellaneons	8		29	28 S	3 W	Piute	May	14	1909	2435
Tibadore Creek	Homer McCarty	Richfield, Utah	Irrigation	8		27	28 S	2½ W	Piute	May	24	1909	2454
Timber Canyon Creek	Niels Kelson	Ephraim, Utah	Irrigation	3		14	17 S	1 W	Sanpete	June	1	1909	2474
Twin Creek	A. H. Poulson et al	Mt. Pleasant, Utah	Irrigation	5		13	15 S	4 E	Sanpete	June	7	1909	2490
Twin Creek	A. H. Poulson et. al	Mt. Pleasant, Utah	Irrigation	5		13	15 S	4 E	Sanpete	June	7	1909	2490a
Three Mile Canyon	O. J. Salisbury	Salt Lake City	Mining	.33			Three Mile Canyon		Piute	Oct.	30	1909	2775
Twin Creek	Cedar Creek High Water Irrigation Co.	Mt. Pleasant, Utah	Irrigation	20		19	15 S	5 E	Sanpete	Dec.	30	1909	2899
Ten Mile Creek	Homer McCarty	Richfield, Utah	Irrigation	10			Ten Mile Creek		Piute	Nov.	25	1910	3638
Ten Mile Creek	Homer McCarty	Richfield, Utah	Irrigation	10			Ten Mile Creek		Piute	Nov.	25	1910	3639
Tom Best Spring	Ezra T. Rappley	Tropic, Utah	Irrigation			35	34 S	3 W	Garfield	Apr.	25	1910	3167
Triangle Canyon Creek	Frank Warner	Fillmore, Utah	Irrigation	1		9	22 S	4 W	Millard	Apr.	28	1910	3174
Uvada Wash and Gold Springs Wash	Thomas A. Thorley	Cedar City, Utah	Irrigation	10	100	1	35 S	17 & 18 W	Iron	Mar.	2	1909	2186
Upper Nephi Spring	Terry Brothers	Enterprise, Utah	Stockwatering	.1			36 S	19 W	Iron	May	11	1910	3207
Upper Parker Canyon Spr.	Terry Brothers	Enterprise, Utah	Stockwatering	.1		8	37 S	18 W	Washington	May	11	1910	3209
Uvada & Gold Springs Wash	Thos. A. Thorley	Cedar City, Utah	Irrigation	22		6	35 S	18 W	Iron	May	18	1910	3233
Victor Spring	Walter James et al	Blackrock, Utah	Stockwatering	.02			Victor Spring		Beaver	Nov.	19	1910	3630
Willow Springs	Alma Marleby	Monroe, Utah	Stockwatering	.5		36	28 S	15 W	Beaver	Feb.	10	1909	2268
Willow, Lucky Boy and Quaking Asp Springs	Beaver Carbonate Mining Co.	Salt Lake City	Mining	.125		13	27 S	13 W	Beaver	Feb.	27	1909	2302

APPLICATIONS TO APPROPRIATE WATER FROM THE SEVIER RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Warm Creek	Albert J. Bishop	Smithfield, Utah	Irrigation	2.5		4	16 S	19 W	Millard	Sept.	10	1909	2677
Wm. Woods Spring	John W. Meyers	Minersville, Utah	Stockwatering	1.5		33	28 S	15 W	Beaver	Oct.	20	1909	2757
Wide Canyon & Middle Canyon	Frank T. Slaughter, et al	Kanosh, Utah	Irrigation	4	4	23	23 S	5 W	Millard	Mar.	11	1910	3061
Willow Springs	D. J. Williams	Greenville, Utah	Stockwatering	.04		23	30 S	10 W	Beaver	Mar.	14	1910	3067
Wire Grass Spring	D. J. Williams	Greenville, Utah	Stockwatering	.01		23	30 S	10 W	Iron	Mar.	14	1910	3069
Water Cress Spring	Mary W. McCarty	Richfield, Utah	Irrigation	5	300	3	28 S	2½ W	Piute	Mar.	15	1910	3079
Warm Creek	Charles W. Phillips	Gandy, Utah	Irrigation	4		4	16 S	19 W	Millard	Aug.	10	1910	3444
Warm Creek	Charles A. Phillips	Gandy, Utah	Irrigation	1.5		4	16 S	19 W	Millard	Sept.	6	1910	3490
Wah Wah Range	Charles L. Clements	Minersville, Utah	Stockwatering	.25	2	33	22 S	15 W	Beaver	Sep.	20	1910	3516
Wah Wah Range	Charles L. Clements	Minersville, Utah	Stockwatering	.5		33	22 S	15 W	Beaver	Sep.	20	1910	3517
Wide Mouth Canyon	Western Resources Promotion Co.	Salt Lake City	Irrigation	10		31	23 S	6 W	Millard	Nov.	4	1910	3578

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
American Fork Creek	J. H. Bigger, Trustee	Salt Lake City	Power	20		21	3 S	3 E	Utah	Apr.	28	1909	2384
American Fork River	Bernard Christensen, et al	American Fork, Utah	Power	20		32	4 S	2 E	Utah	June	15	1909	2510
American Fork River	Provo Reservoir Co.	Provo, Utah	Irrigation	50		32	4 S	2 E	Utah	June	23	1909	2532
American Fork Creek	John Y. Smith, Jr.	Salt Lake City	Power	10		21	3 S	3 E	Utah	Oct.	7	1909	2725
Artesian Wells	Charles Crane	Salt Lake City	Domestic	.89		18	2 S	1 E		Jan.	21	1910	2923
Allcorn Spring	Geo. E. Kay	Mona, Utah	Stockwatering	.5			10 S	1 W	Utah	Mar.	8	1910	3051
American Fork Creek	C. W. Earl	Lehi, Utah	Power	20	750		American Fk. Ck.		Utah	May	17	1910	3230
American Fork Creek	Jed J. Mercer	American Fork, Utah	Power		500		American Fk. Ck.		Utah	June	10	1910	3290
Big Cottonwood Creek	Giles Mining & Milling Co	Salt Lake City	Power	20		22 23 26 27 2 3 34	2 S	3 E	Salt Lake	Apr.	13	1909	2369
Bear Canyon Spring	John H. Dixon	Payson, Utah	Irrigation	2			9 &						
Big Hollow Creek	Utah-Idaho Sugar Co.	Salt Lake City	Irrigation	10		35	10 S	2 E	Utah	May	22	1909	2449
Broad Canyon Spring	J. L. Smith	Eureka, Utah	Miscellaneous	.125		26 21 22 27	5 S	1 W	Utah	June	29	1909	2545
Big Cottonwood Creek	H. L. Thomas	Salt Lake City	Power	30		28 7 8 17	10 S	2 W	Utah	July	12	1909	2568
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	15		18 7 8 17	2 S	3 E	Salt Lake	July	19	1909	2579
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	30		18	2 S	3 E	Salt Lake	July	19	1909	2583
Big Willow Creek	Thos. A. Starrh et al	Salt Lake City	Power	5		18	2 S	3 E	Salt Lake	July	19	1909	2584
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	20		23	3 S	1 E	Salt Lake	July	27	1909	2602
						22	2 S	3 E	Salt Lake	Aug.	18	1909	2643

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	9		17	2 S	3 E	Salt Lake	Sep.	13	1909	2685
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	7		17	2 S	3 E	Salt Lake	Sep.	13	1909	2686
Big Cottonwood Creek	The Progress Co	Murray, Utah	Power	100		25	2 S	1 E	Salt Lake	Sep.	15	1909	2692
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal	Power		408.5	7							
						8							
						17							
						18	2 S	3 E	Salt Lake	Sep.	20	1909	2693
Big Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		18	2 S	3 E	Salt Lake	Sep.	21	1909	2697
Boulder Creek	Washington Irr. Co.	Kamas, Utah	Irrigation	25	500	7		6 &					
						12	3 S	7 E	Summit	Nov.	12	1909	2812
Boulder Creek	Washington Irr. Co.	Kamas, Utah	Irrigation	25	500	7		6 &					
						12	3 S	7 E	Summit	Nov.	12	1909	2813
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		610	25	2 S	1 E	Salt Lake	Jan.	22	1910	2878
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		100	25	2 S	1 E	Salt Lake	Dec.	15	1909	2879
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		150	25	2 S	1 E	Salt Lake	Dec.	15	1909	2880
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		927	25	2 S	1 E	Salt Lake	Jan.	22	1910	2895
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		200	25	2 S	1 E	Salt Lake	Dec.	28	1909	2896
Big Cottonwood Creek	Salt Lake City	Salt Lake City	Domestic		400	25	2 S	1 E	Salt Lake	Dec.	28	1909	2897
Big Cottonwood Creek	Utah Mines Coalition	Salt Lake City	Power	17		27	2 S	3 E	Salt Lake	Jan.	13	1910	2910
Bunnell Fork	A. J. Sprague, et al	Provo, Utah	Miscellaneous	10		25							
						36	5 S	4 E	Utah	Jan.	27	1910	2947
Box Elder Stream	Joseph R. Murdock	Heber, Utah	Miscellaneous	10		17	4 S	2 E	Utah	Mar.	31	1910	3095
Big Cottonwood Creek	Camden Riley	Salt Lake City	Power	3			Big Cottonw'd Ck.		Salt Lake	May	16	1910	3229
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	9			Big Cottonw'd Ck.		Salt Lake	June	1	1910	3267
Big Cottonwood Creek	Julius A. Kuck	Silver Lake, Utah	Power	13			Big Cottonw'd Ck.		Salt Lake	June	1	1910	3269
Bunnel Fork	Alfred J. Sprague	Provo, Utah	Power	10		36	5 S	3 E	Utah	June	25	1910	3334
Big Cottonwood Creek	W. L. Hardwood	Salt Lake City	Power	30		7							
						8							
						17							
						18	2 S	3 E	Salt Lake	July	1	1910	3361
Beaver Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		26	4 S	1 W	Summit	July	11	1910	3388
Beaver Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		21							3
						31	2 S	6 E	Summit	July	11	1910	389

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE–JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Big Cottonwood Creek	Milton S. Hamilton	Oakland, California	Power		408.5	7 8 17 18	2 S	3 E	Salt Lake	July	14	1910	3397
Black Slough Creek and S. L. City Surplus Canal	H. A. Heath	Salt Lake City	Miscellaneous	20		1	1 N	2 W	Salt Lake	Aug.	31	1910	3485
Bear Gulch Creek	Utah Leasing Co.	Salt Lake City	Mining	1		2	4 S	3 W	Salt Lake	Sep.	6	1910	3491
Brigham Fork	Gilman E. Eastman	Salt Lake City	Mining	.2			Brigham Fork		Salt Lake	Sep.	21	1910	3512
Burrs Fork Creek	Chas. D. Harding	Salt Lake City	Domestic	1		27	1 N	2 E	Salt Lake	Oct.	10	1910	3534
Bear Fork Creek	Gray Trust Co.	Salt Lake City	Irrigation	.5		22	1 N	2 E	Salt Lake	Nov.	1	1910	3569
Burrs Fork Creek	Gray Trust Co.	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Nov.	1	1910	3573
Currant Creek	Utah Lake Land & Water Power Co.	Elberta, Utah	Power	25		1	11 S	1 W	Utah	Feb.	8	1909	2264
Currant Creek	Geo. McCune, et al	Eureka & Nephi, Utah	Power			22 23 26 27	10 S	1 W	Juab and Utah	July	7	1909	2556
Curio Canyon	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		27	1 N	2 E	Salt Lake	July	21	1909	2587
Cress Spring and Creeks	John H. McEwan	Provo, Utah	Irrigation	2		6 7	5 S	4 E	Wasatch	Aug.	7	1909	2623
City Creek	Robt. J. Robinson	Salt Lake City	Power	15		20	1 N	1 E	Salt Lake	Aug.	30	1909	2663
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Miscellaneous	10		7 8 17 18	4 S	2 E	Utah	Nov.	18	1909	2823
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation			8	4 S	2 E	Utah	Nov.	18	1909	2824
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation	4		7 8 17 18	4 S	2 E	Utah	Feb.	18	1910	3010

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For in.		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
City Creek	Francis M. Lyman, Jr.	Salt Lake City	Power	20		11 12 13 14	1 N	1 E	Salt Lake	Mar.	24	1910	3087
City Creek, Emigration Canyon, Big and Little Cottonwood Creeks	St. Joseph Water and Irrigation Co., Assignee, Harry S. Joseph	Salt Lake City	Irrigation	15		11	1 N	1 W	Salt Lake & Davis	Apr.	26	1910	3170
Cedar Fort Creek	John M. Dalton	Salt Lake City	Irrigation	2		3 4 9 10	6 S	2 W	Utah	May	6	1910	3194
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation	4		7 8 17 18	4 S	2 E	Utah	May	16	1910	3227
City Creek	Brigham Young University Assignee Karl Keeler	Provo, Utah	Power	10		30	6 S	3 E	Utah	May	28	1910	3261
Chipman Creek	Benjamin Fullmer	Alpine, Utah	Irrigation	4		7 8 17 18	4 S	2 E	Utah	Aug.	11	1910	3447
Curio Canyon	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		27	N	2 E	Salt Lake	Aug.	20	1910	3465
Coon Canyon Creek	Bingham & Garfield R. R. Co.	Salt Lake City	Miscellaneous	1		14	2 S	3 W	Salt Lake	Oct.	12	1910	3536
Dry Creek	John F. Tobin	Salt Lake City	Power		500	24	3 S	1 E	Salt Lake	Dec.	28	1908	2201
Dry Creek	John F. Tobin	Salt Lake City	Power	10		24	3 S	1 E	Salt Lake	Dec.	28	1908	2202
Deer Creek	Deer Creek Copper and Gold Mining Co.	Salt Lake City	Power	15		Deer Creek			Utah	Feb.	2	1909	2253
Dry Herd Canyon	Gray Rock Mining Co.	Eureka, Utah	Irrigation	1		22	10 S	2 W	Utah	May	12	1909	2429
Dry Creek	Provo Reservoir Co.	Provo, Utah	Irrigation	20		17	4 S	2 E	Utah	June	23	1909	2531
Dry Creek	Provo Reservoir Co.	Provo, Utah	Irrigation	10		13	4 S	1 E	Utah	June	23	1909	2533
Deer Creek	John H. McEwan	Provo, Utah	Irrigation	2		6 7	5 S	4 E	Wasatch	Aug.	7	1909	2624
Dry Creek	Charles Roby	Salt Lake City	Power	15		24	3 S	1 E	Salt Lake	Aug.	20	1909	2648

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE–JORDAN RIVER DRAINAGE AREA—Continued,

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Deer Creek	T. J. Yates	Salt Lake City	Power	30		19	4 S	4 E	Wasatch	Oct.	18	1909	2750
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation			8	4 S	2 E	Utah	Nov.	18	1909	2822
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation	10		7 8 17							
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation	10		18 7 8 17	4 S	2 E	Utah	Feb.	18	1910	3009
Deer Creek	C. W. Earl	Lehi, Utah	Power	10		18	4 S	2 E	Utah	May	16	1910	3228
Dairy Fork	J. E. Smith	Kern, Cal.	Miscellaneous	1		21 22 27	Deer	Creek	Utah	June	20	1910	3316
Dry Creek	Geo. C. Lambert	Salt Lake City	Irrigation	10		28 7 8 17	10 S	5 E	Utah	July	15	1910	3400
Drainage	Hyrum Christensen	Spanish Fork, Utah	Irrigation	.2		18	4 S	2 E	Utah	Aug.	11	1910	3446
East Hammon Gorge Cr'k	J. C. Jensen	Provo, Uthh	Power	10	1000	19	8 S	3 E	Utah	Aug.	13	1910	3454
Ellen Spring	Rainbow Trout Co., Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		7 25 26 35	4 S	2 E	Utah	July	20	1909	2586
East Warm Creek	Geo. McCune	Nephi, Utah	Irrigation	5		36 28 29 32	5 S	3 E	Utah	Aug.	16	1909	2639
Emigration Creek	Walter D. Buntin	Salt Lake City	Irrigation	1		33	9 S	1 E	Utah	July	22	1910	3412
East Fork Creek	Mountain Heights Summer Home Co.	Salt Lake City	Irrigation	1		15	1 S	1 E	Salt Lake	Sept.	19	1910	3508
Emigration Creek	Walter D. Buntin	Salt Lake City	Domestic	2.5		22	1 N	2 E	Salt Lake	Nov.	1	1910	3568
Emigration Creek	H. E. Herman	Salt Lake City	Irrigation	20			Emigration	Creek	Salt Lake	Nov.	14	1910	3605
							Emigration	Creek	Salt Lake	Nov.	25	1910	3636

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Fort Canyon Creek	James W. Vance, et al	Alpine, Utah	Power	35		6 7	4 S	2 E	Utah	June	1	1909	2475
Fort Creek	Leuraine L. Park	Salt Lake City	Power	10		7	4 S	2 E	Utah	June	22	1909	2529
Fairfield Spring	John L. McKinney	Fairfield, Utah	Irrigation	15		29 33	6 S	2 W	Utah	Feb.	26	1910	3027
Freeman Gulch Spring	Bingham Canyon Town	Bingham, Utah	Domestic	.08		22 23 26 27	3 S	3 W	Salt Lake	Aug.	23	1910	3433
Ferguson Canyon Creek	Charles E. Miles	Payson, Utah	Irrigation	2		11	10 S	1 E	Utah	Oct.	25	1910	3549
Ferguson Canyon Creek	Claude H. Goodsell	Salt Lake City	Irrigation	1		25	2 S	1 E	Salt Lake	Oct.	28	1910	3557
Greely & Black Shale Spgs	J. C. Williams	Murray, Utah	Irrigation	3		25	2 S	1 E	Salt Lake	Nov.	3	1910	3580
	John W. Taylor et al	Provo, Utah	Miscellaneous	.8		8 9 16 17 19 20 29 30	9 S	2 W	Utah	July	23	1909	2593
Hard Lick Spring	Gilbert Lloyd	Riverton, Utah	Irrigation	1		12	4 S	2 W	Salt Lake	Dec.	3	1908	2179
Hidden Treasure Springs	E. J. Raddatz et al	Salt Lake City	Mining	1.5		16	10 S	2 W	Utah	Apr.	13	1909	2385
Hilberg & Hemsley Spgs.	O. W. Carlson	Salt Lake City	Domestic	2		29	1 S	1 E	Utah	Apr.	9	1909	2868
Hills Ponds Drain	Charles Christenson	Murray, Utah	Miscellaneous	10		31	1 S	1 E	Utah	Feb.	15	1910	2997
Hot Springs Lake	Harry S. Joseph	Salt Lake City	Irrigation	20		14	1 N	1 W	Salt Lake & Davis	May	3	1910	3185
Hilberg & Hemsley Spgs.	O. W. Carlson	Salt Lake City	Domestic	2		29	1 S	1 E	Salt Lake	Aug.	12	1910	3449
Howe Canon Wash	Geo. E. Howe, et al	Salt Lake City	Irrigation		125	Howe Canon Wash			Utah	Nov.	7	1910	3584
Jordan River	Hyrum Bennion	Murray, Utah	Power	60		14	2 S	1 W	Salt Lake	Dec.	30	1908	2204
Jordan River	Arthur Murphy	Salt Lake City	Power	20		32	2 S	3 E	Salt Lake	Feb.	23	1919	2292
Jordan River	Phoenix Mining Co.	Bingham, Utah	Mining	2		34	3 S	3 W	Salt Lake	July	26	1909	2596
Jordan River	Joseph R. Murdock	Heber, Utah	Irrigation	160		26	4 S	1 W	Utah & Salt Lake	Aug.	6	1909	2621
Jordan River	Utah Light & Railway Co.	Salt Lake City	Miscellaneous	10		2	1 S	1 W	Salt Lake	Sep.	13	1909	2688

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Jordan River	Utah Gas & Coke Co.	Salt Lake City	Miscellaneous	1		2	1 S	1 W	Salt Lake	Feb.	21	1910	3015
Jamison Spring & Spring	Henry Miller	Elberta, Utah	Irrigation	1		10							
Jordan River	Nate Rockhill	Lehi, Utah	Irrigation	180		15	10 S	2 W	Utah	Apr.	6	1910	3108
Jordan River	Utah Light & Ry. Co.	Salt Lake City	Miscellaneous	55		22	1 N	1 W	Salt Lake	June	6	1910	3281
Jordan River	Utah Gas & Coke Co.	Salt Lake City	Miscellaneous	1		2	1 S	1 W	Salt Lake	June	14	1910	3300
Jordan River and Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		2	1 S	1 W	Salt Lake	June	29	1910	3341
Kellyon Canyon Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		7	3 S	2 E	Salt Lake	July	14	1910	3398
Little Cottonwood Creek	R. E. Caldwell	Salt Lake City	Power	25		22	1 N	2 E	Salt Lake	Sep.	29	1909	2713
Little Cottonwood Creek	George Kay	Murray, Utah	Irrigation	5		12	3 S	1 E	Salt Lake	Dec.	28	1908	2199
Little Cottonwood Creek	Murray City Corp.	Murray, Utah	Power	15		3	3 S	1 E	Salt Lake	Jan.	8	1909	2215
Little Cottonwood Creek	Murray City Corporation	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	Feb.	17	1909	2279
Little Cottonwood Creek	H. L. Thomas	Salt Lake City	Power	20		2	3 S	1 E	Salt Lake	May	19	1909	2444
Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	20		10 12 10	3 S	1 & 2 E 1 &	Salt Lake	July	19	1909	2580
Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		12	3 S	2 E	Salt Lake	July	19	1909	2581
Little Mountain Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		7	2 S	2 E	Salt Lake	July	19	1909	2582
Lime and High Springs	Hyrum Baird et al	Provo, Utah	Miscellaneous	6		33 25 26 31 35	1 N	2 E 3 &	Salt Lake	July	21	1909	2588
Little Mountain Springs	Charles D. Harding	Salt Lake City	Irrigation	1		36	5 S	4 E	Utah	June	20	1910	2683
Little Cottonwood Creek	Samuel Russell	Salt Lake City	Power	25		33	1 N	2 E	Salt Lake	Sep.	30	1909	2717
Little Spring Creek	Springville City Corp.	Springville, Utah	Domestic	5		7	3 S	2 E	Salt Lake	Nov.	5	1909	2792
Little Cottonwood Creek	Samuel Russell	Salt Lake City	Power	20		35	7 S	3 E	Utah	May	31	1910	2965
Little Cottonwood Creek	Joseph Ulmer	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	May	3	1910	3184
Little Cottonwood Creek	Frank B. Stephens	Salt Lake City	Miscellaneous	50		2	3 S	1 E	Salt Lake	June	8	1910	3287
						28	2 S	1 E	Salt Lake	June	15	1910	3311

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Fort Canyon Creek	James W. Vance, et al	Alpine, Utah	Power	35		6							
						7	4 S	2 E	Utah	June	1	1909	2475
Fort Creek	Lenraine L. Park	Salt Lake City	Power	10		7	4 S	2 E	Utah	June	22	1909	2529
Fairfield Spring	John L. McKinney	Fairfield, Utah	Irrigation	15		29							
						33	6 S	2 W	Utah	Feb.	26	1910	3027
Freeman Gulch Spring	Bingham Canyon Town	Bingham, Utah	Domestic	.08		22							
						23							
						26							
						27	3 S	3 W	Salt Lake	Aug.	23	1910	3133
	Charles E. Miles	Payson, Utah	Irrigation	2		11	10 S	1 E	Utah	Oct.	25	1910	3549
Ferguson Canyon Creek	Claude H. Goodsell	Salt Lake City	Irrigation	1		25	2 S	1 E	Salt Lake	Oct.	28	1910	3557
Ferguson Canyon Creek	J. C. Williams	Murray, Utah	Irrigation	3		25	2 S	1 E	Salt Lake	Nov.	3	1910	3580
Greely & Black Shale Spgs	John W. Taylor et al	Provo, Utah	Miscellaneous	.8		8							
						9							
						16							
						17							
						19							
						20							
						29							
						30	9 S	2 W	Utah	July	23	1909	2593
Hard Lick Spring	Gilbert Lloyd	Riverton, Utah	Irrigation	1		12	4 S	2 W	Salt Lake	Dec.	3	1908	2179
Hidden Treasure Springs	L. J. Raddatz et al	Salt Lake City	Mining	1.5		16	10 S	2 W	Utah	Apr.	13	1909	2365
Hilberg & Hemsley Spgs.	O. W. Carlson	Salt Lake City	Domestic	2		29	1 S	1 E	Utah	Apr.	9	1909	2868
Hills Ponds Drain	Charles Christenson	Murray, Utah	Miscellaneous	10		31	1 S	1 E	Utah	Feb.	15	1910	2997
Hot Springs Lake	Harry S. Joseph	Salt Lake City	Irrigation	20		14	1 N	1 W	Salt Lake & Davis	May	3	1910	3185
Hilberg & Hemsley Spgs.	O. W. Carlson	Salt Lake City	Domestic	2		29	1 S	1 E	Salt Lake	Aug.	12	1910	3449
Howe Canon Wash	Geo. E. Howe, et al	Salt Lake City	Irrigation		125	Howe Canon Wash			Utah	Nov.	7	1910	3534
Jordan River	Hyrum Bennion	Murray, Utah	Power	60		14	2 S	1 W	Salt Lake	Dec.	30	1908	2204
Jordan River	Arthur Murphy	Salt Lake City	Power	20		32	2 S	3 E	Salt Lake	Feb.	23	1919	2292
Jordan River	Phoenix Mining Co.	Bingham, Utah	Mining	2		34	3 S	3 W	Salt Lake	July	26	1909	2596
Jordan River	Joseph R. Murdock	Heber, Utah	Irrigation	160		26	4 S	1 W	Utah & Salt Lake	Aug.	6	1909	2621
Jordan River	Utah Light & Railway Co.	Salt Lake City	Miscellaneous	10		2	1 S	1 W	Salt Lake	Sep.	13	1909	2688

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Jordan River	Utah Gas & Coke Co.	Salt Lake City	Miscellaneous	1		2	1 S	1 W	Salt Lake	Feb.	21	1910	3015
Jamison Spring & Spring	Henry Miller	Elberta, Utah	Irrigation	1		10							
						15	10 S	2 W	Utah	Apr.	6	1910	3108
Jordan River	Nate Rockhill	Lehi, Utah	Irrigation	180		22	1 N	1 W	Salt Lake	June	6	1910	3281
Jordan River	Utah Light & Ry. Co.	Salt Lake City	Miscellaneous	55		2	1 S	1 W	Salt Lake	June	14	1910	3300
Jordan River	Utah Gas & Coke Co.	Salt Lake City	Miscellaneous	1		2	1 S	1 W	Salt Lake	June	29	1910	3341
Jordan River and Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		7	3 S	2 E	Salt Lake	July	14	1910	3398
Kellyon Canyon Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Sep.	29	1909	2713
Little Cottonwood Creek	R. E. Caldwell	Salt Lake City	Power	25		12	3 S	1 E	Salt Lake	Dec.	28	1908	2199
Little Cottonwood Creek	George Kay	Murray, Utah	Irrigation	5		3	3 S	1 E	Salt Lake	Jan.	8	1909	2215
Little Cottonwood Creek	Murray City Corp.	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	Feb.	17	1909	2279
Little Cottonwood Creek	Murray City Corporation	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	May	19	1909	2444
Little Cottonwood Creek	H. L. Thomas	Salt Lake City	Power	20		10		1 &					
						12	3 S	2 E	Salt Lake	July	19	1909	2580
Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	20		10		1 &					
						12	3 S	2 E	Salt Lake	July	19	1909	2581
Little Cottonwood Creek	Milton S. Hamilton	Oakland, Cal.	Power	10		7	2 S	2 E	Salt Lake	July	19	1909	2582
Little Mountain Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	July	21	1909	2588
Lime and High Springs	Hyrum Baird et al	Provo, Utah	Miscellaneous	6		25							
						26							
						31							
						35		3 &					
						36	5 S	4 E	Utah	June	20	1910	2683
Little Mountain Springs	Charles D. Harding	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	Sep.	30	1909	2717
Little Cottonwood Creek	Samuel Russell	Salt Lake City	Power	25		7	3 S	2 E	Salt Lake	Nov.	5	1909	2792
Little Spring Creek	Springville City Corp.	Springville, Utah	Domestic	5		35	7 S	3 E	Utah	May	31	1910	2965
Little Cottonwood Creek	Samuel Russell	Salt Lake City	Power	20		2	3 S	1 E	Salt Lake	May	3	1910	3184
Little Cottonwood Creek	Joseph Ulmer	Murray, Utah	Power	15		2	3 S	1 E	Salt Lake	June	8	1910	3287
Little Cottonwood Creek	Frank B. Stephens	Salt Lake City	Miscellaneous	50		28	2 S	1 E	Salt Lake	June	15	1910	3311

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Little Cottonwood Creek	Peter VanWalkenberg, et al	Sandy, Utah	Irrigation		160	2	3 S	1 E	Salt Lake	July	11	1910	3331
Little Cottonwood Canyon Creek	William Thornton, et al	Salt Lake City	Irrigation	10			Little Cottonwood Canyon Creek		Salt Lake	Aug.	2	1910	3428
Little Cottonwood Creek	William Thornton, et al	Salt Lake City	Power	20		32	2 S	3 E	Salt Lake	Aug.	5	1910	3436
Little Cottonwood Creek	D. J. Williams	Salt Lake City	Irrigation	10	2000	11	3 S	1 E	Salt Lake	Aug.	11	1910	3445
Little Cottonwood Creek	Peter VanWalkenberg, et al	Sandy, Utah	Irrigation		400	10 11 27	2 S	1 & 2 E	Salt Lake	Aug.	12	1910	3450
Little Cottonwood Creek and Minnie Lake	Peter VanWalkenberg, et al	Sandy, Utah	Irrigation		150	2 32	2 S	1 & 3 E	Salt Lake	Aug.	12	1910	3451
Little Cottonwood Creek	Peter VanWalkenberg et al	Sandy, Utah	Irrigation		1550	10 28	2 S	1 & 2 E	Salt Lake	Aug.	12	1910	3452
Little Cottonwood Creek	G. W. R. H. Irr. Co	Murray, Utah	Power	5		16	2 S	1 E	Salt Lake	Sept.	17	1910	3504
Little Cottonwood Creek	Kay and Bagley	Murray, Utah	Irrigation	2.5		3	3 S	1 E	Salt Lake	Oct.	14	1910	3540
Mill Pond Springs	R. Leo Bird	Provo, Utah	Miscellaneous	4		28	7 S	3 E	Utah	May	7	1909	2410
McRae Canyon	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	June	30	1909	2547
Maple Canyon	T. R. Kelly	Springville, Utah	Power	10		7	8 S	4 E	Utah	July	12	1909	2569
Maple or Bone Canyon Creek	Emigration Canyon Improvement Co.	Salt Lake City	Irrigation	1		33	1 N	2 E	Salt Lake	Aug.	5	1909	2619
Mill Creek	Oscar W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	Aug.	7	1909	2622
Mill Pond Spring	State of Utah	Salt Lake City	Miscellaneous	7		28	7 S	3 E	Utah	Aug.	20	1909	2646
Mill Pond Springs	Lydia A. Holdaway et al	Provo, Utah	Power	21		28	7 S	3 E	Utah	Aug.	20	1909	2651
Mill Pond Springs	Lydia A. Holdaway et al	Provo, Utah	Miscellaneous	21		28	7 S	3 E		Aug.	20	1909	2652
Mill Creek	Oscar W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	Nov.	8	1909	2799
Mill Creek	Mill Creek Power Co.	Salt Lake City	Power	20		33	1 S	2 E	Salt Lake	Jan.	14	1910	2912
Maple Canyon Creek	W. D. Harrington	Provo, Utah	Power	10			8 S	3 & 4 E	Utah	Feb.	8	1910	2976
Mill Creek	D. B. Brinton	Murray, Utah	Power	15		36	1 S	1 E	Salt Lake	Feb.	14	1910	2995
Mill Creek	Oscar W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	Feb.	15	1910	2999
Maple or Slate Jack Spr.	J. W. Vest, et al	Mona, Utah	Stockwatering	.1			10 S	1 W	Utah	Feb.	28	1910	3035
Mill Pond Springs	John E. Riddle et al	Springville, Utah	Irrigation	21		28	7 S	3 E	Utah	May	7	1910	3195
Mill Creek	O. W. Carlson	Salt Lake City	Irrigation	10		36	1 S	1 E	Salt Lake	May	16	1910	3224

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Mountain Top Spring	Mountain Heights Summer Home Co.	Salt Lake City	Irrigation	1		23	1 N	2 E	Salt Lake	June	15	1910	3305
Mill Pond Springs	State of Utah	Salt Lake City	Miscellaneous	7		28	7 S	3 E	Utah	Nov.	17	1910	3609
North Dry Creek	Thos. A. Starrh et al	Salt Lake City	Power	5		23	3 S	1 E	Salt Lake	July	27	1909	2603
North Dry Creek	Charles Roby	Salt Lake City	Power		392	24	3 S	1 E	Salt Lake	Nov.	2	1909	2780
North Dry Creek	James P. Jensen	Sandy, Utah	Irrigation	2		12	3 S	1 E	Salt Lake	Feb.	26	1910	3025
North Fork Creek	Gray Trust Co.	Salt Lake City	Irrigation	1		22	1 N	2 E	Salt Lake	Nov.	1	1910	3570
North Dry Fork	Utah Phil. M. Dev. Co.	Salt Lake City	Power	10		12	3 S	1 E	Salt Lake	Nov.	14	1910	3597
Overflow Telluride Power Co	Louis R. McCornick	Salt Lake City	Miscellaneous	.025		35	3 S	3 W	Salt Lake	Jan.	3	1910	2901
Provo River	Joseph R. Keeler	Provo, Utah	Power	100		24	6 S	2 E	Utah	Dec.	9	1908	2184
Provo River	Provo City	Provo, Utah	Power	100		7	6 S	3 E	Utah	Dec.	13	1908	2187
Pinion Canyon	Tintic Delmar Mining Company	Provo	Mining	1			Pinion Canyon		Utah	June	3	1909	2478
Peteetneet Creek	Wm. D. Dixon, et al	Payson, Utah	Power	8		8 9 16 17	9 S	2 E	Utah	June	8	1909	2494
Perdue Spring	J. Preston Creer	Spanish Fork, Utah	Miscellaneous	1			Perdue Spring			July	1	1909	2550
Provo River	C. E. Loose, et al	Provo, Utah	Irrigation	10		34	5 S	3 E	Utah	July	15	1909	2575
Pine, Bug & Rhoda Spgs.	Rainbow Trout Co. Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		25 26 35 36	5 S	3 E	Utah	Aug.	16	1909	2640
Parley's Canyon Creek Springs	Ray VanCott, et al	Salt Lake City	Domestic	5		20	1 S	1 E	Salt Lake	Oct.	23	1909	2764
Provo River	A. E. Snow	Spanish Fork, Utah	Power	100		12	6 S	2 E	Utah	Feb.	8	1910	2975
Provo River	Knight Power Co., Assignee, Knight Investment Co.	Provo, Utah	Power	200		15	3 S	7 E	Summit	May	26	1910	3252
Provo River	Knight Power Co.	Provo, Utah	Power	200		7	5 S	4 E	Utah	July	12	1910	3392
Provo River	Burt and Carlquist	Salt Lake City	Irrigation	1000	120000	7 29 & 36	1 N 2 & 4 S	6 & 4 E	Wasatch	July	22	1910	3429
Parley's Creek	Francis M. Lyman, Jr.	Salt Lake City	Power	30			Parley's Creek		Salt Lake	Aug.	23	1910	3468
Provo River	James A. Knight	Woodland, Utah	Power	150		21	3 S	7 E	Summit and Wasatch	Sept.	19	1910	3509

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA.—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Provo River	Ed. C. Mecham	Provo, Utah	Power	40		31	5 S	4 E	Utah	Oct.	7	1910	3529
Provo River	Knight Power Co.	Provo, Utah	Power	200		34	2 S	5 E	Wasatch	Nov.	21	1910	3621
Rock Spring	Reuben Kay	Mona, Utah	Stockwatering	.5			10 S	1 W	Utah	Mar.	8	1910	3052
Red Pine & Little Cottonwood Creeks	Rainbow Mining Co.	Salt Lake City	Power	2.5		10	3 S	2 E	Salt Lake	June	10	1910	3293
Spanish Fork River	Spanish Fork Co-operative Inst.	Spanish Fork Utah	Power	60		33	8 S	3 E	Utah	Jan.	7	1909	2213
Silver Lake Creek	J. C. Jensen	Provo, Utah	Power	20			Silver Lake Creek		Utah	Jan.	20	1909	2229
Spanish Fork River	U. S. Reclam. Service	Provo, Utah	Irrigation	300		2	9 S	3 E	Utah	Feb.	4	1909	2259
Spanish Fork River	U. S. Reclam. Service	Provo, Utah	Power	400		2	9 S	3 E	Utah	Feb.	4	1909	2260
Spring Creek	W. B. Ereckson, et al	Murray, Utah	Miscellaneous	75		2	4 S	4 E	Wasatch	Feb.	18	1909	2281
Spring Creek	W. B. Ereckson, et al	Murray, Utah	Miscellaneous	200		11	4 S	4 E	Wasatch	Feb.	18	1909	2282
Spring	H. L. Lipton, et al	Payson, Utah	Mining				Spring		Utah	Feb.	18	1909	2286
Springs	Samuel Russell, et al	Salt Lake City	Domestic	3		20	1 S	1 E	Salt Lake	Mar.	20	1909	2328
Spring	Knight Investment Co.	Provo, Utah	Power	.25		13	10 S	1 E	Utah	Mar.	24	1910	2332
Subterranean Stream	F. W. C. Hathenbruck	Provo, Utah	Power	8		8	7 S	3 E	Utah	Mar.	26	1909	2337
Spring	B. W. Ashton	Provo, Utah	Domestic	8			Spring		Salt Lake	Apr.	2	1909	2350
Silver Lake Creek	J. C. Jensen	Provo, Utah	Power	20			Silver Lake Creek		Utah	Apr.	8	1909	2358
Spring	W. H. Stout	Murray Utah	Irrigation	1		35	1 S	1 E	Salt Lake	Apr.	9	1909	2377
Springs	Charles D. Harding	Salt Lake City	Domestic	.25		4	1 S	2 E	Salt Lake	Apr.	28	1909	2388
Spring	E. O. Bylund	Santaquin, Utah	Stockwatering	.06		31	9 S	2 E		May	1	1909	2398
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	8		22	4 S	4 E	Wasatch	May	6	1909	2404
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	12		22	4 S	4 E	Wasatch	May	11	1909	2424
Subterranean Stream	F. W. C. Hathenbruck	Provo, Utah	Irrigation	8		8	7 S	3 E	Utah	May	15	1909	2425
Spring	George Price	Charleston, Utah	Miscellaneous	5		10	4 S	4 E	Wasatch	May	17	1909	2439
Spring	Erick Erickson	Salem, Utah	Irrigation	2		30	9 S	3 E	Utah	May	17	1909	2440
Spring	Utah County Light and Power Co.	American Fork, Utah	Domestic	.25		8	4 S	2 E	Utah	May	26	1909	2458
Spring	James H. Jensen	Murray, Utah	Domestic	.1		33	2 S	1 W	Salt Lake	June	2	1909	2477
Spring	J. W. Beasley	Provo	Miscellaneous	.25		9							
						10	10 S	2 W	Utah	June	7	1909	2491
School House Springs	Lehi and Alpine Cities	Lehi and Alpine, Utah	Domestic	5		7	4 S	2 E	Utah	June	8	1909	2495
Springs	J. A. Holdaway	Provo, Utah	Power	10		12	4 S	1 E	Utah	June	10	1909	2504
Springs	Koran L. Morris	Salt Lake City	Irrigation	1.5		35	1 S	1 E	Salt Lake	June	24	1909	2539

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Bingham Metal Mining Company	Salt Lake City	Power	2		16	4 S	2 W	Tooele	July	12	1909	2571
Salt Creek	C. T. Hoffman	Salt Lake City	Power	18		6	13 S	2 E	Juab	July	14	1909	2573
Springs	Eugenia N. Stokes	Salt Lake City	Irrigation	2		26	1 S	1 E	Salt Lake	July	23	1909	2591
Snake Creek	Knight Power Co., Assignee Snake Creek Power Co.	Provo, Utah	Power	10		12	3 S	3 E	Wasatch	July	26	1909	2598
Snake Creek	Knight Power Co., Assignee, Snake Creek Power Co.	Provo, Utah	Power	10		12	3 S	3 E	Wasatch	July	26	1909	2599
Spring Creek	J. W. Boyce	Murray, Utah	Miscellaneous	10		8	2 S	1 E	Salt Lake	July	28	1909	2604
Smarts Hollows Springs	Samuel A. Cornwall	Murray, Utah	Domestic	.5		35	1 S	1 E	Salt Lake	Aug.	3	1909	2612
Spring	A. A. Noon et al	Provo, Utah	Domestic	.02		21							
Spring	George E. Airis	Salt Lake City	Irrigation	55		22	10 S	2 W	Utah	Aug.	4	1909	2614
Spring	George E. Airis	Salt Lake City	Irrigation	.035		35	1 S	1 E	Salt Lake	Aug.	16	1909	2633
South Fork Provo River	Rainbow Trout Co., Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		35	1 S	1 E	Salt Lake	Aug.	16	1909	2634
						25 26 35 36	5 S	3 E	Utah	Aug.	16	1909	2641
South Fork Provo River	Rainbow Trout Co. Assignee, Hyrum Baird	Provo, Utah	Miscellaneous	10		25 26 35 36	5 S	3 E	Utah	Aug.	16	1909	2642
Spring Creek	State of Utah	Salt Lake City	Power	7		28	7 S	3 E	Utah	Aug.	20	1909	2647
Spring	No. Bingham Consolidated Mining Co.	Bingham, Utah	Miscellaneous	.008		34	2 S	2 W	Salt Lake	Aug.	24	1909	2658
Spring	West Prince of Wales Mining Co.	Salt Lake City	Domestic	.25		32	2 S	3 E	Salt Lake	Sep.	2	1909	2[illegible]
Snake Creek Tributary	Knight Power Co., Assignee, Snake Creek Power Co.	Provo, Utah	Power	2		17	3 S	4 E	Wasatch	Sep.	9	1909	2676
Snake Creek	Snake Creek Power Co	Provo, Utah	Power	24		17	3 S	4 E	Wasatch	Sep.	13	1909	2684

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Gus J. Henroid	Eureka, Utah	Domestic	.1		3	10 S	3 W	Juab	Sep.	28	1909	2710
Springs & Parleys Canyon Creek	S. J. Stookey	Salt Lake City	Irrigation	2		21	1 S	1 E	Salt Lake	Oct.	8	1909	2732
Springs	Gus J. Henriod	Eureka, Utah	Domestic	.1		16	10 S	4 W	Tooele	Oct.	11	1909	2737
Spring	S. A. Langton, et al	Salt Lake City	Irrigation	1		28	1 N	1 E	Salt Lake	Oct.	28	1909	2769
Spring	German E. Ellsworth	Chicago, Ill	Irrigation	.75		28 to 32	9 S	2 E	Utah	Oct.	27	1909	2770
Salt Creek	Nephi City Corp.	Nephi, Utah	Power	40		1	13 S	1 E	Juab	Oct.	28	1909	2774
Springs	John L. Ellerson, et al	Mona, Utah	Domestic	.1		15	11 S	1 W	Juab	Nov.	30	1909	2846
Salt Creek	Nephi Irrigation Co.	Nephi, Utah	Irrigation	11		Salt Creek				Dec.	13	1909	2870
Spring	S. A. Langton, et al	Salt Lake City	Miscellaneous	.1		28	1 N	1 E	Salt Lake	Dec.	21	1909	2887
Spring	Jessup Thomas	Heber, Utah	Irrigation	1		23	4 S	5 E	Wasatch	Dec.	2	1909	2891
Spring	Ed. C. Mecham	Provo, Utah	Miscellaneous	4		31	5 S	4 E	Utah	Feb.	9	1910	2904
Spring Creek	R. Leo. Bird	Provo, Utah	Miscellaneous	20		29	7 S	3 E		Jan.	24	1910	2944
Santaquin Creek	E. O. Bylund	Santaquin, Utah	Power	15		Santaquin Creek			Utah	Jan.	24	1910	2945
Spring	C. E. Thacker	Charleston, Utah	Miscellaneous	4		22	4 S	4 E	Wasatch	Jan.	27	1910	2948
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	8		22	4 S	4 E	Wasatch	Jan.	28	1910	2951
Spring	Geo. W. Daybell	Charleston, Utah	Miscellaneous	12		22	4 S	4 E	Wasatch	Feb.	2	1910	2966
Salt Creek	Parley P. Christison	Nephi, Utah	Power	15		4	13 S	1 E	Juab	Feb.	10	1910	2990
Spring	Independent Water Co.	Bingham, Utah	Miscellaneous	.003		35	3 S	3 W	Salt Lake	Feb.	14	1910	2994
Spring Creek	Progress Co.	Murray, Utah	Irrigation	10		16	2 S	1 E	Salt Lake	Feb.	23	1910	3017
Springs	W. L. Hays, et al	Pleasant Grove, Utah	Power	10		Springs			Juab	Feb.	25	1910	3023
Smarts Hollow Springs	Samuel A. Cornwall	Murray, Utah	Domestic	.5		35	1 S	1 E	Salt Lake	Mar.	5	1910	3046
Salt Creek	Enoch Burton, et al	Nephi, Utah	Power	25		3	13 S	1 E	Juab	Mar.	8	1910	3050
Spring	E. O. Bylund	Santaquin, Utah	Stockwatering	.01		31	9 S	2 E	Utah	Mar.	10	1910	3056
Springs	Joseph E. Bair	American Fork, Utah	Irrigation	.5		20	4 S	2 E	Utah	Mar.	15	1910	3073
Spring Hollow Spring	F. R. Chandler	Salt Lake City	Irrigation	.5		11	1 S	1 E	Salt Lake	Mar.	19	1910	3080
Santaquin Creek	Knight Power Co., Assignee, Knight Investment Co.	Provo, Utah	Power	25		19	10 S[a]	2 E	Utah	Apr.	1	1910	3096
Snake & Lavina Creeks	Knight Power Co., Assignee, Snake Creek Power Co.	Provo, Utah	Power	25		17	3 S	4 E	Wasatch	Apr.	1	1910	3097

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Knight Power Co., Assignee. Knight Investment Co.	Provo, Utah	Miscellaneous	.25		13	10 S	1 E	Utah	Apr.	1	1910	3098
Salt Creek	Nephi City Corp.	Nephi, Utah	Power	40		6	13 S	2 E	Juab	Apr.	1	1910	3099
Spring Branch and Dry Canyon Creek	Cyrus G. Gatrell	Salt Lake City	Domestic	.35		22 27	1 N	1 E	Salt Lake	Apr.	16	1910	3134
Springs	L. R. Thomas	Salt Lake City	Irrigation	1		22	1 N	1 E	Salt Lake	Apr.	20	1910	3144
Spring	Soren K. Jorgensen	Salt Lake City	Irrigation	1		33	1 S	1 E	Salt Lake	Apr.	26	1910	3169
Springs	Clear Springs Trout and Poultry Company	Salt Lake City	Power	6		20	1 S	1 E	Salt Lake	May	2	1910	3181
Spring and Utah Lake	Fera Decker	Provo, Utah	Irrigation	10		10 11	8 S	1 E	Utah	May	2	1910	3183
Springs	Milson R. Pratt	Salt Lake City	Irrigation	.25		Springs			Salt Lake	May	9	1910	3197
Spring	Preston G. Peterson	Provo, Utah	Miscellaneous	.5		11	8 S	1 E	Utah	May	9	1910	3202
Summit Creek	Summit Creek Irr. and Canal Co., Assignee E. O. Bylund	Santaquin, Utah	Irrigation	9		11	10 S	1 E	Utah	June	3	1910	3273
Springs	Louis Fugal et al	Mona, Utah	Irrigation	3		Springs				June	11	1910	3294
Springs	W. L. Hays et al	Pleasant Grove, Utah	Irrigation	10		Springs			Juab	June	15	1910	3303
Summit Creek	E. O. Bylund	Santaquin, Utah	Power	10		11	10 S	1 E	Utah	June	21	1910	3321
Springs	Alfred J. Sprague	Provo, Utah	Miscellaneous	10		36	5 S	3 E	Utah	June	25	1910	3335
Shales Spring	M. N. Bird	Springville, Utah	Domestic	.8		28 29 32 33	9 S	1 E	Utah	June	27	1910	3337
Slough Creek	Charles Crane	Salt Lake City	Miscellaneous	5		18	2 S	1 E	Salt Lake	June	28	1910	3340
Summit Creek	E. O. Bylund	Santaquin, Utah	Irrigation	3		Summit Creek			Utah	June	30	1910	3360
Spring	John O. Edwards	Charleston Utah	Miscellaneous	15		15	4 S	4 E	Wasatch	July	5	1910	3365
	Henry Robins	Murray, Utah	Miscellaneous	3		17	2 S	1 E	Salt Lake	July	8	1910	3371
South Fork Creek	Rainbow Trout Co.	Provo, Utah	Power	40		25 26 35 36	5 S	3 E	Utah	July	11	1910	3385

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Shingle Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		26	4 S	1 W	Summit	July	11	1910	3386
Shingle Creek	Joseph R. Murdock	Heber, Utah	Irrigation	50		3	3 S	7 E	Summit	July	11	1910	3387
Summit Creek	Summit Creek Irr. and Canal Co.	Santaquin, Utah	Irrigation	4		13	10 S	1 E	Utah	July	11	1910	3390
Springs	Summit Creek Irr. and Canal Co.	Santaquin, Utah	Irrigation	13		Springs			Utah	July	14	1910	3399
Spring	Emigration Mt. Home Co.	Salt Lake City	Domestic	.75		32	1 N	2 E	Salt Lake	July	22	1910	3414
Spring	St. Joseph Water and Irr. Co.	Salt Lake City	Irrigation	1		13	1 N	1 W	Salt Lake	July	26	1910	3417
Slate Canyon Water	F. W. C. Hathenbruck	Provo, Utah	Power	8		8	7 S	3 E	Utah	July	26	1910	3418
Springs	Edgar W. Druce	Salt Lake City	Domestic	.25		35	2 S	3 E	Salt Lake	Aug.	12	1910	3448
Spring	M. A. West	Salt Lake City	Domestic	.5		27	1 N	2 E	Salt Lake	Sept.	3	1910	3487
Spring Branch American Fork Creek	American Fork City, et al	American Fork, Utah	Irrigation		400	Spring Branch			Utah	Sept.	28	1910	3518
Spring Creek	George Y. Wallace	Salt Lake City	Power	4		2	2 S	1 E	Salt Lake	Sept.	30	1910	3520
Seven Mile Pass Wash	George E. Howe, et al	Salt Lake City	Irrigation	10		7 Mile Pass Wash			Utah	Nov.	7	1910	3583
Spring Creek	State of Utah	Salt Lake City	Power	7		28	7 S	3 E	Utah	Nov.	17	1910	3608
Twin Springs	Arthur Murphy	Salt Lake City	Irrigation	5		Twin Springs			Tooele	May	8	1909	2413
Tanners Pond	Clarence L. Tanner	Murray, Utah	Miscellaneous	10		16	2 S	1 E	Salt Lake	Mar.	22	1910	3083
Tanners Pond & Spring Creek	George E. Reese	Salt Lake City	Miscellaneous	10		16	2 S	1 E	Salt Lake	Oct.	1	1910	3522
Utah Lake	Joseph R. Murdock, Assignee, Jos. B. Keeler	Provo, Utah	Irrigation	40		35	5 S	1 W	Utah	Mar.	21	1909	2331
Upper and Lower Springs	Provo Valley Trout Co.	Murray Utah	Miscellaneous	100		2	4 S	4 E	Wasatch	Apr.	21	1909	2379
Upper, Peterson Basin & Thomas Fork Springs	Mt. Olympus Fruit & Livestock Farm Co.	Salt Lake City	Irrigation	6		1	2 S	1 E	Salt Lake	June	17	1909	2515
Utah Lake	Francis D. Brown	Salt Lake City	Irrigation	8.75		18	6 S	1 E	Utah	June	28	1909	2543
Utah Lake	Jas. W. Wade	Salt Lake City	Irrigation	5		4	8 S	1 W	Utah	Jan.	17	1910	2916
Utah Lake	James Clove	Provo, Utah	Power	5.4		31	6 S	1 E	Utah	Jan.	18	1910	2918
Utah Lake & Warm Spgs.	Wm. G. Williams	Provo, Utah	Irrigation	5		2	8 S	1 E	Utah	Mar.	5	1910	3043
Utah Lake	Evan A. Angley	Salt Lake City	Irrigation	1.5		31							
						32	6 S	1 E	Utah	Mar.	10	1910	3057
Utah Lake	Fera Decker	Provo, Utah	Irrigation	20		17	8 S	1 E	Utah	May	2	1910	3180
Utah Lake	Joseph W. Gates	Salt Lake City	Irrigation	2.66		31	6 S	1 E	Utah	May	4	1910	3186

APPLICATIONS TO APPROPRIATE WATER FROM THE UTAH LAKE—JORDAN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Utah Lake	Joseph Warhurst	Salt Lake City	Irrigation	2.66		31	6 S	1 E	Utah	May	11	1910	3211
Utah Lake	Benjamin F. Anderson	Salt Lake City	Irrigation	2.66		31	6 S	1 E	Utah	May	11	1910	3212
Utah Lake	M. G. Sacrider	Salt Lake City	Irrigation	2.5		34	7 S	1 W	Utah	July	2	1910	3362
Utah Lake	F. M. Lyman, et al	Salt Lake City	Irrigation	50		35	5 S	1 W	Utah	July	29	1910	3424
Utah Lake	Murray City Corp.	Murray, Utah	Irrigation	50			Utah Lake		Utah	Nov.	30	1910	3645
Vanders Pond	Charles S. Vander	Salt Lake City	Miscellaneous	5		20	1 S	1 E	Salt Lake	Apr.	21	1910	3146
Vanders Pond	Charles S. Vander	Salt Lake City	Miscellaneous	10		20	1 S	1 E	Salt Lake	Apr.	21	1910	3149
White Pine, Red Pine & Red Bird Creeks	Henry C. Lund	Salt Lake City	Power	23		10	3 S	2 E	Salt Lake	June	16	1909	2513
Wire Grass Spring	R. D. Wadley, et al	Pleasant Grove, Utah	Domestic	.25		32	4 S	2 E	Utah	July	8	1909	2557
Water Hollow	Nephi Irrigation Co.	Nephi, Utah	Irrigation	15		4	13 S	2 E	Juab	Dec.	4	1909	2855
Wash Canyon	Louis Fugal, et al	Mona, Utah	Mining	.125			Wash Canyon		Juab	June	11	1910	3295
West Canyon Wash	Nate Rockhill	Lehi, Utah	Irrigation	5		26	5 S	1 W	Utah	Aug.	24	1910	3471

Applications to Appropriate Water from the Green River Drainage Area.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Ashley Creek	Jos. Paulson, Assignee												
	David Mackay, et al	Jensen, Utah	Irrigation	8		23	5 S	22 E	Uintah	May	11	1909	2428
Avintaquin Creek, So. F'k	Alberta Singleton, et al	Soldier Summit	Irrigation	2		6	6 S	8 W	Wasatch	Sep'r	24	1909	2708
Bitter Creek	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colo.	Irrigation		6000	1	20 S	25 E	Grand	Jan.	28	1909	2245
Burnt Fork	Emma J. Saddler et al	Burnt Fork, Wyo.	Irrigation	8		31	3 N	17 E	Summit	Feb.	13	1909	2273
Black Fork	Ft. Bridger Land and Water Co.	Salt Lake City	Irrigation		25000	5	15 N. 6 Prin.	115 W Mer.	Summit	July	3	1909	2275
Bull Hollow	Edward C. Jensen	Cleveland, Utah	Irrigation		2000	33	17 S	10 E	Emery	May	6	1909	2409
Big Brush & Little Brush Creeks	Aurin T. Sheldon, et al	Vernal, Utah	Irrigation	30	1299	25	4 S	22 E	Uintah	Mar.	14	1910	2772
Black Fork	Uintah Development Co.	Evanston, Wyoming	Irrigation		5000	5	15 N	115 W 6 P M	Summit	Nov.	2	1909	2781
Black Fork	Uintah Development Co.	Evanston, Wyoming	Irrigation		6600	5	15 N	115 W 6 P M	Summit	Nov.	2	1909	2782
Brumley Creek	R. L. Winbourn	Moab, Utah	Irrigation	1			26 S	24 E	Grand	Nov.	10	1909	2801
Bob Hil Spring	M. S. Black	Huntington, Utah	Stockwatering	.10			Bob Hill Spring		Emery	Apr.	9	1910	3119
Brumley Creek	R. L. Winbourn, et al	Moab, Utah	Irrigation	2		1	27 S	23 E	San Juan	May	12	1910	3215
Brown's or Coal Canon Wash	A. C. Snyder	Elgin, Utah	Irrigation	.05		15	21 S	16 E	Grand	June	10	1910	3291
Birch Spring	Snellen Johnson	Vernal, Utah	Irrigation	.25		36	3 S	19 E	Uinta	June	20	1910	3317
Big Spring	Heber Moon	Hanna, Utah	Irrigation	1.3		17	1 N	8 W	Wasatch	June	29	1910	3353
Beaver Creek	John F. Williamson	Salt Lake City	Miscellaneous	3		7	13 S	8 E	Carbon	July	9	1910	3375
Beaver Creek	John F. Williamson	Salt Lake City	Miscellaneous	7		7	13 S	8 E	Carbon	July	9	1910	3376
Beaver Creek	Wm. O. Sodergreen	Elk Mountain, Wyo.	Irrigation	1.53		18	3 N	16 E	Summit	Oct.	17	1910	3544
Billings Spring	Ben Daniels	Jensen, Utah	Stockwatering	.125			Billings Spg Uinta			Nov.	2	1910	3573
Beaver Creek	G. A. Richards	Colton, Utah	Irrigation	5		4	13 S	3 E	Carbon	Nov.	21	1910	3631
Beaver Creek	F. E. Murray	Salt Lake City	Irrigation	5		4	13 S	8 E	Carbon	Nov	21	1910	3632
Cottonwood and Westwater Creeks	Grand Valley Fruit and Water Co. Assignee, Wm F. Marrs, et al	Denver, Colo.	Irrigation		28000	19	20 S	25 E	Grand	Jan.	28	1909	2242
Cottonwood Creek	C. L. Allen	Salt Lake City	Power	100		15	18 S	7 E	Emery	Feb.	4	1909	2258
Cottonwood Creek	C. L. Allen	Salt Lake City	Power	60		15	18 S	7 E	Emery	Feb.	17	1909	2280
Cottonwood Creek	Electric Power & Milling Co.	Orangeville, Utah	Power	20		24	18 S	7 E	Emery	May	1	1909	2396

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Cottonwood Spring	Grant Squirer	Cisco. Utah	Irrigation	1		26	19 S	23 E	Grand	May	10	1909	2417
Cottonwood Creek	Grant Squirer	Cisco. Utah	Irrigation	6		19	19 S	23 E	Grand	May	10	1909	2418
Courthouse Box Spring	J. E. Brown	Moab. Utah	Stockwatering	.001	.001		Courthouse B. Sp.		Grand	June	17	1909	2516
Courthouse Seep	J. E. Brown	Moab. Utan	Stockwatering	.003	.003		Courhouse Seep		Grand	June	17	1909	2517
Currant Creek	Fruitland Water Co	Salt Lake City	Irrigation	60		35	2 S	10 W	Wasatch	Sep.	11	1909	2681
Cottonwood Spring	Grant Squirer	Cisco. Utah	Irrigation	.5		26	19 S	23 E	Grand	Sep.	29	1909	2715
Cottonwood Creek	Grant Squirer	Cisco. Utah	Irrigation	4		18	19 S	23 E	Grand	Sep.	29	1909	2716
Cottonwood Spgs. Wash	Lenora A. Epperson	Greenriver. Utah	Irrigation	2.25		24	21 S	15 E	Emery	Oct.	2	1909	2718
Cottonwood Creek	Electric Power & Milling Co.	Orangeville, Utah	Power	40		14	18 S	7 E	Emery	Dec.	13	1909	2871
Cisco Wash	Grand Valley Fruit and Water Co.	Denver. Colo.	Irrigation	20		15	21 S	23 E	Grand	Jan.	21	1910	2926
Court House Seep	J. E. Brown	Moab. Utah	Stockwatering	.01			Court House Seep		Grand	Jan.	24	1910	2931
Courthouse Box Spring	J. E. Brown	Moab. Utah	Stockwatering	.01			Ct. House Box Spg		Grand	Jan.	24	1910	2934
Cottonwood Wash	Sunnyside Res. Irr. Land & Stock Co.	Sunnyside. Utah	Irrigation		1600	6	15 S	13 E	Carbon	Mar.	14	1910	3065
Cottonwood Creek	Grand Valley Fruit and Water Co.	Denver. Colo.	Irrigation	10		30	20 S	25 E	Grand	Apr.	7	1910	3110
Coyote Creek	Andrew G. Tangreen, et al	Moab. Utah	Irrigation	1		9							
						16	29 S	24 E	San Juan	Apr.	13	1910	3127
Cottonwood Spring	Edward Kendall	Vernal. Utah	Miscellaneous	.25		16	4 S	20 E	Uintah	Apr.	16	1910	3136
Cottonwood Spring	Snellen Johnson	Vernal. Utah	Stockwatering	.25		30	3 S	20 E	Uintah	Apr.	19	1910	3139
Chicken Spring	Snellen Johnson	Vernal. Utah	Stockwatering	.25		30	3 S	20 E	Uintah	Apr.	19	1910	3140
Cottonwood Wash	Dennis Barry	Myton. Utah	Irrigation		320	29	3 S	1 E	Uintah	Apr.	30	1910	3178
Coats or Granite Creek	A. D. Wall	Denver. Colorado	Irrigation	60		31	21 S	26 E	Grand	May	16	1910	3226
Cottonwood Creek	Walter S. Dayton	Marrs. Utah	Irrigation	10			Cottonwood Creek		Grand	May	17	1910	3232
Currant Creek	Louis Sweat et al	Heber. Utah	Irrigation	48.75		27	2 S	10 W	Wasatch	June	18	1910	3313
Cottonwood Spring	Joseph Hay et al	Rock Springs. Wyo.	Stockwatering	.1		6	3 S	25 E	Uintah	June	29	1910	3344
Cottonwood Spring	Harry G. Ballard	Thompsons. Utah	Stockwatering	.01		16	20 S	21 E	Grand	July	13	1910	3396
Canyon Spring	Albert M. Rogers. et al	Moab. Utah	Irrigation	.5		1	26 S	21 E	Grand	Aug.	16	1910	3457
Crescent and Ten Mile Washes	Grand Valley Land and Mineral Co.	Indianapolis. Ind.	Irrigation		3000	27	22 S	19 E	Grand	Sept.	16	1910	3502

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued

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Coal Creek	Ralph S. Michel	Chicago, Ill	Miscellaneous	2		16	13 S	8 E	Carbon	Oct.	19	1910	3545
Cottonwood Creek	David Smith	Salt Lake City	Irrigation	5		29	4 S	4 W	Wasatch	Nov.	7	1910	3581
Cottonwood Creek	David Smith	Salt Lake City	Irrigation	5		15	4 S	4 W	Wasatch	Nov.	7	1910	3582
Cottonwood Creek	Fred T. Warner	Myton, Utah	Irrigation	4		29	4 S	4 W	Wasatch	Nov.	7	1910	3583
Desert Lake	F. F. Noyes	Helper, Utah	Irrigation	3		32	16 S	11 E	Emery	Dec.	31	1908	2205
Drainage Water	Vernal City	Vernal, Utah	Miscellaneous	3		23	4 S	21 E	Uintah	Jan.	30	1909	2250
Duchesne River	George Cluff	Theodore, Utah	Irrigation	99.4		30	2 S	5 W	Wasatch	Feb.	19	1909	2287
Duck Lake & Georges F'k	Ferron Ck. Irr. & Res. Co.	Ferron, Utah	Irrigation		528	7							
						8							
						13	20 S	7 E	Sanpete	Mar.	10	1909	2317
Duchesne River	John A. Fortie	Theodore, Utah	Irrigation	7		29	2 S	5 W	Wasatch	Apr.	16	1909	2371
Duchesne River	Sallie M. Calvert	Myton, Utah	Irrigation	2.66		26	3 S	1 W	Wasatch	Apr.	19	1909	2378
Duchesne River	Ouray Irrigation Co	Ouray, Utah	Irrigation	8		3	4 S	2 E	Uintah	May	3	1909	2402
Duchesne River	F. H. Lott	Myton, Utah	Irrigation	500		5	4 S	4 W	Wasatch	May	5	1909	2403
Dry Gulch Wash	Chas. A. Milligan et al	Independence, Utah	Irrigation	4.5		27	2 S	1 W	Wasatch	May	14	1909	2437
Dry Gulch Creek	Dry Gulch Irr. Co.	Roosevelt, Utah	Irrigation	33		25	1 S	2 W	Wasatch	June	21	1909	2524
Dry Gulch Creek	Dry Gulch Irr. Co.	Roosevelt, Utah	Irrigation	27		16	2 S	1 W	Wasatch	June	21	1909	2525
Dry Gulch Creek	Dry Gulch Irr. Co.	Roosevelt, Utah	Irrigation	50		14	1 S	2 W	Wasatch	June	21	1909	2526
Dead Man Spring	May A. Doak	Montrose, Colo.	Stockwatering	.08	.08		Dead Man	Spring	Grand	June	23	1909	2536
Dutch John Spring	Walter B. Dunton	Rock Springs, Wyo.	Irrigation	.5		1	2 N	22 E	Uintah	July	2	1909	2551
Desert Lake Wash	B. R. McDonald, Assignee Heber Howard, et al	Desert Lake, Utah	Irrigation	2		32	16 S	11 E	Emery	Aug.	23	1909	2552
Duchesne River	Samuel J. Maxwell	Stockmore, Utah	Irrigation	1		10	1 S	8 W	Wasatch	July	6	1909	2555
Deep and Geyser Creeks	Samuel M. Bowley et al	Paradox, Colorado	Irrigation	50		10	26 &						
						34	27 S	25 E	Grand	Oct.	12	1909	2741
Deep Creek	Guy A. Long	Roosevelt, Utah	Irrigation	1.25		17	1 N	2 E	Uintah	Oct.	19	1909	2751
Duchesne River	Herbert V. Frazier, et al	Utahn, Utah	Irrigation	2		4	1 S	8 W	Wasatch	Nov.	1	1909	2776
Danish Wash	Grand Valley Fruit and Water Co.	Denver, Colo.	Irrigation	10		6	21 S	24 E	Grand	Jan.	21	1910	2925
Dead Man Spring	Mary J. Doak	Montrose, Colorado	Stockwatering	.08			Dead Man	Spring	Grand	Feb.	9	1910	2987
Dry Fork Ashley Creek	Uintah Realty & Investment Co.	Vernal, Utah	Irrigation	124			3 S	19 E	Uintah	Mar.	5	1910	3047
Dry Gulch Creek	J. E. Strain	Roosevelt, Utah	Irrigation	11.5		24	1 N	3 W	Wasatch	May	21	1910	3248

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

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Dry Fork	Uinta Realty and Investment Co	Vernal, Utah	Irrigation	10			3 S	19 E	Uintah	May	27	1910	3257
Duchesne River	John L. Nowland	Myton, Utah	Irrigation	140		1	4 S	4 W	Wasatch	June	16	1910	3306
Deer Creek	James H. Mayes	Salt Lake City	Miscellaneous	3		10	17 S	7 E	Emery	July	21	1910	3411
Deep Creek	Leomma A. Shields	Park City, Utah	Irrigation	3.3		22	3 S	10 W	Wasatch	Aug.	17	1910	3463
Duchesne River	Ethan J. Jeremy	Salt Lake City	Irrigation			27	1 N	9 W	Wasatch	Aug.	31	1910	3482
Duchesne River	Orson T. Hisken	Tabby, Utah	Irrigation	4.33		32	1 S	7 W	Wasatch	Sept.	14	1910	3499
Duchesne River	Knight Power Co.	Provo, Utah	Power	50		2	3 N	9 W	Wasatch	Sept.	29	1910	3519
Duchesne River	Knight Power Co.	Provo, Utah	Irrigation	50		2	3 N	9 W	Wasatch	Oct.	1	1910	3521
Duchesne River	Chas. E. Westover	Theodore, Utah	Irrigation	.5		13	3 S	5 W	Wasatch	Oct.	22	1910	3546
Daniels Spring	Ben Daniels	Jensen, Utah	Stockwaterlng	.1			Daniels Spring		Uintah	Nov.	2	1910	3572
Diamond or Jones Hole Creek	Henry Praefke	Vernal, Utah	Power	15		1	3 S	25 E	Uintah	Nov.	10	1910	3592
Diamond or Jones Hole Creek	Henry Praefke	Vernal, Utah	Power	30		12	3 S	25 E	Uintah	Nov.	10	1910	3593
East Birch Spring	Geo. C. Julions	Vernal, Utah	Stockwatering	.25		31	3 S	20 E	Uintah	Apr.	19	1910	3141
East Trough Spring	Orson Hyde	Heber, Utah	Stockwatering	.05		16	2 N	21 E	Uintah	July	8	1910	3372
Ferron Creek	C. L. Allen & Co.	Orangeville, Utah	Power	20		7	20 S	7 E	Emery	June	8	1909	2492
Fork Spes. Lake Canyon	James E. Van	Theodore, Utah	Irrigation	.8		31	5 S	7 W	Wasatch	Feb.	21	1910	3013
Fish Canyon Creek	Irvin branch	Wellington, Utah	Irrigation	5		32	13 S	12 E	Carbon	May	10	1910	3218
Grand River	Jas. C. Armstrong	Salt Lake City	Irrigation	20		22	21 S	24 E	Grand	Dec.	3	1908	2177
Grand River	Jas. C. Armstrong	Salt Lake City	Irrigation	20		14	20 S	25 E	Grand	Dec.	3	1908	2178
Green River	Island Home Irri. Co	Green River, Utah	Irrigation	5		32	20 S	16 E	Grand	Jan.	12	1909	2219
Green River	Green River Dev. Co. and A. W. Hille, Assignees, A. C. Honore	Provo, Utah	Irrigation	2000			Green River		Emery and Grand	Jan.	13	1909	2221
Green River	Samuel J. Fell	Salt Lake City	Irrigation	1		22	21 S	16 E	Grand	Jan.	18	1909	2225
Gordon Creek	N. G. Mathis, et al	Price, Utah	Irrigation	4		10	14 S	9 E	Carbon	Jan.	29	1909	2246
Gordon Creek	N. G. Mathis et al	Price, Utah	Irrigation	6		10	14 S	9 E	Carbon	Feb.	8	1909	2257
Green River	Robert Z. McCoy	Encampment, Wyo.	Irrigation	90		1	5 S	23 E	Uintah	Feb.	8	1909	2263
Green River	Lorin I. Long	Green River, Utah	Power	10		3	20 S	16 E	Grand	Feb.	8	1909	2265
Green River	Vernon C. Ward	Green River	Irrigation	1000	480000		16 S	17 E	Emery and Grand	Feb.	17	1909	2278
Grand River	Grand Valley Fruit and Water Co. Assignee, W. P. & G. O. Marrs	Denver, Colorado	Irrigation		15000		20 S	25 E	Grand	Feb.	18	1909	2284
Green River	Milton Simon	Salt Lake City	Irrigation	5		22	21 S	16 E	Emery	Mar.	9	1909	2315
Grand River	Grand Valley Fruit and Water Co., Assignee, Wm. P. Marrs, et al	Denver, Colorado	Power	10000			21 S	25 E	Grand	Apr.	22	1909	2380

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Green River	John T. Pope et al	Salt Lake City	Irrigation	10		19 24	4 S	23 & 24 E	Uintah	May	12	1909	2431
Grimes Wash	Charles R. Curtis	Orangeville, Utah	Irrigation	1		14	18 S	7 E	Emery	June	10	1909	2503
Green River	Alfred Powell	Vernal, Utah	Irrigation	1		21	6 S	21 E	Uintah	Aug.	23	1909	2654
Green River	John T. Pope	Ogden, Utah	Irrigation	10		24	4 S	23 E	Uintah	Aug.	24	1909	2659
Green River	H. E. Silliman	Winfield, Kansas	Irrigation	15		16	20 S	16 E	Grand	Sep.	11	1909	2679
Green River	H. E. Silliman	Winfield, Kansas	Irrigation	5		32	20 S	16 E	Grand	Sep.	11	1909	2680
Gordon Creek	John F. Williamson	Salt Lake City	Miscellaneous	2		17 18 19	13 S	8 E	Carbon	Oct.	12	1909	2739
Gordon Creek	John F. Williamson	Salt Lake City	Miscellaneous	4		17 18 19	13 S	8 E	Carbon	Oct.	12	1909	2740
Grand River	John J. Anderson	Cisco, Utah	Irrigation	6		34	21 S	24 E	Grand	Feb.	8	1910	2977
Gordon Creek	Domenico Milano	Price, Utah	Irrigation	4		10	14 S	9 E	Carbon	Mar.	1	1910	3036
Grand River	Mrs. Augusta Devine	Marrs, Utah	Irrigation	10		14	21 S	24 E	Grand	June	27	1910	3336
Green River	Augustine Kendall	Rock Springs, Wyo.	Irrigation	10		22	2 N	24 E	Uintah	June	27	1910	3339
Green River	Uinta Irr. & Power Co	Salt Lake City	Power		10000	24	4 S	23 E	Uintah	June	30	1910	3357
Green River	E. J. Jeremy	Salt Lake City	Irrigation	3		27	1 N	9 W	Wasatch	Aug.	31	1910	3481
Grand River	Grand Mutual Dev. Co.	Denver, Colo.	Irrigation	100		16	21 S	25 E	Grand	Aug.	31	1910	3483
Huntington Creek	Lewis S. Trapp et al	Rock Springs, Wyo.	Irrigation		20000	10	17 S	8 E	Emery	Mar.	22	1909	2329
Huntington Creek	Geo. A. Snow, Assignee Henry C. Lund	Salt Lake City	Irrigation	150	5500	6	17 S	8 E	Emery	Apr.	8	1909	2356
Huntington Creek	Geo. A. Snow, Assignee Henry C. Lund	Salt Lake City	Irrigation		4000	6	17 S	8 E	Emery	Apr.	8	1909	2357
Horsethief Spring	P. Crout	Moab, Utah	Stockwatering	.01	.01		Horsethief	Spring	Grand	June	22	1909	2528
Huntington Creek	P. E. & L. W. Johnson	Huntington, Utah	Power	100		8	17 S	8 E	Emery	July	16	1909	2577
Huntsman's Spring	E. C. Huntsman	Cedarview, Utah	Irrigation	.5		25	1 S	2 E	Wasatch	July	30	1909	2608
Huntington River	Castle Valley Coal Co	Salt Lake City	Power	150		22	16 S	7 E	Emery	Oct.	18	1909	2748
Hereford Wash	Peter G. Wall	Salt Lake City	Irrigation	4		26	3 N	19 E	Uintah	Jan.	31	1910	2954
Horse Thief Spring	P. Crout	Moab, Utah	Stockwatering	.02			Horse Thief	Sp.	Grand	Feb.	9	1910	2986
Huntington Creek	Enterprise Canal Ass'n	Huntington, Utah	Irrigation	15		9	17 S	8 E	Emery	Feb.	11	1910	2992

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Huff Spring	Alonzo Brinkerhoff	Emery, Utah	Stockwatering	.1		33	17 S	10 E	Emery	Apr.	5	1910	3105
Huntington Creek	Geo. A. Snow	Salt Lake City	Irrigation		10000	9			Emery &				
						16	17 S	8 E	Sanpete	Apr.	23	1910	3161
Huntington Creek	Geo. A. Snow	Salt Lake City	Irrigation		5500	9							
						16	17 S	8 E	Emery	Apr.	23	1910	3162
Hill Creek	J. C. Nelson	Salt Lake City	Irrigation	10		25	11 S	19 E	Uintah	July	6	1910	3366
Hart Draw	Hart Draw Land & Irrigation Co.	Moab, Utah	Irrigation	21		17	31 S	23 E	San Juan	Sept.	12	1910	3494
Indian Canyon Creek	David L. Price	Draper, Utah	Irrigation	2.67		31	4 S	5 W	Wasatch	June	4	1909	2480
Indian Canyon Creek	Millard L. Chaffin	Leavenworth, Kas.	Irrigation	2.5		28	5 S	6 W	Wasatch	Apr.	3	1910	3128
Icelander Creek	R. M. Palmer, et al	Wellington, Utah	Irrigation	.25		1	15 S	13 E	Carbon	Oct.	22	1910	3548
Johnson Spring	Thomas B. Foy	Moab, Utah	Stockwatering	.02		6	26 S	22 E	Grand	Mar.	8	1910	3049
Jesson Wash	James Thomsen	Greenriver, Wyo.	Irrigation	3.75		30	3 N	20 E	Uintah	June	9	1910	3289
Klondike Wash	F. B. Hammond, Jr.	Moab, Utah	Irrigation		2500	31	23 S	20 E	Grand	Aug.	1	1910	3425
King Spring, and Spring	Albert M. Rogers, et al	Moab, Utah	Irrigation	.25		1	26 S	21 E	Grand	Aug.	16	1910	3456
Lake Fork Creek	C. E. Hill, et al	Roosevelt, Utah	Irrigation	4		8	1 S	4 W	Wasatch	Jan.	2	1909	2206
Lake Fork Creek	Joseph T. Henrie	Manti, Utah	Irrigation	2		22	1 S	4 W	Wasatch	Jan.	6	1909	2212
Lake Fork Branch	John J. Moyes, et al	Myton, Utah	Irrigation	12.5		20	2 S	3 W	Watatch	Jan.	11	1909	2231
Lake Fork River	George Summers	Myton, Utah	Irrigation	2.66		33	2 S	3 W	Watatch	Feb.	1	1909	2252
Lake Fork River	Wm. S. Smalley	Myton, Utah	Irrigation	2.66		20	2 S	3 W	Wasatch	Feb.	18	1909	2285
Lodge Pole Creek	Ammon Nebeker, et al	Manila, Utah	Irrigation	10		2	2 N	18 E	Uintah	Apr.	7	1909	2355
Lake Fork	J. C. Anderson	Boneta, Utah	Irrigation	2		28	1 S	4 W	Wasatch	June	15	1909	2509
Little Spring Canyon	Wm. A. Doak	Montrose, Colo.	Stockwatering	.007	.007		Little Spg. Canyon		Grand	June	23	1909	2535
Lake Fork	John Holleltz, et al	Vernal, Utah	Irrigation	10		33	2 S	3 W	Wasatch	July	1	1909	2548
La Sal Creek	Gertrude W. Carpenter	La Sal, Utah	Irrigation	5		25	28 S	24 E	San Juan	July	19	1909	2585
Lake Fork River	Farnsworth Canal & Res. Co.	Boneta, Utah	Irrigation	37.5		33	2 N	5 W	Wasatch	July	31	1909	2609
Limestone Spring	Mary E. Hacking	Vernal, Utah	Stockwatering	.5		18	1 S	22 E	Uintah	Aug.	30	1909	2661
Limestone Spring	John S. Hacking	Vernal, Utah	Irrigation	2		18	1 S	23 E	Uintah	Aug.	30	1909	2662
Lake Fork	C. C. Parsons, Jr.	Salt Lake City	Power	50		23	3 N	5 W	Wasatch	Sep.	3	1909	2668
Lake Fork	C. C. Parsons, Jr.	Salt Lake City	Power	20		8	3 N	4 W	Wasatch	Sep.	3	1909	2670
Little Grand Spring	W. D. Thompson	Greenriver, Utah	Stockwatering	.02		17	22 S	18 E	Grand	Oct.	14	1909	2746
Lake Fork Lake or Moonlight Lake	Ephraim McMillan, Sr.	Heber, Utah	Irrigation	37		18	2 N	5 W	Wasatch	Nov.	5	1909	2790
Lake Fork Creek	Hughgene O'Neill	Myton, Utah	Irrigation	2.66		20	2 S	3 W	Wasatch	Nov.	6	1909	2797

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Lake Fork	Joel S. Wilson	Alexander, Utah	Irrigation	2.66		21	1 N	4 W	Wasatch	Dec.	18	1909	2883
Lake Fork Creek	H. C. Means	Ft. Duchesne, Utah	Power	60		20	2 S	3 W	Wasatch	Feb.	8	1910	2978
Little Spring Canyon Spg.	Wm. A. Doak	Montrose, Colorado	Stockwatering	.02		Little Sp. Can. Sp.			Grand	Feb.	9	1910	2983
La Sal Creek	Andrew G. Tangreen, et al	Moab, Utah	Irrigation	10		17	28 S	25 E	San Juan	Apr.	13	1910	3126
Lake Fork River	Charles Milne	Myton, Utah	Irrigation	2		2	3 S	3 W	Wasatch	May	9	1909	3198
Little Red Creek	Rollie G. Baum	Midway, Utah	Irrigation	7.43		3							
						13	2 S	10 W	Wasatch	May	31	1910	3264
Lake Fork River	B. L. Dart	Myton, Utah	Power	60		20	2 S	3 W	Wasatch	Feb.	8	1910	3268
Lake Fork Creek	Farmer's Irrigation Co	Alexander, Utah	Irrigation	96		21	1 N	4 W	Wasatch	July	6	1910	3369
Lake Fork River	Francis M. Ross, et al	Myton, Utah	Irrigation	17.3		33	2 S	3 W	Wasatch	Aug.	20	1910	3466
Lake Fork	Wm. A. Johnston	Boneta, Utah	Irrigation	11		21	1 S	4 W	Wasatch	Oct.	6	1910	3575
Lonesome Spring & Creek	J. C. Jensen	Heber, Utah	Irrigation	10		5	4 S	9 W	Wasatch	Nov.	10	1910	3594
Lake Fork River	Oliver H. Clark	Vernal, Utah	Irrigation	1		5	1 S	4 W	Uintah	Nov.	15	1910	3602
Mill Creek	Wm. V. Wright et al	Palisade, Colorado	Irrigation		1367		26 S	22 E	Grand	May	7	1909	2407
Miller Creek	Edwin Wright	Salt Lake City	Irrigation		2000	27	15 S	9 E		May	26	1909	2457
Minnie Creek	Charles Thornburg	Soldier Summit, Utah	Irrigation	3		36	5 S	9 W	Wasatch	Sep.	24	1909	2707
Meeks Springs	Maurice Lawson	Utahn, Utah	Irrigation	2.33		24	2 S	8 W	Wasatch	Oct.	8	1909	2734
Miller Creek	George M. Miller	Huntington, Utah	Irrigation	10	1000	29	15 S	9 E	Carbon	Apr.	25	1910	3168
Mill Creek	Spanish Valley Water & Land Co. Assignee W. W. Taylor	Chicago, Ill.	Irrigation		15000	35	26 S	22 E	Grand	Nov.	20	1909	2826
Middle Beaver Creek	H. J. Gregory et al	Lone Tree, Wyoming	Irrigation	20		31							
						32	3 N	16 E	Summit	May	10	1910	3206
Mill Creek and Pack or Brumley Creek	Spanish Valley Water & Land Co	Salt Lake City	Irrigation	50	1000	36	26 S	22 E	San Juan	July	5	1910	3359
Mud or Chokecherry Spg.	Orson Hyde	Heber, Utah	Stockwatering	.05		5	2 N	21 E	Uintah	July	8	1910	3374
Miners Basin Creek	Vernon Snavely	Castleton, Utah	Irrigation	2.3			25 S	23 E	Grand	Aug.	3	1910	3432
Marcine Wash	C. H. Gibbs	Salt Lake City	Irrigation	10	847	4	16 S	11 E	Emery	July	11	1910	3383
Miller Wash	Peter Frandsen	Price, Utah	Stockwatering	.1		Miller Wash			Carbon	Sept.	19	1910	3507
Neck Spring	P. Crout	Moab, Utah	Stockwatering	.01	.01	Neck Spring			Grand	June	22	1909	2527
Nash Wash	Grand Valley Fruit and Water Co.	Denver, Colo.	Irrigation	10		32	21 S	23 E	Grand	Jan.	21	1910	2924

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County	Month	Day	Year	
Neck Spring	P. Crout	Moab, Utah	Stockwatering	.02			Neck Spring		Grand	Feb.	9	1910	2985
Natural Lake	Clarence L. Johnson, et al	Roosevelt, Utah	Irrigation		320	6	2 N	6 W					
						8	1 S	4 W	Wasatch	Aug.	8	1910	3442
Nine Mile or Minnie Maud Creek	Preston Nutter	Price, Utah	Irrigation	5		27	11 S	18 E	Uintah	Oct.	22	1910	3517
Price River	Limone Donato	Helper, Utah	Irrigation	1		12	13S	9 E	Carbon	Feb.	8	1909	2266
Pinicle Wash	Willard E. Christenson	Price, Utah	Domestic	.5		13	14 S	9 E	Carbon	Apr.	8	1909	2359
Price River	Chas. McPherson et al	Winter Quarters, Ut'h	Irrigation	50		15	17 S	1 E	Emery	June	16	1909	2514
Price River	North-West Co., Assignee E. Warren Stees	Salt Lake City	Irrigation		18000	16	17 S	13 E	Emery	July	22	1909	2590
Price River	E. Warren Stees	Salt Lake City	Irrigation	800	200000	22	17 S	13 E	Emery	Oct.	5	1909	2720
Price River	North-West Co	Chicago, Ill.	Irrigation		210000	22	17 S	13 E	Emery	Oct.	26	1909	2768
Price River	James Martella	Helper, Utah	Irrigation	.33		24	13 S	9 E	Carbon	Dec.	22	1909	2888
Pack Creek	A. M. Robertson et al	Moab, Utah	Irrigation	6		26	26 S	22 E	Grand	Feb.	3	1910	2968
Pack Creek	Moab Land Co. et al	Moab, Utah	Irrigation	6		26							
						27							
						22							
						23	26 S	22 E	Grand	Feb.	3	1910	2969
Price River	T. H. Auphand	Helper, Utah	Irrigation	.26		24	13 S	9 E	Carbon	Feb.	24	1910	3019
Pack Creek	Emma S. McConkie	Moab, Utah	Irrigation	3		26	26 S	22 E	Grand	Mar.	23	1910	3086
Placer Creek	Arthur D. Bird	Salt Lake City	Irrigation	10			Placer Creek		Grand	Mar.	26	1910	3088
Price River	F. L. Rager	Salt Lake City	Power	20		32	11 S	9 E	Carbon	June	6	1910	3283
Red Wash	William Gibson	Vernal, Utah	Irrigation		400	23	3 S	21 E	Uintah	Nov.	11	1909	2807
Rock Creek	Blue Bench Canal & Reservoir Co	Theodore, Utah	Irrigation	24		12	2 S	6 W	Wasatch	Nov.	18	1909	2818
Range Creek	Utah Fuel Co.	Salt Lake City	Miscellaneous	.813	196	36	14 S	14 E	Carbon	Dec.	8	1909	2862
Range Creek	Utah Fuel Co.	Salt Lake City	Domestic	.193	47	36	14 S	14 E	Carbon	Dec.	8	1909	2863
Range Creek	Utah Fuel Co.	Salt Lake City	Irrigation	3			14 & 15 S	14 & 15 E	Carbon	Dec.	8	1909	2864
Range Creek	Utah Fuel Co.	Salt Lake City	Irrigation	.994	158	36	14 S	14 E	Carbon	Dec.	8	1909	2865
Red Creek	Clinton H. Carey	Fruitland, Utah	Irrigation	14		25	2 S	9 W	Wasatch	Dec.	8	1909	2866
Ruple Spg. & Cherry Spg.	Arthur E. Ruple, et al	Vernal, Utah	Stockwatering		20	2							
						3	2 S	25 E	Uintah	Sept.	3	1910	3198
Red Creek & Spg. Branch	Joseph H. Kershaw	Fruitland, Utah	Irrigation	2		13	2 S	9 W	Wasatch	Nov.	7	1910	3586
Rabbit Gulch	Peater Barboglio	Tabby, Utah	Irrigation	1.5	40	26	3 S	6 W	Wasatch	Nov.	7	1910	3587
Red and Birch Creeks	George Muir	Heber, Utah	Irrigation	2.66			Red & Birch Cr'ks		Wasatch	Nov.	16	1910	3604
Red Creek	Clinton H. Carey	Fruitland, Utah	Irrigation	18.66		31	2 S	8 W	Wasatch	Apr.	23	1910	3163

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Sowers Creek	Willard E. Cox	Myton, Utah	Irrigation	2.25		6	5 S	3 W	Wasatch	Dec.	5	1908	2182
San Rafael River	Jansen E. Noble	Salt Lake City	Irrigation	2000		24	19 S	10 11 E	Emery	Dec.	15	1908	2188
Sunnyside Wash	Chas. Albert Pierson	Sunnyside, Utah	Irrigation	2.25		9	15 S	13 E	Carbon	Jan.	13	1909	2220
Springs	L. D. & Mead Crandall	Springville, Utah	Irrigation	2		36	8 S	1 W		Jan.	19	1909	2227
Springs and Drainage	Isabell M. Hocking	Vernal, Utah	Irrigation	1.5		12	3 S	20 E	Uintah	Jan.	26	1909	2237
Sunnyside or Cottonwood Wash	Sunnyside Res. I. L. & S. Co.	Sunnyside, Utah	Irrigation		600	6	15 S	13 E		Feb.	1	1809	2251
Spring	Jacob F. Buff	Cedar View, Utah	Domestic	.1		9	1 S	2 W	Wasatch	Mar.	1	1909	2303
Strawberry River	Wm. J. Williams	Theodore, Utah	Irrigation	2.66		3	4 S	6 W	Wasatch	Apr.	1	1909	2346
Sheep Creek	Ammon Nebeker et al	Manila, Utah	Irrigation	50		2	2 N	18 E	Uintah	Apr.	6	1909	2351
Seymour Springs	Louis Kabell	Vernal, Utah	Stockwatering	1		28	2 S	24 E	Uintah	May	7	1909	2406
Squaw Springs	Wm. S. Ashton	Vernal, Utah	Stockwatering	1		21	2 S	23 E	Uintah	May	18	1909	2443
San Rafael River	R. M. Eldred	Greenriver, Utah	Irrigation	3		23	23 S	14 E	Emery	May	20	1909	2446
Spring Branch	Maurice Lawson	Utahn, Utah	Irrigation		20	12	2 S	8 W	Wasatch	May	27	1909	2469
Spring	Martin J. Cleary	Soldier Summit, Utah	Irrigation	1		25	10 S	7 E	Utah	June	10	1909	2500
Spring	Chas. A. Johnson	Moab, Utah	Stockwatering	.01					Grand	June	17	1909	2518
Seven Mile Seep	Fannie M. Brown	Moab, Utah	Stockwatering	.01	.01		Seven Mile Seep		Grand	June	17	1909	2520
Seven Mile Wash Spring	James A. Dubois	Moab, Utah	Stockwatering	.01			7 Mile Wash Spg.		Grand	June	18	1909	2522
Spring Canyon Spring	Wm. A. Doak	Montrose, Colo.	Stockwatering	.005	.005		Spg. Canyon Spg.		Grand	June	23	1909	2534
Sheep Creek	P. G. Wall	Manila, Utah	Irrigation	100		3	2 N	18 E	Uintah	July	1	1909	2549
Springs	F. N. Cameron	Salt Lake City	Miscellaneous	.25		7	13 S	10 E	Carbon	July	6	1909	2554
Springs and Price River	Leon S. Shearer	Denver, Colo.	Irrigation		500	13 14	11 S	8 E	Utah	July	9	1909	2559
Spring	Matt Andler	Price, Utah	Irrigation	.5		34	15 S	8 E	Carbon	July	26	1909	2597
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.5		22	3 N	18 E	Uintah	Aug	14	1909	2626
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.25		14	3 N	18 E	Uintah	Aug.	14	1909	2627
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.5		24	3 N	18 E	Uintah	Aug.	14	1909	2628
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.025		23	3 N	18 E	Uintah	Aug.	14	1909	2629
Spring	Peter G. Wall	Salt Lake City	Irrigation	.5		22	3 N	18 E	Uintah	Aug.	14	1909	2630
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.5		24	3 N	18 E	Uintah	Aug.	14	1909	2631
Spring	Peter G. Wall	Salt Lake City	Stockwatering	.1		26	3 N	18 E	Uintah	Aug.	14	1909	2632
Spring	Keith Smith	Linwood, Utah	Irrigation	.16		23	3 N	23 E	Uintah	Aug.	23	1909	2657
San Rafael River	R. M. Eldred	Green River, Utah	Irrigation	3		23	23 S	14 E	Emery	Sep.	15	1909	2691
Spring	R. L. Marmion	White Rocks, Utah	Domestic	1		18	2 N	1 E	Uintah	Sep.	21	1909	2743
Spring	Charles Humes	Seber, Utah	Irrigation	5		15	3 S	9 W	Wasatch	Oct.	25	1909	2765

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA.—Continued.

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				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
Spring	Albert E. Provansal	Colton, Utah	Stockwatering	.4		28	5 S	9 W	Wasatch	Nov.	4	1909	2786
Spring	Albert E. Provansal	Colton, Utah	Stockwatering	.2		28	5 S	9 W	Wasatch	Nov.	4	1909	2787
Spring	Albert E. Provansal	Colton, Utah	Domestic	.2		28	5 S	9 W	Wasatch	Nov.	4	1909	2788
Spring	Albert E. Provansal	Colton, Utah	Domestic	.4		28	5 S	9 W	Wasatch	Nov.	4	1909	2789
Sego Lily Gulch	William Gibson	Vernal, Utah	Irrigation		400	23	3 S	21 E	Uintah	Nov.	11	1909	2806
Spring	Phil Pico Land & Livestock Co	Manila, Utah	Stockwatering	.25		2	2 N	18 E	Uinta	Nov.	30	1909	2841
Springs	John Siddoway	Vernal, Utah	Irrigation	.5		23	2 S	23 E	Uintah	Dec.	1	1909	2849
Smiths Fork Creek	Uinta Development Co.	Evanston, Wyo.	Irrigation		3500	7	14 N	115 W	6 Prin. Mer.	Summit	Dec.	15	1909	2875
Smiths Fork Creek	Uinta Development Co.	Evanston, Wyo.	Irrigation		1000	5	15 N	115 W	6 Prin. Mer.	Summit	Dec.	15	1909	2876
Sowers Canyon	Sowers Antelope Res. Co.	Theodore, Utah	Irrigation		100	33 34	5 S	5 W	Wasatch	Dec.	23	1909	2890
Spring	Peter G. Wall, Assignee, George M. Bacon	Salt Lake City	Irrigation	.5		22	3 N	18 E	Uintah	Jan.	17	1910	2917
Spring	C. A. Johnson	Moab, Utah	Stockwatering	.01			Spring		Grand	Jan.	24	1910	2932
Seven Mile Wash Spring	James A. Dubois	Moab, Utah	Stockwatering	.01			7 Mile Wash Spg.		Grand	Jan.	24	1910	2936
Seven Mile Seep	Fannie M. Brown	Moab, Utah	Stockwatering	.02			Seven Mile Seep.		Grand	Jan.	24	1910	2937
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		500	21	2 N	18 E	Uintah	Feb.	1	1910	2958
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		450	21	2 N	18 E	Uintah	Feb.	1	1910	2958a
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		2603	21	2 N	18 E	Uintah	Feb.	1	1910	2958b
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		1415	21	2 N	18 E	Uintah	Feb.	1	1910	2958c
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		744	25	2 N	17 E	Uintah	Feb.	1	1910	2959
Sheep Creek	Sheep Creek Irri. Co.	Salt Lake City	Irrigation		353	25	2 N	17 E	Uintah	Feb.	1	1910	2959a
San Rafael River	Alfred Forsman	Greenriver Utah	Irrigation		235	25	2 N	17 E	Uintah	Feb.	1	1910	2960
Springs	A. D. Van Wagonen	Sunnyside, Utah	Stockwatering	1		32	21 S	14 E	Emery	Feb.	1	1910	2963
Spring Canyon Spring	Wm. A. Doak	Montrose, Colorado	Stockwatering	.5			Springs		Emery	Feb.	7	1910	2974
Spring	Walter B. Dunton	Rock Springs, Wyo	Stockwatering	.02			Spring Canyon Sp.		Grand	Feb.	9	1910	2984
Spring	Walter B. Dunton	Rock Springs, Wyo	Stockwatering	.14		3	2 N	21 E	Uintah	Feb.	10	1910	2988
San Rafael River	J. M. Snow	Salt Lake City	Irrigation	.16		3	2 N	21 E	Uintah	Feb.	10	1910	2989
San Rafael River	J. M. Snow	Salt Lake City	Irrigation	10		27	22 S	14 E	Emery	Feb.	28	1910	3030
Springs	Lucian D. and Mead Crandall	Stockmore, Utah	Irrigation	10		27	22 S	14 E	Emery	Feb.	28	1910	3031
				4.6	30	36	1 S	8 W	Wasatch	Mar.	30	1910	3094

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Sears Springs	Wm. Luckinbill	Bridgeport, Utah	Irrigation	2.5		23	1 N	24 E	Uintah	Apr.	4	1910	3103
Spring	John Johnson	Green River, Utah	Irrigation	1		3	21 S	14 E	Emery	Apr.	4	1910	3104
Spring	James H. McGuire	Whiterocks, Utah	Irrigation	2		6	1 S	1 W	Wasatch	Apr.	14	1910	3129
Spring	Independent Coal & Coke Co.	Salt Lake City	Domestic	3		4	13 S	10 E	Carbon	Apr.	22	1910	3152
	Peter J. Naab	Fruitland, Utah	Irrigation	.66		30	2 S	7 W	Wasatch	Apr.	22	1910	3154
Spring Branch	John W. Smith	Green River, Utah	Irrigation	8		26	23 S	14 E	Emery	Apr.	30	1910	3179
San Rafael River	R. L. Kirk	Moab, Utah	Stockwatering	.2		18	16 S	19 E	Grand	May	10	1909	3203
Spring	W. A. Shideler	Marrs, Utah	Irrigation	.5		2	21 S	24 E	Grand	May	11	1910	3214
Spring	Milford B. Farnsworth	Hiawatha, Utah	Irrigation	2		34	15 S	8 E	Carbon	May	13	1910	3219
Spring	Rufus E. Lawton	Heber, Utah	Irrigation	3		31	2 S	7 W	Wasatch	May	21	1910	3236
Spring	Mat Andler	Hiawatha	Irrigation	.5		34	15 S	8 E	Carbon	June	11	1910	3296
Spring	August C. Dahlstrom	Eureka, Utah	Irrigation	2		32	21 S	14 E	Emery	June	15	1910	3304
San Rafael River													
Spring Canyon Burnt Tree Gulches	John Arronco	Kenilworth, Utah	Mining	1		1	13 S	8 E	Carbon	June	25	1910	3333
Spring Creek	Joseph Hay et al	Rock Springs, Wyo.	Irrigation	.25		19							
						30	3 S	25 E	Uintah	June	29	1910	3345
							14 S	11 E	Carbon	June	29	1910	3351
Soldier Creek	Erastus Anderson et al	Price, Utah	Irrigation	10					Emery	June	29	1910	3355
Springs	A. D. VanWagonen	Sunnyside, Utah	Stockwatering	.5			Springs						
Spring	James Liddell	Sunnyside, Utah	Stockwatering	.5		12	14 S	13 E	Carbon	June	29	1910	3356
Sagers Wash	Harry G. Ballard	Thompsons, Utah	Stockwatering	.02		4	21 S	21 E	Grand	July	13	1910	3395
Smith's Fork	Uintah Development Co.	Evanston, Wyo.	Irrigation		1400	7							
						8	14 N	115 W					
							6 Prin. Mer.						
Spring	Fred J. Wint	Marrs, Utah	Domestic	.08		35	20 S	24 E	Summit	July	15	1910	3413
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.03		17	13 S	16 E	Grand	Aug.	8	1910	3441
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.02		32	13 S	16 E	Carbon	Aug.	16	1910	3458
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.04		28	13 S	15 E	Carbon	Aug.	16	1910	3459
Spring	D. A. Tidwell	Wellington, Utah	Stockwatering	.01		22	11 S	16 E	Carbon	Aug.	16	1910	3460
Spring	D. A. Tidwell	Marrs, Utah	Domestic	.09		35	20 S	24 E	Carbon	Aug.	16	1910	3461
Spring	Geo. Canfield	Bridgeport, Utah	Irrigation	2.5		23	1 N	24 E	Grand	Aug.	18	1910	3464
Sears Spring	William Luckinbill	Green River, Utah	Stockwatering	.02		10	18 S	19 E	Uintah	Aug.	22	1910	3467
Steer Ridge Springs	W. D. Thompson	Sunnyside, Utah	Irrigation	6		10	23 S	14 E	Grand	Aug.	23	1910	3469
San Rafael River Fork	Andrew W. Dowd	Fruitland, Utah	Domestic	.5		19	3 S	7 W	Emery	Aug.	29	1910	3478
Spring	Ralph T. Lindblade	Vernal, Utah	Stockwatering	.25		1	3 S	25 E	Wasatch	Oct.	10	1910	3532
	Edward Wipple	Moroni, Utah	Irrigation	.111		24	14 S	3 E	Uintah	Oct.	14	1910	3539
Spring	Peter Olsen	Vernal, Utah	Irrigation	1			South Fork Spg.		Sanpete	Oct.	17	1910	3543
South Fork Spring	William Moore	Heber, Utah	Irrigation	2		8	4 S	10 W	Uintah	Oct.	28	1910	3556
Soldier Creek	John W. Rockhill								Wasatch	Oct.	31	1910	3560

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Soldier Creek	Wm. A. Rockhill	Heber, Utah	Irrigation	2		29	3 S	10 W	Wasatch	Oct.	31	1910	3561
Strawberry River and Indian Creek	U. S. Reclam. Service	Provo, Utah	Irrigation		60000	4 9 17 21	4 S	11 W		Oct.	31	1910	3563
Spring	L. H. Milton	Woodside, Utah	Stockwatering	.002		3	17 S	14 E	Emery	Nov.	11	1910	3595
Spring	Nels Monson	Woodside, Utah	Stockwatering	.001		3	17 S	14 E	Emery	Nov.	11	1910	3596
Spring	John Barbieri	Tabby, Utah	Irrigation	6		1	2 S	8 W	Wasatch	Nov.	16	1910	3603
Spring	Phil Pico Land and Live Stock Co.	Manila, Utah	Irrigation	.5		35	3 N	18 E	Uintah	Nov.	30	1909	2842
Spring	Phil Pico Land and Live Stock Co.	Manila, Utah	Irrigation	.5		35	3 N	18 E	Uintah	Nov.	30	1909	2843
Spring	Phil Pico Land and Live Stock Co.	Manila, Utah	Irrigation	.25		3	2 N	18 E	Uintah	Nov.	30	1909	2844
Taby Creek	Roy Gilman	Stockmore, Utah	Irrigation	.25		24	1 S	8 W	Wasatch	Jan.	18	1909	2226
Tabby Spring	J. H. Hardy	Roosevelt, Utah	Irrigation	2		21	5 S	5 W	Wasatch	Nov.	9	1910	3589
Trail Creek	John S. Hacking	Vernal, Utah	Irrigation	2		11	6 S	25 E	Uintah	Nov.	18	1910	3613
Uintah River	John J. Nielsen	Vernal, Utah	Irrigation	2.33		23	1 N	1 W	Uintah	Jan.	22	1909	2234
Uintah River	Adolpha Sessions	Hayden, Utah	Irrigation	2.5		23	1 N	1 W	Uintah	Feb.	18	1909	2283
Uinta River	Frank Orser et al	Whiterocks, Utah	Irrigation			25	1 N	1 W	Uinta	June	7	1909	2489
Upper Spring	James A. Dubois	Moab, Utah	Stockwatering	.0005		Upper Spring			Grand	June	18	1909	2523
Uinta River	David J. Peterson, et al	Hayden, Utah	Irrigation	11.4		23	1 N	1 W	Uinta	June	5	1909	2544
Uintah River	Geo. E. Young	Vernal, Utah	Irrigation	13		5	1 S	1 E	Uintah	July	12	1909	2570
Uintah	Orlando H. Bracken	Randlett, Utah	Irrigation	3.5		35	2 S	1 E	Uintah	Aug.	16	1909	2635
Uintah River	C. C. Parsons, Jr.	Salt Lake City	Power	125		11	3 N	3 W	Wasatch	Sep.	3	1909	2669
Unnamed Wash	Raymond J. Walker	Denver, Colorado	Irrigation	10		36	2 S	1 E	Uintah	Sep.	24	1909	2709
Upper Spring	James A. Dubois	Moab, Utah	Stockwatering	.01		Upper Spring			Grand	Jan.	24	1910	2933
Uinta River	Hattie Kinyon	Whiterocks, Utah	Irrigation	2.5		1	1 S	1 W	Uinta	Feb.	18	1910	3007
Uinta River	E. L. Oaks, et al	Whiterocks, Utah	Irrigation	12		23	1 N	1 W	Uinta	Feb.	18	1910	3008
Uintah River	O. S. Stout	Whiterocks, Utah	Irrigation	2.5		23	1 N	1 W	Uintah	Feb.	21	1910	3014
Uintah River	Mary L. Naylor	Whiterocks, Utah	Irrigation	2.5		23	1 N	1 W	Uintah	Feb.	24	1910	3022
Uintah River	Orlando H. Bracken	Randlett, Utah	Irrigation	3.5		35	2 S	1 E	Uintah	Mar.	11	1910	3059
Uintah River	Cedar View Irr. Co.	Cedarview, Utah	Irrigation	60		31	2 N	1 W	Uintah	Mar.	11	1910	3062
Uintah River	John H. O'Driscoll	Hayden, Utah	Irrigation	2.66		23	1 N	1 W	Uinta	Mar.	15	1910	3072

APPLICATIONS TO APPROPRIATE WATER FROM THE GREEN RIVER DRAINAGE AREA—Continued.

Source of Supply.	Name of Applicant.	Postoffice Address of Applicant	Use of Water.	Water Applied For In		Location of Point of Diversion.				Date of Priority.			Application No.
				Cu. Ft. per. sec.	Acre ft.	Sec.	Tp.	Range.	County.	Month	Day	Year	
West Cottonwood Creek	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colo.	Irrigation		6000	19	20 S	25 E	Grand	Jan.	28	1909	2243
West Water Creek	Grand Valley Fruit and Water Co., Assignee, Wm. F. Marrs, et al	Denver, Colo.	Irrigation		4000	3 19	20 S	25 E	Grand	Jan.	28	1909	2244
Willow Creek	R. W. Crockett	Price, Utah	Irrigation	200		Willow Creek			Carbon	Mar.	22	1909	2330
Waste Ditch	W. H. Davis	Price, Utah	Irrigation	1		25	13 S	9 E	Carbon	Apr.	16	1909	2370
Willow Spring	Chas. A. Johnson	Moab, Utah	Stockwatering	.01		Willow Spring			Grand	June	17	1909	2519
West, Middle, East and Beaver Creeks	Ed. H. Parkison	Encampment, Wyo.	Irrigation		100000	29	3 N	16 E		Aug.	13	1909	2625
White Rock Creek	E. D. R. Thompson	Salt Lake City	Irrigation	3.42		23	1 S	1 E	Uintah	Sep.	13	1909	2682
White Rocks River	R. L. Marmion et al	While Rocks, Utah	Irrigation	5		9	2 N	1 E	Uintah	Sep.	24	1909	2704
Willow Spring	C. A. Johnson	Moab, Utah	Stockwatering	.01		Willow Spring			Grand	Jan.	24	1910	2935
Whiterocks River	Christian Mooseman	Whiterocks, Utah	Irrigation	12		5	1 N	1 E	Uintah	Feb.	11	1910	2996
Willow Creek	Uteland Mining Co.	Ouray, Utah	Power	10		24	9 S	19 E	Uintah	Mar.	23	1910	3084
Willow Creek	V. C. Wightman	Ouray, Utah	Power	10		24	9 S	19 E	Uintah	Mar.	23	1910	3085
Wimmer Spring	Fera L. Young	Huntington, Utah	Stockwatering	.1		Wimmer Spring			Emery	Apr.	9	1910	3118
Warren Creek	Chas. M. Taylor	Bridgeport, Utah	Irrigation	1.5		27	2 N	24 E	Uintah	Apr.	25	1910	3166
Willow Creek	William L. Jones	Price, Utah	Irrigation	2.66		12	13 S	9 E	Carbon	May	19	1910	3234
Whiterocks River and Deep Creek	Uinta Realty and Investment Co	Vernal, Utah	Irrigation	150		5 8	1 S	1 & 2 E	Uintah	May	27	1910	3256
Whiterocks River	Ralph S. Marimon	Whiterocks, Utah	Irrigation	2.5		6	2 N	1 E	Uintah	June	21	1910	3319
White Sage Springs	Joseph Hay et al	Rock Springs, Wyo.	Stockwatering	.1		15	3 S	25 E	Uintah	June	29	1910	3343
White Sage Spring Creek	Joseph Hay et al	Rock Springs, Wyo.	Stockwatering	.1		15	3 S	25 E	Uintah	June	29	1910	3346
West Trough Spring	Orson Hyde	Heber, Utah	Stockwatering	.05		16	2 N	21 E	Uintah	July	8	1910	3373
Whiterocks River	Charles M. Collins, et al	Taft, Utah	Irrigation	9.5		6	1 N	1 W	Uintah	Sept.	12	1910	3495
Willow Creek	Grant Squirer	Cisco, Utah	Irrigation	2		1	19 S	20 E		Oct.	8	1910	3520
Wastewater Seepage	Fred H Neumeyer	Whiterocks, Utah	Irrigation	3		35	1 N	1 E	Uintah	Oct.	26	1910	3551
Yellow Cat Spring	F. B. Hammond, Jr.	Moab, Utah	Stockwatering	.01			23 S	20 E	Grand	Aug.	1	1910	3426

IRRIGATION DEVELOPMENT IN THE DUCHESNE RIVER BASIN.

INDIAN IRRIGATION. The main ditch constructions for the irrigation of the alloted lands on the Uintah Indian Reservation has been concluded and for most of these lands, lateral systems completed. To June 30, 1910, there had been expended for this work $579, 537.08, of which $143,991.86 were disbursed during the year preceding June 30, 1910. A total of 141.6 miles of main ditch has been built and 191.4 miles of laterals.

The ditches in many instances, after passing from the natural streams by easy gradients to the land to be irrigated, have needed frequently to proceed with the slope across areas that have a fine deep alluvial soil, easily attacked and cut away by running water. The natural gradients being too high to operate the ditches without disastrous results, it has been necessary to install drops at intervals as a measure of safety. This same problem has been met with in building the laterals and has been solved in the same way.

Where washes carrying at intervals large quantities of flood waters, are crossed by the ditches, it is provided that the flood water go under the canals by culverts, or the canals go over the washes by flumes. Roadways in great numbers cross these ditch lines, necessitating bridges. In addition, headgates, weirs, turnout gates, and other auxiliary constructions necessary to the operation or safety of these ditches have been built.

The country is far from the railroad, so that it has not been economically practicable to use concrete and steel. Timber of which a fairly good grade is to be had in the mountains adjacent to the ditches, has supplied the material out of which all the structures have been built.

As an index to the magnitude to this work, it appears that during the last fiscal year there were erected two hundred thirty-four timber structures, which required 570,687 feet B. M. of lumber. The work as a whole has been admirably constructed. It is an example of the greatest value to the practical irrigators there, as

to permanence reasonably attainable considering the necessities and limitations of the country.

The advantages derived by the expenditure of more than half a million dollars by the federal government during the opening of this country, has been of immeasurable assistance to the homesteader and white settler. The state is under the greatest obligation to the Indian Service for these substantial accomplishments in the way of irrigation works, which means so much to the economic welfare of the commonwealth.

This work of the federal government means more for the winning of that country to productive farming than the sum of all that has been done in that country by other agencies. It is a reasonable expectation that the state will do whatever it is necessary to do in order to properly protect the vast interests that are in course of perfection by the federal government for the Indians in Uintah and Wasatch counties.

The total area of arable, irrigable land covered by these constructions aggregates 85,880 acres. Only a small fraction of this area, however, is under actual cultivation and irrigation. The main effort of the Indian Service up until the present, has been concentrated upon building the irrigation works. A great work in clearing and cultivating the land remains to be done before the water rights upon which more than one-half million dollars have been spent are secure. While the Indians may do this work, in the light of past experience with these Indians, it is not a reasonable expectation.

Outside of the possibility of the Indians performing this labor, there are three other probable alternatives:

To lease these lands to white men for a term of years at a low rental, in consideration of their clearing and cultivating the land. This method will probably not work out successfully, if its success is to rest upon leasing to local white men. The country is new, land plenty and cheap, much arable, irrigable country having recently been sold at auction for $0.50 to $4.00 per acre. Under these circumstances, successful leasing must depend largely upon importing white men from a distance. If the country had good transportation facilities, this solution of the problem might be successfully obtained. The lack of

such transportation facilities, however, will mitigate strongly against the successful working out of this suggestion.

Many of the allottees are dead. Their lands are now "inherited lands" and may be sold. Further, under certain conditions and restrictions, live Indian lands may be sold. The clearing and cultivation of such lands might be secured by selling them to white men. Certainly the energy of the white man could be depended upon to scure by cultivation, a water right for the land he had purchased, if the land would be, as the fact is, without such water right, practically valueless.

The method of selling the Indian land, however, is not attractive. Not so much on account of price, but because it requires a down payment of the entire purchase price on the acceptance of the successful bid. In the west for many years, Carey Act lands have been and are being placed upon the market. The land and water rights sold for a small down payment, the balance in annual payments with an interest feature attached to the deferred portion. The United States Reclamation Service is opening a great many tracts for settlement, the terms being a small payment down and the balance in ten annual payments without interest. The State of Utah has offered lands and will offer other lands under ditch, with adequate irrigation water supplies for a small down payment, the balance in ten annual installments with interest at five per cent on deferred payments.

The methods adopted in the sale of Carey Act lands, the lands under United States Reclamation Service projects, and the lands under state irrigation projects, have been and now are pre-eminently attractive to the ordinary farm land purchaser. He has by these methods, opportunity to win at least a part of the purchase price of the land from the land itself, by its cultivation between the date of purchase and the date of final payment. Experience has amply demonstrated that the grantor has been and now is properly secured in the transaction.

If the Bureau of Indian affairs could modify its method of selling allotted Indian lands in what was the Uintah Indian Reservation, to approximate the deferred payment method with interest like those instances cited

above, unquestionably all the land heretofore offered at the appraised price of the offering would have been sold. Under the practice now had, practically none of the offered land has found a purchaser.

The last alternative is for the Indian Service in the same way that the irrigation works have been built, to proceed to clear, cultivate and irrigate, these 90,000 acres of land now commanded by the irrigation works that have just reached completion. While this would be justifiable rather than to allow the water rights dependent upon this cultivation to lapse, the method is so wasteful that if practically possible to avoid, it should not be undertaken.

IRRIGATION BY HOMESTEADERS. The extension of irrigation by homesteaders in the Valley of the Duchesne during the last two years, has made commendable advancement. While the amount and character of their irrigation works will not compare, either in extent or quality with the work of the Indian Service, they have far surpassed the Indian Service in respect to extending the actual cultivation of the land. The main areas under cultivation by the work of white settlers, lie along the main Duchesne Valley from Stockmore to Ouray; on the Lake Fork bench in the vicinity of Roosevelt and in the Deep Creek Valley.

HYDROGRAPHY. Since 1899, a set of gaging stations has been maintained in the Duchesne Basin at points most desirable, to show the volume of water supply available for irrigation. At first this work was done exclusively by the Indian Service. In 1905, the state interested itself far enough to contribute the money needed to pay the gage observers, the expense of maintenance of the stations and the employment of hydrographers being borne by the Indian Service. That arrangement will probably be continued until 1911, when it is understood the engineer in charge of the Indian irrigation will advise the discontinuance of this work and the abandonment of the several gaging stations in the Duchesne Basin. This recommendation is based upon the

judgment that the records having covered continuously practically twelve years, makes it sufficient for the uses of the Indian Service. While this is probably true, all the stations there should not be discontinued. Three at least of those now maintained should be made permanent, viz: the Duchesne River at Myton, the Uintah River at Fort Duchesne, and the Green River at Jensen.

It is universally recognized among water supply engineers, that one or two long term records in each climatic and physiographic unit, become, in the course of time, of very high value. They make the only dependable foundation upon which to predicate averages for other streams of such drainage unit, where the records are generally short and frequently broken for the period they do cover. The value and utility of such long term records will become correspondingly more and more important as the water supply of the state becomes more and more completely utilized. Irrigation development and beneficial use of the public water for any purpose, should not imperil its economic success by building commensurate with the years of plenty, nor should we have retardation of legitimate expansion by pleading inadequate water supply based upon years of famine.

The great doctrine of conservation, which now has such a hold upon the American public, cannot in this state be better served than by pursuing such investigation as will give the data upon which dependable averages for the run-off of our streams may be calculated and the future probabilities in relation thereto be reasonably forecast.

THE STRAWBERRY VALLEY IRRIGATION PROJECT, UTAH. UNITED STATES RECLAMATION SERVICE.

J. L. Lytel, Engineer.

The Strawberry Valley Project now under construction by the United States Reclamation Service will irri-

gate, when completed, approximately 60,000 acres of land lying to the east and south of Utah Lake.

The average elevation of this district is from 4,500 to 4,800 feet above sea level.

The anual rain fall: 18 inches.

The range of temperature from a maximum of 99 degrees to a minimum of 10 degrees below zero.

The principal products are alfalfa (3 crops), hay, cereals, sugar beets, fruits and vegetables.

The water supply for the project will come from the Spanish Fork River and Strawberry River. The former lies in the drainage basin of Utah Lake and the latter in the Colorado River drainage system.

A part of the land covered by this project has a partial water supply from the Spanish Fork River. It is planned to corporate the canals and laterals supplying this land in the new project.

The structural features of the project are as follows:

1. A dam across Strawberry River approximately 60 feet high and 400 feet long. This dam will develop a storage reservoir with a maximum capacity of 290,000 acre-feet. In addition to Strawberry River the waters of Indian Creek and Trail Hollow will be diverted into this reservoir by a canal approximately two and one-half miles long.

2. Strawberry Tunnel, 19,000 feet long, bored through the rim of the Great Basin will take the water from Strawberry Reservoir into the head waters of Diamond Creek, a tributary of Spanish Fork River. The tunnel will have a capacity of five hundred (500) cubic feet per second and will be concrete lined throughout.

3. Concrete Diversion Dam and Head Works on Spanish Fork River. These structures will divert the water of Spanish Fork River and that coming from the Strawberry Reservoir by way of Diamond Fork and Spanish Fork into the main canal of the system.

4. The Main, or High Line Canal as it is called, carried along the foot of the Wasatch Mountains, past the towns of Spanish Fork, Salem, Payson, Santaquin and around to the east side of West Mountain.

5. A hydro-electric power plant, with an ultimate capacity of 3,000 horse power, located at the mouth of

Spanish Fork Canyon. The power from this plant, which is partially completed, is at present being used in constructing the project. Ultimately it will be used for pumping water to lands that can not be reached by gravity canals, and also for draining low ground.

The work under construction and completed to date is as follows:

On the Strawberry Tunnel construction work is being carried forward from one heading at the west portal with three shifts. At the beginning of January, 1910, 5,505 feet had been completed, and at the end of this year the heading will be in approximately 10,700 feet.

The Diversion Dam on Spanish Fork River is practically completed and also three miles of the High Line Canal, which at present is being used as a feeder for the power house at the mouth of the canyon. This portion of the canal embraced 1,500 feet of tunnel; 750 feet of covered aqueduct; 8,000 feet of concrete lined section and 6,500 feet of earth section.

The power house at present contains two 450 K. W. generators and two 600 horse power water turbines. The power generated is transmitted by high tension line a distance of 26½ miles to the tunnel where it is used in construction work, and also to Spanish Fork City for lighting and power purposes.

At the Diversion Dam and Power House several brick and concrete dwellings have been constructed for use by the attendants.

The final location of the High Line Canal, twenty-five miles long, is practically completed.

To facilitate construction work on the project it has been necessary to construct down to date thirty miles of first class wagon road and forty miles of telephone line.

It is expected that during the coming year construction work will be begun on those features of the project that have not yet been touched.

The Board of Army Engineers appointed by President Taft, to investigate the various unfinished projects of the Reclamation Service, with the view of advising the President with reference to the distribution of the $20,000,000 loan recently authorized by Congress, has recom-

mended that $2,272,000 be allotted to the Strawberry Valley Project; which amount is deemed to be sufficient to complete the undertaking.

PIUTE PROJECT.

Joseph Jenson, Engineer.

During the season of 1909, the cliff at the head of the outlet tunnel for the Piute Reservoir, was cut back to solid rock; a shelf for the gate lifting stands was cut in this solid rock face at an elevation of ninety feet. The head end of the tunnel was enlarged to receive the regulating gates, the approach cut was widened and considerable rock which was found to have weathered badly in the first sixty feet of the tunnel was taken out, all involving a solid rock excavation of between three and four thousand cubic yards.

Sixty feet of the head end of the tunnel was lined with concrete. A heavy reinforced concrete breast was placed across the tunnel head and three four feet by four feet iron gate seats set therein. A concrete slab securely anchored to the rock face was continued from this breast to the lifting stand shelf ninety feet above. Here a heavy block of concrete was anchored and the steel bridge in which the lifting stands were afterward set was bedded in the concrete. The gates were installed and connected by means of heavy stems with guides to the lifting stands above.

The outlet cut at the outlet end of the tunnel had been paved with rock obtained from the tunnel excavation in 1908. The side slopes had been protected by a hand laid dry wall of this same rock. It was found that a large portion of this rock had crumbled under the weather conditions to which it had been exposed. This rock was all taken out, good hard lava rock was hauled in from a considerable distance and put in its place. On account of the poor foundation on which it had to be placed, the whole was covered with a slab of concrete,

thus preventing the exit water from the tunnel getting in and behind the rock floor and walls and cutting them out. At the end of the paved portion of the outlet cut, a cut-off wall with wide flaring wing walls was constructed and a bridge was placed over the outlet.

A trench four to ten feet deep and twelve to fifteen feet wide was cut across the river channel immediately at the lower toe of the proposed dam. Into this trench was dumped all rock of average good quality obtained incidentally from the workings of the dam site. This trench has been completely filled with rock and a bank of rock about two feet high now occurs along the lower toe of the dam. This will serve as a drain as well as an anchor for the lower toe of the dam and prevent its sloughing or sliding down stream.

In August, 1909, a contract was let to excavate the core trench and put in the puddle core. This involved the cutting of a trench 25 feet top width, 15 feet bottom width, with an average depth of about 30 feet and about 400 feet long. The state constructed a temporary dam to turn the river through the tunnel, so as to give the contractors access to the river bed below. Under the terms of this contract, the work was to have been completed by January 1, 1910. But little progress was made on the contract work during this period and the State Land Board authorized an extension of time up until March 1, 1910. On January 2, 1910, a heavy thaw up the river resulted in a mid winter flood, bringing with it large quantities of ice, which blocked up the entrance to the tunnel, causing a washout of the temporary diversion dam. The river was again turned by a similar dam. However, before this dam was entirely completed, another freshet caused a second wash out. The engineer in charge then recommended that instead of trying to control the river by means of a temporary embankment, that the upper toe of the main dam be built in a permanent and substantial manner, and to such a height that the high spring water in the river could be forced through the tunnel and prevent any further flooding of the workings below. This suggestion having been adopted, the upper toe of the main dam was built during the early summer months of 1910, to an elevation of 41 feet and

incidently there was stored in the reservoir about eight thousand (8,000) acre-feet of water. After this water had been drawn down and used for irrigation, a heavy rock rip rap was placed on the permanent slopes of the embankment.

As a precautionary measure, a temporary by pass was cut through the rock on the east, so that if any floods should occur beyond the capacity of the tunnel to take care of, a large body of water might be diverted along the east end of the embankment without danger to the structure or interference with the progress of the work below.

In the meantime, the contractors on the core trench and puddle wall had made but little progress. The time for the completion of the work under the contract had been finally extended to July 15, 1910. On the recommendation of the engineer in charge, endorsed by the State Engineer, the State Land Board at its August meeting relieved the contractors from further operation. The engineer in charge was requested to furnish plans and estimates of cost for completing the work left by the contractors. Two alternative schemes were detailed and submitted with recommendations.

One scheme was contingent upon the installation of a sluicing plant for putting in the main fill; the alternative plan contemplated the purchase of a rather expensive steam plant. At its meeting in September, the State Land Board adopted the engineer's recommendation on the sluicing proposition.

Optional contracts with the water users for the use of Ten Mile Creek for power and sluicing purposes had before been obtained by the State Engineer. Options for the use of water from Cottonwood Creek were also secured.

Work on a canal from Cottonwood to Ten Mile and on the pipe line trench from Ten Mile to the dam site was begun forthwith. Contracts for pipe and machinery for sluicing plant and pumping plant were let, most of which has been received and installed at the present writing (November 30, 1910). It is fully expected that all will be in operation within two or three weeks at the outside.

The present conditions of the dam site are such that at comparatively small expense, the structures can be put in shape to store from ten to twenty thousand acre-feet of water for the irrigating season of 1911.

The work under the contract for the canal enlargement, the canal extension and canal structures referred to in connection with the Piute Project in the State Engineer's report for 1907 and 1908 is practically completed.

The following tabulated statement of cost data with reference to the Piute Project, will serve to show what has been done and the expense the state has been put to up to the present for the performance of the work:

COST DATA PIUTE PROJECT TO OCTOBER 31, 1910.

Reservoir site and water rights	$ 36,957.30
Contractor's estimates (canal)	144,534.67
Contractor's estimates (reservoir)	18,894.50
Cement and lumber (contract)	14,889.73
Force account (canal)	13,864.11
Force account (reservoir)	41,906.54
Engineering superintendence and general expense	24,791.99
Office expense	3,095.33
For expenses incurred by the State Land Board not in the records of the State Engineer	6,033.83
Total	$304,968.00

To Complete the Piute Project there will be required:

FOR THE CANAL

From Joseph to Richfield.

Excavation under Hoggan contract 11,180 yards	$ 2,466.60
Sediment to be removed 17,990 yards	3,598.00

To construct four drops (concrete)	1,159.00
To construct five back waters (concrete)	1,560.00
To construct waste gates at Jericho point	1,288.00
To repair four over shots and two bridges	380.00
To construct three over shots and one foot bridge	780.00
To construct three tile under shots, one concrete lateral, one culvert	680.00
Total	$11,911.60

From Richfield to Redmond.

To construct two bridges	$ 394.00
To construct two over shots	450.00
Rip rap and baffel gate at twenty-four foot drop	100.00
Flood and canal gates, Denmark, Wash	380.00
Rip rap and grouting Denmark Wash	210.00
Reinforcing upper bank	600.00
Removing 12,000 cubic yards of sediment	2,400.00
Thirty turnouts (concrete)	1,500.00
Total	$6,034.00

From Redmond to Canal Terminus.

For excavation 150,000 cubic yards	$33,000.00
For eight bridges	1,600.00
For twenty culverts (concrete)	4,200.00
For two drops (concrete)	2,100.00
For twenty turnouts (concrete)	1,000.00
Total	$41,900.00
For the construction of the diversion works at Joseph	13,000.00
Total for the canal and diversion works	$72,846.00

For Storage Dam.

For the completion of core trench and puddle wall	$ 19,840.35
For concrete dyke, bottom of core trench	1,875.00
For sluicing plant which is made up of 12,200 feet of 16-inch wood stave pipe, 2,000 feet of 12-inch wood stave pipe, 175,000 feet of lumber, 90,000 pounds steel plate to line sluice flumes, two giants, pipe fittings, etc.	35,061.40

Labor charge for sluicing 300,000 cubic-yards of fill at 14c		42,000.00
For cutting spillway approximately 40,000 cubic-yards probably one-half solid rock		30,000.00
Rip rap for face of dam 5,100 cubic-yards		10,200.00
Probable charge for rental of water for sluicing		5,000.00
To lay concrete floor in outlet tunnel, 80 cubic-yards at $13.50		1,080.00
Total		$145,056.75
Deduct machinery and wood pipe received to October 31, 1910	$3,364.90	
Deduct cement on hand, 600 sacks at 85c	510.00	
Deduct for lumber on hand, 75,000 feet at $22	1,650.00	
Deduct labor of installation of sluicing plant to November 1, 1910	3,014.50	
Total		$ 8,539.40
Balance		$136,517.35

SUMMARY.

Estimated cost to complete canal and head works	$ 72,846.00
Estimated cost to complete storage dam	136,517.35
Estimated cost to complete Piute Project	$209,363.35
Add 15 per cent for engineering superintendence and exigencies	31,804.65
Total to complete construction of Piute Project	$241,168.00
Cost of Piute Project to October 31, 1910	304,968.00
Estimated cost of construction of completed Piute Project	$546,136.00

It is proposed to offer at this time to the private land owners under the Piute Canal, who have arid lands without a water right under said canal, in Sevier County, between Joseph City, where the intake of the Canal is located, and Redmond, the present terminus of the canal, water rights for the irrigation of these lands.

The state is able to provide sufficient water for the year of 1911, to irrigate all such lands in this area in private ownership.

A policy fair to the land owner and serving at the same time, the interests of the state, would be for the Land Board to provide that land owners in this area who refuse or neglect to sign contracts for water at this time, should not be able hereafter to obtain as advantageous terms as are now offered by the state.

The cost of the water right per acre in the form of contract now offered is $35. Land owners who delay beyond a date to be fixed by the Board, which date should not be later than April 1, 1911, should be charged at the rate of $38 per acre for the same right that is now offered for $35. Each additional year of delay should entail an advance of $3.00 per acre on the purchase price.

The adoption of such a policy must not be looked upon as a penalty. These lands are practically valueless for any purpose without water from the irrigation system provided by the state. Before this project was undertaken, lands in this area sold for $3.00 per acre. The same lands are now being sold for from $25 to $30 per acre. The advance in valuation is entirely due to the location of these lands below the Piute Canal. The speculative owner has received a large profit as it is, and any further tendency to delay getting these lands into productive cultivation should be discouraged.

Such a policy as that outlined above, doubtless will prove in practical operation, fairly efficacious in impelling land owners to get into contract with the state now, as the advance in price for contracts would measurably offset the advance in value of the real estate of the unsigned land, due to the general agricultural advance of the surrounding cultivated area.

The adoption of some such policy is earnestly urged. Any delay on the part of the land owner after the state

is ready to deliver water, not only adds to the immediate burden of the state, but increases the cost of the project to the purchaser.

The best interests of the state and the land owner is served by getting the land into productive cultivation at the earliest possible moment and in equity any added cost due to the delinquency of the land owner, should be as nearly as determinable borne by the land owner. In this view of the matter, the land owner who neglects to contract for water when the state is able to deliver the water is by a progressively added charge for water right for his land, due to such delay, bearing but his just part of an added cost for which he is entirely responsible.

In case sufficient private lands are not signed up for water rights, to consume the water supply available in 1911, the Land Board should sell the state lands within the area now commanded by the Piute Canal, which comprises an area of 2,000 acres of arable, irrigable land.

HATCHTOWN PROJECT.

Joseph Jenson, Engineer.

The storage dam at Hatch has been constructed, with its auxiliary, regulating and safety structures. These regulating structures include a heavy stone masonry outlet culvert, five feet wide by eight feet high inside, a reinforced concrete gate chamber with two 4 x 4½ feet gates, a stone masonry double compartment tower connecting the gate chamber with the crest of the dam, with suitable gate lifting stands and their housing at its top.

The safety structures consist of a spillway 80 feet wide cut through the gravel hill about two hundred feet east of the dam. This is provided with a flash board regulating trestle founded on a deep concrete cut-off wall at its upper end, another deep concrete cut-off wall near its lower end and immediately below and connecting with this, a rollerway or apron, the floor of which is formed with a hand laid layer of rock covered with a layer of cement mortar grouting.

At the beginning of the irrigating season of 1910, there was stored in the reservoir very nearly its full capacity of water. Under the pressure thus produced, a slight seepage occurred at the east end of the dam. This seepage saturated the material at the lower toe of the dam causing some sloughing at that place. A heavy bank of rock was piled against the slope of the dam along the line where the sloughing occurred while the water was still at its maximum height in the reservoir and the sloughing tendency entirely checked. Thereafter the dam stood the test of its first season of service in an entirely satisfactory manner.

The timber crib rock-fill diversion weir about fourteen miles down the river from the storage dam was constructed during the past season and has stood the test of flood and high water in an entirely satisfactory manner. The head gates and sluiceway have also been completed according to plans and specifications. There remains to be done in connection with the head works, the construction of a fish ladder over the diversion weir and a measuring weir and fish screen to be installed in the headgate box.

The canal with its flumes, culverts, bridges and turnouts has been completed. The canal runs through a country which is subject to sudden heavy down pours of rain, usually during the months of July and August. One of the problems has been to protect the canal from damage and consequent disuse, by the torrents of water which accummulate in the natural water courses which cross the course of the canal.

The experience of the local canal companies has been that each summer these floods have come down and cut out large sections of their canals entailing considerable loss, not only because of the immediate damage due to the floods, but also because their canals have been put out of commission for repairs during the heavy irrigation season. To obviate these conditions as far as possible in the state canal, flood water structures have been placed at the intersections of the canal and all the prominent water courses. Most of these structures consist of stone masonry and concrete culverts under the canal with flaring wing walls at the ends.

A number of these had already been constructed prior to the flood season of 1909. In nearly every instance they worked admirably while a flood was at its height, but as the flood began to recede and the carrying capacity of the stream decreased, great quantities of sand and fine gravel, loosened by the flood, were deposited along the gentler grades of the flood wash and in several cases, completely filled the culvert. If the culvert was not promptly cleaned out, the next flood which might come within a few hours would have no outlet and the consequence would be a wash-out of the canal.

During the spring and summer of 1910, a concrete floor was placed between the flaring wing walls at the upper end of each culvert extending back some six to eight feet. At the upper end of this floor or apron, a cut-off wall was also constructed with its crest three to four feet higher than the floor of the culvert. The object was to hold back in the wash, the sand and gravel carried by the tail end of the flood, by decreasing the grade in that portion of the water course and also to produce a water fall immediately at the head of the culvert, which would aid in cleaning the culvert below.

The experiment proved to be entirely satisfactory. During the 1910 season, every culvert on the canal served its purpose without the least trouble. The canal has sustained satisfactorily, a thorough test and is in readiness for regular service. The cost of the Hatchtown Project to November 30, 1910, is $149,498.73.

CAREY ACT PROJECTS.

Of the several Carey Act Projects which have been initiated in the state, only one has as yet reached the stage where the reclamation of the land is in course of accomplishment. This project is located in Millard County, the tract of land involved being near the Town of Oasis. The water supply for these lands comes mainly from a storage reservoir on the Sevier River, situated ten miles south of Jaub Station in Juab County. This

reservoir is capable of storing ninety thousand (90,000) acre-feet of water. One-half of the reservoir is owned by the Carey Act Company—the Oasis Land and Water Company. The stored water from this reservoir is expected to irrigate the forty thousand acres of arable, irrigable land contained in the Carey Act withdrawal of the company.

While a great deal of work has been done to get the water to the land, while many settlers are on the ground, while much of the land has been sold, and while a considerable portion of the land sold has been put in condition to grow crops, a series of misfortunes has happened to the irrigation works, so that although the water supply in the river and in the storage reservoir of the company has been ample, this water supply by reason of the failures of the irrigation works, has been cut off in the middle of the growing season for two successive years, causing great loss and greater discouragement.

Many of the settlers blame the Carey Act Company for these misfortunes, holding that much of the work was inadequate and some of the work of crucial importance to have been negligently constructed. These discontented settlers have begun an action against the company for damages, which is now running its course in the state courts. In the meantime, the company is making great efforts to get financial assistance to reconstruct on safer lines, those parts of the irrigation system which have been lost.

The main trouble has turned upon the effort to maintain across the course of the Sevier River, in a deep alluvial country, a diversion dam thirty-six feet high built of earth. The river bed at the point where the dam was located, is underlaid for a depth of some sixteen feet with quick sand, which rests upon a thick firm layer of clay.

The plans for the first dam constructed here provided for a timber sheet piling, to reach from the fill through the sand and well into the underlying clay. After the failure of this dam, it was observed and so reported by responsible engineers, who examined the situation immediately after the failure, that many of these piles were not long enough to reach more than two-thirds of the distance through the sand. In such case the cause of the

failure is patent. The hydrostatic head maintained at the upper side of the dam while the structure was in use, caused part of the sand base of the dam to flow away and the structure failed.

The second dam was built in the same location as the first dam, the auxiliary structures (outlet tunnel and spillway) of the first dam being used for the second. In this second structure, a double row of tripple lapped sheet piling was to be sunk toward the upper toe of the dam from the fill to the subjacent clay, longtitudinally this double diaphragm of timber to be co-extensive with the fill. Across the course of this timber piling diaphragm occurred the outlet tunnel of the old dam. The piling approached this tunnel from the south, jumped over the space of the tunnel and continued north as far as projected.

From such evidence as is available, it appears that the break at the tunnel was the most serious opening that had been left in the sand between the fill and the clay. That the omission of the piling at the tunnel was a vital mistake, appeared after the dam had been in use several months. When this dam failed, the concrete tunnel and concrete spillway were carried away and the effort to maintain this part of the original idea was finally abandoned.

In the interval between the completion of this dam and its failure, the State Land Board was approached by the Oasis Land and Irrigation Company for the acceptation of the construction features of its contract with the state. Before the Board would take affirmative action, an examination of this dam was ordered to be made by the State Engineer. In pursuance of that order, Mr. Jenson made an examination and submitted the following report:

"In compliance with your request, I have made careful investigation of the condition and method of construction of the reinstalled diverting dam of the Oasis Land and Irrigation Company and Melville Irrigation Company near Burtner, Millard County. I have visited the dam and carefully examined all available records of construction as well as of preliminary examinations and tests of the dam site, and herewith submit you my report on same as follows:

HISTORY. Sometime prior to June 15, 1909, an earthen dam was built across the channel of the Sevier River at the point in question. The plans show that some timber sheet piling was

driven in the bottom of the channel parallel to the axis of the dam, the object being to cut off, or at least lessen the flow of the water through the sand layers immediately under the river bed. Outlet tunnel and overflow spillway were constructed as per plan. This dam was thirty-six feet high over the river channel; had a three to one slope on the upstream side, a top width of ten feet, and a slope of one and one-half to one on the downstream side. (See 'Plans and Specifications for Repairing and Strengthening the Mellville Dam,' State Engineer's office, File No. 1334.)

This dam was put in service during the early part of the summer of 1909, and to all appearances, and according to best information available, fulfilled every requirement. However, notwithstanding that a watchman was kept on guard continuously, and the constructing engineer had but recently visited and inspected the dam and found it satisfactory, his statement being: 'We had not the slightest apprehension of any failure,' suddenly, without warning or indication, on the night of June 15, 1909, a large section of the dam immediately over the river channel went out.

Within two or three days after the break, I was detailed by the State Engineer to visit and study the nature and cause of the break and offer any suggestions, should they be sought, on the manner of reconstruction. It did not require a very keen observation to discover that the cause of the failure was due to a movement of the quick sand bottom upon which the fill for the dam had been placed.

I was informed at that time by the company's engineer that some probing, which had been done prior to the original construction indicated that there was a layer of hard clay about twelve to sixteen feet below the river bed. I advised that before any permanent structure be placed for this diversion dam, that careful tests be made to determine the nature and thickness of this substratum of hard clay; that if the indications of a good clay hard pan were confirmed, that a cut-off trench twenty to twenty-five feet wide be excavated to this hard pan and a puddle wall be carried up from the bottom of this trench to the top of the dam.

Soon thereafter a number of test wells were driven which showed in general, that below the river bottom was found a deposit with an average depth of about sixteen feet, consisting essentially of quick sand mixed more or less promiscuously with pockets or thin layers of soft clay, and that under this was a layer of fairly firm clay of considerable thickness (about ten feet in the case of the single well which extended entirely through this layer).

With this information before them, the company proceeded to build another dam on the same site on practically the same plans as that of the dam which failed. The essential difference in the construction of the original dam and the one now in place, is that two rows of sheet timber piling three feet apart were driven across the river channel under the new dam, whereas the original dam had but one row. Also, the fill for the new dam was extended upstream so as to change the upstream slope from a 'three to one' to 'four to one' slope and to increase the top width from ten feet to twenty feet.

INSPECTION. On Sunday, February 6, 1910, in company with Mr. R. R. Lyman, engineer for the company owning the dam, and Mr. Hiett Maxfield, who had actual charge of the construction of the dam, I visited and inspected the dam at Burtner. The water was then going over the spillway, and, according to Mr. Maxfield's report, had been going over the spillway continuously, with ex-

ception of a few days in January, since October 1, 1909. Thus, the dam had been subjected to a water pressure of eighteen to twenty feet head for a period of four months. A careful inspection of external conditions showed no sign of weakness.

METHOD OF CONSTRUCTION. A study of the records and of reports of the engineer on the construction shows the following:

Two rows of timber sheet piling three feet apart were driven, as stated above, across the river bed and well into the adjacent banks. This piling was made up of three 2-inch x 12-inch or 2-inch x 10-inch plank spiked together; an iron band was fitted around the top of the pile; it was then placed under a 1200-pound hammer and allowed to settle into the soft deposit in the river bed under the influence of two water jets.

Mr. Lyman says: 'Piles when in pure sand, with the aid of the water jet, move easily with comparatively little driving; in fact, in pure sand the weight of the hammer on top of the pile, when the jet is used, is sufficient to drive the pile continuously through the sand. You will observe that the north bank of the river where the cleanest and thickest layer of sand was found the piles were driven quickly and easily.' (See copy of letter to Mr. A. M. Trader, Secretary of the Oasis Land and Irrigation Company, September 24, 1909.) Also, in Mr. Lyman's letter of February 7, 1910, to Joseph Jenson, he says: 'By use of jets at the same time the piling was being driven, progress in sand was comparatively easy and comparatively rapid.'

After the piles had been thus settled to a depth of fourteen to twenty feet, the piles generally reached the firmer substratum designated in the plans as 'Hard Clay'; then Mr. Lyman says: 'Progress when driving piles in the hard clay was at the rate of from one foot in fifteen minutes to perhaps one foot per hour. In some places, however, with two water jets and a 1200-pound hammer, with all the power necessary to operate these effectively, it was impossible to get the piling through the hard material.' (See letter to Joseph Jenson, February 7, 1910.)

Quoting further from the letter just referred to, Mr. Lyman says: 'When the piling was driven a careful record was kept of the material through which each pile passed, without reference whatever to the record previously made when the test-holes were driven.' And again from the same letter: 'All the piles were either driven until they reached well into the hard clay, according to the record of test-holes, or else until the upper end of the pile was badly battered or until it began to crack or twist out of line.' The record of the pile driving shows that in the west line of piling, three hundred thirty-eight piles were driven, thirty-four of which failed to make closure with the hard clay, and that in the east line of piling three hundred fifty-four piles were driven, twenty-two of which failed to make closure with the hard clay, and that the distance from the bottom of the pile to the hard clay, in the cases which failed of closure, varies from a small fraction of a foot to several feet.

I submit herewith a scale drawing, made from this record, which shows the relative position and magnitude of the openings thus left between the sheet piling and the hard clay. The top of the piling was sawed off to a line leaving it projecting above the bottom of the tunnel some three or four feet. Again quoting from Mr. Lyman's letter to Joseph Jenson of February 7, 1910: 'The puddle around the tops of the piles was composed roughly of one-half gravel and one-half

clay. The material was thoroughly wetted and rammed by hand either by using tamping irons, or by using pieces of timber two inches by four inches, which were smoothed at one end and cut to a size that made them convenient to handle. The quantity of water used in the neighborhood for jetting purposes, and for sprinkling purposes, was such that the puddle used up to the top of the piling and for some distance above was completely saturated with water. Yet the material was so tamped that a horse could walk upon it without miring seriously. The material was mixed and put in place around the top of the piling with shovels.

Above the piling a smaller proportion of gravel was used, and finally only clay was placed in the puddle core. This so-called puddle core was the portion of the dam which was kept comparatively low and more thoroughly saturated with water than other portions of the material in the dam. Above the piling the gravel and clay were mixed by use of tongue scrapers after it had been unloaded from the wagons by use of dump boards.'

DISCUSSION OF METHODS AND RESULTS.

The whole question as to the safety of this dam, in my judgment, is involved in the serious question in my mind whether the kind of piling used and the method of driving will result in a water tight diaphragm, even if an unbroken closure were made with the clay substratum. When any one of these piles reached the firmer stratum at the bottom it necessarily acted to all purposes, with reference to the load or the blow of the hammer, as would a column without lateral support between the two ends. The water jets render the sand and soft clay deposit practically in a fluid state affording no lateral support. It is a well known law of mechanics that a column under load is subjected to a lateral flexure depending upon the load, the distance between the supports, or ends in this case, and the least dimension of the cross section, and that the maximum flexure will occur at a point intermediate between the ends of the column. Spiking three planks together, as was done in the case of these piles, is not a sufficient bond to cause the built up pile to act as a single column, and it is entirely consistent to assume that after one or two blows of the hammer, the spikes, especially along the middle of the pile where the maximum flexure occurred, were loosened and that the three planks after that acted as separate and independent columns. Under this condition, there would be nothing to prevent the planks from springing apart under the subsequent blows of the hammer. The mud surrounding the pile would naturally flow in between the planks and in all probability leave them spread more or less apart after the driving was completed. This condition would not be observable in that part of the pile remaining above ground. The heavy iron driving-band placed on the upper end would keep that end of the planks in their original relative position. It is not at all certain, therefore, that this timber diaphragm is at all water tight.

The record of piling shown on the blue printed lists contain indisputable evidence that many openings exist under the piles and above the hard clay, and that many of these openings are in close proximity to each other. It cannot be consistently maintained that water will not find a passage through these openings because the pile had passed through some pocket or thin layer of soft clay. Every indication is that the soft clay deposits noted in the record of tests consist of isolated bodies, probably material that has at some time pre-

viously caved off the bank of the river channel and been surrounded by and covered up with the regular river drift.

These openings must necessarily be regarded as a serious menace to the safety of the dam. They will afford a passage of least resistance to the water which may thus gradually develop currents of flow which would be of more immediate and serious consideration than would be the effect of a very considerable general leakage.

GENERAL CONSIDERATION OF SUBSTRATUM It is well understood by men of experience that material known as 'quick-sand' consists of fine well work particles of some hard material accompanied by a small proportion of clay, silt or other lubricating material, and that this mixture in the presence of water assumes a semi-fluid condition which yields, flows, or 'creeps' under comparatively slight pressure. The tests show conclusively that there is a layer of this material under the dam in question. To maintain a heavy body upon a foundation of this kind, one of two conditions must be attained, either this material must be confined absolutely or the water which softens and renders slippery, the clay or silt which surrounds the sand particles must be cut off effectively. The records of construction above referred to do not show that either of these conditions have been attained.

CONCLUSIONS. It would certainly be presumptious to predict that this dam will fail, yet I must confess that in the light of experience connected with the original dam, I do feel some apprehension as to its permanence. The conditions which contributed to the failure of the first dam may have been lessened, but they certainly have not been eliminated. The fact that this dam has withstood the pressure of the impounded water for four months without any apparent indications of weakness, should certainly be taken into account as an indication of efficiency; yet, it must not be forgotten that its predecessor also stood service without indication of failure until it was gone, which argues that something was going on to consummate its failure, which left no indications where they could be observed. It requires time to 'water log' material such as is contained under this dam, and that time will depend upon various conditions, chief of which are the facility with which water may be applied to and the distance to which water will have to seep before the whole mass under pressure becomes saturated.

SUGGESTIONS. It is possible that a bank of heavy angular rock, or preferably a bank of smelter slag, deposited just below the lower toe of the dam and allowed to settle down gradually through the quick-sand until it came in contact with the clay bottom would prevent a tendency, should there be one, of the foundation to slip down stream. A set of posts driven on a line below the dam well down toward the clay bottom, if carefully observed would possibly indicate any such movement, and thus give sufficient warning to prevent damage due to failure. Or, if a set of tight pipes with well-points be driven across the dam and well down toward the clay bottom, the change in the water level in these pipes might serve as an index to the movement or pressure of water through the dam. These suggestions, however, should be regarded rather as precautionary measures and not as ultimate safety devices.

I am still very strongly of the opinion that the plan of excavating near the upstream toe of the dam, a trench not less than twenty feet wide down to the substratum of clay, then to back fill this trench with a good and well laid puddle carrying the same up as the face of the dam to the crest, would have produced an entirely safe structure. This puddle wall and face can, of course, still be built, though only at a considerable extra expense."

After receipt of this report, the State Engineer advised that the dam be not accepted until the conditions of water pressure in the sand sub-base of the dam downstream from the timber diaphragm had been made, by a series of wells located at points that were deemed to be critical, the experiment to extend over a period of five months, with a maximum head of water maintained in the basin above the dam. Before the installation of this experimental apparatus, the dam failed.

The abandonment of this work has necessitated the construction of a canal from this point up the river several miles, practically to the intersection of the canal grade with the river bed. On the completion of this work, which is now in progress, it is expected that the successful operation of the system will be practically assured.

The other nine Carey Act projects to which reference was made in the introductory paragraph, have not in any case been advanced far enough to reach the construction phase. The names, locations, and the present status for each of these nine projects are given as follows:

Beaver Irrigation Land and Power Company.

The Beaver Irrigation Land and Power Company's Carey Act project, located in Beaver County, proposes to reclaim a track of land along the Beaver River between Minersville and Milford. The most important irrigation work in connection with this project is the construction of a storage reservoir, in the Canyon of the Beaver River, about three miles above Minersville.

The Carey Act company have had withdrawn for reclamation, approximately forty thousand acres of land, which is to be placed on the market at a price not to exceed $80 per acre. Of the area to be reclaimed, that which lies nearest the mountain range is of a grade that

passes under the general name of "sandy loam" and is covered with sage brush. Further, out in the valley the land grades into heavy clay deposits that produce a good growth of grease wood. Both grades of land under irrigation will grow excellent crops, as may be seen at the Town of Minersville, where the sandy loam furnishes the cultivated area and at many points along the Sevier River where extensive areas of grease wood land are under cultivation.

Myton Bench Carey Act Project.

The Myton Bench Carey Act Project contemplates the reclamation of 35,000 acres of land, situated south and southeast of the town of Myton in Wasatch and Uintah counties. The water supply for this land is to come from the main Duchesne River, the point of diversion for the canal being located between Theodore and Myton. The price of this land has not as yet been determined, the application being for a temporary withdrawal.

Lincoln Beach Carey Act Project.

This project is in the hands of Mr. Ferra Decker of Provo, who has asked for a segregation of 3,000 acres of land, to which he expects to supply water from Utah Lake by a pumping system. The maximum elevation to which the water is to be raised, will approximate two hundred feet. The price to be charged must not exceed $200 per acre.

Spanish Valley Reclamation Project.

The Spanish Valley Reclamation Project is located south of Moab in Grand and San Juan counties. It contemplates the reclamation of approximately 5,000 acres of land, by the construction of a storage reservoir on Mill Creek, a tributary of the Grand River. The impounding dam will be about one hundred seventy-five feet high, rock fill type, with steel concrete core wall. A ridge approximately two hundred feet high separates the Mill

Creek Valley, in which the storage reservoir is situated, from the Spanish Valley, in which is located the lands to be reclaimed. It is expected to pierce this ridge with a tunnel something like one thousand feet in length.

By far the most important work in connection with this project, is the storage reservoir dam. The magnitude of this structure compared with the area to be reclaimed, must of necessity bring up the selling price of the land to a very high figure, in order to warrant the actual working out of the project. The Carey Act Company proposes to sell this land at a price that shall not exceed $250 per acre. The lands of the Spanish Valley are located in one of the most favorable climates for fruit growing. Blossoms of the cherry, peach and apricot are rarely injured by the spring frosts, even on the lower lands adjacent to the Grand River, which are most exposed to frost. There has not been a year since the settlement of the country, which covers a period of approximately twenty years, when the frosts have taken the fruit crop.

Virgin Valley Carey Act Project.

This project contemplates the irrigation of an extensive area of land, lying on the south side of the Virgin River, and extending from near the Town of Hurricane westward to a point opposite Saint George. The land is naturally divided into tracts varying in area from about 2,000 to 7,000 acres, situated along a northeast and southwest line extending from Township 41 South, Range 13 east, to the Utah-Arizona line. About five miles south of the town of Hurricane, and immediately adjoining the upper and largest tract of land above referred to is a natural storage basin, which is to be used in connection with this project. This storage basin, locally known as Bench Lake, has a capacity according to the surveys of Mr. H. S. Kleinschmidt of the State Engineer's office, who surveyed the site in September, 1910, of forty thousand (40,000) acre-feet. A partial supply of water to fill this reservoir may be had from Gould Wash. The only other available source is the Virgin River, the connection of which with the reservoir would necessitate a very ex-

pensive canal, or a tunnel, something like two miles long. The maximum price of the land is $200 per acre. This project is located in the Dixie country, in a climate where almonds, grapes and figs can be grown.

Green River Carey Act Project.

The Green River Carey Act Project is located in the Green River Valley, covering most of the arable land that lies south of the Book Cliffs on both sides of the river in the neighborhood of Greenriver Station on the Rio Grande Railroad. The water supply is to come from Green River, the diversion works being a high masonry dam, situated several miles up the canyon from Green River, flumes and tunnels in order to bring the water out into the Greenriver Valley at a sufficient elecation to cover approximately 200,000 acres of arable land. The maximum price for this land will be $150 per acre..

The Woodside Irrigation Project.

The Woodside Irrigation Project is located in Emery County, Utah, and is traversed by the Denver and Rio Grande Railroad, the center of the project being near Woodside Station. The elevation of the tract is about 4,700 feet and the nature of the soil and the protection of the tract by the surrounding hills, are such that if well cultivated and irrigated, not only the ordinary agricultural crops, but peaches, pears, apples, melons, etc., may be produced. The reclamation of the tract involves the construction of a reservoir in the natural channel of Price River. The water will be released from it and conveyed to the tract by means of two canals, one on either side of Price River.

The Buckhorn Irrigation Project.

The Buckhorn Irrigation Project is situated in Emery County, Utah. It consists of two tracts known as the "Melville Tract" and the "Buckhorn Tract."

The center of the former is about twenty-two miles in a southerly direction from the Town of Price, on the

Denver and Rio Grande Railroad. The soil is a mixture of sand and clay, and has an elevation of about 5,700 feet. With the application of sufficient water, any of the ordinary agricultural crops may be produced, together with some of the hardier fruits, such as apples, pears, plums, etc. The area of this track is about 11,000 acres.

The center of the Buckhorn Track is about six miles south of the center of the Melville Track. The soil in this area is a mixture of sand and clay, with the former predominating. It has an elevation of about 5,500 feet. The tract lies in a basin surrounded with hills several hundred feet in height, and with the application of water, not only the ordinary agricultural crops should be produced, but also most of the fruit crops, including peaches, cherries, apricots, etc. The area of this tract is about 12,500 acres.

The water supply to be used in the reclamation of these tracts, is to be obtained for the most part from the Huntington River. Some water, however, will be obtained from what it known as Bull Hollow. The drainage area of this latter source is constituted chiefly by the Cedar Mountain.

There is to be constructed one reservoir in Huntington Canyon, with capacity of about 8,000 acre-feet. A canal which will be used to carry the water from the above reservoir to theMelville tract, also to carry water to the Buckhorn Reservoir from Huntington River, is to be consructed. The latter reservoir has a capacity of about twenty-six thousand (26,000) acre-feet, and situated in the natural channel of Bull Hollow, and will therefore collect the water from this source. Along the line of the diverting channel from Huntington River to the Buckhorn Reservoir, there is to be a wooden siphon, six feet in diameter, three miles in length, with a capacity of three hundred (300) cubic-feet per second. The water stored in this reservoir will be released and conveyed to the Buckhorn Tract by means of two diverting channels.

The Richlands Irrigation Project.

The Richlands Irrigation Project is situated in Millard County, Utah. The center of the tract is about

eleven miles in a westerly direction from the Town of Oasis, on the San Pedro, Los Angeles and Salt Lake Railroad. The soil is a mixture of sand and clay, with the latter predominating, and has an elevation of about 4,690 feet. With the application of sufficient water, most any of the ordinary agricultural crops may be produced. It is well adapted for the production of alfalfa seed. The water supply is to be obtained from the Sevier River. The reclamation of the tract involves the construction of a feeder canal from the river to a natural depression near the tract to be irrigated. In order to form a reservoir of the basin, it will be necessary to make several low dykes on its rim. The water will be drawn from the reservoir and be distributed on the tract by means of a canal and a system of laterals. All of the structures are simple and comparatively inexpensive.

PRIVATE IRRIGATION ENTERPRISE.

The most important private irrigation enterprise which has entered upon construction in the last two years, is near Provo on Provo River.

The Provo Reservoir Company has built a diversion system, which takes the water from the Provo River about one mile above the mouth of the canyon and carries it through an open ditch, a tunnel, a flume, and an inverted siphon to the top of the Provo Delta just southwest from Olmsted.

These diversion works cost approximately $100,000, have a capacity of one hundred twenty-five (125) cubic-feet per second and are meant to irrigate the extensive tracts of arid land on the Provo Delta that lie above the old canal system. It is further in contemplation by the company to extend the system north and west around Pleasant Grove, across the American Fork River and Dry Creek and to the vicinity of the point of the Mountain—a great extent of fine agricultural mesa land comes under this projected extension, which is entirely without

water, being still in sage brush. In addition much of the land at present under cultivation is so scant of water supply, that the full productiveness of the soil is not realized under present conditions.

In addition to the natural flow of the Provo River, which during the early irrigation season, furnished all the water required, the company is constructing a series of storage reservoirs at the head waters of Provo River, which will be used to furnish the water supply in the latter part of the irrigation season, when owing to the late priority of the company's filing, no diversion from the natural flow of the Provo River can be made. Further, the company has acquired by contract, the flow from the Ontario Tunnel, which aggregates during the irrigation season sixteen (16) cubic-feet per second, which is also used through the irrigation system of the company.

The company is contracting with the land owners under the system to furnish a permanent water right at the rate of $75 per acre and a high water right at the rate of $45 per acre.

Irrigation by Pumping, Brigham City.

The water supply from the surface streams during the summer in the fruit growing district around Brigham City, is small. The delta of Box Elder Creek, which comprises the agricultural land at that place, is porous and is underlaid with gravel, which owing to the heavy application of water, when there is plenty, becomes filled with water in the lower part of the delta to within twenty-two feet of the surface. Toward the middle of the delta, the ground water is about eighty-five feet from the surface. From this portion, the lower half, ground water is pumped for irrigation purposes. The municipality owns an electrical plant and during the nights the power generated is consumed for lighting purposes. During the days, however, there is an excess of power which is sold to irrigators at a reasonable rate, viz: $2.00 per horse power per month or about $8 per horse power for the irrigation season. The water pumped is used chiefly for the irrigation of orchards and gardens. There are sixteen

pumping plants in this vicinity which use, during the day time, about 200 horse power and lift to the surface about 6 cubic-feet per second of water. The cost of the water per acre per year depends on the height to which the water is lifted, the efficiency of the pumping plant and the skill of the irrigator. A tract of thirty acres, owned by W. O. Kundson, is irrigated at a cost of $54 per year. The head against which the water is lifted is thirty-two feet. At another plant twenty-five horse power is used to lift two hundred twenty-five gallons against a head of 79 feet. A tract of 25 acres is irrigated from a well 85 feet deep, by the use of twenty-five horse power, the cost per acre per year being $8.00. Most of this development has been accomplished during the past two years.

The Moseda Project.

The Moseda Project is located on the west shore of Utah Lake, about five miles south of Pelican Point. It is proposed ultimately to irrigate between 5,000 and 6,000 acres of land of excellent quality in the ownership of the Moseda Company, by raising water from Utah Lake to a maximum elevation of 115 feet.

The expectation is that the tract will be almost entirely devoted to fruit growing.

Work was begun here in the spring of 1910. An electrically driven pump was installed, which lifts fifteen (15) cubic-feet per second of water to a height of sixty feet above the level of the lake. This quantity of water irrigated 700 acres of land during the past season, 120 acres of which is planted to peach trees, and a like area to apple trees, the remainder of the area was planted to wheat and oats. The cost of operation per acre during the season 1910, amounted to about $2.10.

The president of the company is L. B. Curtis of Denver, Colorado. The engineer in charge is R. T Curtis. The company is selling land which is not cleared and the necessary water right at $150 per acre, twenty-five per cent of which, under the contract, is paid down and the remainder in five equal annual payments. The deferred payments bear interest at the rate of six per

cent. The price of the land which has been cleared and partially planted to fruit trees is $225 per acre. The terms of the contract being as above stated. The company intends to install another pump capable of lifting twenty (20) cubic-feet per second to a height of 115 feet, by May 1, 1911.

Under the terms of the contract, when seventy-five per cent of total area has been sold, the pumping plant will be operated by the owners, and when the entire tract has been served, the pumping plant and water rights will belong to the owners of the land.

SUPREME COURT DECISIONS.

During the period covered by this report, three decisions of the Supreme Court have issued of such great general value to applicants for and appropriations of the public waters of the state, that it is deemed advisable to publish the full text of these opinions in the report.

The cases are:

William H. Pool vs. Utah County Light and Power Company.

N. G. Sowards and J. L. Gibson vs. N. J. Meagher et al.

Edward Patterson vs. John Ryan.

IN THE SUPREME COURT OF THE STATE OF UTAH.

WILLIAM H. POOL,
Appellant,
v.
UTAH COUNTY LIGHT & POWER COMPANY, et. al.,
Respondents.

1. WATERS AND WATER COURSE—APPROPRIATION—STATUTORY PROVISIONS.

Laws 1903, p. 88, c. 100, regulating appropriation of water rights, must be liberally construed according to Compiled Laws, 1907, Sec. 2489, with a view to effect the object of the statute and to promote justice.

2. STATUTES—CONSTRUCTION.

In construing a particular section of an act, all the provisions of the act as well as its object will be considered, but, if the language is unambiguous, it must ordinarily be given full force and effect.

3. WATER AND WATER COURSES—APPROPRIATION—FORFEITURE.

Where application for an appropriation of water is made to the State Engineer according to Laws, 1903, pp. 88-100, c. 100, Secs. 1-42, giving him large discretionary powers with authority to extend the time that he has fixed for completing works required to perfect the appropriation, and work is commenced within the statutory time and prosecuted in good faith and with due diligence, he may extend the time if not beyond the final limit fixed by the statute, although the application therefor is made after the time first fixed by him has expired.

Appeal from District Court, Fourth District, Utah County; J. E. Booth, Judge.

Action by William H. Pool against the Utah County Light and Power Company and another. From a judgment for defendants, plaintiff appeals. Affirmed.

C. S. Varian for appellant. J. W. N. Whitecotton and A. J. Evans, for respondents.

FRICK, J: This action originated in the district court of Utah County, and involves the question as to whether the appellant or respondent has the prior right to the use of the waters of American Fork Creek, a stream flowing through Utah County. The district court found the issues in favor of respondent, and entered judgment dismissing the action; hence this appeal.

Respondent's claim to the water arises by virtue of an application made by it under Chapter 100, p. 88, Laws of Utah, 1903, entitled "Water Rights and Irrigation," and appellant's claim is based upon his application made under the same act as amended by Chapter 108, p. 145, Laws of Utah, 1905. Since the provisions of the two chapters are the same in so far as the rights of the parties to this action are concerned, we shall refer to the act of 1903 only. By this act very important changes for the appropriation and perfecting of rights to the use of public waters of this state were effected. In view that the questions presented for decision involve the construction of certain provisions contained in said act, we shall, in substance at least, set forth such parts as we deem material to a full understanding of the questions decided. Section 1 of the act creates the office of State Engineer. The Governor, with the approval of the Senate, is required to fill the office by appointment. In defining a part of the powers and duties of the State Engineer, said section provides as follows: "He shall have general supervision of the waters of the state and of their measurement, apportionment and appropriation. * * * He shall have power to make and publish such rules and regulations as he may deem necessary from time to time, to fully carry out the provisions of this act and secure the equitable and fair apportionment of the water according to the respective rights of the appropriators." In referring to the right to acquire the use of unappropriated water, Section 34 of said act provides: "Rights to the use of any of the unappropriated water in the state may be acquired by appropriation, in the manner hereinafter provided, and not otherwise. The appropriation must be for some useful or beneficial purpose, and, as between appropriators, the one first in time shall be first in right." Section 35 provides that the application for an appropriation of water must be made to the State Engineer. The section specifically prescribes how the application must be made, and what it must contain. Since there is no claim that this section was not complied with, and as it is quite long, we shall not state its contents further. Section 36 provides the duties of the State Engineer with respect to the application. No contention arises under this section, nor under Section 37, which provides that a notice of the application shall be published by the State Engineer. Section 38 provides that any interested person may "within thirty days after the completion of the publication of said notice, file with the State Engineer a written protest against the granting of said application, stating the reasons therefor, which shall be duly considered by said engineer. He may, in his discretion, hear evidence in support of or against such application, and shall take such action thereon as he

may deem proper and just." Section 42 is as follows: "In his endorsement of approval of any application, the State Engineer shall require that actual construction work must begin within ninety days from the date of such approval, and that the construction of the proposed irrigation works shall be completed within a period of five years from the date of such approval. He may limit the applicant to a less period for the completion of the work and the perfection of the right. The State Engineer shall have authority, for good cause shown, to extend the time within which any irrigation or other works shall be completed, and the appropriation perfected." It is also provided in the act that in some instances the party feeling himself aggrieved may review the action of the State Engineer by a direct appeal to the district court of the county wherein the water is diverted for use, and in other instances may bring an action in such court by which the action taken by the State Engineer may be indirectly reviewed. The State Engineer is invested with a large discretion in discharging his duties with respect to effectuating at least some of the important provisions of the act. The act is quite comprehensive, and, in general, it may be said that its provisions may be readily understood and complied with. Yet, as we shall see, there are some provisions which require careful consideration in order to determine their true meaning and intent. The act, to a large extent, seems to be modeled after the irrigation law of Wyoming. See Chapters 10-14, inclusive, tit. 9, Rev. St. Wyoming, 1899.

The questions involved in this appeal all arise under the provisions of Section 42, which we have set forth in full. This section is a copy of Section 922 of Chapter 14 of Title 9 of the Revised States of Wyoming, aforesaid, and was originally adopted in that state in 1895. North Dakota has a similar section. See Section 30, c. 34, p. 53, Laws N. D. 1905.

The facts that are deemed essential to this appeal are substantially as follows: That on July 7, 1904, the respondent made application to the State Engineer, under the act of 1903 above referred to "to appropriate 100 cubic-feet per second of time of the waters of American Fork Creek, in Utah County, State of Utah, to be diverted from said creek in Utah County, and conveyed through a pipe line to a point of use and distribution for the purpose of developing power to generate electricity for lighting and propelling machinery and other purposes"; that the application was approved by the State Engineer on the 16th day of March, 1905, and the respondent was, by order of the State Engineer, required to begin the construction of its plant and pipe line to be used in generating the power aforesaid within three months from said 16th day of March, 1905, and to complete said plant within eighteen months from the date aforesaid; that respondent commenced work within three months from March 16, 1905; that it did not complete the construction of said plant within eighteen months from said date; and that it did not apply for nor obtain an extension of the time within which to complete said plant from the State Engineer until the 23rd day of October, 1906, on which day the State Engineer, on the application of respondent, did make an order extending the time within which to complete said plant to the 1st day of August, 1907, and on the 10th day of July, 1907, upon the further application of respondent, the State Engineer made a further order of extension to the 1st day of December, 1907; that, when the first eighteen months had expired, the respondent "was actually engaged in completing said works, and had expended $50,000 thereon, and it inadvertantly failed and neglected to apply for

and procure an extension of time before the time fixed expired;" that, before the expiration of the second extension, the respondent "had completed its said works at a cost of $120,000, and had completed its appropriation of said water, and was at the time this action was commenced using the said water to the extent of 50.40 cubic feet of water per second, which is all the water it can use through" the diverting system. The court also found that appellant on the 16th day of December, 1905, duly made and filed his application with the State Engineer to appropriate 100 cubic feet of water per second of time, to be diverted from the same stream in Utah County; that appellant's application was made for water to be used for purposes similar to those above enumerated; that appellant's application was approved by the State Engineer on the 6th day of September, 1906, and he was required to begin the construction of his works within six months, and to complete them within two years from said date; that no written protest was made to the State Engineer against the application of appellant within thirty days or at any time; that the appellant commenced work upon the construction of his plant within six months, to-wit: on the 3rd day of March, 1907, with men and teams and continued said work until the 9th day of said month, "when he was notified to cease all work on his pipe line and power site," and he then ceased work. The reasons why and by whom appellant was notified to quit work are not important; since, if appellant can succeed in his contentions, the fact that he was prevented and the reasons that prevented him from the further prosecution of his work are not deemed material. It is also conceded that each one of the applicants made application for the full amount of water that is contained in said stream.

As conclusion of law the court, in substance, found that the respondent "has made a valid appropriation of 50.40 cubic-feet per second of time of the waters" of the stream aforesaid, "and that said appropriation is prior and superior" to appellant's appropriation.

In our view the material question to be determined is whether the State Engineer exceeded his authority in granting the respondent the first extension of time in which to complete its plant in view of the time and the circumstances under which such extension was granted. Counsel for appellant most earnestly insist that at the time the State Engineer granted the first extension of time he was without jurisdiction or power to do so; that his act in that regard was void and of no force or effect; that respondent's right to the use of the water in question was not completed within the time as fixed by the State Engineer nor within any authorized extension of time; and hence its right to the use of the water lapsed or has been forfeited. Upon the other hand, respondent's counsel, with equal earnestness, assert that the State Engineer, by virtue of the statute, had full power and authority to grant both of the extensions of time, and that the application of respondent was perfected substantially in accordance with the laws of this state, and hence is a valid appropriation of the water applied for, just as the court found it to be. Which of these contentions shall prevail depends upon the true meaning and intent of the act referred to, and especially upon the construction to be given Sections 1 and 42 of said Chapter 100, both of which are directly involved.

By reference to Section 1 of the act, a part of which we have quoted, it will be seen that a large discretion is vested in the State Engineer, to the end that he may "fully carry out the provisions of this act, and secure the equitable and fair apportionment of the water

according to the respective rights of appropriators." Again, in Section 38, it is provided that, in case a protest is made against any application to appropriate water, the engineer "shall take such action thereon (the application) as he may deem proper and just." In other portions of the act equally broad discretionary powers are vested in the engineer, but subject to review by the district courts, either by a direct appeal from the engineer's orders, or by an independent action like the present. Counsel for appellant further contend that "when a statute gives a new and unusual remedy, and directs how the right to the remedy is to be acquired or enjoyed, and how it is to be enforced, the act should be strictly construed; and the validity of all acts done under the authority of such an act will depend upon the compliance with its terms." Campbellsville Lumber Co. v. Hubbert, 112 Fed. 724, 50 C. C. A. 435. The doctrine enunciated in the foregoing quotation is elementary, and when a question arises under statutes which fall within the class defined in the quotation, the courts usually apply the doctrine there asserted with more or less strictness. This is well illustrated by Mr. Justice Lurton in the opinion quoted above. We are not prepared to hold, however, that Chapter 100, which is under consideration here, strictly speaking comes within the class of statutes of which Mr. Justice Lurton speaks. Nor are we prepared to say that the ancient rules of strict construction with respect to any class of statutes should be rigidly enforced in this state. Section 2489, Comp. Laws 1907, which in construing statutes of this state is always to be considered, and whenever applicable to be heeded, provides as follows: "The rule of common law that statutes in derogation thereof are to be strictly construed has no application to the revised statutes. The revised statutes establish the law of this state respecting the subjects to which they relate, and their provisions and all proceedings under them are to be liberally construed with a view to effect the objects of the statutes and to promote justice. Whenever there is any variance between the rules of equity and the rules of common law, in reference to the same matter, the rules of equity shall prevail." In arriving at the true meaning of a particular section, it is not only permissible, but very often necessary, that all the provisions of the act of which the particular sections forms a part be considered, as well as the object or purpose of the law making power in adopting the entire act as passed. True it is that the language employed by the Legislature must first be considered, and, if this is unambiguous and direct, it must ordinarily be given full force and effect. When, therefore, a forfeiture of a pre-existing right is claimed by reason that a particular clause or section of an entire act has not been literally complied with, and when the statute does not in terms or by unavoidable implication declare that the failure of a strict compliance shall work a forfeiture, the courts may well pause before declaring a forfeiture by reason that all the provisions of the act have not been literally complied with.

Counsel for appellant do not claim that section 42 in terms provides that, unless an extension of time is applied for of the State Engineer before the time which is fixed by him has elapsed, he is powerless to extend the time thereafter, nor that the applicant by reason of his failure to apply for an extension before the original time limit has expired thereby forfeits his right to the use of the water applied for. But they contend that the question is analagous to the one by which courts are given power to grant extensions of time for the settlement of bills of exception or to file a transcript on appeal, and

matters of that character. This court, in common with other courts, has held that in case a bill of exceptions is not settled or the transcript is not filed within the time limit by the statute, or within an extension of time which was applied for before the statutory time or an extension thereof was reached, then, and in such event, the judge or officer authorized to settle the bill of exceptions or to receive and file a transcript on appeal would be without jurisdiction to do either, and the act of such judge or officer would be void, and of no effect. Butter v. Lamson, 29 Utah, 439, 82 Pac. 473; Bryant v. Kunkel, 32 Utah, 377, 90 Pac. 1079; Ferree v. Walker, 54 Kan. 49 36 Pac. 7384 Swartz v. Davis, 9 Idaho 238, 74, Pac. 800; in re Clary, 112 Cal. 292, 44 Pac. 569. Upon the other hand, some courts, under statutes similar to ours, have arrived at a different conclusion, and have held that, if the statute fixes a shorter and longer period within which an act may be done and authorizes an extension of the shorter period, but not beyond the longer one provided for, then the judge who, by the statute, is authorized to grant the extension, may do so after as well as before the shorter period of time has elapsed, provided the order granting the extension is made before the final limit has been reached. Greenwood v. Cobbey, 24 Neb. 648, 39 N. W. 833; McDonald vs. McAllister, 32 Neb. 514, 49 N. W. 377.

The weight of authority is, however, clearly in accordance with the holding of this court as declared in the cases above cited. In our judgment, however, there is a broad distinction between the extension of time provided for by the statute for the settling of a bill of exceptions and in granting an extension of time by the State Engineer under the provisions of Chapter 100, aforesaid. The statute fixes a specific time in which a bill of exceptions must be settled and allowed, and unless the statutory time is extended by the judge or court, the bill must be settled and allowed within the statutory time. Under the law in question the State Engineer, however, alone fixes the time which he is given power to extend. It is true that the law fixes an ultimate limit, namely, five years, but this limit, under the law as it stood in 1903 and 1905, when the respective applications were made, the engineer was powerless to extend. Under the act in question, therefore, the engineer is not authorized to extend the fixed statutory limitation, as in the case of settling a bill of exceptions, but one only that he himself has fixed. If we bear in mind that this limit had to be fixed by him at a time when he could not forsee what obstructions might intervene and in some way retard the progress of the contemplated work, and that the limit had to be and was determined on by him alone in accordance with his judgment and discretion based upon such information as he then had, it is easy to perceive why the first limit as fixed by him was intended to be in the nature of a tentative limitation merely. This, it seems to us, becomes more apparent when we keep in mind the powers that are vested in the State Engineer in fixing a time limit and in granting extensions. The purpose of vesting such powers in the State Engineer seems apparent enough. The statute fixes a final limit which applies to all applications alike. Some applications, however, like the one in question, require a large expenditure of money and a considerable time before the appropriation can be perfected by the full completion of the contemplated works. In order, therefore, to hasten the completion of the works as fast as possible, the engineer is authorized to fix a limit much less than the statutory limit. He also is authorized to fix a limit in accordance with the magnitude of the work. This limit, in the nature of things, must be deemed to be merely provisional by both the engineer and the applicant.

Again, the State Engineer is vested with full power to promulgate rules to the end that both public and private rights may be subserved and protected. If, therefore, he had deemed it equitable and expedient to require applicants to apply for an extension of time before the limit as fixed by him had expired, he might have done so, and, in connection therewith, have fixed a penalty for a non-compliance with such rule. He might perhaps refuse to grant an extension of time unless applied for before the first period as fixed by him had expired subject to review by the courts, but we are of the opinion that, so long as the applicant continues to pursue the work he has undertaken under the application in good faith and with due diligence, the engineer is not without power to grant an extension of time if not beyond the ultimate limit fixed by the statute, although the application therefor is not made until after the time first fixed by the engineer has elapsed. Applying the foregoing doctrine to the facts of this case, there seems no escape from what the result should be. When appellant made his application, and when it was approved by the engineer, respondent, as the court found, had complied with the statute, in that it had commenced the construction of its plant within the statutory time. Further, the court found that, before the time limit fixed by the engineer had expired, respondent had expended $50,000 upon its plant, and at the time the extension was granted it was actively engaged in constructing and completing its works. It also appears from the undisputed facts that, when appellant's application was approved, respondent's application was in full force and effect, and the time within which respondent might complete its plant as fixed by the engineer had not yet elapsed. Appellant thus obtained whatever rights th approval of his application gave him with full knowledge of respondent's prior application, that it was actively engaged in carrying on the work under its application, and that the State Engineer had the power, under the conditions named in the statute, to extend the time fixed by the engineer in which respondent might complete its plant and perfect its appropriation of the water applied for. The respondent, therefore, had not abandoned its application by ceasing work, nor had it forfeited its rights by reason of a non-compliance with any of the provisions of the statute when appellant's application was approved; nor was this the case when the engineer extended the time to respondent. Under such circumstances, we are clearly of the opinion that the State Engineer had the power to grant an extension of time to respondent.

We do not wish to be understood as holding that the State Engineer may arbitarily extend the time limit fixed by him at any time and under all circumstances. It may well be that, if an applicant has ceased work so that it may be deemed a virtual abandonment of his application, the engineer may not in effect reinstate the application after a second applicant's rights under his application have attached, and in that way defeat the rights of the second applicant. No such case is presented, and we therefore content ourselves with holding that, under the facts and circumstances disclosed by the record before us, the State Engineer did not exceed his power in granting the extension to respondent, although the application therefor was not made until more than thirty days after the time as fixed by the engineer had elapsed, and do not determine what the extent of the engineer's powers to extend the time limit under all circumstances may be.

If we are right in the foregoing conclusions, then the court did not err in hearing the evidence with respect to the character of the

work that was done, and the time and amount of money expended by respondent, up to the time the extensions of time were granted by the engineer of which appellant complains. Nor did the court err in its findings that the respondent commenced the construction of its plant within the time fixed by the statute. The evidence is ample to support the finding in this regard.

In view of the conclusions reached, all other questions discussed by counsel are of no importance, and hence need no further consideration.

The judgment is, therefore, affirmed, with costs to respondent.

We concur: STRAUP, C. P.
McCARTY, J.

IN THE SUPREME COURT OF THE STATE OF UTAH.

N. G. SOWARDS and J. L. GIBSON,
Appellants,
v.
N. J. MEAGHER, ALBERT N. JARVIS and
DRY GULCH IRRIGATION COMPANY, a corporation,
Respondents.

(January 22, 1910.)

1. EVIDENCE—JUDICIAL NOTICE—ACTS OF CONGRESS.

Judicial notice is taken of an act of Congress restoring Indian reserved lands to the public domain.

2. WATERS AND WATER COURSES—PUBLIC WATERS—APPROPRIATION.

The right to use unappropriated waters on the public domain and a right in the land itself are severable; the former not depending upon the latter.

3. WATERS AND WATER COURSES—APPROPRIATION—LAWS GOVERNING.

Acquisition of the right to use unappropriated public waters, whether on the public domain, within a reservation or elsewhere, is controlled by the laws and customs of the state in which the water is found.

WATERS AND WATER COURSES—PUBLIC WATERS—RIGHT TO APPROPRIATE.

The right to use waters on the public domain for a beneficial purpose may be acquired by mere appropriation, and the first appropriator takes against the world to the extent of his established appropriation, though at the time of his application to the State Engineer, he has no present right in the lands bordering the source of supply nor in

the lands to be benefited; he being entitled to conduct the water across intervening public land to irrigate lands held by him or others, or to dispose of it for a beneficial purpose on lands held or owned by them.

5. INDIANS—RESERVATIONS NOT SUBJECT TO PRIVATE APPROPRIATION.

No private rights in the lands of an Indian reservation can be acquired.

6. EVIDENCE—JUDICIAL NOTICE—OPENING OF PUBLIC LANDS.

Judicial notice is taken of the opening of an Indian reservation in the state and restoration of the unallotted lands thereof to the public domain, but not that particular tracts thereof have since been occupied, claimed, or possessed.

7. WATERS AND WATER COURSES—PUBLIC LANDS—ACQUISITION OF RIGHTS.

Under Comp. Laws, Sec. 1288x et seq., prescribing procedure for the appropriation of public water, an inceptive right to use such water upon or within an Indian reservation can be initiated or acquired after issuance of a proclamation restoring the lands to the public domain, but before they are subject to entry, if the application be made in good faith to appropriate the water for a beneficial use, and not for speculative or monoply.

8. WATERS AND WATER COURSES—"APPROPRIATION OF WATER"—ESSENTIALS.

To constitute a valid appropriation of water, there must be intent to apply it to a beneficial use, a diversion from the natural channel by a ditch, canal, or other structure, and an application of it to a useful industry within a reasonable time; the last mentioned element being the most essential.

9. WATERS AND WATER COURSES—APPLICATION FOR APPROPRIATION—EFFECT.

An application to the State Engineer for permission to appropriate public water is merely notice of intent to appropriate and does not establish an appropriation.

10. WATERS AND WATER COURSES—APPROPRIATION—EXTENT OF RIGHTS.

Rights under an appropriation of water are limited to the quantity actually used for a beneficial purpose.

11. WATERS AND WATER COURSES—APPROPRIATION—CONFLICTING RIGHTS.

To establish a right to appropriate water, one must rely on the strength of his own right, and not on the weakness of his adversary's.

Appeal from District Court, Fourth District, J. E. Booth, Judge.

Action by N. G. Sowards and another against N. J. Meagher and others. From a judgment dismissing the action, plaintiffs appeal. Affirmed.

D. W. Moffat and N. T. Porter for appellants. Thurman, Wedgwood and Irvine, for respondents.

STRAUP, C. J.: The appellants, plaintiffs below, filed an application with the State Engineer for the appropriation of waters of the East Fork of Lake Fork of Green River, which has its source in Wasatch County, and flows southwesterly into the Duchesne River, a tributary of the Green. By reason of such application, they claim to have initiated a right to the use of 300 second-feet of water of such stream for irrigation purposes. Upon a protest filed by the respondents, the defendants below, who also filed applications for an appropriation of the same waters, plaintiffs' application was rejected and the respondents' approved by the State Engineer. The plaintiffs then brought this action in the district court of the Fourth Judicial District against the defendants to adjudicate the questions involved.

In their complaint it is alleged that on and prior to the 28th day of August, 1905, there were 300 second-feet of unappropriated water of the stream, and that on that day, "at the hour of 20 minutes after 9 o'clock in the forenoon," they (the plaintiffs) "filed in the office of the State Engineer of the State of Utah," their application in writing to appropriate 300 second-feet of water to be used each year from January 1 to December 31, to be diverted from the Green River system, Wasatch County, at a particularly described point on the East Fork of Lake Fork River. In such application the diverting works and channels were described, the purpose of such appropriation stated to be for irrigation, and the lands proposed to be irrigated, consisting of a total area of 33,680 acres, described by reference to legal subdivisions. It is further alleged that the defendant Meagher, on the 31st day of July, 1905, and the defendant Jarvis, on the 19th day of August, 1905, made applications to appropriate the same water by filing written applications with the State Engineer, but that at the time of such filings "all of the said waters applied for" by them "the proposed point of diversion, and the lands proposed to be irrigated, were all a part of, and included in, an Indian reservation within the State of Utah, set apart exclusively for the use and occupation of the Indian wards of the federal government, which was reserved from the public domain and under the exclusive control of the United States of America, and that all matters and things pertaining to the appropriation of said water were done upon the Indian reservation so exclusively controlled as herein set forth, and that these plaintiffs filed the first application to appropriate the waters" of the stream in question "after the opening of said reservation." It is further alleged that the rights of the defendants Meagher and Jarvis, acquired by them by reason of their applications, were assigned to the defendant, the Dry Gulch Irrigation Company, who, in March, 1907, "protested the granting of these plaintiffs' application," which was, in June, 1907, rejected by the State Engineer on the sole ground that their application "is in conflict with the prior applications" of the defendants, Meagher and Jarvis. It is further alleged that the defendants have no right, title, or interest whatsoever in or to any portion of the water applied for by the plaintiffs; that they be required to set forth whatever rights or interests are claimed by them; that such claims be adjudged to be unfounded and of no effect; and that plaintiffs' rights and title in and to the use of the waters be determined, quieted, and confirmed. A general demurrer for want of facts was interposed to this complaint, which was sustained by the trial court. The plaintiffs stood on their complaint and declined to amend. The action was thereupon dismissed. They appeal.

The only question presented for review is the ruling of the court sustaining the demurrer. The statute (Comp. Laws. 1907, Sec. 1288x et seq.), so far as necessary here to notice, provides that, in order that one may acquire the right to the use of any unappropriated public water, he shall make an application in writing to the State Engineer, setting forth, among other things, the nature of the proposed use for which the appropriation is intended, the quantity of water to be used, the time during which it is to be used each year, the name of the stream or source where the water is to be diverted, the nature of the diverting works, the dimensions, grade, shape, and nature of the proposed diverting channel, and such other facts as will clearly define the full purpose of the proposed appropriation. It further provides that, "if the proposed use is for irrigation, the application shall show, in addition to the above required facts, the legal subdivisions of the land proposed to be irrigated, with the total area thereof, and the character of the soil." It is further provided that, if the application is conformable to the requirements of the statute, the engineer shall receive and record it, and shall publish a notice of the application. At any time within thirty days after the completion of the publication, any person may file with the State Engineer a written protest against the granting of the application. It then becomes the duty of the engineer to approve or reject the application. Either party aggrieved may then bring an action in the district court for the purpose of adjudicating the questions involved. It is further provided that, in his endorsement of approval of an application, the State Engineer shall require that the actual construction work be commenced within six months from the date of such approval, and that it shall be completed within five years from such date. But the engineer may allow in some cases an extension of time to complete such work, or may limit the applicant to a less period of time. It is further provided that, upon the completion of the work, proof shall be made and maps filed showing the nature and extent of the completed works, the stream or source and place where the water, and the quantity thereof, is diverted, the character, grade, and dimensions of the diverting channel, and other things showing the diversion and appropriation of the water. Upon such proof a certificate of appropriation is then given the applicant, a copy of which is filed with the State Engineer, and one with the county recorder of the county where the water is diverted.

It may be judicially noticed, and here stated, that Congress, in 1902, ordered the unallotted lands of the Indian Reservation referred to in the complaint to be restored to the public domain on the 1st day of August, 1903. That time was extended to October 1, 1904, and again to March 10, 1905. On March 3, 1905, Congress again extended such time to September 1, 1905, but authorized the President of the United States by proclamation to fix an earlier time. Thereupon the President, on the 14th day of July, 1905, issued a proclamation restoring the unallotted lands of the reservation to the public domain, and declaring such lands open to entry, settlement, and disposition on and after the 28th day of August, 1905. It will be observed that it is alleged in the complaint that the defendants filed their applications with the State Engineer for the appropriation of the waters in question on the 31st day of July, and the 19th day of August, 1905, after the proclamation was issued, but before the reservation was actually opened and the unallotted lands restored to the public domain, and were subject to entry, settlement and disposition. Because of such fact, and of the further allegations in the complaint that "all of said water applied for and the lands proposed to be irrigated" by the defendant's "were all a

part of and included in" the Indian Reservation, it is urged by appellants that no right or title in or to the use of the waters or the lands could then lawfully be acquired or initiated; that the State of Utah could not prior to the 28th day of August, exercise any jurisdiction over the waters or the lands of the reservation; that the defendants were mere trespassers, and that their applications were void. But, since the appellants filed their application with the State Engineer, on the very day that the reservation was opened, "at the hour of 20 minutes after 9 o'clock in the forenoon" of that day, it is asserted by them that a right in and to the use of the water and also in and to the lands proposed to be irrigated by them could then lawfully be acquired, and that a right in and to the use of the water was initiated and acquired by them by the filing of their application. Upon these premises, it is urged that the engineer erred in rejecting their application and approving the applications of the defendants, and that the court likewise erred in sustaining the demurrer. It is now well settled and recognized that there is a distinction between initiating or acquiring a right to the use of unappropriated public waters on the public domain, and a right or interest in or to the public lands themselves, and that the former is not dependent upon the latter. To initiate and acquire a right in and to the use of unappropriated public water, whether on the public domain or within a reservation or elsewhere, is dependent upon the law or customs of the state in which such water is found. Property in and to the use of unappropriated waters of a stream or spring, or lake, on the public domain, or within a reservation, may be acquired for a beneficial purpose by mere appropriation, and the first appropriator, to the extent of his appropriation when completed and established, is the owner as against all the world. In order that the appropriator may be entitled to the use of such water, it is not essential that he should have located or taken possession of any tract or parcel of the public domain bordering upon the stream or lake from which the appropriation is made, or that he even have an interest in or to the lands proposed to be irrigated, if such be the beneficial purpose of the appropriation. An appropriation may be made of such water for the irrigation of lands not situated upon or near the stream or lake from which it is taken, and the water may be conducted by means of ditches or channels, or otherwise, across the intervening public lands, to irrigate lands possessed by the appropriator, or others, or he may sell and dispose of the water thus conducted to others to use it for a beneficial purpose on claims or lands possessed or owned by them, or in which they have an interest, and upon which the water may be and is applied for a beneficial purpose. These views are discussed and enlarged upon by Mr. Kinney in his work on irrigation (Chapters 6 and 7) and by Mr. Farnham in his work on "Water and Water Rights" (Volume 3, Chapter 22). And it also has been held that a valid water right may be acquired even though there had been no compliance with the statute regulating the appropriation of unappropriated public waters, where the unappropriated water was actually diverted by means of a ditch or canal or otherwise and applied to a beneficial use before the inception of any adverse statutory claim. Murray v. Tingley, 20 Mont. 260, 50 Pac. 723, and cases there referred to. We have no doubt that unappropriated public water on a reservation or on the public domain is subject to appropriation, and may be appropriated for a beneficial purpose, though the appropriator has not, when his application is filed with the State Engineer, a present right in or to the lands along the stream from

which the water is proposed to be diverted, or in or to the lands proposed to be irrigated by him. In this respect the appropriation of unappropriated public water on a reservation and the location of a mining claim or other lands on or within a reservation rest on different foundations, and are controlled by different principles. The one is a proper subject of rightful acquisition. The other is not. An appropriation made of such waters will be protected, even as against the Government of the United States. The location of mining claims or the taking up of lands on or within a reservation is void and of no effect, because the ores or lands sought to be taken, or acquired, are not then subject to private ownership or acquisition.

But the serious question in the case, and one not altogether free of doubt, is whether, to initiate a right in the use of unappropriated public water, it is essential, when the notice of intention to appropriate is given, or when, as required by the statute, a written application is made and filed with the State Engineer, that the beneficial purpose of use for which the water is proposed to be appropriated shall be immediate and then existing, or whether the beneficial use may be contemplated or anticipated in the future. That is to say, when in an application filed to appropriate water in which the applicant is required, as by the statute provided, to set forth "the nature of the proposed use for which the appropriation is intended," the quantity of water to be used, etc., and such other facts as will clearly define the full purpose of the proposed appropriation, and, if the proposed use is for irrigation, in addition thereto, "the lands proposed to be irrigated, with the total area thereof," the question is, in order to properly initiate a right to the use of the water, whether "the lands proposed to be irrigated" must, when the application is made, be then subject to such a use and capable of being devoted to such a purpose, not necessarily by the applicant himself, but by someone. When the defendants made their applications to appropriate the waters for the purpose of irrigation, no one could then lawfully enter upon, occupy, possess, cultivate, farm, or otherwise use "the lands proposed to be irrigated," because they then were a part of, and included in, the reservation, and were then not open to entry, settlement, or disposition. Neither the applicants nor anyone else could then lawfully use water on such lands. No present right permitting anyone to make use of the beneficial purpose for which the proposed appropriation was made then existed. The inceptive right initiated by the defendants in and to the use of the water by the filing of their applications depended upon several contingencies: One, upon the actual opening of the reservation for settlement; another, upon the entering upon, or settlement of, or taking up of, some or all of the lands proposed to be irrigated by someone entitled to enter upon such lands, or to take them up, after the reservation was opened; and, still another, the agreement or consent of such persons to take and use the water on such lands, or otherwise to permit them to be irrigated therewith, or the water to be used thereon for the purpose of the proposed appropriation. Should any one of these contingencies fail, the proposed appropriation itself would prove abortive, because the application of the water to the proposed beneficial purpose—the absolute and indispensable essential to constitute a completed valid appropriation—could not be made in such case. In this respect the appellants, however, do not stand on much better ground than do the respondents. The only difference between the parties is this: It is alleged that the respondents made applications to appropriate the

water in question to irrigate lands then alleged to be a part of the reservation, the appellants to irrigate lands then a part of the public domain. In neither instance is it alleged that any portion of the lands proposed to be irrigated had then been entered upon, or taken up, or occupied, or possessed, or claimed, by anyone; or that the lands were then, or since have become, subject to such a use. So far as anything is made to appear to the contrary, the lands proposed to be irrigated by the appellants were, when their application was filed, "at the hour of 20 minutes after 9 o'clock in the forenoon" on the very day upon which the reservation was opened, and still are, a part of the public domain, unentered, unoccupied, unsettled, and unclaimed. It is alleged, and we may judicially notice, when the reservation was opened and the unallotted lands thereof restored to the public domain; but it is not alleged, nor can we judicially know, that the particular lands proposed to be irrigated were when the appellants filed their application, or since have been, occupied, claimed, or possessed by anyone. So far, then, as made to appear by the complaint, it is shown that, when the applications to appropriate the water were filed, the beneficial use for which the water was proposed to be appropriated did not then exist, but was, by both parties, contemplated and anticipated in the future. That is, we may well assume that, when the applications were filed, both parties contemplated and anticipated that within the time fixed by the engineer for the construction of the works and the diversion of the water, and by the time such works were completed, the water diverted and conducted upon "the lands proposed to be irrigated," such lands would then be claimed, occupied, and possessed by someone entitled to claim and occupy them, and thus the water could, and would, be applied to the beneficial purpose of the proposed appropriation stated in the applications. May an application be made to appropriate water for a beneficial purpose so contemplated in the future? We confess that the question is open to debate, and is not free of doubt. We have, however, with some hesitancy, reached the conclusion that such an application may properly be made when it is made in good faith and with an actual bona fide intention and a present design to appropriate the water for a beneficial use, though contemplated in the future, and when it is not made for the purposes of mere speculation or monopoly. That the applications were made by the respondents with an actual bona fide intention to appropriate the water for a beneficial purpose is not questioned, nor are their good intentions assailed in any other particular, except by the claim made that they could not lawfully initiate or acquire any right in and to the use of the water until the reservation was actually opened. The three principal elements to constitute a valid appropriation of water, and, as stated by the court in the case of Law v. Rizor, 25 Ore. 557, 37 Pac. 82, and approved by the same court in the case of the Nevada Ditch Company v. Bennett, 30 Ore. 59, 45, Pac. 472, 60 Am. St. Rep. 777, are: "(1) An intent to apply it to some beneficial use; (2) A diversion from the natural channel by means of a ditch, canal, or other structure; and (3) an application of it within a reasonable time to some useful industry." Says Mr. Kinney, in his work on Irrigation (Sec. 151): "There must be, first, some actual beneficial purpose existing at the time, or contemplated in the future, as the object for which the appropriator is to use the water." The same doctrine is also stated in Black's Pomeroy on Water Rights, Sec. 48. In Nevada Ditch Company v. Bennett, supra, it was said:

"The general purpose of an appropriation is to utilize the water in the arid regions, where the supply is limited, for the development and advancement of beneficial industries. In many localities where the water is difficult of diversion, and the expense considerable in conducting it to the place of use, if individual landholders, or even an aggregation of them, were required to make the appropriation for use upon their own possession, these general purposes would be entirely defeated simply for the reason that such holders could not bear the burden of making the appropriation. In such cases, other persons possessing capital are often willing to make the diversion for the benefit of those who have use for the water, but, unless they may contemplate a use which may be applied by the land owner to his possessions, they could not even initiate the appropriation until they had possessed themselves of lands in proportion to the amount of water it is desired to appropriate; so that if the user must be the appropriator, and the appropriator the land holder, the arid regions in many places would remain arid, whereas otherwise they could be made to teem with fertility. No sufficient reason has been suggested why the contemplated use may not be for and upon the possessions of a person other than the appropriator. The authorities we have seem to support the rule that it can be, and we believe it is correct upon principle. We take it, therefore, that the bona fide intention which is required of the appropriator to apply the water to some useful purpose may comprehend a use to be made by or through another person, and upon lands and possessions other than those of the appropriator. Thus the appropriator is enabled to complete and finally establish his appropriation through the agency of the user."

Of course, we are not unmindful that what was said by these writers and courts was with respect to appropriations not regulated by statute. But we think the filing of a written application with the State Engineer, as required by the statute, is but declaring, or the giving of a notice of an intention to appropriate unappropriated public water. The final step, and the most essential element, to constitute a completed valid appropriation of water, is the application of it to a beneficial purpose. Whatever else is required to be or is done, until the actual application of the water is made for a beneficial purpose, no valid appropriation has been effected. This was so before the statute, and it is still so under the statute. The filing of the application with the State Engineer, as required by the statute, does not establish an appropriation of water. It but takes the place of, and is, the preliminary notice of intention to appropriate. Unless the construction of the works is commenced and completed within the time allowed by the engineer, and the water diverted and applied to the beneficial purpose of the proposed appropriation, the filing of the application is for naught, and no completed valid appropriation has been made. If, therefore, an application is made with a present design and an actual bona fide intention to appropriate unappropriated public waters for the irrigation of certain designated lands, a beneficial purpose, at a time when the applicant has no present right, title, or interest, in or to the lands proposed to be irrigated therewith, and, too, when such lands are then unoccupied and unclaimed and a part of a reservation, but it fairly is made to appear that when the proposed diverting channels and work prosecuted with reasonable diligence and dispatch are completed within the time fixed by the statute, or allowed by the engineer, the lands may then be lawfully claimed and occupied, and the water applied to the beneficial purpose for which the appropriation is proposed, we see no good reason why the application should

not be received and the applicant protected in his inceptive right. One filing an application under such circumstances, commencing the construction of works within six months from the approval of his application, prosecuting such proposed works to a completion within the time fixed by the statute or allowed by the engineer, and incurring the necessary expense to divert and conduct the water to the lands proposed to be irrigated, takes the risk that when such works are so completed, and the water diverted and conducted to such lands, they may then be lawfully claimed and occupied by some one who is willing to take the water and use it and apply it to the beneficial purpose for which the application was made to appropriate it. Bearing in mind that an appropriation of the waters as here proposed by the applicants is not made until the waters have been applied to the beneficial purpose for which the proposed appropriation was applied for, the irrigation of certain designated lands, if, when the diverting channels and works, prosecuted with reasonable diligence, are completed, the water may not then lawfully be used on such lands because they remain and still are a part of the reservation, or of the public domain, unclaimed, unsettled, and unoccupied, or if the lands have since been restored to the public domain, and since have been lawfully claimed, occupied, and possessed, but such persons so occupying and possessing the lands refuse to take or use the water thereon or apply it to the beneficial purpose for which the appropriation was applied for, the application, and the construction works, and the moneys expended thereon by the applicant are for naught. In other words, if the proposed appropriator is not able to complete and finally establish his appropriation by applying the water to, and using it for, the beneficial purpose for which it was proposed to be appropriated, either by himself, or through the agency of some user, his appropriation fails. He may not file his application, construct his works, and then hold the water and wait for something to happen. He cannot withhold the water from the proposed beneficial use. He must not only be diligent in constructing the works, and in making the diversion, but he must also be reasonably diligent and expeditious in making application of the water to the beneficial use for which the appropriation was proposed, else he loses his inceptive right. His appropriation will be measured by the quantity of water actually used for the proposed beneficial purpose.

We are of the opinion that, upon the face of the complaint, it is not made to appear that the engineer wrongfully or erroneously approved the defendants' applications, which were prior in time. However, should we be in error in holding that an inceptive right in and to the use of unappropriated public water upon or within a reservation can be initiated or acquired after the issuing of the proclamation, but before the reservation was actually opened and the lands subject to entry, settlement, and disposition, a contrary holding would not materially aid the cause of the appellants for the reasons hereinbefore suggested. And since the appellants, if entitled to recover, must do so upon the strength of their own right or title, and not upon the weakness of that of their adversaries, it again follows that the demurrer was properly sustained.

We are therefore of the opinion that the judgment of the court below ought to be, and it therefore is affirmed, with costs.

Such is the order.

We concur:

FRICK,
McCARTY.

IN THE SUPREME COURT OF THE STATE OF UTAH.

EDWARD PATTERSON, as Administrator of the Estate of JOHN PATTERSON, deceased,
Appellant,

v.

JOHN RYAN,
Respondent.

(April 27, 1910.)

1. WATERS AND WATER COURSES—APPROPRIATION—EXTENT OF RIGHTS.

Plaintiff's intestate in 1901 took possession of land surrounding springs on arid and unsurveyed public land, erected a cabin, constructed a corral, and fenced in a few acres. Until his death in 1905, he maintained the corral and fences, and a portion of the time each year lived in the cabin, and while living there used the water for culinary purposes and to water a team and saddle horse, but never used it for irrigation. Prior to 1901 sheep and cattlemen used the water, and thereafter intestate occasionally required the sheep men to pay for the water while the cattlemen used it without, but neither disputed nor interfered with intestate's right to use the water. Defendant, a cattle man, watered his cattle at the springs for a number of years. **Held** that intestate, although he might have been a trespasser on the land, acquired the right to use the quantity which he used, and, although he posted no notice that he intended to appropriate the water in acordance with the law in force in 1901, the notice and record thereof being merely prima facie evidence that the person giving the notice was applying the water to some beneficial use, so that plaintiff had the right to use the quantity of water used by intestate, and even if he had no right in the land surrounding the springs, he could divert it to some other place, if possible.

2. WATER AND WATER COURSES—APPLICATION—NATURE AND EXTENT OF RIGHTS.

Trespassers upon land may acquire the exclusive right to the use of water either to irrigate land or for other purposes, and, when such right is acquired, it is paramount to the rights of the true owner or claimant of land, and the water claimant, when he is dispossessed of the land, may divert and use the water elsewhere, if he can so divert and use it.

Appeal from Fifth District Court, Beaver County; Joshua Greenwood, Judge.

Action by Edward Patterson, as administrator of John Patterson, deceased, against John Ryan. Judgment for defendant, and plaintiff appeals. Reversed and remanded.

William F. Knox for appellant. E. W. Senior and Allan T. Sanford, for respondent.

FRICK, J. This action was brought by appellant, as administrator of the estate of one John Patterson, deceased, to quiet title to the use of the water flowing from certain springs known as the Potsum Pah Springs, situate in Pine Grove Valley, Beaver County, Utah.

The facts which we deem material, as developed at the trial, in substance, are:

That the land on which the springs in question are situated is arid, and up to the time that this action was commenced, continued to be unsurveyed public domain. In the year 1896 one Thomas McCune filed a desert entry on the lands surrounding the said springs, constructed one or two small reservoirs to hold the waters flowing therefrom, and thereafter placed troughs at the springs, conducted the water into them and used the same to water livestock; that said desert entry was contested and in August, 1903, was duly cancelled by the local United States land office, and the action of the local office was approved by the commissioner of the general land office at Washington, D. C., on the 19th day of January, 1905, and said McCune by said decision forfeited all rights under his desert entry aforesaid. In March, 1901, and while the desert entry of said McCune was still prima facie at least, in force, but when said land and springs were seemingly abandoned and the water flowing from said springs was not being used by anyone except as hereinafter stated, the deceased, John Patterson, took possession of the lands surrounding the springs and of the springs, erected a log cabin 16x14 feet near said springs and constructed a corral and fenced in a few acres of the land near the springs and in connection with the improvements aforesaid, he also cleaned out the reservoirs constructed by said McCune. Said Patterson died on the 4th day of January, 1905. From March, 1901, to the time of his death he maintained the corral and fences aforesaid, and a portion of the time during each year stayed in the cabin aforesaid, and at such times he used the water from the springs for his culinary needs and to water "a team and saddle horse" which the testimony shows he kept with him when staying in said cabin. While Patterson fenced in some land which the testimony shows could have been irrigated, it is clear that he never planted any crops or used any water for irrigation except what by force of gravity ran over a portion of the enclosed lands where some "salt grass" was growing. The testimony also shows that for many years prior to 1901, both the sheep men and cattle men used the water of the springs to water their flocks and herds when they were ranging in the vicinity of the springs in the winter season; that in 1901 for several seasons and at various times the deceased Patterson would require the sheep men to pay him something for watering their sheep at the springs. The number of times that such charges were made is not clear, but it did not occur very often. Some of the sheep men, however, used the water to water their sheep at times during the years aforesaid without paying the deceased, or without asking him for the privilege to do so, and the cattle men, it appears, used the water from the springs without paying the deceased anything, but neither the sheep men nor the cattle men after March, 1901, disputed or interferred with the deceased's right to use the water for the purposes he used it as aforesaid. The defendant was one of the principal cattlemen who watered cattle at the springs for many years in the manner aforesaid, but he apparently had no special rights in the water of the springs up to the time this action was commenced except to use it for his cattle as

above stated. There is much evidence in the record relating to entries of the lands surrounding the springs in question and the proceedings in the United States land office relative thereto, all of which we deem immaterial. The evidence is conclusive that the deceased at the time of his death had no right in or to the lands surrounding the springs or any lands in their vicinity, but both the legal and the equitable title to all of said lands was in the United States at the time aforesaid and when this action was commenced. After the death of said Patterson, to-wit, on the 26th day of December, 1905, the defendant filed his application to appropriate the water of said springs with the State Engineer of the State of Utah in accordance with Chapter 108, Laws of Utah, 1905, but the State Engineer just before the time this action was commenced, rejected said application and the defendant did not within the time, nor as provided by said chapter, bring an action in any court to review the action of said State Engineer in rejecting said application, but he did set forth the facts with respect to said application and the rejection thereof in this action in the nature of a counterclaim.

Upon substantially the foregoing facts the court found in favor of the defendant and found that the said John Patterson, deceased, had acquired no rights to the use of the water of said springs or any part thereof and adjudged the right to the use of the water thereof to be in the defendant. The administrator appeals from the court's findings and judgment.

Counsel for appellant urge that in view of the undisputed facts, the court erred in its findings and judgment in so far as it adjudged that the plaintiff, as the administrator of the estate of said John Patterson deceased, was not entitled to the use of the water of said springs; and also in its findings and judgment that said defendant was entitled to the use of said water. It seems to us that the court laid too much stress upon the question of the right of possession or ownership of the lands surrounding the springs. Even if it be assumed that some one of the different parties who at some time claimed some rights in said land at one time had some equitable right or title thereto, yet the evidence is conclusive that no one ever used or attempted to use the water on said land for irrigation or for the purpose of producing crops of any kind thereon, not even grass for pasture. In view of this fact anyone claiming the legal right to use said water had to base that right upon a use and for a purpose other than irrigation. While the evidence shows that both the sheep men and the cattle men, among whom was the defendant, used the water of said springs for many years prior to the spring of the year 1901, when the deceased took possession thereof, yet this use was not an appropriation of the waters of said springs and was not so intended since it merely consisted in driving their flocks and herds to the springs for water, the same as they might have done to any other stream or water which was suitable to water livestock. Moreover, the use of the water as aforesaid was merely sporadic and intermittent, and the quantity of the water used was so uncertain that under the evidence it would be impossible to determine the quantity of the water the defendant would be entitled to, if it were found that by reason of the foregoing facts, he, at the time of said Patterson's death, was legally entitled to claim any rights to the use of said water. It seems to us that the right of the deceased to the use of at least a portion of said water as against the defendant is based upon more substantial ground. As we

have seen, when the deceased took possession of the springs, no one was using the water except that both sheep men and cattle men, during certain portions of the year, in the manner before stated, drove their sheep and cattle to the springs. Again, it is made to appear that whatever rights Mr. CcCune had in the use of said water, if any, he in effect surrendered (not transferred) to the deceased in 1902, and after that time it seems McCune made no further use of the water, or claim thereto, and his desert entry was cancelled in 1903 by the United States land office, and he never appealed from that decision. Was it necessary for the deceased Patterson to have some right or title in and to the lands surrounding the spring, or any land upon which he applied the water for the purpose of irrigation, or if he did not so apply the water, was he required to post notices under the law in force in 1901, that he intended to, and did appropriate the water flowing from said spring for a specific purpose before he could acquire the legal and exclusive right to the use of all or any portion of said water? The right to the use of water in this state has always depended upon whether the person claiming the water applied it to a beneficial use, and the notice and record required by the statute was merely prima facie evidence of the facts recited therein, namely, that he was applying the water to some beneficial use. Any person, however, who actually used the water for a useful or beneficial purpose acquired the right to take the water so used as against all subsequent claimants regardless of whether the user had posted notices or not. Again, in so far as using the water for irrigation is concerned, the exclusive right to use certain waters in this state has always been independent of and separate from the ownership of the land on which the water was used, or the ownership of any land. To this effect is the case of Sullivan v. Northern Spy Mining Company, 11 Utah 438. The authorities generally support this view: (Well Water Rights, etc., 2nd. Ed. Par. 63). But the authorities are to the effect that even trespassers upon land may acquire the exclusive right to the use of water that is used either to irrigate such land or is used thereon for other purposes, and that such a right, when once acquired, is paramount to the rights of the true owner or claimant of the land and the water claimant, when he is dispossessed of the land may divert and use the water elsewhere than on the land if he can so divert and use it.

Smith v. Logan, 18 Nev. 149;
Alta Land Etc. Company v. Hancock, 85, Cal. 219;
Santa Paula Waterworks v. Peralta, 113 Cal. 38, 45, Pac. 168.

In the California cases some distinction is made on account of riparian rights, which distinction, however, does not militate against or effect the principle just stated. The deceased, therefore, although he may have been a trespasser on the land, still had a right to appropriate and use the water from the springs in his cabin for culinary purposes and for the purpose of watering his team and saddle horse. That he used a certain amount of water from said springs during a portion of each year from March, 1901, until the time of his death, January 4, 1905, no one disputes, and no one seems to have questioned his right to do so. Is there any doubt that the use the deceased made of the water was a beneficial use within the meaning of that term? We think not. If, therefore, the deceased commenced the use of the water from the springs at a time when he had a right to appro-

priate the water, or any part thereof, and if he applied it to a beneficial or useful purpose, why was he not at the time of his death entitled to so much of the water of said springs as he had appropriated and used for such purpose? Counsel for respondent, as we understand them, do not assert the contrary, except to claim in a general way that the deceased never acquired any right to use the water or any part thereof. In view of the evidence we are unable to see upon what this claim rests. If, as the court seemingly concluded, the defendant could acquire some right to the use of the water of the springs by merely intermittently and at long intervals driving his cattle to drink the water, why could not the deceased acquire a right to at least a portion of said water by making a daily use of it for a beneficial purpose for a portion of each year for a term of years? In our judgment the defendant's use of the water was too intermittent and uncertain, either as to time or quantity to prevent the deceased from acquiring a right thereto, and for the same reason we think the claim to the water by appellant, by reason of the fact that the deceased on different occasions required the sheep men to pay him for the use of the water in watering their flocks, is too uncertain a use to authorize a court to find and adjudicate that the appellant has any right to the water by reason of what the deceased did or claimed in that regard. The number of times that the deceased exacted pay from the sheep men was comparatively small at best, and did not occur in every year, or always while the deceased was on the land near the springs. Nor did he ever exact pay from cattle men, nor from all the sheep men, although it appears from the evidence that quite a number of them watered their cattle and sheep at the springs during a part of the time when the deceased stayed in his cabin near the springs. It also appears from the evidence that neither the deceased nor his team and saddle horse were present at the springs or used the water as aforesaid, except during a portion only of each year commencing with March, 1901, and ending January 4, 1905, when the deceased died. Just what the exact time was does not appear and is not found by the court, except the finding that the deceased used the water as aforesaid "a few months each year." Nor did the court find how much water in quantity, or what proportion of the springs the deceased used as aforesaid. In view of all the facts and circumstances we are of the opinion, therefore, that the appellant as administrator is entitled to a specific finding with respect to the quantity or proportion of the water from the springs that the deceased used for culinary purposes and to water his team and saddle horse, and the length of time that the water was used for those purposes each year from 1901 to 1905, and when said quantity and time of use is ascertained the appellant is entitled to a decree awarding him for the benefit of said estate, the quantity of water so found for the time aforesaid. If it be found that the appellant has no right to use the water for the purposes aforesaid, or for any beneficial purpose, on the land surrounding the said springs, then he may, nevertheless, use the water in the quantity that it is found the deceased used it, and for the time that he used it, by diverting it to some other place if appellant can do so. (Smith v. Logan, supra; Santa Paula Waterworks v. Peralta, supra.) If appellant, however, has no right to use the water at or near the springs as the deceased used it, and if he will not divert and use it elsewhere, or dispose of it to someone who will use the same, then appellant at some time in the future may be deemed to have abandoned the right to the use of the water the same as anyone else would be deemed to have abandoned rights by non-usage.

From what has been said it follows that the district court erred in its application of the law to the facts of this case. In view of the unsatisfactory state of the evidence upon the two questions, namely, the amount of water that the deceased Patterson used for culinary purposes and for his team and saddle horse, and the season or the length of time he so used it during each year, we are unable either to direct findings or to make any upon those questions. Since there must be findings upon these two questions before the case can be finally determined, nothing remains for us to do, except to reverse the judgment and to remand the cause for a new trial with directions to the district court to proceed with the case in accordance with the views contained in this opinion. It is so ordered. Appellant to recover costs.

We concur:

STRAUP,
McCARTY.

RESERVOIR SURVEYS.

H. S. Kleinschmidt, Engineer.

The surveys on which the following report is based were made by plane table method. Platting in field done on a scale 1,000 feet to 1 inch with 5 foot contours.

In all cases the reservoir sites were platted to what appeared to be the greatest height to which it was economically practicable to construct a reservoir, without reference to the water available, which was estimated later.

Surveys were referenced to United States Land Survey monuments wherever found.

THURBER RESERVOIR SITE.

The Thurber reservoir site is located on the Fremont River adjacent to the Town of Thurber, in Wayne County.

The area at the seventy-five foot contour is 3,254 acres, the capacity at that elevation being 136,500 acre-feet, with an average depth of forty-two feet, or 56% of the maximum depth. Of this area 1,125 acres are under cultivation, the main crops being alfalfa and grains; 1,050 acres are pasture, wild hay and marsh; 400 acres are slough and open water, and 680 acres dry and uncultivated. The legal subdivisions covered, or partly so, are: Sections 27, 34, and 35, Township 28 south, Range 3 east; Sections 1, 2, 3, 10, 11, 12, 14 and 15, Township 29 south, Range 3 east, and Sections 6 and 7, Township 29 south, Range 4 east, Salt Lake base and meridian.

DAM SITE. The dam site at the east end of the valley is 1,370 feet wide at an elevation of 85 feet, and 500 feet wide at an elevation of 25 feet. The north abutment is a disintegrated sandstone hill, covered with basalt bowlders, outcrops of solid sandstone showing at upper contours. The south abutment is a sandy

earth slope. Bedrock, sandstone, in stream bed, from surface indications, is probably at elevation approximately (—15.0) making the total height of dam 100 feet to an elevation 10 feet higher than maximum water surface. A dam at this point with slopes 2:1 and 3:1 would require approximately 300,000 cu. yds. of fill. There is an abundance of sandy earth for making this fill adjacent to the damsite. At a point one-half mile north of the damsite, at elevations from 75 to 150, there is a large deposit of disintegrated shale and clay suitable for puddle material. By constructing a canal about 4 miles long and ½ mile of flume the greater part of the fill could be sluiced into place. On the hillsides adjacent to the damsite, there is an abundance of basalt bowlders for rip rap. There is no natural spillway site, but one can be excavated in sandstone across the north abutment. Outlet tunnel if excavated would be in sandstone and shale, and would require lining throughout.

WATER SUPPLY. The water shed tributary to the reservoir is 700 square miles in area. This includes Fish Lake, and the high well timbered Fish Lake, Awapa and Aquarius Plateaus, rising to altitudes of over 11,000 feet. The altitude of the reservoir site is approximately 6,800 feet. The upper altitudes are heavily timbered.

The run-off from the water shed surrounding Fish Lake is partly controlled and utilized for irrigation above the reservoir site. A gaging station has been maintained at the damsite since May, 1909, and shows the following average discharge for 1909 and 1910.

Month.	Max.	Min.	Mean.	Total Acre-Feet
January			208	12,800
February			224	12,400
March			250	15,400
April			134	8,000
May	190	68	123	7,600
June	163	68	99	5,900
July	138	50	80	4,900
August	328	68	136	8,400
September	305	114	180	10,800
October	261	163	157	9,700
November	205	126	141	8,400
December	261	190	165	10,200
Total				114,500

This is practically all available for storage, as the small amount used along the Fremont River below the damsite will doubtless be supplied by seepage and direct flow. In addition, there will be available the water at present used on the cultivated lands within the reservoir site, and adjacent land which would have to be acquired. This is estimated at 3,000 acre-feet, making the total amount available for storage 118,000 acre-feet per annum.

The Fremont River at this point is not subject to violent floods, and carries but a small amount of sediment, at any time, thus eliminating the danger of excessive silting of the reservoir.

The top of the 2'' x 4'' gage rod at the United States Geological Survey gaging station at the damsite is 4.0 feet above the 0.0 of the survey. The gage rod bears N. 51 degrees 15 minutes E. 2,450 feet from the west quarter corner of Section 7,Tp. 29 S.—R. 4 W. S. L. B. & M.

Water stored at this point would be utilized on extensive areas of land along the lower reaches of the Fremont River.

ESCALANTE RESERVOIR SITE.

The Escalante reservoir site is located on the Escalante River, adjacent to the town of Escalante in Garfield County.

The area at the 125-foot contour is 890 acres, the capacity at this elevation being 35,000 acre-feet, with an average depth of 40 feet, or forty per cent of the maximum depth. Of this area 410 acres are under cultivation, the main crops being alfalfa and grain; 120 acres are pasture, wild hay and marsh; 325 acres are uncultivated or waste. In addition about sixteen town lots would be made unfit for habitation. The legal subdivisions covered, or partly so, are: Sections 7, 8, 9, 16 and 17, Tp. 35 S.— R. 3 E., S. L. B. & M.

DAM SITE. There are two dam sites, further study being necessary before a definite conclusion can be reached as to which is preferable, and

depending on the choice between two ways of handling this project.

The upper dam site has a width of 350 feet at elevation 140, and 130 feet at elevation 25, the present ground level. Both abutments are solid yellow sandstone of poor quality. The south abutment is almost vertical to an elevation of 175 feet. The distance to bed rock in the stream bed is uncertain, but projecting the slopes of the rock at the ground surface to an intersection indicates bed rock at about elevation 10.0, making the total height of dam 145 feet, to an elevation 10 feet higher than the maximum water surface. There is practically no earth suitable for making a fill of this height adjacent to the damsite. A combination rock and earth fill would seem the most feasible structure. Such a dam at this point, with rock slopes 1:1 with upper earth toe slope 3:1, would require about 150,000 cu. yds. rock and 150,000 cu. yds. earth. The cliffs adjacent to the damsite afford an abundance of material for rock fill. About 2,000 fet west of the dam site there is a deposit of clayey and gravelly material, which would probably supply a sufficent quantity for the earth toe. As shown on the accompanying map, there is a ridge running northwesterly from the dam site, separating the reservoir from Pine Creek, which joins the main stream about 1,000 feet below the dam site. This affords a natural spillway site, its lowest elevation being 105. In order to utilize the flow of Pine Creek, it would be necessary to divert it over this ridge into the reservoir.

The silt problem is a very serious one here. Practically the entire drainage area is soft sandstone which disintegrates rapidly and washes away easily. Even during low water when only a few Sec. Ft. are passing the damsite, the water carries a high percentage of silt. The water shed is subject to very violent cloudbursts, which bring down an enormous amount of sand. The floods come during the summer months when there would be a considerable quantity of water in storage, thus affording no opportunity to allow the sand laden water to pass through the reservoir, or at least carry the sand to the lower portion of the reservoir where most

of it could be sluiced out. It would seem that the development of this project depended on the control of the silt. By constructing a canal approximately two miles long to carry the entire flow of the river around the north side of the reservoir and using the small basin formed by damming Pine Creek near its junction with the main stream as a settling basin, allowing the settled water to flow over the divide into the main reservoir, the greater part of the sand could doubtless be gotten rid of. The settling basin in Pine Creek could be maintained by sluicing out the deposited sand. This secondary dam would involve a fill of about 100,000 cu. yds. rock and 50,000 cu. yds. earth. The canal would involve the excavation of about 20,000 cubic-yards earth.

The second or lower dam site is 1,000 feet below the upper. By building the dam here, the silt could be taken care of in essentially the same manner as in using a secondary dam and basin in Pine Creek, as the silt would be deposited at the upper toe and could no doubt be largely sluiced out. This dam site is 720 feet long at an elevation of 140. A sandstone ridge slopes from the north abutment to within 100 feet of the south abutment, and would form part of the dam. The stream bed here is about 10 feet lower than at the upper site. The yardage of this dam, excluding the ridge which would form part of the dam, using the same type of dam as the upper would be 175,000 cu. yds. rock and 210,000 cu. yds. earth toe. The totals for the main dam and secondary settleing basin dam, using the first plan, are 250,000 cu. yds. rock fill and 200,000 cu. yds. earth. Offsetting this difference somewhat is the fact that earth for the lower dam would have to be brought nearly three-fourths of a mile. A careful survey and estmate would be necessary to determine which plan is the cheaper.

An unusual feature of this project would be the utilization of the stored water. The Escalante River flows through a box canyon from the dam site to its junction with the Colorado River, there being no irrigable land along the stream. Adjacent to the reservoir site on the south and separated from it by a ridge, the lowest elevation of which is 120, there is a large body of land.

To empty the reservoir to the 50 foot contour onto this area, it would be necessary to excavate a cut for outlet tunnel approximately 5,000 feet long, involving about 260,000 cu. yds. earth and subsequent backfill of 90,000 cu. yds. In event of rock being encountered, a tunnel probably 5,000 feet length would be necessary together with 2,000 feet of open cut, or 30,000 cu. yds. This cut could be sluiced out and backfilled hydraulically by conducting water under pressure for about 2 miles.

WATER SUPPLY. The water shed tributary to the reservoir is 200 square miles in area. This includes a part of the Aquarius Plateau, reaching an altitude of over 10,000 feet. The water shed for the most part supports a good growth of timber and under brush. The altitude of the reservoir is approximately 5,700 feet. There is but little irrigation above the reservoir and none below, so that the entire flow of the stream is available for storage. A gaging station has been maintained at the dam site by the United States Geological Survey since August, 1909, and shows the following discharge for the year 1910:

Month.	Max.	Min.	Mean.	Total Acre-Feet
January	136	97	117	7,200
February	139	94	115	6,400
March	139	90	126	7,700
April	125	56	92	5,500
May	122	80	107	6,600
June	80	2	38	2,300
July	272	2	46	2,800
August	146	9	47	2,900
September	244	5	83	4,900
October				*5,000
November				*6,000
December				*7,000
Total				64,300

*Record not available. Estimated.

The datum of the survey is the bottom of the stream bed about 1,000 feet below the dam site. The top of the gage rod at this point is elevation 2.0. This rod bears N. 23 degrees 15 minutes E. 2,520 feet from the south quarter corner of Section 9, Tp. 35 S., R. 3 E., S. L. B. & M.

DUCK LAKE.

Duck Lake lies on the rim of the Great Basin, at an altitude of 9,750 feet, at the head of Asay Creek, tributary to Sevier River and the North Fork of Virgin River, in Kane County. It is in an isolated region of rugged grandeur. The legal subdivisions partly covered are: Sections 7, 8 and 9, Tp. 38 S., R. 8 W. (unsurveyed), and Section 12, Tp. 38 S., R. 9 W., S. L. B. & M.

The area of the lake at time of survey, August, 1910, was 550 acres. Soundings made at intervals of about 550 feet showed a maximum depth of 13.5 feet and a volume at that stage of 4,560 acre-feet. The area level indicated by highest water marks, about 15 feet higher, is 730 acres, and a capacity of 14,200 acre-feet. This capacity may be increased at the rate of about 1,000 acre-feet for each 1 foot raise by dyking the east end of the lake to prevent escape of water through fissured lava. It is reported that the lake has overflowed its east rim at times of extreme high water.

The lake presents many interesting features. It is reported by indisputable authority that it is sometimes entirely dry, at which times it is seen to have subterranean outlets through the fissured lava that forms the bottom and east rim of the lake.

About five miles east of the lake, at the Duck Creek Forest Ranger Station, a large spring rises, which is locally credited with having its source in Duck Lake. This stream, Duck Creek, flows about three miles and disappears in the fissured lava at what is known as the Sinks of Duck Creek. The measured flow at the Sink was 12.8 second feet on August 22, 1910. It is thought that the numerous springs forming the head of Asay Creek are fed from this disappearing stream.

The lake was falling at the rate of 0.08 feet per day during time of survey, showing a daily loss of 44 acre-feet, or 22 second feet. Evaporation at this altitude may be neglected under the conditions of showery weather that prevailed, one rain of 0.75 inches having been recorded. The measured flow of Duck Creek being about 13 second feet, as compared with a loss of 22 second feet from the

lake, leaves 9 second feet unaccounted for. It is said that a large spring issuing from the base of cliffs south of the lake, and in the drainage from the Virgin River, also has its source in the lake.

WATER SUPPLY. The water shed tributary to Duck Lake is about seven square miles in area. It is entirely mountainous at an altitude of about 10,000 feet and is uniformly covered with a dense growth of Pine and Aspen.

The precipitation is probably as great as in any part of the state, mostly in the form of snow, and conditions highly favorable for snow to lie late, thus furnishing a very high percentage of run-off. At ranch fifteen miles southeast, and at an elevation of 3,000 feet lower, the average annual precipitation for the period 1902-1910, inclusive, is 24 inches. Assuming that the daily loss .08 inches equivalent to 22 second feet, observed at the time of survey, is maintained throughout the year, this would indicate an annual outflow of 15,000 acre-feet, or slightly more than the capacity of the lake at highest water mark. This assumption equals a run off of about 3 second feet per square mile of drainage area. This is not excessive under the physical conditions, together with the inflow from subterranean sources probably supplied to a great extent by percolation from an area outside the direct surface drainage area. Conditions are favorable for this to the north of the lake where the mountains rise in a series of ridges probably 1,000 feet higher than the lake.

In order to utilize the waters of the lake it will be necessary to construct an outlet channel. Three routes were investigated. The first at the west end of the lake, would involve about 5,300 feet of tunnel and 13,500 feet of open cut, of which 6,000 feet lies in the lake bottom. This outlet would discharge into the West Fork of the North Fork of the Virgin River.

The second route is near the middle of the south side of the lake. Here a tunnel about 3,500 feet long and open cut 1,500 feet long would drain the lake into the East Fork of the North Fork of the Virgin River. Both of these tunnels would be in sandstone and limestone and would probably require lining throughout.

The third route is at the east end of the lake, where tunnel and lined open cut through fissured lava 17,000 feet in length would drain the lake into Duck Creek. The topography of the region is such that from a point near the sinks of Duck Creek, water could be conducted by open cut into Asay Creek, tributary to Sevier River, East Fork of the Virgin River or Kanab Creek. About four miles below Duck Creek there is a natural basin which could be utilized as a storage reservoir should unusual difficulties be encountered in closing the underground outlets of Duck Lake. Water rights based on the springs on Asay Creek and North Fork of Virgin River, whose source is claimed in Duck Lake, would have to be acquired should such connection be established.

A lone quaking aspen tree at east end of lake, with a 4-foot strip blazed on the north side, bears north 84 degrees east, 11.160 feet from the southwest corner of Section 7, Tp. 38, S. R. 8 W., S. L. B. & M., (location approximate). The upper end of blazed strip is 20.0 feet above 0.0 of survey.

The project, judged from a preliminary survey, although involving large and unusual features, is worthy of further investigationn.

SINK CREEK RESERVOIR SITE.

The Sink Creek reservoir site on Sink Creek is located about 8 miles south of Alton, or Upper Kanab, in Kane County, near the head of Kanab Creek. The area at the 75-foot contour is 420 acres, the capacity at that elevation being 13,250 acre-feet, with an average depth of 31.5 feet, or 42 per cent of the maximum depth. There is no cultivation within this area.

DAM SITE. The dam site is at the south end of the reservoir where the valley narrows to a width of 780 feet at elevation 75, and 400 feet at elevation 10. The west abutment is a steep basalt hill and the east abutment a cemented gravel hill. Bedrock, limestone, in the bottom of the stream channel is at elevation about -10.

A dam at this point with slops 2:1 and 3:1 would require approximately 210,000 cubic yards fill. There is an abundance of clay and gravel material adjacent to the dam site. There is no water available for sluicing except during melting snow and summer freshet periods. Joining the east abutment and extending eastward from it there is a ridge, t he lowest elevation of which is 55, forming an ideal spillway site. A channel from 10 to 25 feet deep and from 50 to 200 feet wide has been eroded in the alluvial bottom of the reservoir along the stream. This well defined channel will serve to collect and carry off a large part of the sediment brought down by Sink Creek during high water. The percentage of silt carried is small, except during flood.

WATER SUPPLY. The water shed tributary to the reservoir is 115 square miles in area, ranging in altitude from 5500 ft. at the reservoir site to 9000 ft. This area is mostly rolling earth-covered hills, supporting only a scanty growth of underbrush. During several months of the year there is no runoff at the dam site.

The probable run off is based on the precipitation at Ranch, the nearest U. S. Weather Bereau Station, having an average annual precipitation of 24 inches, 16 inches from November 1 to April 30. Assuming a precipitation of 20 inches over the water shed, and a runoff factor of 0.3 for the snow period and 0.1 for the remainder of the year, gives a discharge of approximately 30,000 acre-feet, most of which would be available for storage.

The top of a ceder post about 4 ft. high at roadside near dam site is 22.3 above 0.0 of survey.

Water stored at this point would be used to supplement the flow of Kanab Creek, and probably be used near Kanab about 15 miles south.

PINE VALLEY RESERVOIR SITE.

The Pine Valley reservoir site is located at the lower end of Pine Valley, in Washington County. The 175 ft. contour covers an area of 1150 acres, forming a basin with a capacity of 52,000 acre-feet. However, there is

no possibility of realizing this amount of water. It is estimated that a reservoir with upper contour 135 would have a capacity equal to the greatest runoff. The area of this contour is 656 acres with a capacity of 15,965 acre-feet, average depth 24.4 or 18% of the maximum depth. This small coefficient is due to the fact that the lower 50 ft. affords practically no storage on account of rapid fall in the stream bed.

Of this area 400 acres are cultivated, the crops being alfalfa and grain; 256 acres are waste. The legal subdivisions covered, or partly so, are: Sections 10, 14 and 15, Tp. 39 S. R. 15 W. S. L. B. & M.

DAM SITE. The damsite is a very favorable one, being in a narrow gorge between almost vertical basalt walls. The gorge is 330 ft. wide at an elevation of 130, and 600 ft. wide at elevation 145. A combination rock and earth-fill dam at this point, with rock fill slopes ½:1 and 1:1 with upper earth toe slope 3:1, would require approximately 85,000 cu. yds. rock and 95,000 cu. yds. earth. The cliffs adjacent to the damsite afford an abundance of rock and earth for upper toe lies close at hand.

The water shed tributary to the reservoir site is 47 sq. miles in area, ranging in altitude from 6000 ft. at damsite to 10,000 ft. around the south and east rim of the valley. It is nearly all mountainous, sloping north and west, and supports a good growth of underbrush and timber. Conditions are unusually favorable for a high percentage of runoff. The annual precipitation at Pinto, at altitude 6,000 feet, 10 miles north, the nearest United States Weather Bureau Station, averages 15 inches, of which 9.5 inches fall from October 1 to April 30. The precipitation over the Pine Valley watershed doubtless far exceeds this, even at a corresponding elevation, the topography being much more favorable for precipitation. By comparison with streams of a similar nature, the run-off will probably average from 1:0 to 1:5 second feet per square mile, or from 35,000 to 50,000 acre-feet. The discharge from about one-half of the water shed has been appropriated and will be diverted out of the drainage

area. Deducting this and the amount used below Pine Valley will leave from 15,000 to 25,000 acre-feet available for storage. The stream carries practically no silt at this point.

A large yellow pine tree near the dam site bears N. 42 degrees 30 minues W., 8,900 ft. from the South quarter cor. Sec. 14, Tp. 39 S., R. 15 W., S. L. B. & M. A notch cut in the bark on northwest side is 91.5 feet above the 0.0 of survey.

The stored water would supplement the flow of Santa Clara Creek and could probably be used to the best advantage on lands along Santa Clara Creek a few miles above its junction with the Virgin River.

From an engineering stand point, this project presents no unusually difficult features. Its feasibility depends on the cost, which may prove prohibitive on account of the necessity of acquiring practically the entire holdings of the residents of Pine Valley. Because of the value of irrigated lands in the Virgin River Valley, a much higher cost is permissible than would be in a less favored region.

ASH CREEK RESERVOIR SITE.

The Ash Creek reservoir site on Ash Creek is located about 6 miles south of New Harmony and 9 miles southwest of Kanarra, in Washington County.

The 125 ft. contour covers an area of 425 acres, with a capacity at this elevation of 17,000 acre-feet, average depth 40 ft. or 37% of the maxmum depth. Kelsey's Ranch, consisting of about 40 acres of cultivation, formerly occupied the bottom of the site, but this was practically destroyed by floods in late years and has been abandoned. There is no other cultivation within the area.

DAM SITE. The damsite at the south end of the reservoir is in a narrow gorge 250 ft. wide at elevation 125 and 100 ft. wide at 0 or stream bed, the basalt walls of the gorge being almost vertical. East of the damsite there is a saddle elevation 90, and 750 ft. wide at elevation 125. This affords a good spillway site.

A combination earth and rock fill dam at this point with rock fill slopes ½:1 and 1:1 with upper earth toe, slope 3:1, would require approximately 50,000 cu. yds. rock and 56,000 cu. yds. earth. There is an abundance of rock and earth for fill adjacent to damsite. In addition, it will require 25,000 cu. yds. of earth to fill spillway saddle.

WATER SUPPLY. The watershed tributary to the reservoir is 220 square miles in area, ranging in altitude from 4750 ft. at damsite to 9500 ft. being about one-half valley at the lower elevation, the remainder being mountainous and reaching to the summit of the PineValley Mountains and the west edge of Kolob Plateau. The valley portion supports a scanty growth of brush, and the higher altitudes a good uniform cover of cedar and quaking aspen,

The estimated runoff is based on the precipitation records at Pinto near the northwest corner, and Cedar City near the northeast corner of the watershed. These average 15 and 13 inches, respectively, the mean of which, 14 inches may be taken as a fair average over the watershed, 9.5 inches falls from October 1 to April 30. Assuming a runoff factor of 0.3 for winter period and 0.1 for remainder of the season, gives a discharge of 37,000 acre-feet. Of this the entire summer flow is used. It would seem that an amount equal to the reservoir capacity would always be available for storage.

The stream at this point is subject at times to violent floods, which bring down a large amount of silt.

A cross mark on a large basalt boulder on east abutment, marked by a rock monument is 100.0 ft. above 0.0 of survey.

Water stored at this point could probably be used to the best advantage on lands a few miles above the junction of Ash Creek with the Virgin River.

BIG CREEK RESERVOIR SITE.

The Big Creek reservoir site on Big Creek is located 1 mile south of Wood's Ranch above the junction of

Big Creek with Kolob Creek about 15 miles southeast of Kanarra in Iron County.

The 60 ft. contour covers an area of 275 acres, the capacity at this elevation being 5750 acre-feet, with average depth 21 ft. or thirty-five per cent of the maximum depth. The entire area is meadow land used for pasturing horses and cattle.

DAM SITE. The damsite at the south end of the reservoir site is approximately 600 ft. wide at an elevation of 60 ft. and 150 ft. wide at elevation 0 or stream bed. The abutments are both gravelly hills, being heavily timbered. An earth dam at this point with slopes 2:1 and 3:1 would require approximately 100,000 cu. yds. fill. Clay and gravelly earth for this fill lie adjacent to the damsite.

A saddle one-fourth mile east of the damsite, elevation 75 ft. affords a good spillway site.

SUPPLY WATER. The watershed tributary to the reservoir side is approximately 8.5 square miles in area, ranging in altitude from 7500 ft. at damsite to 9000 ft. It is entirely mountainous, consisting of a number of sharp, steep ridges and short canyons. The surface has a fair cover of soil, and formerly supported a dense undergrowth and scattering pine and quaking aspen. On account of overgrazing by sheep a large part of the watershed is now devoid of vegetation and is subject to rapid erosion by water from melting snow and violent rains to which this region is subject. This condition causes a large amount of silt to be washed into the reservoir site. The nearest precipitation record is at Cedar City, twenty miles to the north, where the average annual precipitation is 13 inches. On the reservoir watershed, the altitude being about 3000 ft. higher, conditions are good for a much greater amount. Assuming this at 25 inches and using a runoff factor of 0.5 for snow peroid and 0.2 for the remainder of the season, gives a discharge of 4700 acre-feet.

A bowlder with a stake driven along side, at east side of trail near upper end of reservoir, is 53.0 above 0.0 of survey.

Water stored at this point would be used to supplement the flow of Virgin River, and could probably be used to the best advantage on lands along the Virgin River below Hurricane, in Washington County.

BENCH LAKE RESERVOIR SITE.

The Bench Lake reservoir site is a natural basin about 4 miles southwest of the town of Hurricane, in Washington County. It usually contains a small amount of water, the drainage from the surrounding hills.

The area at an elevation of 40 ft. is 1900 acres, with a capacity of 43,500 acre-feet, average depth 23 ft. or fifty-seven per cent of the maximum depth. There is no cultivation within the area. The legal subdivisions covered, or partly so, are: Sections 15, 16, 17, 18, 20, 21 and 29, Tp. 42 S.—R. 13 W.

The rim of the basin for nearly its entire length exceeds 50 ft. in height above the bottom. There is a gap near the northwest corner of the site, which if closed would complete the natural embankment. This gap has a width of 1200 ft. at an elevation of 50 ft. and a width of 300 ft. at bottom, or elevation 5 ft. An earth dam at this point, with slopes 2:1 and 3:1, would require approximately 150,000 cu. yds. fill. There is an abundance of clay and gravelly earth for this adjacent to the damsite.

Outlet would be had by tunnel under the dam and open cut about 15 ft deep, 1,000 ft. long, conducting water directly to the land to be irrigated, which lies to the west and almost adjacent to the reservoir site. Water to supply the reservoir would be diverted from the Virgin River, about 2 miles above Virgin City, by means of a tunnel 3 miles long and an open cut the same length.

LOGAN RIVER SURVEY.

In accordance with the provisions of Section 1266, Compiled Laws of Utah, 1907, a hydrographic survey of the Logan River System was begun in May, 1909.

The system involves water from a number of sources: The Logan River, Blacksmith Fork, Little Bear, Summit Creek, and a number of smaller streams and springs.

In view of this involved condition and the fact that it would have been impossible to complete the field work in one season, it was deemed advisable to confine the first part of the work to the Logan River.

The area mapped lies in a fairly regular and compact body, extending from beyond Smithfield on the north to Providence, south of Logan, on the south, and westward to the Bear River.

The eastern portion comprises the lower slope of the foot-hills and the benches formed by the Logan River when the valley was occupied by an arm of Lake Bonneville. This is the most fertile portion, the west half in general being swampy. The main crops are alfalfa, wheat, oats, and sugar beets. The dairy industry is a leading one, and consumes practically the entire crop of hay and oats produced. Orchards, small fruit and truck farms are confined to the vicinity of the towns. There are no extensive bearing orchards, but there seems to be a decided move in the direction of planting favorable areas with apples.

The mapping was done along the same general lines as the Weber River Survey. The scale adopted was 1000 ft. to 1 inch, which was afterwards changed to 500 ft. to 1 inch. A record of the flow of the main canals and laterals was obtained for the entire irrigation season.

A considerable amount of tabulation remains to be done before the completed record can be placed in the hands of the District Court, as provided by Section 1271, Compiled Laws of Utah, 1907. This record will be prepared in essentially the same form as the Weber River Survey. (See Sixth Biennial Report of the State Engineer.)

The total area watered by the Logan River is approximately 55 square miles. Of this, 54 square miles has been mapped. Of the total area, 30 square miles, or 19,200 acres, are cultivated or irrigated pasture and meadow, and 25 square miles, or 16,000 acres, are natural meadow and waste land.

VIRGIN RIVER SURVEY.

At the close of the field season on the Logal River survey, in October, 1909, the field party was sent to the Virgin River, in southern Utah, it being hoped that the work could be continued throughout the winter. However, unusually severe weather caused a cessation of work from December 15, 1909, to May, 1910.

Since then the mapping of the lands and the gathering of stream and canal flow data has been carried on without interruption and is now practically finished. Only a small amount of office work has been done on this data, and it is possible to give only a very general notion of the extent of the survey.

The Virgin River system consists of a number of feeder streams, which, in general, flow in an almost due south direction to their junction with the Virgin River, which flows southwest and west from its source near Ranch in the northwest part of Kane County. The main forks from east to west are: Zion Creek, joining the Virgin River near Rockville; North Creek, entering at Virgin City, La Verkin and Ash Creek, entering at La Verkin; Cottonwood Creek, entering at Middleton; and Santa Clara Creek, entering near St. George.

Except along the lower end of Santa Clara Creek near St. George, and the Washington Fields, near Washington, the irrigated areas are quite small and scattered along the streams, often many miles apart. The higher mountain valleys, all very small, support a large number of isolated ranches. This scattered condition of the irrigated areas is due to the extremely broken topography of the region.

On this account, the time consumed in making the surveys and the cost has been much greater than in a region of more favorable topography.

The valley of the Virgin River lies at the lowest altitude in the state, from 2,500 to 3,500 feet above sea level. The climate is semi-tropical, there sometimes being no freezing weather for several years in succession. The crops raised are the ordinary varieties, and, in addition, fruits and nuts, such as figs, grapes, almonds and English walnuts, which cannot be grown in the northern counties.

Under the present conditions there is but little incentive for further agricultural development, as the lack of transportation facilities prevents the marketing of products raised in excess of the home demand.

The approximate total area of irrigated land in the system, excluding the mountain ranches, for which no returns are in, is about 8,500 acres.

The cost to November 1st, 1910, of the survey is $5,468.70. The estimated additional cost of completing the survey and preparing record for presentation to the District Court is $1,150.00.

STREAM MEASUREMENT STATIONS MAINTAINED EITHER JOINTLY OR INDEPENDENTLY BY THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES INDIAN SERVICE, OR STATE ENGINEER.

STREAM	AT OR NEAR
Bear River	Collinston
Beaver River	Minersville
Blacksmith Fork	Hyrum
Cottonwood Creek	Orangeville
Diamond Fork	Springville Crossing
Diamond Fork	Thistle
Duchesne River	Myton
Escalante River	Escalante
Ferron Creek	Ferron
Fremont River	Thurber
Green River	Green River
Hobble Creek	Springville
Huntington Creek	Huntington
Indian Creek	Strawberry Valley
Lake Fork	Myton
Lake Fork	Whiterocks
Logan River	Logan
Logan, Hyde Park & Smithfield Canal	Logan
Muddy Creek	Emery
Price River	Helper
Provo River above Telluride Dam	Provo
San Rafael	Green River
Santa Clara Creek	St. George
Santa Clara Creek	Central
Santaquin Creek	Santaquin
Sevier River	Marysvale
Sevier River	Gunnison
Sixth Water	West Portal Strawberry Tunnel
Spanish Fork	Lake Shore
Spanish Fork	Spanish Fork
Spanish Fork	Thistle
Strawberry River	Strawberry Valley
Strawberry River	Theodore
Trial Hollow Creek	Strawberry Valley
Uinta River	Fort Duchesne
Uinta River	Whiterocks
U. S. Reclamation Service Canal	Spanish Fork
Virgin River	Virgin City
Weber River	Croyden or Devil's Slide
Weber River	Oakley
Weber River	Plain City
Whiterocks River	Whiterocks

STREAM GAGING STATIONS MAINTAINED BY UNITED STATES GEOLOGICAL SURVEY OUTSIDE OF THE STATE BUT OF GREAT IMPORTANCE TO THE STATE

STREAM	AT OR NEAR
Bear River	Evanston, Wyoming
Bear River	Dingle, Idaho
Bear River	Preston, Idaho
Green River	Green River, Wyoming

STATIONS IN THE STATE MAINTAINED BY ENGINEERING DEPARTMENT, SALT LAKE CITY.

STREAM	AT OR NEAR
City Creek	Salt Lake City
Cottonwood Creek (Big)	Salt Lake City
Mill Creek	Salt Lake City
Parley's Creek	Salt Lake City

MAINTAINED BY H. W. SHELEY.

Price River	Woodside

Tabulated List of Expenditures

OF THE

STATE ENGINEER'S OFFICE

FOR THE

YEARS 1909-1910.

STATEMENT OF EXPENDITURES

FROM

IRRIGATION CONTINGENT FUND.

DATE 1909	CLAIMANT.	NATURE OF EXPENSE	AMOUNT
Jan. 31	E. R. Morgan	General services	$130.00
	Edith Bennion	Stenographer	75.00
	Beatrice Barker	Copyist	21.70
	C. F. Balka	Calculator	75.00
	Geo. F. Taylor	Calculator	20.00
	C. W. Bennett	Stenographer	50.00
	R. C. Towler	Calculator	75.00
	Marguerite Allen	Copyist	12.40
	Caleb Tanner	Stamps, etc.	5.00
	R. M. Bell Tel. Co.	Tolls	2.00
	Tribune Reporter Co	Supplies	3.00
	C. R. Savage Co.	Supplies	.45
	Kelly & Co.	Supplies	.35
	Remington Typewriter Co	Supplies	2.25
	C. E. Taylor	Office rent	80.00
Feb. 28	E. R. Morgan	General services	130.00
	Edith Bennion	Stenographer	75.00
	Beatrice Barker	Copyist	19.86
	Geo. F. Taylor	Calculator	40.91
	C. W. Bennett	Stenographer	50.00
	Fred Brind	Draftsman	30.34
	R. C. Towler	Calculator	37.50
	C. F. Balka	Calculator	75.00
	Marguerite Allen	Copyist	10.90
	Pembroke Stationery Co	Supplies	1.40
	R. M. Bell Telephone Co	Tolls	.35
	Tribune Reporter Co.	Supplies	2.30
	Pembroke Stationery Co	Supplies	4.10
	Deseret News Co	Supplies	3.00
Mar. 31	E. R. Morgan	General services	130.00
	Edith Bennion	Stenographer	80.00
	C. F. Balka	Calculator	75.00
	C. W. Bennett	Stenographer	50.00
	Fred Brind	Draftsman	30.75
	Beatrice Barker	Copyist	18.45
	Marguerite Allen	Copyist	10.74
	Geo. F. Taylor	Calculator	27.78
	De Bouzek-Huntze Co	Supplies	92.37
	Remington Typewriter Co	Supplies	1.50
	R. M. Bell Telephone Co	Rental 1st quarter	21.00
	R. M. Bell Telephone Co	Rental and tolls 2nd quarter	23.05
	Wheeler Publishing Co	Supplies	30.00
	S. L. Electric Supply Co.	Supplies	4.00
	C. R. Savage Co	Supplies	.90
	Star Printing Co.	Supplies	102.15
	Caleb Tanner	Stamps, etc.	15.55
	David Wadman	Observer, Weber River	15.00
April 30	Kelly & Co.	Supplies	37.75
	Utah Lithograph Co.	Letterheads	30.00
	Caleb Tanner	Stamps, express, etc.	12.10
	Remington Typewriter Co	Supplies	.75
	Tribune Reporter Co	Supplies	3.00
	Deseret News Co.	Supplies	3.00
	R. M. Bell Telephone Co	Tolls	1.55
	Pembroke Stationery Co	Supplies	4.65
	Scott Hardware Co	Supplies	1.10
	S. L. Blue Print Co.	Blue Prints	1.07

STATEMENT OF EXPENDITURES—CONTINUED.

DATE 1909	CLAIMANT.	NATURE OF EXPENSE	AMOUNT
April 30	E. R. Morgan	General services	130.00
	Edith Bennion	Stenographer	80.00
	Beatrice Barker	Copyist	46.42
	M. S. Mitchell	Stenographer	65.00
	C. W. Bennett	Stenographer	55.00
	C. F. Balka	Calculator	75.00
	Fred Brind	Draftsman	39.15
	Caleb Tanner	Trip to Logan	33.85
May 31	E. R. Morgan	General Services	130.00
	Edith Bennion	Stenographer	80.00
	Beatrice Barker	Copyist	25.15
	M. S. Mitchell	Stenographer	65.00
	C. F. Balka	Calculator	75.00
	C. W. Bennett	Stenographer	55.00
	Fred Brind	Draftsman	72.26
	R. C. Towler	Calculator	12.79
	H. B. Lyman	Supplies	7.50
	Taylor-Armstrong Lumber Co.	Supplies	16.00
	Culmer Paint & Glass Co	Supplies	14.45
	Pembroke Stationery Co	Supplies	9.90
	Breeden Office Supply Co.	Supplies	9.75
	Remington Typewriter Co	Supplies	1.50
	Tribune Printing Co	Supplies	14.80
	R. M. Bell Telephone Co	Tolls	1.10
	Boyd Park Co.	Supplies	8.50
	Nebraska Furniture Co	Supplies	4.00
	Breeden Office Supply Co.	Supplies	.60
	R. L. Polk & Co.	Directory	6.00
	Caleb Tanner	Rating Meters	14.70
	Caleb Tanner	Stamps, etc.	10.25
	H. S. Kleinschmidt	Services, Logan River	82.26
	H. S. Kleinschmidt	Expenses, Logan River	123.60
	Geo. M. Dracey	Services, Logan River	13.07
	Geo. L. Zundell	Services, Logan River	15.67
	Preston Linford	Services, Logan River	35.48
	Preston Linford	Expenses, Logan River	9.00
	R. W. Candland	Expenses, Logan River	31.05
	R. W. Candland	Services, Logan River	47.48
	E. R. Morgan	Expenses, Logan River	2.25
	Caleb Tanner	Rating meters, and express	5.75
June 30	E. R. Morgan	General services	130.00
	Edith Bennion	Stenographer	70.00
	C. W. Bennett	Stenographer	55.00
	Beatrice Barker	Copyist	39.23
	M. S. Mitchell	Stenographer	65.00
	C. F. Balka	Calculator	75.00
	F. Platt Co	Supplies	5.50
	Deseret News Co	Supplies	2.40
	R. M. Bell Telephone Co	Rental and Tolls	23.20
	C. R. Savage Co	Supplies	6.35
	Salt Lake Elec. Supply Co.	Supplies	1.00
	F. Platt Co	Supplies	10.25
	Scott Hardware Co.	Supplies	.55
	Caleb Tanner	Stamps, Express, etc.	18.45
	Pembroke Stationery Co	Supplies	94.92
	Salt Lake Stamp Co.	Supplies	.50
	Geo. L. Zundell	Services, Logan River	45.00
	Geo. M. Dracey	Services, Logan River	45.00
	R. W. Candland	Services, Logan River	70.00
	R. W. Candland	Expenses, Logan River	132.05
	Preston Linford	Expenses, Logan River	13.25
	Preston Linford	Services, Logan River	60.00
	Logan Republican	Notice Re-survey Logan River	5.00
	L. M. Windsor	Services, Logan River	132.02
	L. M. Windsor	Expenses, Logan River	9.25
	Arthur Snow	Services, Spanish Fork River	43.75
July 31	E. R. Morgan	General services	130.00
	Edith Bennion	Stenographer	80.00
	Beatrice Barker	Copyist	40.00
	M. S. Mitchell	Stenographer	65.00
	Fred Brind	Draftsman	53.30
	C. W. Bennett	Stenographer	55.00
	H. S. Kleinschmidt	Draftsman	4.84

STATEMENT OF EXPENDITURES—CONTINUED.

DATE 1909	CLAIMANT	NATURE OF EXPENSE	AMOUNT
July 31	C. F. Balka	Calculator	
	Caleb Tanner	Stamps, express, etc.	65.00
	R. M. Bell Telephone Co	Tolls	24.65
	Breeden Office Supply Co	Supplies	2.00
	F. Platt Co.	Supplies	13.80
	Tribune Reporter Co	Supplies	9.75
	Pembroke Stationery Co	Supplies	1.50
	C. R. Savage Co	Supplies	60.19
	Star Printing Co.	Supplies	1.31
	Taylor-Armstrong Lumber Co	Supplies	125.20
	H. Dinwoodey Furniture Co	Supplies	37.25
	Utah Light & Railway Co	Supplies	22.35
	Arthur Snow	Services, Spanish Fork River	2.40
	R. W. Candland	Services, Logan River	62.50
	R. W. Candland	Expenses, Logan River	70.00
	L. M. Windsor	Services, Logan River	120.05
	Preston Linford	Services, Logan River	115.00
	Preston Linford	Expenses, Logan River	60.00
	Geo. L. Zundell	Services, Logan River	2.95
	Geo. M. Draney	Services, Logan River	45.00
	Joseph Jenson	Trip to Green River	45.00
Aug. 31	E. R. Morgan	General services	13.90
	Edith Bennion	Stenographer	130.00
	M. S. Mitchell	Stenographer	80.00
	C. W. Bennett	Stenographer	65.00
	C. F. Balka	Calculator	55.00
	Fred Brind	Draftsman	65.00
	Beatrice Barker	Copyist	53.71
	F. Platt Co	Supplies	40.00
	Kelly & Co	Supplies	9.50
	R. M. Bell Telephone Co	Tolls	1.25
	R. L. Polk Co	Directory	1.50
	Remington Typewriter Co	Typewriter repair	6.00
	Pembroke Stationery Co	Supplies	14.35
	Breeden Office Supply Co	Supplies	48.31
	Caleb Tanner	Stamps, express, etc.	1.70
	Leonard Tanner	Services, Logan River	17.50
	Leonard Tanner	Expenses, Logan River	58.06
	Wm. Glazier	Services, Logan River	60.65
	R. W. Candland	Services, Logan River	24.68
	R. W. Candland	Expenses, Logan River	80.00
	A. E. Bowman	Services, Logan River	130.40
	Loland Hardy	Services, Logan River	1.51
	H. S. Kleinschmidt	Services, Logan River	8.07
	H. S. Kleinschmidt	Expenses, Logan River	72.26
	Preston Linford	Expenses, Logan River	80.30
	Preston Linford	Services Logan, River	15.50
	Geo. L. Zundell	Services, Logan River	60.00
	W. R. Smith	Services, Logan River	40.65
	L. M. Winsor	Services, Logan River	4.68
	L. M. Winsor	Expenses, Logan River	115.00
	Geo. M. Draney	Services, Logan River	6.75
	Arthur Snow	Services, Spanish Fork River	45.00
	E. A. Porter	Services, General	62.50
Sept. 30	E. R. Morgan	General Services	100.00
	Edith Bennion	Stenographer	130.00
	M. S. Mitchell	Stenographer	80.00
	C. W. Bennett	Stenographer	65.00
	C. F. Balka	Calculator	55.00
	Beatrice Barker	Copyist	65.00
	Fred Brind	Draftsman	20.00
	Kelly & Co	Supplies	60.06
	Pembroke Stationery Co	Supplies	22.80
	Tribune Reporter Co	Supplies	20.95
	Star Printing Co	Supplies	25.75
	Caleb Tanner	Stamps, etc.	56.40
	R. M. Bell Telephone Co	Rental and Tolls	11.30
	Breeden Office Supply Co	Supplies	25.05
	H. S. Kleinschmidt	Services, Logan River	24.45
	H. S. Kleinschmidt	Expenses, Logan River	127.69
			64.25

STATEMENT OF EXPENDITURES—CONTINUED.

DATE	CLAIMANT	NATURE OF EXPENSE	AMOUNT
1909			
Sept. 30	L. M. Winsor	Expenses, Logan River	7.00
	L. M. Winsor	Services, Logan River	80.98
	Leland Hardy	Services, Logan River	50.00
	Leland Hardy	Expenses, Logan River	15.25
	Preston Linford	Expenses, Logan River	10.55
	Preston Linford	Services, Logan River	60.00
	A. E. Bowman	Services, Logan River	1.79
	R. W. Candland	Services, Logan River	66.67
	R. W. Candland	Expenses, Logan River	82.65
	William Glazier	Services, Logan River	21.00
	Leonard Tanner	Services, Logan River	41.21
	Leonard Tanner	Expenses, Logan River	24.46
	Caleb Tanner	Trip to Logan	72.95
	Dr. Kendall	Veterinary Services	30.00
	W. R. Smith	Services, Logan River	4.13
	Arthur Snow	Services, Spanish Fork River	62.50
Oct. 31	E. R. Morgan	General Services	140.00
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	C. F. Balka	Calculator	65.00
	M. S. Mitchell	Stenographer	65.00
	Beatrice Barker	Copyist	40.00
	Fred Brind	Draftsman	85.69
	Mrs. A. C. Meagher	Stenographer	18.46
	Star Printing Co	Supplies	95.65
	Pembroke Stationery Co	Supplies	14.61
	R. M. Bell Telephone Co	Tolls	1.00
	Remington Typewriter Co	Supplies	.60
	Breeden Office Supply Co	Supplies	3.05
	C. R. Savage Co	Supplies	.40
	Caleb Tanner	Stamps, express, etc	20.65
	S. L. Electric Supply Co	Supplies	.50
	H. S. Kleinschmidt	Expenses, Logan River	4.95
	Geo. M. Draney	Services, Logan River	28.50
	I. M. Winsor	Services, Logan River	5.48
	R. W. Candland	Services, Virgin River	46.45
	R. W. Candland	Expenses, Virgin River	92.90
	Ernest Miles	Services, Virgin River	17.42
	Henry Bryner	Services, Virgin River	17.42
	Caleb Tanner	Cleaning Harness, Virgin River	9.00
	Leland Hardy	Services, Virgin River	50.00
	Leland Hardy	Expenses, Virgin River	37.45
	Caleb Tanner	Trip to Springville, Vernal, etc.	103.35
Nov. 30	E. R. Morgan	General services	140.00
	Edith Bennion	Stenographer	36.80
	C. F. Balka	Calculator	65.00
	C. W. Bennett	Stenographer	55.00
	Beatrice Barker	Copyist	40.00
	Fred Brind	Draftsman	53.30
	M. S. Mitchell	Stenographer	65.00
	Mrs. A. C. Meagher	Stenographer	77.20
	Caleb Tanner	Sundries	24.28
	Star Printing Co	Supplies	16.40
	Tribune Printing Co	Supplies	3.80
	Breeden Office Supply Co	Supplies	1.25
	R. M. Bell Telephone Co	Tolls	1.75
	H. S. Kleinschmidt	Services, Logan River (October)	38.46
	H. S. Kleinschmidt	Services, Logan River (November)	40.00
	Henry Bryner	Services, Virgin River	45.00
	R. W. Candland	Services, Virgin River	80.00
	R. W. Candland	Expenses, Virgin River	138.80
	Leland Hardy	Services, Virgin River	50.00
	Preston Linford	Services, Virgin River	6.00
	Preston Linford	Expenses, Virgin River	18.30
	Claude Bryner	Services, Virgin River	16.50
	Ernest Miles	Services, Virgin River	27.00
	Caleb Tanner	Traveling expenses, Virgin River	75.95
	Con. Wagon & Machin. Co	Supplies, Virgin River	6.00
	Salt Lake Hardware Co	Supplies, Virgin River	6.00
	Washington County News	Publication of notice	3.40

STATEMENT OF EXPENDITURES—CONTINUED.

DATE 1909	CLAIMANT	NATURE OF EXPENSE	AMOUNT
	Caleb Tanner	Stamps, etc.	$ 23.30
	Tribune Reporter Co	Supplies	1.50
	Breeden Office Supply Co	Supplies	18.75
	C. R. Savage Co	Supplies	10.89
	S. L. Blue Print	Supplies	1.00
	Pembroke Stationery Co	Supplies	13.22
	Remington Typewriter Co	Supplies	1.50
	R. M. Bell Telephone Co	Rental and tolls	26.25
	Kelly & Co	Supplies	7.95
	Caleb Tanner	Sundries	80.30
	E. R. Morgan	General Services	140.00
	Mrs. A. C. Meager	Stenographer	48.46
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	M. S. Mitchell	Stenographer	65.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	Fred Brind	Draftsman	72.57
	H. S. Kleinschmidt	Services, Logan River	96.15
	Fred Brind	Draftsman Logan River	15.58
	L. M. Winsor	Services, Logan River	5.48
	R. W. Candland	Services, Virgin River	51.61
	R. W. Candland	Expenses, Virgin River	103.22
	Leland Hardy	Services, Virgin River	23.05
	Leland Hardy	Expenses, Virgin River	35.48
	Preston Linford	Services, Virgin River	60.00
	Preston Linford	Expenses, Virgin River	14.25
	Henry Brynor	Services, Virgin River	15.97
	Total for the year 1909		$12,306.09

STATEMENT OF EXPENDITURES FROM IRRIGATION CONTINGENT FUND.

DATE 1910	CLAIMANT.	NATURE OF EXPENSE	AMOUNT
Jan. 31	E. R. Morgan	General services	$110.00
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	M. S. Mitchell	Stenographer	65.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	H. S. Kleinschmidt	Draftsman	9.54
	Fred Brind	Draftsman	20.00
	Mrs. A. C. Meagher	Stenographer	32.75
	Salt Lake Stamp Co.	Supplies	8.50
	R. M. Bell Telephone Co	Tolls	1.45
	Edith Bennion	Stamps, etc	16.85
	Star Printing Co.	Supplies	82.95
	Breeden Office Supply Co.	Supplies	21.05
	Deseret News Co	Supplies	3.00
	Utah Lithograph	Supplies	33.00
	C. R. Savage Co	Supplies	10.89
	Pembroke Stationery Co	Supplies	12.45
	Remington Typewriter Co	Supplies	1.85
	H. S. Kleinschmidt	Services, Logan River	122.50
	Fred Brind	Draftsman, Logan River	38.54
	Preston Linford	Services, Virgin River	60.00
	Preston Linford	Expenses, Virgin River	47.45
	R. W. Candland	Services, Virgin River	68.40
	Caleb Tanner	Traveling expenses, Virgin River	44.00
Feb. 28	E. R. Morgan	General services	110.00
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	M. S. Mitchell	Stenographer	65.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	A. D. Knowlton	Calculator	40.91
	Fred Brind	Draftsman	43.87
	Pembroke Stationery Co	Supplies	12.95
	Beatrice Barker	Stamps, etc.	35.25
	Deseret National Bank	Check Register	1.15
	R. K. Cobb & Co.	Supplies	.60
	H. Dinwoodey Furniture Co	Supplies	32.50
	E. R. Morgan	Trip to Provo	3.35
	R. M. Bell Telephone Co	Tolls	1.45
	Tribune Printing Co	Supplies	3.00
	Breeden Office Supply Co.	Supplies	.50
	L. M. Windsor	Services, Logan River	10.00
	Fred Brind	Draftsman, Logan River	23.37
	H. S. Kleinschmidt	Services, Logan River	92.30
	Preston Linford	Services, Logan River	4.09
	Preston Linford	Expenses, Logan River	10.00
	Preston Linford	Services, Virgin River	60.00
	R. W. Candland	Services, Virgin River	28.61
	Henry Bryner	Services, Virgin River	45.00
	H. S. Kleinschmidt	Services, Virgin River	10.87
	Leland Hardy	Horse Virgin River	175.00
Mar. 31	E. R. Morgan	General services	110.00
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	M. S. Mitchell	Stenographer	65.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	A. D. Knowlton	Calculator	41.41
	Fred Brind	Draftsman	27.27
	Breeden Office Supply Co	Supplies	11.75
	H. Dinwoodey Furniture Co	Supplies	14.50
	Beatrice Barker	Stamps, etc	31.70
	C. R. Savage Co.	Supplies	2.00
	Pembroke Stationery Co	Supplies	37.70
	Star Printing Co	Supplies	60.50
	Electric Mfg. Co	Supplies, Virgin River	1.00
	Salt Lake Hardware Co	Supplies, Virgin River	8.50
	Gun Electric Co	Supplies, Virgin River	1.75
	Caleb Tanner	Hydrographic expense	11.40

STATEMENT OF EXPENDITURES—CONTINUED.

DATE 1910	CLAIMANT.	NATURE OF EXPENSE	AMOUNT
	Fred Brind	Draftsman, Logan River	45.30
	L. M. Winsor	Services, Logan River	22.00
	Preston Linford	Services, Logan River	42.22
	Preston Linford	Services, Logan River	1.75
	H. S. Kleinschmidt	Services, Logan River	65.00
	Preston Linford	Services, Virgin River	17.78
	Leonard Tanner	Services, Virgin River	42.58
	Leonard Tanner	Expenses, Virgin River	20.20
	Henry Bryner	Services, Virgin River	15.00
April 30	E. R. Morgan	General services	140.00
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	M S. Mitchell	Stenographer	65.00
	L. C. Barker	Copyist	14.50
	Fred Brind	Draftsman	33.21
	Beatrice Barker	Stamps, etc.	19.20
	Star Printing Co	Supplies	42.45
	Tribune Reporter Co	Supplies	99.25
	Deseret News Co.	Supplies	5.00
	C. R. Savage Co	Supplies	305.25
	R. M. Bell Telephone Co	Rental and Tolls	21.95
	Salt Lake Stamp Co.	Supplies	2.50
	Pembroke Stationery Co	Supplies	40.77
	Preston Linford	Services, Logan River	38.40
	Leonard Tanner	Services, Virgin River	110.00
	Leonard Tanner	Expenses, Virgin River	73.85
May 31	E. R. Morgan	General Services	120.00
	Edith Bennion	Stenographer	80.00
	C. W. Bennett	Stenographer	55.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	M. S. Mitchell....	Stenographer	65.00
	Fred Brind	Draftsman	24.60
	Breeden Office Supply Co	Supplies	1.80
	C. R. Savage Co	Supplies	11.68
	S. L. Electric Supply Co	Supplies	2.00
	Tribune Reporter Co	Supplies	1.50
	Beatrice Barker	Stamps, etc.	20.70
	Pembroke Stationery Co	Supplies	52.20
	Kelly & Co.	Supplies	12.25
	Taylor-Armstrong Lumber Co.	Pigeonhole Case	55.40
	Breeden Office Supply Co	Supplies	2.15
	Remington Typewriter Co	Supplies	.75
	S. L. Electric Supply Co.	Supplies	.75
	R. M. Bell Telephone Co	Tolls	3.05
	Smith & Adams	Supplies	4.50
	L. M. Winsor	Services, Logan River	27.90
	H. S. Kleinschmidt	Services, Virgin River	100.40
	H. S. Kleinschmidt	Expenses, Virgin River	81.35
	Preston Linford	Expenses, Virgin River	13.00
	Preston Linford	Services, Virgin River	70.32
	Leonard Tanner	Services, Virgin River	81.61
	Leonard Tanner	Expenses, Virgin River	77.90
	Henry Bryner	Services, Virgin River	55.28
	F. W. Penrose	Services, Virgin River	29.03
	Knowlton Nebeker	Services, Virgin River	20.32
	Western Heating & Sheet Metal Co	Supplies, Virgin River	4.00
	Cedar Merc. & Livestock Co	Supplies, Virgin River	76.20
June 30	E. R. Morgan	General services	130.00
	Edith Bennion	Stenographer	70.00
	C. W. Bennett	Stenographer	55.00
	C. F. Balka	Calculator	65.00
	Beatrice Barker	Copyist	40.00
	H. S. Kleinschmidt	Draftsman	20.00
	M. S. Mitchell	Stenographer	65.00
	Fred Brind	Draftsman	26.65
	Beatrice Barker	Stamps, etc	27.75
	Pembroke Stationery Co	Supplies	9.35
	Utah Lithograph Co.	Supplies	12.75
	H. Dinwoodey Furniture Co	Property purchased	77.05
	Oliver Kimball	Services	14.00

STATEMENT OF EXPENDITURES—CONTINUED.

DATE 1910	CLAIMANT	NATURE OF EXPENSE	AMOUNT
	National Cleaning Co.	Cleaning rug	1.55
	R. M. Bell Telephone Co	Rental and tolls	21.25
	S. L. Electric Supply Co	Supplies	1.75
	Leonard Tanner	Services, Virgin River	58.67
	Leonard Tanner	Expenses, Virgin River	37.40
	Preston Linford	Services, Virgin River	80.00
	Preston Linford	Expenses, Virgin River	101.90
	F. W. Penrose	Services, Virgin River	65.00
	Henry Bryner	Services, Virgin River	75.00
	H. S. Kleinschmidt	Services, Virgin River	27.50
	H. S. Kleinschmidt	Expenses, Virgin River	10.75
	Knowlton Nebeker	Services, Virgin River	45.00
	F. McGaw	Repair Timer, Virgin River	1.50
July 31	E. R. Morgan	General Services	140.00
	Edith Bennion	Stenographer	70.00
	C. W. Bennett	Stenographer	55.00
	C. F. Balka	Calculator	65.00
	H. S. Kleinschmidt	Draftsman	31.45
	M. S. Mitchell	Stenographer	65.00
	Fred Brind	Draftsman	12.50
	L. C. Barker	Copyist	8.00
	Beatrice Barker	Copyist	38.33
	Nellie Colvin	Copyist	21.88
	Pembroke Stationery Co.	Supplies	41.34
	Breeden Office Supply Co	Supplies	5.50
	Salt Lake Hardware Co	Supplies	1.10
	Beatrice Barker	Stamps, etc.	21.00
	R. M. Bell Telephone Co.	Tolls	4.25
	Star Printing Co	Supplies	91.85
	Remington Typewriter Co	Supplies	1.45
	Preston Linford	Services, Virgin River	80.00
	Preston Linford	Expenses, Virgin River	149.30
	Leonard Tanner	Services, Virgin River	92.26
	Leonard Tanner	Expenses, Virgin River	74.00
	Henry Bryner	Services, Virgin River	36.29
	Geo. W. Worthen, Jr.	Services, Virgin River	8.71
	F. W. Penrose	Services, Virgin River	45.00
	F. K. Nebeker	Services, Virgin River	45.00
	S. L. Hardware Co	Supplies, Virgin River	9.60
	Studebaker Bros	Supplies, Virgin River	8.30
	L. M. Windsor	Services, Logan River	26.10
	H. S. Kleinschmidt	Services, Reservoir Survey	72.58
	H. S. Kleinschmidt	Expenses, Reservoir Survey	58.40
	Earl Spry	Services, Reservoir Survey	13.55
	G. A. Hart	Services, Reservoir Survey	23.22
	Claude Bryner	Services, Reservoir Survey	29.03
	Claude Bryner	Expenses, Reservoir Survey	14.20
Aug. 31	E. R. Morgan	General Services	140.00
	Edith Bennion	Stenographer	70.00
	C. F. Balka	Calculator	65.00
	C. W. Bennett	Stenographer	55.00
	Beatrice Barker	Copyist	40.00
	Nellis Colvin	Copyist	35.00
	M. S. Mitchell	Stenographer	65.00
	Fred Brind	Draftsman	11.28
	A. D. Knowlton	Calculator	33.33
	Pembroke Stationery Co	Supplies	11.68
	R. C. Polk Co	Directory	6.00
	Star Printing Co	Supplies	14.25
	Tribune Reporter Co	Supplies	.80
	Beatrice Barker	Stamps, etc	21.30
	F. Platt Co	Leather Case	8.75
	Taylor-Armstrong Lbr. Co	Supplies	1.50
	R. M. Bell Tel. Co.	Tolls	1.65
	Noall Bros. & Armstrong	Supplies	18.12
	H. S. Kleinschmidt	Expenses, Reservoir Survey	208.68
	H. S. Kleinschmidt	Services, Reservoir Survey	145.16
	Earl Spry	Services, Reservoir Survey	33.87
	G. A. Hart	Services, Reservoir Survey	58.07
	G. A. Hart	Expenses, Reservoir Survey	12.50
	Claude Bryner	Services, Reservoir Survey	48.39
	Leonard Tanner	Services, Virgin River	78.00
	Leonard Tanner	Expenses, Virgin River	47.85
	Mason Rencher	Services, Virgin River	4.35

STATEMENT OF EXPENDITURES—CONTINUED.

DATE 1910	CLAIMANT	NATURE OF EXPENSE	AMOUNT
Aug. 31	G. W. Worthen Jr.	Services, Virgin River	21.78
	F. W. Penrose	Services, Virgin River	45.00
	Henry Bryner	Services, Virgin River	24.84
	F. K. Nebeker	Services, Virgin River	42.10
	Preston Linford	Services, Virgin River	80.00
	Preston Linford	Expenses, Virgin River	200.85
Sept. 30	E. R. Morgan	General Services	140.00
	Edith Bennion	Stenographer	70.00
	C. F. Balka	Calculator	65.00
	C. W. Bennett	Stenographer	55.00
	Beatrice Barker	Copyist	39.20
	M. S. Mitchell	Stenographer	65.00
	Fred Brind	Draftsman	9.43
	Nellie Colvin	Copyist	29.40
	Utah Light & Railway Co	Supplies	2.60
	C. R. Savage Co	Supplies	7.70
	Beatrice Barker	Stamps, etc	25.00
	Pembroke Stationery Co.	Supplies	7.95
	Utah Lithograph Co	Letterheads	30.00
	R. M. Bell Telephone Co	Rental	25.00
	Remington Typewriter Co	Supplies	1.50
	Leonard Tanner	Services, Virgin River	95.33
	Leonard Tanner	Expenses, Virgin River	77.30
	Studebaker Bros	Supplies, Virgin River	12.00
	Leland Hardy	Horse hire, Virgin River	287.00
	Henry Bryner	Services, Virgin River	55.00
	F. W. Penrose	Services, Virgin River	45.00
	Mason Rencher	Services, Virgin River	45.00
	Preston Linford	Services, Virgin River	80.00
	Preston Linford	Expenses, Virgin River	136.55
	Bennett Glass & Paint Co	Supplies, Virgin River	1.45
	H. S. Kleinschmidt	Services, Reservoir survey	150.00
	H. S. Kleinschmidt	Expenses, Reservoir survey	193.65
	G. A. Hart	Services, Reservoir survey	48.00
	Earl Spry	Services, Reservoir survey	28.00
	Claude Bryner	Services, Reservoir survey	40.00
	Garfield Exchange	Supplies, Reservoir survey	19.70
Oct. 31	Edith Bennion	Stenographer	70.00
	A. D. Knowlton	Calculator	2.88
	Fred Brind	Draftsman	2.56
	M. S. Mitchell	Stenographer	65.00
	H. S. Kleinschmidt	Draftsman	14.51
	Breeden Office Supply Co	Supplies	1.50
	Pembroke Stationery Co.	Supplies	24.80
	Beatrice Barker	Stamps, etc	16.95
	R. M. Bell Telephone Co	Tolls	1.90
	Tribune Reporter Co	Supplies	28.05
	Kelly & Co	Supplies	18.36
	Leonard Tanner	Services, Virgin River	95.80
	Leonard Tanner	Expenses, Virgin River	53.95
	Preston Linford	Expenses, Virgin River	147.56
	Preston Linford	Services, Virgin River	80.00
	Mason Rencher	Services, Virgin River	45.00
	F. W. Penrose	Services, Virgin River	45.00
	Henry Bryner	Services, Virgin River	55.00
	Henry Bryner	Expenses, Virgin River	22.25
	Leland Hardy	Traveling expense	15.45
	Total for the year 1910		12,681.42
	Total for the year 1909		12,300.00
	Balance on hand October 31, 1910		9.58
	Total for the biennium 1909-1910		25,000.00

STATEMENT OF EXPENDITURES

FROM

STATE ENGINEER'S CONTINGENT FUND.

GENERAL EXPENSE.

DATE 1909	CLAIMANT.	NATURE OF EXPENSE	AMOUNT
Jan. 31	C. E. Taylor	Office Rent	$ 80.00
	American Linen Supply Co	Linen	1.00
Feb. 28	S. L. Blue Print Co.	Blue prints	13.00
	Pembroke Stationery Co	Supplies	3.80
	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
Mar. 31	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
April 30	Caleb Tanner	Trip to Panguitch	27.05
	H. O. Shepard	Books	5.00
	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
May 31	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
June 30	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
	H. W Sheley	Salary, Kanab	45.08
July 31	Caleb Tanner	Traveling Expense	20.85
	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
Aug. 31	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
	Utah Lithograph Co	Supplies	60.00
	C. Tanner	Livery hire	3.50
Sept. 30	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
Oct. 31	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Caleb Tanner	Livery hire	5.00
Nov. 30	Caleb Tanner	Traveling expense	16.60
	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
Dec. 31	H. S. Kleinschmidt	Services	13.10
	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Total for the year 1909		1185.58

STATEMENT OF EXPENDITURES

FROM

STATE ENGINEER'S CONTINGENT FUND

GENERAL EXPENSE.

DATE 1910	CLAIMANT	NATURE OF EXPENSE	AMOUNT
Jan. 31	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
Feb. 28	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Star Printing Co	Supplies	20.00
	Beatrice Barker	Stamps, etc	9.50
	Caleb Tanner	Letter pouch	12.40
	Advance Printing Co	Letterheads	12.25
Mar. 31	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Caleb Tanner	Traveling expense	11.95
April 30	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Edwin S. Fuller	Field service	46.67
	Edwin S. Fuller	Traveling expense	19.00
May 31	Edwin S. Fuller	Field service	83.33
	Edwin S. Fuller	Traveling expense	70.95
	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
June 30	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Joseph Jensen	Traveling expense	5.50
	Caleb Tanner	Traveling expenses	63.30
July 31	Caleb Tanner	Traveling expenses	19.00
	American Linen Supply Co	Linen	1.00
	C. E. Taylor	Office rent	80.00
Aug. 31	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Western Arms & Sporting Goods Co	Supplies	7.50
	Caleb Tanner	Traveling expense	21.30
Sept. 30	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
Oct. 31	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
Nov. 30	C. E. Taylor	Office rent	80.00
	American Linen Supply Co	Linen	1.00
	Total amount paid for the year 1910		1303.67
	Total for the year 1909		1185.58
	Total amount covering biennial period		2489.25

STATEMENT OF EXPENDITURES

FROM

STATE ROAD COMMISSION FUND.

DATE 1910	CLAIMANT	NATURE OF EXPENSE	AMOUNT
Mar. 31	Fred Brind	Draftsman	$ 1.85
April 4	Fred Brind	Draftsman	49.92
May 31	Fred Brind	Draftsman	48.18
July 31	Edith Bennion	Stenographer	10.00
	Fred Brind	Draftsman	24.80
	Salt Lake Stamp Co	Rubber stamps	12.50
	Star Printing Co	Supplies	11.25
June 30	Fred Brind	Draftsman	19.27
	Edith Bennion	Stenographer	10.00
	Salt Lake Auto. Livery	Automobile hire	10 00
Aug. 31	Edith Bennion	Stenographer	10.00
	H. S. Kleinschmidt	Field services	4.84
	Fred Brind	Draftsman	26.44
	Claude Bryner	Field expense	1.01
	G. A. Hart	Field expense	1.93
	Earl Spry	Field expense	1.13
	J. W. Jensen	Traveling expense	48.70
Sept. 30	Edith Bennion	Stenographer	10.00
	Fred Brind	Draftsman	33.83
	Salt Lake Stamp Co	Supplies	5.00
	Salt Lake Stamp Co.	Supplies	5.40
Oct. 31	Fred Brind	Draftsman	13.74
	Edith Bennion	Stenographer	10.00
	Caleb Tanner	Traveling expense	51.80
Nov. 30	Fred Brind	Draftsman	47.75
	Edith Bennion	Stenographer	10.00
	Star Printing Co	Supplies	25.75
	Total amount paid on State Road Commission		$505.69
	Total amount covering General Expense		2489.25
	Balance on hand November 30, 1910		5.06
	Total		3000.00

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Piute Reservoir, Diagram of Area and Volume.

Utah Hydrography

1906-1910

Compiled by H. S. KLEINSCHMIDT

The following text and tables of stream flow are a continuation of those published in the State Engineer's Biennial Report, 1906-1907, and have been taken for the most part from United States Geological Survey Water Supply Papers Nos. 211, 212, 249 and 250. Data for 1909 and 1910 was obtained from Mr. E. C. LaRue, District Engineer, United States Geological Survey, Salt Lake City; Mr. W. B. Freeman, District Engineer, United States Geological Survey, Denver, Colo., and Mr. H. W. Sheley, Consulting Engineer, Salt Lake City. Precipitation records were furnished the United States Weather Bureau, Salt Lake City, and data relative to Utah Lake was furnished by the City Engineer's Office, Salt Lake City. For records previous to 1906 see United States Geological Supply Papers or Utah State Engineer's Biennial Report, 1906-1907.

The tables of "Discharge Measurements" are published without change from the source of information. Tables of "Daily Discharge" were made from Daily Gage Height records and Rating Tables, which are not republished. Tables of "Monthly Discharge" were made from the Daily Discharge Tables, and the tables of "Monthly Run-off" from the Monthly Discharge Tables. The Monthly Run-off Tables are complete for the entire period of observation at each station. In this last table, the "mean" or average yearly run-off in acre-feet is, in most cases, the sum of the monthly means, and the average yearly run-off in second-feet per square mile and depth in inches over the drainage area are computed from the mean yearly run-off in acre-feet, since in a number of cases the records have been too incomplete to give a sufficient number of totals for separate years, from which to obtain a proper mean value.

Precipitation records are published for those stations only which are of special value in comparison with stream flow. At best these should be used only in a relative way, as the precipitation stations are for the most part in the valleys, where the precipitation is entirely disproportionate to the observed depth of run-off for streams whose drainage area is largely mountainous, viz:

Logan River, near Logan.

Average annual Depth of Run-off 1897-1910, inclusive....21.80 inches
Average annual Precipitation at Logan 1897-1910, inclusive .....15.78 inches

Weber River at Oakley.

Average annual Depth of Run-off 1907 and 1909.....34.50 inches
Average annual Precipitation at Marion 1907 and 1909....25.18 inches

Big Cottonwood Creek, near Salt Lake City.

Average annual Depth of Run-off 1906-1909.....30.38 inches
Average annual Precipitation at Salt Lake and Park City
1906-1909 .....23.57 inches

From these it is readily seen that the precipitation in the higher altitudes is very much in excess of any records. Hence in using precipitation records for different drainage areas, these are of value only for comparison.

In most cases the mean annual precipitation is the sum of the monthly means, the records being too incomplete to obtain a sufficient number of yearly totals from which to obtain a proper mean value.

CONVENIENT EQUIVALENTS.

The following is a list of convenient equivalents for use in hydraulic computations:

1 second-foot equals 40 California miner's inches (law of March 23, 1901).

1 second-foot equals 38.4 Colorado miner's inches.

1 second-foot equals 40 Arizona miner's inches.

1 second-foot equals 7.48 United States gallons per second; equals 448.8 gallons per minute; equals 646,272 gallons for one day.

1 second-foot equals 6.23 British imperial gallons per second.

1 second-foot for one year covers 1 square mile 1.131 feet or 13.572 inches deep.

1 second foot for one year equals 31,536,000 cubic feet.

1 second-foot equals about 1 acre-inch per hour.

1 second-foot for one day covers 1 square mile 0.03719 inch deep.

1 second-foot for one 28-day month covers 1 square mile 1.041 inches deep.

1 second-foot for one 29-day month covers 1 square mile 1.079 inches deep.

1 second-foot for one 30-day month covers 1 square mile 1.116 inches deep.

1 second-foot for one 31-day month covers 1 square mile 1.153 inches deep.

1 second-foot for one day equals 1.983 acre-feet.

1 second-foot for one 28-day month equals 55.54 acre-feet.

1 second-foot for one 29-day month equals 57.52 acre-feet.

1 second-foot for one 30-day month equals 59.50 acre-feet.

1 second-foot for one 31-day month equals 61.49 acre-feet.

100 California miner's inches equal 18.7 United States gallons per second.

100 California miner's inches equal 96.0 Colorado miner's inches.

100 California miner's inches for one day equal 4.96 acre-feet.

100 Colorado miner's inches equal 2.60 second-feet.

100 Colorado miner's inches equal 19.5 United States gallons per second.

100 Colorado miner's inches equal 104 California miner's inches.

100 Colorado miner's inches for one day equal 5.17 acre-feet.

100 United States gallons per minute equal 0.223 second-foot.

100 United States gallons per minute for one day equal 0.442 acre-foot.

1,000,000 United States gallons per day equal 1.55 second-feet.

1,000,000 United States gallons equal 3.07 acre-feet.
1,000,000 cubic feet equal 22.95 acre-feet.
1 acre-foot equals 325,850 gallons.
1 inch deep on 1 square mile equals 2,323,200 cubic feet.
1 inch deep on 1 square mile equals 0.0737 second-foot per year.
1 foot equals 0.3048 meter.
1 mile equals 1.60935 kilometers.
1 mile equals 5,280 feet.
1 acre equals 0.4047 hectare.
1 acre equals 43,560 square feet.
1 acre equals 209 feet square, nearly.
1 square mile equals 2.59 square kilometers.
1 cubic foot equals 0.0283 cubic meter.
1 cubic foot equals 7.48 gallons.
1 cubic foot of water weighs 62.5 pounds.
1 cubic meter per minute equals 0.5886 second-foot.
1 horsepower equals 550 foot-pounds per second.
1 horsepower equals 76.0 kilogram-meters per second.
1 horsepower equals 746 watts.
1 horsepower equals 1 second-foot falling 8.80 feet.
1⅓ horsepower equal about 1 kilowatt.

To calculate water power quickly: $\frac{\text{Sec.-ft.} \times \text{fall in feet}}{11}$ = net horsepower on water wheel realizing 80 per cent of theoretical power.

BEAR RIVER AT DINGLE, IDAHO.

This station, which was established May 9, 1903, to determine the run-off available for storage in Bear Lake, is located in a cut-off built by the Oregon Short Line Railroad Company one-fourth mile east of Dingle railroad station, about 10 miles above the outlet of Bear Lake, below the proposed intake of the diversion canal to the lake. There is some diversion for irrigation above this point.

Measurements are made from a car and cable. The inclined staff gage is located near the cable and its datum has remained unchanged since the station was established.

The records at this station are not affected by artificial control above or below, but the river is usually frozen over during the period from December 1 to March 31, the ice reaching a thickness of 14 or 15 inches, this, however, being a smooth cover, no anchor or needle ice ever having been known to form.

The conditions during the open-water season at this station are excellent, and fairly accurate estimates of the flow under ice have been made, so that, on the whole, the records at this station may be considered excellent.

Discharge Measurements of Bear River near Dingle, Idaho, in 1906.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
*February 25	W. G. Swendsen	88	159	4.61	212
May 30	H. S. Kleinschmidt	122	609	7.40	2,690
August 17	Thos. Grieve, Jr.	107	188	3.90	276

*Ice 1.2 feet thick.

Daily Discharge in Second-feet of Bear River near Dingle, Idaho, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1..	....	....	....	1,020	740	2,775	988	410	455	295	295	....
2..	....	....	....	840	740	2,775	988	410	455	295	295	....
3..	....	....	....	840	685	2,820	955	390	455	275	295	....
4..	....	....	....	840	685	2,820	895	370	455	275	295	....
5..	....	....	....	840	740	2,675	895	370	495	275	280	....
6..	....	....	....	740	840	2,455	955	370	517	275	295	....
7..	....	....	....	840	849	2,275	955	370	517	275	295	....
8..	....	....	....	895	840	2,275	790	370	495	260	295	....
9..	....	....	....	740	840	2,230	790	370	455	260	295	....
10..	....	....	....	740	895	2,180	840	370	455	260	295	....
11..	....	....	....	740	955	2,230	790	230	410	260	295	....
12..	....	....	....	790	1,050	2,090	790	310	390	260	295	....
13..	....	....	....	840	1,230	1,910	790	295	370	260	295	....
14..	....	....	....	790	1,375	1,870	840	295	370	260	275	....
15..	....	....	....	790	1,550	1,910	840	295	370	260	295	....
16..	....	....	....	740	1,730	1,910	790	260	370	260	295	....
17..	....	....	....	740	2,000	1,990	895	260	370	260	295	....
18..	....	....	....	740	2,000	2,050	840	260	370	260	275	....
19..	....	....	....	740	1,880	2,090	740	242	370	260	225	....
20..	....	....	....	840	1,780	2,090	685	330	350	260	260	....
21..	....	....	....	840	1,640	2,090	610	370	350	260	275	....
22..	...	....	....	840	1,640	2,090	590	410	350	260	....	....
23..	....	....	....	895	1,600	2,000	590	495	330	260	....	....
24..	....	....	....	895	1,640	1,810	590	455	330	225	....	....
25..	....	....	....	895	1,780	1,640	495	475	330	245	....	....
26..	....	....	....	895	1,910	1,500	495	540	295	260	....	....
27..	....	....	....	895	2,090	1,450	495	565	295	280	....	....
28..	....	....	....	870	2,275	1,340	495	540	295	260	....	....
29..	....	....	....	840	2,455	1,155	455	495	295	260	....	....
30..	....	....	....	790	2,635	1,080	410	475	295	280	....	....
31..	....	....	....	....	2,720	.....	410	455	....	295	....	....

NOTE—Ice conditions January 1-March 30, and November 22-December 31.

Monthly Discharge of Bear River near Dingle, Idaho, for 1906.

(Drainage area, 2,890 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	*9,200
February	.....	.....	.....	.....	.....	*8,300
March	.....	.....	.....	.....	.....	*20,000
April	1,020	740	825	0.29	0.32	49,100
May	2,720	685	1,480	.51	.60	91,000
June	2,820	1,080	2,050	.71	.79	122,000
July	988	410	732	.25	.29	45,000
August	565	242	385	.13	.15	23,700
September	517	295	380	.13	.15	23,100
October	295	225	266	.09	.11	16,400
November	295	225	287	.10	.11	*17,600
December	.....	.....	.....	.....	.....	*10,800
The year....	2,820	225	605	0.21	2.84	436,200

*Estimated. Ice conditions January 1-March 31, and November 22-December 31.

Discharge Measurements of Bear River at Dingle, Idaho, in 1907.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 25	A. D. Williams	126	676	7.90	3,110
July 12	do	126	679	7.95	3,140
July 29	do	119	433	6.25	1,460
August 24	do	112	265	4.80	480
September 28	La Rue and Williams	111	251	4.62	412

Daily Discharge in Second-feet of Bear River near Dingle, Idaho, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	1,020	2,180	4.050	3,070	1,180	590	400	390	590
2	....	....	....	1,020	2,275	3,990	2,960	1,110	590	412	390	331
3	....	....	....	1,085	2,320	3,930	2,850	1,040	562	390	390	650
4	....	....	....	1,190	2,320	3,870	2,850	1,040	562	390	390	434
5	....	....	....	1,460	2,320	3,870	2,850	970	562	390	390	390
6	....	....	....	1,730	2,275	3,750	2,960	970	562	390	390	350
7	....	....	....	1,775	2,275	3,750	3,010	970	534	390	390	370
8	....	....	....	1,820	2,320	3,750	3,070	900	534	390	390	350
9	....	....	....	1,865	2,320	3,870	3,070	830	534	390	370	350
10	....	....	660	1,910	2,455	3,870	3,130	770	534	390	350	350
11	....	....	660	1,910	2,455	3,870	3,070	770	508	390	350	350
12	....	....	840	2,000	2,590	3,870	3,130	710	482	390	350	350
13	....	....	685	2,180	2,815	3,870	3,180	710	482	390	350	350
14	....	....	660	2,355	2,995	3,870	3,180	650	482	412	350	276
15	....	....	955	2,545	3,175	3,930	3,180	590	434	412	350	312
16	....	....	740	2,725	3,180	3,930	3,290	590	434	405	350	390
17	....	....	540	2,815	3,050	3,870	3,180	575	434	397	350	276
18	....	....	520	2,995	3,095	3,750	3,070	562	412	390	340	....
19	....	....	590	3,080	3,180	3,570	2,960	590	412	390	276	....
20	....	....	685	3,080	3,290	3,515	2,700	508	412	390	350	....
21	....	....	1,020	2,970	3,515	3,400	2,200	495	412	390	312	....
22	....	....	1,375	2,770	3,630	3,230	1,975	482	412	390	350	....
23	....	....	1,820	2,455	3,750	3,070	1,930	482	412	390	340	....
24	....	....	2,090	2,365	3,870	3,070	1,930	482	390	390	242	....
25	....	....	2,280	2,275	3,990	3,070	1,930	482	390	390	370	....
26	....	....	2,280	2,180	4,050	3,070	1,660	482	390	390	350	....
27	....	....	2,015	2,090	3,990	3,070	1,570	482	390	390	590	....
28	....	....	1,820	2,090	3,990	3,070	1,490	482	390	390	650	....
29	....	....	1,550	2,090	3,870	3,070	1,450	482	412	390	106	....
30	....	....	1,375	2,090	3,870	3,070	1,330	482	390	390	210	....
31	....	....	1,155	....	3,990	.....	1,250	534	....	390	....	....

Monthly Discharge of Bear River near Dingle, Idaho, for 1907.

(Drainage area, 2,890 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	430	175	234	0.08	0.09	14,400
February	750	240	392	.14	.14	21,800
March	2,280	450	1,040	.36	.41	64,000
April	3,080	1,020	2,130	.74	.82	127,000
May	4,050	2,180	3,090	1.07	1.23	190,000
June	4,050	3,070	3,600	1.25	1.38	214,000
July	3,290	1,250	2,550	0.79	1.00	157,000
August	1,180	482	689	.24	0.27	42,400
September	590	390	468	.16	.18	27,800
October	412	390	393	.14	.16	24,200
November	390	106	316	.11	.12	18,800
December	650	276	351	.12	.14	21,600
The year....	4,050	106	1,270	0.43	5.88	923,000

Daily Discharge in Second-feet of Bear River near Dingle, Idaho, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	....	....	534	534	294	1,180	295	276	259	312	312
2.....	....	....	....	390	534	312	1,110	295	276	276	312	276
3.....	....	....	....	454	534	312	1,000	285	276	295	312	295
4.....	....	....	....	434	534	350	900	276	276	312	312	312
5.....	....	....	....	434	534	350	900	312	276	312	312	312
6.....	....	....	....	434	560	350	900	350	276	330	312	330
7.....	....	....	....	434	650	350	830	330	260	330	312	312
8.....	....	....	....	434	550	390	830	312	260	330	312	312
9.....	....	....	....	482	590	454	710	312	260	330	312	312
10.....	....	....	....	482	650	454	650	295	260	330	295	312
11.....	....	....	....	534	650	454	650	312	242	330	285	312
12.....	....	....	....	534	650	482	620	312	242	330	276	....
13.....	....	....	....	534	650	482	562	312	242	312	210	....
14.....	....	....	....	590	560	482	534	312	242	312	106	....
15.....	....	....	....	590	534	650	482	312	242	350	128	....
16.....	....	....	....	590	482	900	460	312	226	350	350	....
17.....	....	....	....	710	460	1,075	434	312	226	350	295	....
18.....	....	....	900	710	434	1,250	412	295	226	350	350	....
19.....	....	....	1,250	710	390	1,490	390	350	226	350	180	....
20.....	....	....	1,250	725	390	1,660	390	312	226	350	180	....
21.....	....	....	1,330	740	350	1,750	390	295	226	350	312	....
22.....	....	....	1,250	740	330	1,660	390	295	226	330	276	....
23.....	....	....	1,110	770	312	1,530	390	295	226	312	290	....
24.....	....	....	830	770	350	1,615	390	312	226	350	276	....
25.....	....	....	770	770	276	1,330	370	312	226	330	276	....
26.....	....	....	650	740	330	1,370	370	312	242	312	276	....
27.....	....	....	590	710	330	1,290	350	312	242	312	276	....
28.....	....	....	590	650	330	1,250	330	312	242	312	276	....
29.....	....	....	590	590	330	1,215	312	312	242	312	276	....
30.....	....	....	562	560	312	.....	312	276	242	312	276	....
31.....	....	....	534	....	276	.....	312	276	....	312	....	....

Monthly Discharge of Bear River near Dingle, Idaho, for 1908.

(Drainage area, 2,890 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	330	250	290	0.10	0.12	17,800
February	320	285	298	.10	.11	17,100
March	1,250	250	587	.20	.23	36,100
April	770	390	596	.20	.23	35,500
May	650	276	466	.16	.19	28,700
June	1,750	294	859	.30	.33	51,100
July	1,180	312	576	.20	.23	35,400
August	350	276	306	.10	.12	18,800
September	276	226	246	.09	.10	14,600
October	350	259	324	.11	.13	19,900
November	350	106	276	.10	.11	16,400
December	350	220	292	.10	.12	18,000
The year....	1,750	106	426	0.15	2.02	309,000

Discharge Measurements of Bear River near Dingle, Idaho, in 1909.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 6.....	W. M. O'Neill.....	121	556	6.94	2,110

Daily Discharge in Second-feet of Bear River near Dingle, Idaho, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	200	440	220	1,330	2,220	3,690	2,850	500	350	303	242	320
2.....	260	400	260	1,410	2,320	3,630	2,740	534	412	294	242	294
3.....	260	360	300	2,020	2,320	3,510	2,630	482	434	294	242	331
4.....	260	320	330	2,070	2,320	3,510	2,580	459	412	294	242	210
5.....	260	280	300	2,070	2,120	3,630	2,470	435	390	294	242	210
6.....	280	260	290	2,100	2,070	3,630	2,420	412	412	294	242	210
7.....	280	240	280	2,120	2,020	3,750	2,320	412	434	294	242	220
8.....	300	230	290	2,120	2,120	3,870	2,320	434	434	294	242	230
9.....	300	230	300	1,620	2,220	3,870	2,320	390	412	294	242	260
10.....	300	230	280	1,290	2,370	3,870	2,120	390	412	294	242	300
11.....	300	240	260	1,110	2,470	3,870	1,980	390	412	294	242	250
12.....	300	240	260	1,918	2,520	3,750	1,750	390	412	294	226	200
13.....	300	240	260	1,040	2,520	3,750	1,410	390	412	285	210	200
14.....	280	240	270	1,040	2,520	3,900	1,250	390	412	276	180	200
15.....	260	240	280	1,000	2,520	3,900	1,140	390	412	276	200	190
16.....	260	240	270	1,140	2,520	3,930	1,040	390	390	276	220	180
17.....	290	230	260	1,040	2,630	3,870	1,000	390	390	276	242	200
18.....	320	220	280	1,570	2,800	3,750	900	390	390	267	259	220
19.....	500	230	310	1,800	2,470	3,630	830	350	390	259	276	320
20.....	700	220	340	2,020	2,320	3,570	830	350	390	259	294	280

Daily Discharge in Second-feet of Bear River near Dingle, Idaho, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21.....	850	230	500	2,220	2,320	3,510	830	350	350	259	312	240
22.....	1,150	210	700	2,320	2,420	3,400	710	350	350	259	350	220
23.....	1,100	200	750	2,320	2,520	3,400	650	332	350	259	412	210
24.....	1,100	200	760	2,320	2,800	3,290	650	312	312	242	435	220
25.....	1,100	200	770	2,320	3,070	3,180	650	312	312	242	458	240
26.....	1,100	200	785	2,120	3,240	3,180	650	312	312	242	458	230
27.....	760	200	800	1,930	3,290	3,180	710	331	312	242	446	210
28.....	620	200	650	2,020	3,400	3,180	710	331	312	242	434	210
29.....	560	....	770	2,020	3,570	3,070	710	312	312	242	431	210
30.....	500	....	970	2,220	3,750	2,960	665	322	312	242	350	220
31.....	460	....	1,110	....	3,810	.....	620	331	....	242	....	220

Monthly Discharge of Bear River near Dingle, Idaho, for 1909.

(Drainage area, 2,890 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,150	260	502	0.17	0.20	30,900
February	440	200	240	.08	.09	13,800
March	1,110	220	458	.16	.18	28,200
April	2,320	1,000	1,770	.61	.68	105,000
May	3,810	2,020	2,630	.91	1.05	162,000
June	3,990	2,960	3,580	1.24	1.38	213,000
July	2,850	620	1,430	0.50	0.57	87,900
August	590	312	386	.13	.15	23,700
September	434	312	378	.13	.15	22,500
October	303	242	273	.09	.11	16,700
November	458	180	292	.10	.11	17,400
December	331	180	234	.08	.09	14,400
The year....	3,990	180	1,020	0.35	4.76	736,000

Discharge Measurements of Bear River near Dingle, Idaho, in 1910.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 23.....	O. W. Hartwell.....	119	493	6.05	1,435
September 1.	L. Crandall.....	105	175	3.32	109
September 23	L. Crandall.....	107	185	3.43	134
September 23	.....do	107	185	3.43	135

Daily Discharge in Second-feet of Bear River near Dingle, Idaho, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	1,080	2,160	665	180	....	....	....	160	...
2	....	....	....	....	2,120	.....	.....	113	104	150	....	180
3	....	....	....	1,040	.....	665	170	....	....	....	160	....
4	....	....	....	1,000	2,030	.....	.....	....	113	150	....	210
5	....	....	....	970	1,890	692	180	....	....	....	160	....
6	....	....	....	970	.....	.....	.....	95	....	160	160	300
7	....	....	....	970	1,580	.....	170	....	113	150	....	....
8	....	....	....	970	1,490	720	.....	86	113	....	160	....
9	....	....	....	970	.....	.....	160	....	....	150	....	....
10	....	....	....	1,040	1,400	640	.....	....	....	....	160	180
11	....	....	....	1,110	.....	615	.....	86	113	160	....	....
12	....	....	....	1,150	1,490	615	160	....	....	140	180	180
13	....	....	....	1,180	1,490	590	.....	86	....	....	180	....
14	....	....	....	1,250	1,490	565	160	86	122	160	180	....
15	....	....	....	1,320	1,530	.....	160	....	....	....	....	170
16	....	....	....	1,320	.....	.....	160	78	....	160	180	....
17	....	....	....	1,290	1,580	420	160	70	122	....	....	160
18	....	....	....	1,250	.....	.....	.....	70	140	170	160	240
19	....	....	....	1,250	1,320	360	150	....	....	....	....	....
20	....	....	....	1,290	.....	.....	.....	70	140	180	170	....
21	....	....	....	....	970	320	.....	....	....	....	....	....
22	....	....	....	1,450	840	.....	160	78	....	....	170	300
23	....	....	....	1,540	.....	240	.....	....	....	160	....	....
24	....	....	....	1,670	780	.....	150	70	122	....	210	180
25	....	....	....	1,810	.....	240	140	70	122	160	....	180
26	....	....	....	....	720	.....	.....	....	122	....	195	....
27	....	....	....	1,940	720	210	.....	70	....	160	195	160
28	....	....	....	1,980	.....	.....	140	86	....	....	....	....
29	....	....	....	2,070	665	210	.....	104	140	160	....	180
30	....	....	....	2,160	.....	210	131	....	140	160	210	....
31	....	....	....	....	.....	.....	122	104	....	....	....	160

Ice conditions January, February and March.

Monthly Discharge of Bear River near Dingle, Idaho, for 1910.

(Drainage area, 2,890 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	2,160	970	1,340	0.46	0.52	79,700
May	2,160	665	1,310	.46	.52	80,500
June	720	180	468	.16	.18	27,800
July	180	122	157	.05	.06	9,650
August	122	70	87	.03	.03	5,320
September	140	104	122	.04	.05	7,260
October	180	140	158	.05	.06	9,700
November	210	160	176	.06	.07	10,500
December	300	160	207	.07	.08	12,700
The period	2,160	70	445	0.15	1.57	243,130

Ice conditions January, February and March.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Bear River, near Dingle, Idaho, 1903 to 1910.

(Drainage Area 2,890 Square Miles.)

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off. Sec. Ft. per Sq. Mile	Run-Off. Depth in inches on Drainage Area
1903	.....	.....	.....	.....	45.72	70.16	28.16	11.74	8.63	9.78	12.20	13.40	.....	....	....
1904	5.37	12.37	52.51	63.02	141.50	129.50	43.73	18.75	16.13	17.03	20.17	19.80	539.90	0.26	3.52
1905	15.92	14.38	22.44	20.71	18.08	27.79	9.65	5.47	6.72	8.49	8.39	8.43	166.50	0.08	1.09
1906	9.20	8.30	20.00	49.10	91.00	122.00	45.00	23.70	23.10	16.40	17.60	10.80	436.20	0.21	2.84
1907	14.40	21.80	64.00	127.00	190.00	214.00	157.00	42.40	27.80	24.20	18.80	21.60	923.00	0.43	5.88
1908	17.80	17.10	36.10	35.50	28.70	51.10	35.40	18.80	14.60	19.90	16.40	18.00	309.00	0.15	2.02
1909	30.90	13.80	28.20	105.00	162.00	213.00	87.90	23.70	22.50	16.70	17.40	14.40	736.00	0.35	4.76
1910	.....	.....	.....	79.70	80.50	27.80	9.65	5.32	7.26	9.70	10.50	12.70	.....	....	....
Mean.	15.60	14.62	37.21	68.58	94.70	106.82	52.06	18.72	15.84	15.28	15.18	14.90	469.51	0.23	3.08

BEAR RIVER, NEAR PRESTON, IDAHO.

This station, which was established October 11, 1889, and has since been continuously maintained, is located just below the wagon bridge on the road from Preston to Battle Creek, at a point about 4½ miles northwest of Preston, Idaho, and about 10 miles north of the Idaho-Utah state line. The records show practically the amount of water passing from Idaho into Utah and will be of value in the final adjudication of water rights.

No important tributaries enter above the station; those coming in below are Battle Creek, entering a few hundred feet below the station, and Cub Creek and Logan River, entering in Cache Valley, about 18 and 40 miles, respectively, below the station. There are at present no important diversions above the station, although the river passes through large areas of irrigable land.

The river seldom freezes over at the station; but the flow is sometimes slightly affected by the presence of slush ice. The channel shifts slightly during floods, but the conditions for measurements are always good.

Discharge measurements are made from a cable and car, about 300 feet below the bridge. A new gage was installed April 3, 1909, below the cable at a point about 200 feet below the old gage. The new curve was found to be parallel to the old curve, and the gage heights taken during 1909, previous to the establishment of the new gage, have been referred to the new gage datum. The estimates of flow at this station may be considered excellent.

Discharge Measurements of Bear River near Preston, Idaho, in 1906.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
February 24..	W. G. Swendsen.....	184	320	1.27	584
April 12.....	H. S. Kleinschmidt.....	198	695	3.41	2,450
May 23.....	Thos. Grieve, Jr.....	201	772	3.79	3,110
July 28.....	.....do	191	397	1.54	687

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	575	545	1,690	2,280	4,225	1,780	605	938	708	708	708
2.....	....	520	520	1,690	2,176	4,140	1,670	575	938	695	730	730
3.....	....	520	520	1,530	1,970	4,140	1,560	565	938	635	730	795
4.....	....	520	520	1,480	2,030	4,175	1,500	530	900	635	730	830
5.....	....	440	520	1,560	2,030	4,275	1,480	520	900	635	730	830
6.....	....	520	545	1,600	1,970	4,650	1,410	475	865	635	730	830
7.....	....	....	545	1,910	1,910	4,615	1,320	465	865	635	730	830
8.....	....	....	545	2,345	1,910	4,445	1,230	465	865	648	730	830
9.....	....	...	575	2,578	1,910	4,310	1,300	440	865	665	730	830
10.....	....	520	575	2,840	1,910	4,275	1,285	415	865	665	730	830
11.....	....	476	575	2,840	1,910	4,110	1,230	415	865	648	730	830
12.....	....	440	575	2,550	1,910	3,885	1,200	415	830	635	730	830
13.....	...	440	575	2,550	2,176	3,660	1,130	390	795	635	730	830
14.....	....	440	575	2,720	2,550	3,550	1,130	365	815	635	730	830
15.....	....	440	575	2,915	3,182	3,470	1,130	365	830	635	730	830

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	....	476	575	2,990	3,278	3,390	1,115	345	760	635	730	830
17.....	....	520	605	3,180	3,150	3,230	1,050	345	760	635	730	830
18.....	....	520	605	3,022	3,150	3,150	1,010	345	760	635	....	830
19.....	....	623	760	2,990	3,150	3,020	960	345	747	635	....	830
20.....	....	605	760	2,870	3,150	2,960	900	345	730	635	....	830
21.....	....	605	635	2,840	3,150	2,720	865	365	730	635	....	830
22.....	....	575	635	2,720	3,150	2,438	830	390	708	635	....	830
23.....	....	545	730	2,690	3,150	2,410	795	545	695	635	....	830
24.....	....	545	975	2,690	3,230	2,410	760	695	695	635	....	830
25.....	....	545	1,260	2,620	3,470	2,438	760	775	695	635	....	830
26.....	....	545	1,175	2,578	3,800	2,385	760	815	695	635	....	865
27.....	520	545	975	2,550	4,174	2,255	760	845	695	635	....	900
28.....	520	545	990	2,425	4,344	2,125	747	885	695	635	730	865
29.....	520	....	1,010	2,280	4,310	2,005	708	938	730	635	730	845
29:.....	520	545	1,010	2,280	4,310	2,005	708	938	730	635	730	845
30.....	520	....	1,035	2,280	4,480	1,890	683	938	730	635	730	815
31.....	520	....	1,215	....	4,344	.....	635	938	....	635	....	795

Monthly Discharge of Bear River near Preston, Idaho, for 1906.

(Drainage area, 4,500 Square Miles.)

Month.	Discharge in Second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	520	420	459	0.10	0.12	28,200
February	623	440	522	.12	.12	29,000
March	1,260	520	717	.16	.18	44,100
April	3,180	1,480	2,450	.54	.61	146,000
May	4,480	1,910	2,880	.64	.74	177,000
June	4,650	1,890	3,360	.75	.83	200,000
July	1,780	635	1,090	.24	.28	67,000
August	938	342	545	.12	.14	33,500
September	938	695	796	.18	.20	47,400
October	708	635	642	.14	.16	39,500
November	728	695	719	.16	.18	42,800
December	900	708	824	.18	.21	50,700
The year....	4,650	342	1,250	0.28	3.77	905,000

Discharge Measurements of Bear River near Preston, Idaho, in 1907.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 12.....	G. F. Burridge.....	224	1,160	5.70	6,560
June 26.....	.....do	216	957	4.90	5,160
July 21.....	.....do	202	795	3.82	3,340
August 14....	La Rue and Burridge.....	196	510	2.10	1,280

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	780	780	1,160	3,720	4,400	6,650	4,400	1,840	920	920	1,000	780
2.....	750	810	1,160	3,640	4,400	6,550	4,230	1,840	920	960	960	780
3.....	720	810	1,200	3,800	4,230	6,550	4,060	1,730	920	1,000	960	810
4.....	720	840	1,200	4,060	4,230	6,550	4,010	1,620	960	1,000	960	840
5.....	720	840	1,240	3,720	4,230	6,740	3,970	1,620	960	960	960	920
6.....	720	840	1,375	3,720	4,230	.....	3,930	1,520	1,000	960	920	920
7.....	720	840	1,520	3,720	4,230	.....	3,830	1,420	1,000	920	920	960
8.....	720	920	1,520	3,720	4,230	.....	3,720	1,420	1,080	920	920	1,000
9.....	780	920	1,520	3,890	4,400	.....	3,560	1,375	1,080	920	920	960
10.....	810	1,080	1,520	4,060	4,490	.....	3,560	1,330	1,040	920	920	840
11.....	840	1,080	1,520	4,400	4,650	.....	3,560	1,240	1,040	920	920	810
12.....	810	1,000	1,420	4,570	4,740	6,550	3,560	1,160	1,000	1,000	920	810
13.....	780	1,080	1,420	4,650	4,740	.....	3,560	1,330	1,000	1,000	920	780
14.....	780	1,080	1,420	4,830	4,740	.....	3,400	1,160	1,000	1,000	920	780
15.....	780	1,000	1,330	5,010	4,740	.....	3,320	1,080	1,000	1,000	920	780
16.....	780	1,000	1,240	5,100	4,740	.....	3,320	1,080	920	1,000	920	780
17.....	780	960	1,470	5,100	4,920	.....	3,320	1,000	920	960	920	660
18.....	780	960	1,620	5,100	5,190	.....	3,320	960	920	960	920	600
19.....	780	960	1,960	5,100	5,550	.....	3,320	920	880	920	840	540
20.....	810	960	2,770	5,100	5,730	5,820	3,240	840	880	920	840	780
21.....	840	960	3,890	5,280	5,820	5,730	3,240	840	880	960	840	920
22.....	920	1,080	3,810	5,280	5,820	5,640	3,080	840	920	920	880	960
23.....	720	1,240	3,560	5,280	5,820	5,550	2,770	810	920	920	880	960
24.....	720	1,080	3,560	5,280	6,270	5,460	2,770	780	920	920	880	1,000
25.....	720	1,080	3,810	5,190	6,550	5,370	2,620	840	920	920	880	1,040
26.....	720	1,080	4,060	4,920	6,740	5,190	2,480	880	920	920	840	1,080
27.....	840	1,080	4,150	4,830	6,740	4,920	2,340	920	920	920	840	1,080
28.....	840	1,080	4,400	4,740	6,740	4,740	.....	920	920	960	810	920
29.....	840	....	4,310	4,660	6,740	4,570	.....	960	920	960	810	920
30.....	780	....	4,060	4,400	6,740	4,570	1,960	920	920	1,000	780	920
31.....	780	....	3,890	....	6,740	.....	1,960	920	....	1,000	....	880

Monthly Discharge of Bear River near Preston, Idaho, for 1907.

Month.	Discharge in Second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	920	720	777	0.17	0.20	47,800
February	1,240	780	980	.22	.23	54,400
March	4,400	1,160	2,360	.52	.60	145,000
April	5,280	3,640	4,560	1.01	1.13	271,000
May	6,740	4,230	5,280	1.17	1.35	325,000
June	8,500	4,570	5,860	1.30	1.45	349,000
July	4,400	1,960	3,250	0.72	.83	200,000
August	1,840	780	1,170	.26	.30	71,900
September	1,080	880	953	.21	.24	56,700
October	1,000	920	954	.21	.24	58,700
November	1,000	780	897	.20	.22	53,400
December	1,080	540	865	.19	.22	53,200
The year....	8,500	540	2,330	0.52	7.01	1,690,000

Discharge Measurements of Bear River near Preston, Idaho, in 1908.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 23	A. D. Williams	196	372	1.35	675

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	920	840	840	1,470	1,330	920	1,620	600	600	....	780	720
2	920	840	880	1,330	1,330	960	1,520	600	600	....	780	780
3	920	780	920	1,330	1,285	1,000	1,420	570	600	....	780	720
4	920	690	920	1,330	1,240	1,120	1,330	540	570	....	780	810
5	920	720	840	1,330	1,240	1,330	1,330	465	570	....	780	810
6	920	720	840	1,420	1,200	1,420	1,200	440	570	....	780	840
7	920	750	840	1,420	1,200	1,520	1,080	420	570	....	780	780
8	920	960	810	1,470	1,160	1,620	1,000	420	570	....	780	780
9	920	840	810	1,470	1,160	1,620	920	395	570	....	780	780
10	880	840	840	1,470	1,240	1,675	840	395	570	....	780	810
11	840	840	840	1,420	1,240	1,730	780	395	570	....	780	780
12	840	840	880	1,420	1,240	1,730	720	395	570	....	780	780
13	840	780	920	1,420	1,080	1,840	720	395	570	....	780	780
14	840	780	960	1,420	1,040	1,840	720	395	570	....	720	780
15	840	780	1,000	1,520	.....	1,900	690	395	576	....	720	780
16	810	780	1,120	1,520	.....	1,900	660	395	540	810	720	780
17	780	750	1,285	1,570	.....	1,960	630	395	540	810	720	....
18	780	720	1,420	1,570	920	2,020	630	395	540	810	720	....
19	780	720	1,520	1,620	920	2,020	630	395	540	840	720	....
20	840	720	1,620	1,675	880	2,080	630	420	540	840	720	....
21	840	690	1,730	1,730	840	2,080	630	420	540	810	750	....
22	840	720	1,990	1,730	840	2,080	630	420	540	810	780	....
23	840	750	2,080	1,730	630	2,210	630	440	540	810	780	....
24	840	780	2,210	1,675	600	2,080	600	540	....	810	840	....
25	780	780	2,210	1,620	660	.....	600	540	....	810	840	....
26	780	780	1,960	1,620	780	.....	600	570	....	780	780	....
27	840	840	1,840	1,520	880	.....	600	570	....	780	720	....
28	840	840	1,840	1,520	920	.....	570	600	....	780	720	840
29	840	840	1,730	1,420	920	.....	540	600	....	780	720	720
30	840	....	1,620	1,375	920	1,730	540	600	....	780	720	720
31	840	....	1,620	....	920	.....	630	600	....	780	....	720

Monthly Discharge of Bear River near Preston, Idaho, for 1908.

Month.	Discharge in Second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	920	780	854	0.19	0.22	52,500
February	960	690	783	.17	.19	45,000
March	2,210	810	1,320	.29	.34	81,200
April	1,730	1,330	1,500	.33	.37	89,300
May	1,330	600	1,010	.22	.26	62,100
June	2,210	920	1,730	.38	.43	103,000
July	1,620	540	827	.18	.21	50,800
August	600	395	475	.11	.12	29,200
September	600	540	561	.13	.14	33,400
October	840	600	758	.17	.19	46,600
November	840	720	761	.17	.19	45,300
December	840	630	737	.16	.19	45,300
The year	2,210	395	943	0.21	2.85	684,000

Discharge Measurements of Bear River near Preston, Idaho, in 1909.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 3	E. A. Porter	198	666	3.25	2,420
May 5	F. S. Fuller	205	910	4.45	4,460
June 11	do	212	996	5.35	5,870
July 16	do	202	639	3.30	2,660

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	720	1,000	785	1,670	4,140	6,550	3,970	1,470	1,340	1,380	1,340	1,670
2	720	1,040	820	2,080	4,140	5,640	3,800	1,470	1,380	1,380	1,340	1,670
3	720	925	855	2,550	4,140	5,910	3,800	1,470	1,380	1,380	1,340	1,670
4	720	925	855	2,690	4,140	6,090	3,640	1,380	1,380	1,380	1,340	1,470
5	750	925	925	2,920	4,140	6,090	3,640	1,290	1,380	1,380	1,340	1,460
6	855	820	925	3,080	4,310	6,090	3,480	1,290	1,420	1,380	1,340	1,240
7	855	855	890	3,000	4,310	6,090	3,320	1,290	1,470	1,380	1,340	1,240
8	855	925	855	3,000	4,310	6,090	3,160	1,290	1,520	1,380	1,380	1,240
9	785	855	855	3,160	4,310	6,090	3,000	1,240	1,520	1,380	1,380	1,380
10	820	855	890	3,480	4,310	6,090	3,000	1,240	1,520	1,380	1,340	1,080
11	750	855	785	3,480	4,310	6,000	2,840	1,200	1,520	1,380	1,340	1,290
12	690	855	720	3,480	4,220	6,000	2,840	1,200	1,520	1,380	1,340	1,290
13	820	925	855	3,320	4,220	5,910	2,840	1,200	1,520	1,380	1,340	1,380
14	1,000	855	890	3,160	4,220	5,910	2,690	1,200	1,520	1,340	1,340	1,470
15	1,570	855	925	3,320	4,220	5,910	2,550	1,160	1,520	1,340	1,240	1,290

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	1,520	925	925	3,480	4,480	5,640	2,550	1,160	1,520	1,340	1,160	1,120
17.....	1,620	925	925	3,720	4,400	5,550	2,410	1,160	1,470	1,340	1,040	1,120
18.....	1,620	960	1,000	3.970	4,310	5,550	2,340	1,160	1,470	1,340	1,120	1,240
19.....	1,840	925	925	4,140	4,310	5,550	2,080	1,160	1,470	1,340	1,290	1,570
20.....	1,570	890	925	4,140	4,310	5,550	2,010	1,200	1,470	1,340	1,380	1,670
21.....	1,470	855	925	4,140	4,310	5,550	1,800	1,200	1,470	1,340	1,570	1,670
22.....	1,520	785	960	3,970	4,480	5,550	1,780	1,200	1,420	1,340	1,670	1,470
23.....	1,380	750	1,080	3,880	4,480	5,370	1,780	1,160	1,420	1,340	1,720	1,570
24.....	1,340	750	1,160	3,800	4,310	5,370	1,670	1,120	1,380	1,340	1,840	1,670
25.....	1,340	785	1,340	4,060	4,400	5,190	1,570	1,120	1,420	1,290	2,080	1,780
26.....	1,340	750	1,380	4,140	4,650	4,920	1,570	1,120	1,470	1,290	2,140	1,890
27.....	1,340	750	1,520	4,310	4,920	4,650	1,570	1,120	1,380	1,290	2,010	2,010
28.....	1,340	750	1,620	4,480	5,370	4,480	1,570	1,120	1,380	1,290	1,890	2,010
29.....	1,160	....	1,520	4,480	5,550	4,400	1,570	1,120	1,380	1,290	1,780	2,140
30.....	1,080	....	1,520	4,310	5,550	4,310	1,570	1,120	1,380	1,290	1,670	2,140
31.....	1,120	....	1,520	....	5,550	.....	1,470	1,200	....	1,290	....	2,200

Monthly Discharge of Bear River near Preston, Idaho, for 1909.

(Drainage area, 4,500 Square Miles.)

Month.	Discharge in Second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,840	720	1,140	0.25	0.29	70,100
February	1,040	750	868	.19	.20	48,200
March	1,620	720	1,030	.23	.26	63,300
April	4,480	1,670	3,510	.78	.87	209,000
May	5,550	4,140	4,480	1.00	1.15	275,000
June	6,090	4,310	5,570	1.24	1.38	331,000
July	3,970	1,470	2,520	.56	.65	155,000
August	1,470	1,120	1,220	.27	.31	75,000
September	1,520	1,340	1,450	.32	.36	86,300
October	1,380	1,290	1,340	.30	.34	82,400
November	2,140	1,040	1,480	.33	.37	88,100
December	2,200	1,080	1,540	.34	.39	94,700
The year....	6,090	720	2,180	0.48	6.57	1,580,000

Discharge Measurements of Bear River near Preston, Idaho, in 1910.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 23.....	O. W. Hartwell.....	207	601	3.89	2,897
May 31.....	.....do	133	458	2.89	1,538
July 29.....	.....do	125	264	1.46	317
July 29.....	.....do	125	264	1.47	333
September 3..	L. Crandall.....	127	289	1.59	387
December 9...	J. C. Dort.....	129	343	2.10	699

Daily Discharge in Second-feet of Bear River near Preston, Idaho, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	1,670	660	865	3,060	3,370	1,430	340	315	340	520	700	820
2.....	1,490	660	1,160	2,910	3,370	1,380	315	315	340	555	660	820
3.....	1,660	660	1,320	2,830	3,370	1,320	315	290	365	625	740	865
4.....	955	660	1,430	2,760	3,370	1,320	315	290	450	590	740	820
5.....	1,100	700	1,610	2,610	3,210	1,260	290	290	450	590	740	820
6.....	1,320	740	1,550	2,610	3,370	1,210	290	290	450	590	740	820
7.....	1,430	660	1,800	2,610	3,210	1,210	290	290	450	590	660	780
8.....	1,490	660	1,870	2,610	3,060	1,210	290	270	450	590	660	780
9.....	1,490	660	2,060	2,610	3,060	1,160	290	250	450	590	660	780
10.....	1,550	660	2,060	2,610	3,060	1,100	270	250	450	590	660	820
11.....	1,550	660	2,330	2,610	3,060	1,100	270	270	450	590	660	820
12.....	1,550	660	2,910	2,760	3,060	1,050	250	340	450	590	660	820
13.....	1,550	660	3,860	2,680	2,980	1,000	250	340	450	590	700	820
14.....	1,610	660	5,630	2,680	2,910	1,000	250	315	450	590	700	780
15.....	1,160	660	6,360	2,680	2,830	1,000	250	290	450	660	700	700
16.....	820	660	6,260	2,680	2,760	1,000	250	290	450	660	700	660
17.....	820	660	6,080	2,760	2,610	955	290	290	485	740	740	660
18.....	820	660	5,540	2,760	2,610	910	315	340	485	780	740	660
19.....	820	660	5,000	2,830	2,540	865	290	340	485	820	740	660
20.....	820	660	4,820	2,830	2,470	820	290	290	485	660	740	660
21.....	820	660	4,550	2,910	2,400	740	290	290	485	700	740	740
22.....	820	660	4,460	2,910	2,330	625	290	315	485	660	740	740
23.....	740	660	4,200	2,910	2,260	590	290	315	450	660	780	740
24.....	740	660	4,030	2,910	2,190	555	290	315	450	660	780	740
25.....	740	660	4,030	2,910	2,120	520	315	315	485	660	820	740
26.....	740	660	3,860	3,060	1,930	485	315	315	520	660	820	660
27.....	740	660	3,690	3,140	1,800	450	315	315	485	660	820	700
28.....	740	700	3,690	3,210	1,670	420	315	340	485	660	820	740
29.....	740	....	3,530	3,290	1,610	390	315	340	520	660	820	660
30.....	660	....	3,370	3,370	1,550	340	315	340	520	660	820	660
31.....	660	....	3,210	....	1,430	.....	315	290	....	660	....	660

Monthly Discharge of Bear River near Preston, Idaho, for 1910.

(Drainage area, 4,500 Square Miles.)

Month.	Discharge in Second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,670	660	1,070	0.24	0.27	65,800
February	740	660	666	.15	.15	37,000
March	6,360	865	3,460	.77	.89	213,000
April	3,370	2,610	2,840	.63	.71	169,000
May	3,370	1,430	2,630	.58	.67	162,000
June	1,430	340	914	.20	.23	54,400
July	340	250	292	.07	.07	17,900
August	340	250	305	.07	.08	18,800
September	520	340	457	.10	.11	27,200
October	820	520	639	.14	.16	39,400
November	820	660	733	.16	.18	43,600
December	865	660	746	.17	.19	46,800
The year....	6,360	250	1,229	0.27	3.71	894,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Bear River near Preston, Idaho, 1890 to 1910.

(Drainage area, 4,500 Square Miles.)

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off. Sec. Ft. per Sq. Mile	Run-Off. Depth in inches on Drainage Area
1890	53.81	44.93	78.17	177.19	319.74	245.00	97.29	61.50	50.15	52.50	46.60	46.00	1,273.00	0.39	5.33
1891	42.44	43.29	48.59	96.51	163.10	133.58	79.21	51.35	47.48	60.27	56.49	64.76	887.00	0.27	3.72
1892	49.20	49.16	80.20	108.53	166.67	264.54	144.22	63.04	47.18	47.97	40.88	54.12	1,115.69	0.34	4.67
1893	56.42	49.00	54.87	127.80	210.80	210.90	97.34	47.74	41.40	45.57	53.40	63.24	1,058.40	0.33	4.43
1894	60.76	54.68	84.01	229.50	367.66	370.66	124.00	72.85	77.70	76.88	68.10	61.38	1,648.32	0.51	6.92
1895	56.69	50.59	67.33	134.96	189.75	114.96	59.46	40.46	37.37	40.95	40.46	41.81	874.80	0.27	3.67
1896	39.66	35.72	49.31	109.25	137.18	266.43	101.45	56.39	47.60	49.93	65.22	62.96	1,021.09	0.32	4.29
1897	58.41	48.32	55.34	173.93	311.25	213.80	82.09	51.53	46.49	68.56	67.06	60.20	1,237.43	0.38	5.18
1898	58.41	43.49	51.96	141.44	171.43	139.36	62.53	33.39	31.84	35.79	39.27	40.58	849.48	0.26	3.56
1899	40.58	35.27	40.40	126.92	186.06	257.36	.....	.....	100.00	75.45	77.95	70.65	.....	....	....
1900	51.71	40.49	91.25	98.42	139.45	91.87	40.58	29.64	28.92	37.94	41.18	40.21	731.66	0.23	3.06
1901	30.93	36.82	74.83	96.34	167.61	84.79	29.94	25.70	25.94	31.05	33.38	37.75	675.10	0.21	2.83
1902	28.53	26.66	31.61	85.57	91.89	93.42	30.31	31.24	24.16	28.72	28.86	28.53	529.39	0.16	2.22
1903	28.29	25.55	43.04	92.23	92.23	.....	.....	.....	.....	.....	29.75	24.60	.....	....	....
1904	37.28	44.00	97.40	168.00	249.80	215.50	64.01	33.82	36.24	42.86	41.65	41.81	1,072.00	0.33	4.50
1905	37.30	36.10	55.80	51.80	60.90	35.60	12.40	10.80	14.90	30.10	29.50	26.00	401.00	0.12	1.68
1906	28.20	29.00	44.10	146.00	177.00	200.00	67.00	33.50	47.40	39.50	42.80	50.70	905.00	0.28	3.79
1907	47.80	54.40	145.00	271.00	325.00	349.00	200.00	71.00	56.70	58.70	53.40	53.20	1,690.00	0.52	7.07
1908	52.50	45.00	81.20	89.30	62.10	103.00	50.80	29.20	33.40	46.60	45.30	45.30	684.00	0.21	2.87
1909	70.10	48.20	63.30	209.00	275.00	331.00	155.00	75.00	86.30	82.40	88.10	94.70	1,580.00	0.49	6.65
1910	65.80	37.00	213.00	169.00	162.00	54.40	17.90	18.80	27.20	39.40	43.60	46.80	894.90	0.27	3.71
Mean.	47.37	41.80	73.90	138.22	192.21	188.76	79.76	44.05	45.42	49.56	49.19	50.25	1,000.49	0.31	4.19

BEAR RIVER, NEAR COLLINSTON, UTAH.

This station, which was established July 1, 1889, and has been continuously maintained since, is located in the lower end of the Bear River canyon, about 6 miles north of the Collinston railroad station, and about one-fourth mile below the power plant. The records show practically the amount of unappropriated water below all diversions.

Discharge Measurements of Bear River near Collinston, Utah, in 1906.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
February 22	W. G. Swendsen	272	598	2.05	1,490
May 23	Thos. Grieve, Jr	288	1,120	4.30	4,420
June 20	do	290	1,180	4.35	4,660
July 26	do	268	305	1.25	621

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	755	805	1,260	2,620	3,670	6,920	2,760	....	1,530	....	....	1,315
2	....	855	1,155	3,110	3,600	7,085	2,550	....	....	....	....	....
3	805	855	1,105	3,250	3,250	6,580	2,360	....	....	....	1,260	....
4	805	855	1,005	2,900	3,670	6,400	2,190	....	....	....	....	....
5	805	855	1,055	2,620	3,320	6,490	2,025	....	....	....	....	....
6	....	905	1,055	2,690	3,390	6,490	1,910	....	....	....	....	....
7	705	805	1,105	2,830	3,460	6,490	1,750	....	....	....	....	....
8	620	755	1,105	2,900	3,320	6,580	1,530	....	1,360	....	....	1,530
9	620	805	1,155	3,320	3,320	6,660	1,360	....	....	....	....	....
10	585	805	1,210	3,745	3,320	6,420	1,260	....	....	....	1,315	....
11	620	805	1,370	3,745	3,390	6,150	1,530	....	....	....	....	....
12	665	855	1,370	4,070	3,390	5,730	1,370	....	....	....	....	....
13	665	855	2,020	3,900	3,530	5,550	1,315	....	....	1,315	....	....
14	705	905	2,190	3,745	3,900	5,470	1,210	....	....	....	....	....
15	755	1,005	1,750	3,745	4,140	5,390	1,155	....	1,690	....	....	1,460
16	....	1,210	....	3,820	4,460	5,215	1,105	....	....	....	....	....
17	705	1,420	1,260	3,980	4,790	5,215	1,050	....	....	....	1,365	....
18	....	....	1,210	4,220	4,790	5,130	950	....	....	....	....	....
19	620	....	1,210	4,380	4,790	4,790	950	....	....	....	....	....
20	585	....	1,210	4,380	4,540	4,540	950	....	....	1,105	....	....
21	585	1,585	1,210	4,300	4,380	4,220	950	....	....	....	....	....
22	1,210	1,530	1,260	4,220	4,380	3,900	.....	....	1,210	....	....	1,420
23	1,055	1,420	1,530	4,140	4,300	3,750	.....	1,750	....	....	....	....
24	1,005	1,370	1,910	4,300	4,300	3,460	.....	....	....	....	1,150	....
25	955	1,370	2,970	4,380	4,380	3,250	.....	1,640	....	....	....	....
26	1,005	1,315	3,670	4,460	4,540	3,180	660	....	....	....	....	....
27	1,150	1,210	3,320	4,380	4,620	3,040	.....	....	....	1,210	....	....
28	905	1,210	2,970	4,060	5,130	2,970	.....	....	....	....	....	....
29	855	....	2,620	3,600	5,660	2,900	.....	....	1,055	....	....	1,690
30	805	....	2,420	3,320	6,060	2,760	.....	....	....	....	....	....
31	806	....	2,420	....	6,580	.....	.....	....	....	....	....	....

Monthly Discharge of Bear River near Collinston, Utah, for 1906.

(Drainage area, 6,000 Square Miles.)

Month.	Discharge in Second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,210	585	783	0.13	0.15	48,100
February	1,580	755	1,100	.18	.19	61,100
March	3,670	1,000	1,700	.28	.33	105,000
April	4,460	2,620	3,700	.62	.69	220,000
May	6,580	3,250	4,210	.70	.81	259,000
June	7,080	2,760	5,090	.85	.95	303,000
*July	2,760	660	1,265	.21	.24	77,800
*August	.....	.....	1,000	.17	.20	72,000
*September	1,690	1,055	1,370	.23	.25	98,700
*October	1,315	1,105	1,150	.19	.22	82,800
*November	1,365	1,150	1,270	.21	.24	91,400
*December	1,690	1,315	1,460	.24	.28	105,300
The year....	7,080	660	2,045	0.34	4.55	1,524,000

*Estimated from gage height taken once each week.

Discharge Measurements of Bear River near Collinston, Utah, in 1907

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 24.....	G. T. Burridge.....	293	1,830	6.60	10,100
June 13.....	....do	280	1,940	7.00	9,710
June 27.....	.....do	288	1,650	6.00	7,190
July 19.....	.....do	280	1,190	4.15	4,190
August 15....	La Rue and Burridge.....	281	998	3.50	3,120

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	....	....	....	.....	8,440	.....	....	900	2,190	2,080	1,970
2.....	....	1,640	2,190	....	.....	.....	.....	....	810	2,300	2,080	1,970
3.....	....	....	....	....	.....	.....	.....	2,620	1,860	2,300	2,080	1,970
4.....	....	....	....	....	6,590	.....	.....	....	1,860	1,970	2,080	1,970
5.....	1,310	....	....	....	.....	.....	.....	....	2,080	1,860	1,970	1,970
6.....	....	....	....	6,080	.....	.....	6,069	....	1,860	1,860	1,970	1,970
7.....	....	....	....	....	.....	.....	.....	....	1,860	1,860	1,970	2,080
8.....	....	....	....	....	.....	9,640	.....	....	1,860	1,860	1,970	2,080
9.....	....	3,460	3,040	....	.....	.....	.....	....	1,860	1,860	1,970	2,300
10.....	....	....	....	....	.....	.....	.....	2,025	1,750	1,860	1,860	2,300
11.....	....	....	....	....	5,150	10,160	.....	....	1,750	1,750	1,860	2,190
12.....	1,365	....	....	....	.....	.....	.....	....	1,860	1,750	1,860	2,080
13.....	....	....	....	7,040	.....	9,640	4,790	....	2,080	1,750	1,970	2,080
14.....	....	....	....	....	.....	.....	.....	....	1,970	1,750	1,970	2,080
15.....	....	....	....	....	.....	9,390	.....	3,250	1,970	1,860	2,080	2,190

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1907—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	2,135	2,620	....	....	....	....	1,530	1,860	1,860	2,080	2,080
17	....	....	....	8,550	....	....	....	1,750	1,750	1,860	1,970	1,310
18	....	....	....	8,660	7,220	....	....	1,640	1,530	1,970	1,970	1,100
19	1,255	....	....	....	....	....	4,220	1,530	1,420	1,970	1,970	1,000
20	....	....	....	8,300	....	....	4,140	1,530	1,420	1,970	1,970	900
21	....	....	....	....	....	....	....	1,420	1,420	1,970	1,970	900
22	....	....	....	....	....	7,990	....	1,420	1,310	1,970	1,970	1,310
23	....	2,245	3,040	....	....	....	....	1,310	1,310	1,970	1,970	1,860
24	....	....	....	....	8,660	....	....	1,310	1,200	1,970	1,970	2,080
25	....	....	....	....	9,205	....	....	1,420	1,100	1,970	1,970	2,300
26	1,255	....	....	....	....	....	....	1,530	1,000	1,970	1,970	2,550
27	....	....	....	7,040	....	7,400	3,460	1,420	900	1,970	1,970	2,530
28	....	....	....	....	....	....	....	1,640	1,420	1,970	1,970	2,970
29	....	....	....	....	....	7,220	....	1,750	1,750	1,970	1,970	2,420
30	....	....	5,980	....	....	....	....	1,000	1,970	1,970	1,970	1,860
31	....	....	....	....	....	....	....	900	....	1,970	....	1,420

Monthly Discharge of Bear River near Collinston, Utah, for 1907.

(Drainage area, 6,000 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,500	1,250	1,320	0.22	0.25	81,200
February	3,460	1,260	2,340	.39	.41	130,000
March	5,980	2,120	3,410	.57	.65	210,000
April	8,700	5,850	7,270	1.21	1.35	433,000
May	9,280	6,000	7,350	1.22	1.41	452,000
June	10,200	7,130	8,600	1.43	1.60	512,000
July	6,850	3,000	4,740	.79	.91	291,000
August	3,250	900	1,870	.31	.36	115,000
September	2,080	810	1,590	.27	.30	94,600
October	2,300	1,750	1,940	.32	.37	119,000
November	2,080	1,860	1,980	.33	.37	118,000
December	3,530	900	1,960	.33	.38	121,000
The year	10,200	810	3,700	0.62	8.36	2,680,000

Discharge Measurements of Bear River near Collinston, Utah, in 1908.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 24	A. D. Williams	203	252	1.00	526

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	1,750	1,310	2,420	2,550	2,420	2,420	2,970	500	645	1,100	1,860	1,420
2.....	1,970	1,310	2,300	2,550	2,080	2,550	2,690	500	645	1,100	1,860	1,530
3.....	2,080	1,420	2,080	2,420	1,970	2,690	2,300	645	725	1,100	1,750	1,640
4.....	2,080	1,640	2,080	2,420	1,970	2,970	2,080	645	725	1,200	1,750	1,640
5.....	1,530	1,640	2,080	2,420	1,970	3,390	1,970	645	725	1,310	1,530	1,860
6.....	1,750	1,860	2,080	2,420	1,750	3,980	1,640	645	725	1,420	1,420	1,860
7.....	1,860	1,970	2,080	2,420	1,750	3,980	1,420	645	725	1,530	1,200	1,860
8.....	1,860	1,970	2,080	2,420	1,640	3,980	1,200	645	725	1,640	1,420	1,860
9.....	1,860	1,860	1,970	2,420	1,640	3,980	1,200	645	725	1,530	1,420	1,860
10.....	1,970	1,860	1,970	2,300	1,860	3,820	1,200	645	725	1,420	1,640	1,860
11.....	1,970	1,860	1,970	2,300	1,750	3,820	1,200	645	725	1,420	1,640	1,860
12.....	1,970	1,970	1,970	2,300	1,750	3,820	1,000	645	725	1,420	1,750	1,860
13.....	1,970	1,970	2,080	2,420	1,860	3,820	1,000	645	725	1,420	1,750	1,860
14.....	1,970	1,860	2,080	2,550	1,860	4,140	1,000	645	725	1,360	1,750	1,860
15.....	1,970	1,860	2,300	2,690	1,750	4,460	900	645	725	1,420	1,750	1,750
16.....	1,860	1,750	2,420	2,830	1,640	4,790	810	645	810	1,640	1,750	1,750
17.....	1,860	1,750	2,550	2,970	1,640	4,790	645	645	810	1,750	1,750	1,750
18.....	1,640	1,860	2,830	3,110	1,640	5,130	500	645	810	1,750	1,750	1,200
19.....	1,860	1,970	2,970	3,110	1,530	5,130	500	645	810	1,750	1,750	810
20.....	1,970	1,750	2,830	3,110	1,640	5,470	500	645	810	1,800	1,750	645
21.....	1,970	1,640	2,690	2,970	1,750	5,130	500	725	810	1,860	1,750	500
22.....	1,970	1,640	2,830	2,970	1,750	4,790	385	725	810	1,860	1,750	500
23.....	1,860	1,750	2,970	3,250	1,640	4,620	385	725	810	1,860	1,750	500
24.....	1,860	1,750	3,250	3,390	1,640	4,460	385	725	900	1,860	1,750	500
25.....	[illegible]	1,860	3,390	3,670	1,640	4,140	385	645	1,000	1,800	1,750	500
26.....	1,860	1,860	3,670	3,670	1,750	3,980	385	645	1,000	1,750	1,860	500
27.....	1,860	1,970	3,820	3,530	2,080	3,820	440	645	1,000	1,750	1,860	645
28.....	1,750	2,190	3,820	3,250	2,420	3,530	500	645	1,000	1,750	1,860	1,000
29.....	1,860	2,420	3,530	2,970	2,420	3,530	500	645	1,000	1,750	1,310	1,420
30.....	1,970	....	3,110	2,690	2,420	3,250	500	645	1,000	1,750	1,310	1,640
31.....	1,970	....	2,550	....	2,420	.....	500	645	....	1,750	....	1,750

Monthly Discharge of Bear River near Collinston, Utah, for 1908.

(Drainage area, 6,000 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	2,080	1,530	1,800	0.32	0.36	116,000
February	2,420	1,310	1,810	.30	.33	104,000
March	3,820	1,970	2,610	.44	.50	160,000
April	3,670	2,300	2,800	.47	.52	167,000
May	2,420	1,530	1,870	.31	.36	115,000
June	*5,470*	*2,420*	*3,980*	*.66*	*.74*	*237,000*
July	2,970	385	1,020	.17	.20	62,700
August	*725*	*500*	*646*	*.11*	*.12*	*39,700*
September	1,000	645	803	.13	.15	47,800
October	*1,860*	*1,100*	*1,580*	*.26*	*.30*	*97,200*
November	1,860	1,200	1,670	.28	.31	99,400
December	*1,860*	*500*	*1,360*	*.23*	*.26*	*83,600*
The year....	5,470	385	1,840	0.31	4.15	1,330,000

Discharge Measurements of Bear River near Collinston, Utah, in 1909.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 5	E. A. Porter	287	1,240	4.40	4,620
May 6	E. S. Fuller	295	1,520	5.80	6,980
June 13	do	298	1,850	6.70	9,020
July 18	do	277	923	3.25	2,850

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1,640	1,750	1,530	3,250	8,440	9,900	5,640	1,860	1,000	2,080	2,300	3,250
2	1,750	1,750	1,750	3,530	8,000	9,900	5,470	1,750	1,100	2,080	2,190	3,110
3	1,640	2,300	2,080	3,980	7,406	9,900	5,300	1,640	1,200	2,190	2,190	2,970
4	1,750	2,836	2,550	4,140	6,150	9,900	5,130	1,640	1,200	2,190	2,080	2,550
5	1,750	2,830	3,980	4,300	6,320	9,900	4,960	1,640	2,550	2,300	2,080	2,550
6	3,110	3,250	4,140	4,460	6,580	11,000	4,790	1,640	2,190	2,300	2,080	2,420
7	3,110	2,970	4,300	4,460	6,860	11,600	4,620	1,640	2,300	2,190	2,080	2,190
8	2,830	2,690	3,820	4,790	6,500	11,600	4,000	1,480	2,420	2,190	2,080	2,190
9	2,550	500	2,970	6,620	6,680	11,600	4,000	1,480	2,300	2,080	2,080	2,190
10	2,190	645	2,550	3,980	6,860	11,600	4,140	1,429	2,300	2,080	2,190	3,300
11	1,860	1,200	2,420	3,980	7,040	11,000	4,140	1,310	2,300	2,080	2,300	2,690
12	1,750	1,200	1,750	4,140	7,040	9,640	3,980	1,200	2,190	2,190	2,300	2,420
13	1,750	2,300	1,420	4,300	7,040	9,640	3,830	1,200	2,080	2,190	2,300	2,420
14	3,110	2,420	1,530	4,460	7,040	9,640	3,070	1,200	1,970	2,080	2,190	2,420
15	3,820	2,350	1,860	4,140	6,860	9,380	3,530	1,100	1,860	2,080	2,190	2,300
16	3,980	2,690	2,190	3,980	6,860	9,640	3,670	1,100	1,860	2,080	2,080	2,300
17	4,620	3,250	2,420	4,790	6,860	9,640	2,830	1,000	1,860	2,080	1,970	2,190
18	3,980	3,980	2,690	5,130	7,040	9,380	2,690	1,000	1,860	2,080	1,860	2,080
19	3,670	3,530	3,530	5,980	6,860	9,140	2,420	1,000	1,670	2,080	1,860	1,970
20	3,110	2,550	3,900	6,150	6,860	8,900	2,190	1,000	1,970	2,080	2,190	1,970
21	3,980	2,420	3,820	6,320	7,040	8,660	1,970	900	2,080	2,080	2,550	2,080
22	4,460	1,640	3,530	6,500	7,040	8,320	1,860	900	2,080	2,080	3,110	2,080
23	4,300	1,860	3,530	6,500	7,040	8,000	1,750	900	2,080	2,080	3,390	2,080
24	3,980	1,860	3,530	6,150	7,040	7,800	1,420	900	2,080	2,080	3,670	2,080
25	3,670	1,750	3,250	6,860	7,400	7,400	2,080	1,100	2,080	2,080	3,670	2,420
26	2,830	1,750	2,970	7,600	8,000	7,400	2,080	1,000	2,080	2,080	3,980	2,300
27	2,690	1,750	2,830	8,000	8,220	7,040	1,970	900	2,080	2,080	4,460	2,420
28	2,830	1,530	3,820	8,000	8,440	6,680	1,806	900	2,190	2,080	4,140	2,190
29	2,550	....	3,980	8,000	8,560	6,320	2,080	810	2,190	2,080	3,586	2,190
30	1,630	....	4,460	8,660	8,900	6,320	1,756	810	2,190	2,080	3,250	2,420
31	1,420	....	4,300	....	9,640	.....	1,750	810	....	2,080	....	2,690

Monthly Discharge of Bear River near Collinston, Utah, for 1909.

(Drainage area 6,000 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	4,620	1,420	2,850	0.48	0.55	175,000
February	3,980	500	2,210	.37	.38	123,000
March	4,460	1,420	3,020	.50	.58	186,000
April	8,660	3,250	5,370	.90	1.00	320,000
May	9,640	6,150	7,300	1.22	1.41	449,000
June	11,600	6,320	9,220	1.54	1.72	549,000
July	5,640	1,420	3,200	.55	.63	203,000
August	1,860	810	1,200	.20	.23	73,800
September	2,550	1,000	2,010	.34	.37	120,000
October	2,300	2,080	2,120	.35	.41	130,000
November	4,460	1,800	2,610	.44	.49	155,000
December	3,250	1,970	2,370	.40	.46	146,000
The year....	11,600	500	3,630	0.61	8.23	2,630,000

Discharge Measurements of Bear River near Collinston, Utah, in 1910.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 3.....	G. H. Canfield.....	221	295.1	1.15	343
August 3.....	.....do	220	295.0	1.15	336
September 8..	.....do	233	326.3	1.30	457
September 8..	.....do	233	324.5	1.31	474
October 6....	.....do	271	501	1.94	989
December 12..	J. C. Dort.....	270	612	2.44	1,516

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	2,080	2,300	6,200	5,520	2,000	250	310	250	780	1,250	1,350
2.....	2,830	2,190	1,800	5,690	5,350	1,890	310	310	250	780	1,150	1,350
3.....	2,830	2,420	3,080	5,520	5,350	1,780	250	310	250	870	1,150	1,350
4.....	2,830	1,970	4,790	5,690	5,180	1,670	250	310	250	870	1,150	1,450
5.....	2,830	1,970	4,960	6 030	5,010	1,670	.....	310	250	960	1,250	1,450
6.....	2,830	1,860	5,130	6,030	5,010	1,560	.....	310	250	1,050	1,150	1,450
7.....	2,550	2,080	5,470	5,690	4,840	1,450	.....	310	250	1,050	1,150	1,450
8.....	2,550	2,080	5,640	5,350	4,670	1,450	.....	310	250	1,050	1,250	1,350
9.....	2,550	2,080	5,640	5,180	4,670	1,350	.....	310	250	1,050	1,150	1,350
10.....	2,550	2,190	5,640	4,840	4,510	1,350	.....	310	250	1,050	1,150	1,350
11.....	2,550	2,190	5,470	4,510	4,510	1,350	.....	310	250	1,050	1,150	1,350
12.....	2,550	2,300	5,130	4,350	4,350	1,250	.....	250	380	1,050	1,150	1,450
13.....	2,550	2,190	5,300	4,350	4,350	1,250	.....	250	450	1,050	1,150	1,450
14.....	2,550	2,080	5,470	4,510	4,350	1,250	.....	310	530	1,050	1,150	1,450
15.....	2,550	2,190	6,150	4,670	4,200	1,150	.....	250	610	1,050	1,150	1,350

Daily Discharge in Second-feet of Bear River near Collinston, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	2,550	2,080	7,040	4,840	4,200	1,150	.....	250	610	1,050	1,250	1,350
17.....	2,420	1,860	7,690	5,010	4,050	1,050	.....	250	690	1,050	1,150	1,350
18.....	2,300	2,080	7,800	4,840	3,900	960	.....	250	690	1,050	1,150	1,350
19.....	2,300	2,190	7,500	4,670	3,750	960	.....	250	690	1,150	1,150	1,250
20.....	2,300	2,190	7,500	4,670	3,600	870	.....	250	780	1,150	1,250	1,250
21.....	2,300	2,080	7,500	4,670	3,450	780	.....	250	690	1,250	1,250	1,150
22.....	2,420	2,080	7,300	4,840	3,300	690	.....	250	690	1,250	1,250	1,150
23.....	2,420	2,080	7,300	4,840	3,160	530	.....	250	780	1,250	1,350	1,250
24.....	2,300	2,190	7,100	4,840	3,020	380	.....	250	690	1,250	1,350	1,250
25.....	2,300	2,190	7,100	4,840	2,890	310	250	250	690	1,150	1,350	1,250
26.....	2,190	2,300	6,910	4,840	2,630	250	310	250	690	1,150	1,350	1,250
27.....	2,190	2,190	6,720	4,670	2,500	250	310	250	690	1,250	1,350	1,250
28.....	2,190	2,190	6,540	4,840	2,370	250	310	160	780	1,350	1,350	1,250
29.....	2,190	....	6,200	5,180	2,240	250	310	160	780	1,350	1,250	1,250
30.....	2,080	....	5,860	5,520	2,120	310	310	160	780	1,250	1,350	1,250
31.....	1,970	....	5,690	....	2,000	.....	310	160	....	1,250	....	1,250

Monthly Discharge of Bear River near Collinston, Utah, for 1910.

(Drainage area, 6,000 Square Miles.)

Month.	Discharge in second-feet.				Run-off.	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	2,830	1,970	2,460	0.41	0.47	151,000
February	2,420	1,860	2,130	.36	.37	118,000
March	7,800	1,860	5,950	.99	1.14	366,000
April	6,200	4,350	5,060	.84	.94	301,000
May	5,520	2,000	3,900	.65	.75	240,000
June	2,000	250	1,050	.18	.20	62,500
July	310	20	141	.02	.03	8,670
August	310	160	262	.04	.05	16,100
September	780	250	515	.09	.10	30,600
October	1,350	780	1,100	.18	.21	67,600
November	1,350	1,150	1,220	.20	.23	72,600
December	1,450	1,150	1,320	.22	.26	81,200
The year....	7,800	20	2,000	0.35	3.98	1,520,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Bear River near Collinston, Utah, 1890 to 1910.

(Drainage area, 6,000 Square Miles.)

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off. Sec. Ft. per Sq. Mile	Run-Off. Depth in inches on Drainage Area
1890	92.25	55.50	196.06	294.70	487.33	270.92	199.88	107.87	80.05	95.00	83.55	76.50	2,139.36	0.49	6.68
1891	61.50	72.59	108.71	162.28	280.99	213.90	96.06	57.69	58.67	75.95	75.09	74.78	1,338.31	0.31	4.19
1892	73.92	69.52	125.28	142.62	237.94	336.77	186.78	73.49	59.50	69.56	71.10	75.95	1,522.41	0.35	4.76
1893	98.28	80.81	113.14	237.13	314.82	292.46	156.18	71.94	68.43	93.77	98.18	104.53	1,729.76	0.40	5.39
1894	78.71	74.42	149.72	318.65	417.26	378.27	170.94	76.86	90.75	101.46	87.18	93.77	2,037.46	0.49	6.55
1895	99.00	90.53	124.82	193.03	266.18	156.32	59.09	49.99	51.95	73.29	79.80	89.46	1,333.45	0.31	4.16
1896	81.41	63.73	80.55	177.68	231.65	380.89	132.87	80.99	74.20	80.43	90.45	95.67	1,570.51	0.36	4.92
1897	87.87	81.42	97.27	346.43	588.19	335.42	111.11	66.53	72.83	108.77	80.39	99.98	2,076.22	0.48	6.46
1898	105.51	87.36	122.30	226.23	283.40	231.40	81.29	45.13	45.88	67.88	71.52	59.46	1,427.38	0.33	4.44
1899	79.87	70.31	115.29	228.44	315.37	371.22	299.63	141.98	86.16	116.03	126.86	107.79	2,059.44	0.47	6.41
1900	106.86	86.03	147.57	154.24	239.93	136.74	41.63	38.18	45.40	72.56	85.21	80.92	1,235.08	0.28	3.86
1901	76.18	86.35	124.94	142.75	274.79	120.73	42.18	35.29	43.08	61.86	68.07	73.60	1,149.84	0.27	3.60
1902	70.03	66.15	73.23	129.48	163.31	127.22	17.95	17.22	17.20	26.26	24.99	19.18	752.22	0.17	2.38
1903	48.02	57.98	109.57	147.57	152.12	152.93	27.55	2.34	15.71	55.46	66.35	56.82	892.41	0.20	2.79
1904	37.51	83.00	196.00	282.00	387.60	300.80	74.22	23.12	30.58	55.83	60.75	65.61	1,597.00	0.37	4.99
1905	73.72	66.59	98.69	107.10	135.30	53.26	2.24	0.78	9.40	49.56	58.08	47.16	701.90	0.16	2.17
1906	48.10	61.10	105.00	220.00	259.00	303.00	77.80	72.00	98.70	82.80	91.40	105.30	1,524.00	0.34	4.55
1907	181.20	130.06	210.00	433.00	452.00	512.00	291.00	115.00	94.60	119.00	118.00	121.00	2,680.00	0.62	8.36
1908	116.00	104.00	160.00	167.60	115.00	237.00	62.70	39.70	47.80	97.20	99.40	83.60	1,330.00	0.31	4.15
1909	175.00	123.00	186.00	320.00	449.00	549.00	233.00	73.80	120.00	130.00	155.00	146.00	2,630.00	0.61	8.23
1910	151.00	118.00	366.00	301.00	240.00	62.50	8.67	16.10	30.60	67.60	72.60	81.20	1,520.00	0.35	4.75
Mean.	95.12	82.30	143.34	225.31	299.58	262.99	112.99	57.43	59.12	80.97	84.00	83.73	1,583.18	0.37	4.90

BOX ELDER CREEK AT BRIGHAM, UTAH.

Box Elder Creek is tributary to Box Elder Lake, about 3 miles northwest of Brigham, Utah. At high stages the water may reach Bear River. The gaging station, which was established May 20, 1909, to determine the amount of unappropriated water passing this point, is located about three-fourths of a mile northwest of Brigham City, Utah, on the Third West Street Bridge, and about one-half mile above the Oregon Short Line Railroad crossing. The gage is of the vertical type and is located on the northwest corner of the bridge.

The records are not affected by ice conditions or by artificial control above or below the station. The gage heights observed at this station are believed to be unreliable and no records can be worked up from 1909 measurements.

Discharge Measurements of Box Elder Creek at Brigham, Utah, in 1909.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 20	E. A. Porter	15.9	14.9	1.05	58
June 10	E. S. Fuller	15.9	9.2	1.45	22
November 2	E. A. Porter	15.9	10.5	1.42	21

Discharge Measurements of Box Elder Creek near Brigham, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
February 24	E. A. Porter	15	10	3.35	17
April 8	E. S. Fuller	16	16	4.2	55
December 8	J. C. Dort	13	5.6	3.32	15
December 27	do	10.5	6.45	3.38	15

LOGAN RIVER, NEAR LOGAN, UTAH.

This station, which was established June 1, 1896, discontinued July 18, 1903, and re-established April 13, 1904, is located about 2 miles east of Logan, Utah, about one-fourth mile below the Hercules power house, near the mouth of the canyon. The records show the total amount of water available for irrigation in the valley below.

The station is below all tributaries, except Blacksmith Fork and Cache River, which enter about 5 and 10 miles, respectively, below the station. Water is diverted above the station to develop power, but is returned to the river above the station. The Logan, Hyde Park, and Smithfield canal diverts above the station, and records have been kept on this canal in order that the total flow from the drainage area might be determined. Practically all the normal low water flow is diverted for irrigation below the station.

The equipment consists of a car and cable and an inclined staff gage.

The records are not affected by artificial control nor by ice conditions, but the high velocity at the station causes shifting of the bed of the stream and makes the measuring conditions rather unfavorable. The results are therefore liable to some error, but may be considered fairly good. The gage datum has remained unchanged since January 1, 1906.

Discharge Measurements of Logan River near Logan, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
February 23..	W. G. Swendsen.....	39	47	1.83	102
April 11.....	H. S. Kleinschmidt.....	67	68	2.24	244
May 5.....	.....do	*46	95	2.80	587
May 23.....	Thos. Grieve, Jr.....	60	130	3.27	779
June 21.....	.....do	63	130	3.30	779
July 27.....	.....do	48	77	2.53	268

Note—Gaging station moved May 1.

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	92	100	98	176	340	874	672	330	287	228	194	213
2.....	76	108	100	165	353	844	672	318	287	232	187	194
3.....	168	104	92	148	410	844	672	318	287	274	194	213
4.....	108	76	108	134	460	856	661	318	283	240	176	257
5.....	108	95	99	108	500	856	627	310	278	232	187	232
6.....	100	76	73	172	510	904	616	310	274	213	232	213
7.....	100	70	76	190	500	856	562	296	274	213	194	213
8.....	100	80	85	213	536	844	510	296	274	232	158	213
9.....	110	104	85	232	605	832	536	284	270	232	158	213
10.....	120	104	90	232	627	815	562	284	264	232	194	213
11.....	108	48	92	240	672	844	525	284	253	213	158	213
12.....	124	99	92	232	716	916	510	284	253	213	158	213
13.....	100	104	124	232	662	934	510	284	253	206	194	213
14.....	108	100	92	236	662	945	535	354	253	206	274	213
15.....	60	108	108	232	672	964	460	274	261	194	274	194
16.....	100	111	70	244	616	964	460	274	245	158	158	194
17.....	110	108	70	283	562	934	460	274	245	176	194	194
18.....	115	108	80	340	536	904	435	253	245	176	124	194
19.....	134	111	90	327	545	874	410	274	236	232	124	213
20.....	187	82	92	340	616	856	410	274	232	158	158	232
21.....	60	85	92	340	630	844	398	386	232	158	158	213
22.....	70	90	92	370	672	844	386	410	274	194	194	213
23.....	124	100	95	350	687	832	386	340	274	232	176	194
24.....	108	73	95	353	844	815	370	332	240	362	194	194
25.....	100	108	134	386	850	728	370	314	236	232	232	194
26.....	100	92	134	350	844	718	362	310	236	232	232	232
27.....	100	100	134	318	964	728	362	310	236	232	232	213
28.....	108	94	124	310	1,090	740	353	305	228	232	232	232
29.....	92	....	134	306	1,026	700	340	296	224	213	232	213
30.....	90	....	158	327	934	689	340	292	232	232	213	213
31.....	92	....	158	....	904	.....	340	287	....	194	....	....

Monthly Discharge of Logan River near Logan, Utah, for 1906.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	183	70	105	0.48	0.55	6,450
February	111	62	97	.44	.46	5,400
March	154	77	103	.48	.55	6,240
April	410	108	267	1.22	1.37	15,750
May	1,200	352	754	3.46	3.99	46,400
June	1,030	658	868	3.98	4.45	51,700
July	635	234	389	1.78	2.06	23,450
August	476	155	209	.96	1.11	12,900
September	184	132	157	.72	.80	9,350
October	256	84	129	.59	.68	7,940
November	172	64	110	.50	.56	6,550
December	138	110	123	.56	.65	7,550
The year....	1,200	62	276	1.26	17.23	199,680

Note—These discharges do not include the flow of the Logan, Hyde Park and Smithfield Canal, which diverts water above the station.

Discharge Measurements of Logan River near Logan, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 25.....	G. T. Burridge.....	75	190	4.15	1,070
July 20.....	.....do	64	153	3.60	752
August 13....	La Rue and Burridge.....	48	113	2.82	410
November 11.	A. D. Williams.....	45	81	2.25	203

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	124	110	110	256	635	1,640	1,200	543	314	263	265	180
2.....	124	124	155	285	672	1,730	1,160	520	333	280	172	180
3.....	124	138	124	330	635	2,150	1,200	474	297	266	172	180
4.....	124	192	110	390	672	2,200	1,240	474	297	243	172	180
5.....	124	305	138	390	635	2,250	1,160	520	314	246	172	180
6.....	124	212	124	420	525	2,250	1,120	474	297	246	172	180
7.....	124	192	138	490	560	2,350	990	474	297	246	172	180
8.....	97	192	128	560	598	2,450	1,030	432	280	246	172	180
9.....	74	138	110	560	598	2,150	1,030	474	280	246	172	180
10.....	84	124	97	635	560	2,150	1,070	432	280	246	172	180

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1907—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11.....	110	124	138	710	598	1,910	1,030	411	280	246	172	180
12.....	138	97	138	790	710	1,910	950	411	280	246	172	180
13.....	97	110	133	830	750	1,820	1,030	390	280	263	200	180
14.....	97	97	138	870	560	1,550	990	390	263	246	220	160
15.....	110	84	138	950	560	1,550	870	390	263	231	200	160
16.....	110	97	155	990	790	1,420	830	390	263	231	200	160
17.....	124	110	155	1,110	790	1,330	672	390	263	231	200	145
18.....	124	110	172	990	1,290	1,330	650	371	263	216	200	145
19.....	110	155	305	910	1,820	1,240	750	371	263	216	200	145
20.....	84	155	560	790	2,100	1,240	750	371	263	216	200	145
21.....	97	172	635	672	2,350	1,200	750	371	246	216	200	145
22.....	84	192	525	598	2,350	1,160	718	371	246	216	180	145
23.....	84	192	560	598	2,350	1,120	666	371	246	216	180	200
24.....	84	155	455	598	2,450	1,120	666	352	246	231	180	200
25.....	97	155	390	598	2,050	1,070	666	352	246	231	180	180
26.....	110	172	360	598	1,780	1,670	666	333	246	231	200	180
27.....	110	172	305	635	1,240	1,070	566	333	246	231	200	180
28.....	124	172	330	710	1,200	1,070	520	333	246	246	200	160
29.....	110	....	305	710	1,370	1,070	520	333	246	246	180	180
30.....	110	....	212	710	1,200	1,120	520	333	280	246	180	180
31.....	110	....	305	....	1,370	.....	566	333	....	246	....	160

Monthly Discharge of Logan River near Logan, Utah, for 1907.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	138	74	108	0.50	0.57	6,640
February	305	84	152	.70	.73	8,440
March	635	97	247	1.13	1.31	15,200
April	1,110	256	656	3.00	3.35	39,000
May	2,450	525	1,150	5.28	6.10	70,700
June	2,450	1,070	1,590	7.31	8.16	94,600
July	1,240	520	860	3.94	4.55	52,900
August	543	333	404	1.85	2.14	24,800
September	333	246	272	1.25	1.38	16,200
October	280	216	240	1.10	1.27	14,800
November	265	180	206	.97	1.08	12,300
December	200	145	172	.79	.91	10,600
The year....	2,450	74	505	2.32	31.55	366,000

Note—These discharges do not include the flow of the Logan, Hyde Park and Smithfield Canal, which diverts water above the gaging station.

Discharge Measurements of Logan River near Logan, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 22.....	A. D. Williams.....	45	82	2.35	221

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	162	115	115	115	220	430	585	205	130	148	115	100
2.....	162	115	115	115	220	430	555	205	130	130	115	75
3.....	145	115	145	115	220	430	520	185	130	130	100	130
4.....	162	162	162	115	220	430	520	185	115	148	100	100
5.....	145	145	145	115	265	430	490	185	115	130	100	130
6.....	145	145	115	130	315	430	455	205	115	130	100	75
7.....	162	115	115	145	430	460	455	205	115	130	100	130
8.....	162	130	115	145	495	460	425	185	115	130	100	100
9.....	162	130	115	145	495	530	425	185	115	130	75	75
10.....	162	162	115	145	495	560	395	165	100	130	65	100
11.....	162	162	115	162	370	665	365	165	100	130	100	75
12.....	162	162	115	180	370	700	340	165	100	130	100	75
13.....	162	115	115	220	370	735	340	165	100	130	115	100
14.....	162	115	115	240	370	775	315	165	100	130	65	75
15.....	162	115	115	265	340	850	315	165	100	130	90	75
16.....	162	145	145	265	370	890	290	145	100	130	90	75
17.....	162	145	162	290	370	930	290	145	100	130	90	75
18.....	162	145	180	315	315	972	290	145	100	130	148	75
19.....	162	145	162	315	370	972	245	145	130	130	148	75
20.....	162	162	162	370	430	930	245	145	130	130	115	75
21.....	162	162	162	430	370	725	225	145	130	148	115	65
22.....	162	130	162	462	370	655	225	145	130	148	115	65
23.....	162	130	162	462	430	585	225	145	165	115	100	65
24.....	162	145	162	370	430	950	225	145	165	115	115	55
25.....	162	145	130	315	430	655	205	145	130	115	115	55
26.....	162	145	145	290	400	655	205	130	130	130	100	75
27.....	162	162	145	265	400	690	205	130	130	130	100	75
28.....	162	162	115	220	400	655	205	130	130	145	115	75
29.....	145	162	115	220	430	950	205	130	130	115	100	75
30.....	145	....	115	220	430	585	205	130	130	115	100	75
31.....	145	....	115	....	465	.....	205	130	....	115	....	75

Monthly Discharge of Logan River near Logan, Utah, for 1908.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	162	145	159	0.73	0.84	9,780
February	162	115	141	.65	.70	8,110
March	180	115	135	.62	.71	8,300
April	462	115	239	1.10	1.22	14,200
May	495	220	374	1.72	1.98	23,000
June	972	430	671	3.08	3.48	39,900
July	585	205	331	1.52	1.75	20,400
August	205	130	161	.74	.85	9,900
September	165	100	120	.55	.61	7,140
October	148	115	130	.60	.69	7,990
November	148	65	103	.47	.52	6,130
December	130	55	82	.38	.43	5,050
The year....	972	55	221	1.01	13.73	160,000

Note—These discharges do not include the flow of the Logan, Hyde Park and Smithfield Canal, which diverts water above the gaging station.

Discharge Measurements of Logan River near Logan, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 4	E. A. Porter	45	79	2.35	222
May 5	E. S. Fuller	50	134	3.40	862
June 12	do	62	229	4.35	1,690
July 17	do	54	114	3.20	594

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	75	148	65	148	690	1,550	1,260	520	250	170	153	170
2	88	148	75	185	552	1,600	1,210	520	250	153	153	189
3	88	100	65	245	912	1,600	1,160	458	229	153	153	189
4	88	115	100	268	912	1,600	1,110	489	229	153	153	153
5	115	100	100	245	838	1,600	1,110	489	250	170	153	136
6	225	75	100	225	875	1,640	1,020	553	250	170	153	153
7	130	100	88	245	912	1,640	970	553	229	153	136	153
8	100	148	88	185	950	1,640	928	520	229	153	136	153
9	88	100	88	205	990	1,680	844	553	208	170	136	136
10	88	100	75	225	950	1,680	844	586	208	153	153	136
11	75	100	65	225	912	1,680	844	586	229	153	121	153
12	88	100	65	225	875	1,680	803	586	273	153	136	153
13	88	130	75	225	800	1,680	727	520	250	136	136	153
14	88	100	88	225	838	1,680	691	489	229	136	136	136
15	148	100	88	268	838	1,680	691	489	208	136	121	153
16	225	115	88	315	912	1,680	655	458	229	136	121	121
17	165	100	130	425	912	1,610	655	400	229	136	92	106
18	115	100	115	585	838	1,610	620	321	229	153	92	106
19	165	115	130	552	875	1,610	586	250	208	153	189	106
20	245	88	130	552	912	1,610	586	229	189	189	346	106
21	245	100	115	488	950	1,610	553	229	170	189	273	106
22	165	88	100	425	1,160	1,680	553	229	170	136	208	106
23	115	65	115	520	1,120	1,260	520	229	170	121	250	106
24	75	55	115	585	1,100	1,610	489	229	189	121	273	106
25	88	65	115	585	1,120	1,550	489	229	189	153	296	106
26	130	75	115	690	1,160	1,550	553	229	189	153	346	106
27	115	65	165	800	1,133	1,430	558	229	170	136	296	106
28	148	65	185	912	1,420	1,370	489	229	170	136	229	106
29	100	....	165	725	1,550	1,260	489	229	189	136	189	106
30	115	....	165	655	1,370	1,260	520	229	189	136	189	106
31	100	....	165	....	1,240	.....	520	250	....	153	....	106

Monthly Discharge of Logan River near Logan, Utah, for 1909.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	245	75	125	0.58	0.67	7,700
February	148	55	99	.46	.50	5,500
March	185	65	108	.50	.58	6,640
April	912	148	405	1.86	2.04	24,100
May	1,550	552	996	4.57	5.27	61,200
June	1,680	1,260	1,580	7.25	8.10	94,000
July	1,260	458	739	3.39	3.92	45,400
August	586	229	391	1.79	2.03	24,000
September	273	170	213	.98	1.09	12,700
October	189	121	150	.69	.79	9,220
November	346	92	184	.85	.95	10,100
December	189	106	130	.60	.69	9,040
The year....	1,680	55	427	1.96	26.63	309,600

Note—These discharges do not include the flow of the Logan, Hyde Park and Smithfield Canal, which diverts water above the gaging station.

Discharge Measurements of Logan River near Logan, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 19.....	E. S. Fuller.....	59	146	3.35	683
August 4.....	G. H. Canfield.....	44	89.0	2.165	218
September 3..	.....do	43.5	78.7	2.06	175
October 5....	.....do	45.5	84.4	2.11	186
December 13..	Dort and Palmer.....	63	65	1.90	122

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	133	103	90	322	1,320	1,110	.....	275	172	190	190	138
2.....	133	103	103	372	1,240	1,060	418	275	172	210	172	138
3.....	118	103	133	398	1,150	1,060	418	275	172	190	172	138
4.....	118	103	133	398	1,110	980	385	252	172	230	172	138
5.....	103	103	168	372	1,110	980	356	210	154	210	154	122
6.....	103	103	168	346	980	940	356	230	172	190	154	122
7.....	103	76	168	372	940	900	356	230	172	190	154	138
8.....	103	76	207	398	940	860	356	230	172	190	154	122
9.....	103	76	188	455	1,110	820	356	230	172	190	154	138
10.....	103	76	168	517	1,320	820	356	230	190	190	154	138
11.....	103	76	168	655	1,360	860	327	230	190	190	154	138
12.....	103	103	168	620	1,410	780	327	230	190	210	154	138
13.....	103	103	188	655	1,460	780	327	230	190	190	154	122
14.....	103	103	207	620	1,360	780	301	230	190	190	154	154
15.....	103	76	250	551	1,280	740	327	230	190	190	154	138

Daily Discharge in Second-feet of Logan River near Logan, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	103	76	250	551	1,150	740	327	230	210	154	154	138
17.....	103	76	274	517	1,060	660	327	210	230	172	154	138
18.....	103	76	322	620	1,060	660	301	230	210	190	138	138
19.....	103	76	346	655	1,060	622	275	230	190	172	154	122
20.....	103	90	372	655	1,020	585	252	210	190	154	122	122
21.....	103	76	455	727	1,020	550	275	210	190	154	154	122
22.....	76	76	551	800	1,060	550	275	210	190	154	154	122
23.....	76	76	517	874	1,150	515	252	210	190	154	122	122
24.....	76	76	455	950	1,190	482	252	210	190	154	138	138
25.....	103	76	398	1,030	1,240	515	275	190	190	172	154	138
26.....	103	76	517	1,150	1,240	482	252	190	190	172	154	122
27.....	103	76	372	1,200	1,150	482	230	190	190	172	122	108
28.....	103	76	372	1,200	1,150	.....	275	190	190	190	122	108
29.....	103	....	346	1,280	1,110	.....	301	154	190	190	122	122
30.....	103	....	298	1,200	1,110	.....	275	172	190	190	122	108
31.....	103	....	322	....	1,060	.....	275	172	....	172	...	94

Monthly Discharge of Logan River near Logan, Utah, for 1910.

(Drainage area, 218 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	133	76	113	0.52	0.60	6,950
February	103	76	85	.39	.41	4,730
March	551	90	280	1.28	1.48	17,200
April	1,280	322	682	3.12	3.50	40,600
May	1,460	940	1,160	5.32	6.14	71,300
June	1,110	442	723	3.32	3.70	43,000
July	430	230	317	1.46	1.65	19,500
August	275	154	219	1.00	1.15	13,500
September	230	154	187	.86	.96	11,100
October	230	154	183	.84	.97	11,300
November	190	122	150	.69	.77	8,930
December	154	94	128	.58	.68	7,870
The year....	1,460	76	353	1.61	22.01	256,000

Note—These discharges do not include the flow of the Logan, Hyde Park and Smithfield Canal, which diverts water above the gaging station.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Logan River near Logan, Utah, 1896 to 1910.

(Drainage area, 218 Square Miles.)

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off. Sec. Ft. per Sq. Mile	Run-Off. Depth in inches on Drainage Area
1896	.....	.....	.....	.....	.....	87.41	33.70	19.74	15.35	14.76	13.09	12.54	.....	....	....
1897	9.22	8.33	9.22	18.86	77.72	58.91	30.31	20.29	16.07	16.23	13.81	11.56	290.54	1.83	25.02
1898	9.35	8.16	8.61	19.22	36.09	29.45	19.80	14.20	10.89	10.58	9.52	8.36	194.23	1.23	16.68
1899	14.08	12.55	14.20	21.96	40.58	87.47	67.64	31.85	22.55	20.78	18.09	17.04	369.14	2.34	31.75
1900	11.87	9.39	11.74	17.85	44.33	41.12	20.84	14.14	11.54	11.56	10.71	10.21	215.31	1.36	18.54
1901	9.78	8.61	9.59	14.04	55.40	39.69	16.48	14.76	12.67	12.11	.....	.....	.....	....	....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1904	.....	.....	.....	20.18	53.99	52.13	27.55	15.31	12.56	11.74	9.94	9.53	.....	....	....
1905	8.73	7.28	8.85	10.53	22.63	29.51	15.25	10.82	9.40	8.79	7.68	7.26	146.70	0.93	12.62
1906	6.40	5.28	6.27	15.60	40.80	50.20	29.30	19.20	15.20	13.40	11.50	13.00	226.00	1.43	19.43
1907	6.64	8.44	15.20	29.06	70.70	94.60	52.90	24.80	16.20	14.80	12.30	10.60	366.00	2.32	31.55
1908	9.78	8.11	8.30	14.20	23.00	39.90	20.40	9.90	7.14	7.99	6.13	5.05	160.00	1.01	13.73
1909	7.70	5.50	6.64	24.10	61.20	94.00	45.40	24.00	12.70	9.22	10.10	9.04	309.60	1.96	26.63
1910	6.95	4.73	17.20	40.60	71.30	43.00	19.50	13.50	11.10	11.30	8.93	7.87	256.00	1.61	22.01
Mean..	9.14	7.85	10.53	21.35	49.81	58.26	30.70	17.88	13.34	12.56	11.00	10.17	253.35	1.60	21.80

Note—These do not include the flow of the Logan, Hyde Park and Smithfield Canal, which diverts water above the station.

LOGAN, HYDE PARK, AND SMITHFIELD CANAL, NEAR LOGAN, UTAH.

This canal diverts water for irrigation and domestic use in Logan, Hyde Park, and Smithfield. Records are fragmentary. Gage heights are available for parts of 1904 and 1905, for the entire year 1906, and for parts of 1907, and 1909.

The channel is permanent, and a rating curve has been developed from measurements made in 1909.

The gage in the canal is above a spillway which discharges into the river above the station. No record was kept of the amount spilled in 1909, but it probably ranged from 2 to 5 second-feet, and the discharges of the canal as given are too large by this amount.

Daily Discharge in Second-feet of Logan, Hyde Park and Smithfield Canal near Logan, Utah, in 1909.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 5	E. S. Fuller	9.5	6.0	3.90	10
June 12	do	10.8	18.2	5.10	60
July 17	do	10.5	22.8	5.55	87

Daily Discharge in Second-feet of Logan, Hyde Park and Smithfield Canal near Logan, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	13	16	10	5	8	18	75	84	25	23	13	18
2	13	16	7	6	8	23	72	84	25	21	16	18
3	13	16	6	6	8	27	72	84	25	23	13	18
4	15	14	7	7	8	28	78	84	25	21	13	18
5	23	14	7	7	8	28	78	83	25	16	16	18
6	19	16	7	7	8	29	81	83	25	14	10	18
7	19	13	7	7	3	28	84	83	25	16	16	18
8	13	15	7	7	.....	29	90	78	25	19	16	18
9	16	15	7	7	.....	31	90	78	25	16	14	18
10	23	15	6	8	.....	32	93	78	27	16	13	18
11	23	15	5	7	10	33	93	78	27	14	14	18
12	23	15	4	7	10	31	93	75	27	16	13	18
13	23	15	18	7	12	35	90	75	27	16	16	18
14	23	15	8	10	13	35	93	84	27	19	16	18
15	4	16	8	10	12	38	99	72	27	4	13	18
16	14	16	7	9	12	41	99	72	27	4	16	18
17	14	15	9	9	10	39	93	72	27	5	13	18
18	22	18	10	9	10	37	93	72	27	5	10	18
19	22	18	10	9	10	35	93	72	27	13	16	18
20	17	15	10	9	11	35	90	75	27	....	13	18
21	14	16	10	9	12	39	90	75	27	....	13	18
22	14	16	10	10	27	42	90	14	27	4	14	18
23	18	16	10	10	27	39	90	27	27	2	16	18
24	15	15	11	10	30	37	90	25	29	3	18	18
25	14	15	10	10	27	49	87	25	27	4	18	18

Daily Discharge in Second-feet of Logan, Hyde Park and Smithfield Canal near Logan, Utah, in 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
26.....	14	16	10	10	43	49	87	25	25	6	19	18
27.....	13	15	10	10	31	78	87	25	23	5	19	18
28.....	13	13	10	10	16	84	84	25	23	13	18	18
29.....	13	....	4	9	16	72	84	25	23	13	18	18
30.....	13	....	5	8	15	75	84	25	23	8	18	18
31.....	14	....	4	....	16	.....	84	25	....	6	....	18

Daily Discharge in Second-feet of Logan, Hyde Park and Smithfield Canal near Logan, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	18	18	....	5	13	35	.....	....	....	....	....	....
2.....	18	19	....	6	16	35	.....	....	....	....	....	....
3.....	18	19	....	5	19	29	.....	....	....	....	....	....
4.....	18	19	....	6	18	31	.....	....	....	....	31	....
5.....	18	23	....	5	19	23	.....	....	....	....	....	....
6.....	18	23	....	6	19	23	.....	....	....	....	....	....
7.....	18	23	....	6	19	23	.....	....	....	....	....	....
8.....	18	23	....	8	19	27	.....	....	....	....	....	....
9.....	18	16	....	10	18	31	.....	....	....	....	....	23
10.....	18	16	....	10	23	19	.....	....	....	....	....	....
11.....	18	16	....	....	16	23	.....	....	....	....	....	....
12.....	18	16	....	5	23	10	.....	....	....	....	....	....
13.....	18	14	....	6	39	13	.....	....	....	....	....	....
14.....	16	16	....	5	31	10	.....	....	....	....	....	....
15	18	13	....	8	31	10	.....	....	....	....	27	....
16.....	18	13	....	13	23	.....	.....	....	....	....	....	....
17.....	18	13	....	16	31	.....	.....	....	....	....	....	....
18.....	18	13	....	19	31	.....	.....	....	....	....	....	....
19.....	18	18	....	13	35	.....	.....	....	....	....	....	23
20.....	16	16	....	18	39	.....	.....	....	....	....	....	....
21.....	19	18	....	19	39	.....	.....	....	....	....	....	....
22.....	13	16	....	16	44	.....	.....	....	....	....	....	....
23.....	16	18	....	13	35	.....	.....	....	....	31	....	....
24.....	16	....	....	19	35	.....	.....	....	....	....	....	....
25.....	16	....	....	23	39	.....	.....	....	....	....	....	....
26.....	16	....	....	19	31	.....	.....	....	....	....	....	23
27.....	18	....	....	6	23	.....	.....	....	....	....	....	....
28.....	18	....	....	8	35	.....	.....	....	....	....	....	....
29.....	19	....	....	10	31	.....	.....	....	....	....	23	....
30.....	18	....	....	13	23	.....	.....	....	....	....	....	....
31.....	18	....	....	....	35	.....	.....	....	....	....	....	....

Daily Discharge in Second-feet of Logan, Hyde Park and Smithfield Canal near Logan, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	....	....	....	....	....	....	....
2	....	....	....	....	10.4	....	....	....	....	....	....	....
3	....	....	....	....	....	....	....	....	....	29	....	....
4	....	....	....	9.1	....	....	....	....	....	....	....	....
5	....	....	....	....	....	....	81	81	....	....	....	....
6	....	....	....	....	....	....	....	....	....	....	....	....
7	....	9.3	8.2	....	....	....	....	....	84	....	....	....
8	....	....	....	....	....	....	....	....	....	....	....	....
9	....	....	....	....	8.2	....	....	....	....	....	....	....
10	31	....	....	....	....	....	....	....	....	29	....	....
11	....	....	....	....	....	63	....	....	....	....	....	....
12	....	....	....	....	....	....	....	....	23	....	....	....
13	....	....	....	10.4	....	63	....	....	....	....	....	....
14	....	9.3	7.3	....	....	....	81	....	....	....	....	....
15	....	....	....	....	....	....	....	78	....	....	....	....
16	....	....	....	....	6.0	....	....	....	....	....	....	....
17	23	....	....	....	....	....	....	....	....	....	....	....
18	....	....	....	11.7	....	....	....	....	....	29	....	....
19	....	....	....	....	....	....	....	....	....	....	....	....
20	....	....	....	....	....	....	....	....	29	....	....	....
21	....	10.4	10.4	....	....	84	84	....	....	....	....	....
22	....	....	....	....	....	....	....	78	....	....	....	....
23	....	....	....	....	....	....	....	....	....	....	....	....
24	10.4	....	....	....	6.3	....	....	....	....	....	....	....
25	....	....	....	11.7	....	....	....	....	....	29	....	....
26	....	....	....	....	....	....	....	....	....	....	....	....
27	....	....	....	....	....	78	84	....	27	....	....	....
28	....	6.4	23	....	....	....	....	....	....	....	....	....
29	....	....	....	....	....	....	....	....	....	....	....	....
30	....	....	....	....	5.4	....	....	....	....	....	....	....
31	13	....	....	....	....	....	....	81	....	23	....	....

BLACKSMITH FORK, NEAR HYRUM, UTAH.

The station, which was established July 19, 1900, discontinued December 31, 1902, and re-established May 16, 1904, is located at the mouth of the canyon, about 10 miles southeast of Logan, and about 5 miles from Hyrum, the nearest railway and postoffice point. It is about 800 feet above the Hyrum city power plant and about 500 feet below the intake of the power canal. A station was established on the power plant race on May 16, 1904, and the total flow from the drainage area since that date is given by the sum of discharges at these two stations. The original station was above the intake of the power canal. The records show the total amount of water available for irrigation in the valley below.

The equipment consists of a car and cable and a vertical staff gage. The flow is not affected by artificial control above or below the station, or by ice at either gage. The velocity at the river station is very high, and a slight shifting of channel during high water makes the records somewhat liable to error. The results, however, may be considered fairly good. Gage heights on the power plant race for 1909 are very uncertain and have not been published. The gage datum has remained unchanged since the new stations were established in 1904.

Discharge Measurements of Blacksmith Fork near Hyrum, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 18	W. G. Swendsen	32.5	21.6	3.33	35
May 5	H. S. Kleinschmidt	40	54.7	4.08	184
May 23	Thos. Grieve, Jr.	40	51.3	3.90	150
June 21	do	39	46.6	3.85	116
July 22	do	38	37.4	3.59	72

Discharge Measurements of Blacksmith Fork Power Plant Race near Hyrum, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 18	W. G. Swendsen	12.5	25.8	4.72	76
May 5	H. S. Kleinschmidt	13.4	28.5	4.90	88
June 21	Thos. Grieve, Jr.	14.0	26.2	4.95	91

Daily Discharge in Second-feet of Blacksmith Fork near Hyrum, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	102	102	122	82	226	361	152	163	163	137	115	102
2	102	102	115	82	226	361	152	163	163	137	115	102
3	102	122	102	82	226	332	152	163	163	137	115	95
4	115	122	102	82	277	274	152	163	163	137	115	95
5	130	102	102	82	277	293	152	163	145	137	115	95
6	122	102	102	130	277	320	152	163	145	137	115	95
7	102	102	102	82	277	332	133	163	145	137	115	95
8	102	102	105	174	277	332	133	163	145	137	115	95
9	102	102	105	195	274	304	163	145	145	137	115	95
10	108	102	102	195	274	277	163	145	145	137	115	95
11	109	102	108	174	274	277	163	145	145	137	115	115
12	122	102	108	174	304	277	163	145	145	137	115	115
13	122	102	102	174	304	277	163	145	145	137	115	115
14	109	102	102	106	304	277	163	145	137	137	115	115
15	130	102	102	106	304	226	163	145	137	137	95	115
16	130	102	102	106	304	226	163	145	137	137	95	115
17	109	102	102	146	304	226	163	145	137	137	95	115
18	130	102	102	146	277	226	163	145	137	137	95	115
19	130	102	102	169	196	226	163	145	137	137	95	115
20	109	102	102	169	277	226	163	182	137	137	95	115
21	115	102	102	304	218	226	163	182	137	130	102	115
22	122	102	102	304	218	226	163	182	137	130	102	115
23	102	102	102	304	218	226	163	182	137	130	102	115
24	102	102	102	304	195	196	163	163	137	130	102	115
25	102	102	117	226	195	196	163	163	137	130	102	115

Daily Discharge in Second-feet of Blacksmith Fork near Hyrum, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
26.....	122	102	130	203	218	196	163	145	137	130	102	115
27.....	122	102	130	203	277	182	163	145	137	122	102	108
28.....	102	122	130	203	304	182	163	145	137	122	102	108
29.....	102	....	130	203	392	182	163	145	137	122	102	108
30.....	102	....	138	226	392	182	163	145	137	122	102	108
31.....	102	....	153	....	392	.....	163	145	....	122	....	108

Note—These discharges include the discharge of the power plant race, which diverts water above the gaging station and returns it a short distance below.

Monthly Discharge of Blacksmith Fork near Hyrum, Utah, for 1906.

(Drainage area, 286 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	130	102	113	0.40	0.46	6,930
February	122	102	104	.36	.38	5,790
March	153	102	111	.39	.45	6,800
April	304	82	169	.59	.65	10,030
May	392	195	274	.96	1.10	16,780
June	361	182	249	.87	.97	14,800
July	163	133	159	.56	.64	9,780
August	182	145	156	.56	.64	9,570
September	163	137	143	.50	.55	8,500
October	137	122	133	.46	.53	8,190
November	115	95	107	.37	.42	6,340
December	115	95	108	.37	.43	6,630
The year....	392	82	152	0.53	7.22	110,100

Note—These are the combined discharges of Blacksmith Fork and the power plant race, which together give the total flow of the river.

Discharge Measurements of Blacksmith Fork near Hyrum, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 22.....	G. T. Burridge.....	56	134	5.90	1,110
June 8.....	.....do	54	111	5.40	719
June 25.....	.....do	43	78	4.65	346
July 20.....	.....do	43	60	4.40	229
August 13....	La Rue and Burridge.....	43	59	4.30	185

Discharge Measurements of Blacksmith Fork Power Plant Race near Hyrum, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 24	G. T. Burridge	13.3	29	4.90	95
June 8	do	13.8	28	4.88	85
June 25	do	12.8	23	4.70	73
July 20	do	12.1	21	4.47	56
August 13	La Rue and Burridge	13.6	27	4.85	79

Daily Discharge in Second-feet of Blacksmith Fork near Hyrum, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	115	163	163	280	944	937	376	282	239	206	182	163
2	115	163	163	348	944	872	376	282	239	206	182	163
3	115	163	182	438	944	944	376	282	239	206	182	163
4	115	163	163	438	944	952	376	282	239	206	182	163
5	115	163	163	438	944	952	334	282	239	206	182	163
6	115	242	163	486	944	952	334	274	239	206	182	163
7	115	296	163	390	865	880	334	274	239	206	182	163
8	115	296	182	772	797	880	334	274	239	206	182	163
9	115	280	182	618	797	804	376	274	239	189	182	163
10	115	182	163	772	797	812	376	274	239	189	182	163
11	115	182	182	964	7,100	872	376	274	239	189	182	163
12	115	182	182	1,100	1,174	865	376	274	239	189	182	163
13	115	163	182	1,176	1,100	937	376	274	239	189	182	163
14	115	163	163	1,250	1,091	937	368	274	239	189	182	163
15	115	163	163	1,584	797	1,020	326	274	239	189	182	163
16	115	145	163	1,900	797	1,020	341	274	239	189	182	163
17	115	145	182	1,176	1,020	1,020	341	274	239	189	182	163
18	115	145	226	1,176	1,100	872	341	274	239	189	182	163
19	115	145	390	1,098	1,106	804	341	274	239	189	182	163
20	115	163	390	684	1,500	804	341	274	239	189	182	163
21	115	163	390	728	1,580	742	334	274	232	189	182	163
22	115	182	390	790	1,660	742	334	274	232	189	182	163
23	115	203	390	797	1,184	742	326	274	232	189	182	163
24	115	182	226	797	1,106	521	326	274	232	189	163	163
25	115	182	203	797	1,106	521	326	274	232	189	163	163
26	115	203	203	952	1,106	473	368	274	232	189	163	163
27	115	182	182	952	1,106	473	368	274	232	189	163	163
28	115	163	182	1,028	1,184	420	326	274	232	189	163	163
29	115	....	226	1,028	1,176	420	326	274	232	189	163	163
30	115	....	203	952	1,106	420	356	239	232	189	163	163
31	163	....	163	....	1,106	.....	356	239	....	189	....	163

Note—These discharges include the discharge of the power plant race, which diverts water above the gaging station and returns it a short distance below.

Monthly Discharge of Blacksmith Fork near Hyrum, Utah, for 1907.

(Drainage area, 286 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	163	115	117	0.41	0.47	7,190
February	296	145	184	.64	.67	10,200
March	390	163	215	.75	.87	13,200
April	1,900	280	865	3.02	3.37	51,500
May	1,660	797	1,070	3.74	4.31	65,800
June	1,020	420	787	2.75	3.07	46,800
July	376	326	350	1.22	1.41	21,500
August	282	239	273	.96	1.10	16,800
Septemebr	239	232	237	.83	.92	14,100
October	206	189	193	.68	.78	11,900
November	182	163	177	.62	.69	10,500
December	163	163	163	.57	.66	10,000
The year....	1,900	115	386	1.35	18.32	279,000

Note—These are the combined discharges of Blacksmith Fork and the power plant race, which together give the total flow of the river.

Discharge Measurements of Blacksmith Fork near Hyrum, Utah, in 1908.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 25.....	A. D. Williams.....	38.0	32.0	3.60	64

Discharge Measurements of Blacksmith Fork Power Plant Race near Hyrum, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 23.....	A. D. Williams.....	14.0	28.0	4.90	92

Daily Discharge in Second-feet of Blacksmith Fork near Hyrum, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	138	110	131	138	175	163	172	152	152	128	123	136
2.....	138	131	131	138	175	163	172	152	152	144	123	136
3.....	138	131	131	138	175	163	172	152	152	144	123	136
4.....	138	131	131	124	175	163	172	152	152	144	123	136
5.....	138	131	131	124	163	163	172	152	152	144	123	136

Daily Discharge in Second-feet of Blacksmith Fork near Hyrum, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
6.....	138	131	131	124	163	163	172	152	152	144	123	136
7.....	138	131	131	124	163	163	172	152	152	144	123	136
8.....	155	131	138	124	163	163	172	152	152	128	123	136
9.....	155	131	138	138	163	163	172	152	152	128	123	136
10.....	155	131	138	138	163	163	172	152	152	128	123	136
11.....	155	131	138	155	163	163	172	152	152	128	123	136
12.....	155	124	138	155	163	183	172	152	152	128	123	136
13.....	155	124	138	155	138	183	172	152	152	136	123	136
14.....	155	124	138	175	138	183	172	152	152	136	123	136
15.....	155	124	138	183	138	183	172	152	152	136	123	115
16.....	155	124	138	183	138	183	172	152	152	136	123	115
17.....	148	124	138	183	138	183	172	152	128	136	136	108
18.....	148	124	138	183	138	183	172	152	128	136	136	101
19.....	148	124	138	183	163	228	152	152	128	123	136	93
20.....	148	124	138	183	163	266	152	152	128	123	136	93
21.....	148	131	138	183	163	212	152	152	128	123	136	74
22.....	148	131	138	183	163	212	152	152	128	123	136	111
23.....	148	131	138	183	163	212	152	152	128	123	136	111
24.....	148	131	138	175	163	190	152	152	128	123	136	111
25.....	148	131	138	175	163	190	152	152	128	123	136	111
26.....	148	131	138	175	163	190	152	152	128	123	136	111
27.....	148	131	138	175	163	190	152	152	128	123	136	111
28.....	148	131	138	175	163	172	152	152	128	123	136	111
29.....	148	131	138	175	163	172	152	152	128	123	136	111
30.....	110	....	138	175	163	172	152	152	128	123	136	111
31.....	110	....	138	....	163	.....	152	152	....	123	....	111

Note—These discharges include the discharge of the power plant race, which diverts water above the gaging station and returns it a short distance below.

Monthly Discharge of Blacksmith Fork near Hyrum, Utah, for 1908.

(Drainage area, 286 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	155	110	145	0.51	0.58	8,920
February	131	110	128	.45	.48	7,360
March	138	131	136	.48	.55	8,360
April	183	124	160	.56	.62	9,520
May	175	138	160	.56	.64	9,840
June	266	163	183	.64	.71	10,900
July	172	152	164	.57	.66	10,100
August	152	152	152	.53	.61	9,350
September	152	128	141	.49	.55	8,390
October	144	123	131	.46	.53	8,060
November	136	123	129	.45	.50	7,680
December	136	74	120	.42	.48	7,380
The year....	266	74	146	0.51	6.91	106,000

Note—These are the combined discharges of Blacksmith Fork and the power plant race, which together give the total flow of the river.

Discharge Measurements of Blacksmith Fork near Hyrum, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 4	E. A. Porter	54	66	4.30	251
May 6	E. S. Fuller	56	132	5.40	793
June 12	do	51	84	5.10	439
July 17	do	46	64	4.30	238

Discharge Measurements of Blacksmith Fork Power Plant Race near Hyrum, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 4	E. A. Porter	15.5	32	4.90	105
May 6	E. S. Fuller	14.0	27	5.10	96
June 12	do	14.0	25	5.0	86
July 17	do	14.5	28	5.0	89

Daily Discharge in Second-feet of Blacksmith Fork near Hyrum, Utah for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	31	67	107	107	471	844	310	214	214	184	107	184
2	31	67	107	130	471	956	310	214	214	184	107	184
3	31	67	107	214	471	956	310	214	214	184	107	130
4	42	67	107	276	620	956	310	214	214	184	107	130
5	67	67	107	184	676	956	310	214	214	184	107	130
6	107	67	107	130	732	844	310	214	214	184	107	107
7	184	67	107	130	788	844	310	214	214	184	107	107
8	184	67	86	107	844	788	310	214	214	184	107	107
9	184	67	86	107	732	732	310	214	214	184	107	107
10	31	67	86	107	620	620	310	214	214	184	107	107
11	31	67	86	130	566	566	310	214	214	184	107	107
12	23	67	86	184	566	566	310	214	214	184	107	107
13	31	67	86	214	566	566	276	214	214	156	107	107
14	31	67	86	244	471	471	276	214	184	130	107	107
15	31	67	86	244	471	471	276	214	184	130	107	107
16	31	67	86	244	471	427	276	214	184	130	107	107
17	184	107	86	244	427	427	244	184	184	130	107	107
18	107	107	86	244	385	427	244	184	184	130	107	107
19	214	107	86	244	427	427	244	184	184	130	107	107
20	244	107	86	214	427	427	244	184	184	130	214	107
21	276	107	86	184	471	427	244	184	184	130	214	107
22	244	107	86	184	566	427	214	184	184	130	214	107
23	184	107	86	244	676	427	214	184	184	130	214	107
24	130	107	86	276	732	427	214	184	184	130	214	107
25	130	107	86	276	844	427	214	184	184	130	214	107
26	107	107	86	427	900	385	214	184	184	107	214	107
27	107	107	86	471	956	346	214	184	184	107	214	107
28	86	107	86	471	956	310	214	184	184	107	184	107
29	67	...	86	471	956	310	214	184	184	107	184	107
30	53	...	86	471	788	310	214	184	184	107	184	107
31	53	...	86	...	788	....	214	184	...	107	...	107

MONTHLY DISCHARGE OF BLACKSMITH FORK, NEAR HYRUM, UTAH, FOR 1909.

(Drainage Area 286 Square Miles.)

Month	Discharge in second-feet						Run-off	
	Maximum	Minimum	Black-smith Fork Mean	Power Plant Mean	Total Mean	Per square mile	Depth in inches on drainage area	Total in acre-feet
January	276	23	104	90	194	0.68	0.78	11,900
February	107	67	84	95	179	.63	.65	9,940
March	107	86	91	95	186	.65	.75	11,400
April	471	107	233	100	133	1.16	1.29	19,800
May	956	385	640	90	730	2.55	2.94	44,900
June	956	310	593	88	681	2.38	2.66	40,500
July	310	214	264	89	353	1.23	1.42	21,700
August	214	184	199	89	288	1.01	1.16	17,700
September	214	184	197	89	286	1.00	1.12	17,000
October	184	107	147	85	232	.81	.94	14,300
November	214	107	144	85	229	.89	.89	13,600
December	184	107	114	80	194	.68	.78	11,900
The year	956	23	238	90	324	1.13	15.38	235,000

Discharge Measurements of Blacksmith Fork near Hyrum, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 19	E. S. Fuller	49	83.6	4.8	435
December 13	J. C. Dort	45	37	3.65	76

Daily Discharge in Second Feet of Blacksmith Fork near Hyrum, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	265	188	265	513	535	295	295	215	194	194	194	176
2	265	188	265	471	535	295	295	215	194	194	194	176
3	202	188	265	471	535	295	265	215	194	194	194	176
4	202	188	265	471	535	295	265	194	194	194	194	176
5	202	188	265	471	535	295	265	194	194	194	194	176
6	202	188	265	471	535	295	265	194	194	194	176	176
7	202	188	265	471	535	295	265	194	194	194	176	176
8	202	188	265	557	484	295	265	194	194	194	176	176
9	202	188	265	652	484	295	265	194	194	194	176	176
10	202	188	265	652	445	295	265	194	194	194	176	176
11	202	188	265	652	445	295	265	194	194	194	176	166
12	202	188	265	652	409	295	265	194	194	194	176	166
13	211	188	265	557	391	295	265	194	194	194	176	166
14	211	188	265	557	391	295	265	194	194	194	176	166
15	211	188	265	513	391	295	265	194	194	194	176	166
16	211	188	265	513	391	295	265	194	194	194	176	166
17	188	188	325	545	357	265	264	194	194	194	176	166
18	188	188	357	545	357	265	264	194	194	194	176	166
19	188	188	391	545	357	265	238	194	194	194	176	166
20	188	188	391	545	357	265	238	194	194	194	176	166
21	188	211	466	545	357	265	238	194	194	194	176	166
22	188	211	508	545	357	295	215	194	194	194	176	166
23	188	211	557	545	357	295	215	194	194	194	176	166
24	188	211	557	535	325	295	215	194	194	194	176	166
25	188	211	557	535	325	295	215	194	194	194	176	166
26	188	211	557	535	325	295	215	194	194	194	176	166
27	188	265	557	535	325	295	215	194	194	194	176	166
28	188	265	557	535	325	295	215	194	194	194	176	143
29	188	....	557	535	325	295	215	194	194	194	176	143
30	188	....	557	535	325	295	215	194	194	194	176	143
31	188	....	557	....	325	.....	215	194	....	194	....	143

Note—These discharges include the discharge of the power plant race, which diverts water above the gaging station and returns it a short distance below.

Monthly Discharge of Blacksmith Fork near Hyrum, Utah, for 1910.

(Drainage area, 286 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	265	188	200	0.70	0.81	12,300
February	265	188	198	.70	.73	11,800
March	557	265	378	1.32	1.52	23,300
April	652	471	541	1.89	2.11	32,200
May	535	325	409	1.43	1.65	25,200
June	295	265	290	1.01	1.12	17,200
July	295	215	248	.87	1.00	15,200
August	215	194	196	.68	.79	12,000
September	194	194	194	.68	.76	11,500
October	194	194	194	.68	.79	11,900
November	194	176	179	.64	.71	10,600
December	176	143	166	.58	.67	10,200
The year....	652	143	266	0.93	12.66	193,400

Note—These are the combined discharges of Blacksmith Fork and the power plant race, which together give the total flow of the river.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Blacksmith Fork near Hyrum, Utah, 1900 to 1910.

(Drainage area, 286 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1900	.....	.....	.....	.....	.....	.....	.....	7.99	8.27	7.93	7.14	7.19	.....	....	....
1901	7.07	6.28	7.22	7.86	11.50	11.13	8.18	8.24	7.26	8.06	7.14	7.32	97.34	0.47	6.39
1902	6.70	6.17	6.89	7.14	7.32	8.69	6.70	6.70	6.49	6.95	6.66	6.89	83.29	0.40	5.48
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1904	.....	.....	.....	.....	36.00	17.81	12.88	12.57	10.31	10.37	8.81	8.64	.....	....	....
1905	8.38	7.26	8.92	11.75	15.04	12.55	10.09	8.82	15.23	7.60	6.97	6.19	118.76	0.58	7.83
1906	6.93	5.79	6.80	10.03	16.78	14.80	9.78	9.57	8.50	8.19	6.34	6.63	110.10	0.53	7.22
1907	7.19	10.20	13.20	51.50	65.80	46.80	21.50	16.80	14.10	11.90	10.50	10.00	279.00	1.35	18.32
1908	8.92	7.36	8.36	9.52	9.84	10.90	10.10	9.35	8.39	8.06	7.68	7.38	106.00	0.51	6.91
1909	11.90	9.94	11.40	19.80	44.90	40.50	21.70	17.70	17.00	14.30	13.60	11.90	235.00	1.13	15.30
1910	12.30	11.80	23.30	32.20	25.20	17.20	15.20	12.00	11.50	11.90	10.60	10.20	193.40	0.93	12.66
Mean.	8.65	8.10	10.80	18.70	25.90	20.00	13.00	10.95	10.70	9.50	8.55	8.25	152.85	0.74	10.00

WEBER RIVER NEAR OAKLEY, UTAH.

This station was established October 22, 1904. It is located approximately 200 feet south of the main canyon road, about 3 miles above Oakley, Utah, and is above all diversions to the Kamas prairie region. The object of the station is to determine the amount of water available for diversion through the low Kamas Pass into Provo River, which is a part of the reclamation scheme in the development of the Weber River project. The conditions at this station and the bench marks are described in Water-Supply Paper No. 176, page 36, where are given also references to publications that contain data for previous years.

Discharge Measurements of Weber River near Oakley, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 9	W. G. Swendsen	48.5	38.6	5.10	a72
May 31	H. S. Kleinschmidt	51	146	5.95	768
August 11	Thos. Grieve, Jr	46	74	4.50	127

a Ice 1.55 feet thick, gage height to top of ice 5.50 feet.

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	73	230	716	748	154	180	82	73	....
2	....	....	....	73	241	847	716	167	180	82	73	....
3	....	....	....	73	275	847	716	167	167	28	73	....
4	....	....	....	73	352	917	655	154	154	82	73	....
5	....	....	....	65	441	1,066	685	154	154	82	73	....
6	....	....	....	73	490	1,145	685	142	130	82	73	....
7	....	....	....	73	542	917	597	130	130	28	73	....
8	....	....	....	81	597	780	597	130	120	82	73	....
9	....	....	....	90	716	813	542	130	120	82	73	....
10	....	....	....	109	780	917	515	130	109	82	65	....
11	....	....	....	130	917	1,400	515	120	109	73	65	....
12	....	....	....	120	1,066	1,850	441	120	109	73	65	....
13	....	....	....	120	847	2,480	465	180	109	73	65	....
14	....	....	....	130	780	.....	418	142	109	73	65	....
15	....	....	....	142	716	1,760	395	109	109	73	65	....
16	....	....	....	154	597	2,210	395	109	109	73	65	....
17	....	....	....	180	542	1,490	373	109	109	73	65	....
18	....	....	....	209	542	1,312	373	109	109	73	58	....
19	....	....	....	230	716	1,312	352	109	109	73	58	....
20	....	....	....	241	917	1,066	352	241	109	65	....	....
21	....	....	....	275	1,066	1,145	332	241	109	65	....	....
22	....	....	....	352	1,145	1,066	312	312	109	65	....	....
23	....	....	....	516	1,145	990	275	241	100	65	....	....
24	....	....	....	490	1,227	917	258	180	100	65	....	....
25	....	....	....	352	917	655	209	154	100	73	....	....

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
26.....	....	....	....	275	847	716	209	154	100	73	....	....
27.....	....	....	....	180	917	716	195	154	82	73	....	....
28.....	....	....	....	180	1,312	815	180	142	82	73	....	....
29.....	....	....	....	209	990	716	167	142	82	73	....	....
30.....	....	....	....	209	917	685	154	109	82	73	....	....
31.....	....	....	....	....	780	.....	154	109	....	73	....	....

Monthly Discharge of Weber River near Oakley Utah for 1906.

(Drainage area, 170 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	516	66	182	1.07	1.20	10,800
May	1,310	225	760	4.47	5.15	46,700
June	2,480	655	1,150	6.77	7.58	68,400
July	748	154	419	2.47	2.84	25,800
August	312	109	153	.90	1.03	9,410
September	180	82	116	.68	.75	6,900
October	82	66	75	.44	.51	4,600
November	73	58	69	.41	.46	2,580
December	.....	.....	.....	.....	.....	.....
The period..	2,480	58	368	2.15	19.52	175,000

Discharge Measurements of Weber River near Oakley, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 26.....	G. T. Burridge.....	53	167	6.20	1,020
June 15.....	La Rue and Burridge.....	53	150	6.00	1,100
June 29.....	G. T. Burridge.....	58	206	7.00	1,850
July 23.....	.....do	51	139	5.80	690
August 17....	La Rue and Burridge.....	47	85	4.70	190

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	....	....	109	435	1,410	3,220	385	142	90	73	80
2.....	....	66	66	120	435	1,510	3,220	360	142	90	73	73
3.....	....	....	....	154	435	1,620	3,690	360	130	90	73	....
4.....	....	....	....	167	360	1,730	3,850	410	130	90	73	73
5.....	....	....	....	180	360	1,975	3,850	360	130	90	73	73
6.....	....	66	58	154	360	1,975	4,010	385	130	90	73	73
7.....	....	....	....	142	385	2,230	3,370	315	130	90	73	73
8.....	....	....	....	142	385	1,850	2,495	295	120	90	73	73
9.....	....	66	58	167	410	1,510	2,495	241	120	90	73	73
10.....	....	....	....	167	460	1,210	2,100	225	120	90	73	80
11.....	....	....	....	180	570	1,210	1,850	209	109	90	73	80
12.....	....	....	....	209	690	1,620	1,620	195	109	90	73	80
13.....	....	66	73	258	630	1,410	1,410	195	109	90	73	90
14.....	....	....	....	630	570	1,210	1,410	195	109	90	66	90
15.....	....	....	....	690	690	930	1,310	195	100	90	66	100
16.....	....	73	81	630	760	840	1,110	195	100	90	66	100
17.....	....	....	....	543	885	840	1,020	195	90	90	66	....
18.....	....	....	....	543	930	930	975	195	90	90	66	....
19.....	....	....	....	543	1,210	1,410	975	195	90	80	66	....
20.....	....	66	130	340	1,510	1,620	930	195	90	80	73	....
21.....	....	....	....	360	1,730	1,850	845	195	90	80	73	....
22.....	....	....	....	360	1,850	2,360	760	....	90	80	80	....
23.....	....	66	130	340	1,620	1,620	725	154	90	80	80	....
24.....	....	....	....	360	1,410	1,410	660	154	90	80	80	....
25.....	....	....	....	410	1,310	1,410	630	154	90	80	80	....
26.....	....	....	....	460	1,020	1,510	630	154	90	80	73	....
27.....	....	66	120	485	930	1,730	600	154	90	80	73	....
28.....	....	....	....	460	840	2,230	515	142	90	73	73	....
29.....	....	....	....	460	840	2,360	485	142	90	73	73	....
30.....	....	....	109	460	1,020	2,360	410	142	90	73	73	....
31.....	....	....	....	....	1,210	.....	385	142	....	73	....	....

Monthly Discharge of Weber River near Oakley, Utah, for 1907.

(Drainage area, 170 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	66	0.39	0.45	4,060
February	73	66	67	.39	.41	3,720
March	130	58	91	.54	.62	5,610
April	690	109	341	2.00	2.24	20,300
May	1,850	360	847	5.00	5.75	52,100
June	2,360	840	1,600	9.41	10.50	95,200
July	4,010	385	1,660	9.77	11.28	102,000
August	410	142	226	1.30	1.49	13,900
September	142	90	106	.62	.69	6,310
October	90	73	86	.50	.58	5,260
November	73	66	72	.42	.47	4,260
December	.....	.....	74	.43	.50	4,560
The year....	4,010	66	436	2.56	34.98	317,000

Discharge Measurements of Weber River near Oakley, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 14	A. D. Williams	50	97	5.20	316

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	46	58	194	435	975	195	82	109	120	....
2	....	90	46	58	209	410	930	241	82	120	120	....
3	....	90	46	66	.....	360	930	275	82	120	120	....
4	....	73	46	66	209	360	930	195	82	120	120	....
5	...	58	50	66	410	360	840	180	82	120	120	....
6	....	....	58	73	485	360	885	295	82	130	120	....
7	....	58	73	73	460	360	760	225	73	130	120	....
8	....	58	73	80	485	410	690	180	73	130	90	....
9	....	58	58	80	515	460	570	180	73	130	90	....
10	....	58	58	90	515	630	460	180	73	142	90	....
11	....	58	50	100	485	1,110	410	180	73	142	90	....
12	....	66	46	109	460	1,620	340	195	90	142	90	....
13	....	73	46	120	410	1,620	340	195	82	130	90	....
14	....	....	46	130	410	1,975	315	180	82	130	90	....
15	....	90	46	142	385	2,490	315	167	82	130	82	....
16	....	73	46	130	360	1,620	295	167	82	130	82	....
17	....	58	52	180	315	1,410	275	142	82	130	73	....
18	....	58	52	209	340	1,210	241	130	82	130	73	....
19	....	58	66	225	385	930	209	130	82	130	73	....
20	....	46	....	241	460	1,020	195	130	82	130	73	....
21	....	46	66	258	485	1,210	195	130	82	130	66	....
22	....	46	66	275	542	1,510	195	130	82	130	66	....
23	....	46	66	315	460	1,110	180	120	82	130	66	....
24	58	46	66	275	435	1,020	167	120	167	130	73	....
25	73	46	66	....	460	1,310	167	120	142	130	73	....
26	73	46	66	258	460	1,730	167	120	130	130	73	....
27	73	46	66	241	485	2,100	154	120	....	120	....	....
28	90	46	66	209	460	2,360	154	90	120	120	73	....
29	....	46	66	180	460	1,310	209	90	120	120	90	....
30	109	....	66	180	485	930	180	90	109	120	....	....
31	109	....	66	...	410	.....	167	90	....	120	....	....

Monthly Discharge of Weber River near Oakley, Utah, for 1908.

(Drainage area, 170 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	58	0.34	0.39	3,570
February	.....	.....	52	.30	.32	3,000
March	73	46	52	.30	.35	3,210
April	315	58	160	.94	1.05	9,520
May	542	194	415	2.44	2.82	25,500
June	2,490	360	1,120	6.57	7.34	66,600
July	975	154	414	2.44	2.81	25,500
August	295	90	160	.94	1.08	9,840
September	167	73	92	.54	.61	5,490
October	142	109	128	.75	.87	7,870
November	120	66	88	.52	.58	5,220
December	.....	.....	69	.40	.47	4,270
The year....	2,490	58	234	1.37	18.69	170,000

Discharge Measurements of Weber River near Oakley, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 6.....	E. A. Porter.....	44	59	4.20	92
May 8.....	E. S. Fuller.....	53	125	5.75	659
June 14.....	.....do	55	194	6.90	*a*1,840
July 19.....	.....do	48	111	5.00	407

*a*Surface velocity measured, not reduced.

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	....	....	58	241	1,110	1,890	243	279	129	108	....
2.....	....	....	....	66	241	1,730	1,790	279	210	118	108	....
3.....	....	....	....	66	315	2,490	1,690	243	195	118	108	....
4.....	....	....	....	73	410	3,220	1,510	243	195	118	99	....
5.....	....	....	....	73	570	4,010	1,330	243	195	129	99	....
6.....	....	....	....	73	600	4,010	1,176	261	180	129	99	....
7.....	....	....	....	73	630	4,010	873	243	180	129	99	....
8.....	....	....	....	73	690	2,920	878	243	180	129	99	....
9.....	....	....	....	73	760	2,230	811	226	166	129	99	....
10.....	....	....	....	82	1,020	1,730	747	210	166	118	99	....
11.....	....	....	....	82	840	1,620	685	210	166	118	99	....
12.....	....	....	....	82	630	1,730	624	195	166	118	99	....
13.....	....	....	....	90	690	1,730	595	195	166	118	99	....
14.....	....	....	....	109	690	1,970	566	180	166	118	108	....
15.....	....	....	....	120	760	1,850	510	180	153	108	108	....

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	....	130	760	1,970	510	210	153	108	108	....
17	....	....	....	148	630	3,070	484	210	141	108	108	....
18	....	....	....	167	690	3,220	457	210	141	108	118	....
19	....	....	....	167	690	2,490	457	195	141	108	129	....
20	....	....	....	180	760	2,220	407	195	141	108	141	....
21	....	....	....	194	840	1,990	360	301	141	108	153	....
22	....	....	....	209	1,020	1,890	339	407	141	108	141	....
23	....	....	....	209	1,110	2,220	318	243	141	108	141	....
24	....	....	....	225	1,020	2,490	308	210	141	108	141	....
25	....	....	....	225	840	2,490	298	195	129	108	129	....
26	....	....	....	241	1,020	2,220	279	180	129	108	118	....
27	....	....	....	275	1,210	2,350	261	180	129	108	118	....
28	....	....	....	315	1,620	2,220	261	180	129	108	99	....
29	....	....	....	315	1,310	2,100	243	166	129	108	99	....
30	....	....	....	295	1,020	1,990	243	407	129	99	99	....
31	....	....	....	....	1,110	.....	243	318	....	99	....	....

Monthly Discharge of Weber River near Oakley, Utah, for 1909.

(Drainage area, 163 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	66	0.41	0.47	4,060
February	.....	.....	58	.36	.37	3,220
March	.....	.....	58	.36	.41	3,570
April	315	58	149	.91	1.02	8,870
May	1,620	241	860	4.91	5.66	49,200
June	4,110	1,110	2,380	14.6	16.29	142,000
July	1,890	243	682	4.18	4.82	41,900
August	407	166	232	1.42	1.64	14,300
September	279	129	161	.99	1.10	9,580
October	129	99	114	.70	.81	7,010
November	153	99	112	.69	.77	6,660
December	.....	.....	95	.58	.67	5,840
The year	4,010	.....	409	2.51	34.03	296,000

Discharge Measurements of Weber River near Oakley, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 5	G. H. Canfield	43	54.2	4.07	96
December 6	J. C. Dort	45	49.8	4.10	85

Daily Discharge in Second-feet of Weber River near Oakley, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	205	.....	1,790	190	120	74	....	74	....
2	....	....	....	222	685	1,690	174	96	74	74	74	65
3	....	....	96	240	568	1,330	174	96	74	85	....	65
4	....	....	....	222	568	.....	.....	96	74	85	65	65
5	....	....	....	240	568	1,020	160	96	74	85	65	74
6	....	....	....	240	596	878	160	96	65	74	65	96
7	....	....	133	240	625	878	160	85	65	74	65	....
8	....	....	....	278	685	811	160	85	....	74	65	65
9	....	....	....	320	878	779	146	74	65	....	65	65
10	....	....	120	364	1,090	747	146	74	65	74	65	65
11	....	....	....	412	1,330	625	146	74	65	74	65	74
12	....	....	....	462	1,330	625	146	108	65	74	....	74
13	....	....	....	514	1,250	568	133	74	65	85	65	85
14	....	....	146	412	1,250	514	133	74	65	85	65	96
15	....	....	....	364	1,250	462	160	74	65	74	65	....
16	....	....	146	344	1,020	437	146	74	74	85	65	146
17	....	....	....	....	.....	412	146	74	....	96	....	205
18	....	....	....	412	747	388	133	74	85	96	65	146
19	....	....	174	462	811	364	133	74	85	96	65	146
20	....	....	190	488	811	342	190	74	74	85	74	205
21	....	....	320	514	747	320	149	74	74	85	74	240
22	....	....	412	568	685	299	133	74	74	85	74	462
23	....	....	364	685	747	278	120	74	....	85	74	462
24	....	....	320	747	811	259	120	74	74	85	74	....
25	....	....	278	878	1,020	240	108	74	74	85	....	462
26	....	....	240	1,020	1,020	222	108	74	74	74	74	685
27	....	....	240	1,090	948	205	108	74	74	74	74	747
28	....	....	222	1,090	1,020	190	108	74	74	74	65	625
29	....	....	205	1,020	1,510	190	120	74	74	74	65	878
30	....	....	190	1,020	1,600	190	108	74	74	74	65	568
31	....	....	174	....	1,600	.....	96	74	....	74	....	462

Monthly Discharge of Weber River near Oakley, Utah, for 1910.

(Drainage area, 170 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	*85	0.50	0.57	5,230
February	.....	.....	*75	.44	.46	4,170
March	412	80	180	1.06	1.22	11,100
April	1,090	205	515	3.03	3.38	30,600
May	1,600	568	952	5.61	6.47	58,500
June	1,790	190	608	3.59	4.00	36,200
July	190	96	141	.83	.96	8,670
August	120	74	81	.48	.55	4,970
September	85	65	72	.42	.47	4,280
October	96	74	80	.48	.55	4,940
November	74	65	68	.40	.45	4,060
December	878	65	260	1.53	1.76	16,000
The year	1,790	65	261	1.53	20.84	189,000

*Estimated.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Weber River near Oakley, Utah, 1905 to 1910.

(Drainage area, 170 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1905	.....	.....	3.95	7.38	22.87	44.08	9.59	4.33	3.51	4.49	3.56	.....	.....	....	....
1906	.....	.....	.....	10.80	46.70	68.40	25.80	9.41	6.90	4.60	2.58	.....	.....	....	....
1907	4.06	3.72	5.61	20.30	52.10	95.20	102.00	13.90	6.31	5.26	4.26	4.56	317.00	2.56	34.98
1908	3.57	3.00	3.21	9.52	25.50	66.60	25.50	9.84	5.49	7.87	5.22	4.27	170.00	1.37	18.69
1909	4.06	3.22	3.57	8.87	49.20	142.00	41.90	14.30	9.58	7.01	6.66	5.84	296.00	2.51	34.03
1910	5.23	4.17	11.10	30.60	58.50	36.20	8.67	4.97	4.28	4.54	4.06	16.00	189.00	1.53	20.84
Mean.	4.23	3.53	5.49	14.58	42.48	75.41	33.91	9.46	6.01	5.70	4.39	7.67	177.40	1.45	19.68

WEBER RIVER NEAR CROYDON, UTAH.

This station, which is located at Devils Slide, about 1½ miles west of the town of Croydon and 10 miles below the town of Echo, just below the canyon at the lower end of Henefer Valley, was established February 1, 1905, to determine the amount of water available for storage in the Henefer basin, about 2 miles above the station, in connection with the Weber River project.

Lost Creek enters one-fourth mile above the station and Chalk Creek about 15 miles above. The only diversions above the station are those in the Kamas prairie region and for the narrow valley below.

The flow is apparently little affected by ice. The occurrence of slush ice is noted, but no allowance is made for this. Otherwise the records are good, although the channel shifts slightly at high water.

Discharge Measurements of Weber River near Croydon, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 8	W. G. Swendsen	91	87.1	1.75	154
April 29	H. S. Kleinschmidt	93	157	2.48	515
May 12	do	106	355	4.40	2,080
June 15	Thos. Grieve, Jr.	110	439	4.90	2,640
August 9	do	91	85.5	1.64	152

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	99	160	195	1,008	761	1,916	856	166	322	202	202	166
2	99	144	160	584	754	1,716	1,008	202	418	240	240	166
3	113	128	160	526	775	1,816	1,090	202	472	202	240	202
4	128	160	177	368	969	1,816	930	202	368	166	240	202
5	128	144	177	393	1,348	2,016	782	202	322	202	202	240
6	99	128	160	495	1,384	2,732	712	202	322	202	202	240
7	128	128	177	526	1,402	2,628	646	166	280	202	240	240
8	128	99	177	838	1,420	1,620	646	166	280	202	240	240
9	154	113	195	930	1,528	1,816	646	166	280	166	240	240
10	99	113	214	747	1,620	2,016	584	166	280	166	240	240
11	99	128	195	819	1,816	2,116	526	166	280	202	202	280
12	99	144	195	782	1,816	2,524	472	138	280	166	202	368
13	99	144	319	615	1,806	3,046	472	166	240	166	202	280
14	113	160	274	584	1,816	3,153	472	138	280	202	202	240
15	128	195	274	615	1,716	2,732	472	138	240	202	202	166
16	128	233	195	646	1,528	2,116	418	166	280	202	202	166
17	128	177	177	747	1,438	2,217	418	166	280	202	202	202
18	144	177	177	930	1,304	2,116	368	166	280	166	202	202
19	274	177	177	893	1,348	1,716	322	166	280	202	166	240
20	233	160	160	893	1,620	1,620	322	280	240	202	166	240

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21.....	233	177	195	969	1,716	1,438	280	526	280	202	202	202
22.....	195	160	233	1,132	1,916	1,438	280	584	280	166	240	166
23.....	160	160	319	1,260	1,866	1,438	240	646	240	166	166	202
24.....	160	160	446	1,304	1,716	1,260	240	472	240	166	202	240
25.....	177	177	900	1,132	2,016	856	240	418	240	202	202	240
26.....	160	177	985	1,008	1,528	856	240	368	202	202	240	240
27.....	160	160	820	969	2,116	930	202	368	202	202	202	322
28.....	160	195	559	856	2,524	930	202	322	202	202	240	280
29.....	160	....	534	782	2,940	1,260	166	322	202	202	240	280
30.....	144	....	669	747	2,524	930	166	280	202	202	202	240
31.....	160	....	541	....	2,265	.....	166	322	....	202	....	240

Monthly Discharge of Weber River near Croydon, Utah, for 1906.

(Drainage area, 1,090 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	274	99	145	0.13	0.15	8,920
February	233	99	157	.14	.15	8,720
March	985	160	327	.30	.35	20,100
April	1,300	368	802	.74	.82	47,700
May	2,940	754	1,660	1.52	1.76	102,000
June	3,150	856	1,850	1.69	1.89	110,000
July	1,090	160	474	.44	.50	29,100
August	627	152	268	.25	.28	16,500
September	472	195	280	.26	.29	16,700
October	236	177	192	.18	.20	11,800
November	240	177	215	.20	.22	12,800
December	368	166	236	.22	.25	14,500
The year....	3,150	99	550	0.51	6.86	399,000

Discharge Measurements of Weber River near Croydon, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 25.....	G. T. Burridge.....	110	506	6.00	4,160
June 14.....	La Rue and Burridge.....	109	416	5.15	2,500
June 28.....	G. T. Burridge.....	108	369	4.75	2,060
July 23.....	.....do	101	231	3.35	890
August 16....	La Rue and Burridge.....	94	113	2.20	261

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	202	202	322	646	2,018	2,764	2,450	545	395	261	261	217
2.....	166	240	322	712	2,224	2,882	2,450	545	395	305	261	217
3.....	166	368	322	1,008	2,018	3,000	2,550	493	395	305	261	217
4.....	202	526	368	1,260	1,816	3,420	2,550	655	395	305	261	217
5.....	240	1,174	368	1,438	1,620	2,790	2,670	655	349	305	261	217
6.....	202	930	418	1,438	1,528	2,550	2,790	599	349	305	261	217
7.....	202	584	418	1,348	1,528	2,670	2,670	545	305	305	261	217
8.....	202	418	418	1,260	1,528	2,790	2,550	545	305	305	261	261
9.....	202	418	418	1,348	1,528	2,910	2,325	443	305	305	261	261
10.....	166	322	418	1,716	1,916	3,150	2,215	395	261	305	261	261
11.....	202	280	418	2,120	2,224	3,030	2,215	395	261	261	261	261
12.....	202	280	322	2,434	2,764	2,790	1,826	349	261	261	261	261
13.....	202	280	322	2,882	2,764	2,550	1,641	349	261	261	261	261
14.....	166	280	280	3,420	2,322	2,550	1,641	305	261	261	261	261
15.....	202	280	202	3,570	2,120	2,325	1,553	305	261	261	261	217
16.....	202	280	322	3,420	1,826	2,110	1,467	305	261	217	261	217
17.....	202	280	322	3,000	2,542	2,115	1,381	261	261	217	261	217
18.....	202	280	712	2,542	2,764	1,920	1,297	261	261	261	261	217
19.....	166	322	930	2,018	3,135	1,732	1,213	261	261	261	261	217
20.....	166	322	1,620	1,816	3,720	1,920	1,133	261	261	261	261	217
21.....	202	368	2,434	1,716	4,170	2,110	1,053	261	261	261	261	217
22.....	202	368	1,916	1,620	4,220	2,450	1,053	261	261	261	261	217
23.....	166	418	1,260	1,620	4,170	2,450	977	261	261	261	261	261
24.....	202	418	1,008	1,620	4,625	2,325	905	261	261	261	261	261
25.....	202	418	856	1,620	4,220	2,110	837	261	217	261	261	305
26.....	202	472	856	1,716	3,720	1,732	773	305	217	261	261	305
27.....	202	418	782	2,018	3,570	1,920	773	305	217	261	261	261
28.....	202	280	712	2,224	3,270	2,325	713	305	217	261	261	261
29.....	240	....	712	2,120	3,135	2,215	713	349	217	261	217	261
30.....	240	....	584	2,120	3,000	2,450	655	395	217	261	217	217
31.....	240	....	584	....	2,764	.....	599	395	....	261	....	217

Monthly Discharge of Weber River near Croydon, Utah, for 1907.

(Drainage area, 1,090 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	240	166	205	0.19	0.22	12,600
February	1,170	221	408	.38	.39	22,700
March	2,430	202	680	.62	.72	41,800
April	3,570	646	1,930	1.77	1.97	115,000
May	4,626	1,530	2,750	2.52	2.91	169,000
June	3,420	1,730	2,460	2.36	2.52	146,000
July	2,790	599	1,600	1.47	1.69	98,400
August	655	261	382	.35	.40	23,500
September	395	217	280	.26	.28	16,700
October	305	217	271	.25	.29	16,700
November	261	217	258	.24	.26	15,400
December	305	217	240	.22	.25	14,800
The year....	4,620	166	955	0.88	11.90	693,000

Discharge Measurements of Weber River near Croydon, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 15.....	A. D. Williams.....	96	118	2.40	340

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	217	217	261	261	545	773	1,053	349	217	261	305	261
2.....	217	217	261	261	655	837	905	305	217	305	305	261
3.....	217	217	261	261	655	837	773	261	217	395	205	217
4.....	217	217	261	261	655	837	773	261	217	443	305	217
5.....	217	217	261	261	655	837	773	261	217	349	305	217
6.....	217	217	261	261	773	837	773	261	217	349	305	217
7.....	217	217	175	261	837	837	773	261	217	305	305	261
8.....	217	217	175	261	905	905	837	261	217	305	305	261
9.....	217	217	261	305	977	977	837	261	217	305	261	261
10.....	217	217	261	305	977	977	905	261	217	305	261	261
11.....	217	217	261	305	977	1,053	977	261	217	305	261	261
12.....	217	217	261	305	905	1,213	977	261	217	305	261	261
13.....	217	217	305	305	837	1,381	905	261	217	349	261	261
14.....	217	217	305	305	773	1,467	773	261	217	349	261	261
15.....	217	217	395	305	713	1,553	713	261	217	395	261	261
16.....	217	217	395	349	713	1,641	545	261	217	395	261	261
17.....	217	217	443	395	713	1,920	443	261	217	443	217	261
18.....	217	217	443	655	713	2,110	349	261	217	443	217	261
19.....	217	217	545	655	655	1,920	261	261	217	349	217	261
20.....	217	217	443	713	713	1,381	217	261	217	349	217	261
21.....	217	217	395	773	773	1,381	217	261	217	349	217	261
22.....	261	261	395	773	837	1,381	217	261	217	261	217	261
23.....	261	261	349	773	837	1,381	217	217	217	261	217	261
24.....	261	261	349	773	837	1,467	217	217	349	261	261	261
25.....	261	261	349	655	837	1,553	261	217	443	261	261	261
26.....	261	261	349	599	773	1,553	261	217	545	305	261	261
27.....	261	261	305	545	773	1,553	261	217	545	305	261	217
28.....	217	261	305	493	773	1,553	261	217	443	305	261	217
29.....	217	261	261	443	773	1,297	305	217	349	305	261	217
30.....	217	....	261	395	773	1,133	305	217	261	305	261	217
31.....	217	....	261	....	773	.....	305	217	....	305	....	217

Monthly Discharge of Weber River near Croydon, Utah, for 1908.

(Drainage area, 1,090 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	261	217	226	0.21	0.24	13,900
February	261	217	229	.21	.22	13,200
March	545	175	317	.29	.24	19,500
April	773	261	440	.40	.45	26,200
May	977	545	778	.71	.82	47,800
June	2,110	773	1,220	1.18	1.31	76,200
July	1,050	217	561	.51	.59	34,500
August	349	217	252	.23	.27	15,500
September	545	217	264	.24	.27	15,700
October	443	261	330	.30	.35	20,300
November	305	217	262	.24	.27	15,600
December	261	217	248	.23	.26	15,200
The year	2,110	175	432	0.40	5.29	314,000

Discharge Measurements of Weber River near Croydon, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 8	E. A. Porter	99	100	2.82	552
May 8	E. S. Fuller	110	490	5.85	3,330
June 14	do	118	450	5.70	2,720
July 19	do	98	165	2.85	562

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	217	305	305	713	1,730	3,060	2,320	443	443	395	305	305
2	217	261	349	905	1,730	3,090	2,110	443	599	395	305	305
3	217	261	395	1,210	2,110	5,120	2,110	395	545	395	305	305
4	217	261	395	1,210	2,550	5,120	2,110	395	493	395	305	305
5	305	261	395	905	3,340	5,120	2,020	349	655	395	305	305
6	655	261	395	773	2,800	5,120	1,830	349	599	395	305	305
7	655	261	349	655	3,060	5,120	1,550	349	545	395	305	305
8	599	261	349	655	3,480	5,120	1,300	349	493	395	305	305
9	443	305	349	655	3,620	4,640	1,050	349	493	395	305	305
10	493	349	349	773	3,620	3,620	977	443	493	395	305	305
11	545	395	349	773	4,490	2,960	905	395	493	395	305	305
12	599	305	349	713	3,340	2,800	905	349	599	395	305	305
13	655	395	349	713	2,930	3,060	837	349	545	395	305	305
14	905	397	395	977	2,930	3,060	773	349	545	395	305	305
15	1,050	349	395	1,300	3,340	2,930	713	349	545	395	305	305

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	1,210	349	395	1,640	3,060	2,800	713	349	493	395	305	305
17.....	1,210	349	395	2,110	3,060	2,800	655	349	493	349	305	305
18.....	1,130	349	443	2,220	2,930	3,620	599	443	493	349	305	305
19.....	1,050	305	443	2,220	3,200	3,620	599	493	493	349	305	305
20.....	905	305	443	2,220	3,340	3,200	545	443	443	349	655	305
21.....	905	305	395	1,830	3,620	2,550	599	395	443	349	837	305
22.....	905	305	443	1,640	3,760	2,930	599	599	443	349	773	305
23.....	905	305	443	1,640	3,900	2,670	545	545	443	349	713	305
24.....	837	261	443	1,830	3,200	2,670	493	545	443	349	599	305
25.....	773	261	395	1,730	2,930	2,800	493	493	443	349	545	305
26.....	655	261	443	2,220	3,200	2,800	493	443	443	349	493	305
27.....	599	261	493	2,800	3,620	2,800	493	443	443	349	395	305
28.....	545	261	599	3,060	5,120	2,800	443	443	443	349	349	305
29.....	493	....	655	2,550	3,690	2,670	443	443	495	349	349	305
30.....	443	....	655	1,830	2,690	2,670	443	443	495	305	305	305
31.....	349	....	655	....	3,690	.....	443	443	....	305	....	305

Monthly Discharge of Weber River near Croydon, Utah, for 1909.

(Drainage area, 1,090 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,210	217	667	0.61	0.71	41,000
February	395	261	307	.28	.29	17,000
March	655	305	426	.39	.45	26,200
April	3,060	655	1,480	1.36	1.52	88,100
May	5,120	1,730	3,260	2.99	3.45	200,000
June	5,120	2,550	3,460	3.17	3.54	206,000
July	2,320	443	971	.89	1.03	59,700
August	599	349	418	.38	.44	25,700
September	655	395	494	.45	.51	29,400
October	395	305	370	.34	.39	22,800
November	837	305	394	.36	.40	23,400
December	305	305	305	.28	.32	18,800
The year....	5,120	217	1,050	.96	13.05	758,000

Discharge Measurements of Weber River near Croydon, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 6.....	G. H. Canfield.....	92.5	77.4	2.17	126
August 6.....	.....do	93.5	76.8	2.17	124
September 6..	.....do	91.5	61.60	2.04	89
October 7....	.....do	94.0	79.2	2.22	142
December 7...	J. C. Dort.....	102	93.9	2.40	192

Daily Discharge in Second-feet of Weber River near Croydon, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	305	305	713	1,210	1,890	1,100	160	160	132	132	190	190
2	305	305	905	1,210	1,890	1,020	160	160	132	132	190	190
3	305	305	1,050	1,300	1,610	1,020	160	160	132	132	190	190
4	305	305	1,210	1,300	1,520	1,020	160	160	106	132	190	190
5	305	305	1,380	1,380	1,260	1,020	160	132	106	132	190	190
6	305	349	1,380	1,380	1,260	950	160	132	106	132	190	190
7	305	349	1,380	1,470	1,340	810	160	132	106	132	190	190
8	305	349	1,300	1,550	1,520	810	160	132	106	132	190	190
9	305	349	1,300	1,550	1,520	680	160	132	106	160	190	190
10	305	349	1,300	1,830	1,700	560	160	132	106	160	190	225
11	305	349	1,300	1,830	1,700	560	160	132	106	160	190	265
12	305	349	1,300	2,110	1,790	500	160	132	106	160	190	265
13	305	349	1,380	2,320	1,790	450	160	132	106	160	190	225
14	305	349	1,380	2,320	1,790	400	160	132	106	160	190	225
15	305	349	1,470	2,320	1,100	400	160	132	106	160	190	190
16	305	349	1,550	2,440	1,100	400	160	132	106	190	190	190
17	305	349	1,550	2,110	1,020	350	160	132	106	190	190	190
18	305	349	1,550	2,110	950	350	160	132	132	190	190	190
19	305	349	1,550	1,920	810	350	160	132	132	190	190	190
20	349	349	1,550	1,920	810	225	160	132	132	190	190	190
21	349	349	1,550	2,020	740	190	160	132	132	190	190	190
22	349	395	1,380	2,020	680	190	160	132	132	190	190	190
23	349	395	1,380	2,020	740	190	160	132	132	190	190	190
24	349	395	1,380	2,220	740	190	160	132	132	190	190	190
25	349	349	1,300	2,220	810	190	160	132	132	190	190	190
26	349	349	1,300	2,220	890	190	160	132	132	190	190	190
27	349	349	1,300	2,220	1,020	190	160	132	132	190	190	190
28	349	395	1,300	2,350	1,100	190	160	132	132	190	190	190
29	349	....	1,300	2,320	1,100	190	160	132	132	190	190	190
30	305	....	1,210	2,320	1,100	190	160	132	132	190	190	190
31	305	....	1,210	....	1,100	....	160	132	....	190	....	190

Monthly Discharge of Weber River near Croydon, Utah, for 1910.

(Drainage area, 1,090 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	349	305	319	0.29	0.34	19,600
February	395	305	348	.32	.33	19,300
March	1,550	713	1,320	1.21	1.40	81,200
April	2,550	1,210	1,920	1.76	1.96	114,000
May	1,890	740	1,230	1.13	1.30	75,600
June	1,100	160	493	.45	.51	29,300
July	160	160	160	.15	.17	9,840
August	160	132	136	.12	.14	8,360
September	132	106	120	.11	.12	7,140
October	190	132	168	.15	.18	10,300
November	190	190	190	.17	.19	11,300
December	262	190	198	.18	.21	12,200
The year	2,550	106	550	0.50	6.85	398,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Weber River near Croydon, Utah, 1905 to 1910.

(Drainage area, 1,090 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1905	9.22	9.72	15.13	20.59	35.29	52.13	7.32	3.21	4.34	7.07	9.34	6.89	180.00	0.23	3.39
1906	8.92	8.72	20.10	47.70	102.00	110.00	29.10	16.50	16.70	11.80	12.80	14.50	399.00	0.61	6.86
1907	12.60	22.70	41.80	115.00	169.00	146.00	98.40	23.50	16.70	16.70	15.40	14.80	693.00	0.88	11.90
1908	13.90	13.20	19.50	26.20	47.80	76.20	34.50	15.50	15.70	20.30	15.60	15.20	314.00	0.40	5.29
1909	41.00	17.00	26.20	88.10	200.00	206.00	59.70	25.70	29.40	22.80	23.40	18.80	758.00	0.96	13.05
1910	19.60	19.30	81.20	114.00	75.60	29.30	9.84	8.36	7.14	10.30	11.30	12.20	398.00	0.50	6.85
Mean.	17.54	15.11	33.97	68.60	104.95	103.27	39.81	15.46	14.69	14.83	14.64	13.73	457.00	0.58	7.89

MONTHLY RUN-OFF

In Thousands of Acre Feet of Weber River near Uinta, Utah, 1890 to 1901.

(Drainage area, 1,600 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1890	28.20	30.40	67.10	130.00	278.50	120.00	33.80	17.20	15.80	19.90	17.70	17.80	776.70	0.67	9.09
1891	18.60	25.60	38.40	89.40	169.30	98.50	51.90	20.80	23.90	36.80	34.10	32.80	638.10	0.55	7.49
1892	36.80	40.00	49.20	53.90	166.40	170.60	50.40	14.70	11.10	14.80	21.20	29.30	658.00	0.57	7.71
1893	16.00	10.60	56.10	90.60	271.80	178.00	17.30	0.60	1.20	2.40	6.00	10.60	621.30	0.53	7.35
1894	.....	.....	.....	.....	.....	.....	.....	6.70	14.20	17.10	14.10	12.90	.....	....	....
1895	9.00	7.60	[illegible]	90.00	123.10	50.50	11.60	9.50	11.10	17.10	19.80	21.80	387.60	0.33	4.77
1896	29.40	27.60	58.10	99.40	195.00	199.20	33.00	18.00	16.30	22.00	32.70	25.80	756.50	0.67	9.08
1897	17.80	16.30	28.50	134.20	246.70	72.80	10.80	9.80	12.40	28.40	23.50	20.80	622.10	0.53	7.28
1898 ...	16.70	17.80	24.10	79.10	98.80	44.80	17.90	5.70	10.20	18.60	26.10	25.50	385.10	0.33	4.52
1899	27.40	27.30	48.00	157.20	218.[illegible]	219.80	72.70	25.30	19.20	24.20	.....	.....	.....	....	....
1900	.....	.....	.....	.....	.....	.....	.....	7.60	8.50	18.30	28.80	.....	.....	....	....
1901* ...	15.20	37.80	42.50	56.40	121.80	42.40	12.70	12.30	12.50	16.70	.....	.....	.....	....	....
Mean.	21.50	24.10	42.00	98.00	191.00	119.50	31.20	12.40	13.00	18.00	22.40	21.90	616.00	0.53	7.27

*Station abandoned.

WEBER RIVER NEAR PLAIN CITY, UTAH.

This station was established in 1903 under the direction of the state engineer and was maintained by the State of Utah until May 14, 1905, when it was taken up by the United States Geological Survey, by whom it has since been maintained in co-operation with the State. It is located at the highway bridge on the main road to Plain City and West Weber, about 10 miles northwest of Ogden, Utah, and about 6 miles above the mouth of the river.

The station is below all tributaries and diversions, Ogden River entering about 8 miles above the station. The records show the total amount of water discharged into Great Salt Lake and will be valuable in the adjudication of water rights on the Ogden and Weber rivers.

Discharge measurements are made from the bridge. The upstream face of the center bridge pier is graduated, marked with white paint, and forms the gage.

The records are very little affected by ice, although the river freezes at times near the station. There is no effect from artificial control above or below the station, and as the bed of the stream changes only very slightly the records may be considered excellent.

Discharge Measurements of Weber River near Plain City, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 28	W. G. Swendsen	124	824	10.2	2,040
May 14	H. S. Kleinschmidt	139	1,280	13.8	3,510
June 1	do	131	1,640	16.3	4,630
June 14	Thos. Grieve, Jr.	133	1,460	14.9	4,090
June 27	do	115	432	6.9	729
July 16	do	93	151	4.0	139
August 11	do	36	15	2.6	11

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	275	395	1,980	1,940	4,680	1,040	18	335	170	295	375
2	....	275	355	1,815	1,860	4,920	940	14	420	156	315	375
3	215	260	335	1,500	1,810	4,500	870	14	490	142	315	375
4	....	260	335	1,120	2,010	4,330	715	14	375	142	315	375
5	....	245	355	1,190	3,050	4,180	595	14	315	142	315	375
6	156	230	275	1,190	2,820	4,060	465	10	295	142	315	375
7	....	230	355	1,230	2,900	4,500	395	10	260	156	295	375
8	....	245	335	1,580	2,900	4,410	335	10	245	156	295	375
9	....	260	335	1,850	3,100	4,280	315	10	230	170	295	395
10	170	275	375	2,140	3,180	3,930	295	10	200	170	295	395
11	....	260	415	1,940	3,270	3,620	260	10	185	170	295	355
12	....	245	565	1,810	3,530	3,710	245	10	185	170	295	335
13	260	245	905	1,540	3,800	3,790	200	10	170	170	275	315
14	....	260	715	1,540	3,440	3,920	156	10	170	156	275	295
15	....	295	565	1,580	2,060	3,880	128	10	185	156	275	275

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	....	335	515	1,810	2,830	3,550	114	10	200	170	275	275
17.....	315	335	440	2,270	2,480	3,220	70	10	215	170	295	295
18.....	....	335	440	2,660	2,150	2,960	50	10	215	185	295	315
19.....	....	335	440	2,790	2,230	2,270	34	10	215	200	315	315
20.....	905	355	465	2,560	2,310	2,060	28	40	215	215	315	315
21.....	....	375	490	2,700	2,570	1,780	23	685	215	230	335	335
22.....	....	375	490	2,900	2,660	1,620	23	1,300	215	230	335	335
23.....	....	355	870	3,220	2,570	1,460	23	1,115	215	245	335	335
24.....	335	335	940	3,360	2,480	1,310	23	870	215	245	335	335
25.....	....	335	2,190	2,960	2,400	1,240	18	540	215	245	335	335
26.....	....	335	2,520	2,700	2,740	1,150	18	515	200	260	335	465
27.....	295	355	2,350	1,600	3,480	1,115	18	465	200	260	355	940
28.....	....	355	2,020	1,970	3,910	1,240	23	465	185	275	355	745
29.....	....	....	1,625	1,900	4,500	1,150	23	440	185	275	355	515
30.....	....	....	1,580	1,900	4,500	1,040	18	420	170	275	375	420
31.....	255	....	1,660	....	5,150	.....	18	375	....	295	....	395

Monthly Discharge of Weber River near Plain City, Utah, for 1906.

(Drainage area, 2,060 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
*January	905	156	327	0.16	0.18	20,100
February	375	230	299	.15	.15	16,600
March	2,520	335	830	.40	.46	51,000
April	3,360	1,120	2,060	1.00	1.12	123,000
May	5,150	1,810	2,940	1.40	1.60	181,000
June	4,920	1,040	3,000	1.46	1.60	179,000
July	1,040	18	241	.12	.14	14,800
August	1,300	10	240	.12	.14	14,800
September	490	170	238	.12	.13	14,200
October	295	142	199	.10	.11	12,200
November	375	275	313	.15	.17	18,600
December	940	275	388	.19	.22	23,900
The year....	5,150	10	929	0.45	6.10	669,100

*Based on gage heights read twice weekly.

Discharge Measurements of Weber River near Plain City, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 21.....	La Rue and Burridge.....	134	1,840	17.70	5,630
June 5.....	G. T. Burridge.....	134	1,730	16.60	4,820
June 11.....	.....do	133	1,650	16.20	4,480
June 30.....	.....do	131	1,100	11.85	2,700
July 22.....	.....do	122	487	6.90	959
August 10....	La Rue and Burridge.....	112	143	4.00	188

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	375	490	1,750	2,140	4,840	4,090	2,460	427	289	251	403	333
2.....	355	715	1,528	2,220	4,570	4,260	2,380	379	289	269	403	333
3.....	335	2,020	1,456	2,870	4,450	4,400	2,420	355	311	269	403	333
4.....	335	4,000	1,492	3,890	4,180	4,570	2,630	333	311	269	403	333
5.....	335	5,650	1,562	3,850	3,920	4,750	2,750	355	311	289	403	333
6.....	355	5,650	1,676	4,570	3,300	4,930	2,920	379	289	289	403	355
7.....	375	4,750	1,600	4,835	3,125	4,970	2,790	333	289	311	403	355
8.....	375	3,740	1,638	4,620	3,040	5,150	2,540	289	269	311	403	379
9.....	355	2,420	1,528	4,450	3,210	5,150	2,380	251	251	333	379	379
10.....	355	1,940	1,528	4,490	3,825	4,880	2,220	220	251	355	379	379
11.....	355	1,750	1,492	4,890	4,090	4,620	1,980	205	235	355	379	403
12.....	355	1,528	1,420	5,285	4,530	4,400	1,790	190	220	355	355	403
13.....	355	1,456	1,456	5,375	4,840	4,440	1,600	160	205	355	355	403
14.....	355	1,420	1,564	5,510	4,970	4,570	1,564	130	190	355	355	403
15.....	375	1,384	1,700	5,730	4,570	4,400	1,492	116	190	355	355	451
16.....	375	1,384	1,790	5,880	4,440	3,960	1,312	90	190	379	379	427
17.....	375	1,492	1,900	5,830	4,090	3,650	1,172	68	205	379	379	427
18.....	375	1,456	2,069	5,420	4,490	3,380	1,076	58	205	379	379	379
19.....	375	1,492	2,960	5,310	4,835	3,210	974	58	205	379	379	403
20.....	375	1,940	4,400	4,750	5,100	3,130	910	58	205	379	379	379
21.....	395	2,300	5,220	4,360	5,240	3,390	850	58	205	403	379	403
22.....	440	2,420	5,740	4,180	5,330	3,430	790	68	205	403	379	403
23.....	465	3,430	5,105	4,050	5,370	3,560	734	78	205	403	355	403
24.....	540	2,870	4,350	4,050	5,370	3,340	654	90	220	403	355	427
25.....	565	2,710	4,000	3,740	5,285	2,870	628	116	220	403	355	475
26.....	565	2,260	3,520	4,050	4,530	2,660	628	102	235	403	355	550
27.....	515	2,020	3,040	4,220	4,310	2,510	602	130	235	403	355	654
28.....	465	1,900	2,790	4,700	4,130	2,460	576	175	251	403	355	576
29.....	415	....	2,540	4,930	4,050	2,510	550	269	251	403	355	500
30.....	375	....	2,380	5,100	3,960	2,580	500	311	251	403	333	403
31.....	440	....	2,250	....	4,000	.....	451	269	....	403	....	379

Monthly Discharge of Weber River near Plain City, Utah, for 1907.

(Drainage area, 2,060 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	565	335	400	0.19	0.22	24,600
February	5,650	490	2,380	1.16	1.20	132,000
March	5,740	1,420	2,500	1.20	1.40	154,000
April	5,880	2,140	4,500	2.18	2.42	268,000
May	5,370	3,040	4,390	2.13	2.46	270,000
June	5,150	2,460	3,870	1.88	2.09	230,000
July	2,920	451	1,490	.72	.83	91,600
August	427	58	197	.10	.11	12,100
September	311	100	240	.12	.13	14,300
October	403	251	360	.17	.20	22,100
November	403	333	375	.18	.20	22,300
December	654	333	412	.20	.23	25,300
The year....	5,880	58	1,760	0.85	11.49	1,270,000

Discharge Measurements of Weber River near Plain City, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 16.....	A. D. Williams.....	69	69	3.30	61

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	379	379	576	427	628	2,100	892	16	11	291	472	330
2.....	379	355	451	475	680	2,260	732	157	11	310	472	330
3.....	355	355	451	475	762	2,100	612	237	7	472	446	310
4.....	355	333	451	525	850	2,140	554	187	7	860	446	310
5.....	355	333	451	525	880	2,960	472	172	7	764	446	310
6.....	576	355	451	550	910	2,670	398	130	7	554	446	310
7.....	880	355	475	576	910	2,580	310	118	7	526	446	310
8.....	610	355	475	576	880	2,540	273	106	21	526	446	310
9.....	500	379	500	654	1,006	2,540	220	83	27	526	446	330
10.....	427	379	550	734	940	2,580	157	83	27	498	422	330
11.....	379	379	576	734	910	2,580	106	61	27	472	398	330
12.....	379	355	576	762	974	2,580	94	51	72	472	374	330
13.....	355	355	680	850	1,038	2,620	94	51	94	446	374	330
14.....	355	355	734	974	974	2,620	83	42	118	446	352	330
15.....	379	355	790	1,101	880	3,390	83	42	130	498	352	330
16.....	403	355	947	1,138	850	3,650	61	42	130	583	352	352
17.....	403	333	1,071	1,172	820	3,520	42	42	143	672	352	352
18.....	403	333	1,280	1,240	790	3,610	27	34	143	828	374	374
19.....	379	355	1,172	1,312	760	3,390	21	34	143	926	374	422
20.....	403	355	947	1,384	850	2,710	16	42	143	893	374	416
21.....	403	333	880	1,492	1,600	2,750	16	42	143	893	352	472
22.....	403	333	850	1,530	1,456	2,790	21	34	143	796	352	472
23.....	403	333	790	1,420	1,381	2,630	21	34	143	732	330	472
24.....	379	333	760	1,280	1,280	2,340	21	27	255	702	310	472
25.....	379	311	710	1,101	1,280	2,220	21	27	291	642	310	472
26.....	355	311	680	1,010	1,560	2,060	16	27	498	612	310	472
27.....	355	311	628	910	2,020	1,820	16	21	422	612	330	472
28.....	427	333	576	820	1,900	1,550	16	21	371	583	330	472
29.....	427	500	550	710	1,790	1,286	16	16	310	554	330	498
30.....	403	....	525	576	1,680	1,100	16	16	291	554	330	498
31.....	379	....	525	....	1,720	.....	16	11	....	498	....	498

Monthly Discharge of Weber River near Plain City, Utah, for 1908.

(Drainage area, 2,060 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	880	355	381	0.19	0.21	23,400
February	500	311	352	.17	.18	20,200
March	1,280	451	679	.33	.38	41,800
April	1,530	427	901	.44	.49	53,600
May	2,020	628	1,130	.55	.63	69,500
June	3,650	1,100	2,520	1.22	1.36	150,000
July	892	16	176	.08	.10	10,800
August	237	11	65	.03	.03	3,980
September	498	7	138	.07	.08	8,210
October	926	291	604	.30	.34	37,100
November	472	310	381	.18	.20	22,700
December	498	310	389	.19	.22	23,000
The year	3,650	7	643	0.31	4.32	465,000

Discharge Measurements of Weber River near Plain City, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 7	E. A. Porter	130	866	10.30	2,110
April 7	E. S. Fuller	132	1,920	18.20	6,740
June 13	do	138	1,840	15.40	4,200
July 18	do	115	316	4.40	952

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	498	1,320	672	2,220	5,130	5,840	2,620	175	205	289	355	850
2	498	860	672	2,660	4,850	6,050	2,500	145	311	289	355	1,210
3	498	828	672	2,870	4,780	6,050	2,340	116	427	333	355	1,170
4	526	860	702	2,750	4,600	7,010	2,100	90	550	333	355	1,100
5	892	860	828	2,460	5,060	7,430	1,860	78	500	355	355	1,010
6	2,100	860	1,030	2,300	6,050	7,580	1,670	78	475	355	355	1,040
7	2,870	892	926	2,060	5,940	7,430	1,460	90	475	355	355	974
8	1,740	892	860	1,490	5,740	7,150	1,210	90	427	355	333	910
9	2,110	796	860	1,000	5,940	6,050	1,010	78	427	355	333	910
10	994	796	796	2,020	6,380	5,940	850	68	427	355	333	880
11	860	800	732	2,220	6,750	5,280	654	78	403	355	333	880
12	828	1,060	612	2,180	6,750	4,720	602	90	403	355	311	850
13	1,630	1,400	612	2,140	6,160	4,720	525	102	379	355	333	850
14	2,300	1,060	612	2,340	5,040	4,090	500	102	379	355	333	856
15	4,450	926	672	2,830	5,540	4,040	451	90	379	355	355	129

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	3,430	892	702	3,650	5,640	3,960	379	90	379	355	355	790
17.....	2,230	860	764	4,360	5,360	3,910	333	90	355	355	355	790
18.....	2,300	860	960	4,450	5,360	3,830	251	78	355	355	355	790
19.....	1,940	796	1,670	4,660	5,450	3,780	235	68	403	355	475	762
20.....	3,080	796	1,360	5,130	5,640	3,650	235	68	427	355	602	762
21.....	3,000	732	1,210	5,280	6,050	3,560	205	78	427	355	2,960	762
22.....	3,210	732	1,210	4,990	6,380	3,430	190	78	379	355	1,780	734
23.....	2,260	732	1,210	4,720	6,750	3,250	175	90	379	355	1,749	734
24.....	1,700	732	1,400	4,550	7,150	3,130	160	90	355	355	1,780	734
25.....	1,290	732	1,550	4,360	6,880	3,000	160	90	355	355	1,670	734
26.....	1,210	702	1,900	4,660	6,270	2,960	190	90	333	355	1,980	734
27.....	1,210	702	2,460	5,200	6,620	2,830	220	102	333	355	1,710	707
28.....	1,290	702	3,040	6,270	7,430	2,790	289	130	289	355	1,420	707
29.....	1,140	....	2,830	6,750	6,880	2,750	235	145	289	355	1,040	707
30.....	1,210	....	2,540	5,940	6,620	2,660	190	130	289	355	820	707
31.....	1,670	....	1,940	....	5,740	.....	175	130	....	355	....	734

Monthly Discharge of Weber River near Plain City, Utah, for 1909.

(Drainage area, 2,060 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	4,450	4,980	1,760	0.85	0.98	108,000
February	1,400	702	866	.42	.44	48,100
March	3,040	612	1,230	.60	.69	75,600
April	6,750	1,900	3,660	1.78	1.99	218,600
May	7,430	4,600	5,990	2.91	3.36	368,000
June	7,580	2,660	4,610	2.24	2.50	274,000
July	2,620	160	773	.38	.43	47,500
August	175	68	973	.05	.05	5,980
September	550	205	384	.19	.21	22,800
October	355	289	349	.17	.19	21,500
November	2,960	311	806	.39	.44	48,000
December	1,210	707	846	.41	.47	52,000
The year....	7,580	68	1,780	0.87	11.75	1,290,000

Discharge Measurements of Weber River near Plain City in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 27.....	E. S. Fuller.....	20	13.4	2.4	16
December 10..	J. C. Dort and W. Josl.....	114	27.2	4.96	480

Daily Discharge in Second-feet of Weber River near Plain City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	1,312	628	1,038	2,420	.....	1,240	16	12	10	160	280	333
2.....	3,650	628	1,561	2,664	.....	1,070	16	12	10	208	280	333
3.....	2,060	680	2,748	2,916	.....	1,138	14	12	10	208	280	333
4.....	1,980	707	3,000	2,832	.....	1,172	14	12	10	208	316	316
5.....	1,860	762	3,694	2,580	2,622	880	14	12	10	244	316	333
6.....	1,780	820	3,430	2,748	2,874	820	14	12	10	298	262	333
7.....	1,636	790	3,254	2,958	2,622	790	14	12	10	280	262	316
8.....	1,312	790	3,126	3,084	2,380	654	14	12	20	175	244	316
9.....	1,420	734	3,210	3,254	2,380	628	14	12	20	175	280	316
10.....	1,384	680	2,916	3,518	2,460	602	14	12	20	208	298	403
11.....	1,276	654	2,706	3,386	2,790	475	14	12	20	175	298	403
12.....	1,240	628	2,500	3,386	2,748	403	14	12	20	190	298	500
13.....	1,138	628	2,622	3,254	2,790	333	14	12	14	190	280	451
14.....	1,038	628	2,832	3,254	2,706	190	14	12	14	190	280	356
15.....	974	602	2,916	3,210	2,622	115	14	12	14	190	280	333
16.....	880	602	3,126	3,254	2,460	86	14	12	14	208	298	298
17.....	850	576	3,342	3,254	2,140	86	14	12	14	208	316	298
18.....	820	576	3,474	3,210	1,456	44	14	12	14	226	316	298
19.....	820	550	3,738	3,126	1,384	58	14	10	20	280	333	333
20.....	790	525	4,100	3,168	1,240	44	14	10	20	298	316	333
21.....	762	525	4,375	3,298	1,172	40	14	10	26	298	316	316
22.....	734	500	4,650	3,518	1,138	30	14	10	44	298	316	298
23.....	734	500	5,125	3,606	1,104	26	12	10	86	298	333	298
24.....	707	475	4,720	3,694	1,006	26	12	10	100	280	333	333
25.....	707	525	4,100	3,870	910	20	12	10	86	280	333	298
26.....	680	576	3,782	3,958	1,006	20	12	10	72	280	333	280
27.....	680	654	3,606	4,046	910	20	12	10	72	280	333	280
28.....	680	820	3,342	4,150	910	16	12	10	100	280	333	280
29.....	654	....	3,168	4,430	942	16	12	10	130	280	316	298
30.....	654	....	2,622	4,480	1,138	16	12	10	160	280	316	244
31.....	628	....	2,500	....	1,206	.....	12	10	....	280	....	280

Monthly Discharge of Weber River near Plain City, Utah, for 1910.

(Drainage area, 2,060 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	3,650	628	1,156	0.56	0.65	71,000
February	820	475	622	.31	.31	34,000
March	5,125	1,038	3,268	1.59	1.87	201,000
April	4,480	2,420	3,350	1.63	1.81	200,000
May	4,378	910	2,019	.98	1.13	124,000
June	1,240	16	368	.18	.20	21,900
July	16	12	14	...	...	900
August	12	10	11	...	...	700
September	160	10	39	.02	.02	2,300
October	298	160	240	.12	.14	15,000
November	333	244	303	.15	.16	18,000
December	500	244	327	.16	.18	20,100
The year....	5,125	10	976	0.48	6.47	708,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Weber River near Plain City, 1904 to 1910.

(Drainage area, 2,060 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft per Sq. Mile	Depth in inches on Drainage Area
1904	18.45	39.86	64.44	181.31	310.39	103.06	6.09	0.00	0.60	12.91	16.37	17.34	770.80	0.52	7.02
1905	19.06	21.00	30.75	47.60	129.13	29.81	0.51	0.31	0.77	2.79	8.81	7.01	297.53	0.20	2.70
1906	*26.10	16.60	51.00	123.00	181.00	179.00	14.80	14.80	14.20	12.20	18.60	23.90	669.10	0.45	6.10
1907	24.60	132.00	154.00	268.00	270.00	230.00	91.60	12.10	14.30	22.10	22.30	25.30	1,270.00	0.86	11.56
1908	23.40	20.20	41.80	53.60	69.50	150.00	10.80	3.98	8.21	37.10	22.70	23.90	465.00	0.35	4.23
1909	108.00	48.10	75.00	218.00	368.00	274.00	47.50	5.98	22.80	21.50	48.00	52.00	1,290.00	0.87	11.75
1910	71.00	34.00	201.00	200.00	124.00	21.90	0.90	0.70	2.30	15.00	18.00	20.10	708.90	0.48	6.47
Mean.	40.70	44.50	132.80	155.90	207.40	141.10	24.60	5.40	7.00	17.70	22.10	24.20	781.60	0.53	7.12

*Estimated.

GREAT SALT LAKE GAGE HEIGHTS.

From Gage at Saltair, Maintained by U. S. Weather Bureau.

Year	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15
1903													*−0.8	+0.5	+0.2	+0.1	−0.2	−0.4	−0.7	−0.7	−0.8	−0.7	−0.6	−0.5
1904	*−0.5	−0.5	−0.5	−0.4	−0.1	+0.1	+0.7	−0.7	+0.8	+1.4	+1.4	*−1.5	+1.4	+1.3	+1.0	+0.6	+0.4	+0.3	−0.0	0.0	0.0	0.0	0.0	−0.1
1905	0.0	−0.1	−0.1	+0.2	+0.3	+0.3	+0.6	+0.7	+0.7	*−0.8	−0.7	−0.7	+0.4	+0.1	−0.1	−0.3	−0.6	−0.9	−0.9	−1.0	†−1.1	−1.1	−1.0	−1.0
1906	†−1.0	−0.8	−0.8	−0.7	−0.5	−0.0	+0.1	−0.4	+0.5	+0.7	+1.0	+1.2	*+1.4	+1.2	+0.9	+0.6	+0.6	+0.5	+0.4	+0.3	+0.2	+0.2	+0.2	+0.3
1907	*−0.5	−0.6	−0.8	−1.3	−1.5	+1.7	+2.0	+2.5	+2.6	+2.8	+3.0	+3.2	+3.6	*+3.8	+3.5	+3.4	+3.2	+3.0	†+2.9	+2.9	+3.0	+3.0	+3.0	+3.1
1908	−3.2	−3.3	−3.4	−3.6	−3.7	−3.8	+3.8	−3.9	+3.8	+3.8	+3.9	*+4.1	+4.1	+4.0	+3.8	+3.6	+3.2	+3.1	†+3.0	+3.1	+3.1	+3.2	+3.2	+3.3
1909	*−3.4	−3.5	−3.9	−4.1	−4.2	−4.4	+4.6	−4.7	+4.8	+4.9	+5.5	*+5.7	+5.7	+5.7	+5.5	+5.3	+5.2	+5.2	+5.1	+5.1	+5.1	+5.1	+5.4	+5.6
1910	+5.7	+5.8	+6.0	+6.1	+6.2	+6.5	+6.7	+6.9	+7.0	*+7.1	+7.0	+6.8	+6.5	+6.3	+6.1	+5.9	+5.6	+5.3	+5.2	+5.1	+5.1	†+5.0	+5.0	+5.1

*Highest. †Lowest.

CITY CREEK NEAR SALT LAKE CITY, UTAH.

City Creek is the northernmost tributary of Jordan River. Its natural channel passes through Salt Lake City and its water is used almost entirely for the city water supply. Its discharge is measured by means of two 5-foot Cippoletti weirs.

Daily Discharge in Second-feet of City Creek near Salt Lake City, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	8.2	10.2	9.2	18	45	96	....	....	....	....	....	....
2	8.0	10.2	9.0	21	43	105	....	....	....	....	....	....
3	8.1	10.8	10.3	26	43	152	....	....	....	....	....	....
4	8.0	10.2	10.3	26	47	164	....	....	....	....	....	....
5	10.2	10.2	12.3	26	51	....	....	....	....	....	....	....
6	8.7	10.2	12.0	24	56	....	....	....	....	....	....	....
7	10.3	10.2	13.0	23	61	....	....	....	....	....	....	....
8	9.7	10.2	12.0	23	65	....	....	....	....	....	....	....
9	9.2	10.2	12.0	22	71	....	....	....	....	....	....	....
10	8.4	10.2	12.0	23	72	....	....	....	....	....	....	....
11	10.7	9.8	12.0	24	71	....	....	....	....	....	....	....
12	8.7	9.8	11.0	23	67	....	....	....	....	....	....	....
13	8.7	9.8	11.0	23	63	....	....	....	....	....	....	....
14	9.3	11.0	11.0	23	63	....	....	....	....	....	....	....
15	10.5	9.5	12.0	26	63	....	....	....	....	....	....	....
16	12.0	9.8	14.0	29	66	....	....	....	....	....	....	....
17	12.0	9.5	17.0	34	66	....	....	....	....	....	....	....
18	11.0	9.2	17.0	37	65	....	....	....	....	....	....	....
19	11.0	9.2	16.0	39	66	....	....	....	....	....	....	....
20	14.0	9.1	16.0	39	70	....	....	....	....	....	....	....
21	14.0	9.2	15.0	40	77	....	....	....	....	....	....	....
22	15.0	9.0	14.0	38	88	....	....	....	....	....	....	....
23	13.0	9.0	15.0	38	98	....	....	....	....	....	....	....
24	13.0	9.0	15.0	39	91	....	....	....	....	....	....	....
25	12.0	9.0	14.0	37	86	....	....	....	....	....	....	....
26	11.0	9.0	15.0	38	80	....	....	....	....	....	....	....
27	12.0	9.2	16.0	44	84	....	....	....	....	....	....	....
28	10.0	9.9	19.0	47	99	....	....	....	....	....	....	....
29	11.0	....	18.0	48	108	....	....	....	....	....	....	....
30	10.2	....	18.0	49	161	....	....	....	....	....	....	....
31	10.3	....	17.0	....	94	....	....	....	....	....	....	....

Monthly Discharge of City Creek near Salt Lake City, Utah, for 1906.

(Drainage area, 19.2 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	8.4	7.5	7.8	.41	.47	478
February	8.8	7.5	7.8	.41	.42	435
March	15	8.0	10.6	.55	.64	654
April	33	13	22	1.17	1.30	1,340
May	69	20	51	2.64	3.04	3,110
June	59	32	49	2.58	2.83	2,940
July	27	19	24	1.25	1.44	1,480
August	19	13	15	.80	.92	941
September	14	11	12	.63	.76	721
October	11	10.4	10.6	.55	.64	654
November	11	9.5	10.2	.53	.59	606
December	9.5	9.1	9.4	.49	.56	579
The year	69	7.5	19.2	1.00	13.69	13,900

Monthly Discharge of City Creek near Salt Lake City, Utah, for 1907.

(Drainage area, 19.2 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	9.5	8.6	8.9	.47	.54	550
February	20.0	9.2	15	.80	.83	849
March	37	15	20	1.05	1.21	1,240
April	60	21	40	2.08	2.32	2,390
May	132	43	70	3.66	4.22	4,320
June	111	57	80	4.19	4.68	4,790
July	57	28	41	2.14	2.47	2,530
August	27	19	22	1.16	1.34	1,370
September	19	13	16	.82	.91	932
October	13	11	12	.64	.74	754
November	12	6.4	10.3	.54	.60	614
December	11	9.9	10.2	.53	.61	624
The year	132	6.4	28.9	1.51	20.47	21,000

Monthly Discharge of City Creek near Salt Lake City, Utah, for 1908.

(Drainage area, 19.2 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	10.1	8.7	9.5	.50	.57	585
February	9.7	8.8	9.3	.48	.52	532
March	12	9.2	10.4	.54	.62	639
April	21	9.5	15	.80	.89	912
May	64	18	37	1.94	2.24	2,290
June	81	47	64	3.36	3.75	3,839
July	47	22	31	1.63	1.88	1,920
August	23	16	19	.99	1.14	1,170
September	16	14	15	.76	.85	872
October	15	12	13	.69	.80	814
November	13	9.0	10.0	.52	.58	594
December	9.4	8.2	8.9	.46	.53	545
The year	81	8.2	20.3	1.06	14.37	14,700

Monthly Discharge of City Creek near Salt Lake City, Utah, for 1909.

(Drainage area, 19.2 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	15	8.0	10.6	.55	.64	652
February	11	8.8	9.7	.51	.53	539
March	19	9.0	14	.71	.82	836
April	49	18	32	1.64	1.83	1,870
May	108	43	72	3.74	4.31	4,410
June	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The year	.....	.....	.....	.....	.....	.....

MONTHLY RUN-OFF

In Thousands of Acre Feet of City Creek near Salt Lake City.

(Drainage area, 19 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1899	0.31	0.28	0.40	1.34	2.89	4.70	1.78	0.83	0.69	0.62	0.54	0.52	14.49	1.05	14.26
1900	0.49	0.42	0.55	0.60	1.48	0.95	0.62	0.46	0.39	0.40	0.39	0.40	7.13	0.52	7.03
1901	0.34	0.71	0.42	0.65	3.14	1.40	0.77	0.55	0.42	0.46	0.42	0.40	9.18	0.67	9.15
1902	0.37	0.31	0.37	0.80	2.37	1.76	0.83	0.55	0.45	0.40	0.39	0.37	8.96	0.65	8.82
1903	0.37	0.33	0.40	0.60	1.03	2.38	0.98	0.71	0.54	0.58	0.45	0.43	9.39	0.67	9.12
1904	0.37	0.36	0.49	1.22	3.41	2.32	1.17	0.83	0.63	0.55	0.51	0.49	12.35	0.90	12.24
1905	0.46	0.41	0.49	0.74	1.84	1.61	0.89	0.65	0.5[illegible]	0.52	0.48	0.49	9.13	0.65	8.88
1906	0.49	0.44	0.65	1.34	3.11	2.98	1.41	0.95	0.71	0.65	0.60	0.58	13.92	1.00	13.67
1907	0.55	0.85	1.24	2.39	4.22	4.79	2.56	1.37	0.93	0.75	0.61	0.62	21.00	1.51	20.47
1908	0.59	0.53	0.64	0.91	2.29	3.83	1.92	1.17	0.87	0.81	0.59	0.55	14.70	1.06	14.37
1909	0.45	0.54	0.84	1.87	4.41	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
Mean.	0.45	0.43	0.62	1.13	2.81	2.67	1.29	0.81	0.62	0.57	0.50	0.49	12.03	0.87	11.80

EMIGRATION CREEK NEAR SALT LAKE CITY, UTAH.

Emigration Creek is tributary to Parleys Creek just below the mountain front. Its waters are used for the water supply of Salt Lake City. Measurements are made by means of a 2-foot rectangular weir.

Monthly Discharge of Emigration Creek near Salt Lake City, Utah, for 1906.

(Drainage area, 29 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.6	.6	.6	.02	.02	39.4
February	.6	.6	.6	.02	.02	35.5
March	15	.6	4.2	.14	.17	261
April	18	11	15	.52	.58	894
May	17	12	14	.90	.58	892
June	14	4.2	10.5	.36	.41	630
July	6.9	3.0	4.5	.15	.48	277
August	3.8	1.7	2.6	.08	.69	141
September	3.1	1.4	1.9	.06	.71	111
October	1.6	1.1	1.5	.05	.06	89
November	2.4	1.1	1.6	.05	.06	94
December	4.4	1.1	1.9	.06	.07	114
The year....	18	.6	4.9	.17	2.96	3,580

Monthly Discharge of Emigration Creek near Salt Lake City, Utah, for 1907.

(Drainage area, 29 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre feet
January	2.28	1.1	1.0	.05	.06	98
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May 24-31.....	19	5.0	10.4	.03	.01	105
June	19	5.0	7.5	.26	.29	449
July	19	4.6	5.6	.19	.23	341
August	7.6	6.4	6.8	.23	.27	416
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	2.8	1.7	2.1	.07	.08	127
December	4.0	1.6	2.7	.09	.11	167
The period..	19	1.1	.....	.....	.....	1,760

Monthly Discharge of Emigration Creek near Salt Lake City, Utah, for 1908.

(Drainage area, 29 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	1.9	1.3	1.6	.06	.06	98
February	3.2	1.4	1.5	.02	.06	87
March	4.0	1.6	3.0	.10	.12	183
April	8.9	3.6	5.7	.20	.22	340
May	8.9	5.8	8.8	.30	.35	541
June	12	3.0	7.6	.26	.29	452
July	8.9	2.4	6.3	.22	.25	393
August	8.9	4.0	6.2	.21	.24	379
September	6.8	3.1	4.9	.17	.19	292
October	6.8	4.8	5.8	.20	.23	354
November	5.8	4.9	5.6	.19	.21	332
December	4.8	2.4	3.6	.13	.15	224
The year	12	1.3	5.1	.17	.24	3,680

Daily Discharge in Second-feet of Emigration Creek near Salt Lake City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	3.75	....	....	....	....	....	....	1.05	....	....	....	.80
2	....	....	....	....	....	....	....	....	....	2.98	....	....
3	1.62	....	....	....	....	....	....	.99	....	....	....	....
4	....	1.33	....	....	....	....	1.62	....	1.05	....	....	....
5	....	....	....	....	....	....	....	.99	....	....	....	....
6	....	1.33	....	....	....	....	....	....	....	....	.99	....
7	1.33	....	....	....	....	....	....	....	....	....	....	....
8	....	....	....	....	....	....	....	....	....	....	....	....
9	1.62	1.33	....	....	....	....	....	....	....	1.05	....	....
10	....	....	....	....	....	....	1.62	....	....	....	....	....
11	....	1.33	....	....	....	....	....	....	.80	....	....	....
12	1.62	....	....	....	....	....	....	....	....	....	....	....
13	....	....	....	....	....	....	1.62	....	....	....	....	.80
14	....	1.62	....	....	....	....	....	1.05	....	....	.99	....
15	....	....	....	....	....	....	1.62	....	....	....	....	....
16	....	....	....	....	....	....	....	....	....	1.19	....	....
17	1.33	....	....	....	....	....	1.62	.80	....	....	....	....
18	....	....	....	....	....	....	1.33	....	1.05	....	....	....
19	1.33	....	....	....	....	....	1.33	.57	....	....	....	.80
20	....	....	....	....	....	....	....	....	....	....	.80	....
21	....	....	....	....	....	1.93	....	.57	....	....	....	....
22	1.33	....	....	....	....	....	1.19	....	....	....	....	....
23	1.33	....	....	....	....	....	....	....	....	1.33	....	....
24	....	....	....	....	....	....	....	....	....	....	....	....
25	....	....	....	....	....	....	1.05	....	1.05	....	....	....
26	....	....	....	....	....	2.27	....	....	....	....	....	....
27	....	....	....	....	....	....	1.05	....	....	....	.80	.80
28	1.62	....	....	....	....	1.93	....	.57	....	....	....	....
29	....	....	....	....	....	....	1.05	....	....	....	....	....
30	....	....	....	....	....	....	....	....	....	1.05	....	....
31	....	....	....	....	....	....	....	....	....	....	....	....

Monthly Discharge of Emigration Creek near Salt Lake City, Utah, for 1910.

(Drainage area, 29 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	3.8	1.3	1.7	0.06	0.07	150
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....
July	1.6	1.1	1.4	.06	.06	85
August	1.1	.6	.8	.03	.03	50
September	1.1	.8	1.0	.03	.04	60
October	3.0	1.1	1.5	.06	.06	90
November	1.0	.8	.9	.03	.03	55
December	.8	.8	.8	.03	.03	50
The period..	.....	.....	.....	.....	.....	.....

PARLEYS CREEK NEAR SALT LAKE CITY, UTAH.

Parleys Creek is formed by the junction of two forks which together drain nearly 8 miles of the crest of the Wasatch Range, and empties into Jordan River near the southern limits of Salt Lake City. Measurements are made by means of two 10-foot Cippoletti weirs, located above the intakes of the city water works.

Daily Discharge in Second-feet of Parley's Creek near Salt Lake City, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	12	23	23	63	143	231	63	28	25	18	18	20
2.....	12	23	26	73	151	238	64	27	20	18	18	22
3.....	12	23	25	91	171	238	62	26	20	18	18	22
4.....	13	23	25	91	198	244	60	25	20	19	18	22
5.....	21	23	31	86	251	259	59	25	20	20	18	19
6.....	30	14	31	80	214	274	58	25	20	20	17	20
7.....	25	18	31	76	225	274	55	25	19	20	17	20
8.....	21	16	31	74	243	224	54	25	18	20	17	21
9.....	20	16	31	76	253	207	47	25	18	20	17	21
10.....	18	19	31	80	262	207	46	39	18	20	....	22
11.....	11	20	31	77	249	191	46	32	18	20	....	20
12.....	14	20	25	74	207	187	45	30	20	20	....	20
13.....	19	18	30	76	187	173	42	28	20	20	17	20
14.....	26	18	31	85	182	166	40	27	20	20	18	19
15.....	31	22	32	92	187	176	39	27	19	20	17	19

Daily Discharge in Second-feet of Parley's Creek near Salt Lake City, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	33	22	38	130	205	182	38	28	19	19	17	19
17.....	30	25	39	172	201	163	35	28	19	19	17	11
18.....	28	25	44	198	193	140	36	29	19	19	18	8
19.....	28	23	46	205	201	133	36	29	20	19	18	9
20.....	37	22	43	201	206	129	35	29	20	18	19	12
21.....	34	22	44	161	220	129	35	29	20	18	51	15
22.....	32	23	42	159	206	123	34	30	20	18	32	16
23.....	31	24	44	159	244	119	34	28	20	18	28	17
24.....	27	25	44	163	201	118	34	26	20	17	28	18
25.....	30	23	45	159	206	104	34	26	20	17	28	18
26.....	30	25	47	176	213	77	34	25	20	16	30	17
27.....	30	25	55	205	224	73	33	23	19	17	27	16
28.....	28	23	64	228	214	71	33	20	19	17	20	16
29.....	26	....	60	199	216	70	32	19	19	17	19	14
30.....	28	....	59	193	202	68	28	18	19	17	19	15
31.....	26	....	57	....	191	.....	28	23	....	18	....	18

Monthly Discharge of Parley's Creek near Salt Lake City, Utah, for 1906.

(Drainage area, 50 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	12	4	8	.16	.17	462
February	10	6	8	.15	.16	428
March	27	5	13	.26	.30	788
April	39	21	48	.97	1.08	2,890
May	146	71	107	2.13	.25	6,570
June	122	39	69	1.38	1.54	4,100
July	39	18	25	.49	.57	1,510
August	31	14	17	.34	.40	1,060
September	15	10	15	.23	.26	695
October	10	9	10	.19	.22	596
November	13	3	9	.18	.20	543
December	15	5	10	.20	.23	618
The year....	146	3	20	.56	5.38	20,300

Monthly Discharge of Parley's Creek near Salt Lake City, Utah, for 1907.

(Drainage area, 50 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	11	3	8	.16	.19	501
February, 7 days	32	9	23	.46	.12	321
March	.....	.....	.....	.....	.....	.....
April	212	123	163	3.25	.36	9,690
May	204	85	147	2.93	.34	9,030
June	164	116	139	2.77	1.66	4,410
July	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November, ...	16	11	13	.27	.30	790
*a*December	14	9	11	.22	.26	691
The period..	.....	.....	.....	.....	.....	.....

*a*Partial month; mean estimated for full month.

Monthly Discharge of Parley's Creek near Salt Lake City, Utah, for 1908.

(Drainage area, 50 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	16	7	11	.22	.20	686
February	14	5	10	.20	.22	584
March	22	6	14	.27	.31	836
April	41	15	27	.54	.61	1,620
May	81	19	49	.98	1.13	3,020
June	81	49	74	1.48	1.65	4,410
July	49	25	34	.69	.79	2,120
August	30	16	22	.44	.51	1,360
September	20	12	15	.31	.34	908
October	20	14	17	.34	.39	1,050
November	18	5	14	.27	.30	809
December	18	3	12	.25	.29	763
The year....	81	3	25	.50	6.60	18,760

Monthly Discharge of Parley's Creek near Salt Lake City, Utah, for 1909.

(Drainage area, 50 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	37	11	25	.49	.56	1,510
February	25	16	22	.43	.45	1,190
March	64	23	39	.77	.89	2,380
April	228	63	130	2.59	2.89	7,740
May	262	143	209	4.17	4.80	12,900
June	274	68	166	3.31	3.69	9,880
July	64	28	43	.85	.98	2,610
August	39	18	27	.53	.61	1,630
September	25	18	20	.30	.44	1,170
October	20	16	19	.37	.43	1,140
November	51	17	21	.41	.47	1,250
December	22	8	18	.35	.40	1,080
The year....	274	8	61	1.22	16.61	44,500

Daily Discharge in Second-feet of Parley's Creek near Salt Lake City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	32.1	18.3	19.6	70.4	.....	47.3	27.5	19.0	....	12.2	12.2	10.5
2.....	27.5	15.1	21.0	75.6	.....	45.5	27.5	19.0	....	19.6	12.2	10.5
3.....	24.5	8.9	30.5	83.0	.....	44.6	26.7	19.0	....	15.1	11.6	10.5
4.....	22.4	7.4	36.9	76.6	.....	42.7	26.7	19.0	....	14.5	11.6	10.5
5.....	12.8	8.9	60.4	79.8	.....	40.3	26.0	19.0	....	14.5	11.6	10.5
6.....	13.9	11.6	66.3	....	.....	39.4	23.8	18.3	....	14.5	11.6	10.5
7.....	16.4	16.4	....	....	.....	39.4	23.1	17.7	....	14.5	11.6	10.5
8.....	19.6	15.7	....	....	.....	38.6	21.7	17.0	....	13.9	11.6	10.5
9.....	19.6	16.4	....	....	.....	37.8	21.1	16.4	11.0	13.9	11.6	10.5
10.....	19.6	16.4	....	....	.....	33.8	21.7	16.4	11.6	13.9	11.6	11.1
11.....	20.3	16.4	58.4	....	.....	33.8	22.4	16.4	12.2	13.9	11.6	12.2
12.....	19.6	17.0	58.4	....	.....	33.8	23.1	16.4	12.2	15.1	11.6	12.8
13.....	19.0	17.0	62.3	....	.....	33.8	22.4	16.4	11.6	13.3	11.6	12.2
14.....	19.6	18.3	69.4	....	.....	32.9	23.1	16.4	12.2	13.3	11.6	12.2
15.....	19.0	17.0	74.5	....	.....	32.1	23.1	15.8	12.2	13.3	11.6	10.5
16.....	17.7	10.5	76.6	....	.....	31.3	23.1	15.8	11.0	12.8	11.6	10.5
17.....	16.4	10.3	78.7	....	.....	29.7	22.4	15.1	13.3	13.3	11.6	10.5
18.....	16.4	15.8	86.3	....	.....	29.0	26.7	15.1	12.8	15.8	11.6	10.5
19.....	16.4	15.8	90.7	....	.....	27.5	26.7	14.5	12.2	14.5	12.7	10.5
20.....	16.4	15.8	97.5	....	62.3	27.5	26.0	14.5	12.2	14.5	11.1	10.5
21.....	16.4	17.0	103.3	....	62.3	26.7	24.5	13.9	12.2	13.3	11.6	10.5
22.....	17.0	15.8	108.0	....	61.4	26.7	22.4	13.3	12.2	13.3	11.6	5.6
23.....	17.0	15.8	115.1	....	60.4	26.0	22.4	13.3	12.2	13.3	11.6	5.6
24.....	17.7	17.0	98.6	....	59.4	26.0	19.0	13.3	12.2	12.8	12.2	6.5
25.....	16.4	18.3	87.4	....	59.4	26.0	15.8	13.3	12.2	12.8	12.2	6.5
26.....	17.0	18.3	89.6	....	56.5	26.0	16.4	13.3	12.2	12.2	12.2	5.6
27.....	12.2	19.6	79.8	....	52.8	26.0	20.3	13.3	12.2	12.2	8.4	5.6
28.....	14.5	17.0	84.1	....	51.8	26.7	20.3	13.3	12.2	12.2	10.0	7.4
29.....	18.3	....	79.8	....	50.0	28.8	20.3	13.3	12.2	12.2	10.5	8.9
30.....	18.3	....	75.6	....	49.1	28.2	19.6	13.3	12.2	12.2	10.5	10.0
31.....	18.3	....	70.4	....	49.1	.....	19.0	13.3	....	12.2	....	11.6

Monthly Discharge of Parley's Creek near Salt Lake City, Utah, for 1910.

(Drainage area, 50 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	32.1	12.2	18.5	0.37	0.43	1,140
February	19.6	7.4	15.4	.31	.32	840
March	115.1	19.6	63.9	1.28	1.48	3,920
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	47.3	26.9	32.9	.66	.73	1,960
July	27.5	15.8	32.7	.65	.75	2,010
August	19.0	13.3	15.7	.31	.36	970
September	13.3	11.1	12.1	.24	.27	720
October	19.6	12.2	13.7	.27	.31	840
November	12.8	8.4	11.5	.23	.26	680
December	12.8	5.6	9.7	.20	.22	600
The period..	115.1	5.6	22.6	0.45	5.13	13,680

MONTHLY RUN-OFF

In Thousands of Acre Feet of Parley's Creek near Salt Lake City.

(Drainage area, 50 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1898	.....	.....	.....	.....	.....	.....	.....	0.58	0.54	0.65	0.57	0.52	.....	....	....
1899	0.55	0.44	1.54	8.14	10.76	10.08	3.75	1.29	0.81	1.01	0.81	0.71	39.88	1.06	15.50
1900	0.74	0.58	1.62	1.25	1.69	0.95	0.78	0.46	0.42	0.55	0.48	0.46	9.18	0.25	3.45
1901	0.46	0.59	0.68	2.26	5.52	1.70	0.86	0.71	0.51	1.52	0.48	0.46	14.45	0.40	5.40
1902	0.43	0.42	0.46	1.99	3.60	1.99	0.83	0.65	0.45	0.46	0.45	0.40	12.12	0.33	4.54
1903	0.49	0.36	0.74	1.79	4.55	3.27	1.02	0.68	0.51	0.58	0.51	0.37	14.86	0.41	5.56
1904	0.43	0.58	1.20	7.32	10.36	3.12	1.60	0.98	0.69	0.80	0.63	0.52	28.23	0.78	10.40
1905	0.55	0.50	0.58	1.13	2.28	1.28	0.77	0.49	0.39	0.43	0.39	0.37	9.16	0.25	3.44
1906	0.46	0.44	0.80	1.58	6.18	4.11	1.51	1.08	0.69	0.58	0.54	0.[illegible]2	18.57	0.52	7.11
1907	0.50	.....	.....	9.69	9.03	.....	.....	.....	.....	.....	0.80	0.69	.....	....	....
1908	0.69	0.58	0.84	1.62	3.02	4.41	2.12	1.36	0.91	1.05	0.81	0.76	18.26	0.50	6.80
1909	1.51	1.19	2.38	7.74	12.90	9.88	2.61	1.63	1.17	1.14	1.25	1.08	44.50	1.22	16.61
1910	1.14	0.84	2.92	.....	.....	1.96	2.91	0.97	0.72	0.84	0.68	0.60	.....	....	....
Mean.	0.65	0.59	1.30	4.05	6.33	3.89	1.60	0.91	0.65	0.72	0.67	0.58	20.92	0.57	7.88

MILL CREEK NEAR SALT LAKE CITY, UTAH.

Mill Creek drains a narrow basin extending to the crest of the Wasatch Range. Measurements are made by means of a 12.5-foot Cippoletti weir, located near the mouth of the canyon.

Daily Discharge in Second-feet of Mill Creek near Salt Lake City, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	15	15	17	23	32	65	84	25	27	22	21	20
2	15	15	17	23	32	91	84	25	27	23	21	20
3	15	15	17	30	32	91	65	25	27	20	19	21
4	15	15	17	27	50	104	65	25	27	20	19	21
5	15	15	17	27	50	104	65	25	27	20	19	19
6	15	15	19	25	47	104	47	25	27	21	19	15
7	15	15	19	25	53	77	47	30	27	21	19	15
8	15	15	19	25	53	77	47	30	27	21	19	15
9	15	15	19	25	59	77	47	30	27	21	19	15
10	15	15	19	25	37	65	27	30	27	21	19	15
11	8	15	19	25	37	65	27	30	25	21	19	15
12	8	15	19	27	37	65	27	30	25	21	19	17
13	15	17	16	27	37	65	27	30	25	21	19	17
14	15	17	16	30	40	65	27	30	25	21	19	17
15	15	17	16	30	37	77	27	30	25	21	19	19
16	15	17	16	32	40	77	27	30	25	21	19	19
17	15	17	21	40	40	112	27	30	25	21	19	19
18	15	17	21	40	40	112	27	30	23	21	19	15
19	19	17	21	40	40	77	27	30	23	21	19	7
20	19	17	21	34	53	77	27	30	23	21	19	7
21	19	17	21	37	53	.....	27	30	23	21	25	17
22	19	17	20	27	77	77	27	30	23	21	20	17
23	19	21	20	27	77	77	25	27	23	21	20	17
24	15	21	20	27	65	77	26	27	23	21	20	17
25	15	21	20	27	65	77	25	27	23	21	20	17
26	15	21	20	30	65	65	25	27	23	21	20	17
27	15	17	20	30	84	84	26	27	23	21	20	17
28	15	17	23	32	84	84	25	27	23	21	20	17
29	10	....	23	32	53	84	25	27	23	21	20	17
30	10	....	23	32	53	84	25	27	23	21	20	17
31	15	....	23	....	53	.....	25	27	....	21	....	17

Monthly Discharge of Mill Creek near Salt Lake City, Utah, for 1906.

(Drainage area, 21.3 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	11	3	9	.41	.47	534
February	10	9	9	.44	.46	524
March	10	5	10	.45	.52	585
April	21	10	15	.72	.80	906
May	56	16	31	1.47	1.70	1,920
June	59	25	31	1.73	1.93	2,200
July	25	12	19	.89	1.03	1,170
August	27	13	16	.73	.84	955
September	15	13	14	.65	.73	833
October	13	13	13	.61	.71	802
November	13	4	11	.54	.60	679
December	12	11	12	.55	.63	720
The year....	72	7	26	1.24	16.80	19,100

Monthly Discharge of Mill Creek near Salt Lake City, Utah, for 1907.

(Drainage area, 21.3 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	12	7	11	.52	.60	684
February	21	11	14	.67	.69	786
March	34	15	19	.90	1.04	1,180
April	45	17	33	1.53	1.71	1,940
May	65	37	48	2.21	2.58	2,930
June	72	42	58	2.72	3.04	3,450
July	49	27	34	1.61	1.86	2,110
August	30	23	26	1.21	1.40	1,580
September	27	20	23	1.07	1.19	1,350
October	20	16	19	.88	1.01	1,150
November	17	16	17	.78	.87	988
December	17	13	15	.70	.81	920
The year....	72	7	26	1.24	16.80	19,100

Monthly Discharge of Mill Creek near Salt Lake City, Utah, for 1908.

(Drainage area, 21.3 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	14	13	13	.61	.70	795
February	14	7	13	.61	.65	741
March	15	13	14	.64	.74	838
April	18	13	15	.72	.80	918
May	50	18	30	1.39	1.60	1,820
June	65	39	46	2.17	2.42	2,750
July	39	27	31	1.44	1.66	1,890
August	25	21	23	1.08	1.24	1,410
September	21	19	19	.91	1.02	1,160
October	19	16	17	.80	.92	1,050
November	17	11	16	.75	.83	948
December	17	4	13	.61	.70	798
The year....	65	4	21	.98	13.28	15,100

Monthly Discharge of Mill Creek near Salt Lake City, Utah, for 1909.

(Drainage area, 21.3 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre feet
January	19	8	15	.69	.80	904
February	21	15	17	.78	.81	922
March	23	16	19	.90	1.04	1,190
April	40	23	29	1.38	1.54	1,750
May	84	32	51	2.38	2.74	3,120
June	112	65	81	3.81	4.25	4,830
July	84	25	37	1.72	1.98	2,250
August	30	25	28	1.32	1.52	1,730
September	27	23	25	1.17	1.30	1,480
October	23	20	21	.98	1.13	1,280
November	25	19	20	.91	1.02	1,160
December	21	7	16	.76	.88	1,000
The year....	112	7	30	1.40	19.01	21,000

Daily Discharge in Second-feet of Mill Creek near Salt Lake City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	16.8	14.9	14.9	22.9	39.5	44.8	27.3	21.0	17.0	15.3	15.3	13.0
2.....	16.8	14.9	14.9	22.9	39.5	44.8	22.9	21.0	17.0	15.3	15.3	13.0
3.....	16.8	14.9	14.9	25.1	39.5	44.8	22.9	18.7	17.0	15.3	15.3	13.0
4.....	16.8	14.9	14.9	27.3	34.4	32.0	22.9	18.7	17.0	15.3	15.3	13.0
5.....	13.0	14.9	18.7	27.3	34.4	32.0	22.9	18.7	17.0	15.3	15.3	13.0
6.....	8.1	14.9	18.7	27.3	34.4	32.0	22.9	18.7	17.0	15.3	15.3	13.0
7.....	16.8	14.9	18.7	27.3	24.4	32.0	22.9	....	17.0	15.3	15.3	13.0
8.....	16.8	14.9	18.7	27.3	34.4	32.0	22.9	18.7	17.0	15.3	15.3	13.0
9.....	16.8	14.9	18.7	29.7	34.4	32.0	22.9	18.7	17.0	15.3	15.3	13.0
10.....	16.8	14.9	18.7	29.7	42.1	32.0	22.9	18.7	17.0	15.3	15.3	16.8
11.....	16.8	14.9	18.7	29.7	44.8	32.0	22.9	18.7	17.0	15.3	15.3	16.8
12.....	16.8	15.3	22.9	29.7	44.8	32.0	22.9	18.7	17.0	15.3	15.3	16.8
13.....	16.8	15.3	22.9	29.7	44.7	32.0	22.9	18.7	17.0	14.9	15.3	16.8
14.....	16.8	15.3	22.9	34.4	32.0	32.0	22.9	18.7	17.0	14.9	15.3	16.8
15.....	15.3	15.3	25.1	34.4	32.0	30.0	22.9	18.7	17.0	14.9	15.3	16.8
16.....	15.3	15.3	25.1	34.4	32.0	30.0	22.9	18.7	17.0	14.9	15.3	16.8
17.....	15.3	15.3	25.1	36.9	32.0	30.0	22.9	18.7	17.0	14.9	15.3	16.8
18.....	14.9	15.3	25.1	36.9	32.0	27.3	21.0	18.7	17.0	14.9	15.3	16.8
19.....	14.9	15.3	25.1	36.9	32.0	27.3	21.0	18.7	15.3	14.9	15.3	16.8
20.....	14.9	15.3	25.1	36.9	32.0	27.3	21.0	18.7	15.3	14.9	15.3	16.8
21.....	14.9	15.3	25.1	36.9	42.1	27.3	21.0	18.7	15.3	14.9	15.3	16.8
22.....	14.9	15.3	25.1	36.9	42.1	27.3	21.0	18.7	15.3	14.9	15.3	16.8
23.....	14.9	15.3	22.9	36.9	42.1	27.3	21.0	18.7	15.3	14.9	15.3	16.8
24.....	14.9	15.3	22.9	36.9	42.1	27.3	21.0	18.7	15.3	14.9	15.3	14.9
25.....	14.9	15.3	22.9	36.9	42.1	27.3	21.0	18.7	15.3	14.9	15.3	14.9
26.....	14.9	14.9	22.9	36.9	42.1	27.3	21.0	17.0	15.3	14.9	15.3	14.9
27.....	14.9	14.9	22.9	36.9	42.1	27.3	21.0	17.0	15.3	14.9	14.9	14.9
28.....	14.9	14.9	22.9	42.1	42.1	27.3	21.0	17.0	15.3	14.9	14.9	14.9
29.....	14.9	....	22.9	42.1	42.1	27.3	21.0	17.0	15.3	14.9	14.9	14.9
30.....	14.9	....	22.9	39.4	42.1	27.3	21.0	17.0	15.3	15.3	14.9	14.9
31.....	14.9	....	22.9	....	44.8	.....	21.0	17.0	....	15.3	....	....

Monthly Discharge of Mill Creek near Salt Lake City, Utah, for 1910.

(Drainage area, 21.3 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	8.1	16.9	15.4	0.76	0.87	950
February	14.9	15.3	15.1	.71	.74	820
March	14.9	25.1	21.5	1.01	1.16	1,320
April	22.9	42.1	33.0	1.55	1.73	1,970
May	32.0	44.8	38.4	1.80	2.07	2,360
June	27.2	44.8	31.0	1.46	1.63	1,850
July	20.8	27.3	32.1	1.51	1.74	1,970
August	16.8	18.7	18.3	.86	.99	1,130
September	15.3	16.8	16.2	.76	.85	960
October	14.9	15.3	15.1	.71	.82	930
November	14.9	15.3	15.3	.75	.84	910
December	13.0	16.8	14.7	.69	.80	900
The year....	32.0	15.3	22.2	1.05	14.24	16,070

MONTHLY RUN-OFF

In Thousands of Acre Feet of Mill Creek near Salt Lake City.

(Drainage area, 21 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1899	0.71	0.56	0.74	0.98	2.15	3.01	1.60	1.11	0.95	0.89	0.80	0.71	14.20	0.93	12.70
1900	0.74	0.58	0.74	0.74	1.32	0.95	0.65	0.58	0.51	0.52	0.54	0.46	8.33	0.56	7.45
1901	0.43	0.44	0.52	0.60	1.81	1.19	0.92	0.77	0.69	0.71	0.69	0.62	9.38	0.65	8.44
1902	0.58	0.50	0.58	0.77	1.45	1.28	0.83	0.68	0.57	0.58	0.51	0.43	8.76	0.57	7.80
1903	0.49	0.36	0.52	0.60	1.08	1.55	0.92	0.80	0.69	0.71	0.66	0.55	8.91	0.58	7.94
1904	0.62	0.55	0.68	1.13	2.55	2.44	1.57	0.92	0.89	0.83	0.74	0.52	13.45	0.88	11.93
1905	0.55	0.44	0.62	0.74	1.41	1.58	0.95	0.77	0.71	0.71	0.60	0.43	9.52	0.63	8.53
1906	0.52	0.53	0.58	0.89	1.94	2.20	1.17	0.92	0.83	0.80	0.69	0.71	11.78	0.78	10.59
1907	0.68	0.79	1.18	1.19	2.93	3.45	2.14	1.58	1.35	1.15	0.99	0.92	19.10	1.24	16.80
1908	0.80	0.74	0.84	0.92	1.82	2.75	1.89	1.41	1.16	1.05	0.95	0.80	15.40	0.98	13.28
1909	0.90	0.92	1.19	1.75	3.12	4.83	2.25	1.73	1.48	1.28	1.16	1.00	21.60	1.40	19.01
1910	0.95	0.82	1.32	1.97	2.36	1.85	1.97	1.13	0.96	0.93	0.91	0.90	16.07	1.05	14.24
Mean.	0.66	0.60	0.79	1.06	2.00	2.26	1.41	1.03	0.90	0.85	0.78	0.67	13.04	0.85	11.56

BIG COTTONWOOD CREEK NEAR SALT LAKE CITY, UTAH.

Big Cottonwood Creek, the largest tributary of Jordan River, rises near Clayton Peak, which reaches an elevation of over 12,000 feet. Its headwaters are very mountainous and heavily timbered. The discharge is measured near the mouth of the canyon by means of a compound weir, which serves not only to measure the water, but to distribute it among the various claimants. The weir is just below the power plant of the Utah Light and Power Company, the operation of which causes a diurnal fluctuation in the discharge.

Daily Discharge in Second-feet of Big Cottonwood Creek, near Salt Lake City, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	35	38	35	47	143	162	433	112	139	78	68	75
2.....	37	40	35	49	136	468	430	125	126	76	63	79
3.....	37	39	37	56	155	570	428	112	101	72	67	72
4.....	32	44	38	55	180	677	480	109	103	74	63	74
5.....	33	41	40	68	216	775	379	104	115	78	63	64
6.....	45	38	47	61	203	835	358	117	117	70	63	67
7.....	40	39	44	62	212	821	310	107	104	91	52	68
8.....	40	37	42	57	226	627	299	106	110	78	59	66
9.....	39	37	42	55	248	514	271	112	95	70	53	66
10.....	39	42	39	58	265	472	243	115	100	71	57	66
11.....	35	39	40	55	265	455	242	109	95	79	58	63
12.....	38	39	35	62	234	485	238	107	94	70	62	60
13.....	39	40	38	60	210	535	222	91	100	79	59	63
14.....	42	38	37	62	212	521	210	82	92	75	70	63
15.....	45	39	40	71	228	566	204	82	86	59	61	62
16.....	42	39	42	78	234	591	203	112	79	74	51	62
17.....	42	41	51	116	212	627	195	100	78	54	57	60
18.....	42	41	52	157	210	603	186	86	74	60	59	52
19.....	42	37	53	169	232	524	195	101	86	74	60	48
20.....	45	38	49	167	275	467	180	104	78	71	63	62
21.....	42	39	47	146	303	428	175	95	81	70	68	62
22.....	47	38	46	126	321	441	158	141	79	61	85	62
23.....	45	35	44	120	350	471	162	106	79	71	82	59
24.....	40	34	46	123	321	490	146	109	75	51	79	60
25.....	46	36	42	115	262	487	139	86	73	67	85	62
26.....	44	38	46	126	275	443	143	95	67	68	79	63
27.....	41	33	47	150	327	480	145	91	78	71	85	59
28.....	38	34	45	171	411	455	138	82	79	70	70	54
29.....	41	....	47	167	387	455	129	83	76	70	79	57
30.....	42	....	49	145	323	424	118	79	72	68	72	59
31.....	42	....	47	....	323	.....	123	81	....	49	....	55

Monthly Discharge of Big Cottonwood Creek, near Salt Lake City, Utah, for 1906.

(Drainage area, 18.5 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	30	19	26	.53	.62	1,590
February	28	26	27	.55	.58	1,490
March	43	23	31	.65	.75	1,940
April	130	37	73	1.51	1.68	4,370
May	288	77	205	4.24	4.89	12,600
June	.....	.....	200.0	4.12	4.60	11,900
July	216	80	144	2.98	3.44	8,880
August	115	60	74	1.54	1.78	4,590
September	90	50	57	1.18	1.32	3,420
October	50	37	43	.89	1.03	2,650
November	43	28	39	.81	.91	2,350
December	54	39	39	.10	.12	3,000
The year....	216	.....	81	1.59	21.72	58,900

Monthly Discharge of Big Cottonwood Creek, near Salt Lake City, Utah, for 1907.

(Drainage area, 18.5 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	51	45	48	.98	1.13	2,920
February	82	30	43	.87	.92	2,490
March	146	29	55	1.13	1.30	3,360
April	.....	.....	85	1.75	1.95	5,060
May	292	102	208	4.28	4.93	12,800
June	793	216	432	8.91	9.94	25,700
July	731	150	391	8.07	9.30	24,100
August	148	71	98	2.01	2.32	6,000
September	70	49	58	1.20	1.34	3,450
October	60	41	52	1.06	1.22	3,170
November	57	38	44	.92	1.02	2,650
December	42	36	37	.76	.88	2,280
The year....	.....	.....	120.0	2.66	36.25	93,900

Monthly Discharge of Big Cottonwood Creek, near Salt Lake City, Utah, for 1908.

(Drainage area, 18.5 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	37	28	33	.68	.78	2,020
February	36	27	31	.64	.69	1,790
March	42	27	34	.70	.81	2,090
April	215	33	85	1.74	1.94	5,030
May	.....	.....	193	3.98	4.59	11,900
June	520	158	292	6.02	6.72	17,400
July	269	92	164	3.38	3.90	10,100
August	89	52	64	1.31	1.51	3,910
September	88	42	54	1.11	1.24	3,210
October	67	46	57	1.18	1.36	3,520
November	60	38	47	.97	1.08	2,790
December	39	25	36	.75	.86	2,230
The year....	519	25	91	1.87	25.48	66,000

Monthly Discharge of Big Cottonwood Creek, near Salt Lake City, Utah, for 1909.

(Drainage area, 18.5 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	47	32	41	.84	.96	2,490
February	49	33	38	.79	.82	2,130
March	53	35	43	.89	1.02	2,640
April	171	47	99	2.03	2.26	5,870
May	411	136	255	5.26	6.06	15,700
June	835	162	529	10.9	12.16	31,500
July	480	118	235	4.80	5.59	14,400
August	141	79	102	2.10	2.42	6,270
September	130	62	91	1.87	2.09	5,400
October	91	49	70	1.44	1.06	4,290
November	85	61	67	1.37	1.53	3,900
December	79	48	63	1.29	1.49	3,860
The year....	835	32	136	2.80	38.06	98,500

Daily Discharge in Second-feet of Big Cottonwood Creek, near Salt Lake City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	61.7	50.5	50.5	99.5	275.0	382.6	119.7	82.0	54.2	46.9	48.1	42.3
2.....	61.7	55.4	49.3	102.5	233.8	389.6	119.7	77.8	52.9	69.6	48.1	43.5
3.....	59.2	44.6	50.5	107.1	212.1	382.6	104.1	76.4	52.9	55.4	48.1	43.5
4.....	66.9	46.9	57.9	107.1	216.01	331.8	116.5	75.0	55.4	54.2	46.9	43.5
5.....	57.9	45.8	64.3	165.6	198.7	305.2	116.5	75.0	51.7	52.9	42.3	40.1
6.....	59.2	48.1	66.9	104.1	181.9	307.4	114.9	73.6	52.9	51.7	43.5	41.2
7.....	59.2	51.7	79.2	165.6	194.90	300.8	86.2	72.3	51.7	50.5	48.1	40.1
8.....	59.2	49.3	83.4	104.9	206.3	292.1	93.5	60.6	51.7	49.3	46.9	42.3
9.....	59.2	46.9	82.0	121.3	254.1	260.4	101.0	63.0	50.5	48.1	48.1	41.2
10.....	51.7	48.1	83.4	137.8	309.6	254.1	93.5	63.0	50.5	49.3	48.1	41.2
11.....	56.6	46.9	80.6	154.9	354.6	250.0	87.7	62.0	48.1	49.3	44.6	41.2
12.....	56.6	45.8	77.8	174.5	370.8	250.0	84.8	62.0	51.7	55.4	44.6	49.3
13.....	56.6	43.5	77.8	172.7	387.3	241.9	93.5	64.3	50.5	56.6	44.6	44.6
14.....	57.9	45.8	83.4	169.3	375.5	239.9	83.4	63.0	50.5	52.9	44.6	45.8
15.....	57.9	45.8	87.7	149.7	340.9	219.9	70.9	64.3	51.7	51.7	46.9	44.6
16.....	57.9	44.6	89.1	141.2	279.3	204.4	93.5	61.7	55.4	49.3	45.6	42.3
17.....	56.6	47.6	93.5	132.8	241.9	204.4	83.4	60.4	55.4	56.6	....	43.5
18.....	64.3	48.1	102.5	141.2	268.7	196.8	79.2	59.2	52.9	50.5	40.1	41.2
19.....	54.2	50.5	107.1	167.3	277.1	196.8	79.2	59.2	51.7	66.9	42.5	41.2
20.....	51.7	46.9	107.1	169.8	281.4	170.9	80.6	59.2	52.9	54.2	42.3	44.6
21.....	51.7	48.1	119.7	206.3	258.3	170.9	77.8	55.4	50.5	55.4	41.2	43.5
22.....	55.4	50.5	146.3	204.4	223.9	167.3	77.8	56.6	50.5	52.9	42.3	37.9
23.....	46.9	41.4	149.7	223.9	261.5	165.5	76.4	56.6	49.3	54.2	49.3	40.1
24.....	51.7	46.9	136.1	....	318.4	160.2	70.9	56.6	50.5	52.9	....	41.2
25.....	56.6	50.5	126.2	....	327.3	336.3	72.3	57.9	49.3	51.7	....	40.1
26.....	51.7	48.1	113.4	....	303.0	146.3	72.3	55.4	48.1	51.7	45.8	44.6
27.....	50.5	46.9	108.7	....	307.4	144.6	76.4	54.2	48.1	52.9	36.8	44.6
28.....	50.5	46.9	107.1	....	307.4	131.1	80.6	56.6	48.1	50.5	40.1	44.6
29.....	56.6	....	99.5	343.2	336.3	127.8	77.8	51.7	48.1	49.3	40.1	36.8
30.....	51.7	....	95.0	322.9	354.6	121.6	75.0	52.9	46.9	49.3	42.3	41.2
31.....	50.5	....	93.5	....	380.2	.....	69.6	51.2	....	50.5	....	36.8

Monthly Discharge of Big Cottonwood Creek, near Salt Lake City, Utah, in 1910.

(Drainage area, 18.5 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	66.9	46.9	56.1	1.16	1.33	3,450
February	55.4	43.5	47.8	0.98	1.02	2,600
March	149.7	49.3	92.6	1.91	2.20	5,700
April	343.2	99.5	160.2	3.30	3.69	9,550
May	387.3	181.9	285.3	5.88	6.78	17,300
June	389.6	124.6	235.2	4.85	5.43	14,000
July	119.7	69.6	88.0	1.81	2.09	5,400
August	82.0	51.7	62.9	1.30	1.49	3,900
September	55.4	46.9	51.2	1.05	1.18	3,000
October	69.6	46.9	53.0	1.09	1.26	3,250
November	49.3	36.8	44.5	.92	1.02	2,650
December	49.3	36.8	42.2	.87	1.00	2,600
The year....	389.6	36.8	101.8	2.10	28.49	73,400

MONTHLY RUN-OFF

In Thousands of Acre Feet of Big Cottonwood Creek near Salt Lake City.

(Drainage area, 49.5 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.96	1.57	.....	....	....
1899	1.54	1.36	2.00	5.65	11.10	22.52	10.12	5.53	.....	.....	.....	.....	.....	....	....
1900	.....	.....	.....	.....	13.66	5.30	2.34	1.72	1.34	1.51	1.55	0.83	.....	....	....
1901	1.35	1.31	1.81	4.14	16.60	10.21	4.95	2.40	1.79	1.78	1.67	1.66	49.66	1.38	18.82
1902	1.41	1.33	1.51	4.20	12.91	11.57	3.81	2.03	1.67	1.63	1.49	1.41	44.97	1.25	16.97
1903	1.32	1.08	1.48	3.42	9.26	.....	3.54	1.51	.....	.....	.....	.....	.....	....	....
1904	.....	.....	.....	.....	.....	.....	.....	.....	2.14	2.28	1.90	1.57	.....	....	....
1905	1.60	1.39	1.78	3.60	8.03	11.19	3.91	2.18	1.88	1.97	1.67	1.63	40.81	1.14	15.42
1906	1.60	1.50	1.94	4.37	12.60	11.90	8.90	4.59	3.42	2.65	2.35	3.00	58.90	1.59	21.72
1907	2.92	2.39	3.35	5.96	12.80	25.70	24.10	6.00	3.45	3.17	2.65	2.28	93.90	2.66	36.25
1908	2.02	1.79	2.09	5.03	11.90	17.40	10.10	3.91	3.21	3.52	2.79	2.23	66.00	1.87	25.48
1909	2.49	2.13	2.64	5.87	15.70	31.50	14.40	6.27	5.40	4.29	3.96	3.86	98.50	2.80	38.06
1910	3.45	2.60	5.70	9.55	17.30	14.00	5.40	2.90	3.00	3.25	2.65	2.60	73.40	2.10	28.49
Mean.	1.97	1.69	2.43	5.18	12.90	16.13	8.32	3.64	2.73	2.61	2.24	2.06	65.77	1.85	25.13

LITTLE COTTONWOOD CREEK NEAR SALT LAKE CITY, UTAH.

Little Cottonwood Creek is the most southern of the streams tributary to Jordan River on which records have been obtained. The flow is measured over two 15-foot Cippoletti weirs, located near the mouth of the canyon.

Daily Discharge in Second-feet of Little Cottonwood Creek near Salt Lake City, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	16	18	15	25	.....	.....	.....	....	....	....	20	25
2	16	21	16	23	.....	.....	.....	....	....	....	20	23
3	14	21	16	23	.....	.....	.....	....	....	....	20	21
4	16	19	16	27	.....	.....	.....	....	....	....	21	20
5	16	19	18	27	.....	.....	.....	....	....	....	21	22
6	20	18	16	27	.....	.....	.....	....	....	....	21	24
7	19	14	17	27	.....	.....	.....	....	....	....	20	27
8	19	14	18	27	.....	.....	.....	....	....	....	21	27
9	18	18	18	27	.....	.....	.....	....	....	....	20	27
10	13	18	16	29	.....	.....	.....	....	....	....	19	28
11	11	19	17	29	.....	.....	.....	....	....	....	18	29
12	10	19	16	27	.....	.....	.....	....	....	....	17	27
13	11	19	17	27	.....	.....	.....	....	....	....	16	27
14	16	19	18	29	.....	.....	.....	....	....	27	16	25
15	21	19	19	34	.....	.....	.....	....	....	27	18	25
16	21	19	19	40	.....	.....	.....	....	....	27	19	23
17	19	16	19	60	.....	.....	.....	....	....	27	19	21
18	19	14	20	66	.....	.....	.....	....	....	26	21	19
19	19	18	19	68	.....	.....	.....	....	....	25	22	19
20	20	19	19	71	.....	.....	.....	....	....	26	25	19
21	21	19	20	74	.....	.....	.....	....	....	25	29	14
22	19	18	19	74	.....	.....	.....	....	....	25	23	19
23	16	15	19	71	.....	.....	.....	....	....	25	25	19
24	16	14	20	66	.....	.....	.....	....	....	25	29	21
25	16	16	19	68	.....	.....	.....	....	....	25	27	21
26	14	16	20	74	.....	.....	.....	....	....	23	27	21
27	16	16	20	77	.....	.....	.....	....	....	23	23	20
28	18	17	21	80	.....	.....	.....	....	....	19	27	19
29	16	....	20	83	.....	.....	.....	....	....	19	26	20
30	18	....	21	89	.....	.....	.....	....	....	20	25	24
31	19	....	24	....	.....	.....	.....	....	....	19	....	23

Monthly Discharge of Little Cottonwood Creek near Salt Lake City, Utah, for 1898-99, 1904-05-06-07-08-09.

(Drainage area, 12.7 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
1898.						
November	15.37	9.2	11.9	0.94	1.04	708
December	13.9	9.7	12	.94	1.09	735
1899.						
January	14	10.3	12	.95	1.10	745
February	13	8.5	11	.89	.93	630
March	14	10	12	.98	1.13	763
April	64	13	39	3.07	3.42	2,330
May	171	44	105	8.29	9.56	6,480
1904.						
August	.....	.....	27	2.14	2.47	1,670
September	.....	.....	17	1.35	1.51	1,020
October	.....	.....	17	1.38	1.59	1,070
November	.....	.....	15	1.19	1.33	896
1905.						
October	19	14	16	1.29	1.49	1,010
November	14	7.8	11	.90	1.00	679
December	12	8.1	10	.77	.89	600
1906.						
January	12	7.1	10	.80	.92	625
February	14	8.6	12	.91	.95	640
March	19	9.2	14	1.11	1.28	684
April, 1-18.....	52	19.0	27	2.20	1.47	996
1907.						
January	13	9.6	11	.91	1.04	706
February	17	11	15	1.15	1.20	810
March	71	16	29	2.29	2.64	1,790
April, 1-12.....	83	38	51	4.02	1.79	1,220
November	24	15	18	1.42	1.58	1,070
December	17	12	14	1.18	1.36	922
1908.						
January	17	11	13	1.05	1.21	817
February	18	9.2	12	.93	1.01	682
March	19	10	15	1.19	1.37	930
April, 1-20.....	111	18	45	3.58	2.66	1,800
December	23	5.6	17	1.33	1.53	1,040
1909.						
January	21	9.6	17	1.33	1.53	1,040
February	21	14	18	1.38	1.44	972
March	24	15	18	1.45	1.67	1,130
April	89	23	49	3.86	4.31	2,920
October	27	19	24	1.91	1.28	868
November	29	15	22	1.73	1.93	1,310
December	29	14	22	1.80	2.08	1,400

Daily Discharge in Second-feet of Little Cottonwood Creek near Salt Lake City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	21.3	19.4	18.5	55.0	.....	.....	.....	....	14.3	17.6	18.5	13.0
2	23.2	19.4	19.4	57.5	.....	.....	.....	....	15.0	18.5	18.5	12.6
3	24.1	20.4	21.3	60.2	.....	.....	.....	....	15.0	19.4	18.5	12.6
4	21.3	20.4	23.2	62.9	.....	.....	.....	15.0	15.0	21.3	17.6	12.6
5	21.3	20.4	25.2	62.9	.....	.....	.....	15.9	15.9	20.4	17.6	11.9
6	19.4	19.4	25.2	65.6	.....	.....	.....	15.0	15.0	....	17.6	11.1
7	21.3	19.4	26.1	65.6	.....	.....	.....	15.0	15.0	....	17.6	16.8
8	24.1	18.5	28.2	68.4	.....	.....	.....	15.0	15.0	19.4	17.6	15.9
9	23.2	14.3	27.2	71.2	.....	.....	.....	14.3	14.3	19.4	17.6	15.9
10	23.2	14.3	27.2	76.8	.....	.....	.....	14.3	14.3	18.5	17.6	15.9
11	23.2	16.0	29.2	104.1	.....	.....	.....	14.3	14.3	17.6	15.9	15.9
12	22.3	17.6	31.3	110.2	.....	.....	.....	13.4	13.4	15.9	15.9	15.9
13	22.3	17.6	35.7	....	.....	.....	.....	14.3	14.3	17.6	17.6	14.3
14	23.2	15.9	40.3	....	.....	.....	.....	14.3	14.3	17.6	17.6	14.3
15	22.3	15.9	45.0	....	.....	.....	.....	15.0	15.0	18.5	17.6	13.4
16	21.3	15.9	50.0	....	.....	.....	.....	15.9	15.9	19.4	17.6	13.4
17	21.3	15.0	57.5	....	.....	.....	.....	17.6	17.6	20.4	14.3	12.6
18	23.2	14.3	65.6	....	.....	.....	.....	17.6	17.6	20.4	14.3	12.6
19	21.3	15.0	71.2	....	.....	.....	.....	18.5	18.5	21.3	15.9	11.9
20	23.2	15.9	73.9	....	.....	.....	.....	20.4	20.4	24.1	15.9	11.1
21	21.3	15.0	88.7	....	.....	.....	.....	20.4	20.4	24.1	17.6	9.6
22	21.3	17.6	88.7	....	.....	.....	.....	20.4	20.4	25.2	15.0	9.6
23	20.4	17.6	94.7	....	.....	.....	.....	21.3	21.3	22.3	17.6	8.9
24	19.4	15.9	88.7	....	.....	.....	.....	21.3	21.3	21.3	15.9	8.9
25	19.4	15.9	71.2	....	.....	.....	.....	21.3	21.3	19.4	15.9	8.9
26	20.[illegible]	18.5	68.4	....	.....	.....	.....	19.4	19.4	19.4	15.9	8.9
27	21.3	17.6	65.6	....	.....	.....	.....	14.3	17.6	19.4	14.3	8.9
28	20.4	17.6	62.9	....	.....	.....	.....	14.3	17.6	19.4	14.3	8.2
29	19.4	....	56.3	....	.....	.....	.....	14.3	17.6	20.4	14.3	8.2
30	20.4	....	60.2	....	.....	.....	.....	13.4	17.6	19.4	13.4	9.6
31	19.4	....	52.4	....	.....	.....	.....	15.0	....	19.4	....	9.6

Monthly Discharge of Little Cottonwood Creek near Salt Lake City, Utah, in 1910.

(Drainage area, 12.7 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	24.1	19.4	21.6	1.70	1.95	1,330
February	20.4	14.3	17.2	1.35	1.41	940
March	94.7	18.5	49.6	3.91	4.50	3,050
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....
August	21.3	13.4	16.8	1.32	1.52	1,030
September	21.3	13.4	17.3	1.36	1.52	1,030
October	25.2	15.9	19.9	1.49	1.71	1,160
November	18.5	13.4	16.5	1.30	1.45	980
December	16.8	8.2	11.9	0.94	1.03	730
The year	.....	.....	.....	.....	.....	.....

JORDAN RIVER NEAR LEHI.

Since the abandonment of the gaging station at outlet of Utah Lake, discharges have been computed from the combined quantities diverted from the Jordan River by the East Jordan, the South Jordan, the Utah and Salt Lake and the City Canal, and the discharge over the weir below the intakes of these canals. It represents the total outflow from Utah Lake plus the gain between the lake and the weir, a relatively small amount. These records have been compiled and furnished by Mr. H. W. Sheley and Mr. J. Fewson Smith.

Daily Discharge in Second-feet of Jordan River near Lehi, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	398	539	827	918	865	653	591	....	....
2	....	....	....	403	542	848	915	872	644	550	....	....
3	....	....	....	370	560	840	956	822	638	551	....	....
4	....	....	....	390	551	873	963	794	634	560	....	....
5	....	....	....	442	596	879	978	813	653	572	....	....
6	....	....	....	429	646	917	986	814	644	598	....	....
7	....	....	....	413	661	928	1,007	806	651	593	549	575
8	....	....	....	413	675	865	1,022	787	629	598	....	....
9	....	....	....	427	671	898	1,014	847	635	598	....	....
10	....	....	....	430	669	911	1,017	740	645	594	....	....
11	....	....	....	444	677	931	1,022	742	645	596	....	....
12	....	....	....	462	612	911	1,006	746	620	599	....	....
13	....	....	....	471	696	929	999	752	610	599	....	570
14	....	....	....	458	796	934	942	753	609	584	544	....
15	....	....	....	455	692	925	886	744	613	588	....	....
16	....	....	....	427	710	875	910	726	631	598	....	....
17	....	....	....	459	704	859	919	736	630	613	....	....
18	....	....	....	430	698	895	922	741	579	607	....	....
19	....	....	....	388	719	909	910	716	584	590	....	....
20	....	....	....	402	694	927	954	699	591	588	....	....
21	....	....	....	541	747	948	882	709	584	586	....	....
22	....	....	....	546	775	917	879	718	583	582	560	591
23	....	....	....	546	759	913	873	714	598	592	....	....
24	....	....	....	519	738	913	868	706	602	590	....	....
25	....	....	....	532	788	917	861	676	614	588	....	....
26	....	....	....	532	800	926	932	657	592	587	....	....
27	....	....	....	563	799	943	844	657	584	587	....	....
28	....	....	....	575	775	948	855	659	588	586	....	....
29	....	....	....	485	793	899	840	676	577	585	....	....
30	....	....	....	522	774	895	856	661	587	585	552	....
31	....	....	....	....	809	.....	837	670	....	587	....	586

Monthly Discharge of Jordan River near Lehi, Utah, for 1907.

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	72	.....	.....	4,440
February	.....	.....	170	.....	.....	9,430
March	.....	.....	325	.....	.....	19,980
April	575	370	462	.....	.....	27,500
May	809	539	699	.....	.....	42,970
June	948	827	903	.....	.....	53,750
July	1,022	837	929	.....	.....	57,130
August	872	661	742	.....	.....	45,650
September	653	583	615	.....	.....	36,610
October	613	550	587	.....	.....	36,120
November	.....	.....	551	.....	.....	32,810
December	.....	.....	601	.....	.....	35,780
The year	*1,022*	*370*	*555*	.....	.....	402,180

Note—No pumping during 1907.

Daily Discharge in Second-feet of Jordan River near Lehi, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	521	600	551	527	440	486	314	179	....
2	....	....	....	....	611	546	526	504	485	317	179	....
3	....	....	....	543	588	540	476	523	482	274	181	365
4	....	....	....	522	510	510	516	585	480	272	182	....
5	....	....	....	....	575	539	475	534	480	287	180	....
6	....	....	....	549	564	561	496	601	480	258	180	....
7	....	....	....	432	536	584	506	618	493	225	180	371
8	....	....	....	....	462	550	509	619	490	190	180	....
9	....	....	....	535	526	516	520	598	496	175	180	375
10	....	....	....	....	560	515	502	573	468	178	178	....
11	....	....	....	583	554	507	495	494	468	180	180	....
12	....	....	....	....	542	519	497	470	472	177	299	374
13	....	....	....	580	580	514	548	490	430	176	336	382
14	....	....	....	587	587	554	501	503	389	178	335	....
15	....	....	....	....	580	568	491	493	398	182	314	361
16	....	....	....	....	493	637	478	488	389	179	333	....
17	....	....	....	599	544	604	460	492	362	170	337	....
18	....	....	....	....	566	605	465	491	390	176	326	358
19	....	....	....	....	532	604	497	460	389	195	335	....
20	....	....	....	705	539	524	502	488	377	179	370	365
21	....	....	....	774	539	464	466	494	382	180	366	....
22	....	....	....	665	534	483	578	495	377	182	357	354
23	....	....	....	614	506	586	595	492	430	195	372	....
24	....	....	....	666	529	619	598	463	349	184	371	....
25	....	....	678	....	531	660	613	455	295	182	357	....
26	....	....	667	615	527	551	616	486	320	184	360	....
27	....	....	636	....	544	469	449	487	314	186	....	....
28	....	....	647	474	545	503	394	464	287	188	372	....
29	....	....	646	596	550	527	400	467	293	191	....	....
30	....	....	582	591	533	544	420	465	269	191	372	....
31	....	....	582	....	547	.....	386	528	....	175	....	....

Monthly Discharge of Jordan River near Lehi, Utah, in 1908.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	561	.....	.....	34,530
February	.....	.....	568	.....	.....	33,630
March	.....	.....	632	.....	.....	38,890
April	774	432	553	.....	.....	32,750
May	611	462	546	.....	.....	33,590
June	660	464	553	.....	.....	32,880
July	616	386	500	.....	.....	30,744
August	619	440	507	.....	.....	31,180
September	496	269	408	.....	.....	24,240
October	314	175	205	.....	.....	12,340
November	372	178	282	.....	.....	16,770
December	.....	.....	376	.....	.....	23,110
The year	774	175	474	.....	.....	*344,645

*Pumped June 20-October 31, 22,460 acre-feet.

Daily Discharge in Second-feet of Jordan River near Lehi, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	605	....	672	766	1,004	1,276	1,025	837	735	668	699
2	439	608	699	....	776	1,015	1,277	916	843	733	636	685
3	....	....	....	....	748	1,037	1,277	936	837	708	638	707
4	....	....	....	603	767	1,075	1,257	1,098	800	711	612	701
5	....	612	699	....	699	1,091	1,281	987	777	708	653	703
6	....	....	....	643	779	1,088	1,235	991	765	704	641	312
7	462	....	706	....	780	1,150	1,203	984	807	669	658	521
8	....	584	....	670	747	1,124	1,203	944	807	684	692	661
9	....	....	660	640	811	1,149	1,189	950	841	686	673	722
10	....	610	....	....	740	1,155	1,241	938	811	694	674	705
11	....	....	685	....	872	1,194	1,124	945	628	704	678	740
12	475	622	....	....	830	1,215	1,145	935	780	697	659	757
13	489	....	684	....	797	1,205	1,139	923	785	698	682	721
14	489	....	....	617	865	1,222	1,126	912	780	697	681	713
15	500	....	682	....	861	1,218	1,140	889	777	697	582	783
16	....	....	....	....	828	1,250	1,138	898	749	694	673	774
17	....	668	679	661	838	1,253	1,137	903	761	686	677	762
18	502	....	601	....	885	1,259	1,156	897	728	693	675	762
19	502	720	....	674	892	1,297	1,141	912	758	700	638	762
20	548	....	695	....	911	1,300	1,136	883	758	696	695	762
21	....	701	....	600	928	1,294	1,031	853	691	698	684	762
22	....	....	691	666	917	1,280	1,060	725	751	698	697	762
23	....	698	....	714	942	1,254	1,034	871	749	698	699	738
24	....	....	709	698	970	1,243	1,083	825	749	698	719	755
25	....	....	....	701	947	1,261	1,033	832	748	699	731	752
26	522	690	699	688	963	1,289	1,018	801	746	704	722	752
27	....	700	....	731	964	1,333	988	770	732	676	576	761
28	....	....	709	719	932	1,309	1,027	788	736	715	698	769
29	....	....	....	686	945	1,293	1,029	864	737	707	699	769
30	593	....	642	711	973	1,281	1,026	889	735	680	699	769
31	....	....	....	....	961	.....	1,016	827	....	693	....	794

Monthly Discharge of Jordan River near Lehi, Utah, in 1909.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	524	.....	.....	32,195
February	.....	.....	642	.....	.....	35,737
March	.....	.....	683	.....	.....	42,000
April	734	600	677	.....	.....	40,200
May	973	699	859	.....	.....	52,800
June	1,333	1,004	1,205	.....	.....	71,700
July	1,281	988	1,139	.....	.....	70,000
August	1,025	725	902	.....	.....	55,500
September	843	691	771	.....	.....	45,800
October	735	669	698	.....	.....	42,900
November	731	576	673	.....	.....	40,000
December	794	312	720	.....	.....	44,300
The year....	1,333	312	791	.....	.....	573,200

Note—No pumping during 1909.

Daily Discharge in Second-feet of Jordan River near Lehi, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	819	820	955	1,048	944	1,064	700	506	505	298	330	383
2.....	854	790	941	1,050	966	968	685	497	503	278	330	391
3.....	798	824	942	947	980	955	743	476	505	320	333	400
4.....	736	837	923	1,064	986	995	700	529	502	225	333	398
5.....	896	837	906	1,061	997	1,011	587	466	507	300	336	398
6.....	854	837	906	1,051	966	1,010	637	452	514	307	336	399
7.....	841	837	905	1,046	956	993	618	450	513	308	338	399
8.....	841	836	906	1,060	952	865	602	434	508	304	338	400
9.....	841	823	902	1,060	963	923	570	445	502	307	338	404
10.....	845	820	905	1,060	875	941	590	440	496	307	338	404
11.....	841	831	905	1,077	945	867	583	442	490	290	338	404
12.....	840	831	905	1,046	942	752	587	437	503	304	338	402
13.....	851	831	927	1,007	934	810	584	427	507	280	328	402
14.....	851	855	945	733	912	855	601	416	508	285	328	407
15.....	851	799	945	881	875	841	578	442	536	283	327	417
16.....	821	800	953	989	882	843	560	437	508	370	327	416
17.....	792	812	953	973	939	805	632	439	478	338	348	414
18.....	820	829	967	1,007	948	838	528	432	530	327	347	406
19.....	790	829	980	983	947	831	549	431	540	327	309	405
20.....	828	854	993	950	890	835	542	433	490	343	298	423
21.....	828	857	1,028	882	928	705	536	418	417	343	324	405
22.....	791	867	1,046	932	906	785	531	494	369	338	324	396
23.....	836	867	1,046	921	928	679	521	526	322	338	354	386
24.....	836	867	1,037	951	922	692	560	498	315	335	354	398
25.....	846	867	1,028	952	871	697	548	516	244	335	354	404
26.....	824	893	1,029	956	894	698	556	512	262	335	354	404
27.....	837	914	1,060	970	886	703	538	528	265	346	348	404
28.....	862	915	1,068	990	853	724	526	529	281	332	348	404
29.....	820	....	827	927	905	746	522	477	256	337	360	404
30.....	841	....	827	961	910	745	521	491	261	330	358	404
31.....	841	....	827	....	922	.....	521	505	....	....	....	404

Monthly Discharge of Jordan River near Lehi, Utah, in 1910.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	896	736	830	.....	.....	51,100
February	915	799	811	.....	.....	45,000
March	1,068	827	951	.....	.....	58,500
April	1,077	733	984	.....	.....	58,600
May	997	853	926	.....	.....	57,000
June	1,064	679	839	.....	.....	49,900
July	743	521	582	.....	.....	35,800
August	529	427	470	.....	.....	29,000
September	540	244	435	.....	.....	26,100
October	370	225	316	.....	.....	19,500
November	360	298	337	.....	.....	20,100
December	423	383	402	.....	.....	24,800
The year.....	1,077	225	657	.....	.....	*474,400

*Note—Pumped August 21-September 31, 800 acre-feet.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Jordan River, in Jordan Narrows, near Lehi, Utah, 1901 to 1910.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1901	.....	.....	.....	.....	.....	.....	11.38	8.25	5.48	3.75	.....	.....	.....	....	....
1902	3.57	2.39	2.64	13.03	12.12	10.30	6.95	9.22	14.05	17.28	.....	.....	.....	....	....
1903	.....	.....	.....	.....	21.03	22.14	24.60	19.06	9.82	8.61	0.24	.....	.....	....	....
1904	.....	.....	.....	.....	15.87	24.94	25.21	24.11	22.79	.....	.....	.....	.....	....	....
1905	.....	.....	.....	.....	22.75	28.32	29.70	26.32	21.48	.....	.....	.....	.....	....	....
1906	.....	.....	.....	.....	21.83	28.80	28.90	22.99	17.97	.....	.....	.....	.....	....	....
1907	4.44	9.43	19.98	27.50	42.97	53.75	57.13	45.65	36.61	36.12	32.81	35.78	402.18	....	....
1908	34.53	33.63	38.89	32.75	33.59	38.22	30.74	31.18	24.24	12.34	16.77	23.11	344.65	....	....
1909	22.20	35.74	42.00	40.20	52.80	71.70	70.00	55.50	45.80	42.90	40.00	44.30	573.20	....	....
1910	51.10	45.00	58.50	58.60	57.00	49.90	35.80	29.00	26.10	19.50	20.10	24.80	474.40	....	....
Mean.	25.17	25.24	32.40	34.42	31.11	35.86	32.04	27.13	22.43	20.07	21.98	32.00	339.85	....	....

Note—1901-1906 inclusive from reports of J. Fewson Smith. 1907-1910 inclusive from data compiled by H. W. Sheley. See footnotes following monthly discharge tables.

UTAH LAKE GAGE HEIGHTS.

Compromise Level 4515.799. Second Column Shows Elevation in Feet, + Above, — Below, Compromise Level Figures 45 to Be Prefixed to All Readings in First Column to Give Elevation Above Sea Level.

	1900		1901		1902		1903		1904		1905		1906		1907		1908		1909		1910	
Jan. 1	.....	.....	13.4	—2.4	13.2	—2.6	12.1	—3.7	11.6	—4.2†	12.4	—3.4	11.6	—4.2†	13.9	—1.9†	16.5	+0.7	15.3	—0.5†	17.0	+1.2
" 15	.....	.....	13.6	—2.2	13.3	—2.5	12.3	—3.5	11.8	—4.0	12.6	—3.2	11.7	—4.1	14.1	—1.7	16.5	+0.7	15.6	—0.2	17.1	+1.3
Feb. 1	15.4	—0.4	13.8	—2.0	13.5	—2.3	12.5	—3.3	12.0	—3.8	12.9	—2.9	12.1	—3.7	14.4	—1.4	16.5	+0.7	16.1	+0.3	17.1	+1.3
" 15	15.3	—0.5	14.0	—1.8	13.6	—2.2	12.8	—3.0	12.2	—3.6	13.2	—2.6	12.2	—3.6	14.8	—1.0	16.6	+0.8*	16.2	+0.4	17.1	+1.3
March 1	15.4	—0.4*	14.4	—1.4	13.9	—1.9	12.9	—2.9	12.6	—3.2	13.4	—2.4	12.5	—3.3	15.0	—0.8	16.6	+0.8	16.3	+0.5	17.3	+1.5
" 15	15.4	—0.4	14.4	—1.4	14.0	—1.8	.....	.....	13.0	—2.8	13.5	—2.3	12.7	—3.1	15.3	—0.5	16.6	+0.8	16.4	+0.6	17.4	+1.6
April 1	15.4	—0.4	14.6	—1.2*	14.0	—1.8	13.7	—2.1*	13.4	—2.4	13.8	—2.0	13.0	—2.8	15.6	—0.2	16.6	+0.8	16.5	+0.7	17.6	+1.8
" 15	15.4	—0.4	14.6	—1.2	14.1	—1.7*	13.7	—2.1	13.6	—2.2	14.0	—1.8	13.4	—2.4	16.0	+0.2	16.4	+0.6	16.5	+0.7	17.6	+1.8
May 1	15.4	—0.4	14.6	—1.2	14.0	—1.8	13.7	—2.1	13.8	—2.0	14.1	—1.7*	13.8	—2.0	16.4	+0.6	16.2	+0.4	17.0	+1.2	17.7	+1.9*
" 15	15.2	—0.6	14.6	—1.2	13.9	—1.9	13.5	—2.3	13.9	—1.9	14.0	—1.8	14.1	—1.7	16.7	+0.9	16.1	+0.3	17.5	+1.7	17.6	+1.8
June 1	15.1	—0.7	14.6	—1.2	13.9	—1.9	13.5	—2.3	14.2	—1.6*	13.6	—1.9	14.1	—1.4	16.9	+1.1	16.1	+0.3	18.1	+2.3	17.3	+1.5
" 15	14.9	—0.9	14.4	—1.4	13.8	—2.0	13.5	—2.3	14.2	—1.6	13.5	—2.3	14.5	—1.3*	17.5	+1.7	16.0	+0.2	18.7	+2.9*	16.9	+1.1
July 1	14.5	—1.3	14.0	—1.8	13.5	—2.3	13.2	—2.6	14.0	—1.8	12.9	—2.9	14.3	—1.5	17.8	+2.0*	15.8	+0.0	18.6	+2.8	16.3	+0.5
" 15	14.2	—1.6	13.8	—2.0	13.2	—2.6	12.7	—3.1	13.6	—2.2	12.5	—3.3	14.1	—1.7	17.8	+2.0	15.6	—0.2	18.2	+2.4	16.0	+0.2
Aug. 1	13.9	—1.9	13.6	—2.2	12.9	—2.9	12.4	—3.4	13.2	—2.6	12.0	—3.8	13.7	—2.1	17.4	+1.6	15.3	—0.5	17.7	+1.9	15.7	—0.1
" 15	13.6	—2.2	13.2	—2.6	12.7	—3.1	12.0	—3.8	12.9	—2.9	11.6	—4.2	13.4	—2.4	17.0	+1.2	15.0	—0.8	17.4	+1.6	15.5	—0.3
Sept. 1	13.2	—2.6	13.1	—2.7	.....	.....	11.6	—4.2	12.6	—3.2	11.2	—4.6	13.2	—2.6	16.7	+0.9	14.6	—1.2	17.2	+1.4	15.1	—0.7
" 15	13.0	—2.8	12.9	—2.9	.....	.....	11.3	—4.5	12.4	—3.4	11.0	—4.8	13.2	—2.6	16.5	+0.7	14.4	—1.4†	17.1	+1.3	14.8	—1.0
Oct. 1	12.8	—3.0†	12.7	—2.9	11.9	—3.9	.....	.....	12.1	—3.7	10.8	—5.0†	13.1	—2.7	16.3	+0.5	14.4	—1.4	16.9	+1.1	14.5	—1.3†
" 15	12.8	—3.0	12.6	—3.2†	11.7	—4.1	11.1	—4.7†	12.1	—3.7	10.8	—5.0	12.9	—2.9	16.3	+0.5	14.6	—1.2	16.8	+1.0	14.5	—1.3
Nov. 1	12.8	—3.0	12.7	—3.1	11.6	—4.2†	11.2	—4.6	12.1	—3.7	11.0	—4.8	13.1	—2.7	16.3	+0.5	14.8	—1.0	16.7	+0.9	14.6	—1.2
" 15	12.8	—3.0	12.8	—3.0	11.6	—4.2	11.2	—4.6	12.1	—3.7	11.1	—4.8	13.2	—2.6	16.4	+0.6	15.0	—0.8	16.8	+1.0	14.6	—1.2
Dec. 1	13.2	—2.6	12.9	—2.9	11.7	—4.1	11.3	—4.5	12.2	—3.6	11.3	—4.5	13.4	—2.4	16.4	+0.6	15.1	—0.7	16.8	+1.0	14.7	—1.1
" 15	13.3	—2.5	13.0	—2.8	11.9	—3.9	11.5	—4.3	12.3	—3.5	11.4	—4.4	13.6	—2.2	16.4	+0.6	15.2	—0.6	17.0	+1.2	14.8	—1.0

PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH.

This station, which was established February 1, 1905, to determine the amount of water available for irrigation in Utah Valley, is located about 1 mile above the Telluride Power Company's dam and about 4 miles above the mouth of the canyon and about 11 miles from Provo.

The station is below all tributaries, South Fork entering about one-fourth mile above the station. Some water is diverted above the station for irrigation in Heber Valley, and all the normal low-water flow is diverted for irrigation below the station. The Telluride Power Company diverts water about 1 mile below the station for power development, but returns it to the river at the mouth of the canyon.

The equipment consists of a cable and car and an inclined staff gage. The gage datum was changed July 24, 1908, when the station was established at a point one-fourth mile above the old site.

The records are not affected by ice nor by artificial control above, but there seems to be some backwater effect either from the dam below the station or from some unknown cause, and the records since the dam was raised in July, 1908, have not been satisfactory.

Discharge Measurements of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
February 14..	W. G. Swendsen.....	69	113	3.80	222
May 10.....	H. S. Kleinschmidt.....	76	222	5.30	886
June 3.... ..	Thomas Grieve, Jr.....	80	244	5.40	993
June 13.....	.....do	96	396	7.00	1,760
July 7.....	.....do	71	156	4.20	402

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	226	226	310	576	530	1,336	486	226	310	268	354	226
2.....	310	226	268	486	530	1,098	486	268	310	268	310	226
3.....	354	184	268	530	530	912	486	268	310	226	310	226
4.....	226	184	268	354	576	958	486	268	310	226	310	354
5.....	226	184	226	354	670	958	486	268	310	226	310	354
6.....	268	142	226	354	766	1,004	486	226	310	268	310	310
7.....	268	100	226	354	354	1,432	442	226	310	268	310	310
8.....	398	184	226	398	718	1,098	442	226	310	268	310	310
9.....	398	142	268	442	766	912	354	226	310	268	268	310
10.....	766	184	268	530	912	1,004	354	226	268	268	268	310
11.....	310	226	310	530	958	912	268	184	268	268	268	354
12.....	184	184	670	530	1,336	1,384	268	184	268	268	268	354
13.....	226	184	530	442	1,384	1,576	268	184	268	268	268	442
14.....	290	226	398	442	1,098	1,876	268	184	310	268	268	354
15.....	354	268	354	486	958	1,576	310	184	310	268	268	268

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	268	310	226	486	912	1,480	268	184	310	226	268	268
17.....	310	268	268	576	862	1,480	268	184	310	226	268	310
18.....	268	268	268	670	766	1,242	268	184	310	226	310	310
19.....	576	354	226	670	814	1,146	268	184	310	226	310	310
20.....	576	310	268	622	1,050	1,050	268	354	310	226	226	310
21.....	530	310	268	670	1,146	958	268	268	268	226	184	268
22.....	184	310	354	718	1,242	912	268	354	268	226	268	268
23.....	268	268	398	814	1,288	862	310	310	268	226	268	268
24.....	268	268	530	766	1,288	862	310	268	268	226	310	310
25.....	268	268	670	718	1,288	912	268	268	268	226	310	310
26.....	226	268	530	670	1,626	958	268	268	226	226	310	486
27.....	226	226	486	622	1,384	1,146	268	268	268	226	268	486
28.....	226	268	486	576	1,336	1,050	268	268	268	226	268	398
29.....	226	....	442	576	1,432	576	268	268	268	268	268	354
30.....	184	....	486	530	1,336	530	226	268	268	268	226	310
31.....	184	....	530	....	1,098	.....	226	268	....	268	....	310

Monthly Discharge of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1906.

(Drainage area, 600 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	274	0.46	0.53	16,800
February	340	153	250	.42	.43	13,900
March	657	240	360	.60	.69	22,100
April	774	340	527	.88	.98	31,400
May	1,680	340	973	1.62	1.87	59,800
June	1,860	500	1,090	1.82	2.02	64,900
July	479	240	331	.55	.64	20,400
August	359	210	260	.43	.50	16,000
September	322	256	295	.49	.55	17,600
October	272	240	258	.43	.50	15,900
November	340	210	289	.48	.54	17,200
December	479	240	320	.53	.61	19,700
The year....	1,860	153	436	0.73	9.86	316,000

Discharge Measurements of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 18.....	G. T. Burridge.....	84	282	5.90	1,390
July 6.....	.....do	102	390	7.45	1,880
July 26.....	La Rue and Burridge.....	76	188	4.93	642
August 20....	.....do	70	138	4.15	349

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	305	272	418	418	920	1,120	1,680	458	387	387	387	387
2.....	272	305	378	500	920	1,285	1,860	458	387	387	387	387
3.....	272	418	418	588	822	1,740	1,920	418	387	387	387	387
4.....	305	680	418	634	726	1,800	1,920	458	387	387	387	387
5.....	305	774	418	726	726	1,980	2,100	418	500	387	387	387
6.....	340	680	378	726	680	2,160	2,040	418	500	387	387	387
7.....	305	500	378	680	680	2,280	1,920	378	418	387	387	387
8.....	272	458	340	588	634	2,340	1,680	378	418	387	387	387
9.....	272	500	418	588	634	2,160	1,505	378	418	387	387	387
10.....	240	458	378	726	634	1,860	1,395	378	418	387	387	387
11.....	272	500	418	920	774	1,285	1,340	378	418	387	387	387
12.....	272	458	418	970	870	1,680	1,175	378	418	387	387	387
13.....	272	458	378	1,285	1,020	2,040	1,120	340	418	387	387	387
14.....	272	500	378	1,395	870	1,680	1,175	340	387	387	387	387
15.....	272	458	340	1,560	726	1,505	1,070	340	387	387	387	387
16.....	272	458	305	1,560	726	1,285	970	340	387	387	387	387
17.....	305	340	458	1,395	870	1,175	870	340	387	387	387	387
18.....	305	305	544	1,230	1,020	1,175	744	340	387	387	387	340
19.....	272	340	588	1,070	1,285	1,340	774	340	340	387	387	340
20.....	240	340	634	920	1,680	1,560	726	340	340	387	387	340
21.....	210	340	726	774	2,040	1,680	680	340	387	387	387	387
22.....	210	418	634	774	2,220	1,860	634	340	387	387	387	387
23.....	181	500	588	774	2,220	1,920	634	340	387	387	387	387
24.....	210	418	500	774	2,340	1,450	588	340	387	387	387	387
25.....	272	378	500	774	2,160	1,285	588	387	387	387	387	387
26.....	305	418	500	774	1,680	1,285	588	387	387	387	387	387
27.....	305	418	500	822	1,450	1,340	544	387	387	387	387	458
28.....	340	378	458	970	1,285	1,560	544	387	387	387	387	418
29.....	272	....	458	970	1,175	1,740	500	387	387	387	387	387
30.....	272	....	418	920	1,120	1,800	458	418	387	387	387	305
31.....	272	....	378	....	1,120	.....	458	387	....	387	....	387

Monthly Discharge of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1907.

(Drainage area, 600 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	340	196	280	0.47	0.54	17,200
February	774	272	450	.75	.78	25,000
March	750	322	460	.77	.88	28,300
April	1,560	418	897	1.49	1.67	53,400
May.	2,340	634	1,170	1.95	2.25	71,900
June	2,340	1,120	1,650	2.75	3.07	98,200
July	2,100	470	1,120	1.87	2.16	68,900
August	458	359	387	.65	.74	23,800
September	500	359	400	.67	.74	23,800
October	398	378	381	.64	.73	23,400
November	378	378	378	.63	.70	22,500
December	458	305	378	.63	.73	23,200
The year....	2,340	196	663	1.10	14.99	480,000

Discharge Measurements of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 22	E. C. La Rue	76	197	5.02	245
September 5	do	72	110	2.13	229
October 30	do	74	170	3.05	390

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	378	210	378	340	500	1,070	1,070	310	225	328	382	346
2	378	272	378	340	634	970	1,020	275	225	328	382	346
3	340	340	378	340	680	1,020	1,020	258	225	346	382	382
4	378	340	378	340	774	970	970	258	225	364	382	364
5	305	340	418	305	726	1,070	970	225	225	382	382	364
6	272	305	378	305	870	1,020	970	292	225	382	382	364
7	240	340	340	340	774	970	970	346	225	346	382	346
8	240	340	340	340	774	1,020	870	310	225	364	382	346
9	305	340	340	340	870	970	822	258	241	364	364	364
10	378	340	340	340	970	970	822	258	225	364	382	364
11	305	305	340	340	870	1,070	726	292	241	364	364	364
12	340	340	340	340	822	1,340	694	346	241	382	364	346
13	305	340	340	378	970	1,340	662	328	241	382	364	364
14	340	305	378	418	870	1,450	630	292	241	382	364	364
15	340	305	418	458	822	1,560	598	275	241	382	364	364
16	340	305	418	500	822	1,800	566	241	241	495	364	364
17	340	340	458	634	870	1,680	534	241	241	457	364	364
18	340	305	458	588	870	1,450	502	225	241	400	364	346
19	340	305	418	588	870	1,285	470	225	225	400	364	495
20	340	340	378	680	1,070	1,175	438	241	225	419	364	382
21	340	305	340	726	970	1,285	403	241	225	400	364	495
22	340	305	340	774	920	1,340	371	241	225	400	382	495
23	340	340	340	870	920	1,395	339	225	225	382	364	328
24	340	340	340	822	1,070	1,230	307	225	225	382	382	346
25	340	305	340	774	920	1,230	275	225	258	400	364	346
26	340	305	340	680	1,020	1,285	275	225	364	382	364	346
27	305	305	340	680	1,070	1,285	241	225	310	382	364	346
28	340	340	340	634	1,020	1,230	258	225	328	382	275	328
29	305	458	340	588	970	1,175	258	225	328	382	258	310
30	305	....	305	544	970	1,070	292	225	328	382	310	328
31	272	....	305	....	1,020	.....	310	225	....	382	....	310

Monthly Discharge of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1908.

(Drainage area, 600 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	378	240	329	0.55	0.63	20,200
February	458	225	330	.55	.57	19,000
March	458	322	372	.62	.72	22,900
April	870	322	515	.86	.96	30,600
May	1,070	500	886	1.48	1.70	54,500
June	1,800	970	1,230	2.05	2.29	73,200
July	1,070	241	579	.97	1.11	35,600
August	346	225	260	.43	.50	16,000
September	364	225	253	.42	.47	15,100
October	504	328	386	.64	.74	23,700
November	382	258	364	.61	.68	21,700
December	495	310	365	.61	.70	22,400
The year	1,800	225	489	0.81	11.07	355,000

Discharge Measurements of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 10	Wm. M. O'Neill	75.0	166	2.89	517
May 11	E. S. Fuller	73.0	350	5.70	1,050
May 14	L. J. Towne and E. C. La Rue	82.5	280	4.8	1,370
June 17	E. S. Fuller	103.0	423.5	6.52	2,115
June 20	E. C. La Rue and M. R. Elton	100.0	449.0	6.41	2,136
October 24	Porter and Henshaw	74.0	140.0	2.60	370

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	384	301	301	471	950	1,683	1,815	317	680	454	419	436
2	384	317	301	525	810	1,878	1,683	367	581	436	384	562
3	384	317	317	600	856	2,131	1,683	350	562	454	350	419
4	384	333	317	639	1,046	2,193	1,748	350	525	454	350	384
5	419	333	350	553	1,271	2,720	1,618	317	581	471	419	367
6	902	254	350	507	1,271	2,875	1,554	384	562	436	419	317
7	810	254	367	454	1,368	2,960	1,368	401	562	471	401	350
8	525	367	367	454	1,490	2,790	1,148	367	562	419	401	419
9	525	285	317	471	1,490	2,167	1,046	350	581	436	384	471
10	525	285	269	489	1,873	2,146	998	350	526	419	525	384

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11.....	1,046	301	254	489	1,944	2,128	950	367	525	419	419	350
12.....	639	384	254	489	1,680	2,111	856	384	525	436	384	367
13.....	600	384	254	507	1,428	2,113	680	350	525	384	367	419
14.....	1,490	350	254	525	1,368	2,113	454	350	525	401	419	384
15.....	1,490	333	384	639	1,398	2,131	419	317	525	419	384	317
16.....	723	350	367	744	1,428	2,131	436	419	525	384	401	285
17.....	600	350	384	856	1,310	2,127	401	350	525	401	401	195
18.....	562	333	436	1,122	1,254	2,131	401	367	525	384	384	254
19.....	525	350	436	1,310	1,310	2,111	384	384	419	384	419	317
20.....	639	350	430	1,227	1,459	2,131	401	367	401	384	471	317
21.....	659	350	401	917	1,554	2,100	401	367	384	384	333	301
22.....	680	317	384	788	1,683	2,000	384	389	384	384	525	350
23.....	639	317	384	766	1,683	2,000	367	419	471	384	471	350
24.....	525	350	419	856	1,618	2,043	384	401	419	384	471	367
25.....	419	333	419	810	1,428	2,000	367	419	454	367	471	384
26.....	419	317	436	856	1,368	2,079	384	419	489	367	471	350
27.....	384	285	419	1,196	1,554	1,977	350	436	471	384	471	350
28.....	317	301	454	1,174	1,910	2,043	350	419	401	367	384	350
29.....	317	....	454	1,148	1,748	1,944	350	401	454	350	367	317
30.....	317	....	471	950	1,715	1,878	333	471	489	350	419	350
31.....	350	....	454	....	1,748	.....	350	454	....	419	....	317

Monthly Discharge of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1909.

(Drainage area, 600 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,490	317	600	1.00	1.15	36,800
February	384	254	326	0.54	0.57	18,200
March	471	254	354	.59	.68	21,800
April	1,310	454	752	1.24	1.38	59,500
May	1,944	810	1,458	2.43	2.80	89,700
June	2,960	1,683	2,232	3.73	4.16	134,000
July	1,813	333	794	1.32	1.55	48,800
August	471	317	381	.64	.73	23,400
September	680	384	505	.84	.94	30,000
October	471	350	419	.70	.81	25,800
November	525	333	416	.70	.78	24,700
December	562	195	358	.61	.70	22,000
The year....	2,960	195	716	1.20	16.25	534,700

Discharge Measurements of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 9.....	E. S. Fuller.....	78.0	181	3.10	695

Daily Discharge in Second-feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	1,280	352	352	650	1,310	1,060	228	278	212	278	278	333
2.....	1,010	371	556	650	1,170	1,010	244	244	212	278	278	314
3.....	579	182	698	698	979	952	244	244	212	261	296	314
4.....	491	212	798	650	1,030	874	228	244	212	261	296	333
5.....	35[illegible]	244	798	900	952	798	244	261	212	261	296	333
6.....	352	296	798	698	900	900	244	261	212	261	296	333
7.....	430	244	650	602	773	1,090	244	228	212	278	278	314
8.....	450	333	602	650	926	512	212	228	212	261	296	314
9.....	470	333	650	723	979	450	212	212	212	261	314	314
10.....	430	371	556	748	1,140	371	212	228	212	261	296	333
11.....	450	371	512	874	1,530	371	244	212	212	278	296	390
12.....	430	333	491	926	1,510	352	212	228	212	278	296	390
13.....	390	390	512	900	1,450	371	261	212	212	278	296	352
14.....	512	390	650	900	1,510	390	244	212	244	278	296	314
15.....	470	602	723	874	1,460	371	244	212	244	278	314	296
16.....	410	390	773	798	1,170	352	244	212	261	278	314	314
17.....	352	314	798	748	1,140	314	261	212	278	278	296	352
18.....	314	390	748	798	952	296	244	212	278	296	314	333
19.....	296	352	848	900	900	314	244	197	278	314	333	333
20.....	390	352	798	979	773	278	244	197	278	314	314	352
21.....	410	390	900	1,140	823	244	244	197	261	314	314	333
22.....	410	410	979	1,140	823	278	228	212	261	296	333	314
23.....	450	390	1,170	1,060	798	278	228	197	261	296	352	296
24.....	450	430	952	1,110	823	228	244	182	261	278	352	296
25.....	491	430	900	1,250	823	244	228	212	261	278	333	352
26.....	371	352	848	1,420	1,010	228	197	212	261	296	333	314
27.....	352	390	823	1,550	952	244	182	212	278	278	333	314
28.....	371	390	848	1,560	900	228	212	212	278	278	333	314
29.....	352	....	874	1,510	979	244	244	212	261	278	333	296
30.....	278	....	748	1,390	1,170	228	244	212	261	278	333	296
31.....	333	....	650	....	1,060	.....	244	212	....	278	....	314

Monthly Discharge of Provo River Above Telluride Power Company's Dam near Provo, Utah, in 1910.

(Drainage area, 600 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	1,280	278	457	0.76	0.88	28,100
February	602	182	357	.60	.62	19,800
March	1,170	352	742	1.24	1.42	45,600
April	1,560	602	959	1.60	1.78	57,100
May	1,530	773	1,060	1.77	2.22	65,200
June	1,090	228	462	.77	.86	27,500
July	261	182	234	.39	.45	14,400
August	278	182	220	.37	.42	13,500
September	278	212	242	.40	.45	14,400
October	314	261	280	.46	.54	17,200
November	352	278	311	.52	.58	18,500
December	390	296	326	.59	.63	20,000
The year	1,560	182	471	0.79	10.85	341,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Provo River Above Telluride Power Company's Dam near Provo, Utah, 1906 to 1910.

(Drainage area, 600 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1906	16.80	13.90	22.10	31.40	59.80	64.90	20.40	16.00	17.60	15.90	17.20	19.70	316.00	0.73	9.86
1907	17.20	25.00	28.30	53.40	71.90	98.20	68.90	23.80	23.80	23.40	22.50	23.20	480.00	1.10	14.99
1908	20.20	19.00	22.90	30.60	54.50	73.20	35.60	16.00	15.10	23.70	21.70	22.40	355.00	0.81	11.07
1909	36.80	18.20	21.80	59.50	89.70	134.00	48.80	23.40	30.00	25.80	24.70	22.00	534.70	1.20	16.25
1910	28.10	19.80	45.60	57.10	65.20	27.50	14.40	13.50	14.40	17.20	18.50	20.00	341.00	0.79	10.85
Mean.	23.28	19.18	28.14	46.40	68.22	79.56	37.60	18.54	20.18	21.20	20.92	21.46	405.34	0.93	12.60

MONTHLY RUN-OFF

In Thousands of Acre Feet of Provo River at Mouth of Canyon near Provo, Utah, 1889 to 1910.

(Drainage area, 640 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft per Sq. Mile	Depth in inches on Drainage Area
1889	.....	.....	.....	.....	.....	.....	.....	8.92	8.93	11.07	13.33	23.62	.....	....	....
1890	18.57	20.92	31.99	49.98	118.45	70.45	19.31	15.50	14.52	18.70	18.02	18.02	414.54	0.89	12.13
1891	15.68	17.24	30.26	28.43	75.40	70.81	26.01	15.99	18.68	23.39	22.61	21.09	365.59	0.79	10.71
1892	20.20	20.18	22.20	22.43	66.36	89.90	27.12	12.36	11.96	14.82	16.60	15.81	340.04	0.73	9.96
1893	15.43	15.27	21.58	39.24	76.06	94.02	26.50	15.31	15.35	21.39	23.09	25.40	388.64	0.83	11.56
1894	22.37	21.72	29.58	40.88	89.10	66.05	19.18	15.19	25.59	23.37	22.31	20.97	397.29	0.85	11.60
1895	20.97	18.11	25.89	40.64	74.77	32.25	16.05	13.22	12.44	15.62	17.86	18.63	306.42	0.65	9.07
1896	19.80	17.14	24.47	37.43	71.69	92.71	23.61	19.12	18.39	20.84	25.04	23.98	394.22	0.85	11.60
1897	24.60	27.77	25.51	50.94	114.12	47.37	18.14	13.84	15.47	27.61	25.77	22.87	414.00	0.89	12.12
1898	17.40	17.05	23.98	32.68	58.84	48.97	12.42	9.96	9.94	12.19	16.72	17.16	279.03	0.60	8.19
1899	17.65	14.83	24.68	50.88	71.88	129.54	41.75	20.72	19.64	22.75	.....	.....	.....	....	....
1900	.....	.....	.....	.....	.....	24.04	11.13	10.45	10.47	13.40	21.36	.....	.....	....	....
1901	19.31	26.16	20.48	23.33	72.62	23.74	14.70	14.63	14.28	15.80	16.60	17.16	278.80	0.60	8.17
1902* ...	.....	.....	.....	.....	81.17	43.47	13.40	11.50	11.69	15.06	18.21	17.95	.....	....	....
1904	15.00	21.46	22.86	28.92	71.85	69.59	15.73	12.92	10.44	11.35	12.02	12.59	305.77	0.66	8.94
1905† ...	8.73	10.55	17.24	19.90	27.65	43.60	7.93	7.05	5.96	9.62	10.62	7.55	175.41	0.41	5.20
Mean.	18.23	19.05	25.50	35.90	76.40	63.80	19.55	13.55	13.97	17.32	18.78	18.78	340.80	0.73	9.94

Note—†Station abandoned 1905. *1902 missing.

HOBBLE CREEK, NEAR SPRINGVILLE, UTAH.

The station was established March 23, 1904. It is located about 1 mile above the mouth of the canyon, 4 miles southeast of Springville, Utah, 600 feet northeast of the head of Mapleton Canal, and about 1,200 feet southwest of the Springville electric power plant. The conditions and the bench marks are described in Water-Supply Paper No. 176, page 58, where are given also references to publications that contain data for previous years.

Discharge Measurements of Hobble Creek near Springville, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 3	Thos. Grieve, Jr	18.5	17.8	1.95	66
August 7	do	17.5	16.1	1.55	19

Daily Gage Height, in Feet, of Hobble Creek near Springville, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	1.25	....	1.7	2.5	2.5	1.85	1.65	1.55	1.5	1.55	....
2	1.25	....	....	1.7	2.5	2.45	1.85	1.6	1.6	1.5	1.55	....
3	....	1.2	....	1.6	2.7	2.4	1.9	1.6	1.6	1.5	1.5	1.5
4	....	....	....	1.55	3.3	2.35	1.9	1.6	1.55	1.55	....	....
5	....	1.2	1.35	1.55	3.8	2.35	1.85	....	1.55	1.55	1.5	1.5
6	....	....	....	1.6	4.0	2.45	1.85	1.55	1.55	1.55	1.45	....
7	1.25	1.2	1.25	1.7	3.7	....	1.85	1.5	1.55	1.5	1.5	1.55
8	....	....	....	1.88	3.7	2.3	1.85	1.55	1.55	1.5	....	....
9	....	1.2	1.25	2.1	3.8	2.25	1.85	1.55	....	1.45	....	....
10	1.25	....	1.3	2.35	3.9	2.25	1.8	1.55	1.55	1.4	....	....
11	....	....	1.3	2.5	3.9	....	1.8	1.55	1.55	1.45	1.5	1.55
12	1.25	....	1.35	2.35	....	2.2	1.75	....	....	1.45	1.5	....
13	....	1.2	....	2.45	4.0	2.2	1.75	1.5	1.55	1.5	1.5	....
14	....	....	1.35	2.4	3.4	2.2	1.75	1.55	1.55	....	1.5	....
15	....	....	....	2.6	3.4	2.15	1.70	1.55	1.55	1.5	1.5	1.5
16	1.3	....	....	2.62	3.3	2.15	1.75	1.5	....	1.5	....	....
17	....	1.3	1.3	3.35	3.2	2.15	1.75	1.55	1.6	1.5	1.5	....
18	....	1.3	....	4.0	3.1	2.15	1.75	1.55	1.55	1.55	....	1.55
19	1.35	1.3	1.3	3.9	3.2	2.1	1.75	....	1.5	1.55	1.45	....
20	....	1.25	1.3	3.6	....	2.0	1.75	1.7	1.5	....	1.45	....
21	1.3	....	1.35	3.85	3.2	....	1.7	1.7	1.55	....	1.5	1.55
22	....	....	1.35	....	3.0	1.95	1.6	1.65	1.55	1.5	....	....
23	1.3	1.3	1.35	3.9	3.0	....	1.6	1.6	1.55	1.5	....	....
24	....	1.3	1.4	3.3	2.9	....	1.6	1.6	1.55	1.5	1.5	....
25	1.25	1.3	1.45	3.0	2.7	1.9	1.55	1.55	1.55	1.5	....	1.55
26	....	1.25	1.55	2.7	2.7	1.85	1.65	1.55	1.55	1.5	1.5	....
27	1.2	1.3	1.6	2.5	2.8	1.85	1.65	1.55	1.55	1.5	....	1.55
28	....	....	1.65	2.5	3.0	1.9	1.65	1.5	1.55	....	....	....
29	....	....	1.6	....	2.8	1.8	....	1.55	1.55	1.5	....	1.55
30	1.25	....	1.6	2.45	2.6	....	1.6	1.57	1.1	1.5	1.5	....
31	....	....	1.65	....	2.6	....	1.6	1.55	....	1.5	....	....

Discharge Measurements of Hobble Creek near Springville, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 19	G. T. Burridge	16	26	2.21	118
July 8	do	17	23	2.00	78
July 27	La Rue and Burridge	17	16	1.60	49
August 21	do	16	16	1.45	42

Daily Discharge in Second-feet of Hobble Creek near Springville, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	382	112	48	41	35	33	35
2	....	....	....	....	....	382	112	48	43	35	35	35
3	....	....	....	....	....	382	97	43	43	35	35	35
4	....	....	....	....	....	410	84	48	43	35	35	35
5	....	....	....	....	....	396	84	48	43	35	35	35
6	....	....	....	....	....	382	84	48	43	35	35	35
7	....	....	....	....	....	382	84	48	43	35	35	35
8	....	....	....	....	....	382	84	48	43	35	35	35
9	....	....	....	....	....	324	91	43	43	35	35	35
10	....	....	....	....	....	266	97	43	43	35	35	35
11	....	....	....	....	....	266	97	43	39	35	35	35
12	....	....	....	....	....	266	97	43	39	35	35	35
13	....	....	....	....	....	266	84	43	43	35	35	35
14	....	....	....	....	....	241	78	43	42	35	35	35
15	....	....	....	....	....	222	73	39	41	35	35	35
16	....	....	...	....	....	211	73	39	39	35	35	35
17	....	....	....	....	....	202	68	39	39	35	35	35
18	....	....	....	....	....	202	63	39	39	35	35	35
19	....	....	....	....	....	182	63	39	39	34	35	35
20	....	....	....	....	....	162	63	39	39	33	35	35
21	....	....	....	....	....	162	63	39	39	32	35	35
22	....	....	....	....	....	144	63	43	39	32	35	35
23	....	....	....	....	....	135	55	41	39	32	35	35
24	....	....	....	....	....	127	55	39	39	32	35	35
25	....	....	....	....	....	127	55	39	39	32	35	35
26	....	....	....	....	....	112	55	39	39	32	35	35
27	....	....	....	....	....	112	48	39	39	32	35	35
28	....	....	....	....	....	112	48	39	39	32	35	35
29	....	....	....	....	....	112	48	39	35	32	35	35
30	....	....	....	....	....	112	48	39	35	32	35	35
31	....	....	....	....	....	....	48	39	....	32	....	35

Monthly Discharge of Hobble Creek near Springville, Utah, in 1907.

(Drainage area, 120 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	410	112	240	2.00	2.23	14,300
July	112	48	74	.62	.71	4,540
August	48	39	43	.36	.41	2,640
September	43	37	41	.35	.38	2,430
October	37	32	35	.29	.34	2,130
November	37	35	36	.30	.33	2,160
December	37	35	37	.31	.35	2,260
The period	410	32	72	0.60	4.75	50,500

Discharge Measurements of Hobble Creek near Springville, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 27	A. D. Williams	16.5	15	1.50	44
April 18	do	17	21	1.75	68
June 4	do	17	21	1.95	65

Daily Discharge in Second-feet of Hobble Creek near Springville, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	35	35	32	39	48	63	55	35	32	30	35	35
2	35	35	32	39	48	63	55	35	32	30	35	35
3	35	35	32	39	48	59	55	35	32	30	35	35
4	35	35	32	43	48	55	55	35	32	31	35	35
5	35	35	32	48	48	55	55	35	32	32	35	35
6	35	35	32	48	48	55	55	35	32	32	35	35
7	35	35	32	48	48	55	48	35	32	32	35	35
8	35	35	33	48	48	55	48	35	32	32	35	35
9	35	34	34	43	48	59	43	35	32	32	35	35
10	35	34	35	48	48	63	43	35	32	32	35	35
11	35	33	35	48	48	73	43	35	32	32	35	35
12	35	33	35	55	48	84	41	35	32	32	35	35
13	35	32	35	63	55	97	39	35	32	32	35	35
14	35	32	35	63	52	104	39	35	32	32	35	35
15	35	32	35	63	48	112	39	35	32	32	35	35

Daily Discharge in Second-feet of Hobble Creek near Springville, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	35	32	35	55	48	97	39	35	32	32	35	35
17.....	35	32	35	55	48	84	39	35	32	32	35	35
18.....	35	32	35	55	48	73	39	35	32	32	36	35
19.....	35	32	35	55	43	63	39	35	32	32	37	35
20.....	35	32	35	55	43	63	39	35	32	32	38	35
21.....	35	32	35	55	43	63	39	35	32	32	39	35
22.....	35	32	35	55	43	63	39	32	32	32	37	35
23.....	35	32	35	63	43	59	39	32	32	32	35	35
24.....	35	32	35	55	43	55	39	32	32	32	35	35
25.....	35	32	38	55	43	55	39	32	32	32	35	35
26.....	35	32	40	52	64	55	37	32	32	32	35	35
27.....	35	32	43	48	84	55	35	32	32	32	35	35
28.....	35	32	39	48	84	55	35	32	32	32	35	35
29.....	35	....	39	48	84	55	35	32	31	33	35	35
30.....	35	....	39	48	84	55	35	32	30	34	35	35
31.....	35	....	39	....	74	.....	35	32	....	35	....	35

Monthly Discharge of Hobble Creek near Springville, Utah, in 1908.

(Drainage area, 120 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	37	35	36	0.30	0.35	2,210
February	35	34	34	.29	.31	1,970
March	43	34	36	.30	.35	2,230
April	68	41	53	.44	.50	3,160
May	84	46	54	.45	.52	3,330
June	112	55	68	.57	.64	4,060
July	59	37	44	.36	.42	2,690
August	37	32	35	.29	.34	2,160
September	34	31	32	.27	.30	1,920
October	35	31	33	.27	.31	2,010
November	39	35	37	.31	.35	2,220
December	39	37	37	.31	.36	2,290
The year....	112	31	42	0.35	4.75	30,200

Discharge Measurements of Hobble Creek near Springville, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 11.....	E. S. Fuller.....	25	70	6.20	558
June 9.....	.....do	25	48	5.20	299
July 3.....	.....do	23	24	4.10	102
September 18.	.....do	13	17	3.50	35

Daily Discharge in Second-feet of Hobble Creek near Springville, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	36	38	38	97	698	503	145	40	45	14	26	35
2.....	36	38	38	127	723	530	145	35	35	11	26	35
3.....	36	38	38	162	747	558	101	35	35	16	26	35
4.....	36	38	38	234	771	368	101	45	35	22	26	35
5.....	36	38	38	236	795	395	101	45	35	24	26	32
6.....	37	38	38	201	820	382	101	45	35	26	26	30
7.....	37	38	38	126	820	368	101	45	35	26	26	30
8.....	38	38	38	144	820	331	101	45	35	26	28	30
9.....	38	38	38	144	732	319	88	45	35	26	30	30
10.....	47	38	38	162	645	296	88	45	35	26	30	30
11.....	56	38	39	174	558	274	82	35	35	26	30	30
12.....	65	38	40	186	561	252	76	35	35	26	30	30
13.....	74	38	41	200	564	243	76	35	35	26	30	30
14.....	84	38	42	212	522	233	76	35	35	26	30	30
15.....	84	38	43	407	480	214	65	35	35	26	30	30
16.....	84	38	44	647	427	214	65	35	35	26	32	30
17.....	69	38	46	675	394	214	65	35	35	26	34	30
18.....	54	38	52	704	357	214	76	35	35	26	35	30
19.....	38	38	56	732	564	178	76	40	35	26	35	30
20.....	38	38	59	760	610	162	65	45	35	26	35	30
21.....	38	38	59	788	703	145	65	35	25	26	35	30
22.....	38	38	59	647	750	130	65	35	26	26	35	30
23.....	38	38	63	445	648	130	68	35	26	26	35	30
24.....	38	38	66	510	537	130	60	35	18	26	35	30
25.....	38	38	70	544	530	130	58	35	18	26	35	30
26.....	38	38	73	578	524	130	55	35	18	26	35	30
27.....	38	38	90	602	537	130	55	35	18	26	35	30
28.....	38	38	90	626	591	130	55	26	18	26	35	30
29.....	38	....	90	650	591	130	45	26	18	26	35	30
30.....	38	....	90	674	562	130	45	26	18	26	35	30
31.....	38	....	97	....	532	.....	45	26	....	26	....	30

Monthly Discharge of Hobble Creek near Springville, Utah, in 1909.

(Drainage area, 120 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	84	36	46.5	0.39	0.45	2,860
February	38	38	38.0	.32	.33	2,110
March	90	38	54.5	.45	.52	3,350
April	788	97	414.0	3.45	3.85	24,600
May	820	357	611.0	5.09	5.87	37,600
June	558	130	252.0	2.10	2.34	15,000
July	115	45	75.9	0.63	.73	4,670
August	45	26	36.9	.31	.36	2,270
September	45	18	30.8	.26	.29	1,830
October	26	11	24.6	.21	.24	1,510
November	35	26	31.5	.26	.29	1,870
December	35	30	30.7	.26	.30	1,890
The year....	820	11	137.0	1.14	15.57	99,600

Discharge Measurements of Hobble Creek near Springville, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 4	A. B. Purton	14	18.60	3.6	43
July 13	do	12	15.90	3.45	28
September 7	do	11	14.01	3.55	23

Daily Discharge in Second-feet of Hobble Creek near Springville, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	30	....	35	130	....	89	35	26	18	22	22	22
2	....	....	....	130	....	....	35	....	....	22	22	26
3	....	26	....	....	....	....	....	26	....	22	22	22
4	....	....	44	130	....	....	....	....	....	22	22	22
5	....	30	....	145	130	....	26	....	....	22	22	22
6	....	....	....	....	130	77	26	26	....	22	22	22
7	....	26	54	145	116	77	....	....	22	22	22	22
8	....	....	....	153	....	77	26	22	22	22	22	22
9	....	....	....	161	102	77	26	....	18	22	22	22
10	30	....	59	....	102	77	....	22	14	22	22	26
11	....	....	....	253	102	77	26	18	18	22	22	26
12	....	30	89	253	102	....	....	18	18	22	22	26
13	....	....	....	253	102	77	26	18	18	22	22	22
14	....	30	116	213	....	77	26	....	18	22	22	22
15	30	....	130	191	....	....	....	18	22	22	22	22
16	....	....	161	177	102	77	26	....	22	22	22	22
17	30	....	161	....	102	77	....	18	22	22	22	22
18	....	....	191	177	102	77	26	....	22	22	22	22
19	....	30	213	213	102	....	....	18	22	26	26	22
20	....	....	....	253	102	65	26	18	31	26	26	22
21	....	30	253	296	102	59	26	....	26	22	22	22
22	30	....	343	274	....	54	....	14	26	22	22	22
23	....	....	343	274	102	44	26	14	22	22	22	22
24	30	....	253	....	....	44	....	18	22	22	22	22
25	....	....	....	274	89	35	....	11	18	22	22	22
26	....	....	213	274	89	35	....	....	18	22	26	22
27	....	....	....	....	....	35	....	18	22	22	22	22
28	....	30	161	274	89	35	....	....	22	22	22	22
29	30	....	145	253	....	35	....	....	22	22	22	22
30	....	....	....	253	89	35	....	....	18	22	22	22
31	....	....	130	....	89	....	....	....	....	22	....	22

Monthly Discharge of Hobble Creek near Springville, Utah, in 1910.

(Drainage area, 120 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	30	30	30	0.25	0.29	1,830
February	30	26	30	0.25	.26	1,640
March	343	35	141	1.18	1.36	8,680
April	296	130	210	1.75	1.95	12,500
May	226	89	113	.94	1.08	6,950
June	89	35	66	.55	.62	3,930
July	35	26	27	.23	.26	1,660
August	26	11	20	.17	.19	1,230
September	31	14	20	.17	.19	1,190
October	26	22	22	.18	.21	1,350
November	26	22	22	.18	.20	1,310
December	26	22	22	.18	.21	1,350
The year....	343	11	60	0.50	6.82	43,620

MONTHLY RUN-OFF

In Thousands of Acre Feet of Hobble Creek near Springville, Utah, 1904 to 1910.

(Drainage area, 120 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1904	.....	.....	0.71	5.59	8.18	2.73	1.96	1.22	0.95	1.09	0.95	0.98	.....	....	....
1905	1.40	1.42	1.66	2.69	4.98	3.53	1.14	1.13	1.02	0.77	1.01	0.90	21.65	0.25	3.40
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1907	.....	.....	.....	.....	.....	14.30	4.54	2.64	2.43	2.13	2.16	2.26	.....	....	....
1908	2.21	1.97	2.23	3.16	3.33	4.06	2.69	2.16	1.92	2.91	2.22	2.29	30.20	0.35	4.75
1909	2.86	2.11	2.35	24.60	37.60	15.00	4.67	2.27	1.83	1.51	1.87	1.89	99.60	1.14	15.57
1910	1.83	1.64	8.68	12.50	6.95	3.93	1.66	1.23	1.19	1.35	1.31	1.35	43.62	0.50	6.82
Mean.	2.08	1.79	3.23	9.71	12.21	7.25	2.78	1.74	1.56	1.48	1.59	1.61	47.13	0.54	7.39

DIAMOND FORK RIVER NEAR THISTLE, UTAH.

This station, which was established December 2, 1907, to determine the amount of water available for irrigation and power development in connection with the Strawberry Valley project of the United States Reclamation Service, is located about 2½ miles northwest of Thistle, Utah, and about one-fourth mile above the mouth of the river.

As the station is below all tributaries and there are no important diversions above or below, the records show the total run-off from the Diamond Fork drainage area.

Discharge measurements are made from a footbridge. The gage is an inclined staff near the bridge.

The river is frozen over at the station during several months, but as the winter flow is fairly constant good estimates may be made. The records are unaffected by artificial control. Although the section shifts a great deal throughout the year, many measurements were made in 1909 and the records may be considered good. The gage datum has remained unchanged since the station was established.

Discharge Measurements of Diamond Fork near Thistle, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 20	A. D. Williams	20.0	18.0	3.12	20
March 26	do	20.0	20.0	3.25	27
April 16	do	19.5	20.0	3.35	32
June 2	do	20.0	24.0	3.50	47
June 27	do	19.5	21.0	3.37	34
August 27	E. A. Porter	18.0	14.7	3.00	14
September 22	E. C. La Rue	18.4	13.0	3.00	11
October 13	do	19.7	15.1	3.08	14
October 29	do	19.7	14.0	3.10	14

Daily Discharge in Second-feet of Diamond Fork River near Thistle, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	21	20	22	32	42	32	19	13	12	12	13
2	....	18	26	22	32	47	32	19	13	12	12	13
3	....	12	20	22	37	47	28	19	13	15	12	14
4	....	24	27	26	37	47	24	19	13	15	12	16
5	....	28	27	30	42	47	24	22	13	15	12	14
6	....	33	23	30	37	42	21	22	13	15	12	14
7	....	18	23	29	32	42	21	22	13	15	12	14
8	....	28	14	25	32	42	21	19	12	15	12	14
9	....	18	12	25	37	42	18	16	12	15	12	14
10	....	21	23	25	42	42	18	16	12	15	12	14

Daily Discharge in Second-feet of Diamond Fork River near Thistle, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11.....	11	18	23	28	42	47	18	19	12	15	12	14
12.....	11	14	23	32	42	53	16	19	12	15	12	14
13.....	11	14	22	32	47	53	28	17	12	15	12	13
14.....	11	24	23	37	42	53	24	17	12	15	12	11
15.....	14	28	27	37	37	53	21	17	12	15	12	11
16.....	12	24	31	32	37	59	18	17	12	15	12	11
17.....	11	32	31	37	37	59	18	17	12	15	12	12
18.....	13	24	31	37	37	59	18	17	11	15	12	11
19.....	14	28	23	32	37	53	18	17	11	15	12	11
20.....	12	28	23	37	42	47	18	17	11	15	12	11
21.....	11	24	27	37	42	42	19	15	11	15	12	11
22.....	12	21	23	37	42	37	19	15	11	15	12	11
23.....	13	24	23	47	37	37	19	14	11	15	12	11
24.....	21	20	27	42	37	37	19	14	37	15	12	11
25.....	16	24	31	37	37	42	19	14	23	15	12	11
26.....	16	24	23	32	42	37	19	14	11	15	12	11
27.....	21	24	26	28	53	37	22	14	11	13	14	11
28.....	16	24	23	28	47	37	28	14	12	13	14	11
29.....	16	24	23	28	42	32	22	14	12	12	12	11
30.....	20	....	23	32	42	32	19	14	12	12	13	11
31.....	14	....	22	....	42	.....	22	14	....	12	....	11

Note—These discharges were obtained by the indirect method of shifting channels, except December 19 to 28, which were estimated.

Monthly Discharge of Diamond Fork River near Thistle, Utah, in 1908.

(Drainage area, 157 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January 11-31...	21	11	14	0.09	0.10	587
February	33	12	23	.15	.16	1,320
March	31	12	24	.15	.17	1,460
April	47	22	32	.20	.23	1,870
May	53	32	40	.25	.29	2,430
June	59	32	45	.29	.32	2,670
July	32	16	21	.13	.15	1,320
August	22	14	17	.11	.12	1,040
September	37	11	13	.08	.09	786
October	15	12	14	.09	.10	885
November	14	12	12	.08	.09	726
December	.....	.....	12	.08	.09	756
The year....	59	11	22	0.14	1.91	15,800

Discharge Measurements of Diamond Fork River near Thistle, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 7	E. A. Porter	20.0	14.5	3.10	18
March 8	do	19.7	19.3	3.25	26
March 8	do	19.7	18.1	3.30	29
March 12	do	19.7	19.1	3.25	24
April 9	W. M. O'Neil	20.5	29.2	3.69	75
April 27	E. S. Fuller	23.0	58.1	4.80	336
April 27	do	23.0	55.8	4.80	338
May 11	do	24.0	106	5.20	712
June 5	do	23.0	86.2	4.40	542
June 9	do	22.0	71.7	3.90	361
July 4	do	20.5	33.7	2.70	100
September 10	do	20.5	21.8	2.15	34
October 14	E. C. La Rue	20.3	18.8	2.08	25

Daily Discharge in Second-feet of Diamond Fork River near Thistle, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	8	8	21	90	350	502	100	55	61	24	28	....
2	8	8	21	104	378	522	100	55	38	24	28	....
3	8	10	21	118	420	542	100	49	49	24	28	....
4	8	15	28	111	513	552	94	49	28	24	28	....
5	8	15	28	97	622	532	94	49	38	24	28	....
6	8	11	28	83	668	470	87	49	38	24	28	....
7	15	13	28	76	715	439	87	49	38	24	28	....
8	18	11	24	76	715	378	87	49	38	28	28	....
9	24	11	28	76	735	341	87	49	28	24	28	....
10	21	11	28	90	690	321	87	129	28	24	38	....
11	11	11	28	90	688	293	87	100	28	24	38	....
12	11	18	28	96	670	276	80	49	28	24	28	....
13	11	21	21	111	637	257	80	49	28	28	29	....
14	28	21	28	111	583	239	74	49	28	28	28	....
15	63	21	44	159	583	231	74	49	28	28	24	....
16	38	21	44	201	573	222	74	49	28	28	24	....
17	28	21	56	227	562	222	74	49	28	28	24	....
18	28	21	63	266	542	214	74	49	28	28	24	....
19	21	21	50	284	573	214	74	49	28	28	24	....
20	21	18	50	257	591	206	74	49	28	28	28	....
21	21	18	50	240	613	189	68	49	28	28	28	....
22	24	15	50	204	632	181	68	46	28	28	28	....
23	21	28	50	204	651	164	68	44	28	28	28	....
24	21	28	50	232	670	149	68	44	28	28	28	....
25	24	28	50	232	656	141	68	38	28	28	28	....
26	28	21	56	260	642	141	61	28	28	28	28	....
27	24	28	70	318	628	127	61	20	28	28	24	....
28	11	18	63	395	615	120	61	20	28	28	20	....
29	6	....	70	363	662	112	55	20	24	28	24	....
30	8	....	63	350	522	100	55	20	24	28	24	....
31	6	....	76	....	481	.....	55	28	....	28	....	....

Monthly Discharge of Diamond Fork River near Thistle, Utah, for 1909.

(Drainage area, 157 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	63	6	18.8	0.12	.14	1,100
February	28	8	17.5	0.11	.12	972
March	76	21	42.6	.27	.31	2,620
April	395	76	184	1.17	1.30	10,900
May	735	350	596	3.80	4.38	36,600
June	552	106	280	1.78	1.99	16,700
July	100	55	76.6	.49	.56	4,710
August	120	20	47.7	.30	.35	2,930
September	61	24	31.2	.20	.22	1,860
October	28	24	26.6	.17	.19	1,640
November	38	20	27.3	.17	.19	1,620
December	.....	.....	24.0	.15	.18	1,480
The year	735	6	114	.73	9.93	83,200

Discharge Measurements of Diamond Fork River near Thistle, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 2	A. B. Purton	20	20.05	2.28	29
March 21	do	20.8	39.84	3.15	157
April 29	do	21.2	47.91	3.40	231
May 21	do	20.3	34.32	2.85	117
June 21	do	20.2	24.12	2.38	43
July 23	do	20.7	18.5	2.01	22
August 9	do	20.6	18.49	2.01	19
September 19	do	20.4	18.47	2.11	25

Daily Discharge in Second-feet of Diamond Fork near Thistle, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	33	100	.....	60	38	20	....	24	....	24
2	....	....	33	100	238	60	38	20	20	....	24	....
3	....	....	33	....	214	60	.....	20	....	24	....	24
4	....	....	33	117	214	60	.....	20	20	....	24	....
5	....	....	38	117	192	.....	38	20	....	24	24	24
6	....	....	43	117	170	60	33	20	20	....	....	....
7	....	....	43	126	170	60	33	20	....	24	24	24
8	....	....	43	145	.....	60	33	20	20	24	....	....
9	....	....	49	165	170	60	28	20	....	....	24	24
10	....	....	49	....	192	60	.....	20	20	24	....	24

Daily Discharge in Second-feet of Diamond Fork near Thistle, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	....	....	43	238	192	60	28	20	....	24	24	....
12	....	....	43	286	192	60	28	20	20	....	24	24
13	....	....	49	262	170	60	28	20	....	24	....	....
14	....	....	49	214	170	60	28	....	20	24	24	24
15	....	....	49	238	.....	48	28	20	....	24	....	....
16	....	....	62	238	170	48	28	20	20	....	24	24
17	....	....	84	....	150	48	28	20	28	28	....	24
18	....	....	135	262	132	48	28	20	....	....	24	....
19	....	....	175	250	132	48	28	20	28	24	24	24
20	....	....	185	238	124	43	28	20	....	....	....	....
21	....	....	206	274	124	43	28	....	28	24	28	24
22	....	....	217	262	.....	43	28	20	28	....	....	....
23	....	....	206	238	116	43	28	20	28	24	28	24
24	....	....	206	....	100	38	.....	20	24	....	....	24
25	....	....	195	238	100	38	28	20	....	24	24	....
26	....	....	175	238	86	.....	28	20	24	....	24	24
27	....	....	155	238	86	38	28	20	24	24	....	....
28	....	....	135	262	86	38	28	....	24	....	24	20
29	....	....	135	262	79	38	28	20	24	24	....	....
30	....	....	108	262	72	38	28	....	24	....	24	20
31	....	....	108	....	60	.....	.....	20	....	24	.....	16

Monthly Discharge of Diamond Fork near Thistle, Utah, for 1910.

(Drainage area, 157 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
*January	.....	.....	25	0.16	0.18	1,550
*February	.....	.....	20	.13	.13	1,100
March	217	33	100	.64	.73	6,150
April	286	100	209	1.33	1.48	12,400
May	250	60	149	.95	1.05	9,160
June	60	38	51	.32	.36	3,010
July	38	34	30	.19	.22	1,840
August	20	20	20	.13	.15	1,230
September	28	20	23	.15	.16	1,360
October	28	24	24	.15	.18	1,490
November	28	24	24	.15	.17	1,460
December	24	16	23	.15	.17	1,430
The year	286	16	58	0.35	4.98	42,180

*Estimated.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Diamond Fork near Thistle, Utah, 1908 to 1910.

(Drainage area, 157 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in Inches on Drainage Area
1908	0.69	1.32	1.46	1.87	2.43	2.67	1.32	1.04	0.79	0.89	0.73	0.76	15.80	0.14	1.91
1909	1.16	0.97	2.62	10.90	36.60	16.70	4.71	2.93	1.86	1.64	1.62	1.48	83.20	0.73	9.93
1910	1.55	1.10	6.15	12.40	9.16	3.01	1.84	1.23	1.36	1.49	1.46	1.43	42.18	0.35	4.98
Mean.	1.13	1.13	3.41	8.39	16.07	7.46	2.62	1.73	1.34	1.34	1.27	1.22	47.06	0.41	5.61

SPANISH FORK AT THISTLE, UTAH.

This station, which was established December 3, 1907, to determine the amount of water available for irrigation and power development in connection with the Strawberry Valley project of the United States Reclamation Service, is located half a mile below Thistle station on the Denver and Rio Grande Railroad.

Thistle Creek enters about one-half mile above the station and Diamond Fork comes in about 2 miles below. There are no important diversions above the station.

The river usually freezes over at the station during two or three months in the winter, but as the winter flows is fairly constant good estimates may be made. The records are not affected by artificial control.

Although the section is somewhat shifting, many measurements have been made and the results may be considered excellent. The equipment consists of a vertical staff gage and a cable and car. The The gage datum has remained unchanged since the station was established.

Discharge Measurements of Spanish Fork River near Thistle, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 30	A. D. Williams	35	29	3.20	59
April 15	do	34	34	3.40	85
June 2	do	34	46.8	3.72	142
June 26	do	35	31	3.27	73
August 27	E. A. Porter	31	19	2.85	33
September 24	La Rue and Lytel	35	55	3.05	192
October 16	E. C. La Rue	33	26	3.05	54
October 29	do	32	24	3.00	44

Daily Discharge in Second Feet of Spanish Fork River near Thistle, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	63	63	63	86	137	63	63	37	37	45	45
2	....	63	63	63	86	137	63	63	37	37	45	45
3	....	63	45	63	101	137	63	63	37	45	45	45
4	....	63	73	63	101	137	63	63	37	37	45	45
5	....	63	73	63	101	118	63	438	37	37	45	45
6	....	63	63	63	101	118	63	54	37	37	45	45
7	....	63	63	54	101	118	63	54	37	37	45	45
8	....	86	63	45	101	118	63	54	37	37	45	37
9	....	63	54	63	137	118	63	45	101	37	45	37
10	....	63	54	73	118	118	54	137	45	37	45	45
11	86	63	63	73	118	118	54	63	137	37	45	45
12	73	63	63	73	118	118	54	63	45	37	45	45
13	86	63	63	73	137	101	101	54	45	37	45	45
14	73	63	73	86	137	101	63	54	45	37	45	45
15	63	73	86	86	137	101	63	54	45	45	45	45

Daily Discharge in Second-feet of Spanish Fork River near Thistle, Utah, for 1908.—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	63	86	101	86	137	101	54	45	45	45	45	54
17.....	86	73	101	86	137	101	54	45	45	45	45	54
18.....	86	73	86	101	157	118	54	45	37	45	45	63
19.....	73	54	73	101	157	101	54	45	37	54	45	63
20.....	63	73	63	86	137	86	54	45	37	54	45	86
21.....	63	73	54	101	137	86	54	73	37	45	45	....
22.....	63	86	63	101	137	86	54	45	37	45	45	....
23.....	63	86	63	101	137	86	54	45	45	45	45	....
24.....	63	63	63	101	137	73	45	37	203	45	45	....
25.....	63	63	63	101	137	73	45	37	54	45	45	....
26.....	63	73	63	86	137	73	45	37	45	45	45	....
27.....	63	63	63	63	157	73	45	37	45	45	54	....
28.....	63	73	63	63	137	63	566	37	37	45	45	....
29.....	63	....	63	86	137	63	407	37	37	45	45	....
30.....	63	....	63	86	137	63	101	37	37	45	45	....
31.....	54	....	63	....	137	.....	63	37	....	45	....	....

Monthly Discharge of Spanish Fork River near Thistle, Utah, for 1908.

(Drainage area, 480 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	86	54	68	0.14	0.16	2,850
February	86	54	69	.14	.14	3,970
March	101	45	68	.14	.16	4,190
April	101	50	80	.17	.19	4,750
May	157	94	132	.28	.32	8,120
June	147	68	106	.22	.25	6,310
July	582	50	88	.18	.21	5,410
August	438	37	66	.14	.16	4,060
September	203	37	51	.11	.12	3,050
October	54	37	42	.09	.10	2,590
November	54	45	46	.10	.10	2,710
December	.....	.....	38	.08	.09	2,320
The year....	582	37	72	0.15	2.00	50,320

Discharge Measurements of Spanish Fork River near Thistle, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 7	E. A. Porter	36	35	3.35	96
April 9	W. M. O'Neil	37	50	3.50	149
April 27	E. S. Fuller	42	88	4.65	417
April 27	do	42	88	4.65	405
May 12	do	42	113	4.90	745
June 9	do	41	105	4.55	571
July 4	do	30	54	3.20	154
September 10	do	34	42	2.80	81

Daily Discharge in Second-feet of Spanish Fork River near Thistle, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	89	49	49	123	373	592	149	90	149	69	69	....
2	49	49	61	142	468	720	149	90	98	69	69	....
3	49	49	74	208	452	805	149	83	114	69	69	....
4	49	49	80	220	597	865	149	83	98	69	69	....
5	49	49	142	162	720	865	149	83	83	69	69	....
6	49	49	123	142	740	805	149	83	83	69	69	....
7	82	49	89	132	800	720	149	83	83	69	69	....
8	89	49	74	142	777	548	140	83	83	76	69	....
9	82	49	82	142	797	506	131	83	69	69	69	....
10	74	49	82	142	765	466	114	98	83	69	83	....
11	74	49	61	149	785	392	114	90	83	69	83	....
12	49	55	61	149	745	374	114	90	83	69	69	....
13	49	61	74	142	640	356	111	90	83	69	69	....
14	282	49	74	181	592	322	114	90	83	69	69	....
15	407	49	97	232	597	322	106	90	83	69	69	....
16	105	49	114	283	548	290	106	90	83	69	69	....
17	74	49	142	341	548	261	106	98	83	69	69	....
18	61	49	181	407	570	261	122	106	83	69	69	....
19	61	49	142	445	640	261	131	98	83	69	69	....
20	68	49	123	407	747	248	123	98	83	69	83	....
21	74	49	105	341	805	238	114	98	83	69	76	....
22	123	38	114	283	805	211	114	94	83	76	76	....
23	74	61	123	283	805	211	106	90	83	83	83	....
24	49	44	105	207	720	211	106	90	83	76	83	....
25	61	57	105	283	640	189	106	83	83	69	79	....
26	49	38	123	311	640	189	106	83	83	69	76	....
27	38	38	132	426	666	189	106	83	83	69	76	....
28	49	38	123	621	692	168	98	83	83	69	72	....
29	49	....	123	485	666	158	98	83	83	69	69	....
30	152	....	123	426	592	158	98	83	76	69	69	....
31	105	....	123	....	548	.....	98	98	69	69	....	....

Monthly Discharge of Spanish Fork River near Thistle, Utah, for 1909.

(Drainage area, 480 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	407	38	86	0.18	0.21	5,280
February	61	38	48	.16	.11	2,680
March	184	49	104	.22	.25	6,400
April	621	123	268	.56	.62	15,900
May	860	373	661	1.38	1.59	40,600
June	865	158	397	.83	.92	23,600
July	149	98	120	.25	.29	7,386
August	106	83	89	.19	.21	5,490
September	149	60	86	.18	.20	5,120
October	83	69	70	.15	.17	4,310
November	83	69	73	.15	.17	4,336
December	.....	.....	66	.13	.16	4,060
The year	865	38	172	0.36	4.90	125,000

Discharge Measurements of Spanish Fork River near Thistle, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 2	A. B. Purton	34	95	2.80	90
March 21	do	37	64.35	3.55	245
April 29	do	39.0	93.30	4.05	448
June 21	do	34.5	35.85	2.90	79
July 23	do	33	31.37	2.78	64
August 9	do	28.7	28.60	2.59	43
September 19	do	29.2	31.72	2.70	59

Daily Discharge in Second-feet of Spanish Fork River near Thistle, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	92	206	440	195	69	69	....	44	....	56
2	....	....	92	206	400	195	69	69	34	....	56	....
3	....	....	92	....	395	195	.....	62	....	34	....	56
4	....	....	92	206	660	195	.....	62	34	....	56	56
5	....	....	101	206	355	.....	69	56	....	34	56	56
6	....	....	110	206	325	170	69	56	34	....	....	....
7	....	....	120	206	320	160	69	56	....	34	56	56
8	....	....	130	218	320	145	69	56	34	34	....	....
9	....	....	150	218	345	145	69	56	....	....	56	56
10	....	....	172	....	375	135	.....	56	34	....	....	56

Daily Discharge in Second-feet of Spanish Fork River near Thistle, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	....	....	161	268	365	125	69	56	....	34	56	....
12	....	....	150	294	370	110	69	56	34	....	56	56
13	....	....	150	294	350	100	69	56	....	34	....	....
14	....	....	172	268	320	90	69	56	34	44	56	56
15	....	....	194	268	.....	83	69	56	....	....	....	....
16	....	....	218	268	320	83	69	44	34	62	56	56
17	....	....	242	....	290	83	69	44	44	....	....	56
18	....	....	218	300	290	83	69	44	56	69	56	....
19	....	....	242	305	260	83	69	44	56	....	56	56
20	....	....	....	310	260	83	69	44	....	....	....	....
21	....	....	268	380	260	83	69	....	44	50	56	56
22	....	....	294	385	.....	83	69	44	....	....	....	....
23	....	....	307	390	225	83	69	44	44	56	56	56
24	....	....	255	....	215	76	69	44	39	....	....	56
25	....	....	330	365	205	69	56	44	....	50	56	....
26	....	....	230	435	205	69	69	44	44	56	56	56
27	....	....	....	480	205	69	69	44	39	....	....	....
28	....	....	206	480	210	83	69	....	34	56	56	50
29	....	....	206	485	210	90	76	34	....	56	....	....
30	....	....	206	445	210	90	76	....	44	....	56	50
31	....	....	206	....	200	.....	72	34	....	56	....	50

Monthly Discharge of Spanish Fork River near Thistle, Utah, for 1910.

(Drainage area, 480 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
*January	.....	.....	130	0.28	0.31	8,000
*February	.....	.....	125	.26	.29	6,800
March	307	92	186	.39	.45	11,400
April	485	206	307	.64	.71	18,300
May	440	200	296	.61	.71	18,200
June	195	69	114	.24	.26	6,780
July	76	56	69	.14	.16	4,250
August	69	34	50	.10	.12	3,070
September	56	34	39	.08	.09	2,300
October	69	34	47	.08	.10	2,910
November	56	56	56	.12	.13	3,330
December	56	50	55	.12	.14	3,390
The year	485	34	123	0.25	3.47	88,730

*Estimated.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Spanish Fork near Thistle, Utah, 1908 to 1910.

(Drainage area, 480 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1908	2.85	2.97	4.19	4.75	8.12	6.31	5.41	4.06	2.05	2.59	2.71	2.32	50.32	0.15	2.00
1909	5.28	2.68	6.40	15.90	40.60	23.60	7.38	5.49	5.12	4.31	4.33	4.06	125.00	0.36	4.90
1910	8.00	6.80	11.40	18.20	18.20	6.78	4.25	3.07	2.30	2.91	3.33	3.39	88.73	0.25	3.47
Mean..	5.38	4.48	7.33	12.98	22.31	12.23	5.68	4.21	3.49	3.27	3.46	3.26	88.02	0.25	3.46

SPANISH FORK NEAR SPANISH FORK, UTAH.

This station, which was established May 23, 1900, discontinued November 30, 1901, and re-established March 26, 1903, to determine the total water available from Spanish Fork for irrigation near Utah Lake, is located in the mouth of the canyon, 600 feet above the diversion dam of the East Bench Irrigation Company and about 5 miles southeast of Spanish Fork, Utah. The records are of special importance to the United States Reclamation Service in connection with the Strawberry Valley project.

The station is below all tributaries and above all important diversions except the Reclamation Service power canal, which diverts water at a point about one-half mile above the station. The water thus diverted is used to develop power, after which a part of the water is returned to the river, the remainder being turned into the Salem canal and used for irrigation. The entire low-water flow of the river below the station is used for irrigation. The amount of water diverted is measured and added to the discharge of the river.

The records are little affected by ice and show no effect from artificial control below, but variations in daily flow are caused by manipulation of gates on the Reclamation Service diversion dam above.

Measurements are made from a cable and car.

Although the section is somewhat shifting, numerous measurements have been made and the results obtained are excellent. The datum of the staff gage has remained unchanged since the station was established.

Discharge Measurements of Spanish Fork River near Spanish Fork, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 6	W. G. Swendsen	34.5	23.4	1.40	76
February 4	do	35.5	27.3	1.48	70
March 3	do	34.5	25.5	1.40	58
March 22	do	36.1	32.5	1.55	109
April 28	H. S. Kleinschmidt	39.5	73.4	2.40	343
May 10	do	48.0	122.0	3.74	801
May 19	Thos. Grlove, Jr.	46.0	125.0	3.74	693
June 2	do	40.0	94.5	2.85	472
June 12	do	39.0	80.0	2.50	338
July 3	do	38.0	45.5	1.70	177
August 7	do	37.0	30.4	1.40	96
October 17	do	37.0	27.5	1.25	90

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	68	68	89	233	368	456	169	112	96	81	81	81
2	89	57	78	233	354	454	158	104	120	81	81	81
3	57	57	57	177	393	426	158	104	112	81	81	88
4	57	68	86	122	515	439	158	104	96	81	88	104
5	57	78	70	177	637	452	158	96	96	81	88	96

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
6.....	78	78	74	177	665	452	148	96	96	81	88	88
7.....	57	78	74	288	658	398	148	96	96	81	88	81
8.....	78	68	75	288	743	385	138	88	96	81	88	81
9.....	78	68	85	288	742	358	138	88	96	81	88	81
10.....	57	68	110	344	874	372	138	88	96	81	88	81
11.....	48	78	278	372	874	358	129	88	88	81	88	81
12.....	57	78	292	344	907	358	129	88	88	81	81	81
13.....	57	78	294	288	905	344	120	88	88	81	81	104
14.....	68	78	116	302	743	344	120	104	88	81	81	81
15.....	57	89	93	344	741	331	138	96	96	81	81	62
16.....	57	89	80	357	747	318	129	96	112	81	81	62
17.....	57	78	94	455	724	277	120	96	96	81	81	62
18.....	57	89	95	567	722	257	138	96	96	81	74	62
19.....	89	100	53	538	720	240	129	104	96	81	68	74
20.....	89	68	84	510	750	227	120	148	88	81	74	81
21.....	57	89	96	510	765	203	120	112	88	81	74	81
22.....	57	78	123	538	740	192	120	120	88	74	74	81
23.....	57	78	233	594	672	192	120	104	88	74	74	81
24.....	68	68	328	580	660	192	148	96	88	74	74	81
25.....	78	78	455	483	593	180	120	96	88	81	81	81
26.....	68	68	316	442	555	180	120	96	88	81	81	104
27.....	78	78	233	385	570	180	112	96	88	81	81	120
28.....	68	78	215	372	585	180	112	96	88	81	81	104
29.....	68	....	177	382	560	180	112	96	88	81	81	96
30.....	78	....	215	368	533	180	112	88	81	81	81	88
31.....	68	....	233	....	467	.....	104	104	....	81	....	88

Note—Daily discharge obtained by indirect method for shifting channels March 3 to May 19. Two rating curves were used for the periods preceding and following March 3 and May 19, respectively.

Monthly Discharge of Spanish Fork River near Spanish Fork, Utah, for 1906.

(Drainage area, 670 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	89	48	66	0.10	0.11	4,080
February	100	57	76	.11	.12	4,220
March	455	53	158	.24	.27	9,720
April	594	122	369	.55	.61	22,000
May	907	354	661	.99	1.14	40,600
June	456	180	304	.45	.51	18,100
July	169	104	132	.20	.23	8,120
August	148	88	100	.15	.17	6,120
September	120	81	94	.14	.16	5,570
October	81	74	80	.12	.14	4,940
November	88	68	81	.12	.14	4,820
December	120	62	85	.13	.14	5,210
The year....	907	48	184	.27	3.75	134,000

Discharge Measurements of Spanish Fork River near Spanish Fork, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 28	La Rue and Burridge	42	142	3.30	892
June 17	G. T. Burridge	39	107	2.35	598
June 20	do	39	103	2.25	520
July 5	do	36	64	1.37	248
July 9	do	36	56	1.18	209
July 25	do	36	51	.95	165
August 21	La Rue and Burridge	35	40	.70	123
November 14	E. C. La Rue	35	30	.49	82

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	88	88	158	277	601	890	280	156	136	117	100	84
2	62	88	158	304	601	970	280	156	136	136	100	84
3	62	138	158	358	547	1,090	256	196	117	136	100	84
4	62	158	168	412	520	1,130	236	176	117	117	100	84
5	74	634	158	412	547	1,170	236	156	156	117	100	84
6	88	412	158	412	547	1,130	216	156	136	136	100	84
7	74	252	138	412	547	1,050	216	156	136	117	100	100
8	74	158	138	412	547	1,010	216	156	136	117	100	84
9	88	120	138	439	547	890	216	136	136	117	100	84
10	74	138	138	547	574	820	216	117	136	117	100	70
11	74	138	138	657	684	750	196	117	117	117	100	100
12	74	138	203	712	740	750	196	117	117	117	100	100
13	88	120	203	796	852	750	196	117	117	117	70	84
14	88	120	138	908	657	645	196	117	117	117	84	84
15	88	120	158	908	657	610	176	136	117	117	84	84
16	88	120	158	824	629	610	176	136	117	117	84	84
17	88	120	158	712	684	540	176	117	117	117	84	84
18	74	158	180	657	852	540	156	176	117	117	100	84
19	88	138	180	629	908	505	156	136	117	117	100	84
20	74	138	203	547	1,730	505	156	136	117	117	100	84
21	62	138	277	520	1,970	470	176	117	100	117	84	84
22	62	138	358	493	1,890	435	176	156	100	100	84	84
23	74	227	358	466	1,450	400	156	136	100	100	84	84
24	74	180	331	453	1,330	338	156	136	100	100	84	84
25	88	158	277	520	1,370	338	156	136	100	100	84	84
26	88	158	277	520	1,210	308	176	156	100	100	84	100
27	88	158	277	629	1,050	308	176	136	100	100	84	100
28	88	180	227	740	890	308	176	136	117	100	84	100
29	88	....	227	712	838	308	176	136	117	100	100	100
30	88	....	252	629	785	280	156	176	117	100	84	84
31	88	....	252	....	820	.....	156	136	....	117	....	84

Monthly Discharge of Spanish Fork River near Spanish Fork, Utah, for 1907.

(Drainage area, 670 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	96	62	81	0.12	0.14	4,970
February	684	96	178	.27	.28	9,890
March	368	148	207	.31	.36	12,700
April	908	290	571	.85	.95	34,000
May	1,970	534	889	1.33	1.53	54,700
June	1,190	294	674	1.01	1.13	40,100
July	280	156	197	.29	.34	12,100
August	196	126	147	.22	.25	9,040
September	156	108	122	.18	.20	7,260
October	136	108	118	.18	.20	7,260
November	108	77	96	.14	.16	5,730
December	108	77	92	.14	.16	5,660
The year	1,970	62	281	.42	5.70	203,000

Discharge Measurements of Spanish Fork River near Spanish Fork, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 30	A. D. Williams	36	36	.60	106
January 31	do	36	29	.45	83
March 26	do	36	36	.65	110
April 17	do	36	42	.90	141
June 3	do	37	54	1.30	212
October 29	E. C. La Rue	36	36	.75	109

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	84	57	100	100	118	217	102	118	60	73	73	60
2	84	70	100	100	118	217	102	102	60	73	73	73
3	84	84	100	100	135	217	87	102	73	87	87	73
4	84	100	100	100	290	217	87	87	73	87	73	73
5	70	84	117	100	135	217	87	135	73	87	73	73
6	70	57	84	117	135	217	87	102	73	73	73	73
7	70	70	57	117	154	217	87	87	73	73	73	60
8	70	84	84	100	154	195	87	87	73	73	73	60
9	70	84	84	100	174	195	87	87	73	73	73	60
10	70	84	84	117	174	195	87	73	73	73	73	60

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11.....	70	100	84	118	174	195	87	102	87	73	73	60
12.....	57	84	100	118	174	195	87	87	102	73	73	60
13.....	57	70	100	118	174	174	87	87	87	73	73	60
14.....	70	46	117	135	174	174	102	87	73	73	73	49
15.....	84	57	136	135	174	174	102	73	73	73	73	49
16.....	70	70	156	135	174	174	87	73	73	87	60	49
17.....	70	84	156	135	174	174	87	73	73	87	60	49
18.....	70	84	156	135	195	240	87	73	73	73	60	49
19.....	84	57	117	135	195	195	73	73	73	87	60	49
20.....	84	84	117	135	217	174	73	73	60	87	73	*...
21.....	84	70	100	135	195	154	73	73	60	87	73	....
22.....	84	84	100	135	195	154	73	87	60	87	73	....
23.....	84	100	100	174	174	154	73	73	60	87	73	....
24.....	84	100	100	154	174	135	73	73	174	87	87	....
25.....	84	100	117	135	174	118	73	73	118	87	87	....
26.....	84	100	117	118	195	118	87	73	87	73	73	....
27.....	84	100	100	118	195	118	73	73	87	87	60	....
28.....	84	100	100	118	195	102	174	60	73	87	49	....
29.....	84	....	100	118	195	102	318	60	73	73	60	....
30.....	84	....	100	118	195	102	102	60	73	73	60	....
31.....	70	....	117	....	217	.....	102	60	....	73	....	....

*River frozen.

Monthly Discharge of Spanish Fork River near Spanish Fork, Utah, for 1908.

(Drainage area, 670 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	92	64	80	0.12	0.14	4,940
February	108	46	84	.13	.14	4,850
March	166	64	110	.16	.19	6,760
April	174	100	126	.19	.21	7,500
May	290	118	180	.27	.31	11,100
June	240	102	177	.26	.29	10,500
July	318	73	101	.15	.17	6,210
August	135	60	85	.13	.15	5,230
September	174	66	81	.12	.14	4,820
October	94	73	82	.12	.14	5,040
November	94	54	76	.11	.13	4,500
December	.....	.....	58	.09	.10	3,540
The year....	318	46	103	0.15	2.11	*75,000

*This does not include diversion by United States Reclamation Service Canal during the latter part of the season.

Discharge Measurements of Spanish Fork River near Spanish Fork, Utah in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 18	E. A. Porter	37	31	0.60	88
March 12	do	36	29	.50	85
April 9	W. M. O'Neill	46	53	1.02	215
April 28	E. S. Fuller	50	163	1.45	1,040
May 12	do	48	195	4.80	1,280
June 2	do	45	173	3.90	1,010
June 2	do	45	173	3.90	1,060
June 9	do	42	152	3.30	924
July 4	do	36	56	.75	209
September 17	do	34	19.2	.40	31

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	34	44	50	183	662	1,040	233	132	141	42	42	42
2	44	25	55	256	632	1,100	222	123	141	42	42	53
3	44	34	74	338	707	1,300	222	123	123	42	42	42
4	55	24	94	363	937	1,360	244	115	123	42	42	42
5	67	25	338	203	1,180	1,350	222	115	141	42	42	42
6	109	25	154	203	1,210	1,290	213	123	123	42	48	42
7	144	30	193	183	1,180	1,200	201	123	123	42	48	42
8	80	44	126	163	1,320	1,040	201	123	115	42	53	42
9	80	25	118	173	1,350	924	201	123	78	42	42	42
10	80	25	102	214	1,420	801	190	123	42	42	48	42
11	83	34	94	224	1,400	724	180	132	42	42	48	42
12	84	55	87	203	1,300	662	180	141	42	42	42	42
13	86	67	109	267	1,220	617	170	132	42	42	42	42
14	88	55	109	209	1,140	572	160	123	42	42	48	42
15	90	39	94	401	1,150	542	160	123	42	42	42	42
16	92	50	126	512	1,120	528	160	132	42	42	42	42
17	94	67	193	707	1,000	499	160	132	42	42	42	42
18	94	44	245	737	1,030	485	150	141	42	42	42	42
19	80	44	183	737	1,130	429	150	141	42	42	42	42
20	94	44	173	692	1,200	415	204	132	42	....	42	42
21	363	44	154	542	1,390	374	160	132	42	53	53	42
22	527	39	135	469	1,360	348	160	141	42	53	65	42
23	94	34	173	441	1,400	335	160	132	42	53	42	42
24	34	30	144	469	1,260	311	160	123	42	53	53	42
25	....	44	169	441	1,100	311	150	123	42	53	42	42
26	....	39	163	542	1,090	288	150	115	42	48	42	42
27	34	25	193	707	1,010	288	141	107	48	42	48	48
28	44	39	183	1,410	1,290	255	141	107	53	42	42	48
29	39	....	183	937	1,240	255	141	107	42	42	42	48
30	34	....	173	737	1,090	244	132	107	42	42	42	42
31	39	....	183	....	960	.....	141	107	....	42	....	53

Monthly Discharge of Spanish Fork River near Spanish Fork, Utah, for 1909.

(Drainage area, 670 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	582	54	146	0.22	0.25	8,980
February	129	71	98	.15	.15	5,430
March	387	87	174	.26	.30	10,700
April	1,150	194	482	.72	.80	28,700
May	1,530	667	1,190	1.78	2.05	73,200
June	1,400	288	710	1.06	1.18	42,200
July	288	176	220	.33	.38	13,500
August	190	156	170	.25	.29	10,500
September	204	134	158	.24	.26	9,406
October	160	115	144	.22	.25	8,850
November	180	134	149	.22	.25	8,870
December	168	96	130	.19	.22	7,990
The year	1,530	54	314	0.47	6.39	228,000

Discharge Measurements of Spanish Fork River near Spanish Fork, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 3	A. B. Purton	33.0	24.85	—0.1	53
March 23	do	37.5	82.01	1.58	400
June 11	do	37	39.375	0.35	117
June 24	do	35	59.85	0.15	97
August 11	do	15.6	12.185	—0.24	24
September 2	do	13.5	9.038	—0.38	13
September 20	do	19.5	16.163	—0.10	40

Daily Discharge in Second-feet of Spanish Fork River near Spanish Fork, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	149	134	157	291	694	233	156	128	95	100	103	100
2.....	157	149	157	291	602	228	139	135	92	112	101	100
3.....	157	131	181	299	631	226	143	114	94	111	104	105
4.....	157	120	199	287	542	211	145	113	100	104	105	107
5.....	153	132	201	287	548	208	151	111	98	103	100	90
6.....	138	132	201	321	534	202	151	110	97	101	101	89
7.....	157	132	217	313	526	197	149	107	93	102	106	97
8.....	149	149	245	336	526	191	150	106	92	100	106	100
9.....	157	145	271	373	546	189	145	104	91	101	101	98
10.....	153	145	257	414	576	186	147	106	88	100	102	105
11.....	153	145	287	461	576	183	140	101	92	100	105	108
12.....	157	145	301	500	571	183	138	105	88	100	104	112
13.....	143	145	270	509	576	181	137	104	93	102	102	99
14.....	149	145	341	490	526	173	136	96	99	103	107	99
15.....	149	142	341	439	502	164	141	97	112	102	103	93
16.....	149	131	356	443	478	161	146	97	115	119	99	93
17.....	149	103	332	443	446	158	141	96	119	117	104	94
18.....	140	143	336	410	426	157	148	95	122	128	96	90
19.....	129	139	356	493	410	159	141	90	133	121	116	91
20.....	136	139	406	557	380	155	138	99	120	114	106	92
21.....	146	143	461	585	372	153	136	96	110	106	104	103
22.....	146	153	556	579	350	148	137	96	107	105	111	89
23.....	149	149	544	593	328	147	133	94	99	108	115	80
24.....	145	147	418	608	290	147	130	86	107	102	112	89
25.....	142	153	368	682	290	144	129	94	105	102	110	91
26.....	144	157	352	727	297	148	127	94	97	102	96	85
27.....	142	153	361	751	285	140	132	94	105	108	94	75
28.....	129	157	313	763	285	146	131	96	104	106	92	93
29.....	153	....	325	748	256	153	126	97	109	110	97	82
30.....	124	....	280	763	237	163	124	104	108	117	100	86
31.....	129	....	287	....	237	.....	124	95	....	106	....	89

Monthly Discharge of Spanish Fork River near Spanish Fork, Utah, for 1910.

(Drainage area, 670 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	157	124	146	0.22	0.25	9,000
February	157	103	141	.21	.22	6,700
March	556	157	312	.47	.54	19,200
April	763	287	495	.74	.82	29,400
May	694	237	446	.67	.77	27,400
June	233	140	174	.26	.29	10,400
July	156	124	139	.21	.24	8,500
August	135	86	102	.15	.18	6,200
September	133	88	100	.15	.16	5,900
October	128	100	111	.17	.20	6,800
November	115	92	104	.16	.17	6,200
December	108	90	95	.14	.16	5,800
The year....	763	86	197	0.28	4.00	141,500

MONTHLY RUN-OFF

In Thousands of Acre Feet of Spanish Fork River near Spanish Fork, Utah.

(Drainage area, 670 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. ft. per Sq. Mile	Depth in inches on Drainage Area
1889	.....	.....	.....	.....	.....	.....	.....	.....	2.98	3.81	3.15	4.12	.....	....	....
1890	4.18	4.22	8.79	23.03	47.79	12.20	7.01	3.84	3.75	3.94	3.98	3.08	126.79	0.25	3.50
1900	.....	.....	.....	.....	.....	7.86	3.44	3.26	3.63	3.87	4.40	3.57	.....	....	....
1901	2.52	5.05	5.96	7.80	16.66	7.91	4.74	6.09	4.46	5.04	4.88	.....	.....	....	....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1903	.....	.....	.....	.....	13.96	12.97	4.86	2.95	3.09	3.38	2.90	3.07	.....	....	....
1904	4.77	4.55	5.28	10.35	21.09	9.64	5.82	4.66	4.05	4.17	3.66	3.34	81.37	0.17	2.28
1905	4.16	4.62	5.41	6.61	15.80	9.28	2.84	2.99	3.53	3.60	3.61	3.36	65.81	0.14	1.84
1906	4.80	4.22	9.72	22.00	40.60	18.10	8.12	6.12	5.57	4.94	4.82	5.21	134.00	0.27	3.75
1907	4.97	9.89	12.70	34.00	54.70	40.10	12.10	9.04	7.26	7.26	5.73	5.66	203.00	0.42	5.70
1908	4.94	4.85	6.76	7.50	11.10	10.50	6.21	5.23	4.82	5.04	4.50	3.54	*75.00	0.15	2.11
1909	8.98	5.43	10.70	28.70	73.20	42.20	13.50	10.50	9.40	8.85	8.87	7.97	228.00	0.47	6.38
1910	9.00	6.70	19.20	29.40	27.40	10.40	8.50	6.20	5.90	6.80	6.20	5.80	141.50	0.28	4.00
Mean.	5.37	5.50	9.29	18.82	32.23	16.47	7.01	5.53	4.87	5.06	4.73	4.43	119.41	0.25	3.36

*This does not include the diversion by United States Reclamation Service Canal.

UNITED STATES RECLAMATION SERVICE POWER CANAL NEAR SPANISH FORK, UTAH.

This station, which was established January 1, 1909, to determine the amount of water diverted by the Reclamation Service for power in connection with the Strawberry Valley project, is located in the mouth of the canyon at a point about 1½ miles below the canal head gates and about 5 miles southeast of Spanish Fork, Utah.

The station is located in the middle of a long tangent on the canal, which is smoothly lined with concrete. A good rating curve has been obtained and the records may be considered excellent. The gage datum has remained unchanged since the station was established.

The discharge of this canal has been added to that of the river at the station near Spanish Fork, just below, to give the total discharge of Spanish Fork above the diversions.

Discharge Measurements of United States Reclamation Service Power Canal near Spanish Fork, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 8	E. A. Porter	7.4	9.69	1.70	36.8
February 10	E. C. La Rue	8.4	13.6	2.20	66.2
April 9	W. M. O'Neill	7.1	9.07	1.58	35.7
April 28	E. S. Fuller	7.0	9.90	1.80	43.3
May 12	do	7.7	11.6	2.05	57.6
June 2	do	11.0	26.2	3.50	170.0
July 4	do	7.6	10.6	1.80	46.0
September 17	do	9.6	19.0	2.80	107.0
October 13	E. C. La Rue	9.7	19.6	2.85	111.0

Daily Discharge in Second-feet of United States Reclamation Service Power Canal near Spanish Fork, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	78.7	57.3	54.5	30.8	27.0	41.6	44.0	44.0	63.0	96.1	99.7	111
2	82.1	60.1	54.5	34.9	34.9	188.0	44.0	44.0	54.5	96.1	99.7	115
3	78.7	60.1	46.6	34.9	39.3	44.0	44.0	39.3	51.8	99.7	99.7	96.1
4	82.1	57.3	46.6	27.0	37.1	44.0	44.0	46.6	49.1	99.7	96.1	92.5
5	54.5	66.0	49.1	34.9	39.3	39.3	44.0	44.0	60.1	99.7	99.7	85.5
6	57.3	57.3	41.6	30.8	39.3	39.3	44.0	44.0	54.5	99.7	96.1	82.1
7	17.2	66.0	44.6	30.8	39.3	41.6	44.0	41.6	57.3	99.7	107.0	89.0
8	41.6	66.0	0	30.8	44.0	39.3	44.0	44.0	49.1	103.0	92.5	99.7
9	41.6	54.5	0	32.8	44.0	44.0	44.0	44.0	85.5	99.7	99.7	103.0
10	49.1	66.0	0	32.8	39.3	39.3	44.0	46.6	123.0	99.7	107.0	99.7
11	46.6	63.0	0	32.8	44.0	44.0	44.0	44.0	111.0	99.7	107.0	99.7
12	44.0	57.3	0	34.9	44.0	39.3	44.0	49.1	115.0	99.7	107.0	89.0
13	54.5	60.1	0	29.2	39.3	39.3	44.0	41.6	107.0	99.7	107.0	99.7
14	63.0	60.1	0	28.9	37.1	46.6	44.0	39.3	107.0	96.7	107.0	99.7
15	60.1	60.1	66.0	32.8	37.1	41.6	44.0	44.0	107.0	99.7	107.0	82.1

Daily Discharge in Second-feet of United States Reclamation Service Power Canal near Spanish Fork, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	54.5	57.3	66.0	37.1	39.3	41.6	44.0	44.0	107.0	111.0	99.7	85.5
17.....	54.5	57.8	46.6	34.9	39.3	41.6	44.0	49.1	115.0	99.7	92.5	66.8
18.....	57.3	57.3	32.8	37.1	39.3	44.0	44.0	49.1	107.0	99.7	49.7	54.5
19.....	51.8	57.3	32.8	32.8	39.3	44.0	44.0	46.6	107.0	107.0	99.7	54.5
20.....	46.6	51.8	8.6	34.9	39.3	39.3	44.0	44.0	103.0	115.0	107.0	72.2
21.....	15.8	57.3	30.8	32.8	39.3	39.3	44.0	49.1	99.7	107.0	123.0	75.4
22.....	54.5	60.1	28.9	23.5	39.3	44.0	44.0	49.1	99.7	96.1	115.0	82.1
23.....	54.5	54.5	27.0	25.2	39.3	44.0	44.0	44.0	99.7	99.7	107.0	82.1
24.....	54.5	46.6	25.2	27.0	39.3	44.0	44.0	44.0	99.7	99.7	115.0	85.5
25.....	54.5	66.0	32.8	30.8	39.3	44.0	44.0	54.5	99.7	99.7	107.0	72.3
26.....	69.4	51.8	27.0	30.8	34.9	44.0	44.0	49.1	107.0	99.7	115.0	89.0
27.....	60.1	49.1	27.0	30.8	39.3	44.0	44.0	49.1	99.7	103.0	115.0	85.5
28.....	66.0	54.5	30.8	41.6	30.8	44.0	44.0	49.1	99.7	103.0	99.7	85.5
29.....	57.3	....	30.8	39.3	31.9	44.0	44.0	49.1	92.5	99.7	96.1	85.5
30.....	44.0	....	30.8	39.3	44.0	44.0	44.0	49.1	92.5	99.7	99.7	82.3
31.....	57.3	....	34.9	....	41.6	.....	44.0	49.1	....	99.7	....	99.7

Monthly Discharge of United States Reclamation Service Power Canal near Spanish Fork, Utah, for 1909.

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	82.1	15.8	54.9	.....	.....	3,380
February	66.0	46.6	58.3	.....	.....	3,240
March	66.0	0	29.5	.....	.....	1,810
April	41.6	26.2	32.3	.....	.....	1,920
May	44.0	27.0	38.8	.....	.....	2,390
June	188	39.3	47.2	.....	.....	2,810
July	46.6	41.6	44.0	.....	.....	2,710
August	54.5	39.3	45.9	.....	.....	2,820
September	123	49.1	90.8	.....	.....	5,400
October	115	96.1	101	.....	.....	6,210
November	123	92.5	104	.....	.....	6,190
December	115	54.5	87.1	.....	.....	5,360
The year....	188	0	61.2	.....	.....	44,200

Discharge Measurements of United States Reclamation Service Power Canal near Spanish Fork, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 3.....	A. B. Purton.....	9.7	19.70	2.85	109

Daily Discharge in Second-feet of United States Reclamation Service Canal near Spanish Fork, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	107	92	115	107	60	69	79	84	70	73	72	85
2.....	115	107	115	107	57	66	73	93	65	87	72	85
3.....	115	100	115	115	57	66	77	72	63	57	75	88
4.....	115	89	119	103	54	63	79	71	70	57	78	90
5.....	111	96	115	103	60	62	85	69	70	56	75	77
6.....	96	96	115	115	60	65	85	68	73	57	78	77
7.....	115	96	123	107	66	64	83	66	68	59	85	85
8.....	107	107	119	107	66	67	85	68	67	60	85	88
9.....	115	103	127	107	66	67	81	67	70	61	82	85
10.....	111	103	131	111	60	66	85	69	67	63	82	89
11.....	111	103	123	107	60	65	81	68	72	69	83	89
12.....	115	103	127	107	57	66	81	72	67	69	78	92
13.....	107	103	96	103	60	66	81	75	67	71	78	88
14.....	107	103	100	123	66	66	80	69	68	71	82	87
15.....	107	100	100	111	69	64	84	70	72	67	78	82
16.....	107	100	103	115	72	64	83	67	73	75	78	82
17.....	107	72	103	115	66	63	78	65	77	75	78	82
18.....	104	107	107	82	72	63	86	66	73	81	75	79
19.....	93	103	115	60	69	65	85	69	74	74	79	80
20.....	100	103	107	69	66	65	83	66	67	72	75	82
21.....	104	107	111	69	69	67	82	67	67	69	79	87
22.....	104	111	123	63	72	65	83	67	67	68	82	78
23.....	107	107	111	63	75	67	79	67	59	71	85	69
24.....	103	111	115	63	72	67	77	59	67	67	85	78
25.....	100	111	115	63	72	64	77	67	72	67	85	80
26.....	102	115	123	63	79	72	75	66	59	67	96	74
27.....	100	111	111	57	79	68	81	66	73	72	78	64
28.....	93	115	107	69	79	79	82	66	67	72	79	82
29.....	111	....	119	54	72	73	79	66	77	75	80	71
30.....	93	....	96	69	63	76	80	67	79	74	82	75
31.....	93	....	103	....	63	.....	82	67	....	75	....	78

Monthly Discharge of United States Reclamation Service Power Canal near Spanish Fork, Utah, for 1910.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	115	93	106	.....	.....	6,460
February	115	72	103	.....	.....	5,690
March	123	96	107	.....	.....	6,540
April	115	54	90	.....	.....	5,370
May	79	54	71	.....	.....	4,090
June	79	62	48	.....	.....	3,970
July	86	73	81	.....	.....	4,987
August	93	60	69	.....	.....	4,240
September	79	63	70	.....	.....	4,120
October	81	56	68	.....	.....	4,240
November	96	72	80	.....	.....	4,750
December	92	64	81	.....	.....	5,000
The year....	123	54	81	.....	.....	59,450

SPANISH FORK AT LAKE SHORE, UTAH.

This station, which was established December 10, 1903, discontinued July 10, 1907, and re-established March 10, 1909, to determine the amount of water wasted into Utah Lake, is located about 3 miles west of Spanish Fork, Utah, 1 mile east of Lake Shore, and about 3 miles above the mouth of the river.

The station is below all tributaries and diversions, all the low-water flow being diverted above. The station was originally located about 800 feet above the wagon bridge on the road from Spanish Fork to Lake Shore, but as the conditions were very unsatisfactory it was relocated at a point about one-half mile further downstream where the measuring conditions are excellent.

Measurements are made from a cable and car.

The records are not affected by ice or artificial control below. The bed of the stream is fairly permanent at the new station, a good rating curve has been obtained, and the 1909 records may be considered excellent. The datum of the staff gage has remained unchanged since the new station was established.

Discharge Measurements of Spanish Fork near Lake Shore, Utah, in 1906.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 20	W. G. Swendsen	27.0	26.5	4.53	72
February 3	do	27.0	25.6	4.48	65
March 2	do	30.0	31.3	4.50	83
March 23	do	37.5	60.9	5.41	181
April 28	H. S. Kleinschmidt	52.0	123	7.25	352
June 12	Thos. Grieve, Jr.	24.0	10.0	4.20	13

Daily Discharge in Second-feet of Spanish Fork near Lake Shore, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	49	58	85	177	315	200	.....	....	....	....	19	36
2	50	54	82	170	339	180	.....	....	....	....	21	50
3	47	61	79	161	362	161	.....	....	....	....	21	50
4	48	61	84	142	408	145	....	....	....	....	21	40
5	46	62	84	147	532	139	.....	....	....	....	21	40
6	50	62	77	152	552	177	.....	....	....	....	21	57
7	53	62	80	220	536	161	.....	....	....	....	23	57
8	56	61	86	228	534	131	.....	....	....	....	23	57
9	56	58	91	236	532	123	.....	....	....	....	26	57
10	59	63	163	264	491	74	.....	....	....	....	28	57
11	62	64	222	260	500	58	.....	....	....	....	28	57
12	66	73	182	236	433	31	.....	....	....	....	28	57
13	70	69	245	231	611	17	.....	....	....	....	28	65
14	92	74	119	236	513	8	.....	....	....	....	26	65
15	58	71	58	255	113	3	.....	....	....	....	26	65

Daily Discharge in Second-feet of Spanish Fork near Lake Shore, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	54	76	52	329	422	0	.....	....	....	....	26	57
17	58	67	56	375	445	18	.....	....	....	....	26	50
18	58	72	64	395	398	6	.....	....	....	....	26	50
19	68	87	61	397	397	.....	.....	....	....	....	26	50
20	72	75	88	400	416	.....	.....	....	....	....	26	50
21	72	75	94	420	488	.....	.....	....	....	....	26	50
22	49	79	97	460	435	.....	.....	....	....	....	26	50
23	66	81	181	496	397	.....	.....	....	....	....	26	42
24	58	80	226	460	366	.....	.....	....	....	....	26	50
25	58	76	319	478	333	.....	.....	....	....	....	26	50
26	56	73	245	395	318	.....	.....	....	....	....	26	74
27	56	81	193	367	280	.....	.....	....	....	....	26	74
28	59	77	198	352	322	.....	.....	....	....	....	36	65
29	58	....	180	361	326	.....	.....	....	....	....	36	65
30	58	....	179	364	280	.....	.....	....	....	....	36	57
31	58	....	186	....	242	.....	.....	....	....	....	....	57

Monthly Discharge of Spanish Fork River near Lake Shore, Utah, for 1906.

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	92	46	59.0	.....	.....	3,630
February	87	54	69.9	.....	.....	3,880
March	319	52	134	.....	.....	8,240
April	496	142	305	.....	.....	18,100
May	552	242	419	.....	.....	25,800
June	200	0	54.7	.....	.....	0
July	0	0	0	.....	.....	0
August	0	0	0	.....	.....	0
September	0	0	0	.....	.....	0
October	0	0	0	.....	.....	0
November	36	19	26.0	.....	.....	1,550
December	74	10	52.9	.....	.....	3,250
The year	552	0	93.4	.....	.....	67,700

Discharge Measurements of Spanish Fork near Lake Shore, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 17	G. T. Burridge	.....	126	7.75	382
July 5	.....do	.....	10	4.85	13
July 24	.....do	.....	4	4.50	0.4

Daily Discharge in Second-feet of Spanish Fork near Lake Shore, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	63	80	116	192	488	452	24	....	....	....	....	....
2.....	63	80	116	216	488	452	19	....	....	....	....	....
3.....	55	126	116	265	488	470	19	....	....	....	....	....
4.....	55	265	116	338	488	470	11	....	....	....	....	....
5.....	55	410	116	338	440	470	11	....	....	....	....	....
6.....	59	375	116	314	440	470	11	....	....	....	....	....
7.....	59	204	116	289	440	470	11	....	....	....	....	....
8.....	63	137	116	326	410	470	11	....	....	....	....	....
9.....	59	126	116	387	410	452	11	....	....	....	....	....
10.....	53	116	116	410	410	434	.....	....	....	....	....	....
11.....	53	116	116	452	410	434	.....	....	....	....	....	....
12.....	71	116	126	530	488	506	.....	....	....	....	....	....
13.....	71	106	126	566	488	506	.....	....	....	....	....	....
14.....	71	106	126	590	470	482	.....	....	....	....	....	....
15.....	71	106	126	590	470	482	.....	....	....	....	....	....
16.....	71	106	126	590	512	410	.....	....	....	....	....	....
17.....	71	116	169	572	560	386	.....	....	....	....	....	....
18.....	71	116	192	488	560	354	.....	....	....	....	....	....
19.....	71	116	228	470	560	316	.....	....	....	....	....	....
20.....	63	116	252	470	590	298	.....	....	....	....	....	....
21.....	63	116	265	488	608	176	.....	....	....	....	....	....
22.....	63	126	277	488	578	161	.....	....	....	....	....	....
23.....	63	126	277	488	554	161	.....	....	....	....	....	....
24.....	55	126	265	512	530	146	.....	....	....	....	....	....
25.....	55	126	252	512	506	132	.....	....	....	....	....	....
26.....	63	126	240	512	482	83	.....	....	....	....	....	....
27.....	63	126	216	512	458	73	.....	....	....	....	....	....
28.....	71	126	192	482	434	64	.....	....	....	....	....	....
29.....	71	....	180	482	434	56	.....	....	....	....	....	....
30.....	71	....	168	470	410	41	.....	....	....	....	....	....
31.....	80	....	168	....	410	.....	.....	....	....	....	....	....

Note—Spanish Fork was practically dry after July 9 until late in the fall.

Monthly Discharge of Spanish Fork River near Lake Shore, Utah, for 1907.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre feet
January	80	53	64.1	.....	.....	3,940
February	*410*	*80*	*144*	.....	.....	*8,000*
March	277	116	169	.....	.....	10,400
April	*590*	192	*445*	.....	.....	*26,500*
May	608	410	484	.....	.....	29,800
June	506	41	320	.....	.....	19,600
July	24	.....	14.2	.....	.....	254
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period..	608	41	.....	.....	.....	98,500

Discharge Measurements of Spanish Fork River near Lake Shore, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 11	E. A. Porter	25	56	4.00	118
April 9	W. M. O'Neill	26	101	5.39	234
May 10	E. S. Fuller	43	390	15.35	1,310
May 10	do	43	390	15.35	1,330
June 3	do	35	292	12.35	893
July 3	do	10	2.8	1.65	73
September 17	do	23	28.3	2.55	39

Daily Discharge in Second-feet of Spanish Fork River near Lake Shore, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	...	280	799	752	4	3	217	9	40	105
2	....	....	....	370	757	810	3.5	3	114	10	37	98
3	....	....	....	418	799	887	3.5	3	11	12	35	90
4	....	....	....	514	865	940	3.5	2.5	12	13	32	89
5	....	....	....	361	985	952	3	2.5	14	14	28	88
6	....	....	....	289	1,110	928	3	2.5	15	16	29	86
7	....	....	....	266	1,110	854	3	2.5	20	18	31	84
8	....	....	....	244	1,180	777	3	3	26	20	32	83
9	....	....	....	253	1,200	658	3	3	36	20	39	86
10	....	....	121	320	1,210	590	3	3	46	22	46	90
11	....	....	105	316	1,430	492	3	3	56	22	45	94
12	....	....	94	289	1,280	451	3	3	66	23	44	98
13	....	....	105	312	1,110	428	3	3	77	23	46	111
14	....	....	129	424	1,620	415	3	3	68	23	48	99
15	....	....	222	356	940	298	3	3	60	24	50	97
16	....	....	330	636	928	266	3	3	56	26	55	109
17	....	....	352	742	898	205	3	3	50	27	60	121
18	....	....	492	804	854	169	3	4	46	29	70	111
19	....	....	352	826	882	161	9	4	40	32	80	100
20	....	....	280	876	966	161	15	5	35	34	124	90
21	....	....	205	712	1,010	133	7	5	32	34	168	82
22	....	....	180	622	1,046	90	4	5.5	30	35	213	74
23	....	....	316	582	1,078	52	5	5.5	25	37	165	76
24	....	....	217	636	1,030	42	5	5	22	38	117	77
25	....	....	226	577	898	24	5.5	4.5	20	40	107	79
26	....	....	258	662	821	12	5.2	4	15	41	97	81
27	....	....	302	777	860	11	.5	3.5	13	42	97	83
28	....	....	274	854	898	5.5	4.5	3.5	11	42	86	102
29	....	....	280	1,050	1,090	4	4	4	10	42	86	121
30	....	....	244	876	882	4	3.8	4	10	41	95	141
31	....	....	269	....	707	.....	3.5	10	....	41	....	161

Monthly Discharge of Spanish Fork River near Lake Shore, Utah, for 1909.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 10-31	492	94	241	.....	.....	10,500
April	1,050	244	549	.....	.....	32,700
May	1,430	757	987	.....	.....	60,700
June	952	4	386	.....	.....	23,000
July	15	3	4	.....	.....	262
August	110	3	7	.....	.....	429
September	217	10	42	.....	.....	2,490
October	42	9	27	.....	.....	1,680
November	213	28	73	.....	.....	4,370
December	161	74	97	.....	.....	5,940
The period	1,430	3	241	.....	.....	142,000

Discharge Measurements of Spanish Fork River near Lake Shore, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 1	O. W. Hartwell	24.5	63.4	4.03	133
March 4	A. B. Purton	27.5	88.9	5.11	199
July 26	do	5.4	1.74	1.16	1.45
September 1	do	5.8	1.56	1.20	1.18

Daily Discharge in Second-feet of Spanish Fork River near Lake Shore, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	126	307	401	2	1	1	....	....	....	....
2	....	105	136	338	361	....	....	....	1	....	26	69
3	105	....	164	347	275	1	....	1	....	3	....	....
4	....	102	203	365	247	....	1	....	....	....	29	....
5	108	....	215	365	239	....	....	1	1	2	....	72
6	....	....	219	365	203	1	1	....	....	....	....	....
7	112	102	256	374	179	....	....	....	1	2	57	67
8	....	....	320	379	179	1	1	1	....	....	....	....
9	....	84	338	419	136	....	....	....	1	....	64	72
10	105	....	311	460	112	1	....	1	....	2	....	....
11	....	96	307	510	203	....	1	....	....	....	28	78
12	115	....	325	565	195	....	....	1	2	2	....	....
13	....	....	338	550	171	1	1	....	....	....	....	78
14	115	105	406	550	157	....	....	....	2	3	46	....
15	....	....	401	510	129	1	1	1	....	....	....	78
16	....	96	437	482	102	....	....	....	2	....	36	....
17	122	....	406	473	81	1	....	1	....	29	....	72
18	....	90	410	482	57	....	1	....	....	....	32	67
19	87	....	437	482	52	....	....	1	2	44	....	....
20	....	....	473	510	31	1	1	....	....	....	....	....
21	90	96	540	487	23	....	....	....	2	40	57	75
22	....	....	615	520	16	1	1	1	....	....	....	....
23	....	105	673	505	9	....	....	....	1	....	62	62
24	115	....	478	525	5	1	....	1	....	40	....	....
25	....	108	442	545	3	....	1	....	....	....	62	....
26	96	....	419	565	2	....	1	1	1	38	....	72
27	....	....	401	575	2	1	1	....	....	....	....	....
28	99	115	365	525	2	....	....	....	1	38	67	62
29	....	....	334	520	2	1	1	1	....	....	....	....
30	....	....	320	464	2	....	....	....	1	....	64	64
31	78	....	315	....	2	....	....	1	....	54	....	....

Monthly Discharge of Spanish Fork River near Lake Shore, Utah, for 1910.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	122	78	103	.....	.....	6,300
February	115	84	100	.....	.....	5,400
March	673	136	326	.....	.....	20,000
April	575	307	468	.....	.....	27,800
May	401	2	115	.....	.....	7,100
June	2	1	1	.....	.....	.....
July	1	1	1	.....	.....	.....
August	1	1	1	.....	.....	.....
September	2	1	1	.....	.....	.....
October	54	2	22	.....	.....	1,400
November	67	29	46	.....	.....	2,700
December	78	62	69	.....	.....	4,200
The year	673	1	104	.....	.....	74,900

MONTHLY RUN-OFF

In Thousands of Acre Feet of Spanish Fork River near Lake Shore, Utah, 1904 to 1910.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft per Sq. Mile	Depth in inches on Drainage Area
1904	3.28	4.38	5.45	10.00	12.42	0	0	0	0	0	0	2.48	38.00	....	....
1905	3.33	3.67	3.08	5.36	1.10	0	0	0	0	0	0.06	2.63	19.23	....	....
1906	2.63	3.88	8.24	18.16	25.80	3.25	0	0	0	0	1.55	3.25	67.70	....	....
1907	3.94	8.00	10.40	26.50	29.80	19.60	0.25	.....	.....	.....	.....	.....	.....	....	....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1909	.....	.....	10.50	32.70	60.70	23.00	0.26	0.43	2.49	1.68	4.37	5.94	.....	....	....
1910	6.20	5.40	20.00	27.80	7.10	0	0	0	0	1.40	2.70	4.20	74.90	....	....
Mean.	4.10	5.07	9.61	20.08	22.82	7.64	0.08	0.09	0.50	0.62	1.74	3.70	76.05	....	....

Discharge Measurements of Santaquin Creek near Santaquin, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 8	A. B. Purton	8.5	6.65	1.22	13
March 22	do	8.5	8.40	1.42	24
May 10	do	9.0	14.30	1.70	65
July 9	do	8.8	6.47	1.25	12
September 13	do	9.0	5.65	1.16	7

Daily Discharge in Second-feet of Summit Creek near Santaquin, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	17	48	48	16	11	9	9	8	7
2	....	...	....	17	48	48	16	11	9	13	8	7
3	....	....	....	17	48	27	16	11	9	9	8	7
4	....	....	....	17	48	24	16	11	9	8	8	7
5	....	....	....	24	68	24	16	11	9	9	8	7
6	...	....	....	24	68	24	16	11	9	9	8	7
7	....	....	....	24	68	24	16	11	9	8	8	7
8	....	....	....	24	68	24	16	11	9	8	8	7
9	....	....	12	24	92	24	16	11	9	9	8	7
10	....	....	12	24	154	24	16	11	9	9	8	7
11	....	...	12	34	121	24	16	11	9	9	8	7
12	....	....	12	34	92	24	11	11	10	8	8	7
13	....	....	12	48	121	24	11	11	16	8	8	7
14	....	....	12	48	92	16	11	9	10	8	8	7
15	....	....	12	48	92	16	11	9	10	9	8	7
16	....	....	17	48	68	16	11	9	10	9	8	7
17	....	....	17	48	48	16	11	9	10	12	8	7
18	....	....	17	68	48	16	11	9	10	13	8	7
19	....	....	17	68	48	16	11	9	14	10	8	6
20	....	....	24	68	48	16	11	9	9	10	8	6
21	....	....	24	68	48	16	11	9	9	9	8	6
22	....	....	24	68	48	16	11	9	9	9	8	6
23	....	....	24	68	48	16	11	9	8	8	8	6
24	....	....	21	92	48	16	11	9	8	8	8	6
25	....	....	17	92	48	16	11	9	8	8	8	6
26	....	....	24	121	48	16	11	9	9	8	8	6
27	....	....	17	92	48	16	11	9	9	8	8	5
28	....	....	17	68	48	16	11	9	9	8	8	5
29	....	....	17	68	48	16	11	9	9	8	8	5
30	....	....	17	68	48	16	11	9	8	8	8	6
31	....	....	17	....	48	.....	11	9	....	8	....	6

Monthly Discharge of Summit Creek near Santaquin, Utah, for 1910.

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	18	.....	.....	805
April	121	17	51	.....	.....	3,030
May	154	48	65	.....	.....	4,000
June	48	16	21	.....	.....	1,260
July	16	11	13	.....	.....	787
August	11	9	10	.....	.....	621
September	16	8	10	.....	.....	575
October	13	8	9	.....	.....	555
November	8	7	8	.....	.....	464
December	7	5	7	.....	.....	421
The period	154	5	21	.....	.....	12,500

PRICE RIVER NEAR HELPER, UTAH.

This gaging station, which was established February 21, 1904, is located on the upper side of the ford, about 3 miles south of Helper, Utah, and 350 feet west of the main line of the Denver and Rio Grande Railroad.

The datum of the original chain gage remained unchanged until washed out by high water April 11, 1907. It was replaced by a temporary gage June 23, 1907, and by a permanent one July 16, 1907. All gage heights after June 22, 1907, are referred to a new datum 0.7-foot above the original datum. The bed of the stream is composed of fine gravel and sand and shifts slightly, especially during high water, and new rating tables are required each year. The records of discharge are considered fairly good.

Discharge Measurements of Price River near Helper, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 19	H. S. Kleinschmidt	54	134	4.70	449
May 18	Thos. Grieve	66	216	5.70	1,220
May 31	do	64	195	5.50	870
June 30	do	59	106	4.20	187
October 18	do	42	102	3.35	30

Daily Discharge in Second-feet of Price River near Helper, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	4	9	9	150	354	740	182	150	60	30	60	18
2	4	9	9	98	305	740	182	354	60	30	44	18
3	4	18	9	60	354	740	182	150	60	30	44	18
4	4	18	9	98	404	740	150	150	44	30	30	18
5	4	18	9	60	620	740	150	150	44	30	30	18
6	4	18	18	60	740	680	150	150	44	30	30	18
7	4	18	18	150	740	680	150	122	44	30	30	18
8	9	18	18	150	740	150	150	122	30	30	30	18
9	9	18	18	219	805	150	150	98	30	30	30	30
10	9	18	30	219	870	563	150	98	30	30	30	18
11	4	18	18	219	937	563	122	98	30	30	30	18
12	4	18	18	219	1,145	563	122	98	30	30	30	18
13	4	18	18	182	1,145	563	122	98	30	30	30	18
14	4	18	18	182	1,005	563	122	219	30	30	30	18
15	4	18	18	260	937	508	122	122	44	30	30	18
16	4	18	9	305	937	508	122	122	60	30	30	18
17	4	18	9	404	1,075	455	122	122	60	30	30	18
18	4	18	9	455	1,075	404	455	98	60	30	30	18
19	4	18	4	404	1,075	404	1,220	98	44	30	30	18
20	4	30	18	404	1,295	354	150	98	44	30	18	18
21	9	18	9	455	1,527	354	78	122	44	30	18	18
22	9	18	18	455	1,527	305	78	122	44	30	18	18
23	4	9	18	508	1,450	305	78	78	44	30	18	18
24	4	9	60	563	1,145	260	508	78	44	30	18	30
25	9	9	78	508	1,145	260	122	60	44	30	18	30
26	9	9	78	455	1,005	260	122	60	44	30	18	30
27	18	18	60	404	1,005	219	98	60	30	30	18	18
28	18	18	98	354	1,005	219	98	60	30	30	18	18
29	18	....	182	354	1,005	219	150	44	30	30	18	18
30	18	....	150	354	937	182	150	44	30	30	18	18
31	9	....	150	....	805	.....	150	44	....	30	....	18

Monthly Discharge of Price River near Helper, Utah, for 1906.
(Drainage area, 530 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	18	4	7	0.01	0.01	437
February	30	9	17	.03	.03	916
March	182	4	39	.07	.08	2,370
April	563	60	290	.55	.60	17,300
May	1,530	305	940	1.79	2.03	58,400
June	740	182	477	0.90	1.00	28,300
July	1,220	78	191	.36	0.40	11,700
August	354	44	113	.21	.23	6,950
September	60	30	42	.08	.09	2,510
October	30	30	30	.06	.06	1,840
November	60	18	28	.05	.06	1,640
December	30	18	20	.04	.04	1,200
The year	1,530	4	181	0.35	4.63	133,500

Discharge Measurements of Price River near Helper, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 22	La Rue and Burridge	62	203	4.60	714
July 15	G. T. Burridge	60	143	3.45	224
August 2	do	52	115	3.30	137
August 27	do	47	96	3.15	100

Daily Discharge in Second-feet of Price River near Helper, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	18	18	44	122	.....	.....	468	140	114	54	54	42
2	18	18	44	150	.....	.....	418	140	90	54	54	42
3	18	18	44	150	.....	.....	418	242	90	54	54	42
4	18	44	60	182	.....	.....	370	140	90	54	54	42
5	18	44	69	219	.....	.....	370	140	90	54	54	42
6	18	44	60	219	.....	.....	324	140	114	54	54	42
7	18	44	69	219	.....	.....	324	140	90	54	54	42
8	18	18	60	305	.....	.....	324	114	90	54	54	42
9	18	18	60	305	.....	.....	282	114	90	54	54	42
10	18	60	60	354	.....	.....	242	114	90	54	54	42
11	18	60	60	455	.....	.....	242	90	54	54	42	42
12	18	44	30	....	.....	.....	204	90	54	54	42	42
13	18	44	30	....	.....	.....	242	90	54	54	42	42
14	18	44	18	....	.....	.....	204	90	54	54	42	42
15	18	44	18	....	.....	.....	170	90	54	54	42	42
16	18	44	18	....	.....	.....	204	90	54	54	42	42
17	18	44	18	....	.....	.....	204	90	54	54	42	42
18	18	44	18	....	.....	.....	204	90	54	54	42	42
19	18	44	30	....	.....	.....	204	90	54	54	42	42
20	18	44	78	....	.....	.....	204	90	54	54	42	42
21	18	44	150	....	.....	.....	170	70	54	54	42	42
22	18	44	150	....	.....	.....	170	54	54	54	42	54
23	18	30	150	....	.....	736	170	70	54	54	42	54
24	18	60	150	....	.....	572	170	90	54	54	42	54
25	18	44	122	....	.....	572	170	680	54	54	42	54
26	18	44	122	....	.....	572	170	204	54	54	42	54
27	60	44	122	....	.....	520	170	170	54	54	42	54
28	60	44	122	....	.....	520	204	170	54	54	42	42
29	60	....	98	....	.....	468	170	90	54	54	42	42
30	60	....	78	....	.....	468	170	242	54	54	42	42
31	30	....	98	....	.....	.....	140	204	....	54	....	42

Monthly Discharge of Price River near Helper, Utah, for 1907.

(Drainage area, 530 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	60	18	24	0.04	0.05	1,460
February	60	18	41	.08	.08	2,250
March	150	18	72	.14	.16	4,430
April 1-11.....	455	122	244	.46	.....	5,320
May	.....	.....	.....	.....	.....	.....
June 23-30.....	736	468	554	1.05	.....	8,790
July	468	140	242	0.46	.50	14,900
August	680	54	141	.27	.31	8,670
September	114	54	68	.13	.14	4,020
October	54	54	54	.10	.12	3,320
November	54	42	46	.09	.10	2,740
December	54	42	44	.08	.09	2,720
The period..	736	18	136	0.16	1.55	58,600

Discharge Measurements of Price River near Helper, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 25.....	A. D. Williams.....	42	71	2.95	79.3
July 10.....	Hoyt and La Rue.....	40	82	2.78	48.0

Daily Discharge in Second-feet of Price River near Helper, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	....	35	68	326	242	68	68	50	35	50	....
2.....	....	....	35	50	242	242	68	68	14	35	50	....
3.....	....	....	35	50	283	204	68	50	14	35	50	....
4.....	....	....	35	68	204	204	68	50	14	50	50	....
5.....	....	....	35	89	204	204	50	50	7	68	50	....
6.....	....	....	35	89	204	204	35	50	7	50	35	....
7.....	....	....	35	418	204	204	35	35	7	50	35	....
8.....	....	....	35	89	242	204	35	35	7	35	35	....
9.....	....	....	35	89	242	242	50	35	7	35	35	....
10.....	....	....	35	89	242	242	50	35	7	35	35	....
11.....	....	....	35	418	242	204	35	35	7	35	35	....
12.....	....	....	35	371	283	204	35	50	7	35	23	....
13.....	....	....	35	418	242	204	35	570	7	35	23	....
14.....	....	....	35	371	242	204	35	113	7	35	23	....
15.....	....	....	910	326	242	204	35	35	7	23	35	....

Daily Discharge in Second-feet of Price River near Helper, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	910	326	242	204	35	35	50	23	35	....
17	....	....	735	371	283	204	35	50	7	35	35	....
18	....	....	89	371	326	140	23	50	50	23	50	....
19	....	....	89	371	283	140	23	50	7	23	50	....
20	....	....	418	283	283	113	23	35	7	23	50	....
21	....	....	371	326	242	89	23	35	14	23	35	....
22	....	....	418	283	242	113	23	35	7	23	35	....
23	....	....	418	283	242	113	23	35	7	23	35	....
24	....	....	418	283	242	89	23	35	7	23	35	....
25	....	....	89	371	283	89	23	35	7	23	35	....
26	....	....	570	371	326	89	23	23	35	35	35	....
27	....	....	89	326	326	89	89	14	50	35	35	....
28	....	....	418	371	242	89	35	14	50	35	35	....
29	....	....	418	371	242	89	242	14	23	35	35	....
30	....	....	418	326	242	89	113	14	35	35	35	....
31	....	....	418	....	242	.....	113	7	....	35	....	....

Note—January, February and December, ice conditions.

Monthly Discharge of Price River near Helper, Utah, for 1908.

(Drainage area, 530 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	50	35	40	0.08	0.09	2,480
February	68	35	41	.08	.08	2,340
March	910	35	248	.47	.54	15,200
April	418	50	268	.50	.56	15,900
May	326	204	256	.48	.56	15,700
June	242	89	169	.32	.36	10,100
July	242	23	51	.10	.11	3,130
August	570	7	57	.11	.12	3,490
September	50	7	18	.03	.03	1,040
October	68	23	34	.06	.07	2,070
November	50	23	38	.07	.08	2,250
December	35	14	29	.06	.06	1,800
The year	910	7	104	0.20	2.66	75,500

Discharge Measurements of Price River near Helper, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 19	E. A. Porter	61	209	4.30	696
September 23	do	51	67.2	3.0	101
November 4	do	50	53.9	2.8	53

Daily Discharge in Second-feet of Price River near Helper, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	14	8	95	95	455	1,090	311	95	1,090	72	53	45
2.....	14	8	72	150	455	1,150	311	95	223	53	53	53
3.....	14	8	53	185	507	1,400	267	95	185	72	53	53
4.....	14	8	53	311	671	1,530	311	95	120	72	53	53
5.....	14	14	53	267	787	1,590	267	95	120	72	53	53
6.....	24	14	37	223	846	1,660	223	95	150	72	53	53
7.....	24	8	53	185	966	1,660	185	120	185	72	53	53
8.....	24	8	37	150	1,030	1,590	150	120	150	95	53	53
9.....	24	8	72	150	1,090	1,460	150	120	95	72	53	24
10.....	24	8	52	185	1,150	1,210	150	150	95	72	53	24
11.....	14	8	37	223	1,210	1,090	150	150	95	72	53	24
12.....	24	8	37	185	1,210	1,030	120	120	95	72	53	24
13.....	24	8	37	185	1,030	966	120	120	95	95	53	37
14.....	24	14	37	311	966	966	120	120	95	72	53	53
15.....	24	14	24	357	906	846	120	120	95	72	53	53
16.....	24	14	53	405	906	787	95	120	95	72	53	53
17.....	14	14	53	507	906	729	95	185	95	53	53	53
18.....	14	14	53	671	906	729	150	223	95	72	53	53
19.....	14	14	72	615	966	671	223	267	95	72	53	53
20.....	14	14	53	507	1,030	671	185	267	95	72	53	53
21.....	14	14	53	455	1,340	615	150	223	95	72	53	53
22.....	14	14	53	405	1,340	615	150	267	95	72	53	53
23.....	14	14	72	357	1,400	561	95	223	95	72	53	53
24.....	14	14	53	405	1,460	561	223	150	95	72	53	50
25.....	14	24	37	405	1,210	507	120	95	95	72	53	50
26.....	14	120	53	455	1,090	455	150	95	95	72	53	50
27.....	14	95	95	615	1,150	455	120	95	95	72	53	50
28.....	14	53	95	729	1,340	405	120	95	95	72	53	50
29.....	37	....	120	729	1,340	405	120	72	72	72	53	50
30.....	72	....	72	507	1,280	357	120	72	72	72	53	50
31.....	14	....	95	....	1,090	.....	120	357	....	53	....	50

Monthly Discharge of Price River near Helper, Utah, for 1909.

(Drainage area, 530 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	72	14	20	0.04	0.04	1,220
February	120	8	20	.04	.04	1,120
March	120	24	59	.11	.13	3,630
April	729	95	364	.69	.76	21,700
May	1,460	455	1,030	1.95	2.25	63,300
June	1,660	357	925	1.75	1.95	55,000
July	311	95	167	.32	.36	10,300
August	357	72	146	.28	.31	8,980
September	1,660	72	142	.27	.29	8,450
October	95	53	72	.14	.16	4,400
November	53	53	53	.10	.11	3,150
December	53	24	48	.09	.10	2,930
The year....	1,660	8	255	0.48	6.50	184,000

Discharge Measurements of Price River near Helper, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 27	E. S. Fuller	62	190	4.4	1,123
June 10	do	60	95.8	3.20	158
July 21	G. H. Canfield	57.5	62.4	2.79	54
August 25	do	39.5	45.5	2.66	32
October 1	do	50	47.5	2.70	38

Daily Discharge in Second-feet of Price River near Helper, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	53	26	53	374	1,353	310	72	39	26	39	39	26
2	53	26	53	527	1,243	250	72	39	26	96	39	26
3	53	26	26	527	1,243	250	53	39	26	72	39	39
4	53	26	26	527	1,130	250	53	39	26	53	39	39
5	26	26	26	916	1,023	200	39	39	26	53	39	39
6	39	26	26	916	1,023	200	39	39	26	39	39	26
7	39	26	26	527	916	158	39	39	26	39	39	26
8	39	26	39	374	916	158	39	39	26	39	53	26
9	53	26	39	811	916	124	39	26	26	39	53	26
10	53	26	39	916	1,023	124	39	26	26	39	39	39
11	53	26	39	....	1,023	124	39	26	39	39	39	39
12	39	53	26	....	1,023	124	39	26	39	72	39	39
13	39	53	26	811	1,130	124	39	18	158	53	39	39
14	39	53	72	712	1,130	124	39	18	53	53	39	39
15	....	....	....	617	1,023	200	63	18	53	53	39	39
16	....	....	....	527	916	200	39	39	53	250	39	39
17	527	53	53	527	916	200	39	26	617	250	39	39
18	448	53	53	527	811	200	39	26	96	158	39	39
19	448	53	617	617	712	72	39	26	72	96	39	53
20	39	53	1,467	712	617	72	39	26	72	72	39	96
21	39	53	1,353	811	617	53	39	26	53	53	39	96
22	39	53	374	1,023	527	53	39	26	53	53	53	124
23	26	53	310	916	527	53	39	26	39	53	53	124
24	26	53	158	811	527	53	39	26	39	53	53	39
25	26	53	310	916	527	53	39	26	39	53	39	96
26	72	53	916	1,023	448	53	39	26	39	53	39	53
27	72	39	916	1,243	448	53	39	26	39	39	39	72
28	26	39	916	1,353	374	53	39	225	39	39	39	53
29	26	....	1,023	1,353	374	96	53	39	39	39	26	39
30	26	....	448	1,467	371	72	96	26	39	39	26	26
31	....	....	....	....	310	.....	39	26	....	39	....	26

Monthly Discharge of Price River near Helper, Utah, for 1910.

(Drainage area, 530 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	527	26	145	0.28	0.31	8,900
February	53	26	41	.08	.08	2,250
March	1,467	26	324	.61	.70	19,900
April	1,467	374	804	1.52	1.69	47,900
May	1,353	310	811	1.53	1.76	50,000
June	310	53	135	.25	.30	8,050
July	96	39	41	.08	.09	2,500
August	225	18	36	.07	.08	2,200
September	617	26	64	.12	.14	3,800
October	250	39	68	.13	.15	4,200
November	53	26	40	.08	.08	2,380
December	124	26	49	.09	.11	3,080
The year....	1,467	18	203	0.40	5.49	155,160

Note—Flow is affected by storage in Gooseberry Reservoir.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Price River near Helper, Utah, 1904 to 1910.

(Drainage area, 530 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1904	.....	.....	2.71	9.64	*21.25	*15.00	3.54	2.38	2.27	1.81	1.26	1.09	.....	....	....
1905	1.39	2.02	3.06	4.25	23.30	15.11	1.59	1.16	5.22	1.62	1.22	0.74	60.58	0.16	2.15
1906	0.44	0.92	2.37	17.30	58.40	28.30	11.70	6.95	2.51	1.84	1.64	1.20	133.50	0.35	4.63
1907	1.46	2.25	4.43	.....	.....	.....	14.90	8.67	4.02	3.32	2.74	2.72	.....	....	....
1908	2.48	2.34	15.20	15.90	15.70	10.10	3.13	3.49	1.04	2.07	2.25	1.80	75.50	0.20	2.66
1909	1.22	1.12	3.63	21.70	63.30	55.00	10.30	8.98	8.45	4.40	3.15	2.93	184.00	0.48	6.50
1910† ...	8.90	2.25	19.90	47.90	50.00	8.05	2.50	2.20	3.80	4.20	2.38	3.08	155.16	0.40	5.49
Mean.	2.63	1.82	7.33	19.45	38.66	21.93	6.81	4.83	3.87	2.75	2.09	1.94	114.11	0.30	4.05

†Provisional. *Estimated.

PRICE RIVER NEAR WOODSIDE, UTAH.

This station, which is at the D. & R. G. R. R. bridge near Woodside, was established in connection with the Woodside reclamation project by H. W. Sheley, engineer for the project, through whose efforts the station has been maintained.

It shows the amount of surplus water below all present diversions on the Price River. Discharges have been computed by the Bolster method for shifting beds.

Daily Discharge in Second-feet of Price River near Woodside, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	....	....	....	8,150	....	....	....
1	....	....	....	....	....	....	....	....	5,040	78	64	96
2	....	....	....	....	....	....	....	....	2,300	....	....	....
2	....	....	....	....	....	....	....	....	550	78	64	96
3	....	....	....	....	....	....	....	....	860	....	....	....
3	....	....	....	....	....	....	....	....	380	95	64	96
4	....	....	....	....	....	....	....	....	340	68	64	80
5	....	....	....	....	....	....	....	....	700	....	....	....
5	....	....	....	....	....	....	....	....	135	68	64	64
6	....	....	....	....	....	....	....	....	5,140	....	....	....
6	....	....	....	....	....	....	....	....	750	68	64	....
7	....	....	....	....	....	....	....	....	3,160	....	....	....
7	....	....	....	....	....	....	....	....	750	80	64	....
8	....	....	....	....	....	....	....	....	1,040	80	80	....
8	....	....	....	....	....	....	....	....	600	80	64	....
9	....	....	....	....	....	....	....	....	265	80	64	....
10	....	....	....	....	....	....	....	....	165	80	64	....
11	....	....	....	....	....	....	....	....	180	95	64	....
12	....	....	....	....	....	....	....	....	135	68	64	....
13	....	....	....	....	....	....	....	....	135	92	64	....
14	....	....	....	....	....	....	....	....	95	92	64	....
15	....	....	....	....	....	....	....	....	95	92	64	....
16	....	....	....	....	....	....	....	....	95	75	64	....
17	....	....	....	....	....	....	....	....	95	92	64	....
18	....	....	....	....	....	....	....	....	95	80	64	....
19	....	....	....	....	....	....	....	....	115	80	35	....
20	....	....	....	....	....	....	....	....	115	64	96	....
21	....	....	....	....	....	....	....	4,190	....	....	....	....
21	....	....	....	....	....	....	650	2,870	135	64	96	....
22	....	....	....	....	....	....	....	600	....	....	....	....
22	....	....	....	....	....	....	165	460	115	64	115	....
23	....	....	....	....	....	....	1,310	....	....	....	....	....
23	....	....	....	....	....	....	75	300	....	64	115	....
24	....	....	....	....	....	....	3,530	265	....	....	....	....
24	....	....	....	....	....	....	265	235	....	64	115	....
25	....	....	....	....	....	....	235	205	....	64	115	....
26	....	....	....	....	....	....	3,060	205	....	64	115	....
27	....	....	....	....	....	....	....	155	....	....	....	....
27	....	....	....	....	....	....	....	100	....	64	135	....
28	....	....	....	....	....	....	....	155	....	64	115	....
29	....	....	....	....	....	....	95	135	....	64	115	....
30	....	....	....	....	....	....	....	115	....	64	96	....
31	....	....	....	....	....	....	....	5,420	....	....	....	....
31	....	....	....	....	....	....	....	650	....	64	....	....

Note—Where two discharges are shown for the same date, they are the maximum and minimum, respectively.

Monthly Discharge of Price River near Woodside, Utah, in 1909.

(Drainage area, 1,500 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....
July	3,530	10	.....	.....	.....	*.....
August	5,420	115	.....	.....	.....	*64,000
September	8,150	57	.....	.....	.....	*.....
October	95	64	74	0.05	0.06	4,500
November	135	64	80	.05	.06	4,800
December	.....	.....	73	.05	.06	4,400
The period..	8,150	10	260	0.17	0.90	77,700

*Obtained by platting discharge.

Discharge Measurements of Price River near Woodside, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 25....	E. S. Fuller.....	36	.....	10.25	748

Daily Discharge in Second-feet of Price River near Woodside, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	....	1,210	465	1,710	450	115	450	0	59	85	75
2.....	....	....	....	....	.....	.....	.....	....	0	300	....	....
2.....	....	....	1,090	510	1,670	420	79	125	....	59	85	75
3.....	....	....	1,020	535	1,520	370	54	105	360	155	68	75
4.....	....	....	....	....	.....	.....	.....	....	1,660	....	....	....
4.....	....	....	1,300	580	1,370	350	70	105	960	110	68	75
5.....	....	....	....	....	.....	.....	.....	....	490	....	....	....
5.....	....	....	2,040	535	1,370	335	79	88	230	110	68	68
6.....	....	....	2,870	580	1,440	325	61	88	94	93	68	68
7.....	....	....	1,830	605	1,410	280	61	79	60	75	68	68
8.....	....	....	1,380	580	1,300	270	61	53	26	59	68	68
9.....	....	....	1,110	605	1,300	230	45	36	10	59	68	75
10.....	....	....	510	630	1,270	210	45	36	2	59	68	90

Daily Discharge in Second-feet of Price River near Woodside, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11	....	....	420	605	1,270	195	28	20	2	59	68	90
12	....	....	305	790	1,350	170	22	53	2	59	50	110
13	....	....	....	....	....	....	....	....	455	235	....	....
13	....	....	270	820	1,350	145	10	88	235	135	38	110
14	....	....	....	....	....	....	....	....	335	....	....	....
14	....	....	270	820	1,420	130	10	70	235	75	90	150
15	....	....	....	....	....	....	....	....	235	760	370	....
15	....	....	305	880	1,310	100	34	20	0	75	175	150
16	....	....	....	....	....	....	820	....	460	2,750	370	....
16	....	....	305	850	1,330	70	95	20	2	1,700	175	130
17	....	....	....	....	....	....	510	....	1,700	680	370	....
17	....	....	340	820	1,200	67	135	5	650	530	150	110
18	....	....	....	....	....	....	....	....	335	480	370	....
18	....	....	380	790	1,120	59	95	3	180	395	295	110
19	....	....	....	....	....	....	....	....	1,040	....	....	....
19	....	....	380	880	1,010	56	44	1	760	195	230	90
20	....	....	420	905	915	50	60	1	370	145	230	90
21	....	....	465	960	880	50	45	5	155	120	200	75
22	....	....	555	1,200	890	50	30	2	135	120	200	75
23	....	....	715	1,200	830	50	36	1	110	120	200	....
24	....	....	765	1,200	760	37	20	1	93	100	200	....
25	....	....	715	1,310	715	37	5	....	93	100	370	....
26	....	....	715	1,380	670	37	0	0	93	100	295	....
27	....	....	715	1,420	660	37	0	0	75	100	90	....
28	....	....	660	1,500	590	40	20	0	75	100	75	....
29	....	....	....	....	....	....	330	....	....	....	....	....
29	....	....	555	1,690	555	1,300	56	....	75	85	75	....
30	....	....	....	....	....	....	295	....	....	....	....	....
30	....	....	465	1,880	195	500	130	....	75	68	75	....
31	....	....	....	....	....	....	1,500	....	....	....	....	....
31	....	....	465	....	480	....	920	....	....	100	....	....

Note—Where two discharges are shown for the same date, they are the maximum and minimum, respectively.

Monthly Discharge of Price River near Woodside, Utah, in 1910.

(Drainage area, 1,500 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	*70	0.05	0.05	4,300
February	.....	.....	*70	.05	.05	4,200
March	2,870	270	792	.53	.61	48,700
April	1,880	465	918	.61	.68	54,600
May	1,710	480	1,102	.74	.85	67,800
June	1,300	37	187	.12	.14	11,100
July	1,600	0	114	.08	.09	7,000
August	450	0	41	.03	.03	2,500
September	1,700	0	221	.15	.16	13,200
October	2,750	59	207	.14	.16	12,700
November	370	38	128	.09	.10	7,500
December	150	68	92	.06	.07	5,600
The year	2,870	.....	330	0.22	2.99	239,300

*Estimated. Data and computations furnished by H. W. Sheley.

INDIAN CREEK IN STRAWBERRY VALLEY.

This station is located just above the junction of Indian Creek and Strawberry River. Its purpose is to determine the amount of water available for storage in the Strawberry Reservoir for the United States Reclamation Service Strawberry project.

Discharge Measurements of Indian Creek in Strawberry Valley in 1909 and 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909.		*Feet.*	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 7	.....	.....	.....	.....	67.9
September 12	.....	.....	.....	.....	31.3
September 15	.....	.....	.....	.....	29.7
1910.					
May 20	A. B. Purton	23.5	37.2	2.88	95
July 24	do	22.0	16.4	1.45	25
August 23	do	18.1	15.9	1.37	19

Daily Discharge in Second-feet of Indian Creek in Strawberry Valley, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	.....	51	.....	....	....	....	....	....
2	....	....	....	....	.....	.....	.....	25	....	....	19	....
3	....	....	....	....	.....	.....	.....	....	21	....	....	....
4	....	....	....	....	107	49	.....	....	....	....	....	....
5	....	....	....	....	.....	.....	.....	....	....	....	....	....
6	....	....	....	....	95	.....	.....	25	21	21	....	....
7	....	....	....	....	.....	46	.....	....	....	....	....	....
8	....	....	....	....	.....	.....	31	....	....	....	....	....
9	....	....	....	....	.....	.....	.....	23	21	....	19	....
10	....	....	....	....	98	.....	.....	....	....	....	....	....
11	....	....	....	....	.....	41	.....	....	....	....	....	....
12	....	....	....	....	.....	.....	29	23	....	....	....	....
13	....	....	....	56	83	.....	.....	....	21	21	....	....
14	....	....	....	....	.....	.....	.....	....	....	....	19	....
15	....	....	....	....	86	41	.....	....	....	....	....	....
16	....	....	....	....	.....	.....	29	....	....	....	....	....
17	....	....	....	....	74	.....	.....	....	23	....	....	....
18	....	....	....	....	.....	36	27	....	....	....	....	....
19	....	....	....	....	101	.....	.....	25	....	21	....	....
20	....	....	....	....	.....	.....	.....	....	23	....	....	....
21	....	....	....	....	95	.....	.....	....	....	....	....	....
22	....	....	....	....	.....	36	.....	23	....	....	....	....
23	....	....	....	....	.....	.....	27	....	....	....	....	....
24	....	....	....	110	.....	.....	.....	....	23	....	....	....
25	....	....	....	....	.....	36	.....	....	....	....	....	....
26	....	....	....	....	59	.....	27	21	....	21	....	....
27	....	....	....	....	.....	36	.....	....	....	....	....	....
28	....	....	....	....	.....	.....	.....	....	....	....	....	....
29	....	....	....	....	.....	36	.....	....	23	....	....	....
30	....	....	41	....	.....	.....	27	21	....	....	....	....
31	....	....	....	....	.....	.....	.....	....	....	....	....	....

Monthly Discharge of Indian Creek in Strawberry Valley, Utah, in 1910.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	110	52	87	.....	.....	5,330
June	51	36	41	.....	.....	2,450
July	35	27	29	.....	.....	1,800
August	26	21	23	.....	.....	1,430
September	23	21	22	.....	.....	1,310
October	22	19	21	.....	.....	1,280
November	.....	.....	19	.....	.....	565
December	.....	.....	.....	.....	.....	.....
The period..	.....	.....	.....	.....	.....	14,165

STRAWBERRY RIVER IN STRAWBERRY VALLEY, UTAH.

This station, which was established May 12, 1903, and discontinued July 12, 1906, was originally located below the junction of Big and Little Strawberry rivers, above the mouth of Indian Creek. It was established below Indian Creek October 14, 1908, but no records of gage heights were obtained in 1908. Measurements are made from a cable whenever possible.

The records show the amount of water available for storage in Strawberry Valley for the use of the Reclamation Service. The water will be stored by a low dam and diverted through a tunnel 18,500 feet long into the drainage basin of Spanish Fork, a tributary of Utah Lake, for irrigation and power development. This tunnel is not yet finished. The river is frozen over nearly five months of the year.

There is a small amount diverted out of the drainage area above the gaging station.

Discharge Measurements of Strawberry River in Strawberry Valley, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 7 *a*	A. B. Larson	23	38	2.13	36.1
January 10 *b*	do	22	37	2.15	31.7
January 13 *c*	do	21	38	2.25	33.7
January 15 *d*	do	21	25	1.61	13.7
January 16 *d*	do	21	27	1.89	18.0
January 18 *e*	do	20	36	2.65	25.8
January 22 *e*	do	20	35	2.50	22.8
February 12	H. S. Kleinschmidt	16	15	2.65	34.4
February 18	do	16	15	2.70	30.4
March 10 *f*	do	16	14	3.25	21.0
March 21 *g*	do	16	16	3.50	19.0
April 13	H. W. Sheley	20	20	3.45	18.0
April 15	A. B. Larson	35	86	3.45	131
April 19	do	49	132	4.05	285
April 20	do	52	123	3.64	345
April 21 *h*	do	58	168	3.55	470
April 22	do	59	211	4.15	637
April 23	do	58	190	3.86	552
April 27	do	58	144	3.12	365
April 29	do	59	222	4.34	694
May 3	do	62	270	4.93	874
May 4	do	63	297	5.32	984
May 7	do	61	250	4.70	783
June 18	do	60	160	2.65	241
July 12	Thos. Grieve	60	74	1.98	106

a Ice 12 to 18 inches thick.
b Ice 15 inches thick.
c Ice 18 inches thick.
d Water backed by snow, ice 18 inches thick.
e Water over top of ice.
f Six inches of water over ice.
g One inch of water over ice.
h Channel clear of ice.

Daily Discharge in Second-feet of Strawberry River in Strawberry Valley, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	539	457	....	....	....	....	....	....
2	....	....	....	....	595	457	....	....	....	....	....	....
3	....	....	....	....	770	457	....	....	....	....	....	....
4	....	....	....	....	923	484	....	....	....	....	....	....
5	....	....	....	....	985	511	....	....	....	....	....	....
6	....	....	....	....	861	511	....	....	....	....	....	....
7	....	....	....	....	770	430	....	....	....	....	....	....
8	....	....	....	....	770	377	....	....	....	....	....	....
9	....	....	....	....	770	326	....	....	....	....	....	....
10	....	....	....	....	770	351	....	....	....	....	....	....
11	....	....	....	....	770	351	....	....	....	....	....	....
12	....	....	....	....	892	377	....	....	....	....	....	....
13	....	....	....	....	985	377	....	....	....	....	....	....
14	....	....	....	....	830	377	....	....	....	....	....	....
15	....	....	....	....	652	325	....	....	....	....	....	....
16	....	....	....	....	652	300	....	....	....	....	....	....
17	....	....	....	....	652	270	....	....	....	....	....	....
18	....	....	....	....	652	252	....	....	....	....		....
19	....	....	....	....	681	229	....	....	....	....	....	....
20	....	....	....	....	740	229	....	....	....	....	....	....

Daily Discharge in Second-feet of Strawberry River in Strawberry Valley, Utah, for 1906.—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21	....	....	....	....	800	207	.....	....	....	....	....	....
22	....	....	....	....	770	186	.....	....	....	....	....	....
23	....	....	....	....	740	186	.....	....	....	....	....	....
24	....	....	....	....	740	.....	.....	....	....	....	....	....
25	....	....	....	....	681	166	.....	....	....	....	....	....
26	....	....	....	....	624	146	.....	....	....	....	....	....
27	....	....	....	....	652	.....	.....	....	....	....	....	....
28	....	....	....	....	740	.....	.....	....	....	....	....	....
29	....	....	....	....	740	166	.....	....	....	....	....	....
30	....	....	....	....	624	146	.....	....	....	....	....	....
31	....	....	....	....	511	.....	.....	....	....	....	....	....

Note—Ice conditions January 1 to April 20.

Monthly Discharge of Strawberry River in Strawberry Valley, Utah, in 1906.

(Drainage area, 190 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	36	14	28	0.15	0.17	1,720
February	34	25	30	0.16	0.17	1,670
March	24	19	20	0.11	0.12	1,250
April	669	18	228	1.20	1.34	13,600
May	998	517	738	3.89	4.48	45,400
June	522	142	305	1.61	1.79	18,100
July 1-12	129	92	108	.....	.....	2,570
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period	998	14	225	1.19	8.07	84,300

Discharge Measurements of Strawberry River in Strawberry Valley, Utah, in 1908.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 26 *a*	E. A. Porter	.....	.....	5.86	25.3
Sept. 23 *b*	La Rue and Lytle	.....	.....	5.95	31.3
October 14 *c*	do	.....	.....	5.94	29.5

a By wading about 100 yards above cable.
b By wading 10 feet above cable.
c At cable.

Discharge Measurements of Strawberry River Below Indian Creek near Strawberry Valley, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 6	E. S. Fuller	64	273	11.2	1,382
July 7	do	39.5	58.8	6.61	196
September 12	do	39	37.6	6.10	80.6

Discharge Measurements of Strawberry River in Strawberry Valley, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 20	A. B. Purton	47	105	3.91	229
July 23	do	43	44	2.51	27
August 23	do	45	44	2.45	20
August 25	do	32	27	2.42	17

Monthly Discharge of Strawberry River in Strawberry Valley, Utah, in 1910.

(Drainage area, 190 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	476	128	297	1.56	1.80	18,300
June	120	40	58	.30	.34	3,460
July	39	24	29	.15	.18	1,790
August	24	18	22	.12	.13	1,360
September	40	18	25	.13	.15	1,480
October	32	25	28	.15	.17	1,730
November	.....	.....	*24	.13	.14	714
December	.....	.....	.....	.....	.....	.....
The period	476	18	69	0.36	2.91	28,800

*Estimated.

STRAWBERRY RIVER AT THEODORE, UTAH.

This station, which was established June 10, 1908, is located at the west boundary of Theodore town site, along the wagon road to Heber, about 1¼ miles above the junction of the Strawberry with Duchesne River, about one-half mile upstream from the mouth of Indian Canyon, and about 18 miles below the mouth of Currant Creek. Discharge measurements are made by means of a car and cable.

The flow of the stream is affected by ice for about four months during the winter season.

The chain gage is located about 50 feet downstream from the cable from which discharge measurements are made. The datum of the gage has remained constant since the station was established.

Very good results should be obtained at this station except at extremely high stages, when the stream overflows the left bank, rendering it impossible to make gagings.

Discharge Measurements of Strawberry River near Theodore, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 20 *a*	R. H. Fletcher	41	251	.....	671
June 11	do	61	136	3.15	389
June 22	do	61	133	3.08	358
July 22	do	61	88	2.38	140
July 31	W. B. Freeman	59	90	2.52	160
August 7	R. H. Fletcher	60	90	2.48	178
August 16	do	60	87	2.40	131
August 26	do	60	76	2.27	98
September 8	do	61	92	2.52	160
September 16	do	60	80	2.32	118
September 28	do	60	78	2.38	136
October 8	do	59	77	2.41	134
October 16	do	60	83	2.39	136
October 27	do	60	80	2.38	136
November 10	do	59	76	2.35	128
November 18	do	56	73	2.25	115
December 9 *b*	do	59	53	2.23	81

a Measured from bridge.
b Wading measurement. Ice conditions.

Daily Discharge in Second-feet of Strawberry River near Theodore, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	....	220	453	95	116	139	....
2	....	....	....	....	....	....	220	328	95	116	139	....
3	....	....	....	....	....	....	220	163	95	139	139	....
4	....	....	....	....	....	....	220	163	95	139	139	....
5	....	....	....	....	....	....	190	139	95	139	139	....
6	....	....	....	....	....	....	190	163	95	139	139	....
7	....	....	....	....	....	....	190	139	95	139	139	....
8	....	....	....	....	....	....	190	139	116	139	139	....
9	....	....	....	....	....	....	190	139	116	139	139	....
10	....	....	....	....	....	....	163	139	116	116	139	....
11	....	....	....	....	....	410	163	139	139	116	116	....
12	....	....	....	....	....	453	163	139	139	116	139	....
13	....	....	....	....	....	453	163	163	139	116	139	....
14	....	....	....	....	....	453	163	163	116	116	116	....
15	....	....	....	....	....	453	163	139	116	139	139	....
16	....	....	....	....	....	497	163	139	116	139	139	....
17	....	....	....	....	....	497	163	116	116	139	139	....
18	....	....	....	....	....	497	139	116	116	139	139	....
19	....	....	....	....	....	453	139	139	116	139	139	....
20	....	....	....	....	....	410	139	116	95	139	139	....
21	....	....	....	....	....	368	139	116	95	116	139	....
22	....	....	....	....	....	368	139	116	95	116	139	....
23	....	....	....	....	....	328	139	116	95	139	116	....
24	....	....	....	....	....	328	139	116	116	139	116	....
25	....	....	....	....	....	328	116	116	190	116	116	....
26	..	....	....	....	....	290	116	116	163	116	139	....
27	....	....	....	....	....	290	163	116	139	139	139	....
28	....	....	....	....	....	253	190	116	116	139	139	....
29	....	....	....	....	....	253	190	95	139	139	116	....
30	....	....	....	....	....	253	163	95	116	139	116	....
31	....	....	....	....	....	....	410	95	....	....	....	....

Monthly Discharge of Strawberry River near Theodore, Utah, in 1908.

(Drainage area, 1,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June 11-30	519	253	386	.....	.....	15,300
July	419	128	179	0.15	0.17	11,000
August	475	106	153	0.13	0.15	9,410
September	190	95	123	0.10	0.11	7,320
October	151	116	135	0.11	0.13	8,300
November	151	116	136	0.11	0.13	8,090
December	.....	.....	100	0.08	0.09	6,150
The period	519	95	173	0.11	0.78	65,600

Discharge Measurements of Strawberry River near Theodore, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 6	R. H. Fletcher	55	49	3.40	116
January 21	do	52	60	4.00	147
March 30	do	60	94	2.65	217
April 13	do	58	90	2.65	208
April 28	do	66	225	4.96	989
July 11	do	63	189	4.15	540
July 22	do	63	169	3.76	440
August 10	do	62	149	3.50	341
August 26	do	61	136	3.40	267
September 9	do	62	140	3.38	325
September 26	do	61	119	3.06	242
October 8	do	62	121	2.97	228
October 25	do	61	113	2.91	209
November 13	do	61	104	2.75	168
November 23	do	61	131	3.22	267

Monthly Discharge of Strawberry River near Theodore, Utah, in Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	220	685	2,260	870	352	1,520	216	194	228
2	....	....	....	290	660	2,330	800	352	542	216	194	216
3	....	....	....	368	670	2,550	776	352	398	216	194	240
4	....	....	....	453	880	2,700	823	316	367	240	194	....
5	....	....	....	290	1,220	2,820	776	316	382	228	194	....
6	....	....	....	253	1,570	2,910	730	316	367	228	194	....
7	....	....	....	220	1,760	2,950	686	352	522	228	194	....
8	....	....	....	220	1,950	2,950	644	352	382	216	183	....
9	....	....	....	205	2,120	2,780	602	352	303	216	183	....
10	....	....	....	220	2,330	2,550	582	352	290	216	194	....
11	....	....	....	220	2,480	2,360	623	414	265	216	194	....
12	....	....	....	205	2,620	2,260	522	367	278	216	183	....
13	....	....	....	205	2,440	2,160	503	367	265	216	205	....
14	....	....	....	253	2,260	2,090	484	367	265	216	194	....
15	....	....	....	272	2,190	2,030	484	352	265	216	194	....
16	....	....	....	290	2,300	1,920	448	367	263	216	194	....
17	....	....	....	389	2,260	1,840	431	466	263	216	263	....
18	....	....	....	497	2,160	1,780	414	484	251	216	251	....
19	....	....	....	564	2,190	1,700	448	503	251	216	228	....
20	....	....	....	634	2,300	1,650	562	398	265	205	228	....
21	....	....	....	587	2,400	1,520	466	382	240	205	240	....
22	....	....	....	564	2,550	1,410	431	448	240	205	263	....
23	....	....	....	564	2,660	1,340	448	382	240	205	263	....
24	....	....	....	610	2,660	1,260	466	367	240	205	251	....
25	....	....	....	658	2,510	1,210	431	352	240	205	251	....
26	....	....	....	732	2,330	1,160	414	316	240	205	251	....
27	....	....	....	849	2,360	1,060	414	316	228	194	251	....
28	....	....	....	969	2,510	989	382	303	228	194	240	....
29	....	....	....	970	2,620	941	382	290	228	194	154	....
30	....	....	....	780	2,650	917	367	290	228	194	240	....
31	....	....	....	....	2,550	....	352	303	....	194	....	....

Monthly Discharge of Strawberry River near Theodore, Utah, for 1910.

(Drainage area, 1,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	970	205	451	0.38	0.42	26,800
May	2,660	660	2,080	1.73	2.00	128,000
June	2,950	917	1,950	1.63	1.81	116,000
July	870	352	541	.45	.52	33,300
August	503	290	365	.30	.35	22,400
September	1,520	228	335	.28	.31	19,900
October	240	194	212	.18	.20	13,000
November	263	154	214	.18	.20	12,700
December	.....	.....	.....	.....	.....	.....
The period	2,950	154	768	0.64	5.81	372,100

Discharge Measurements of Strawberry River near Theodore, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 10	W. B. Freeman	61	105	3.44	286
March 30	R. H. Fletcher	62	133	3.53	363
April 12	do	66	220	4.03	938
April 26	do	75	359	6.89	1,630
May 10	do	70	282	6.05	1,240
June 21	do	62	112	3.54	300
July 12	do	61	91	3.20	211
July 26	do	61	83	3.10	172
August 8	do	61	80	3.02	159
August 22	do	61	78	3.02	160
September 9	do	60	70	2.90	127
September 25	do	60	73	2.98	150
October 10	do	60	75	2.98	150
October 21	do	60	75	3.08	160
November 5	do	60	73	2.96	138
November 18	do	60	71	2.92	136

Daily Discharge in Second-feet of Strawberry River near Theodore, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	329	1,480	585	305	235	135	148	148	....
2	....	....	....	352	1,380	568	260	210	135	160	148	....
3	....	....	....	398	1,260	550	260	185	135	160	148	....
4	....	....	....	414	1,180	515	260	172	135	160	148	....
5	....	....	....	414	1,180	498	260	185	148	160	148	....
6	....	....	....	431	1,180	480	260	172	135	160	148	....
7	....	....	....	413	1,110	445	235	172	135	160	148	....
8	....	....	....	448	1,130	445	235	160	135	148	148	....
9	....	....	....	484	1,180	410	222	160	135	148	135	....
10	....	....	329	265	1,220	410	210	148	135	148	135	....
11	....	....	290	352	1,330	395	210	148	122	148	148	....
12	....	....	290	941	1,380	380	210	160	122	148	148	....
13	....	....	265	1,060	1,330	380	210	198	135	160	148	....
14	....	....	263	1,240	1,260	350	210	160	135	172	135	....
15	....	....	265	1,240	1,180	350	210	160	135	198	135	....
16	....	....	265	1,140	1,150	350	222	148	222	210	135	....
17	....	....	265	1,240	1,040	350	235	148	260	210	135	....
18	....	....	278	1,390	960	335	222	135	380	185	135	....
19	....	....	278	1,620	920	320	222	248	235	210	135	....
20	....	....	290	1,750	860	305	210	248	185	185	135	....
21	....	....	316	1,850	840	305	210	160	185	172	135	....
22	....	....	352	1,860	800	290	210	160	172	160	135	....
23	....	....	414	1,700	760	290	198	148	160	160	135	....
24	....	....	431	1,620	742	260	185	135	160	160	148	....
25	....	....	414	1,640	725	260	185	135	160	160	148	....
26	....	....	431	1,620	708	260	172	135	160	160	148	....
27	....	....	414	1,680	690	260	198	135	148	160	143	....
28	....	....	398	1,680	672	260	185	135	148	160	148	....
29	....	....	382	1,620	638	290	185	135	148	148	148	....
30	....	....	329	1,580	620	462	185	135	148	148	135	....
31	....	....	316	....	702	.....	198	135	....	148	....	....

Monthly Discharge of Strawberry River near Theodore, Utah, in 1910.

(Drainage area, 1,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March, 22 days	431	263	331	0.28	0.23	14,400
April	1,860	265	1,090	.91	1.01	64,900
May	1,480	620	1,020	.85	.98	62,700
June	585	260	379	.31	.35	22,600
July	305	172	219	.18	.21	13,500
August	248	135	165	.14	.16	10,100
September	380	122	163	.14	.15	9,700
October	210	148	165	.14	.16	10,100
November	148	135	142	.12	.13	8,500
December	.....	.....	.....	.....	.....	.....
The period	1,860	122	408	0.34	3.38	216,500

LAKE FORK. BELOW FORKS NEAR WHITEROCKS, UTAH.

This station, which is located about 500 feet below the junction of East and West forks on the old Indian trail about thirty miles west of Whiterock, was established May 10, 1907, a fragmentary record having been kept at the same place during 1904.

There are no diversions above the station. The stream bed is rough and current swift at all but low stages and results are only fair.

Discharge Measurements of Lake Fork, Below Forks near Whiterocks, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 21	I. I. Price	70	210	3.05	1,090
June 8	do	75	228	3.32	1,490
June 14	do	75	194	2.98	1,080
July 13	W. G. Garvens	80	294	3.00	2,880
July 25	I. I. Price	80	216	2.48	1,660
August 31	do	75	105	*b*2.50	560
September 13	do	65	83	2.10	329
September 17	W. B. Freeman	52	93	2.00	280
October 2	R. H. Fletcher	55	89	1.94	264
October 29	do	71	112	1.75	203
November 11	do	62	99	1.55	203
November 25	do	58	94	1.60	193

a Ice conditions. *b* Reading from new gage. Old gage read 1.30 feet.
Note—Above measurements made at various sections.

Daily Discharge in Second-feet of Lake Fork, Below Forks near Whiterocks, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	760	7,500	890	610	265	210	190
2	....	....	....	....	....	830	7,700	930	560	265	210	190
3	....	....	....	....	....	1,040	8,300	860	480	265	210	190
4	....	....	....	....	....	1,190	9,300	930	450	265	210	190
5	....	....	....	....	....	1,390	8,200	820	560	260	210	190
6	....	....	....	....	....	1,810	7,500	790	520	260	200	190
7	....	....	....	....	....	1,920	6,600	765	520	260	200	200
8	....	....	....	....	....	1,630	5,700	720	450	260	200	210
9	....	....	....	....	....	1,720	5,750	720	380	260	200	210
10	....	....	....	....	450	1,250	2,700	709	380	255	199	210
11	....	....	....	....	450	1,080	2,750	640	380	255	185	210
12	....	....	....	....	490	1,080	2,800	610	320	255	185	185
13	....	....	....	....	540	1,250	2,740	590	320	250	180	160
14	....	....	....	....	540	1,250	2,880	590	320	250	180	155
15	....	....	....	....	540	1,080	2,480	610	300	250	170	150
16	....	....	....	....	520	950	2,110	590	285	240	180	150
17	....	....	....	....	520	900	1,680	560	285	240	185	150
18	....	....	....	....	560	900	1,680	560	285	240	190	150
19	....	....	....	....	640	1,080	1,680	530	270	240	190	150
20	....	....	....	....	760	1,800	2,160	510	270	240	190	150
21	....	....	....	....	950	2,800	2,290	510	270	235	185	150
22	....	....	....	....	1,080	3,880	1,650	510	270	235	160	150
23	....	....	....	....	1,190	3,740	1,140	490	255	235	160	150
24	....	....	....	....	1,390	2,810	1,440	490	255	230	185	150
25	....	....	....	....	1,250	2,830	2,230	560	255	230	180	150

Daily Discharge in Second-feet of Lake Fork, Below Forks near Whiterocks, Utah, for 1907—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
26.....	....	....	....	....	1,080	3,240	1,520	530	255	230	185	150
27.....	....	....	....	....	990	3,720	1,290	510	255	230	180	150
28.....	....	....	....	....	870	4,300	1,120	510	260	230	180	150
29.....	....	....	....	....	830	5,760	1,020	510	260	220	185	150
30.....	....	....	....	....	760	6,200	1,020	560	260	220	190	150
31.....	....	....	....	....	730	.....	930	560	....	210	....	150

Note—These discharges were obtained by the indirect method for shifting channels. Daily discharges estimated by comparisons with adjacent stations for days on which there are no gage records. Ice conditions December 18 to 31, 1907; discharge estimated.

Monthly Discharge of Lake Fork Below Forks near Whiterocks, Utah, in 1907.

(Drainage area, 300 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May 10-31.....	1,390	450	779	.....	.....	34,000
June	6,200	760	2,160	7.20	8.05	129,000
July	9,300	930	3,490	11.63	13.43	215,000
August	930	490	634	2.11	2.43	39,000
September	610	255	351	1.17	1.31	20,900
October	265	210	245	0.28	0.94	15,100
November	210	160	189	0.63	0.70	11,200
December	210	.....	169	0.56	0.65	10,400
The period..	9,300	160	1,034	3.45	27.51	475,000

Discharge Measurements of Lake Fork Below Forks near Whiterocks, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 23	R. H. Fletcher	52	81	1.35	234
April 3	do	54	66	1.38	196
April 15	do	61	81	1.64	262
April 26	do	62	84	1.72	275
May 12	do	65	112	2.12	500
May 20	do	65	112	2.28	504
June 3	do	60	109	2.19	529
June 20	do	92	190	3.30	1,040
June 28	do	100	230	3.73	1,960
July 8	do	80	147	2.90	901
July 21	do	65	109	2.18	529
July 28	W. B. Freeman	59	106	2.40	457
August 8	R. H. Fletcher	64	109	2.35	476
August 14	do	69	119	2.45	581
August 27	do	58	96	2.05	357
September 8	do	56	85	1.75	318
September 17	do	58	89	1.98	337
September 28	do	58	98	2.05	377
October 7	do	58	95	2.05	361
October 15	do	60	99	2.13	403
October 26	do	58	90	1.93	304
November 9	do	56	84	1.75	287
November 17	do	54	79	1.66	267
December 8	do	53	83	1.55	272
December 21 *a*	do	40	97	2.88	248

a Ice conditions. *b* Reading from new gage. Old gage read 1.30 feet.
Note—Above measurements made at various sections.

Daily Discharge in Second-feet of Lake Fork, Below Forks near Whiterocks, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	548	1,285	1,285	307	367	307	....
2	....	....	....	....	....	493	985	820	307	367	307	....
3	....	....	....	....	....	411	985	675	307	367	307	....
4	....	....	....	214	....	402	....	675	307	....	281	....
5	....	....	....	....	....	....	....	....	307	....	307	....
6	....	....	....	....	....	402	1,080	....	307	367	307	....
7	....	....	....	....	....	402	900	548	281	367	307	....
8	....	....	....	....	....	402	820	493	336	402	281	....
9	....	....	....	....	....	493	745	....	402	402	281	....
10	....	....	....	....	....	675	745	....	307	402	281	....
11	....	....	....	....	402	....	745	493	367	402	281	....
12	....	....	....	....	402	3,070	675	411	307	402	281	....
13	....	....	....	....	367	3,255	675	548	367	402	281	....
14	....	....	....	....	367	3,255	675	610	402	402	281	....
15	....	....	....	257	....	3,255	745	493	367	402	257	....
16	....	....	....	....	336	2,380	675	411	367	402	257	....
17	....	....	....	....	336	1,520	548	402	367	367	257	....
18	....	....	....	....	307	1,285	493	402	336	402	257	....
19	....	....	....	....	411	1,180	493	493	336	402	257	....
20	....	....	....	....	411	1,285	....	411	336	367	257	....

Daily Discharge in Second-feet of Lake Fork, Below Forks near Whiterocks, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21	....	....	....	....	444	1,785	402	444	307	367	257	....
22	....	....	....	....	444	2,380	402	493	307	367	257	....
23	....	....	....	....	402	1,925	402	548	307	367	257	....
24	....	....	....	....	402	.....	402	493	307	367	257	....
25	....	....	....	307	444	.....	367	444	493	336	281	....
26	....	....	....	281	610	2,220	402	....	402	336	281	....
27	....	....	....	....	548	2,070	548	367	367	336	281	....
28	....	....	....	....	493	1,650	548	....	367	336	281	....
29	....	....	....	....	444	1,650	985	336	367	336	257	....
30	....	....	....	....	548	1,400	820	336	367	307	257	....
31	....	....	....	....	610	.....	820	336	....	307	....	....

Monthly Discharge of Lake Fork Below Forks near Whiterocks, Utah, in 1908.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 15-31	.....	.....	200	.....	.....	6,740
April	.....	.....	237	0.79	0.88	14,100
May	610	336	422	1.41	1.62	25,900
June	3,350	402	1,550	5.17	5.77	92,200
July	1,280	384	721	2.40	2.77	44,300
August	1,340	336	529	1.76	2.03	32,500
September	493	294	351	1.17	1.31	20,900
October	423	322	377	1.25	1.45	23,200
November	307	257	280	0.93	1.04	16,700
December	272	228	251	0.84	0.97	15,400
The period	3,350	228	524	1.75	17.84	292,000

Discharge Measurements of Lake Fork Below Forks near Whiterocks, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 13	R. H. Fletcher	48	75	2.56	185
May 3	do	54	79	1.75	243
May 24	do	70	118	2.42	547
June 16	do	107	308	4.80	2,853
July 6	do	100	216	3.80	1,527
July 21	do	84	144	2.75	768
August 11	do	68	121	2.65	632
August 27	do	67	122	2.54	612
September 9	do	74	138	2.88	777
September 25	do	62	96	2.18	333
October 7	do	61	92	2.06	326
October 26	do	58	75	1.78	257
November 15	do	57	76	1.64	224
November 24	do	57	74	1.66	226

Daily Discharge in Second-feet of Lake Fork, below Forks near Whiterocks, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	160	180	170	196	236	550	2,120	445	1,710	317	226	215
2	160	180	170	196	236	775	2,060	580	1,400	317	226	226
3	160	180	170	196	248	1,350	2,060	522	1,120	335	226	206
4	170	180	170	187	287	2,240	1,940	445	955	352	226	196
5	170	180	170	196	317	2,790	1,820	445	955	352	206	160
6	175	170	170	196	317	2,930	1,760	470	1,040	352	215	160
7	175	170	170	178	335	3,000	1,450	495	955	445	218	196
8	175	170	170	178	352	2,440	1,210	495	880	317	221	196
9	180	170	170	178	395	2,310	1,210	522	810	317	224	195
10	180	170	170	169	395	2,060	1,040	642	810	302	226	200
11	180	160	180	178	395	2,060	1,040	522	740	302	215	190
12	185	160	180	178	352	2,240	955	675	675	287	215	180
13	185	160	180	178	335	2,510	880	675	675	287	215	195
14	180	160	180	196	317	2,440	810	522	610	287	226	195
15	180	160	180	196	317	2,580	740	522	550	287	215	195
16	185	150	180	215	317	2,720	740	610	550	274	215	195
17	185	150	175	236	317	3,000	642	918	495	274	215	190
18	185	150	170	236	317	3,070	675	955	495	274	215	180
19	190	150	170	236	352	3,000	810	845	470	274	226	175
20	190	150	170	236	395	2,180	810	880	445	260	236	165
21	190	160	160	226	445	2,060	675	1,080	420	260	236	180
22	190	160	160	215	550	2,240	642	880	395	260	236	185
23	190	160	160	215	550	2,580	675	880	395	260	226	185
24	190	160	160	215	495	2,930	642	708	395	260	226	185
25	190	160	160	215	445	2,580	610	642	371	260	215	185
26	190	170	150	248	445	2,310	810	610	352	260	215	185
27	190	170	150	287	522	2,140	880	580	352	236	206	185
28	190	170	150	260	610	2,410	642	495	335	236	215	185
29	190	....	150	274	550	2,510	550	495	335	236	215	185
30	190	....	170	248	522	2,180	495	445	235	236	215	185
31	190	....	180	....	495	.....	445	642	....	236	....	185

Monthly Discharge of Lake Fork near Whiterocks, Utah, for 1909.

(Drainage area, 300 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	190	160	182	0.61	0.70	11,200
February	180	150	165	.55	.57	9,160
March	180	150	168	.56	.65	10,300
April	287	169	212	.71	.79	12,600
May	610	236	393	1.31	1.51	24,200
June	3,070	550	2,350	7.83	8.75	140,000
July	2,120	445	1,030	3.43	3.98	63,300
August	1,080	415	634	2.11	2.44	39,000
September	1,710	335	668	2.23	2.49	39,700
October	445	236	289	0.96	1.11	17,800
November	236	206	220	0.73	0.82	13,100
December	226	160	188	0.63	0.72	71,600
The year	3,070	150	542	1.81	24.53	392,000

Discharge Measurements of Lake Fork, Below Forks near Whiterocks, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 10	R. H. Fletcher	36	50	1.22	126
March 29	do	48	72	1.60	218
April 11	do	56	74	1.70	238
April 25	do	67	121	2.67	630
May 9	do	80	168	3.13	1,040
May 23	do	74	143	3.04	809
June 6	do	80	150	3.20	888
June 20	do	63	99	2.40	436
July 11	do	56	80	1.82	270
July 25	do	56	73	1.74	220
August 8	do	57	75	1.73	223
August 22	do	57	79	1.65	243
September 10	do	53	62	1.38	160
September 24	do	62	80	1.95	288
October 8	do	55	72	1.70	233
October 20	do	57	78	1.78	238
November 4	do	56	73	1.64	204
November 17	do	54	59	1.50	161

Daily Discharge in Second-feet of Lake Fork, Below Forks near Whiterocks, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	125	196	880	1,580	350	285	160	229	192	....
2	....	....	125	206	740	1,280	316	316	160	242	192	....
3	....	....	125	206	610	1,340	300	285	160	242	192	....
4	....	....	125	206	610	1,050	316	285	160	242	192	....
5	....	....	125	196	580	970	350	256	160	229	192	....
6	....	....	125	206	550	930	300	242	160	229	181	....
7	....	....	125	215	580	820	285	229	150	216	181	....
8	....	....	125	215	740	750	270	229	150	216	181	....
9	....	....	125	226	995	650	242	204	150	192	181	....
10	....	....	125	236	1,450	590	242	192	141	192	181	....
11	....	....	130	236	1,760	650	242	204	150	192	181	....
12	....	....	150	260	1,770	650	242	242	150	204	181	....
13	....	....	150	260	1,640	620	229	229	170	229	181	....
14	....	....	187	260	1,280	590	216	270	170	229	181	....
15	....	....	196	236	1,180	535	270	242	170	270	181	....
16	....	....	196	236	1,010	535	332	216	270	316	170	....
17	....	....	196	236	855	535	332	216	350	270	170	....
18	....	....	196	248	855	485	285	216	350	270	170	....
19	....	....	215	287	970	440	300	192	421	270	170	....
20	....	....	215	334	930	440	270	192	402	242	170	....
21	....	....	236	374	820	402	300	192	366	242	160	....
22	....	....	236	395	715	402	270	181	316	242	160	....
23	....	....	248	420	820	366	242	181	300	229	160	....
24	....	....	248	495	1,100	350	242	170	285	229	160	....
25	....	....	236	610	1,180	350	229	170	285	229	150	....
26	....	....	236	740	1,010	332	204	170	285	216	150	....
27	....	....	226	845	1,010	316	229	170	242	216	150	....
28	....	....	215	955	1,180	332	242	181	242	216	150	....
29	....	....	215	995	1,400	402	300	170	216	204	150	....
30	....	....	196	918	1,400	366	285	160	216	204	150	....
31	....	....	196	....	1,520	.....	270	160	....	204	....	....

Monthly Discharge of Lake Fork, Below Forks near Whiterocks, Utah, for 1910.

(Drainage area, 300 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	248	125	180	0.60	0.69	11,100
April	995	196	382	1.27	1.42	22,700
May	1,770	150	1,040	3.47	4.00	64,000
June	1,580	316	635	2.12	2.37	37,800
July	350	204	274	.91	1.05	16,800
August	316	160	214	.71	.82	13,200
September	421	141	230	.77	.86	13,700
October	316	192	231	.77	.89	14,200
November	192	150	172	.57	.64	10,200
December	.....	.....	.....	.....	.....	.....
The period	1,770	125	373	1.24	12.74	204,000

LAKE FORK NEAR MYTON, UTAH.

This station, which is located about 3 miles above Myton, Utah, was originally established July 3, 1900, and was known as the station on Lake Fork at mouth. It was discontinued at the end of the season of 1903, although several discharge measurements were made in 1904, and was reestablished June 13, 1907. On October 14, 1907, a cable equipment was installed about one-quarter mile above the gage.

As the station is only about one-half mile above the junction of the stream with Duchesne River, the records show the amount of water which Lake Fork contributes to the Duchesne, and in connection with the records obtained at the station on Lake Fork below the forks, which is about 20 miles upstream and above all present diversions, they indicate also the amount of water diverted for irrigation along the stream. No important tributaries enter between the two stations.

Several canal systems built by the United States Indian Service take water from this stream above the station for irrigation. Some private canal systems are proposed or in operation. As at all other stations in this basin, the stream is icebound for several months during the winter season.

Discharge Measurements of Lake Fork near Myton, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 29	I. I. Price	39.6	243	5.45	730
June 13	do	39.6	276	6.30	1,190
June 29	do	39.6	347	8.08	2,380
September 16	Freeman and Price	72	180	2.50	230
September 30	R. H. Fletcher	76	171	2.45	207
October 14	do	66	146	2.40	176
October 31	do	66	141	2.28	185
November 9	do	64	133	2.20	172
November 23	do	64	117	2.12	130
December 10	do	66	148	2.32	179

Daily Discharge in Second-feet of Lake Fork near Myton, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	....	....	....	....	330	175	....	....
2	....	....	....	....	....	....	....	....	330	175	....	....
3	....	....	....	....	....	....	....	....	295	175	....	....
4	....	....	....	....	....	....	....	....	295	175	....	....
5	....	....	....	....	....	....	....	....	330	175	....	....
6	....	....	....	....	....	....	....	....	330	200	....	....
7	....	....	....	....	....	....	....	....	295	230	....	....
8	....	....	....	....	....	....	....	....	295	200	....	....
9	....	....	....	....	....	....	....	....	260	200	150	....
10	....	....	....	....	....	....	....	....	260	200	....	....
11	....	....	....	....	....	....	....	....	230	200	....	....
12	....	....	....	....	....	....	....	....	230	175	....	....
13	....	....	....	....	....	1,190	....	....	230	175	....	....
14	....	....	....	....	....	1,130	....	....	200	175	....	....
15	....	....	....	....	....	1,020	....	....	200	175	....	....

Daily Discharge in Second-feet of Lake Fork near Myton, Utah, for 1907—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	....	....	....	860	....	....	200	175	....	....
17	....	....	....	....	....	1,020	....	....	200	175	....	....
18	....	....	....	....	....	1,020	....	405	200	175	....	....
19	....	....	....	....	....	1,310	....	405	200	175	....	....
20	....	....	....	....	....	1,620	....	365	200	175	....	....
21	....	....	....	....	....	1,970	....	330	175	175	....	....
22	....	....	....	....	....	1,900	....	330	175	175	....	....
23	....	....	....	....	....	1,620	....	330	175	150	125	....
24	....	....	....	....	....	1,430	....	330	175	150	....	....
25	....	....	....	....	....	1,490	....	330	175	150	....	....
26	....	....	....	....	....	1,620	....	405	175	175	....	....
27	....	....	....	....	....	1,970	....	330	175	175	....	....
28	....	....	....	....	....	2,330	....	295	175	150	....	....
29	....	....	....	....	....	2,470	....	295	175	150	....	....
30	....	....	....	....	....	2,690	....	405	200	150	....	....
31	....	....	....	....	....	....	....	405	....	150	....	....

Monthly Discharge of Lake Fork near Myton, Utah, in 1907.

(Drainage area, 475 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
June 13-30	2,690	860	1,590	3.35	2.24	56,800
August 18-31	405	295	354	.745	.39	9,830
September	330	175	230	.484	.54	13,700
October	230	150	176	.371	.43	10,800
November	150	130	142	.299	.33	8,450
December 1-9	180	150	163	.343	.12	2,910
The period	2,690	130	.....	.....	4.05	102,000

Discharge Measurements of Lake Fork, near Myton, Utah, in 1908

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 24	R. H. Fletcher	64	125	3.48	133
April 6	do	64	115	3.44	117
April 14	do	65	128	3.65	150
April 27	do	65	133	3.78	176
May 13	do	65	159	4.25	261
May 22	do	65	169	4.25	300
June 4	do	65	161	4.25	270
June 20	do	69	318	6.44	1,460
June 28	do	68	286	6.13	1,220
July 8	do	66	210	5.63	609

Discharge Measurement of Lake Fork, near Myton, Utah, in 1908—Continued.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
July 23	R. H. Fletcher	65	149	4.05	243
July 31	Freeman and Fletcher	66	197	4.83	478
August 6	R. H. Fletcher	66	175	4.45	389
August 17	do	66	160	4.15	265
August 25	do	65	156	4.13	264
September 9	do	65	152	4.10	247
September 15	do	65	141	3.93	207
September 29	do	65	144	3.90	217
October 9	do	65	148	4.00	242
October 17	do	65	158	4.13	306
October 29	do	65	143	3.94	222
November 11	do	65	134	3.72	172
November 18	do	65	138	3.80	188
December 3	do	65	133	3.77	181
December 10	do	65	155	4.10	141

Daily Discharge in Second-feet of Lake Fork near Myton, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	115	190	340	892	671	212	169	212	150
2	....	....	....	115	212	310	834	671	190	190	190	150
3	....	....	....	115	212	310	951	445	169	212	190	169
4	....	....	....	115	258	310	834	407	150	235	190	150
5	....	....	....	115	310	283	724	373	150	283	212	150
6	....	....	....	115	310	283	724	373	169	258	190	190
7	....	....	....	132	310	283	620	340	190	258	190	235
8	....	....	....	132	310	283	572	283	235	235	169	235
9	....	....	....	132	373	310	527	258	258	235	190	235
10	....	....	....	115	310	485	445	283	235	235	169	235
11	....	....	....	132	283	1,560	445	258	235	235	169	235
12	....	....	....	132	310	2,215	445	310	235	235	169	235
13	....	....	....	150	283	2,480	445	340	235	235	169	235
14	....	....	....	169	283	2,660	445	373	235	235	190	212
15	....	....	....	169	282	2,660	445	310	212	212	190	212
16	....	....	....	169	282	2,130	407	340	212	235	190	212
17	....	....	....	190	258	1,485	373	283	190	283	169	190
18	....	....	....	190	258	1,075	340	258	169	283	169	190
19	....	....	....	190	258	892	310	283	150	283	169	169
20	....	....	....	212	310	1,075	283	283	150	283	169	150
21	....	....	....	212	310	1,635	235	283	132	258	169	150
22	....	....	....	212	310	1,875	258	310	115	235	169	150
23	....	....	....	212	310	1,635	340	283	150	212	150	132
24	....	....	115	212	310	1,875	235	283	190	212	132	132
25	....	....	115	190	310	1,795	212	283	310	190	132	150
26	....	....	115	190	340	1,715	235	258	283	190	115	169
27	....	....	115	190	407	1,715	258	283	283	212	115	212
28	....	....	115	190	407	1,275	283	235	212	212	132	212
29	....	....	115	235	340	1,140	373	212	212	212	150	212
30	....	....	115	190	310	1,275	527	212	212	235	....	258
31	....	....	115	....	310	.....	445	190	....	212	....	283

Monthly Discharge of Lake Fork near Myton, Utah, in 1908.

(Drainage area, 475 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
March 24-31.....	124	124	124	.261	.08	1,970
April	235	124	170	.358	.40	10,100
May	407	190	302	.636	.73	18,600
June	2,700	283	1,260	2.65	2.96	75,000
July	951	224	476	1.00	1.15	29,300
August	698	201	328	.691	.80	20,200
September	301	124	208	.438	.49	12,400
October	283	169	237	.499	.58	14,600
November	212	124	173	.364	.41	10,300
December	180	135	147	.309	.36	9,040
The period..	2,700	124	.....	.....	7.96	202,000

Note—Discharge estimated for November and December, 1907. Discharge estimated for the frozen period, December 6-31, 1908.

Discharge Measurements of Lake Fork near Myton, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 7....	R. H. Fletcher.....	66	107	4.55	178
January 20...	.....do	66	128	4.68	207
February 16..	.....do	66	113	4.60	149
February 26..	.....do	66	116	4.65	180
March 16....	.....do	66	116	4.00	183
March 29....	.....do	65	118	3.59	144
April 12.....	.....do	65	107	3.46	113
April 28.....	.....do	65	134	3.90	191
May 12.....	.....do	65	152	.....	265
May 25.....	.....do	65	167	4.45	327
June 9.....	.....do	70	375	7.50	2,066
June 22.....	Fletcher and Bailey.....	70	360	6.04	1,855
June 23.....	R. H. Fletcher.....	70	429	6.90	2,474
July 10.....	.....do	66	234	3.90	724
July 23.....	.....do	66	185	3.18	398
August 9.....	.....do	66	162	2.80	286
August 26....	.....do	66	183	3.14	385
September 8..	.....do	67	230	3.89	726
September 26.	.....do	66	149	2.76	258
October 8....	.....do	66	142	2.61	226
October 23...	.....do	66	125	2.35	165
November 12.	.....do	66	122	2.25	143
November 22.	.....do	66	135	2.48	178
December 22.	.....do	64	124	3.15	183

Daily Discharge in Second-feet of Lake Fork near Myton, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	175	185	180	142	172	358	2,080	215	1,610	190	130	160
2.....	175	185	180	142	156	455	1,720	285	1,250	190	130	160
3.....	175	185	180	149	156	1,580	1,640	270	915	180	130	160
4.....	175	180	180	142	172	2,360	1,490	228	735	180	130	115
5.....	175	180	180	130	190	2,330	1,340	215	668	228	130	115
6.....	175	175	180	124	221	2,580	1,220	240	735	228	130	150
7.....	178	175	180	130	232	2,840	1,060	300	780	215	130	150
8.....	180	170	180	130	232	2,250	870	335	690	215	130	180
9.....	180	170	180	130	244	1,930	758	270	580	202	130	180
10.....	180	170	180	130	240	1,650	712	285	600	202	130	190
11.....	185	165	180	130	235	1,720	645	335	540	202	130	150
12.....	185	165	180	130	230	1,860	560	335	520	190	130	190
13.....	185	160	180	130	226	2,000	520	335	480	180	130	190
14.....	185	160	180	136	222	2,070	480	335	440	180	140	190
15.....	185	155	180	142	218	2,140	440	255	405	170	150	190
16.....	190	149	183	142	214	2,140	405	335	405	160	150	190
17.....	190	150	180	156	210	2,680	388	990	352	170	150	170
18.....	195	150	175	156	210	2,920	388	668	352	170	160	170
19.....	200	155	170	172	221	2,680	440	560	335	160	190	140
20.....	207	155	160	172	256	2,140	480	540	335	160	190	170
21.....	205	160	160	172	296	1,720	440	520	300	160	190	180
22.....	205	165	160	156	325	1,840	388	560	285	160	170	183
23.....	205	165	155	156	375	2,360	352	540	285	170	180	180
24.....	200	170	155	142	375	2,620	440	520	270	170	180	180
25.....	200	175	155	149	340	2,470	388	388	240	150	180	180
26.....	195	180	150	156	325	2,180	405	370	255	150	170	180
27.....	195	180	150	172	340	2,110	600	335	240	150	170	180
28.....	195	180	150	190	395	2,080	440	335	228	150	160	180
29.....	190	....	144	190	415	2,140	352	285	202	150	160	180
30.....	190	....	140	172	415	2,000	300	270	180	150	150	180
31.....	190	....	140	....	340	.....	255	405	....	150	....	180

Monthly Discharge of Lake Fork near Myton, Utah, in 1909.

(Drainage area, 475 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	180	0.40	0.46	11,600
February	.....	.....	168	.35	.37	9,330
March	.....	.....	169	.36	.41	10,400
April	190	124	149	.31	.35	8,870
May	415	156	264	.56	.64	16,200
June	2,920	358	2,070	4.36	4.86	123,000
July	2,080	255	709	1.49	1.72	43,600
August	990	215	383	.81	0.93	23,600
September	1,610	180	507	1.07	1.19	30,200
October	228	150	177	.37	0.43	10,900
November	190	130	151	.32	.35	8,980
December	.....	.....	171	.36	.42	10,500
The year....	2,920	124	426	0.90	12.13	307,000

Discharge Measurements of Lake Fork near Myton, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 19	R. H. Fletcher	65	.....	.....	.....
February 11	do	60	.....	.....	.....
February 23	do	60	.....	.....	.....
March 11	W. B. Freeman	54	.....	.....	.....
March 30	R. H. Fletcher	65	.....	.....	.....
April 12	do	66	.....	.....	.....
April 26	do	66	.....	.....	.....
May 10	do	69	.....	.....	.....
May 24	do	68	.....	.....	.....
June 7	do	67	.....	.....	.....
June 21	do	66	.....	.....	.....
July 12	do	57	.....	.....	.....
July 26	do	56	.....	.....	.....
August 6	do	59	.....	.....	.....
August 23	do	58	.....	.....	.....
September 8	do	33	.....	.....	.....
September 26	do	63	.....	.....	.....
October 10	do	60	.....	.....	.....
October 21	do	65	.....	.....	.....
November 5	do	61	.....	.....	.....
November 18	do	59	.....	.....	.....

Daily Discharge in Second-feet of Lake Fork near Myton, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	124	645	1,170	190	134	10	63	115	....
2	....	....	....	124	520	1,120	166	98	13	90	115	....
3	....	....	....	124	423	1,020	141	124	13	83	106	....
4	....	....	....	124	388	825	141	98	21	83	106	....
5	....	....	....	144	353	735	155	76	17	76	106	....
6	....	....	....	144	353	690	124	51	13	76	98	....
7	....	....	....	144	335	645	106	40	13	76	106	....
8	....	....	....	141	405	520	90	40	13	83	106	....
9	....	....	....	144	580	440	76	30	10	76	106	....
10	....	....	....	144	892	370	51	30	10	76	106	....
11	....	....	....	166	1,250	370	40	26	13	76	98	....
12	....	....	....	166	1,400	405	46	30	13	76	106	....
13	....	....	....	190	1,280	405	40	46	13	90	98	....
14	....	....	178	190	1,060	353	30	51	26	90	106	....
15	....	....	166	190	965	335	30	51	30	106	106	....
16	....	....	166	178	802	300	76	40	63	240	106	....
17	....	....	141	166	645	300	90	40	215	190	90	....
18	....	....	144	166	690	270	63	30	178	190	90	....
19	....	....	166	190	645	240	51	30	240	128	90	....
20	....	....	178	215	690	215	40	30	240	190	98	....
21	....	....	178	270	622	215	40	40	202	166	96	....
22	....	....	166	270	520	190	63	51	178	166	106	....
23	....	....	166	300	560	178	51	40	144	166	106	....
24	....	....	166	335	802	190	46	30	144	166	98	....
25	....	....	166	423	940	178	30	26	134	166	98	....
26	....	....	166	405	825	166	30	21	106	155	106	....
27	....	....	166	580	802	155	30	21	90	144	106	....
28	....	....	175	645	892	166	35	21	90	124	106	....
29	....	....	141	735	1,040	228	63	21	76	124	106	....
30	....	....	141	712	1,200	224	76	17	76	124	98	....
31	....	....	144	....	1,260	.....	76	13	....	124	....	....

Monthly Discharge of Lake Fork near Myton, Utah, in 1910.

(Drainage area, 475 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 13-31....	178	142	154	.32	.37	9,470
April	735	124	262	.55	.62	15,600
May	1,400	335	762	1.60	1.84	46,900
June	1,170	155	421	.89	.99	25,100
July	190	30	74	.16	.18	4,540
August	134	13	45	.10	.11	2,780
September	240	10	80	.17	.19	4,770
October	240	63	124	.26	.30	7,620
November	115	90	103	.22	.24	6,130
December	.....	.....	.....	.....	.....	.....
The period..	1,400	10	224	0.47	4.84	143,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Lake Fork near Myton, Utah, 1900 to 1910.

(Drainage area, 475 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1900	*8.36	*7.55	*9.69	*11.12	*57.22	*40.51	11.99	5.96	6.66	7.19	6.84	7.62	180.73	0.53	7.10
1901	5.84	5.28	6.15	7.86	78.21	32.08	15.37	15.68	8.57	8.12	6.66	6.76	197.58	0.57	7.81
1902	5.53	5.00	5.94	6.51	44.17	73.70	13.50	6.65	5.23	5.99	6.51	5.53	184.27	0.54	7.27
1903	.....	.....	.....	6.43	28.22	79.80	25.27	9.65	7.32	8.30	8.27	.....	.....	....	....
1907	.....	.....	.....	.....	.....	.....	.....	.....	13.70	10.80	8.45	.....	.....	....	....
1908	.....	.....	.....	10.10	18.60	75.00	29.50	20.20	12.40	14.60	10.30	9.04	.....	....	....
1909	11.60	9.22	10.40	8.87	16.20	122.00	43.60	23.60	30.20	10.90	8.98	10.50	307.00	0.90	12.13
1910	.....	.....	.....	15.60	48.90	25.10	4.54	2.78	4.77	7.62	6.13	.....	.....	....	....
Mean.	7.83	6.79	8.05	9.50	41.26	64.31	20.71	12.07	11.10	9.19	7.77	7.89	206.37	0.60	8.18

*Estimated.

WHITEROCKS RIVER NEAR WHITEROCKS, UTAH.

This station, which is located at the mouth of the canyon, on the road from the plateau to the river bottom, about 10 miles above the Whiterocks Indian Agency, was established April 18, 1899, abandoned at the end of 1904 and reestablished April 11, 1907, at practically the same place. There are no diversions above the station. The same gage datum was used from 1899 to 1904, inclusive. A new gage and datum were used in 1907 to May, 1908, inclusive, and a new datum from May 9, 1908, to date. Since no one lives near the gage, readings are taken only when discharge measurements are made, and daily discharges are computed from these in connection with hydrographs of other streams in the basin on which daily records are kept. Owing to poor conditions at the station and the necessary method of computing daily discharges, results are rather approximate.

Discharge Measurements of Whiterocks River near Whiterocks, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 11 *a*	I. I. Price	38	51	2.90	134
April 27	do	38	58	3.00	146
May 11	do	39	54	3.00	145
May 26	do	50	88	4.10	454
June 3	do	55	108	4.62	702
June 10	do	54	94	4.30	516
June 25	do	58	134	5.32	1,030
July 2	do	75	174	5.60	1,320
July 9	J. B. Cabanis	55	131	4.75	936
July 16	do	55	93	4.10	479
July 23	I. I. Price	50	77	4.00	388
August 2	do	50	70	3.95	349
August 12	do	35	44	3.45	185
August 24	do	35	42	3.25	161
September 5	do	30	42	*b*3.40	144
September 18	Freeman and Fletcher	31	34	2.94	110
October 7	R. H. Fletcher	31	34	3.00	98
October 21	do	32	31	2.70	91
November 4	do	32	34	2.62	77
November 18	do	31	34	2.68	89
December 3 *c*	do	31	32	2.55	80

a Wading measurements.
b Backwater caused by fallen tree in stream below gage.
c Ice conditions.

Monthly Discharge of Whiterocks River near Whiterocks, Utah, for 1907.

(Drainage area, 114 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
April 11-30	.....	.....	204	1.79	1.33	8,090
May	.....	.....	274	2.40	2.77	16,800
June	.....	.....	800	7.02	7.83	47,600
July	.....	.....	735	6.45	7.44	45,200
August	.....	.....	203	1.78	2.05	12,500
September	.....	.....	127	1.11	1.24	7,560
October	.....	.....	91.6	.804	.93	5,630
November	.....	.....	84.0	.737	.82	5,000
December 1-15	.....	.....	80.0	.702	.39	2,380
The period	.....	.....	.....	.....	.....	151,000

Discharge Measurements of Whiterocks River near Whiterocks, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 28 *a*	R. H. Fletcher	28	27	2.66	58
April 9	do	30	28	2.65	61
April 17	do	30	35	2.70	88
April 24	do	31	40	3.02	128
May 9	do	40	60	*d*1.87	246
May 18	do	45	75	2.05	348
June 2	do	35	56	1.80	242
June 17	do	55	100	2.68	630
June 26	do	50	88	2.35	506
July 6	do	35	54	1.87	246
July 20	do	31	45	1.60	202
July 26 *a*	Freeman and Fletcher	30	49	1.56	142
August 12	R. H. Fletcher	31	48	1.62	173
August 22	do	35	59	1.90	244
August 29	do	31	49	1.60	168
September 4	do	30	39	1.48	120
September 18	do	30	45	1.48	140
September 26	do	35	54	1.80	184
October 6	do	31	49	1.64	157
October 14	do	31	47	1.60	148
October 24	do	31	46	1.58	139
November 8	do	30	40	1.34	95
November 16*c*	do	30	40	1.48	88
November 28*c*	do	30	41	1.80	68
December 6 *c*	do	30	37	1.32	94
December 19*c*	do	55	99	3.48	54

a Wading measurement.
b Backwater caused by fallen tree in stream below gage.
c Ice conditions.
d New gage. Old gage was washed out about May 4, 1908, and new gage was established May 10, 1908. The gage datum and locations are not the same.

Monthly Discharge of Whiterocks River near Whiterocks, Utah, for 1908.

(Drainage area, 114 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 15-13	.....	.....	77.8	.682	.36	2,620
April	.....	.....	79.2	.695	.78	4,710
May	.....	.....	220	1.93	2.22	13,500
June	.....	.....	524	4.60	5.13	31,200
July	.....	.....	208	1.82	2.10	12,800
August	.....	.....	198	1.74	2.01	12,200
September	.....	.....	156	1.37	1.53	9,280
October	.....	.....	187	1.64	1.89	11,500
November	.....	.....	95.8	.840	.94	5,700
December	.....	.....	72.6	.637	.73	4,460
The period	.....	.....	.....	.....	16.69	108,000

Discharge Measurements of Whiterocks River near Whiterocks, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 11	R. H. Fletcher	30	51	2.32	50
January 27	do	31	65	2.58	73
February 4	do	30	43	1.62	61
March 10	do	30	34	1.45	51
March 22	do	30	30	1.02	57
April 5	do	30	32	1.10	60
April 17	do	31	39	1.30	102
May 7	do	32	46	1.58	145
May 21	do	45	64	2.10	280
May 31	do	50	76	2.30	372
June 12	do	58	130	3.30	774
June 26	do	55	104	2.80	533
July 3	do	52	88	2.55	435
July 17	do	37	53	1.95	211
July 28	do	44	60	2.12	277
August 5	do	34	47	1.80	183
August 23	do	45	73	2.20	330
September 2	do	55	111	2.90	603
September 13	do	50	82	2.38	373
September 29	do	35	47	1.85	177
October 5	do	46	3.50	1.84	161
October 20	do	40	2.62	1.50	105
October 29	do	33	2.91	1.45	96
November 6	do	34	1.94	1.38	66
November 17	do	36	2.55	1.50	92
November 26	do	34	2.14	1.40	73
December 16	do	46	1.41	1.30	67

Daily Discharge in Second-feet of Whiterocks River near Whiterocks, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	50	65	50	80	80	370	440	180	400	180	80	60
2.....	50	65	50	80	80	400	435	180	603	180	80	60
3.....	50	65	50	65	80	440	435	180	760	170	75	60
4.....	50	61	50	60	100	600	440	180	720	170	75	60
5.....	50	55	50	62	120	1,600	480	185	680	178	70	60
6.....	50	55	50	50	125	1,960	500	180	680	160	66	60
7.....	50	50	50	50	147	2,020	400	190	700	160	60	60
8.....	50	50	50	50	160	1,960	340	190	690	160	60	60
9.....	50	50	50	60	180	1,000	260	180	660	160	60	60
10.....	50	50	51	60	185	800	200	170	600	160	70	60
11.....	50	50	50	60	180	750	180	170	520	160	75	65
12.....	50	50	50	60	175	774	180	170	460	160	80	65
13.....	50	50	50	60	170	840	180	170	373	150	80	65
14.....	50	50	50	70	170	960	190	170	360	150	85	65
15.....	50	50	50	80	160	1,080	200	170	360	140	90	65
16.....	55	50	55	85	170	1,120	200	170	370	120	90	67
17.....	55	50	55	92	180	1,120	227	240	370	120	92	65
18.....	55	50	55	105	190	1,080	210	400	370	120	80	65
19.....	55	50	55	105	200	1,380	200	380	350	115	80	60
20.....	60	50	60	90	220	800	200	360	350	105	75	60
21.....	60	50	60	100	290	780	220	330	340	100	70	60
22.....	60	50	57	80	320	800	220	330	340	100	70	60
23.....	65	50	60	80	340	840	220	325	330	100	60	60
24.....	65	50	60	80	320	800	220	350	320	100	60	60
25.....	70	50	60	80	320	640	220	350	280	100	60	60
26.....	70	50	60	80	300	538	235	330	240	100	73	60
27.....	73	50	65	80	320	480	275	320	220	100	60	60
28.....	70	50	65	85	330	440	280	300	200	90	60	60
29.....	70	....	65	85	370	440	190	280	180	95	60	60
30.....	65	....	70	80	370	440	180	280	180	90	60	60
31.....	65	....	70	....	372	.....	180	320	....	80	....	60

Monthly Discharge of Whiterocks River near Whiterocks, Utah, for 1909.

(Drainage area, 114 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre feet
January	73	50	57	0.50	0.58	3,500
February	65	50	52	.46	.48	2,900
March	70	50	56	.50	.58	3,420
April	105	50	75	.66	.73	4,480
May	372	80	217	1.90	2.20	13,200
June	2,020	370	908	7.97	8.90	54,000
July	500	180	269	2.36	2.72	16,400
August	400	170	249	2.19	2.52	15,400
September	760	180	434	3.80	4.25	25,700
October	180	80	131	1.15	1.37	8,060
November	92	60	72	0.63	0.71	4,240
December	67	60	61	.54	.62	3,770
The year	2,020	50	215	1.89	25.76	155,070

Discharge Measurements of Whiterocks River near Whiterocks, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 6	Fletcher and Richardson	35	36	.....	61
January 25	R. H. Fletcher	32	36	.....	72
February 9	do	35	38	.....	78
February 28	do	31	28	1.18	51
March 8	Freeman and Fletcher	30	27	1.20	46
March 18	R. H. Fletcher	30	28	1.30	53
March 27	do	31	33	1.38	75
April 6	do	30	28	1.32	59
April 20	do	34	44	1.74	120
April 29	do	55	104	2.75	485
May 6	do	30	57	2.10	233
May 16	do	50	87	2.40	344
May 28	do	52	86	2.54	396
June 3	do	50	74	2.38	312
June 13	do	37	53	2.00	194
June 27	do	33	42	1.68	109
July 6	do	34	41	1.72	119
July 20	do	34	47	1.85	139
July 30	do	37	53	1.92	182
August 3	Fletcher and Gruber	36	51	1.90	177
August 15	R. H. Fletcher	34	44	1.75	126
August 29	do	33	38	1.65	101
September 5	do	32	30	1.60	101
September 12	do	30	33	1.46	83
September 28	do	34	41	1.67	115
October 5	do	33	39	1.58	106
October 15	do	32	35	1.56	94
October 25	do	33	35	1.58	101
November 2	do	31	33	1.48	81
November 10	do	30	33	1.40	85
November 21	do	30	27	1.36	67

Monthly Discharge of Whiterocks River near Whiterocks, Utah, for 1910.

(Drainage area, 114 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	65	0.57	0.66	4,010
February	.....	.....	67	.59	.61	3,720
March	.....	.....	60	.52	.60	3,620
April	.....	.....	162	1.42	1.58	9,640
May	.....	.....	414	3.63	4.18	25,500
June	.....	.....	210	1.84	2.05	12,500
July	.....	.....	134	1.18	1.36	8,240
August	.....	.....	123	1.08	1.24	7,560
September	.....	.....	150	1.32	1.47	8,920
October	.....	.....	92	.80	.93	5,630
November	.....	.....	68	.60	.66	4,020
December	.....	.....	.....	.....	.....	.....
The period	.....	.....	140	1.23	15.34	93,400

MONTHLY RUN-OFF

In Thousands of Acre Feet of Whiterocks River near Whiterocks, Utah, 1899 to 1910.

(Drainage area, 114 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq Mile	Depth in Inches on Drainage Area
1899	.....	.....	.....	.....	.....	.....	.....	.....	5.12	4.92	3.93	3.87	.....	....	....
1900	2.89	2.67	3.07	2.02	24.60	15.06	5.04	3.81	3.27	2.71	3.51	3.38	72.62	0.88	11.96
1901	3.07	2.78	3.07	4.40	31.17	10.65	6.21	7.87	5.65	4.61	3.75	3.75	87.00	1.05	14.33
1902	2.92	2.20	2.96	3.42	28.95	20.70	6.68	4.09	3.41	3.26	2.83	2.71	84.22	1.02	13.86
1903	2.09	2.28	2.64	3.33	15.90	39.15	12.18	5.72	5.30	4.67	3.99	3.70	101.22	1.23	16.65
1909 ...	3.50	2.90	3.42	4.48	13.20	54.00	16.40	15.40	25.70	8.06	4.24	3.77	155.07	1.89	25.76
1910	4.01	3.72	3.62	9.64	25.50	12.50	8.24	7.56	8.92	5.63	4.02	.....	.....	....	....
Mean.	3.[illegible]	2.77	3.17	4.65	22.23	25.34	9.12	7.41	8.20	4.84	3.76	3.53	99.06	1.19	16.10

DUCHESNE RIVER AT MYTON, UTAH.

This station, which was established October 26, 1899, and has been in operation every year, or portions thereof since that time, is located at the highway bridge at Myton, Utah, and was described in the earlier reports as the Price Road Bridge station. The object of the station is to determine the amount of water available for storage and irrigation.

The station is situated about 3 miles below the mouth of Lake Fork and about 15 miles above the mouth of the Uinta River, and the records show practically the entire run-off of the Duchesne basin above the mouth of Uinta River.

Within the last few years numerous ditches have been built by the United States Indian Service to divert water from this stream and its tributaries for irrigation on the Uinta Reservation. Water is also diverted for irrigation outside the limits of the reservation by several private parties.

Results at this station are affected by ice conditions for about four months during the winter season, and it is usually out of the question to apply open channel ratings for any portion of that time. The discharge has also been more or less affected by eddies about the wooden crib piers and by drift lodged against them.

The datum of the gage remained practically constant from the establishment of the station until June 6, 1909. (See Water-Supply Paper 269.)

Results at this station have been fairly good.

Discharge Measurements of Duchesne River near Myton, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 9	.....	118	744	7.60	2,760

Daily Discharge in Second-feet of Duchesne River near Myton, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	481	1,530	3,010	.....	....	....	....	....	....
2	....	....	....	423	1,415	2,880	.....	....	....	....	....	....
3	....	....	....	423	1,415	3,010	.....	....	....	....	....	....
4	....	....	....	423	1,650	3,375	.....	....	....	....	....	....
5	....	....	....	423	2,150	3,715	.....	....	....	....	....	....
6	....	....	....	423	2,430	4,250	.....	....	....	....	....	....
7	....	....	....	423	2,575	3,842	.....	....	....	....	....	....
8	....	....	....	423	2,575	3,205	.....	....	....	....	....	....
9	....	....	....	481	2,725	3,205	.....	....	....	....	....	....
10	....	....	....	548	3,010	3,715	.....	....	....	....	....	....
11	....	....	....	548	3,205	4,790	.....	....	....	....	....	....
12	....	....	....	548	3,205	5,700	.....	....	....	....	....	....
13	....	....	....	548	3,842	6,650	.....	....	....	....	....	....
14	....	....	....	548	3,842	7,220	.....	....	....	....	....	....
15	....	....	....	548	3,375	7,220	.....	....	....	....	....	....

Daily Discharge in Second-feet of Duchesne River near Myton, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	....	615	3,205	7,220	.....	....	....	....	....	....
17	....	....	....	685	3,205	7,030	.....	....	....	....	....	....
18	....	....	....	840	3,040	6,270	.....	....	....	....	....	....
19	....	....	....	920	3,040	5,510	.....	....	....	....	....	....
20	....	....	....	1,005	3,545	5,150	.....	....	....	....	....	....
21	....	....	....	1,200	4,070	5,150	.....	....	....	....	....	....
22	....	....	....	1,415	4,610	5,150	.....	....	....	....	....	....
23	....	....	....	1,650	4,790	4,610	.....	....	....	....	....	....
24	....	....	....	1,770	4,970	3,842	.....	....	....	....	....	....
25	....	....	....	1,770	4,610	3,205	.....	....	....	....	....	....
26	....	....	....	1,650	4,250	3,205	.....	....	....	....	....	....
27	....	....	....	1,415	3,842	3,205	.....	....	....	....	....	....
28	....	....	....	1,302	4,070	3,205	.....	....	....	....	....	....
29	....	....	....	1,415	4,250	2,880	.....	....	....	....	....	....
30	....	....	....	1,650	3,842	2,725	.....	....	....	....	....	....
31	....	....	....	....	3,375	.....	.....	....	....	....	....	....

Monthly Discharge of Duchesne River near Myton, Utah, for 1906.

(Drainage area, 2,750 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	1,170	423	893	0.325	0.36	53,100
May	4,970	1,440	3,320	1.21	1.40	204,000
June	7,320	2,800	4,520	1.64	1.83	269,000
July 1-10	3,850	2,720	3,140	1.14	.42	62,300
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period	7,320	423	.....	.....	4.01	588,000

Discharge Measurements of Duchesne River at Myton, Utah, for 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 10	I. I. Price	102	598	6.04	814
April 25	do	104	665	7.10	1,870
May 14	do	107	728	7.90	2,880
May 29	do	107	806	8.35	3,910
June 12	do	108	851	8.82	4,650
June 29	do	109	981	9.90	7,340
July 19	do	106	874	8.50	3,930
August 15	do	104	678	6.75	1,490
September 2	do	104	666	6.52	1,330
September 14	do	104	628	6.10	844
September 16	Freeman, Fletcher and Price	103	640	6.03	757
September 30	R. H. Fletcher	101	620	5.94	732
October 15	do	102	630	5.95	705
October 30	do	102	564	5.90	672
November 13	do	104	613	5.80	572
November 22	do	101	602	5.68	497
December 9	do	106	626	5.66	497

Daily Discharge in Second-feet of Duchesne River near Myton, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	2,410	3,320	7,900	2,410	1,230	670	670	....
2	....	....	....	....	2,180	3,840	8,190	2,410	1,230	670	670	....
3	....	....	....	....	2,180	4,620	8,490	2,310	1,120	670	595	....
4	....	....	....	....	2,050	5,285	9,100	2,410	1,120	670	595	....
5	....	....	....	....	2,050	6,000	9,410	2,180	1,230	670	595	....
6	....	....	....	....	2,050	6,510	9,410	2,050	1,230	750	595	....
7	....	....	....	....	1,920	5,780	9,100	2,050	1,230	750	595	....
8	....	....	....	....	1,920	6,510	8,790	1,800	1,020	750	595	....
9	....	....	....	....	1,920	6,000	8,490	1,680	925	750	595	....
10	....	....	....	750	2,050	5,285	7,610	1,450	925	670	595	....
11	....	....	....	925	2,180	4,830	7,050	1,560	835	670	595	....
12	....	....	....	1,310	2,580	4,830	6,255	1,450	835	670	595	....
13	....	....	....	1,680	2,860	5,285	6,000	1,450	835	670	595	....
14	....	....	....	2,050	2,860	4,620	5,760	1,450	835	670	525	....
15	....	....	....	2,310	2,580	4,210	5,285	1,450	750	670	525	....
16	....	....	....	2,580	2,410	3,660	4,620	1,310	750	670	525	....
17	....	....	....	2,580	2,580	3,490	4,210	1,310	750	670	525	....
18	....	....	....	2,580	3,010	3,660	4,020	1,230	750	670	525	....
19	....	....	....	2,410	3,490	4,210	4,020	1,230	670	670	525	....
20	....	....	....	2,310	4,210	5,285	4,210	1,230	670	670	525	....
21	....	....	....	1,920	5,050	6,255	4,410	1,230	670	670	525	....
22	....	....	....	1,800	5,520	6,255	3,840	1,120	670	670	525	....
23	....	....	....	1,680	6,000	6,000	3,490	1,120	670	670	525	....
24	....	....	....	1,920	6,000	5,520	3,320	1,120	670	670	525	....
25	....	....	....	2,180	5,520	5,050	3,490	1,120	670	670	525	....
26	....	....	....	2,180	5,050	5,285	3,660	1,230	670	670	525	....
27	....	....	....	2,180	4,410	6,000	3,160	1,230	670	670	525	....
28	....	....	....	2,110	3,840	6,780	3,160	1,230	670	670	525	....
29	....	....	....	2,580	3,660	7,330	2,860	1,230	670	670	525	....
30	....	....	....	2,410	3,320	7,610	2,720	1,230	670	670	525	....
31	....	....	....	....	3,160	.....	2,410	1,230	....	670	....	....

Monthly Discharge of Duchesne River near Myton, Utah, for 1907.

(Drainage area, 2,750 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April 10-30	2,650	794	2,060	.749	.58	85,800
May	6,000	1,900	3,290	1.20	1.38	202,000
June	7,610	3,400	5,390	1.96	2.19	321,000
July	9,560	2,470	5,680	2.07	2.39	349,000
August	2,440	1,120	1,560	.567	.65	95,900
September	1,400	670	874	.318	.35	52,000
October	792	670	693	.252	.29	42,600
November	670	525	564	.205	.23	33,600
December 1-15	595	525	551	.200	.11	16,400
The period	9,560	525	.....	.....	8.17	1,200,000

Discharge Measurements of Duchesne River at Myton, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 18*b*	R. H. Fletcher	102	624	5.80	621
March 24	do	102	604	5.60	498
April 6	do	103	583	5.57	457
April 14	do	103	631	5.91	696
April 27	do	103	630	6.28	915
May 13	do	104	783	6.68	1,160
May 21	do	104	682	6.81	1,280
June 5	do	100	657	6.60	956
June 21	do	106	825	8.00	2,500
June 29	do	105	793	7.87	2,270
July 9	do	103	705	6.73	1,530
July 23	do	101	605	5.93	676
July 31	Freeman and Fletcher	106	683	6.39	1,000
August 6	R. H. Fletcher	101	639	6.25	965
August 17	do	100	626	5.93	737
August 25	do	100	586	5.93	717
September 10	do	101	589	5.70	555
September 15	do	101	601	5.77	634
September 30	do	101	595	5.75	616
October 9	do	101	611	5.90	704
October 17	do	101	608	6.03	764
October 29	do	101	584	5.80	629
November 11	do	100	575	5.65	551
November 19	do	100	571	5.62	508
December 3*a*	do	99	580	5.64	564
December 10*a*	do	99	581	5.50	559

*a*Ice conditions. *b*Ice out of stream.

Daily Discharge in Second-feet of Duchesne River near Myton, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	430	815	1,240	2,000	2,440	450	570	635	....
2	....	....	....	430	850	1,180	1,840	1,450	450	570	635	....
3	....	....	....	430	1,020	1,070	1,840	1,230	450	635	570	....
4	....	....	....	430	1,310	980	1,770	940	450	770	570	....
5	....	....	....	430	1,250	950	1,840	850	395	700	570	....
6	....	....	....	430	1,190	950	1,850	940	395	635	570	....
7	....	....	....	550	1,130	850	1,680	1,030	395	635	570	....
8	....	....	....	550	1,330	845	1,560	940	450	635	570	....
9	....	....	....	485	1,490	940	1,450	850	570	700	510	....
10	....	....	....	485	1,420	1,290	1,340	770	570	700	510	....
11	....	....	....	485	1,300	2,170	1,340	770	510	700	510	....
12	....	....	....	550	1,180	3,450	1,230	770	510	700	510	....
13	....	....	....	620	1,130	4,170	1,230	770	570	700	510	....
14	....	....	....	690	1,030	4,480	1,130	850	635	700	510	....
15	....	....	....	770	985	4,670	1,130	770	570	700	450	....
16	....	....	....	850	935	4,420	1,130	700	510	770	450	....
17	....	....	....	940	935	2,100	1,030	700	510	770	510	....
18	....	....	620	850	980	3,650	940	700	510	770	510	....
19	....	....	550	1,030	1,070	2,250	850	700	450	770	510	....
20	....	....	485	1,240	1,280	2,050	770	770	450	700	510	....
21	....	....	485	1,500	1,280	2,500	770	700	450	700	510	....
22	....	....	485	1,550	1,220	3,300	700	700	450	635	510	....
23	....	....	485	1,480	1,150	3,140	700	1,230	395	635	450	....
24	....	....	485	1,250	1,050	2,970	700	850	570	635	510	....
25	....	....	485	1,140	1,050	3,200	700	700	850	635	450	....
26	....	....	485	1,080	1,290	3,120	635	635	770	635	450	....
27	....	..	485	930	1,450	3,180	700	570	635	635	450	....
28	....	....	485	880	1,330	2,660	850	570	635	635	450	....
29	....	....	430	870	1,220	2,250	1,130	510	570	635	450	....
30	....	....	430	880	1,100	2,180	1,340	510	570	635	450	....
31	....	....	430	....	1,140	.....	1,130	450	....	635	....	....

Monthly Discharge of Duchesne River near Myton, Utah, for 1908.

(Drainage area, 2,750 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 18-31	620	430	490	.178	.09	13,600
April	1,550	430	813	.296	.33	48,400
May	1,490	815	1,160	.422	.49	71,300
June	4,670	845	2,400	.873	.97	143,000
July	2,000	668	1,230	.447	.52	75,600
August	2,440	480	869	.316	.36	53,400
September	850	422	539	.196	.22	32,100
October	770	602	682	.248	.29	41,900
November	668	450	522	.190	.21	31,100
December	.....	.....	527	.192	.22	32,400
The period	4,670	422	.....	.....	3.70	543,000

Discharge Measurements of Duchesne River near Myton, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 5	R. H. Fletcher	100	274	6.44	460
January 19	do	114	313	6.62	574
February 15	do	105	265	6.72	483
February 25	do	105	267	6.61	396
March 15	do	100	276	6.62	462
March 29	do	100	598	5.78	664
April 14	do	100	583	5.69	558
April 27	do	102	639	6.68	1,243
May 12	do	108	847	8.44	3,345
May 26	do	108	872	8.50	3,385
December 22	do	110	362	6.00	630

Daily Discharge in Second-feet of Duchesne River near Myton, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	610	1,190	3,500	.....	6.3	7.15	5.4	5.3	5.15
2	....	....	....	662	1,080	4,000	.....	6.2	7.0	5.4	5.3	5.15
3	....	....	....	780	1,190	5,130	.....	6.1	6.4	5.4	5.3	5.15
4	....	....	....	908	1,310	6,430	.....	6.0	6.2	5.5	5.3	5.15
5	....	....	....	750	1,560	7,300	.....	5.9	6.2	5.5	5.3	5.15
6	....	....	....	635	1,920	8,080	.....	5.9	6.3	5.5	5.3	5.15
7	....	....	....	635	2,020	*....	.....	5.9	6.4	5.4	5.3	5.15
8	....	....	....	585	2,200	.....	.....	5.9	6.4	5.4	5.3	....
9	....	....	....	562	2,530	.....	.....	5.9	6.15	5.4	5.3	....
10	....	....	....	585	2,820	.....	*7.15	5.85	6.1	5.4	5.3	....
11	....	....	....	585	3,050	.....	7.0	5.85	6.1	5.45	5.3	....
12	....	....	....	685	3,220	.....	6.9	5.8	6.1	5.4	5.3	....
13	....	....	....	562	3,140	.....	6.8	5.8	6.0	5.4	5.3	....
14	....	....	....	610	2,740	.....	6.7	5.8	5.9	5.4	5.3	....
15	....	....	....	635	2,600	.....	6.6	5.8	5.9	5.4	5.2	....
16	....	....	....	690	2,740	.....	6.6	5.8	5.8	5.4	5.2	....
17	....	....	....	780	2,740	.....	6.5	5.8	5.7	5.4	5.15	....
18	....	....	....	908	2,600	.....	6.5	5.85	5.65	5.4	5.1	....
19	....	...	....	940	2,600	.....	6.5	5.9	5.65	5.4	5.1	....
20	....	....	....	1,010	2,890	.....	6.6	6.05	5.6	5.4	5.25	....
21	....	....	....	1,010	3,220	.....	6.55	6.1	5.6	5.35	5.3	....
22	....	....	....	940	3,790	.....	6.4	6.2	5.6	5.35	5.3	....
23	....	....	....	940	4,000	.....	6.4	6.25	5.55	5.35	5.3	....
24	....	....	....	908	4,000	.....	6.45	6.1	5.55	5.35	5.3	....
25	....	....	....	975	3,790	.....	6.4	6.0	5.55	5.35	5.25	....
26	....	....	....	1,010	3,590	.....	6.45	5.9	5.5	5.35	5.2	....
27	....	....	....	1,230	3,690	.....	6.6	5.85	5.5	5.35	5.2	....
28	....	....	....	1,390	4,000	.....	6.7	5.8	5.5	5.35	5.15	....
29	....	....	....	1,480	4,430	.....	6.6	5.7	5.5	5.35	5.15	....
30	....	....	....	1,310	4,100	.....	6.5	5.7	5.45	5.3	5.15	....
31	....	....	....	....	3,590	.....	6.45	6.05	....	5.3	....	....

*Note—No readings June 7-July 9, inclusive. New gage beginning July 10, and there being no discharge measurements on account of flood having cut a new channel around the old station, and since 1910 measurements do not cover range of gage heights, no daily discharges are shown. The readings from July 10 on are gage heights.

Monthly Discharge of Duchesne River near Myton, Utah, for 1909.

(Drainage area, 2,750 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	1,480	562	841	0.31	0.34	50,000
May	4,430	1,080	2,850	1.04	1.20	175,000
June 1-6	8,080	3,500	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The year	.....	.....	.....	.....	.....	.....

Monthly Discharge of Duchesne River near Myton, Utah, for 1910.

(Drainage area, 2,750 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 12-31	2,240	875	1,140	0.41	.31	45,200
April	4,540	980	2,110	.77	.86	126,000
May	5,440	2,700	3,690	1.34	1.54	227,000
June	4,840	875	1,970	.72	.80	117,000
July	1,090	385	580	.21	.25	36,000
August	685	285	384	.14	.16	23,600
September	1,150	285	501	.18	.20	29,800
October	935	425	533	.19	.22	32,800
November	480	455	458	.17	.19	27,300
December	.....	.....	.....	.....	.....	.....
The period	5,440	285	1,263	0.46	4.53	665,000

Discharge Measurements of Duchesne River near Myton, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 20	R. H. Fletcher	90	195	7.45	364
February 12	do	80	172	7.80	355
February 24	do	95	271	7.80	636
June 22	do	128	360	5.60	1,140
July 13	do	96	206	4.90	467
July 27	do	96	187	4.70	390
August 6	do	96	201	2.10	468
August 23	do	95	182	1.85	352
September 8	do	95	163	1.75	293
September 26	do	96	204	2.20	494
October 11	do	95	194	2.10	420
October 22	do	98	235	2.50	607
November 6	do	95	198	2.20	453
November 19	do	95	198	2.18	441

Daily Discharge in Second-feet of Duchesne River near Myton, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	980	4,060	4,840	1,090	685	300	475	470	....
2	....	....	....	1,040	3,700	4,540	980	605	300	475	470	....
3	....	....	....	1,090	3,190	4,260	928	605	300	450	480	....
4	....	....	....	1,090	2,860	3,610	875	535	315	475	480	....
5	....	....	....	1,090	2,860	3,270	875	475	332	475	480	....
6	....	....	....	1,090	2,860	3,020	875	450	332	450	455	....
7	....	....	....	1,000	2,700	2,700	775	385	315	450	455	....
8	....	....	....	1,150	2,860	2,400	685	385	315	425	455	....
9	....	....	....	1,200	3,270	2,170	605	368	285	425	455	....
10	....	....	....	1,260	4,260	1,960	535	350	285	425	455	....
11	....	....	....	1,440	5,240	1,960	475	332	285	425	455	....
12	....	....	2,240	1,700	5,440	1,820	475	368	285	425	455	....
13	....	....	1,700	1,820	5,240	1,820	475	405	315	462	455	....
14	....	....	1,200	1,960	4,740	1,700	425	405	315	462	455	....
15	....	....	875	1,960	4,440	1,570	475	405	368	480	455	....
16	....	....	875	1,890	4,060	1,510	535	385	450	935	455	....
17	....	....	875	1,820	3,440	1,440	605	350	825	820	455	....
18	....	....	875	1,960	3,190	1,440	605	315	825	722	455	....
19	....	....	928	2,100	3,020	1,320	535	315	980	705	455	....
20	....	....	980	2,240	3,110	1,320	535	425	875	705	455	....
21	....	....	980	2,470	3,020	1,200	475	350	1,150	605	455	....
22	....	....	1,090	2,550	2,860	1,090	475	332	1,040	605	455	....
23	....	....	1,200	2,630	2,700	1,040	425	332	605	540	455	....
24	....	....	1,200	2,700	3,190	980	425	315	535	575	455	....
25	....	....	1,150	2,940	3,790	980	385	285	535	540	455	....
26	....	....	1,200	3,270	3,520	875	405	285	535	520	455	....
27	....	....	1,150	3,700	3,270	875	385	285	535	520	455	....
28	....	....	1,090	3,970	3,700	875	450	285	505	490	455	....
29	....	....	1,090	4,540	4,160	1,090	505	300	505	490	455	....
30	....	....	1,040	4,440	4,840	1,320	475	300	475	500	455	....
31	....	....	980	....	4,840	.....	475	300	....	500	....	....

MONTHLY RUN-OFF

In Thousands of Acre Feet of Duchesne River near Myton, Utah, 1899 to 1910.

(Drainage area, 2 750 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per-Sq. Mile	Depth in inches on Drainage Area
1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	24.78	23.68	21.34	.....	....	....
1900	20.95	18.88	24.23	27.78	143.68	101.28	23.18	16.66	17.61	19.25	18.15	21.03	452.04	0.23	3.07
1901	*17.22	*15.55	17.77	29.62	194.85	88.36	36.71	27.85	18.27	19.80	18.80	*18.45	503.27	0.25	3.43
1902	*17.22	*15.55	17.88	39.04	121.07	133.24	34.14	16.80	15.36	18.29	19.15	*18.45	466.17	0.24	3.21
1903	.....	.....	.....	28.52	81.90	180.39	56.08	23.06	19.58	23.55	21.00	.....	.....	....	....
1904	.....	.....	21.92	41.12	175.60	205.50	63.39	38.31	21.93	24.66	20.59	.....	.....	....	....
1905	.....	.....	.....	53.10	204.00	269.00	.....	.....	.....	.....	.....	.....	.....	....	....
1906	.....	.....	.....	.....	202.00	321.00	349.00	95.90	52.00	42.60	33.60	16.40	.....	....	....
1907	.....	.....	.....	48.40	71.30	142.00	75.60	53.40	32.10	41.90	31.10	32.40	.....	....	....
1908	.....	.....	.....	50.60	175.00	.....	.....	.....	.....	.....	.....	.....	.....	....	....
1909	.....	.....	.....	126.00	227.00	117.00	36.00	23.60	29.80	32.80	27.30	.....	.....	....	....
1910	.....	.....	.....												
Mean.	18.47	16.66	20.45	48.29	159.58	173.20	84.26	36.95	25.83	27.51	23.71	21.35	657.26	0.33	4.43

*Estimated.

UINTA RIVER NEAR WHITEROCKS, UTAH.

This station was established September 16, 1899, abandoned the latter part of 1904 and reestablished August 13, 1907.

The present station is located at the highway bridge on the government road up Uinta Canyon about 10 miles northwest of the Whiterocks Indian Agency. No water is diverted above the station. The same gage was used from 1899 to 1904, inclusive. The gage established in August, 1907, was located a short distance upstream from the old gage and at a different datum. The present chain gage has no determined relation to this last gage. It was established October 22, 1907.

As no one lives in the vicinity of the gage it is read only when discharge measurements are made, and the discharge for intermediate days is estimated by comparison with the hydrographs of other streams in that locality.

Owing to poor conditions at the station and the method necessary in computing daily discharges, results are rather approximate.

Discharge Measurements of Uinta River near Whiterocks, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 13	I. I. Price	83	113	1.10	456
August 25	do	84.5	101	1.05	379
September 10	do	84.5	90	.90	301
October 9	R. H. Fletcher	68	86	.78	286
October 22	do	70	80	1.30	219
November 5	do	69	73	1.22	206
November 19	do	68	64	1.10	155

Monthly Discharge of Uinta River near Whiterocks, Utah, for 1907.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
August 13-31	.....	.....	373	1.71	1.21	14,100
September	.....	.....	308	1.41	1.57	18,300
October	.....	.....	250	1.15	1.33	15,400
November	.....	.....	174	.798	.89	10,400
The period	.....	.....	.....	.....	.....	58,200

Discharge Measurements of Uinta River near Whiterocks, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 30*a*	R. H. Fletcher	63	61	.98	123
April 10*a*	do	65	64	1.05	146
April 18	do	69	72	1.18	202
April 25	do	71	85	1.40	221
May 11	do	73	96	1.52	315
May 19	do	75	129	1.88	516
June 3	do	73	104	1.63	348
June 18	do	78	161	2.20	1,010
June 27	do	80	163	2.35	1,240
July 7	do	75	134	2.00	706
July 21	do	72	112	1.70	543
July 27	Freeman and Fletcher	72	125	1.90	544
August 13	R. H. Fletcher	75	115	1.82	468
August 22	do	75	122	1.85	479
August 28	do	73	105	1.60	329
September 3	do	71	98	1.45	298
September 18	do	71	94	1.48	316
September 25	do	75	117	1.85	448
October 5	do	72	101	1.50	333
October 13	do	72	97	1.50	323
October 23	do	71	95	1.45	294
November 7	do	70	81	1.30	241
November 14	do	70	83	1.28	240
November 24	do	70	77	1.20	213
December 7*b*	do	70	76	1.22	155
December 24*b*	do	81	206	3.10	237

*a*Some ice. *b*Ice conditions.

Note—On October 9, 1907, station was moved 1 mile down stream to a bridge. New gage established at bridge on October 22, 1907.

Monthly Discharge of Uinta River near Whiterocks, Utah, for 1908.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 15-31	.....	.....	146	.670	.42	4,020
April	.....	.....	172	.789	.88	10,200
May	.....	.....	348	1.60	1.84	21,400
June	.....	.....	910	4.17	4.65	54,100
July	.....	.....	636	2.92	3.37	39,100
August	.....	.....	444	2.04	2.35	27,300
September	.....	.....	327	1.50	1.67	19,500
October	.....	.....	325	1.49	1.72	20,000
November	.....	.....	236	1.08	1.20	14,000
December	.....	.....	202	.927	1.07	12,400
The year	.....	.....	.....	.....	19.17	233,000

Discharge Measurements of Uinta River near Whiterocks, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 15	R. H. Fletcher	66	120	2.55	194
January 26	do	66	92	1.75	182
February 6	do	66	81	1.47	83
February 18	do	60	53	0.90	103
March 9	do	61	57	.95	133
March 20	do	66	62	1.00	136
April 3	do	66	67	1.00	156
April 16	do	69	71	1.10	177
May 6	do	70	92	1.34	268
May 19	do	72	107	1.56	362
May 29	do	75	118	1.75	477
June 3	do	83	166	2.42	1,061
June 14	do	84	204	2.63	1,266
June 25	do	83	186	3.00	1,254
July 2	do	85	160	2.60	809
July 15	do	78	123	1.85	451
July 27	do	81	148	2.35	795
August 3	do	74	113	1.80	464
August 16	do	78	130	2.10	602
August 30	do	75	113	1.80	477
September 3	do	84	160	2.30	790
September 14	do	74	128	2.00	524
September 28	do	72	108	1.72	369
October 4	do	73	108	1.70	372
October 21	do	73	86	1.45	226
October 30	do	71	82	1.45	196
November 8	do	71	85	1.40	193
November 18	do	67	85	1.42	193
November 30	do	67	84	1.40	178
December 17	do	60	151	3.15	164

Daily Discharge in Second-feet of Uinta River near Whiterocks, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	195	120	120	140	220	470	1,540	500	600	360	200	175
2	195	100	120	140	215	485	1,030	470	680	360	200	175
3	195	100	120	140	220	1,060	1,000	415	772	360	200	175
4	195	100	120	160	235	1,720	960	410	800	360	200	175
5	195	90	120	160	215	2,080	940	400	780	340	200	175
6	195	83	125	160	268	2,400	920	595	770	320	195	170
7	195	85	125	160	285	2,380	900	395	770	315	195	170
8	195	85	125	160	320	2,280	880	400	760	300	193	170
9	195	85	125	160	325	1,880	760	420	720	290	195	170
10	195	85	135	160	330	1,440	610	440	680	280	195	170
11	195	90	135	160	330	1,320	560	465	660	280	190	165
12	195	90	135	160	320	1,220	520	480	620	280	190	165
13	195	90	135	160	310	1,220	500	480	560	280	190	165
14	195	90	135	165	300	1,270	475	480	540	270	190	165
15	195	90	135	170	290	1,340	445	500	540	260	190	165
16	195	90	135	175	280	1,400	446	615	490	255	190	165
17	195	95	135	210	280	1,440	460	640	470	250	190	164
18	195	110	135	215	290	1,520	485	650	460	240	193	160
19	195	105	135	215	362	1,540	515	680	450	235	190	160
20	195	105	140	215	325	1,480	515	700	440	230	190	160

Daily Discharge in Second-feet of Uinta River near Whiterocks, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21.....	195	105	135	210	380	1,400	500	700	430	230	190	160
22.....	195	110	135	200	430	1,340	480	660	420	220	190	160
23.....	195	110	135	190	430	1,340	480	500	400	225	190	160
24.....	195	110	135	190	420	1,380	520	480	390	225	190	160
25.....	180	110	135	200	415	1,390	580	430	380	230	190	160
26.....	182	110	135	205	415	1,320	660	400	370	230	180	160
27.....	175	110	135	235	420	1,240	815	400	370	230	180	160
28.....	170	110	135	235	435	1,200	760	400	369	220	180	160
29.....	160	....	135	230	477	1,120	720	420	360	210	180	160
30.....	120	....	135	225	455	1,080	630	415	360	196	178	160
31.....	120	....	135	....	415	.....	560	500	....	200	....	160

Monthly Discharge of Uinta River near Whiterocks, Utah, for 1909.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre feet
January	.....	.....	187	0.86	0.99	11,500
February	.....	.....	99	0.45	.47	5,460
March	.....	.....	132	.61	.70	8,120
April	.....	.....	184	.84	.94	10,900
May	.....	.....	335	1.54	1.77	20,600
June	.....	.....	1,300	5.97	6.66	77,400
July	.....	.....	640	2.94	3.39	39,400
August	.....	.....	480	2.20	2.54	29,500
September	.....	.....	547	2.51	2.80	32,500
October	.....	.....	267	1.25	1.42	16,400
November	.....	.....	193	0.88	0.98	11,500
December	.....	.....	165	0.76	0.87	10,100
The year....	.....	.....	377	1.73	23.52	273,380

Discharge Measurements of Uinta River near Whiterocks, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 15	R. H. Fletcher	68	94	1.48	156
January 24	do	68	88	1.32	142
February 8	*do*	*67*	*95*	*1.22*	*145*
February 26	do	67	86	1.24	146
March 7	*Freeman and Fletcher*	*67*	*74*	*1.22*	*117*
March 17	R. H. Fletcher	68	82	1.32	141
March 25	*do*	*68*	*94*	*1.40*	*189*
April 7	do	68	87	1.32	159
April 18	*do*	*72*	*102*	*1.45*	*224*
April 30	do	77	147	2.30	654
May 7	*do*	*74*	*122*	*1.80*	*429*
May 17	do	74	133	1.92	505
May 30	do	77	159	2.20	769
June 4	do	74	150	2.05	636
June 15	do	73	177	1.78	398
June 25	do	72	108	1.60	318
July 5	do	74	120	1.78	422
July 19	do	72	112	1.68	342
July 29	do	75	128	1.90	437
August 4	Fletcher and Palmer	73	115	1.74	381
August 16	R. H. Fletcher	73	103	1.50	258
August 30	*do*	*72*	*93*	*1.46*	*192*
September 6	do	71	94	1.40	192
September 13	do	72	93	1.45	207
September 29	do	72	99	1.54	237
October 6	do	70	89	1.46	196
October 17	do	73	108	1.56	265
October 26	do	70	88	1.46	192
November 3	do	68	89	1.40	169
November 11	do	68	84	1.38	161
November 22	do	68	81	1.32	150

Monthly Discharge of Uinta River near Whiterocks, Utah, for 1910.

(Drainage area, 218 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	150	0.69	0.79	9,200
February	.....	.....	145	.67	.69	8,100
March	.....	.....	157	.72	.83	9,600
April	.....	.....	323	1.48	1.65	19,200
May	.....	.....	683	3.13	3.61	42,000
June	.....	.....	417	1.91	2.13	24,800
July	.....	.....	362	1.66	1.91	22,300
August	.....	.....	282	1.29	1.49	17,300
September	.....	.....	264	1.21	1.35	15,700
October	.....	.....	213	.98	1.13	13,100
November	.....	.....	154	.71	.79	9,200
December	.....	.....	.....	.....	.....	.....
The period	.....	.....	286	1.31	16.37	190,500

MONTHLY RUN-OFF

In Thousands of Acre Feet of Uinta River near Whiterocks, Utah, 1899 to 1910.

(Drainage area, 218 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1899	.....	.....	.....	.....	.....	.....	.....	.....	9.82	9.96	7.74	7.38	.....	....	....
1900	6.89	6.22	7.69	8.21	39.97	35.52	13.71	11.31	9.34	9.47	8.21	8.92	165.46	1.04	14.10
1901	8.61	7.78	9.22	10.65	42.06	21.12	15.43	14.88	11.48	10.02	8.45	9.04	168.75	1.06	14.32
1902	8.26	7.08	8.84	9.16	34.11	39.58	16.13	11.14	9.92	9.36	8.27	7.69	169.66	1.07	14.45
1903	5.29	5.28	7.50	8.81	26.44	53.20	23.49	14.27	12.44	10.82	9.10	8.92	185.54	1.17	15.80
1907	.....	.....	.....	.....	.....	.....	.....	.....	14.10	18.30	15.40	10.40	.....	....	....
1908	.....	.....	.....	10.20	21.40	54.10	39.10	27.30	19.50	20.00	14.00	12.40	.....	....	....
1909	11.50	5.48	8.06	10.90	29.80	85.10	41.00	30.40	32.50	16.40	11.40	10.10	284.00	1.73	23.40
1910	8.20	8.10	9.60	19.20	42.00	24.80	22.30	17.30	15.70	13.10	8.20	.....	.....	....	....
Mean.	8.31	6.66	8.48	11.02	32.40	36.20	24.45	18.09	14.98	13.05	10.20	8.32	192.16	1.21	16.35

UINTA RIVER NEAR FORT DUCHESNE, UTAH.

This station, which is located at the wooden highway bridge on the road to Vernal, one-fourth of a mile from Fort Duchesne, Utah, was originally established on September 4, 1899, and continued until the end of 1904. It was also maintained for a brief period during 1906, and one April 9, 1907, the station was reestablished.

The data obtained at this point show the amount of water contributed by this stream to Duchesne River, except the comparative small amount diverted for irrigation below, and in connection with the records of the stations above on the Whiterocks and the Uinta they show the amount of water taken for irrigation by the numerous diversions both on the Uinta and Whiterocks above the station. The upper tributaries, above irrigation diversions, afford excellent opportunities for storage and power development.

The flow of the stream is affected by ice for about four months during the winter season, and the accuracy of the results is somewhat affected by eddies around the crib piers and by deposits of sediment brought down by Deep Creek during floods.

Practically the same datum was used for the gage up to and including 1906. The present chain gage, established April 9, 1907, has an entirely different datum. It is fastened to the bridge from which discharge measurements are made.

Discharge Measurements of Uinta River near Fort Duchesne, Utah, in 1906.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 21	R. I. Meeker	52	185	3.08	256
May 8	E. O. Greene	59	230	3.70	484

Daily Gage Heights, in Feet, of Uinta River near Fort Duchesne for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	3.05	4.45	.....	....	....	....	....	....
2	....	....	....	....	3.05	4.35	.....	....	....	....	....	....
3	....	....	....	....	3.05	4.55	.....	....	....	....	....	....
4	....	....	....	....	3.1	4.85	.....	....	....	....	....	....
5	....	....	....	....	3.25	5.45	.....	....	....	....	....	....
6	....	....	....	....	3.5	5.5	.....	....	....	....	....	....
7	....	....	....	....	3.45	5.2	.....	....	....	....	....	....
8	....	....	....	....	3.65	5.1	.....	....	....	....	....	....
9	....	....	....	....	3.75	5.45	.....	....	....	....	....	....
10	....	....	....	....	4.0	5.75	.....	....	....	....	....	....
11	....	....	....	....	4.25	6.75	.....	....	....	....	....	....
12	....	....	....	....	4.55	6.8	.....	....	....	....	....	....
13	....	....	....	....	4.75	7.0	.....	....	....	....	....	....
14	....	....	....	....	4.3	.....	.....	....	....	....	....	....
15	....	....	....	....	4.1	.....	.....	....	....	....	....	....

Daily Gage Heights, in Feet, of Uinta River near Fort Duchesne for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	....	....	4.1	.....	.....	....	....	....	....	....
17	....	....	....	....	4.1	.....	.....	....	....	....	....	....
18	....	....	....	....	4.05	.....	.....	....	....	....	....	....
19	....	....	....	....	4.25	.....	.....	....	....	....	....	....
20	....	....	....	....	4.65	.....	.....	....	....	....	....	....
21	....	....	....	3.05	5.15	.....	.....	....	....	....	....	....
22	....	....	....	3.25	5.6	.....	.....	....	....	....	....	....
23	....	....	....	3.4	5.75	.....	.....	....	....	....	....	....
24	....	....	....	3.3	5.85	.....	.....	....	....	....	....	....
25	....	....	....	3.3	5.25	.....	.....	....	....	....	....	....
26	....	....	....	3.25	4.85	.....	.....	....	....	....	....	....
27	....	....	....	3.15	4.6	.....	.....	....	....	....	....	....
28	....	....	....	3.0	5.0	.....	.....	....	....	....	....	....
29	....	....	....	3.15	4.95	.....	.....	....	....	....	....	....
30	....	....	....	3.15	4.6	.....	.....	....	....	....	....	....
31	....	....	....	....	4.45	.....	.....	....	....	....	....	....

Discharge Measurements of Uinta River near Fort Duchesne, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 9	Meeker and Price	81	297	6.44	181
April 24	I. I. Price	81	322	6.72	335
May 13	....do	81	310	6.80	345
May 28	....do	81	384	7.30	857
June 11	....do	81	412	7.65	1,350
June 28	....do	81	477	8.52	2,800
July 10	J. B. Cabanis	81	466	7.95	2,050
August 14	I. I. Price	81	367	6.76	408
September 3	....do	81	340	6.62	305
September 19	R. H. Fletcher	79	329	6.43	218
October 10	....do	79	333	6.42	202
October 23	....do	80	322	6.35	173
November 6	....do	80	281	6.34	150
November 20	....do	80	254	6.35	142
December 5a	....do	80	245	6.50	99

Daily Discharge in Second-feet of Uinta River near Fort Duchesne, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	310	750	3,395	750	300	190	150	....
2	....	....	....	....	250	1,420	3,395	875	300	190	150	....
3	....	....	....	....	250	1,575	3,395	875	300	190	150	....
4	....	....	....	....	250	1,735	3,395	875	300	190	150	....
5	....	....	....	....	250	2,260	3,395	750	300	190	150	....
6	....	....	....	....	250	2,260	2,945	750	370	190	150	....
7	....	....	....	....	200	1,900	2,525	640	370	240	150	....
8	....	....	....	....	200	1,900	2,330	640	300	240	150	....
9	....	....	....	160	200	1,270	2,330	640	240	190	150	....
10	....	....	....	200	160	1,270	1,980	540	240	190	150	....
11	....	....	....	250	200	1,270	1,815	540	240	190	150	....
12	....	....	....	310	310	1,575	1,815	540	240	190	150	....
13	....	....	....	375	375	1,420	1,650	450	240	190	150	....
14	....	....	....	450	310	1,270	1,650	450	240	190	150	....
15	....	....	....	535	310	1,125	1,485	450	240	190	150	....
16	....	....	....	535	250	995	1,165	370	240	190	150	....
17	....	....	....	450	310	995	1,165	300	190	190	150	....
18	....	....	....	450	450	1,270	1,165	300	190	190	150	....
19	....	....	....	375	635	2,075	1,015	300	190	190	150	....
20	....	....	....	375	995	2,455	1,015	300	190	190	150	....
21	....	....	....	310	1,270	2,660	1,485	370	190	150	150	....
22	....	....	....	375	1,575	2,455	1,165	240	190	150	150	....
23	....	....	....	310	1,900	1,900	1,165	240	190	150	150	....
24	....	....	....	310	1,735	1,735	1,165	240	190	190	....	....
25	....	....	....	310	1,420	2,075	1,485	300	190	190	....	....
26	....	....	....	310	1,125	2,075	1,325	370	190	190	....	....
27	....	....	....	310	995	2,455	1,325	300	190	150	....	....
28	....	....	....	310	870	2,870	1,165	300	190	150	....	....
29	....	....	....	375	750	2,870	1,015	300	190	150	....	....
30	....	....	....	310	750	3,080	1,015	370	190	150	....	....
31	....	....	....	....	635	...	875	450	....	150	....	....

Note—Ice in December.

Monthly Discharge of Uinta River at Fort Duchesne, Utah, for 1907.

(Drainage area, 672 Square Miles.)

Month	Discharge in Second-feet			Run-off		
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
April 9-30	535	168	361	0.537	0.44	15,800
May	1,870	180	635	.945	1.09	39,000
June	3,040	810	1,860	2.77	3.09	111,000
July	3,510	903	1,860	2.77	3.19	114,000
August	945	240	487	.725	.84	29,900
September	370	190	253	.376	.42	15,100
October	240	170	188	.280	.32	11,600
November	148	120	139	.207	.23	8,270
December 1-15	.....	.....	102	.152	.08	3,030
The period	.....	.....	.....	.....	.....	348,000

Discharge Measurements of Uinta River near Fort Duchesne for 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 28	R. H. Fletcher	80	227	6.32	139
April 1	do	78	217	6.28	108
April 11	do	80	219	6.37	137
April 23	do	80	239	6.60	244
May 2	do	80	230	6.50	189
May 16	do	80	250	6.56	223
June 5	do	80	261	6.58	214
June 15	do	80	478	8.30	2,360
June 25	do	80	417	7.48	872
July 9	do	80	372	6.83	317
July 25*b*	Freeman and Fletcher	68	66	6.40	106
August 11	R. H. Fletcher	80	348	6.61	228
August 18	do	80	351	6.65	244
August 24	do	80	369	6.85	339
August 31	do	78	94	6.55	226
September 10	do	80	94	6.62	246
September 21	do	70	73	6.42	139
September 30	do	80	344	6.78	302
October 10	do	80	348	6.76	295
October 19	do	80	350	6.82	338
October 30	do	80	343	6.75	293
November 5	do	80	339	6.70	262
November 13	do	80	326	6.62	236
November 23	do	77	77	6.51	179
December 2*ab*	do	75	85	6.78	226
December 17*a*	do	56	77	6.95	177

a Ice conditions. *b* Wading measurements.

Daily Discharge in Second-feet of Uinta River near Fort Duchesne, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	88	153	323	435	238	153	261	261	....
2	....	....	....	88	191	261	435	238	153	213	261	....
3	....	....	....	118	306	213	360	213	153	261	261	....
4	....	....	....	118	375	213	360	170	153	261	213	....
5	....	....	....	118	306	213	435	133	153	261	213	....
6	....	....	....	118	246	213	360	170	153	261	261	....
7	....	....	....	153	306	323	360	170	118	323	213	....
8	....	....	....	118	375	323	295	133	118	261	213	....
9	....	....	....	118	375	392	295	101	375	261	213	....
10	....	....	....	118	375	1,020	295	133	246	323	213	....
11	....	....	....	118	306	1,620	295	213	246	323	213	....
12	....	....	....	118	306	2,360	295	213	191	261	213	....
13	....	....	....	153	306	2,165	295	170	191	261	213	....
14	....	....	153	153	246	2,165	238	323	246	261	213	....
15	....	....	153	153	191	1,975	238	323	246	261	213	....
16	....	....	153	118	191	1,455	238	213	170	323	213	....
17	....	....	153	153	246	1,010	143	213	170	323	170	....
18	....	....	153	153	306	795	143	213	170	323	213	....
19	....	....	118	153	635	600	143	323	133	323	246	....
20	....	....	118	191	635	600	106	323	170	32	246	....
21	....	....	118	191	450	695	106	261	133	323	246	....
22	....	....	118	191	375	795	76	323	133	323	191	....
23	....	....	118	191	306	695	76	360	133	261	191	....
24	....	....	118	191	306	695	106	360	213	261	191	....
25	....	....	118	153	306	795	106	323	563	261	191	....

Daily Discharge in Second-Feet of Uinta River near Fort Duchesne, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
26	....	....	118	153	375	695	106	264	323	264	194	....
27	....	....	118	153	450	795	106	213	264	264	194	....
28	....	....	118	153	375	600	143	246	264	264	194	....
29	....	....	118	153	306	515	187	246	264	264	246	....
30	....	....	118	153	375	435	238	194	264	264	246	....
31	....	....	88	....	535	.....	143	194	....	264	....	....

Monthly Discharge of Uinta River near Fort Duchesne, Utah, for 1908.

(Drainage area, 672 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 14-31	174	103	134	0.20	0.13	4,940
April	220	103	152	.23	.26	9,040
May	635	153	342	.51	.59	21,000
June	2,360	213	857	1.28	1.43	51,000
July	435	91	242	.36	.42	14,900
August	392	117	243	.36	.42	14,900
September	563	118	216	.32	.36	12,800
October	358	238	293	.44	.50	18,000
November	276	192	228	.34	.38	13,600
December	.....	.....	191	.28	.33	11,700
The period	2,360	91	209	0.45	4.81	172,000

Discharge Measurements of Uinta River near Fort Duchesne in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 4	R. H. Fletcher	40	64	7.50	170
January 28	do	40	74	6.84	127
February 10	do	35	57	7.6	128
March 13	do	35	61	6.9	116
March 27	do	80	316	6.6	222
April 6	do	78	288	6.37	161
April 29	do	79	273	6.49	197
May 11	do	80	225	6.8	378
May 26	do	80	230	6.82	409
June 8	do	80	490	8.27	2,781
June 21	do	80	444	7.82	1,459
July 7	do	80	399	7.10	572
July 23	do	80	372	6.65	308
August 7	do	80	353	6.5	188
August 25	do	80	368	6.9	386
September 6	do	80	438	7.85	1,471
September 22	do	80	388	6.92	466
October 9	do	80	353	6.66	287
October 22	do	80	350	6.55	200
November 11	do	79	89	6.54	229
November 20	do	85	111	6.38	188
December 21	do	105	135	7.10	171

Daily Discharge in Second-feet of Uinta River near Fort Duchesne for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	160	120	120	192	175	412	1,090	210	1,160	310	210	210
2	160	120	120	210	192	685	775	175	1,620	282	210	210
3	165	125	115	210	192	660	775	210	1,090	282	210	175
4	170	125	110	210	192	2,460	775	175	835	310	210	160
5	165	125	100	175	210	4,300	775	175	1,160	310	210	145
6	165	125	100	169	232	4,470	895	192	1,540	310	210	132
7	160	125	100	175	282	3,980	720	192	1,230	310	210	140
8	160	125	100	169	282	2,460	518	192	1,160	310	175	150
9	160	125	100	175	282	2,740	472	192	1,020	282	175	160
10	160	125	100	175	342	1,860	392	175	858	255	255	170
11	160	125	110	175	342	1,560	358	175	895	255	210	170
12	160	125	115	160	310	1,660	264	175	1,020	255	210	170
13	160	125	116	160	282	1,970	213	255	775	255	210	170
14	160	125	118	175	282	1,760	213	232	665	255	210	170
15	160	125	120	175	232	2,210	213	192	614	232	210	170
16	160	125	140	192	232	1,540	255	213	630	232	210	170
17	155	125	160	210	232	2,070	210	563	630	210	175	170
18	155	125	160	210	282	2,260	192	614	535	210	192	170
19	155	125	170	210	232	1,980	255	472	535	210	175	170
20	150	125	180	210	282	1,710	450	392	535	210	175	170
21	150	125	190	210	342	1,540	342	392	492	210	175	170
22	150	125	195	175	412	1,540	255	392	450	210	175	170
23	150	125	200	175	412	1,460	255	323	450	210	192	170
24	140	125	200	175	412	1,710	342	294	450	210	175	170
25	140	125	200	175	412	1,710	255	323	450	210	192	170
26	130	125	210	175	342	1,380	255	264	375	232	192	170
27	130	125	222	175	412	1,300	630	264	375	210	255	170
28	127	125	210	175	582	1,300	540	264	310	210	210	170
29	120	....	200	255	582	1,230	282	213	282	210	192	170
30	120	....	180	210	535	1,160	255	213	282	210	210	170
31	120	....	160	....	412	.....	210	323	310	210	....	170

Monthly Discharge of Uinta River near Fort Duchesne, Utah, for 1909.

(Drainage area, 672 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	151	0.23	0.26	9,280
February	.....	.....	125	.19	.19	6,940
March	.....	.....	149	.22	.26	9,160
April	255	160	187	.28	.31	11,100
May	582	175	319	.48	.55	19,600
June	4,470	412	1,940	2.89	3.22	115,000
July	1,090	192	1,090	0.64	0.74	26,400
August	614	175	272	0.41	0.47	16,700
September	1,540	282	740	1.10	1.23	44,000
October	310	210	246	0.37	0.42	15,100
November	255	175	201	.30	.33	12,000
December	.....	.....	168	.25	.29	10,300
The period	4,470	160	411	0.61	8.27	296,000

Discharge Measurements of Uinta River near Fort Duchesne, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 18	R. H. Fletcher	70	174	8.60	150
February 10	do	45	89	8.50	121
February 22	do	50	105	8.60	181
March 16	do	88	108	6.48	212
March 31	do	88	111	6.50	200
April 13	do	90	115	6.55	203
April 27	do	80	282	7.26	676
May 11	do	80	365	7.80	1,280
May 25	do	80	352	7.05	481
June 8	do	90	116	6.60	211
June 22	do	28	28	6.20	56
July 13	do	24	20	5.80	19
July 27	do	15	11	5.78	9
August 5	do	31	45	6.28	106
August 24	do	27	41	6.06	41
September 7	do	25	35	6.00	30
September 27	do	88	101	6.40	157
October 11	do	32	46	6.29	105
October 22	do	90	114	6.48	183
November 6	do	90	105	6.46	158
November 19	do	89	94	6.36	132

Daily Discharge in Second-feet of Uinta River near Fort Duchesne, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	147	616	446	35	79	19	109	147	....
2	....	....	....	147	527	527	25	128	26	147	147	....
3	....	....	....	147	446	446	28	147	26	147	147	....
4	....	....	....	147	373	307	22	94	33	109	147	....
5	....	....	....	147	307	307	38	79	33	109	147	....
6	....	....	200	147	307	248	30	53	33	179	147	....
7	....	....	200	147	307	222	30	33	33	179	147	....
8	....	....	200	147	446	173	30	26	26	179	147	....
9	....	....	200	147	616	173	19	19	19	179	147	....
10	....	....	200	147	928	113	19	19	19	109	147	....
11	....	....	200	169	1,290	113	19	19	19	109	147	....
12	....	....	218	191	1,160	113	19	19	19	109	147	....
13	....	....	170	191	1,010	113	19	53	19	128	147	....
14	....	....	170	191	873	98	19	33	66	147	147	....
15	....	....	170	191	713	82	14	43	94	169	128	....
16	....	....	195	169	527	69	19	33	109	241	128	....
17	....	....	170	191	527	82	19	33	191	216	128	....
18	....	....	170	191	446	82	19	26	216	191	109	....
19	....	....	195	191	446	56	19	26	191	191	109	....
20	....	....	215	269	446	56	14	26	216	191	109	....
21	....	....	215	297	8.3	56	19	26	191	191	109	....
22	....	....	215	297	307	56	33	43	147	191	91	....
23	....	....	210	361	307	46	19	33	191	169	109	....
24	....	....	210	433	340	46	19	33	147	147	109	....
25	....	....	210	473	446	36	14	19	109	147	109	....
26	....	....	225	553	373	40	6	19	128	147	109	....
27	....	....	205	616	340	40	4	19	128	147	91	....
28	....	....	205	818	446	40	3	19	128	147	91	....
29	....	....	169	818	527	64	33	33	128	147	91	....
30	....	....	147	765	486	52	94	33	109	147	91	....
31	....	....	147	616	486	....	79	33	....	147	....	....

Monthly Discharge of Uinta River near Fort Duchesne, Utah, for 1910.

(Drainage area, 672 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	9,280
February	.....	.....	.....	.....	.....	8,280
March	225	200	195	.29	.33	12,000
April	818	147	295	.44	.49	17,600
May	1,290	307	541	.81	.93	33,300
June	527	36	143	.21	.24	8,510
July	95	2	25	.04	.04	1,540
August	147	19	42	.06	.07	2,580
September	216	19	94	.14	.16	5,580
October	241	79	144	.21	.25	8,850
November	147	95	126	.19	.21	7,500
December	.....	.....	.....	.....	.....	.....
The period..	1,290	2	178	0.27	2.72	115,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Uinta River near Fort Duchesne, Utah, 1899 to 1910.

(Drainage area, 672 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1899	.....	.....	.....	.....	.....	.....	.....	.....	4.64	5.01	6.61	7.01	.....	....	....
1900	7.62	6.84	7.56	5.89	56.84	25.65	4.12	2.21	3.69	6.03	6.25	5.53	138.37	0.28	3.88
1901	8.20	7.50	8.12	6.96	73.05	15.53	8.61	10.33	7.20	7.13	6.96	7.99	167.68	0.34	4.68
1902	7.69	7.22	7.25	5.86	40.70	37.01	9.73	2.68	3.22	4.85	6.05	5.21	137.46	0.28	3.88
1903	.....	.....	.....	7.44	28.35	85.69	21.09	6.27	7.20	9.16	7.91	1.74	.....	....	....
1904	.....	.....	5.49	5.89	59.40	37.31	12.73	9.16	8.15	11.19	10.00	.....	.....	....	....
1905	9.28	6.84	9.16	11.10	19.60	115.00	26.40	16.70	44.00	15.10	12.00	10.30	296.00	0.61	8.27
1910	.....	.....	12.00	17.60	33.30	8.51	1.54	2.58	5.58	8.85	7.50	.....	.....	....	....
Mean.	8.24	7.15	8.13	8.68	44.46	46.39	12.63	7.13	10.46	8.41	7.91	6.29	175.28	0.36	4.91

Discharge Measurements of White River near Dragon, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 17	R. I. Meeker	72	184	3.60	587
April 18	do	73	198	3.78	679
May 13	do	80	506	6.60	2,310
June 24	do	89	631	6.20	1,950
July 19	T. E. Brick	72	285	4.28	931

Daily Discharge in Second-feet of White River near Dragon, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	770	1,150	2,340	1,310	575	690	575	....	....
2	....	....	....	730	1,150	2,200	1,310	690	730	610	....	....
3	....	....	....	690	1,050	2,270	1,255	650	730	575	....	....
4	....	....	....	650	1,000	2,200	1,200	650	860	575	....	....
5	....	....	....	610	1,000	2,130	1,150	610	690	575	....	....
6	....	....	....	610	1,150	2,340	1,050	650	610	575	....	....
7	....	....	....	610	1,420	2,410	1,050	575	575	610	....	....
8	....	....	....	610	1,480	2,485	1,480	575	575	575	....	....
9	....	....	....	610	1,540	2,055	1,100	575	575	540	....	....
10	....	....	....	610	1,795	1,925	1,050	540	540	575	....	....
11	....	....	....	610	2,130	2,130	1,000	505	540	540	....	....
12	....	....	....	610	1,925	2,200	1,000	505	540	540	....	....
13	....	....	....	610	2,340	2,340	1,000	540	505	540	....	....
14	....	....	....	610	2,055	2,560	1,000	860	505	540	....	....
15	....	....	....	610	1,860	2,710	1,050	650	650	540	....	....
16	....	....	....	610	1,730	2,785	1,050	650	1,310	540	....	....
17	....	....	....	610	1,860	2,860	950	730	1,365	540	....	....
18	....	....	....	650	2,055	2,860	905	690	815	540	....	....
19	....	....	....	905	2,130	2,935	905	1,050	730	505	....	....
20	....	....	....	950	2,270	2,785	860	860	690	540	....	....
21	....	....	....	770	2,340	2,270	815	610	650	540	....	....
22	....	....	....	860	2,560	2,130	770	650	690	540	....	....
23	....	....	....	1,000	2,560	2,055	770	610	650	540	....	....
24	....	....	....	1,100	2,710	1,990	730	610	650	540	....	....
25	....	....	....	1,200	3,250	1,925	690	575	610	540	....	....
26	....	....	....	1,200	2,560	1,665	650	540	610	540	....	....
27	....	....	....	1,200	2,340	1,600	650	540	815	575	....	....
28	....	....	....	1,200	2,200	1,540	650	505	730	540	....	....
29	....	....	....	1,100	2,485	1,480	650	505	690	540	....	....
30	....	....	....	1,050	2,710	1,480	575	505	650	540	....	....
31	....	....	....	....	2,860	.....	540	540	....	575	....	....

Monthly Discharge of White River near Dragon, Utah, for 1906.

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	1,230	610	804	.....	.....	47,800
May	3,250	990	2,000	.....	.....	123,000
June	2,950	1,170	2,230	.....	.....	133,000
July	1,480	558	949	.....	.....	58,400
August	1,080	505	627	.....	.....	38,600
September	1,360	505	707	.....	.....	42,100
October	610	522	560	.....	.....	34,400
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period	3,250	505	1,082	.....	.....	477,000

Discharge Measurements of Green River near Greenriver, Wyoming, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 4*a*	A. J. Parshall	161	589	1.50	873
April 26	do	278	921	2.85	3,040
May 5	do	246	804	2.65	2,580
May 22	do	284	1,150	3.35	4,200
June 1	do	284	1,540	4.10	6,910
June 24	do	284	1,500	3.90	6,340
July 5	do	284	1,370	3.70	5,470
July 27	do	284	1,090	3.10	3,480

*a*Right channel frozen over, no flow.

Daily Discharge in Second-feet of Green River near Greenriver, Wyoming, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	1,175	2,020	6,945	5,160	2,860	2,020	790	....	....
2	....	....	....	965	2,410	5,500	4,510	2,860	2,020	710	....	....
3	....	....	....	965	2,210	5,160	4,200	2,630	2,020	710	....	...
4	....	....	....	965	2,210	4,510	4,830	2,410	1,850	710	....	....
5	....	....	....	875	2,630	4,510	5,500	2,410	1,690	710	....	....
6	....	....	....	1,175	3,360	4,830	5,500	2,210	1,690	710	....	....
7	....	....	....	1,065	3,100	5,500	5,500	2,210	1,540	635	....	....
8	....	....	....	1,290	2,860	6,210	5,850	2,020	1,410	635	....	....
9	....	....	....	1,410	2,860	5,500	6,210	1,850	1,290	635	....	....
10	....	....	....	1,290	3,100	4,830	6,210	1,850	1,290	635	....	....
11	....	....	....	2,020	3,360	4,510	5,850	1,690	1,175	635	....	....
12	....	....	....	1,690	3,910	4,830	5,850	1,540	1,175	635	....	....
13	....	....	....	1,690	5,160	6,210	5,850	1,540	1,065	635	....	....
14	....	....	....	2,410	6,210	10,150	5,850	1,540	1,065	560	....	....
15	....	....	....	2,210	6,570	11,000	6,210	1,540	1,175	560	....	....
16	....	....	....	1,850	6,210	12,290	6,210	1,410	1,290	560	....	....
17	....	....	....	2,020	6,210	11,860	5,850	1,410	1,290	560	....	....
18	....	....	....	2,860	5,500	11,860	5,500	1,410	1,175	560	....	....
19	....	....	....	2,860	4,830	11,430	4,830	1,410	1,175	560	....	....
20	....	....	....	2,630	4,200	9,730	4,510	1,410	1,065	560	....	....
21	....	....	....	2,410	3,910	8,100	4,200	1,690	965	560	....	....
22	....	....	....	2,630	4,200	6,945	3,910	1,850	965	635	....	....
23	....	....	....	3,360	5,160	5,850	3,630	2,210	965	710	....	....
24	....	....	....	3,100	5,850	6,210	3,630	2,860	875	790	....	....
25	....	....	....	3,100	6,945	6,210	3,910	3,630	875	790	....	....
26	....	....	....	2,860	7,710	5,500	3,910	3,910	875	710	....	....
27	....	....	....	2,860	8,100	4,800	3,630	3,910	875	710	....	....
28	....	....	....	2,410	8,100	4,510	3,360	3,360	790	710	....	....
29	....	....	....	2,020	8,500	4,510	3,100	2,860	790	635	....	....
30	....	....	....	2,020	8,500	4,800	2,860	2,630	790	560	....	....
31	....	....	....	....	8,100	.....	2,630	2,020	....	560	....	....

Monthly Discharge of Green River near Greenriver, Wyoming, for 1906.

(Drainage area, 7,450 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	3,360	893	2,040	0.27	0.31	121,000
May	8,700	2,060	5,030	.68	.78	309,000
June	12,200	4,510	6,830	.92	1.02	406,000
July	6,210	2,740	4,860	.65	0.75	299,000
August	4,060	1,390	2,240	.30	.35	138,000
September	1,990	790	1,260	.17	.19	75,000
October	790	560	660	.09	.10	40,600
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period..	12,200	560	328	0.44	3.50	1,390,000

MONTHLY RUN-OFF

In Thousands of Acre Feet of Green River near Greenriver, Wyoming, 1895 to 1906.

(Drainage area, 7,450 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1895	.....	.....	.....	.....	.....	243.98	270.57	253.27	104.78	37.96	29.02	45.00	.....	....	....
1896	.....	.....	.....	60.00	131.34	700.30	258.22	90.39	51.71	22.17	47.60	66.41	.....	....	....
1897	110.77	103.52	116.83	116.51	600.68	449.14	171.80	98.57	27.49	62.29	45.22	36.89	1,941.60	0.36	4.89
1898	.....	.....	.....	158.52	249.83	539.34	284.08	87.13	38.44	21.34	24.10	52.20	.....	....	....
1899	115.69	122.18	114.37	94.97	201.06	741.01	893.78	317.83	122.76	112.03	101.28	103.30	3,040.16	0.56	7.64
1901	.....	.....	.....	78.84	415.23	322.27	169.15	86.76	37.61	.....	.....	.....	.....	....	....
1902	.....	.....	.....	50.15	128.85	420.00	164.04	85.13	38.94	20.21	.....	.....	.....	....	....
1904	.....	.....	.....	116.50	377.00	605.50	323.10	125.40	52.96	42.92	.....	.....	.....	....	....
1905	.....	.....	.....	52.54	97.27	353.90	212.70	68.99	38.02	29.88	.....	.....	.....	....	....
1906	.....	.....	.....	121.00	309.00	406.00	299.00	138.00	75.00	40.60	.....	.....	.....	....	....
Mean.	112.18	112.85	115.60	94.34	280.03	478.14	304.64	135.15	58.77	43.27	49.44	60.76	1,847.17	0.34	4.67

Discharge Measurements of Green River near Jensen, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 19	R. I. Meeker	475	2,580	6.63	7,500
June 4	do	530	4,750	9.95	20,100
June 26	do	520	4,030	8.41	14,300
July 21	*T. E. Brick*	*399*	*2,860*	*6,10*	*8,620*

Daily Discharge in Second-feet of Green River at Jensen, Utah, for 1906.

Day	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*June*	*July*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*
1	....	....	.....	9,610	9,000	26,570	8,700	5,050	4,380	....	....	....
2	....	....	.....	8,930	9,000	21,910	9,000	4,600	4,170	....	....	....
3	....	....	.....	6,470	9,000	20,400	9,000	4,600	4,170	....	....	....
4	....	....	.....	5,670	8,700	19,950	8,410	4,600	4,380	....	....	....
5	....	....	.....	5,160	9,000	19,500	8,130	4,380	4,170	....	....	....
6	....	....	.....	4,010	9,610	19,060	10,435	4,380	3,960	....	....	....
7	....	....	.....	4,230	13,030	20,400	11,075	4,170	3,960	....	....	....
8	....	....	.....	4,230	14,530	22,750	11,730	3,960	3,550	....	....	....
9	....	....	.....	4,680	14,920	23,220	11,730	3,750	3,160	....	....	....
10	....	....	.....	5,410	15,705	23,220	12,390	3,550	2,970	....	....	....
11	....	....	.....	5,930	17,760	18,620	12,060	3,350	2,610	....	....	....
12	....	....	.....	6,740	19,060	19,060	11,730	3,350	2,440	....	....	....
13	....	....	5,410	8,130	19,500	20,870	11,400	3,160	2,270	....	....	....
14	....	....	7,850	8,130	20,870	23,690	11,400	2,970	2,270	....	....	....
15	....	....	4,230	7,010	21,810	26,080	11,400	2,790	2,270	....	....	....
16	....	....	3,390	6,200	21,340	29,020	11,400	2,610	2,270	....	....	....
17	....	....	2,650	5,930	21,340	30,000	11,400	2,440	2,440	....	....	....
18	....	....	2,310	7,010	21,340	27,550	11,075	2,610	3,160	....	....	....
19	....	....	2,000	7,850	20,870	28,530	10,435	2,790	4,380	....	....	....
20	....	....	2,000	9,000	19,950	26,080	9,510	2,610	3,160	....	....	....
21	....	....	2,000	9,925	19,950	22,750	8,350	2,610	2,790	....	....	....
22	....	....	2,000	9,925	20,870	19,950	8,070	2,610	2,610	....	....	....
23	....	....	1,850	9,925	21,810	17,760	7,530	2,970	2,790	....	....	....
24	....	....	4,680	10,900	23,690	15,705	7,260	3,750	2,790	....	....	....
25	....	....	9,000	12,665	25,590	14,920	7,000	4,820	2,610	....	....	....
26	....	....	15,310	14,530	28,530	13,770	6,490	4,820	2,440	....	....	....
27	....	....	16,100	13,400	29,020	10,570	6,240	5,510	2,440	....	....	....
28	....	....	14,530	11,590	29,020	10,900	5,990	5,750	2,440	....	....	....
29	....	....	15,310	10,240	27,550	10,240	5,990	5,510	2,790	....	....	....
30	....	....	15,310	9,925	29,020	9,610	5,750	4,820	2,270	....	....	....
31	....	....	12,300	.....	29,510	.....	5,050	4,600	....	....	....	....

Monthly Discharge of Green River at Jensen, Utah, for 1906.

(Drainage area, 26,600 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March 13-31.....	16,200	1,990	7,340	0.28	0.19	276,000
April	14,700	3,970	8,070	.30	.34	480,000
May	29,600	8,850	19,400	.73	.84	1,190,000
June	30,200	9,670	20,400	.77	.86	1,210,000
July	12,300	5,160	9,230	.35	.40	568,000
August	5,870	2,520	3,850	.14	.17	237,000
September	4,420	2,240	3,080	.12	.13	183,000
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period..	30,200	1,990	10,672	0.40	2.93	4,140,000

GREEN RIVER AT GREENRIVER, UTAH.

This station (originally called Blake) was established October 21, 1894, discontinued in November, 1896, and reestablished in February, 1905. It is located at the D. & R. G. R. R. bridge at Greenriver railroad station and near the Elgin postoffice.

The station was established to determine the unappropriated runoff of the river, and the record is very valuable to owners of ranches along the river course. Several irrigation projects are completed and being promoted in this drainage basin.

The last diversion above the station is about 10 miles upstream; there are no diversions below the station. Price River enters from the west about 16 miles above the station.

A new bridge was erected at this point between the periods of maintenance of the original station and the present one. The present datum, as near as can be learned, is 1.68 feet below the original datum. Owing to change in conditions of flow due to the relocation of the bridge piers it is, however, impossible to utilize the early measurements in studies of discharge curves under the present conditions. The datum of the present chain gage has remained the same since its establishment.

At low and medium stages measurements are made from a ferryboat at a point about 450 feet above the bridge. At high stages measurements are made from the bridge.

The bed of the river at the bridge is mainly rock, overlain in places with silt at low stages. At high stages the high velocity of the current scours out this silt, and the changes in conditions of flow necessitate new ratings at frequent intervals.

Discharge Measurements of Green River near Greenriver, Utah, in 1906.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 17	H. S. Kleinschmidt	462	2,770	6.60	10,400
May 17	E. C. Murphy	472	4,430	9.81	34,000
June 8	Thos. Grieve	472	4,440	9.80	33,600
June 29	do	466	3,820	8.50	22,600
October 10	do	400	1,780	4.60	3,170

Daily Discharge in Second-feet of Green River near Greenriver, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1,510	1,770	1,910	13,700	16,180	40,300	16,180	9,010	7,680	4,150	3,370	1,640
2	1,390	1,770	1,910	13,125	15,245	42,180	16,845	9,480	8,550	3,870	6,870	1,770
3	1,390	1,640	1,910	10,950	14,910	44,060	17,510	9,010	8,110	3,870	6,390	2,290
4	1,510	1,640	2,200	9,960	13,125	47,032	18,205	9,480	7,270	3,870	6,740	3,140
5	1,510	1,640	2,360	9,480	13,125	50,020	18,205	8,550	7,270	3,870	6,740	3,610
6	1,510	1,640	2,360	9,010	13,125	50,020	18,205	8,110	7,680	3,610	5,060	3,370
7	1,510	2,050	2,530	8,110	14,910	49,021	18,205	8,110	7,680	3,610	4,140	3,370
8	1,510	1,510	2,630	6,480	15,245	50,020	18,205	7,680	6,870	3,370	4,150	3,010
9	1,510	1,640	2,720	6,480	15,245	51,016	17,510	7,270	6,480	9,370	4,150	2,920
10	1,510	1,390	2,720	6,100	16,180	51,016	17,510	6,870	6,100	3,370	4,150	2,720

Daily Discharge in Second-feet of Green River near Greenriver, Utah, for 1906—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11.....	1,510	1,510	2,720	6,870	29,340	48,028	18,205	6,480	5,740	3,370	4,150	2,530
12.....	1,510	1,510	3,370	8,110	23,420	46,036	18,205	6,100	5,390	3,370	3,870	2,720
13.....	1,640	1,390	4,440	8,110	25,080	35,600	17,510	6,100	5,060	3,370	3,870	2,720
14.....	1,770	1,390	6,100	8,110	29,370	32,900	17,510	6,100	4,740	3,140	3,870	2,530
15.....	1,770	1,510	6,480	8,550	35,600	31,120	17,510	6,100	4,440	3,140	3,610	2,720
16.....	1,770	1,510	6,100	9,960	38,420	29,370	16,845	5,740	5,060	3,140	3,610	2,530
17.....	1,770	1,510	5,740	9,960	37,480	28,500	16,845	5,740	4,740	3,140	3,610	2,360
18.....	1,770	1,510	5,060	9,480	36,540	30,240	16,845	5,390	5,390	3,140	3,370	2,200
19.....	2,530	1,640	4,740	9,960	37,480	30,240	16,180	5,060	6,100	2,920	3,370	2,050
20.....	2,720	1,770	4,150	9,960	36,540	29,370	16,180	5,060	5,060	2,920	2,920	1,770
21.....	1,770	1,770	3,140	9,480	36,540	31,120	15,245	5,390	5,060	2,920	2,530	1,770
22.....	1,390	1,770	3,610	11,470	37,480	30,240	14,910	6,480	6,100	3,140	2,360	1,770
23.....	1,770	1,770	4,440	13,125	38,420	29,370	13,700	7,680	5,390	3,140	1,910	1,770
24.....	1,770	1,770	5,740	14,305	39,360	30,240	12,550	8,550	5,060	3,140	1,770	1,770
25.....	1,770	1,770	6,870	14,910	39,360	30,240	12,000	7,270	5,060	3,140	1,910	2,200
26.....	1,770	1,770	10,950	16,180	39,360	31,120	12,000	6,870	4,740	3,140	2,360	2,720
27.....	1,770	1,770	10,950	15,245	38,420	32,000	10,950	6,480	4,440	2,920	2,530	2,720
28.....	1,770	1,770	25,080	16,845	39,360	30,240	10,950	7,270	4,150	2,920	2,360	2,720
29.....	1,640	....	23,420	19,620	41,240	28,500	10,450	7,680	4,150	2,720	2,050	2,920
30.....	1,770	....	21,840	17,510	42,180	30,240	9,480	8,110	4,150	2,920	1,770	2,720
31.....	1,640	....	18,900	.....	44,060	.....	9,480	7,680	....	3,140	....	3,140

Monthly Discharge of Green River at Greenriver, Utah, in 1906.

(Drainage area, 38,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre feet
January	2,820	1,450	1,720	106,000	0.046	0.05
February	2,050	1,450	1,600	93,000	.044	.05
March	25,500	1,910	6,970	429,000	.182	.21
April	19,600	6,200	11,200	666,000	.293	.33
May	44,100	14,300	29,500	1,810,000	.772	.89
June	51,500	28,900	37,600	2,240,000	.984	1.10
July	18,200	9,480	15,600	959,000	.408	.47
August	9,720	5,060	7,230	445,000	.189	.22
September	8,780	4,150	5,870	340,000	.154	.17
October	4,150	2,720	3,290	202,000	.086	.10
November	6,870	1,770	3,600	214,000	.094	.10
December	3,610	1,700	2,570	158,000	.067	.08
The year..	51,500	1,450	10,600	7,670,000	.276	3.77

Note—The above values must be used with a great deal of caution as they are considered only rough approximations. It is probable that the discharge for January, February, and March is much too high owing to ice conditions, for which no corrections could be made on account of lack of data. April and May can be considered approximate. June is known to be far too high (compare observers' and hydrographers' gage heights on days of measurements), and May is probably too high, also, but to a less extent. It is believed that the remainder of the year can be accepted as fair.

Discharge Measurements of Green River at Greenriver, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 21.....	La Rue and Burridge.....	470	5,110	11.50	41,500
July 17.....	G. T. Burridge.....	478	4,850	10.80	36,600
August 3.....	.....do	.....	3,890	8.70	22,500
August 28....	La Rue and Burridge.....	453	3,200	7.20	11,400

Daily Discharge in Second-feet of Green River near Greenriver, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	3,140	2,920	9,480	10,950	17,510	34,920	44,060	20,820	7,790	3,840	3,360	2,210
2.....	2,920	2,720	8,550	9,960	18,205	33,250	44,060	19,430	7,790	3,360	3,360	2,060
3.....	2,920	2,720	8,550	9,010	18,900	33,250	43,100	18,750	7,790	3,360	3,360	2,210
4.....	2,720	2,720	7,680	8,110	18,900	33,250	45,020	18,070	7,790	3,590	3,360	2,060
5.....	2,720	2,920	6,870	8,110	18,205	36,610	45,980	17,405	8,730	4,120	3,360	2,060
6.....	2,720	3,140	6,480	6,870	17,510	41,180	47,900	16,740	7,350	4,120	3,360	2,060
7.....	2,360	3,370	5,740	6,870	16,845	46,940	48,970	16,095	6,930	4,420	3,360	1,920
8.....	2,200	4,150	6,100	8,550	16,180	48,970	50,040	15,450	6,930	4,420	3,360	1,920
9.....	2,360	4,740	5,390	9,960	16,180	52,180	50,040	15,450	6,930	4,120	3,360	1,920
10.....	2,720	6,100	4,740	10,450	14,910	55,390	48,970	14,835	6,530	4,120	3,140	1,920
11.....	2,720	8,110	4,740	11,470	14,910	57,530	48,970	13,625	6,140	4,420	3,140	1,780
12.....	2,720	9,010	4,740	12,000	16,180	56,460	47,900	13,030	5,760	5,050	3,140	1,780
13.....	2,530	8,110	5,060	12,000	18,205	55,390	45,980	12,455	5,400	5,400	3,140	1,780
14.....	2,530	6,870	5,060	13,125	24,250	52,180	43,100	12,455	5,050	5,760	3,140	1,780
15	2,530	6,100	4,740	16,845	27,040	50,040	41,180	11,880	5,050	5,760	3,140	1,780
16.....	2,720	5,740	4,740	19,620	29,370	46,940	37,455	11,880	5,050	4,120	2,930	1,650
17.....	2,720	5,740	4,740	22,630	29,370	45,020	35,745	10,780	4,730	4,420	2,930	1,650
18.....	2,530	5,390	4,440	25,080	27,040	44,060	33,250	10,255	4,730	4,120	2,730	1,650
19.....	2,530	5,390	4,150	26,780	26,780	43,100	30,695	9,730	4,120	4,120	2,730	1,650
20.....	2,360	5,390	4,150	29,370	26,780	43,100	27,485	9,220	4,120	3,840	2,730	1,650
21.....	2,530	5,390	4,150	28,500	31,120	43,100	25,950	8,730	4,120	3,590	2,730	1,520
22.....	2,720	6,480	7,680	25,930	40,300	43,100	24,415	8,730	3,840	3,590	2,540	1,520
23.....	2,360	7,270	4,740	23,420	46,036	43,100	22,975	8,250	3,840	3,590	2,540	1,520
24.....	2,200	7,680	8,550	20,340	50,986	42,140	22,250	7,790	3,840	3,590	2,540	1,520
25.....	2,050	6,100	14,910	18,900	46,940	42,140	22,250	8,250	3,590	3,590	2,370	1,520
26.....	1,770	6,870	15,545	18,205	48,970	41,180	22,250	8,250	3,590	3,590	2,370	1,520
27.....	2,050	6,870	15,545	17,510	47,900	42,140	22,250	10,255	3,590	3,590	2,210	1,650
28.....	2,360	8,550	14,910	17,510	50,040	42,140	22,250	9,730	3,590	3,590	2,210	1,650
29.....	2,530	....	13,700	17,510	46,940	44,060	21,535	9,220	3,590	3,360	2,210	1,650
30.....	2,720	....	12,550	17,510	42,140	44,060	21,535	8,730	3,590	3,360	2,210	1,650
31.....	2,920	....	11,470	.....	33,250	.....	20,820	8,250	....	3,360	....	1,650

Monthly Discharge of Green River at Greenriver, Utah, in 1907.

(Drainage area, 38,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	3,140	1,840	2,580	0.068	0.08	159,000
February	9,240	2,720	5,660	.148	.15	314,000
March	15,500	4,150	7,800	.204	.24	480,000
April	29,400	7,070	16,800	.424	.47	964,000
May	51,000	15,200	29,200	.764	.88	1,800,000
June	57,500	33,100	44,600	1.17	1.30	2,650,000
July	50,000	20,800	35,800	.937	1.08	2,200,000
August	21,200	8,020	12,500	.327	.38	769,000
September	8,980	3,590	5,430	.142	.16	323,000
October	5,950	3,360	4,110	.108	.12	253,000
November	3,360	2,210	2,910	.076	.08	173,000
December	2,210	1,520	1,770	.046	.05	109,000
The year	57,500	1,520	14,000	.368	4.99	10,200,000

Discharge Measurements of Green River near Greenriver, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 24	A. D. Williams	441	2,570	6.20	6,120
July 9	Hoyt and La Rue	470	3,750	8.00	14,800

Daily Discharge in Second-feet of Green River near Greenriver, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1,650	1,920	2,060	4,730	10,255	15,450	17,405	6,930	6,140	7,350	4,420	1,390
2	1,650	2,060	2,060	4,420	9,730	14,835	16,740	7,790	6,140	6,140	4,420	1,390
3	1,650	2,060	2,210	4,120	9,220	14,835	15,450	8,730	6,140	5,760	4,120	1,390
4	1,650	2,060	2,730	3,840	9,220	13,030	15,150	9,730	5,760	5,400	4,120	1,390
5	1,650	1,920	2,730	3,840	9,220	12,455	15,450	10,780	5,400	5,050	4,120	1,270
6	1,650	1,920	2,930	3,840	9,730	14,835	15,450	9,220	5,400	4,730	3,840	1,390
7	1,650	2,060	2,930	3,840	10,255	14,835	16,095	6,930	4,730	4,730	3,840	1,520
8	1,650	2,060	2,930	3,840	10,255	15,450	16,095	6,140	4,120	4,120	3,590	1,780
9	1,650	2,060	2,930	3,840	10,780	14,835	15,450	6,140	4,120	4,120	3,590	1,920
10	1,650	2,210	3,140	3,840	11,320	15,450	15,450	9,730	3,840	4,120	3,360	2,060
11	1,650	2,060	3,140	3,840	11,880	14,835	15,450	8,250	3,590	4,120	3,360	2,210
12	1,650	2,060	3,140	3,840	13,030	15,450	14,835	6,140	3,590	4,120	3,360	2,370
13	1,650	1,920	3,140	3,840	14,835	17,405	14,835	6,530	3,360	4,120	3,360	2,370
14	1,650	2,060	3,360	4,120	15,450	21,535	14,220	9,730	3,360	4,120	3,360	2,370
15	1,650	2,060	3,360	4,730	10,095	22,250	13,030	8,730	3,360	3,840	3,140	2,320

Daily Discharge in Second-feet of Green River near Greenriver, Utah, for 1908—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16.....	1,650	2,060	3,840	5,760	15,450	25,190	13.030	8.730	3,140	3,840	2,930	2,210
17.....	1,650	1,920	5,050	6,140	13,625	25,950	13,030	9.220	3.140	3,840	2.930	1,920
18.....	1,650	1,920	5,400	6,530	13,030	26,710	12,455	9.220	3,140	4,120	2,730	1,780
19.....	1,780	1,920	4,730	7,350	12,455	26,710	11,880	8.730	3.140	5,050	2,730	1,650
20.....	1,920	1,920	4,420	8,250	12,455	27,485	11,330	8,730	2,930	5,760	2,540	1,650
21.....	1,920	1,920	4,730	9,730	13,030	27,485	10,780	9,220	2,730	5,760	2,370	1,650
22.....	2,060	2,060	5,760	11,330	13,625	26,710	10,255	9,220	6,530	5,400	2,370	1,650
23.....	2,060	2,060	6,530	12,455	14,220	25,950	9,730	9,220	5,050	5,050	2,540	1,650
24.....	1,920	2,060	6,140	13,625	14.835	26,710	9,730	8,730	4,730	4,730	2,540	1,650
25.....	1,920	2,210	5,760	14,220	15,450	25,950	9,220	8,250	6,140	4,730	2,930	1,650
26.....	1,920	2,210	5,760	14,220	14,220	24,445	7,790	8,250	5,400	4,730	2,930	1,650
27.....	1,920	2,060	5,400	13,030	13,625	22,975	7,350	8,250	4,420	4,730	3,140	1,650
28.....	2,060	2,060	4,730	12,455	14.835	22,250	6,930	7,790	4,730	4,420	3,140	1,650
29.....	2,060	....	4,420	11,880	15,450	20,125	6,140	7,790	5,050	4,420	2,930	1,650
30.....	2,060	....	4,420	10,780	15,450	19,439	6,930	7.350	6,530	4,420	1,390	1,650
31.....	2,060	....	4,420	.....	15,450	.....	6,140	6,530	....	4,420	....	1,650

Monthly Discharge of Green River near Greenriver, Utah, in 1908.

(Drainage area, 38,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	2,140	1,650	1,790	.047	.05	110,000
February	2,210	1,920	2,030	.053	.06	117,000
March	6,730	2,060	4,040	.106	.12	248,000
April	14,200	3,840	7,380	.193	.22	439,000
May	16,100	9,220	13,000	.340	.39	799,000
June	27,500	12,700	20,400	.534	.60	1,210,000
July	17,400	6,140	12,400	.325	.37	762,000
August	10,800	6,140	8,370	.219	.25	515,000
September	6,730	2,730	4,560	.119	.13	271,000
October	7,570	3,840	4,810	.126	.15	296,000
November	4,420	1,460	3,210	.084	.09	191,000
December	2,370	1,270	1,760	.046	.05	108,000
The year.....	27,500	1,270	6,980	.183	2.48	5,070,000

Discharge Measurements of Green River near Greenriver, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 6.....	E. A. Porter.....	350.0	3,473	7.70	13,697
June 10.....	.....do	495	5,036	13.70	82,040
June 10.....	.....do	495	6,466	13.70	93,017
September 29.....	.....do	448	2,458	6.40	5,470
November 24.....	.....do	420	1,605	5.60	2,986

Monthly Discharge of Green River near Greenriver, Utah, in 1909.

(Drainage area, 38,200 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	3,510	930	1,980	0.05	0.06	122,000
February	2,580	1,330	1,720	.05	.05	95,500
March	33,000	1,460	8,120	.21	.25	499,000
April	16,200	4,820	9,290	.24	.27	553,000
May	32,700	11,000	22,400	.59	.68	1,380,000
June	62,400	32,700	46,300	1.21	1.35	2,760,000
July	42,600	12,800	25,200	0.66	0.76	1,550,000
August	14,100	8,000	10,300	.27	.31	633,000
September	18,000	5,170	9,960	.26	.29	593,000
October	4,820	3,220	3,930	.10	.11	242,000
November	3,570	2,470	2,980	.08	.09	177,000
December	4,820	895	1,850	.05	.06	114,000
The year	62,400	895	12,000	0.31	4.28	8,720,000

Discharge Measurements of Green River near Greenriver, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 26	E. S. Fuller	465	4,264	9.0	17,800
October 3	G. H. Canfield and J. C. Dort.	408	1,450	5.67	2,244
December 3	G. H. Canfield	421	1,462	5.52	2,284

Monthly Discharge of Green River near Greenriver, Utah, in 1910.

(Drainage area, 38,200 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
*January	1,000	1,000	1,000	0.03	0.03	61,500
February	7,500	1,200	2,500	.07	.07	139,000
March	22,400	2,700	11,400	.30	.35	701,000
April	24,800	7,560	12,500	.33	.36	744,000
May	28,800	13,000	21,200	.55	.64	1,300,000
June	21,300	6,310	13,600	.36	.39	809,000
July	6,500	1,640	3,230	.09	.10	199,000
August	4,650	1,100	2,160	.06	.07	133,000
September	6,500	1,100	2,140	.06	.06	121,000
October	5,940	1,300	3,280	.09	.10	202,000
November	3,460	2,000	2,270	.06	.07	135,000
December	2,000	770	1,520	.04	.05	93,500
The year	28,800	770	6,420	0.17	2.29	4,640,000

*Estimated.

Daily Discharge in Second-feet of Green River near Greenriver, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	....	1,200	2,700	11,000	24,800	18,600	6,500	4,050	1,100	1,300	3,000	2,000
2.....	....	1,200	3,660	9,580	27,500	21,000	6,120	4,650	1,100	1,640	2,860	2,000
3.....	....	1,200	4,320	9,350	26,800	21,300	5,260	4,050	6,500	2,000	2,720	2,000
4.....	....	1,200	4,820	8,890	26,100	20,700	5,100	3,750	2,720	2,000	2,590	2,000
5.....	....	1,200	9,580	7,780	24,800	20,100	4,800	3,300	1,350	2,220	2,340	2,000
6.....	....	1,200	10,800	8,000	21,800	20,100	4,800	3,300	1,300	2,460	2,220	1,800
7.....	....	1,200	13,700	8,000	21,200	20,700	4,800	2,590	1,300	2,460	2,220	1,800
8.....	....	1,200	16,600	8,000	19,500	20,700	4,500	3,450	1,300	2,460	2,220	1,800
9.....	....	1,200	19,500	8,000	19,900	19,000	4,200	3,600	1,300	2,460	2,000	1,800
10.....	....	1,200	22,400	8,000	19,900	18,000	4,200	3,000	1,300	2,460	2,000	1,800
11.....	....	1,200	18,300	8,000	20,200	16,500	3,600	2,340	1,300	2,220	2,000	1,800
12.....	....	1,300	16,200	7,560	21,500	15,900	3,300	2,110	1,350	2,220	2,000	1,800
13.....	....	1,500	14,200	8,660	22,400	14,700	3,000	1,800	1,400	2,460	2,000	1,800
14.....	....	2,000	12,300	9,580	25,800	13,200	2,720	1,640	1,400	2,460	2,590	1,800
15.....	....	7,500	11,000	11,300	28,500	12,800	2,460	1,640	1,640	2,460	3,450	1,800
16.....	....	3,000	10,500	12,500	28,800	11,800	2,460	1,640	1,640	2,720	3,300	1,800
17.....	....	3,500	10,100	13,300	26,100	10,200	2,460	1,500	2,220	5,940	2,590	1,800
18.....	....	4,000	9,350	14,700	25,000	11,900	2,460	1,500	3,450	5,420	2,110	1,800
19.....	....	4,300	8,890	13,100	24,300	11,000	2,000	1,500	2,720	5,100	2,000	1,720
20.....	....	4,320	9,350	13,300	22,600	10,500	2,460	1,500	2,860	4,800	2,000	1,570
21.....	....	3,980	9,350	12,800	18,600	10,500	2,460	1,400	2,860	4,950	2,000	1,300
22.....	....	3,360	9,350	12,800	17,700	10,000	2,200	1,300	2,590	5,100	2,000	1,150
23.....	....	3,220	10,100	14,400	17,100	9,540	2,000	1,400	2,340	4,500	2,000	810
24.....	....	2,700	11,300	15,000	17,100	9,080	1,800	1,300	2,220	4,350	2,000	810
25.....	....	2,700	11,800	16,500	16,500	8,400	1,800	1,300	2,220	4,200	2,000	770
26.....	....	2,700	11,800	18,600	16,500	7,740	1,640	1,300	2,220	4,050	2,000	930
27.....	....	3,080	12,300	20,800	15,900	6,900	1,640	1,300	2,220	3,750	2,000	930
28.....	....	3,660	12,300	19,900	15,300	6,500	1,640	1,200	2,000	3,450	2,000	900
29.....	....	....	12,800	21,500	13,800	6,340	2,000	1,200	1,800	3,300	2,000	900
30.....	....	....	12,800	24,800	13,000	6,500	2,220	1,200	1,350	3,300	2,000	900
31.....	....	....	12,300	.....	18,600	.....	3,450	1,100	....	3,300	....	900

Note—January, ice conditions.

MONTHLY RUN-OFF

In Thousands of Acre Feet of Green River near Greenriver, Utah, for 1895 to 1910.

(Drainage area, 38,200 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1895	78.21	55.55	251.98	595.75	1,182.14	937.78	754.02	319.92	118.71	155.99	98.06	76.06	4,638.29	0.17	2.25
1896	79.14	67.02	212.44	455.09	1,009.62	1,404.67	692.60	372.00	325.13	227.81	164.10	99.55	5,109.34	0.18	2.49
1897	79.93	83.21	104.53	542.45	2,168.52	2,073.00	423.31	222.92	219.09	354.66	205.82	89.53	7,588.07	0.27	3.70
1898	288.07	305.45	286.35	622.42	1,272.00	1,580.25	635.23	157.78	109.55	89.77	84.08	78.15	5,510.11	0.20	2.69
1899	97.46	94.26	191.29	405.10	1,428.79	2,623.30	1,878.75	655.09	198.92	150.95	.....	.....	.....	....	....
1905* ...	.....	.....	185.70	252.20	855.30	1,570.00	504.30	169.20	150.60	154.[illegible]	122.10	80.40	4,085.10	0.15	2.01
1906† ...	102.00	92.90	429.00	666.00	1,810.00	2,240.00	959.00	445.00	349.00	202.00	214.00	158.00	7,670.00	0.28	3.77
1907‡ ...	159.00	214.00	480.00	964.00	1,800.00	2,650.00	2,200.00	769.00	323.00	253.00	173.00	109.00	10,200.00	0.37	4.99
1908§ ...	110.00	117.00	248.00	429.00	799.00	1,210.00	762.00	515.00	271.00	296.00	191.00	108.00	5,070.00	0.18	2.48
1909	122.00	95.50	499.00	553.00	1,280.00	2,760.00	1,550.00	633.00	593.00	242.00	177.00	114.00	8,720.00	0.31	4.28
1910	61.50	129.00	701.00	744.00	1,300.00	809.00	199.00	133.00	121.00	202.00	135.00	93.50	4,640.00	0.17	2.29
Mean.	118.13	128.02	326.30	567.45	1,455.12	1,805.27	880.75	400.17	252.64	211.66	156.42	100.62	6,323.09	0.23	3.10

*Station discontinued November, 1899, to March, 1905. †‡§ Discharges are probably much too high, as follows: 1906—January, February and December, correct; March, April, July, August, September, October, November, 15 per cent; May and June, 20 per cent. 1907—January correct; February-April, inclusive, 15 per cent; May-August, inclusive, 20 per cent; September and October, 35 per cent; November and December, 50 per cent. 1908—January, February and December, 50 per cent; March, September and November, 40 per cent; April, May, July, August and October, 30 per cent; June, 20 per cent. 1909 correct.

COTTONWOOD CREEK NEAR ORANGEVILLE, UTAH.

This station was established May 1, 1909, and is located at Robert Johnson's ranch, about 5 miles northwest of the town of Orangeville.

Daily Discharge in Second-feet of Cottonwood Creek near Orangeville, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	105	945	570	85	617	53	36	....
2	....	....	....	....	132	1,100	480	85	75	53	36	....
3	....	....	....	....	158	1,350	435	85	571	53	29	....
4	....	....	....	....	170	1,460	396	85	124	53	29	....
5	....	....	....	....	182	1,410	358	85	138	44	29	....
6	....	....	....	....	195	1,280	320	162	151	44	29	....
7	....	....	....	....	268	1,140	320	560	113	44	29	....
8	....	....	....	....	340	990	280	830	75	44	29	....
9	....	....	....	....	360	928	245	1,100	75	44	29	....
10	....	....	....	....	380	865	245	1,360	53	44	29	....
11	....	....	....	....	270	1,060	228	600	53	44	29	....
12	....	....	....	....	270	865	210	335	61	44	29	....
13	....	....	....	....	235	858	210	70	75	44	29	....
14	....	....	....	....	270	850	175	520	75	44	32	....
15	....	....	....	....	350	780	175	970	61	44	36	....
16	....	....	....	....	340	880	170	1,470	53	44	36	....
17	....	....	....	....	330	1,030	165	1,520	53	44	36	....
18	....	....	....	....	320	730	188	1,520	56	44	53	....
19	....	....	....	....	405	630	210	1,470	60	44	36	....
20	....	....	....	....	490	710	165	600	61	44	53	....
21	....	....	....	....	540	790	162	1,520	61	44	52	....
22	....	....	....	....	675	740	162	95	53	44	51	....
23	....	....	....	....	588	840	162	82	53	44	50	....
24	....	....	....	....	500	940	153	60	53	44	49	....
25	....	....	....	....	550	790	144	60	53	44	48	....
26	....	....	....	....	600	600	135	60	53	44	47	....
27	....	....	....	....	838	555	125	60	53	44	46	....
28	....	....	....	....	885	510	110	115	53	36	45	....
29	....	....	....	....	935	385	110	170	53	36	44	....
30	....	....	....	....	938	640	85	225	53	36	44	....
31	....	....	....	....	942	.....	85	620	....	36	....	....

Monthly Discharge of Cottonwood Creek near Orangeville, Utah, in 1909.

(Drainage area, 235 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	942	105	437	1.86	2.15	26,900
June	1,460	385	888	3.78	4.22	52,800
July	570	85	225	0.96	1.11	13,800
August	1,520	60	535	2.28	2.62	32,900
September	617	53	105	0.45	0.50	6,250
October	53	36	44	.19	.23	2,710
November	53	29	38	.16	.18	2,280
December	.....	.....	.....	.....	.....	.....
The period	1,520	29	325	1.38	11.01	138,000

Discharge Measurements of Cottonwood Creek near Orangeville, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 22	Fuller and Tanner	50	.....	4.95	182
June 9	E. S. Fuller	50	.....	5.8	353
July 25	G. H. Canfield	24	30.5	4.60	43
July 25	do	22	36.1	4.69	47
August 28	do	21	30.77	4.46	32
August 28	do	22	30.77	4.45	32
September 29	do	21	26.8	3.61	30
November 29	do	30	25.6	3.75	33

Daily Discharge in Second-feet of Cottonwood Creek near Orangeville, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	36	36	112	.....	670	137	56	34	....	28	....
2	....	....	....	112	590	670	112	47	34	....	28	....
3	....	26	53	....	670	630	.....	47	34	28	28	....
4	....	31	67	138	590	590	.....	47	....	28	28	....
5	....	31	87	168	590	.....	112	40	40	28	28	....
6	....	....	....	112	630	470	112	40	30	28	....	....
7	....	31	87	112	750	430	90	....	30	28	28	....
8	....	31	38	200	.....	390	90	40	30	28	....	....
9	....	....	200	168	790	350	90	40	30	28	28	....
10	....	31	200	....	790	310	.....	40	30	28	33	....
11	....	....	270	235	1,030	270	70	47	....	28	33	....
12	....	31	310	270	1,030	.....	70	47	30	28	33	....
13	....	....	....	235	950	310	70	40	30	28	....	....
14	....	31	200	....	710	270	70	....	....	28	33	....
15	....	....	270	235	.....	270	70	40	270	28	33	....
16	....	26	....	200	470	270	70	40	1,190	28	33	....
17	....	....	390	....	470	235	.....	40	161	28	33	....
18	....	26	430	270	510	235	.....	34	....	28	33	....
19	....	26	....	390	590	.....	56	235	306	28	33	....
20	....	....	....	390	550	200	56	56	161	28	....	....
21	....	31	350	310	510	200	47	....	28	28	33	....
22	....	....	235	430	.....	165	47	34	28	28	33	....
23	....	31	235	470	510	165	47	34	28	....	33	....
24	....	....	200	....	510	165	.....	34	28	28	....	....
25	....	31	112	590	510	165	.....	34	....	28	33	....
26	....	26	44	710	550	.....	.....	34	28	28	33	....
27	....	....	....	750	590	137	70	34	28	28	....	....
28	....	....	53	710	670	200	56	....	28	28	33	....
29	....	....	87	710	.....	270	47	34	28	28	33	....
30	....	....	....	670	750	137	47	34	28	....	33	....
31	....	....	44	....	710	.....	.....	34	....	....	....	....

Monthly Discharge of Cottonwood Creek near Orangeville, Utah, in 1910.

(Drainage area, 235 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
*January	.....	.....	30	0.13	0.15	1,840
February	36	26	30	.13	.13	1,660
March	430	36	184	.78	.90	11,300
April	750	112	334	1.42	1.59	19,900
May	1,930	470	653	1.78	3.21	40,200
June	670	137	312	1.33	1.48	18,600
July	137	47	74	.32	.36	4,540
August	235	34	46	.20	.23	2,860
September	1,190	28	106	.45	.50	6,310
October	28	28	28	.13	.15	1,720
November	33	28	31	.13	.14	1,870
December	.....	.....	30	.13	.15	1,840
The year	1,190	26	155	0.58	8.98	113,000

*Estimated.

FERRON CREEK NEAR FERRON, UTAH.

This station was established September 18, 1909, and is located at Westenshaw's ranch about 2½ miles above the town of Ferron, about ½ mile below the flour mill and headgate of the north and south canals.

Discharge Measurements of Ferron Creek near Ferron, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 28	E. A. Porter	20	15.5	2.1	30.6
June 12	do	31	58	4.20	496
July 26	do	17	7.6	7.20	5.70
August 23	do	14	16.9	*2.15	36.5
December 4	do	.....	.....	†....	6.50

*New gage=6.65 old gage.
†Estimated, ice conditions.

Daily Discharge in Second-feet of Ferron Creek near Ferron, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	51	367	105	....	3,000	32	20	....
2	....	....	....	....	51	485	96	....	32	32	16	....
3	....	....	....	....	78	606	143	....	32	32	16	....
4	....	....	....	....	96	638	114	....	32	25	16	....
5	....	....	....	....	105	766	96	....	32	20	16	....
6	....	....	....	....	164	575	46	....	32	16	16	....
7	....	....	....	....	164	515	32	....	32	13	16	....
8	....	....	....	....	164	425	28	....	32	13	16	....
9	....	....	....	....	124	500	28	....	32	13	16	....
10	....	....	....	....	153	470	28	....	32	13	13	....
11	....	....	....	....	124	455	28	....	32	20	13	....
12	....	....	....	....	63	496	7	....	32	20	13	....
13	....	....	....	....	51	539	7	....	32	20	13	....
14	....	....	....	....	41	339	7	....	32	20	....	....
15	....	....	....	....	51	339	6	....	32	20	....	....
16	....	....	....	....	70	381	6	....	32	20	....	....
17	....	....	....	....	70	367	6	....	32	20	....	....
18	....	....	....	....	132	284	6	....	32	20	....	....
19	....	....	....	....	185	284	6	....	32	20	....	....
20	....	....	....	....	196	284	6	....	32	20	....	....
21	....	....	....	....	220	298	6	....	32	20	....	....
22	....	....	....	....	196	258	6	....	32	20	....	....
23	....	....	....	....	196	298	6	36	32	20	....	....
24	....	....	....	....	124	284	6	25	32	20	....	....
25	....	....	....	....	153	271	6	20	32	20	....	....
26	....	....	....	....	284	258	6	20	32	20	....	....
27	....	....	....	....	298	185	6	20	32	20	....	....
28	....	....	....	....	284	164	6	20	32	20	....	....
29	....	....	....	....	208	164	6	16	32	20	....	....
30	....	....	....	....	174	133	6	16	32	20	....	....
31	....	....	....	....	215	.....	6	1,620	....	20	....	....

Monthly Discharge of Ferron Creek near Ferron, Utah, in 1909.

(Drainage area, 1,500 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	298	41	146	0.10	0.12	9,000
June	766	133	372	0.25	0.28	22,100
July	143	6	28	0.02	0.02	1,700
August*	1,690	6	207	0.14	0.10	3,700
September	3,000	32	131	0.09	0.10	7,800
October	32	13	20	0.01	0.01	1,250
November†	20	13	15	0.01	0.00	400
December	.....	.....	.....	.....	.....	.....
The period..	3,000	6	124	0.09	0.63	45,950

*19 days. †13 days.

Discharge Measurements of Ferron Creek near Ferron, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 21	E. S. Fuller	19	24.5	2.4	91
March 21	.....do	38	27.8	2.4	90
June 8	.....do	38	28.3	1.95	48
July 24	G. H. Canfield	3	1.24	0.80	0.47
August 26	.....do	4.5	1.65	0.70	0.22
September 27	.....do	9.5	7.18	1.22	4.82
November 29	.....do	3.0	1.3	0.80	0.38

Daily Discharge in Second-feet of Ferron Creek near Ferron, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	10	110	51	150	170	4	....	....	4	....	....
2	....	7	90	51	150	160	4	....	....	4	....	....
3	....	7	100	51	140	170	4	....	51	4	....	....
4	....	7	70	51	130	170	4	....	....	4	....	....
5	....	7	80	51	130	170	4	....	....	4	....	....
6	....	10	70	51	130	150	4	....	....	4	....	....
7	....	14	70	51	110	110	4	....	....	4	....	....
8	....	14	70	51	180	60	4	....	....	4	....	....
9	....	14	70	51	180	34	4	....	....	4	....	....
10	....	14	70	70	180	34	4	....	....	4	....	....
11	....	14	51	70	170	19	4	42	....	4	....	....
12	....	19	51	90	170	19	4	....	....	4	....	....
13	....	19	60	70	180	14	4	....	....	4	....	....
14	....	19	60	70	190	10	4	....	190	4	....	....
15	....	34	70	90	160	10	150	....	26	450	....	....

Daily Discharge in Second-feet of Ferron Creek near Ferron, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	34	60	90	170	10	4	....	120	4	....	....
17	2	34	60	110	180	7	2	....	4	2	....	....
18	....	19	100	130	170	7	1	....	520	1	....	....
19	....	10	150	180	150	7	1	....	4	1	....	....
20	2	10	150	180	150	7	1	....	350	....	....	....
21	4	10	150	180	140	7	1	....	4	....	....	....
22	10	10	170	190	140	4	1	....	7	....	....	....
23	14	14	90	190	120	4	.....	....	7	....	....	....
24	14	14	51	190	120	4	.....	....	7	....	....	....
25	19	14	51	210	140	4	.....	....	7	....	....	....
26	14	14	51	220	150	4	.....	....	7	....	....	....
27	14	34	51	270	150	4	1	....	4	....	....	....
28	14	51	34	250	140	4	.....	....	4	....	....	....
29	19	....	19	200	170	4	26	....	4	....	....	....
30	14	....	19	180	180	4	.....	....	4	....	....	....
31	10	....	51	....	180	.....	.....	....	....	....	....	....

Note—January 1 to 13, inclusive, ice conditions.

Monthly Discharge of Ferron Creek near Ferron, Utah, in 1910.

(Drainage area, 1,500 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	19	.....	6	.....	.....	343
February	51	7	17	0.01	0.01	944
March	170	19	76	0.05	0.06	4,660
April	270	51	123	0.08	0.09	7,320
May	190	110	155	0.10	0.12	9,530
June	170	4	46	0.03	0.03	2,740
July	150	.....	8	.....	.....	480
August	42	.....	1	.....	.....	83
September	520	.....	54	0.04	0.04	3,210
October	450	.....	16	0.01	0.01	978
November	4	.....	.....	.....	.....	5
December	4	.....	.....	.....	.....	25
The year	520	.....	42	0.03	0.36	30,300

HUNTINGTON CREEK NEAR HUNTINGTON, UTAH.

This station was established May 3, 1909, and is located at Cunba's ranch, about 7 miles northwest of the town of Huntington. It is below the main tributaries.

Discharge Measurements of Huntington Creek near Huntington, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 17	E. A. Porter	44	133	4.80	730
July 29	do	35	78.3	3.38	138
August 21	do	30.5	33.3	2.65	79
September 21	do	32	30.1	2.75	66
November 6	do	31	24.5	2.55	46
November 30	do	31	27.6	2.65	65
December 5	do	31	21.9	2.51	40

Discharge Measurements of Huntington Creek near Huntington, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
March 23	Fuller and Tanner	32	43	3.15	154
June 8	E. S. Fuller	37	71	3.75	231
July 26	G. H. Canfield	34	51	3.18	94
July 27	do	34	52.6	3.20	101
August 29	do	32	35	2.76	41
August 29	do	32	31.7	2.76	41
September 30	do	30	28.6	2.75	42
November 30	do	30	22.5	2.63	31

Daily Discharge in Second-feet of Huntington Creek near Huntington, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	56	....	....	830	232	.....	....	38	47	34	....
2	....	....	26	....	780	204	.....	....	38	58	34	....
3	....	56	....	165	925	232	.....	....	47	47	34	....
4	....	....	40	....	990	204	.....	....	47	38	34	....
5	....	40	....	145	1,070	217	.....	....	42	38	34	29
6	40	....	26	....	1,030	204	.....	....	38	42	34	29
7	....	56	....	107	1,050	217	.....	....	47	42	34	29
8	56	....	40	....	.....	204	.....	....	47	42	34	....
9	....	40	....	....	960	204	.....	....	42	42	34	....
10	40	....	40	125	810	178	.....	....	47	42	34	....
11	....	26	....	....	870	178	.....	....	42	38	34	....
12	....	56	40	235	955	154	.....	....	52	38	34	29
13	26	....	....	320	1,000	154	.....	....	58	38	34	34
14	....	73	40	261	980	154	.....	....	58	38	34	38
15	....	73	....	385	900	178	.....	29	102	38	34	....
16	40	....	26	385	840	204	.....	29	102	38	34	....
17	....	90	....	350	700	204	.....	34	112	38	34	....
18	56	73	....	285	700	204	.....	34	102	38	34	....
19	....	73	....	375	560	178	.....	29	72	38	34	....
20	....	....	165	410	520	154	.....	34	58	38	34	....
21	56	56	....	440	520	154	.....	34	47	38	34	34
22	....	....	125	410	307	132	.....	38	52	38	34	34
23	....	40	....	....	232	112	.....	34	52	38	34	34
24	56	....	145	470	232	.....	.....	38	47	38	34	....
25	....	26	....	500	217	.....	.....	34	52	38	34	....
26	40	....	107	570	217	.....	102	38	47	38	34	....
27	....	40	....	650	232	.....	.....	29	58	38	34	....
28	56	....	....	610	232	.....	.....	38	52	38	34	34
29	....	....	145	455	217	.....	.....	38	47	38	34	....
30	40	....	....	680	204	.....	.....	47	47	38	34	....
31	....	....	165	....	217	.....	.....	47	....	38	....	....

Monthly Discharge of Huntington Creek near Huntington, Utah, in 1910.

(Drainage area, 210 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	56	26	46	0.22	0.25	2,820
February	90	26	52	0.25	0.26	2,900
March	165	26	81	0.39	0.44	4,990
April	680	107	326	1.55	1.74	19,400
May	1,070	204	655	3.12	3.60	40,300
June	232	87	164	0.78	0.87	9,760
July	.....	.....	100	0.48	0.55	*6,150
August	47	29	33	0.16	0.18	2,000
September	112	38	56	0.27	0.30	3,360
October	58	38	40	0.19	0.22	2,450
November	34	34	34	0.16	0.18	2,020
December	38	29	33	0.16	0.18	2,020
The year	1,070	26	135	0.64	8.77	98,170

*Estimate.

MUDDY CREEK NEAR EMERY, UTAH.

This station was established April 29, 1909, and is located at Jacobson's ranch, about 7 miles northwest of the town of Emery and about 1 mile below the boundary of the Manti National Forest.

Discharge Measurements of Muddy Creek near Emery, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 13	E. A. Porter	24	41	3.4	247
August 25	do	17	15.4	1.90	485
September 18	do	17	17.8	1.98	55
December 3	do	.....	.....	.....	4

Daily Discharge in Second-feet of Muddy Creek near Emery, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	44	224	153	100	....	....	....	....
2	....	....	....	....	53	300	146	94	....	....	....	....
3	....	....	....	....	119	292	126	71	....	....	....	....
4	....	....	....	....	146	300	119	94	....	....	....	....
5	....	....	....	....	132	292	100	94	....	....	....	....
6	....	....	....	....	12	292	100	....	....	....	....	....
7	....	....	....	....	15	277	94	68	....	....	....	....
8	....	...	....	....	18	284	94	63	....	....	....	....
9	....	....	....	....	21	262	88	....	....	....	....	....
10	....	....	....	....	24	262	88	....	....	....	....	....
11	....	....	....	....	53	262	112	....	....	....	....	....
12	....	....	....	....	112	254	119	....	....	....	....	....
13	....	....	....	....	119	262	119	68	....	....	....	....
14	....	....	....	....	119	254	112	58	....	....	....	....
15	....	....	....	....	106	254	112	58	....	....	....	....
16	....	....	....	....	181	254	106	58	....	....	....	....
17	....	....	....	....	254	254	106	....	....	....	....	....
18	....	....	....	....	270	240	112	....	56	....	....	....
19	....	....	....	....	224	240	112	....	....	....	....	....
20	....	....	....	....	188	240	112	....	....	....	....	....
21	....	....	....	....	232	232	112	....	....	....	....	....
22	....	....	....	....	195	232	106	....	....	....	....	....
23	....	....	....	....	188	217	119	....	....	....	....	....
24	....	....	....	....	174	217	112	68	....	....	....	....
25	....	....	....	....	210	210	112	48	....	....	....	....
26	....	....	....	....	202	202	112	48	....	....	....	....
27	....	....	....	....	224	202	100	48	....	....	....	....
28	....	....	....	....	217	188	100	48	....	....	....	....
29	....	....	....	48	202	181	100	48	....	....	....	....
30	....	....	....	40	174	169	94	....	....	....	....	....
31	....	....	....	....	202	.....	94	....	....	....	....	....

Monthly Discharge of Muddy Creek near Emery, Utah, in 1909.

(Drainage area, 130 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	292	12	146	1.12	1.29	8,980
June	300	160	245	1.88	2.10	14,600
July	153	88	109	0.84	0.97	6,700
August	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
The period..	300	12	133	1.28	4.36	30,280

Discharge Measurements of Muddy Creek near Emery, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
July 23	G. H. Canfield	18.5	14.9	2.00	33
July 23	do	18.5	14.7	2.00	33
August 27	do	17.5	10.0	1.45	20
September 28	do	16.0	8.40	1.51	17
November 28	do	15.5	7.43	1.50	18

Daily Discharge in Second-feet of Muddy Creek near Emery, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	.....	.....	.....	48	12	....	....	....
2	....	....	....	....	.....	.....	.....	53	10	....	....	....
3	....	....	....	....	.....	.....	.....	48	190	....	....	....
4	....	....	....	....	.....	.....	.....	44	12	....	....	....
5	....	....	....	....	.....	.....	.....	48	12	....	....	....
6	....	....	....	....	.....	.....	.....	44	10	....	....	....
7	....	....	....	....	.....	.....	.....	39	12	....	....	....
8	....	....	....	....	.....	.....	.....	31	12	....	....	....
9	....	....	....	....	.....	.....	.....	31	12	....	....	....
10	....	....	....	....	.....	.....	.....	28	12	....	....	....
11	....	....	....	....	.....	.....	.....	24	18	....	....	....
12	....	....	....	....	.....	.....	.....	24	12	....	....	....
13	....	....	....	....	.....	.....	.....	18	190	....	....	....
14	....	....	....	....	.....	.....	.....	15	120	....	....	....
15	....	....	....	....	.....	.....	.....	18	134	....	....	....

Daily Discharge in Second-feet of Muddy Creek near Emery, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	....	....	.....	.....	.....	18	31	....	....	....
17	....	....	....	....	.....	.....	.....	12	24	....	....	....
18	....	....	....	....	.....	.....	.....	12	....	....	....	....
19	....	....	....	....	.....	.....	.....	12	....	....	....	....
20	....	....	....	....	.....	.....	.....	18	....	....	....	....
21	....	....	....	....	.....	.....	.....	18	....	....	....	....
22	....	....	....	....	.....	.....	.....	18	....	....	....	....
23	....	....	....	....	.....	.....	33	12	....	....	....	....
24	....	....	....	....	.....	.....	33	18	....	....	....	....
25	....	....	....	....	.....	.....	33	18	....	....	....	....
26	....	....	....	....	.....	.....	26	18	....	....	....	....
27	....	....	....	....	.....	.....	26	18	....	....	....	....
28	....	....	....	....	.....	.....	30	12	18	....	....	....
29	....	....	....	....	.....	.....	340	12	18	....	....	....
30	....	....	....	....	.....	.....	58	12	18	....	....	....
31	....	....	....	....	.....	.....	53	12	....	....	....	....

Monthly Discha.gė of Muddy Creek near Emery, Utah, in 1910.

(Drainage area, 130 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....
July	340	26	76	0.54	0.62	1,250
August	53	12	24	.18	.21	1,490
September	100	10	35	.27	.30	2,090
October	265	18	25	.19	.22	1,560
November	18	18	18	.14	.15	1,070
December	.....	.....	.....	.....	.....	.....
The period..	340	10	35	0.26	1.50	7,460

SAN RAFAEL RIVER NEAR GREENRIVER, UTAH.

This station was established May 5, 1909, and is located about 16 miles southwest of the town of Greenriver, at the county bridge en route from Greenriver to Hanksville.

Discharge Measurements of San Rafael River near Greenriver, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 5	E. A. Porter	47.0	88	2.20	223
June 9	do	100.0	692	7.2	3,036
June 20	do	102.0	572	6.00	2,378
September 28	do	57	108	1.60	164

Daily Discharge in Second-feet of San Rafael River near Greenriver, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	.....	1,090	1,310	230	3,850	140	140	....
2	....	....	....	....	.....	1,490	1,220	220	4,720	135	140	....
3	....	....	....	....	.....	1,990	1,030	220	820	130	140	....
4	....	....	....	....	.....	2,760	950	190	800	125	140	....
5	....	....	....	....	221	3,080	1,000	180	1,150	130	140	....
6	....	....	....	....	290	3,320	880	220	450	120	140	....
7	....	....	....	....	374	3,560	830	300	1,830	130	140	....
8	....	....	....	....	359	3,610	780	560	730	130	130	....
9	....	....	....	....	423	3,160	700	880	420	130	135	....
10	....	....	....	....	474	2,920	580	750	350	130	170	....
11	....	....	....	....	510	2,930	540	810	360	130	160	....
12	....	....	....	....	620	3,020	510	880	500	130	185	....
13	....	....	....	....	423	2,780	460	670	360	130	150	....
14	....	....	....	....	374	2,780	420	550	300	130	140	....
15	....	....	....	....	359	2,800	300	430	290	130	110	....
16	....	....	....	....	423	2,600	230	390	330	120	150	....
17	....	....	....	....	374	2,680	200	3,730	260	120	140	....
18	....	....	....	....	406	2,800	200	2,000	190	120	140	....
19	....	....	....	....	474	2,650	250	1,750	180	120	130	....
20	....	....	....	....	640	2,300	370	1,400	170	120	130	....
21	....	....	....	....	816	2,230	270	1,160	180	120	140	....
22	....	....	....	....	1,040	2,180	280	890	170	120	160	....
23	....	....	....	....	1,150	2,160	380	730	170	120	160	....
24	....	....	....	....	1,180	2,180	460	540	160	120	240	....
25	....	....	....	....	938	2,110	330	430	150	115	170	....
26	....	....	....	....	792	1,890	280	420	150	110	185	....
27	....	....	....	....	1,060	1,740	250	380	150	140	170	....
28	....	....	....	....	1,560	1,710	390	330	150	140	360	....
29	....	....	....	....	1,660	1,570	300	360	150	140	210	....
30	....	....	....	....	1,390	1,320	280	310	150	140	185	....
31	....	....	....	....	1,150	.....	230	1,180	....	140	....	....

Monthly Discharge of San Rafael River near Greenriver, Utah, in 1909.

(Drainage area, 2,140 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	1,660	221	721	0.33	0.39	38,600
June	3,610	1,090	2,450	1.15	1.28	146,000
July	1,310	200	523	0.24	0.28	32,200
August	3,730	180	745	.35	.40	45,800
September	4,720	150	655	.31	.34	39,000
October	140	110	128	.06	.07	7,870
November	360	130	162	.08	.09	9,640
December	.....	.....	.....	.....	.....	.....
The period	4,720	110	765	0.36	2.85	319,000

Discharge Measurements of San Rafael River near Greenriver, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 26	E. S. Fuller	60	401	4.32	1,414
July 28	G. H. Canfield	22	.....	.05	7
October 2	Canfield and Dort	43	35	1.10	54
December 2	G. H. Canfield	45	50.6	1.55	80

Daily Discharge in Second-feet of San Rafael River near Greenriver, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	478	382	1,530	752	490	58	4	56	102	100
2	....	....	1,110	305	1,344	664	319	46	15	54	116	125
3	....	....	1,989	398	1,220	642	191	52	15	53	95	95
4	....	....	2,179	446	1,082	620	172	46	704	52	82	108
5	....	....	2,339	366	1,165	583	172	40	235	51	70	108
6	....	....	1,840	414	1,028	490	148	40	124	49	58	87
7	....	....	1,240	398	921	435	108	46	124	48	58	100
8	....	....	874	446	921	305	94	34	82	47	70	80
9	....	....	781	398	1,251	305	82	24	70	46	82	74
10	....	....	690	446	1,564	271	70	11	35	46	70	87
11	....	....	550	446	1,560	235	58	....	20	52	95	100
12	....	....	462	446	1,594	213	58	391	11	46	82	132
13	....	....	510	494	1,524	180	40	164	4	52	64	147
14	....	....	478	446	1,458	191	64	64	4	64	88	140
15	....	....	414	650	1,390	180	46	70	....	76	213	125
16	....	....	510	510	1,300	172	148	82	257	2,240	362	108
17	....	....	462	570	1,015	164	268	58	3,190	1,765	213	100
18	....	....	414	690	796	156	140	46	362	288	148	87
19	....	....	446	590	704	140	82	35	348	213	124	100
20	....	....	494	710	686	116	58	25	304	201	242	80
21	....	....	430	851	644	116	70	46	213	155	180	100
22	....	....	430	757	583	100	64	20	279	172	155	95
23	....	....	446	660	490	88	40	....	235	180	140	87
24	....	....	382	898	546	88	46	....	148	265	116	75
25	....	....	446	1,406	509	82	35	....	94	148	116	70
26	....	....	414	1,311	564	70	29	....	88	164	164	70
27	....	590	414	1,737	545	58	13	....	58	155	153	95
28	....	494	446	1,806	664	70	8	30	64	180	142	100
29	....	....	430	1,875	686	180	76	....	52	164	132	95
30	....	....	335	1,737	730	257	88	8	58	108	120	108
31	....	....	320	....	752	....	116	8	....	95	110	120

Monthly Discharge of San Rafael River near Greenriver, Utah, in 1910.

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	*125	0.06	0.07	7,700
February	590	494	542	.25	.26	12,000
March	2,339	320	734	.34	.40	45,200
April	1,875	305	753	.35	.39	44,800
May	1,594	400	902	.46	.53	61,500
June	752	58	264	.12	.14	15,700
July	490	8	110	.05	.06	6,730
August	391	0	47	.02	.02	2,860
September	3,190	0	240	.11	.13	14,300
October	2,240	46	235	.11	.13	14,400
November	362	58	127	.06	.07	7,560
December	125	70	99	.05	.05	6,100
The year	3,190	0	356	0.17	2.25	238,910

*Estimated.

FREMONT RIVER NEAR THURBER, UTAH.

This station was established to determine the amount of water available for storage in the Thurber reservoir site.

The station is located at the head of the canyon about 2 miles east of the town of Thurber. The stream bed is subject to shifting during high water and a ford a short distance above the station affects the results. Results are only fair.

Discharge Measurements of Fremont River near Thurber, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 13	E. A. Porter	29.0	61.0	4.25	116
June 30	do	28.0	64.4	4.35	673
August 11	do	28.5	58.0	4.97	111
August 30	do	28.7	37.0	5.02	132

Daily Discharge in Second Feet of Fremont River near Thurber, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	.....	138	68	78	205	241	176	205
2	....	....	....	....	.....	150	78	78	283	261	163	205
3	....	....	....	....	.....	150	78	78	305	261	163	205
4	....	....	....	....	.....	150	90	78	261	261	163	205
5	....	....	....	....	.....	150	90	78	261	241	150	190
6	....	....	....	....	.....	163	90	90	261	241	126	205
7	....	....	....	....	.....	163	90	102	261	241	138	190
8	....	....	....	....	.....	163	90	138	240	241	150	190
9	....	....	....	....	.....	163	90	138	240	241	163	190
10	....	....	....	....	.....	163	90	126	205	222	163	205
11	....	....	....	....	.....	150	102	126	222	222	163	190
12	....	....	....	....	.....	138	102	261	241	205	176	205
13	....	....	....	....	.....	114	90	176	261	205	176	205
14	....	....	....	....	163	114	90	163	261	190	190	205
15	....	....	....	....	163	114	78	305	241	190	190	222
16	....	....	....	....	150	114	78	305	241	190	190	222
17	....	....	....	....	138	90	90	328	228	176	190	222
18	....	....	....	....	163	114	90	305	205	176	190	241
19	....	....	....	....	176	102	90	328	205	190	205	241
20	....	....	....	...	190	114	138	305	190	176	190	261
21	....	....	....	....	190	114	126	283	163	176	190	261
22	....	....	....	....	176	114	114	261	176	163	190	241
23	....	....	....	....	163	114	125	241	176	163	190	241
24	....	....	....	....	163	102	114	222	176	176	190	241
25	....	....	....	....	163	90	102	222	176	176	190	241
26	....	....	....	....	150	78	102	205	176	176	205	222
27	....	....	....	....	138	90	102	205	176	190	205	222
28	....	....	....	....	150	90	90	190	190	190	205	222
29	....	....	....	....	126	90	78	163	205	190	205	241
30	....	....	....	....	126	90	78	126	222	190	205	222
31	....	....	....	....	138	.....	78	190	....	176	....	222

Monthly Discharge of Fremont River near Thurber, Utah, in 1909.

(Drainage area, 700 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	190	126	157	0.22	0.26	5,600
June	163	78	123	.18	.20	7,300
July	138	78	94	.13	.16	5,800
August	328	78	190	.27	.31	11,700
September	305	163	222	.32	.35	13,200
October	261	163	204	.29	.34	12,500
November	205	126	176	.25	.28	10,500
December	261	190	219	.31	.36	13,500
The year	328	78	173	0.25	2.26	80,100

Discharge Measurements of Fremont River near Thurber, Utah, in 1910.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 17	E. S. Fuller	29	29	4.82	80
August 17	G. H. Canfield	31	36	4.95	68
August 17	do	28	25	4.93	65
September 21	do	31	39	5.58	124
September 21	do	30	39	5.58	126
October 14	do	33	35	5.33	89

Daily Discharge in Second-feet of Fremont River near Thurber, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	169	149	212	114	105	83	70	76	102	127	104	109
2	159	144	206	119	100	87	67	84	107	131	109	104
3	164	149	212	114	96	87	63	75	117	124	104	104
4	159	144	217	110	100	78	66	79	112	120	104	109
5	154	144	222	114	96	74	62	69	117	123	104	109
6	164	139	228	119	87	78	60	70	117	128	109	119
7	159	144	239	114	92	74	69	75	112	128	114	119
8	164	149	250	119	96	69	65	83	117	122	109	109
9	159	154	256	124	92	72	69	74	112	117	104	114
10	149	149	262	144	87	76	64	83	107	111	104	114

Daily Discharge in Second-feet of Fremont River near Thurber, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
11.....	154	154	250	134	92	72	60	87	112	111	109	109
12.....	149	154	195	124	87	68	64	92	117	106	104	109
13.....	154	164	184	119	82	64	68	87	127	101	109	104
14.....	159	174	174	114	87	68	64	82	142	95	104	104
15.....	164	184	179	119	92	72	60	73	152	95	109	109
16.....	159	190	174	124	87	67	64	68	157	100	104	104
17.....	169	195	184	119	82	71	60	63	167	104	104	104
18.....	159	159	174	110	78	74	56	67	177	104	109	109
19.....	154	154	164	105	82	70	50	67	167	109	114	109
20.....	149	159	169	110	78	74	54	71	147	104	109	104
21.....	154	164	174	105	78	70	58	71	127	100	114	104
22.....	159	169	179	100	73	66	54	80	126	95	119	109
23.....	164	179	174	105	68	68	50	84	126	95	124	104
24.....	159	184	169	100	72	64	54	80	127	100	119	104
25.....	154	195	154	96	68	68	61	84	127	104	114	109
26.....	149	206	144	100	64	68	68	80	134	104	119	114
27.....	154	195	124	105	71	71	77	76	128	109	104	119
28.....	149	206	114	100	67	67	85	71	122	104	104	119
29.....	144	....	110	110	71	63	77	80	128	104	109	114
30.....	139	....	105	105	73	67	68	89	123	109	104	114
31.....	144	....	110	....	79	.....	71	98	....	104	....	119

Monthly Discharge of Fremont River near Thurber, Utah, in 1910.

(Drainage area, 700 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	169	139	156	0.22	0.26	9,590
February	206	139	166	.24	.25	9,220
March	202	105	184	.26	.30	11,300
April	144	96	113	.16	.18	6,720
May	105	64	83	.12	.14	5,120
June	87	63	72	.10	.11	4,270
July	85	50	64	.09	.11	3,940
August	98	63	78	.11	.13	4,770
September	177	102	128	.18	.21	7,620
October	131	95	109	.16	.18	6,700
November	124	104	106	.15	.17	6,310
December	119	104	110	.16	.18	6,760
The year....	206	50	114	0.16	2.22	82,300

ESCALANTE CREEK NEAR ESCALANTE, UTAH.

This station was established August 8, 1909, to determine the amount of water available for storage in the Escalante reservoir site. The station is located at the head of the canyon about ¾ of a mile east of the town of Escalante. The bed of the stream is shifting sand, and the record is only an approximation.

Discharge Measurements of Escalante Creek near Escalante, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 5	E. A. Porter	.....	.....	.....	8.0
November 3	do	11.0	7.9	2.06	13.5

Discharge Measurements of Escalante Creek near Escalante, Utah, for 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 14	E. S. Fuller	37	.....	2.85	122

Daily Discharge in Second-feet of Escalante Creek near Escalante, Utah, in 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	77	82	121	61	.....	67	225	....	....	30
2	....	96	....	....	.....	.....	3	....	....	....	22	....
3	....	....	126	96	116	56	.....	36	7	17	....	38
4	....	96	....	....	.....	.....	3	....	....	....	14	....
5	....	....	131	....	116	53	.....	25	5	....	....	22
6	....	106	....	86	.....	.....	2	....	....	16	14	....
7	....	....	136	....	116	50	.....	36	3	....	....	20
8	....	96	....	86	.....	.....	2	....	....	16	14	....
9	....	....	131	....	116	50	.....	50	3	....	....	18
10	....	86	....	96	.....	.....	3	....	....	78	14	....
11	....	....	131	....	116	40	.....	36	32	....	....	22
12	....	82	....	53	121	.....	3	....	....	22	14	....
13	....	86	126	....	.....	38	....	....	....	....	....	27
14	....	....	....	46	121	.....	.....	50	210	32	14	32
15	....	96	116	....	.....	30	4	....	....	....	....	....
16	....	....	....	40	106	.....	.....	43	45	....	14	35
17	96	136	121	....	.....	.....	1	....	58	32	....	....
18	....	....	....	40	96	19	.....	205	211	....	14	35
19	96	147	126	....	.....	.....	.....	....	45	22	....	....
20	....	....	....	....	96	5	.....	45	....	....	14	35

Daily Discharge in Second-feet of Escalante Creek near Escalante, Utah, in 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21	96	136	136	96	.....	.....	4	....	....	22	....	....
22	....	....	....	....	116	3	.....	62	....	....	14	42
23	96	136	136	96	.....	.....	11	....	....	22	....	....
24	....	....	....	....	82	.....	.....	53	16	....	18	38
25	96	126	147	96	.....	.....	101	....	....	22	....	....
26	....	....	....	....	72	2	158	45	....	....	18	....
27	91	136	136	106	.....	.....	.....	....	18	18	....	45
28	....	....	....	....	68	3	91	7	....	....	38	35
29	86	....	136	126	.....	.....	385	....	16	14	....	....
30	....	....	....	....	64	4	130	7	16	....	32	35
31	86	....	126	....	.....	.....	227	....	....	27	....	....

Monthly Discharge of Escalante Creek near Escalante, Utah, for 1910.

(Drainage area, 200 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	96	86	89	0.45	0.51	5,500
February	147	82	112	.56	.59	6,220
March	147	77	127	.64	.73	7,810
April	126	40	82	.41	.46	4,870
May	121	64	103	.51	.59	6,330
June	64	0	28	.14	.16	1,650
July	385	0	43	.22	.25	2,650
August	205	7	51	.26	.29	3,140
September	225	7	61	.30	.34	3,610
October	78	16	26	.13	.15	1,580
November	38	14	18	.09	.10	1,070
December	45	18	32	.16	.18	1,960
The year	385	0	64	0.32	4.35	46,400

SEVIER RIVER NEAR MARYSVALE, UTAH.

This station, which was established February 18, 1906, to determine the amount of water available for irrigation and storage in the upper valley of Sevier River, is located about 6 miles above Marysvale, Utah, about 3 miles below the site of the proposed state dam on Sevier River, and about 10 miles below the junction of South and East forks. The equipment consists of a cable and car and a vertical staff gage, which has remained unchanged since the station was established.

During very cold weather the records are somewhat affected by ice. The flow is not affected by artificial control below, but the daily flow depends to some extent on manipulations of gates at storage reservoirs on the South and East forks. The bed of the stream is somewhat shifting, but the results may be considered good.

Discharge Measurements of Sevier River near Marysvale, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 24	H. S. Kleinschmidt	55	221	4.85	673
July 19	Thomas Grieve, Jr.	49	128	3.94	260

Daily Discharge in Second-feet of Sevier River near Marysvale, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	203	189	705	1,660	316	339	250	....	....	....
2	....	....	189	203	646	1,510	313	339	444	....	....	....
3	....	....	163	189	618	1,410	310	302	339	....	....	....
4	....	....	163	189	618	1,316	307	267	302	....	....	....
5	....	....	163	176	675	1,271	304	250	284	....	....	....
6	....	....	151	176	768	1,271	301	203	....	....	....	....
7	....	....	151	218	834	1,271	298	189	....	....	....	....
8	....	....	163	234	870	1,271	294	176	....	....	....	....
9	....	....	163	*234	980	1,142	290	163	....	....	....	....
10	...	....	176	234	.....	1,060	286	163	....	....	....	....
11	....	....	176	234	.....	1,060	282	163	....	....	....	....
12	....	....	176	234	.....	1,142	278	176	....	....	....	....
13	....	....	176	234	.....	1,020	274	203	....	....	....	....
14	....	....	189	218	.....	1,020	270	203	....	....	....	....
15	....	....	189	218	.....	906	266	250	....	....	....	....
16	....	....	189	234	.....	870	262	302	....	....	....	....
17	....	....	176	250	.....	834	258	358	....	....	....	....
18	....	203	176	284	.....	800	254	378	....	....	....	....
19	....	203	176	320	.....	736	250	378	....	....	....	....
20	....	203	163	358	.....	675	242	399	....	....	....	....
21	....	203	176	378	.....	646	234	399	....	....	....	....
22	....	203	176	444	.....	618	226	399	....	....	....	....
23	....	176	176	615	2,310	540	218	399	....	....	....	....
24	....	176	189	618	2,260	491	231	231	....	....	....	....
25	....	176	218	705	2,210	444	250	250	....	....	....	....
26	....	176	250	736	2,110	399	302	302	....	....	....	....
27	....	176	250	705	1,960	378	339	339	....	....	....	....
28	....	189	218	675	1,910	358	378	378	....	....	....	....
29	....	....	203	675	1,960	358	421	421	....	....	....	....
30	....	....	203	736	2,010	320	378	378	....	....	....	....
31	....	....	189	....	1,810	.....	189	358	....	....	....	....

Note—May 10 to 22, water was over top of the gage rod.

Monthly Discharge of Sevier River near Marysvale, Utah, in 1906.

(Drainage area, 2,560 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February 18-28	208	176	190	0.08	0.08	4,150
March	258	153	187	.08	.09	11,500
April	736	182	362	.14	.16	21,500
May	2,300	618	1,470	.57	.66	90,400
June	1,640	330	895	.35	.39	53,300
July 19-31	421	218	297	.....	.....	7,660
August	479	163	287	.11	.13	17,600
September 1-5	444	250	324	.....	.....	3,210
October	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....
The period	2,300	153	.....	.....	.....	209,000

Discharge Measurements of Sevier River near Marysvale, Utah, in 1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 1	G. T. Burridge	60	383	6.40	1,230
July 12	do	50	146	3.30	302
July 30	do	51	154	3.80	397
August 24	La Rue and Burridge	53	195	4.25	537

Daily Discharge in Second-feet of Sevier River near Marysvale, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	.....	.....	.....	378	378	....	284	302
2	....	....	....	....	.....	.....	.....	705	378	....	284	302
3	....	....	....	....	.....	.....	.....	515	358	....	267	320
4	....	....	....	....	.....	.....	.....	444	358	....	267	302
5	....	....	....	....	.....	.....	.....	515	378	....	284	302
6	....	....	....	....	.....	.....	.....	467	399	....	284	320
7	....	....	....	....	.....	.....	.....	467	378	467	284	320
8	....	....	....	....	.....	.....	.....	444	378	378	267	320
9	....	....	....	....	.....	.....	.....	399	358	339	267	320
10	....	....	....	....	.....	.....	.....	378	339	250	267	320
11	....	....	....	....	.....	.....	.....	358	320	218	267	320
12	....	....	....	....	.....	.....	302	339	284	203	267	302
13	....	....	....	....	.....	.....	284	339	267	218	250	302
14	....	....	....	....	.....	.....	250	284	234	203	250	320
15	....	....	....	....	.....	.....	234	284	234	339	250	284

Daily Discharge in Second-feet of Sevier River near Marysvale, Utah, for 1907—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	....	....	....	....	.....	.....	218	284	218	302	267	284
17	....	....	....	....	.....	.....	218	267	218	378	250	267
18	....	....	....	....	.....	.....	218	358	218	284	250	284
19	....	....	....	....	.....	.....	218	339	203	267	250	284
20	....	....	....	....	.....	.....	234	339	189	284	250	267
21	....	....	....	....	.....	.....	267	467	189	267	267	267
22	....	....	....	....	.....	.....	267	515	189	267	250	267
23	....	....	....	....	.....	.....	267	467	302	267	234	284
24	....	....	....	....	.....	.....	302	491	302	284	234	250
25	....	....	....	....	.....	.....	320	467	302	284	250	267
26	....	....	....	....	.....	.....	515	444	302	267	284	302
27	....	....	....	....	.....	.....	515	399	302	267	284	267
28	....	....	....	....	.....	.....	515	399	284	267	302	267
29	....	....	....	....	.....	.....	421	399	267	284	302	267
30	....	....	....	....	.....	.....	399	399	267	284	302	284
31	....	....	....	....	.....	.....	399	399	....	284	....	284

Monthly Discharge of Sevier River near Marysvale, Utah, in 1907.

(Drainage area, 2,560 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....
July 12-31	528	218	321	.....	.....	12,700
August	705	267	413	0.16	0.19	25,400
September	399	189	296	.12	.13	17,600
October	467	203	307	.12	.14	18,000
November	302	234	271	.11	.12	16,100
December	320	250	293	.12	.14	18,000
The year	705	189	.....	.....	.....	109,000

Discharge Measurements of Sevier River near Marysvale, Utah, in 1908.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 14	A. D. Williams	53	176	4.30	480
June 5	do	52	130	3.35	326
June 24	do	51	95	2.70	196

Daily Discharge in Second-feet of Sevier River near Marysvale, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	302	250	284	302	467	320	203	618	320	284	234	....
2.....	284	267	250	284	515	320	218	736	320	284	234	....
3.....	284	267	250	302	540	302	250	675	358	284	218	189
4.....	284	284	250	339	591	302	250	675	358	284	234	....
5.....	284	267	250	320	591	284	234	540	399	302	218	....
6.....	284	302	267	339	565	284	250	491	358	234	218	....
7.....	267	284	250	358	565	320	234	444	339	218	218	....
8.....	267	267	250	399	565	320	234	378	339	203	318	....
9.....	267	302	234	399	565	302	234	320	320	203	218	....
10.....	284	302	234	378	515	267	234	421	399	189	218	....
11.....	284	302	234	378	467	267	234	736	399	176	218	....
12.....	267	284	234	399	467	250	302	591	399	176	218	176
13.....	284	284	234	399	467	250	267	540	399	163	218	....
14.....	267	267	250	515	444	267	302	467	399	163	218	....
15.....	302	267	284	618	421	284	339	421	399	163	218	....
16.....	302	284	302	675	378	284	358	358	378	176	203	....
17.....	284	284	339	646	339	302	339	339	378	189	203	....
18.....	267	284	339	646	320	284	339	339	358	203	189	....
19.....	284	284	339	675	302	284	302	399	339	218	189	....
20.....	284	284	339	800	284	267	284	339	339	218	203	....
21.....	267	284	339	768	302	267	284	302	320	234	203	....
22.....	284	284	339	800	284	218	267	284	320	218	203	....
23.....	284	320	320	906	284	203	267	284	320	218	203	....
24.....	284	302	320	870	284	203	267	267	320	203	....	....
25.....	284	302	339	675	267	189	302	250	320	234	....	....
26.....	284	302	320	591	267	176	358	234	358	250	....	....
27.....	284	320	284	565	284	189	358	218	320	250	....	....
28.....	284	284	320	515	284	151	378	203	358	234	189	....
29.....	284	267	320	540	284	140	491	203	339	234	176	....
30.....	267	....	302	491	267	163	675	284	320	234	....	....
31.....	267	....	....	....	302	.....	618	302	....	234	....	....

Monthly Discharge of Sevier River near Marysvale, Utah, in 1908.

(Drainage area, 2,560 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	311	267	284	0.11	0.13	17,500
February	320	258	289	.11	.11	16,600
March	348	234	291	.11	.13	17,900
April	906	293	534	.21	.23	31,800
May	604	267	406	.16	.18	25,000
June	330	140	258	.10	.11	15,400
July	675	203	315	.12	.14	19,400
August	752	203	412	.16	.19	25,300
September	540	320	363	.14	.15	21,600
October	302	163	224	.09	.10	13,800
November	234	182	212	.08	.09	12,600
December	.....	.....	178	.07	.08	10,900
The year....	906	140	314	0.12	1.64	228,000

Discharge Measurements of Sevier River near Marysvale, Utah, in 1909.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 16	E. A. Porter	59	291	6.05	1,000
June 25	do	52	112	2.95	194
August 1	do	55	164	4.22	420
November 11	do	52	118	3.40	353

Daily Discharge in Second-feet of Sevier River near Marysvale, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	170	157	170	284	834	900	202	465	1,110	403	324	....
2	170	157	189	284	768	826	230	420	1,820	403	323	....
3	170	157	320	320	800	826	246	375	a3,000	393	322	....
4	170	157	450	320	834	814	246	355	2,000	373	320	....
5	163	176	578	388	1,060	802	258	316	1,900	373	318	....
6	189	173	800	339	1,180	790	269	289	1,230	383	316	....
7	203	170	1,120	320	1,320	756	280	289	1,070	393	314	....
8	203	170	1,060	311	1,410	773	280	298	1,030	373	304	....
9	210	176	980	320	1,460	739	271	365	868	373	304	....
10	196	163	879	330	1,440	690	262	365	745	373	314	....
11	193	170	817	339	1,430	660	246	355	687	363	333	....
12	190	176	565	330	1,340	600	238	516	673	363	324	....
13	186	170	421	320	1,290	570	230	466	604	363	314	....
14	182	170	320	339	1,200	542	230	442	578	363	314	296
15	203	170	340	444	1,110	516	238	521	552	373	314	....
16	189	176	358	565	1,020	442	246	600	526	353	314	....
17	189	163	358	736	900	442	238	722	502	350	314	....
18	189	176	358	800	881	408	216	739	478	346	314	....
19	189	176	339	870	826	375	262	630	456	343	334	....
20	189	176	311	870	826	355	271	706	456	343	353	....
21	189	170	339	800	826	335	298	600	434	324	373	....
22	203	170	330	736	808	316	407	516	424	333	380	....
23	182	170	334	675	813	298	516	490	413	333	380	....
24	176	176	339	646	818	238	603	375	403	333	380	....
25	163	176	339	632	822	189	690	335	413	333	380	....
26	163	176	339	618	826	176	670	307	413	333	380	....
27	176	170	339	675	826	181	650	355	424	332	383	....
28	151	170	328	768	863	186	630	397	434	331	380	....
29	151	....	317	912	900	191	590	355	424	330	370	....
30	151	....	306	912	900	196	550	335	434	328	360	....
31	157	....	295	....	900	.....	510	615	.....	326	....	....

a Discharge estimated; gage height approximately 10 feet.

Monthly Discharge of Sevier River near Marysvale, Utah, in 1909.

(Drainage area, 2,560 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	210	151	181	0.07	0.08	11,100
February	176	157	170	.07	.07	9,440
March	1,120	170	462	.18	.21	28,400
April	942	284	542	.21	.24	32,300
May	1,460	768	1,010	.40	.46	62,100
June	900	176	594	.20	.22	30,000
July	690	202	358	.14	.16	22,000
August	739	280	449	.18	.20	27,600
September	3,000	403	817	.32	.36	48,600
October	403	324	356	.13	.16	21,900
November	383	304	338	.13	.15	20,100
December	.....	.....	295	.11	.13	18,100
The year	3,000	.....	457	0.18	2.44	332,000

Discharge Measurements of Sevier River near Marysvale, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 12	E. S. Fuller	60	276	5.70	889
May 19	do	56	220	4.70	620
August 20	G. H. Canfield	52	133	3.25	303
September 14	do	53	140	3.43	334
September 23	do	53	133	3.05	319
October 20	do	53	115	2.98	254

Daily Discharge in Second-feet of Sevier River near Marysvale, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	478	860	332	.....	412	351	224	323	....
2	....	....	....	489	890	332	.....	445	351	231	313	....
3	....	....	....	478	890	332	.....	434	361	231	257	....
4	....	....	777	456	860	329	.....	371	401	224	244	....
5	....	....	....	422	860	293	.....	351	412	205	244	....
6	....	....	....	456	875	313	.....	332	422	205	231	....
7	....	....	....	456	875	313	.....	303	371	205	....	....
8	....	....	....	456	860	179	.....	274	371	205	231	....
9	....	....	....	467	860	137	.....	274	351	192	231	....
10	....	....	....	467	860	189	.....	256	351	192	....	....
11	....	....	....	....	860	257	351	265	342	179	231	....
12	....	....	....	....	860	293	351	293	332	179	231	205
13	....	....	645	....	801	313	351	293	332	179	244	313
14	....	....	671	511	.....	361	351	351	332	179	244	313
15	....	....	697	511	620	412	351	342	351	179	244	313
16	....	....	697	....	620	412	351	332	391	323	257	313
17	....	158	723	....	620	412	351	323	412	371	244	293
18	....	....	750	....	620	412	351	293	456	313	244	293
19	137	....	777	....	620	412	342	303	445	257	....	391
20	....	....	860	671	620	401	342	303	434	....	....	391
21	....	....	950	697	371	401	332	303	456	....	231	371
22	....	....	980	723	361	412	323	303	412	....	231	332
23	....	....	777	723	361	401	313	303	342	....	231	....
24	....	....	697	723	351	434	308	313	393	....	231	....
25	[illegible]	....	671	750	351	422	303	303	274	....	218	....
26	137	351	615	777	351	412	313	293	257	....	224	231
27	....	371	570	790	351	412	313	303	257	391	231	244
28	....	....	546	804	342	434	313	293	230	332	....	244
29	....	....	500	832	342	422	332	391	224	332	....	274
30	....	....	456	875	342	412	351	371	224	323	....	274
31	....	....	456	....	342	.....	361	351	....	....	....	218

Monthly Discharge of Sevier River near Marysvale, Utah, in 1910.

(Drainage area, 2,560 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	137	137	137	0.05	0.06	3,530
February	462	138	204	.08	.08	11,650
March	980	456	680	.27	.31	42,350
April	875	422	595	.23	.25	35,400
May	890	342	628	.24	.28	38,650
June	434	137	346	.14	.15	20,600
July	422	303	356	.14	.16	21,900
August	445	257	325	.13	.15	20,000
September	456	230	351	.14	.15	20,850
October	391	179	266	.11	.12	16,300
November	323	218	241	.09	.10	14,300
December	391	205	266	.11	.12	16,300
The year	980	137	367	0.14	1.93	261,890

MONTHLY RUN-OFF

In Thousands of Acre Feet of Sevier River near Marysvale, Utah, 1906 to 1910.

(Drainage area, 2,560 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1906	.....	.....	11.50	21.50	90.40	53.30	7.63	17.60	3.21	.....	.....	.....	.....	....	....
1907	.....	.....	.....	.....	.....	.....	.....	25.40	17.60	18.90	16.10	18.00	.....	....	....
1908	17.50	16.60	17.90	21.80	25.00	15.40	19.40	25.30	21.60	13.80	12.60	10.90	228.00	0.12	1.64
1909	11.10	9.44	28.40	32.30	62.10	30.00	22.00	27.[illegible]	48.60	21.90	20.10	18.10	332.00	0.18	2.44
1910	3.53	11.65	42.35	35.40	38.65	20.60	21.90	20.00	20.85	16.30	14.30	16.30	261.830	0.14	1.93
Mean.	10.71	12.57	25.04	30.25	54.04	29.82	17.74	23.18	22.37	17.72	15.78	15.82	230.00	0.12	1.69

Note—During 1910 the flow was influenced through controlling works at two new storage reservoirs, i. e., at Hatchtown and at the Piute Reservoir about 5 miles above the gaging station. These tend to equalize the flow.

SEVIER RIVER NEAR GUNNISON, UTAH.

This station, which was established June 29, 1900, to obtain data for use in connection with irrigation in the Sevier Valley, is located about 4 miles west of Gunnison, Utah, on the road to Westview precinct. It is about three-fourths of a mile above the mouth of San Pitch River and below all other tributaries of importance.

The river freezes occasionally during the winter and the channel is liable to shift slightly during floods, but on the whole the records obtained are good.

Discharge Measurements of Sevier River near Gunnison, Utah, in 1906.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 25	H. S. Kleinschmidt	60	210	3.52	563
May 21	C. Tanner	78	404	5.65	1,770
May 29	Thomas Grieve, Jr	79	519	6.27	2,530
July 27	do	42	126	.95	42

Daily Discharge in Second-feet of Sevier River near Gunnison, Utah, for 1906.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	294	176	435	627	1,796	741	152	202	348	294	377
2	....	294	150	406	663	1,796	701	177	202	348	320	406
3	....	294	125	377	701	1,728	701	202	202	320	294	406
4	223	294	117	377	741	1,592	701	182	202	320	294	406
5	223	294	109	377	741	1,592	701	182	245	320	294	435
6	223	294	143	435	783	1,397	701	162	269	320	294	435
7	223	294	162	559	783	1,397	663	162	269	294	294	406
8	453	294	182	627	741	1,335	663	162	269	269	294	435
9	683	294	202	527	783	1,169	663	162	245	406	269	435
10	915	294	223	527	825	1,169	465	143	245	269	269	435
11	891	320	406	559	880	1,223	377	125	223	245	294	406
12	869	348	406	495	961	1,169	319	143	202	245	269	406
13	847	406	377	527	1,115	1,279	262	143	182	223	269	406
14	825	435	348	495	1,115	1,169	205	143	182	202	269	406
15	802	406	294	465	1,223	1,169	149	143	182	202	269	406
16	781	406	269	465	1,279	1,169	93	143	223	202	269	406
17	701	377	245	527	1,397	1,169	37	143	294	223	269	406
18	741	377	269	527	1,525	1,115	47	125	294	223	269	406
19	721	320	245	527	1,592	1,065	68	143	294	223	269	406
20	701	320	245	527	1,728	915	57	182	294	223	269	406
21	583	294	294	527	1,796	870	57	223	294	223	269	435
22	465	294	294	559	1,932	783	68	245	294	245	269	406
23	392	245	320	593	1,932	741	68	245	348	245	269	406
24	320	245	377	593	2,000	663	80	435	348	245	320	406
25	320	223	377	627	2,000	627	68	495	348	245	348	406
26	320	245	406	593	2,140	593	68	435	348	245	348	406
27	320	202	406	559	2,175	527	80	320	348	245	348	406
28	320	202	435	559	2,210	495	80	294	348	245	348	406
29	320	....	435	593	2,140	465	80	269	348	269	348	406
30	312	....	435	627	2,070	435	104	269	348	269	348	406
31	304	....	435	....	1,932	.....	128	245	....	269	....	406

Monthly Discharge of Sevier River near Gunnison, Utah, in 1906.

(Drainage area, 3,990 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	701	150	390	0.098	0.11	24,000
February	435	202	308	.077	.08	17,100
March	441	103	286	.072	.08	17,600
April	634	377	520	.130	.14	30,900
May	2,240	627	1,370	.343	.40	84,200
June	1,800	435	1,080	.271	.30	64,300
July	294	42	130	.033	.04	7,990
August	495	132	213	.053	.06	13,100
September	354	182	271	.068	.08	16,100
October	406	202	265	.066	.08	16,300
November	365	269	298	.075	.08	17,700
December	435	383	413	.104	.12	25,400
The year	2,240	42	462	0.116	1.52	335,000

Discharge Measurements of Sevier River near Gunnison, Utah, in 1907.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
June 2	G. T. Burridge	78	369	5.35	1,430
July 13	do	50	181	2.50	307
July 31	do	51	188	2.40	309
August 25	La Rue and Burridge	60	245	3.45	709

Daily Discharge in Second-feet of Sevier River near Gunnison, Utah, for 1907.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	406	406	406	465	701	1,728	870	294	465	182	406	406
2	406	435	406	435	593	1,728	825	294	406	182	406	406
3	406	435	406	435	593	1,660	825	377	406	269	406	406
4	406	435	406	406	593	1,660	741	435	406	269	406	406
5	435	406	406	377	559	1,864	627	435	406	269	406	406
6	406	406	406	377	559	1,864	559	435	377	269	406	406
7	406	435	406	348	593	1,932	559	527	377	269	406	435
8	406	435	435	320	593	2,000	527	627	377	269	406	465
9	435	435	435	348	627	2,000	495	661	377	269	406	465
10	435	435	435	377	593	2,000	465	663	377	269	406	465
11	435	406	435	377	701	2,070	465	495	377	269	406	406
12	435	406	435	406	915	2,070	406	495	348	277	435	495
13	435	406	406	406	1,065	2,070	377	495	348	286	420	495
14	435	377	406	435	1,065	2,070	377	435	348	294	406	527
15	435	377	406	435	1,065	2,000	377	406	348	294	406	527

Daily Discharge in Second-feet of Sevier River near Gunnison, Utah, in 1907—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
16	435	348	406	465	1,169	1,864	320	406	320	320	406	527
17	465	348	377	465	1,279	1,864	269	406	320	320	406	527
18	527	348	377	465	1,335	1,728	202	406	320	320	406	527
19	701	348	377	593	1,397	1,592	182	406	320	348	406	527
20	553	348	377	825	1,397	1,525	143	406	320	348	406	527
21	495	348	348	870	1,397	1,459	143	406	320	348	406	559
22	465	348	348	915	1,335	1,453	143	377	294	348	406	559
23	465	348	377	964	1,397	1,335	143	465	294	348	406	559
24	406	348	406	1,013	1,397	1,335	125	465	269	377	406	559
25	406	348	406	1,013	1,397	1,223	125	559	245	377	406	559
26	406	348	406	915	1,397	1,065	143	527	245	377	406	559
27	406	348	406	870	1,525	964	223	527	245	406	406	527
28	406	406	406	825	1,592	915	202	495	223	406	406	559
29	406	....	435	701	1,660	915	182	465	182	406	406	559
30	406	....	435	701	1,660	870	202	465	182	406	406	559
31	406	....	465	....	1,660	.....	294	465	....	406	....	559

Monthly Discharge of Sevier River near Gunnison, Utah, in 1907.

(Drainage area, 3,990 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	701	406	445	0.112	0.13	27,400
February	450	348	392	.098	.10	21,800
March	465	362	410	.103	.12	25,200
April	1,040	334	593	.149	.17	35,300
May	1,690	559	1,100	.276	.32	67,600
June	2,070	869	1,650	.414	.46	98,200
July	869	134	377	.095	.11	23,200
August	663	307	468	.117	.13	28,800
September	465	192	333	.083	.09	19,800
October	406	182	320	.080	.09	19,700
November	435	406	410	.103	.11	24,400
December	559	406	503	.126	.15	30,900
The year	2,070	134	583	0.146	1.98	422,600

Discharge Measurements of Sevier River near Gunnison, Utah, in 1908.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 15	A. D. Williams	30	137	2.00	173
June 6	do	38	161	1.80	163
June 6	do	42	145	1.80	157
June 25	do	42	135	1.70	132

Daily Discharge in Second-feet of Sevier River near Gunnison, Utah, for 1908.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	559	465	465	377	406	182	143	431	182	348	465	377
2.....	559	465	465	377	377	182	143	527	....	348	....	348
3.....	559	465	435	377	377	182	143	627	202	348	435	348
4.....	495	465	435	377	377	202	143	639	202	377	435	362
5.....	495	465	435	377	377	223	143	651	202	377	435	377
6.....	495	465	435	377	377	223	143	663	202	348	435	377
7.....	495	465	435	348	377	223	134	701	202	348	435	377
8.....	495	465	435	320	369	246	125	701	202	348	435	377
9.....	495	465	435	303	362	269	91	664	202	320	435	362
10.....	495	465	435	386	355	269	68	627	212	320	406	348
11.....	527	465	427	269	348	269	57	610	223	320	406	348
12.....	527	465	420	245	465	69	69	593	223	320	406	362
13.....	527	465	413	223	480	4	80	571	223	334	420	377
14.....	527	465	406	212	495	0	87	549	223	348	435	377
15.....	495	465	406	202	450	348	94	527	223	348	435	377
16.....	495	465	406	192	406	377	87	527	223	348	435	377
17.....	495	465	406	182	466	348	80	527	245	377	435	377
18.....	495	465	406	226	391	348	94	570	245	377	221	377
19.....	495	465	406	269	377	348	94	627	245	377	406	....
20.....	465	465	406	305	377	265	94	593	245	377	406	....
21.....	465	465	391	341	377	182	101	559	245	377	406	....
22.....	495	495	377	377	377	169	109	543	245	406	406	....
23.....	495	495	377	406	377	156	155	527	245	435	406	....
24.....	465	495	377	435	363	143	202	527	269	435	406	....
25.....	495	495	377	420	348	143	162	527	294	435	406	....
26.....	465	465	377	406	298	143	130	433	269	435	406	....
27.....	465	465	377	435	250	143	109	339	245	435	406	....
28.....	465	465	377	465	202	143	126	245	245	435	406	....
29.....	465	....	377	495	192	143	143	245	269	435	406	....
30.....	465	....	377	435	182	143	239	182	294	465	406	....
31.....	465	....	377	....	182	.....	335	182	....	465	....	....

Note—December 19 to 31, inclusive, ice conditions.

Monthly Discharge of Sevier River near Gunnison, Utah, in 1908.

(Drainage area, 3,990 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	559	465	503	0.126	0.15	30,900
February	495	465	471	.118	.13	27,100
March	465	392	416	.104	.12	25,600
April	495	192	342	.086	.10	20,400
May	511	192	363	.091	.10	22,300
June	392	143	233	.058	.06	13,900
July	362	57	136	.034	.04	8,360
August	701	192	520	.130	.15	32,000
September	307	193	234	.059	.07	13,900
October	465	320	384	.096	.11	23,600
November	465	406	430	.108	.12	25,600
December	.....	.....	365	.091	.10	22,400
The year....	701	57	366	0.092	1.26	260,000

SEVIER RIVER NEAR GUNNISON, UTAH.

This station, which was established June 29, 1900, to determine the amount of water available for irrigation at this point, is located at the highway bridge on the road to Westview precinct, about 4 miles west of Gunnison, Utah.

It is about three-fourths of a mile above the mouth of San Pitch River and below all other important tributaries.

Measurements are made from the bridge or by wading. An inclined staff gage is located just below the bridge, the datum of which has remained unchanged since the station was established.

The records are occasionally slightly affected by ice and the bed of the stream shifts somewhat during floods, but on the whole the records may be considered good.

Discharge Measurements of Sevier River near Gunnison, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 10	E. A. Porter	70	317	4.55	1,230
June 24	do	43	217	1.90	181

Daily Discharge in Second-feet of Sevier River near Gunnison, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	350	400	470	511	740	988	143	223	783	377	392	435
2	350	390	393	527	762	1,010	143	202	825	348	392	435
3	350	392	430	537	772	1,089	143	192	825	348	406	480
4	350	392	543	495	783	1,170	143	192	1,060	348	406	495
5	350	392	600	500	820	1,220	143	172	915	348	392	527
6	400	392	663	500	847	1,560	125	172	1,090	334	406	527
7	400	392	740	510	915	1,360	125	162	1,310	334	406	511
8	406	392	830	511	1,360	1,340	125	162	1,690	334	406	511
9	406	392	915	511	1,120	1,250	109	152	2,060	334	406	511
10	406	392	915	520	1,140	1,140	94	143	1,590	362	406	495
11	413	430	915	527	1,140	915	102	152	1,590	377	406	495
12	420	470	915	527	1,690	850	94	162	1,120	392	406	495
13	420	520	1,340	543	1,040	783	94	231	1,040	392	392	480
14	420	659	1,520	543	1,040	682	94	420	783	392	392	480
15	420	543	1,220	543	1,010	627	94	405	804	392	392	465
16	435	527	1,140	543	963	610	87	762	804	392	392	465
17	435	405	988	543	869	559	87	825	762	392	406	465
18	435	495	915	543	847	559	94	847	655	392	435	495
19	420	495	939	550	825	511	109	1,010	645	392	435	435
20	406	530	915	560	894	392	113	1,040	610	392	511	435
21	413	559	892	576	783	320	320	939	506	392	527	435
22	420	465	869	598	804	245	182	963	576	392	559	428
23	428	334	825	600	741	182	202	869	527	318	543	430
24	435	320	741	610	741	172	223	783	543	348	495	435
25	435	465	593	610	783	160	223	701	495	406	465	435
26	435	495	559	645	847	143	245	593	465	377	435	435
27	420	801	543	682	892	162	245	559	435	377	435	435
28	418	543	540	690	915	143	231	495	420	377	406	465
29	406	....	530	701	988	143	223	362	406	377	406	465
30	406	....	527	726	930	143	223	420	406	377	406	465
31	406	....	520	....	869	.....	223	465	....	406	....	465

Monthly Discharge of Sevier River near Gunnison, Utah, in 1909.

(Drainage area, 3,990 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre-feet
January	435	350	407	0.10	0.12	25,000
February	804	320	403	.12	.12	25,700
March	1,520	392	789	.20	.23	48,500
April	720	495	565	.14	.16	33,600
May	1,360	740	909	.23	.26	55,900
June	1,560	143	682	.17	.19	40,600
July	320	87	155	.04	.04	9,530
August	1,040	143	479	.12	.14	29,500
September	2,000	406	859	.22	.24	51,100
October	406	334	373	.9	.11	22,000
November	559	392	429	.11	.12	25,500
December	527	420	467	.12	.13	28,700
The year	2,000	87	548	.14	1.86	397,000

Discharge Measurements of Sevier River near Gunnison, Utah, in 1910.

Date	Hydrographer	Width	Area of Section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
August 21	G. H. Canfield	77.0	50.3	1.48	70
September 24	do	79.5	137.38	3.68	390
September 24	do	79.5	137.3	3.68	404
October 21	do	78.0	97.1	3.14	228
December 13	do	79	103.5	3.22	258

Daily Discharge in Second-feet of Sevier River near Gunnison, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	470	530	715	875	530	100	30	140	44	270	470	330
2.....	805	550	715	850	590	100	30	140	44	257	715	330
3.....	782	570	805	827	550	110	30	190	44	244	550	330
4.....	805	550	900	805	470	100	30	177	80	230	435	330
5.....	782	550	1,125	715	490	100	30	140	90	217	417	330
6.....	782	470	1,150	760	470	100	30	120	90	203	417	330
7.....	715	470	1,400	715	435	80	30	120	120	203	365	300
8.....	715	470	1,375	670	470	80	30	120	120	203	347	300
9.....	692	470	1,350	670	400	70	30	100	152	203	330	300
10.....	670	....	1,300	650	435	60	30	120	152	230	330	285
11.....	670	490	1,300	590	470	60	30	100	165	230	330	244
12.....	....	510	1,225	510	400	60	30	315	177	230	315	244
13.....	590	510	1,200	490	382	60	30	165	162	244	315	244
14.....	590	510	1,200	470	400	60	30	120	162	244	315	257
15.....	550	510	1,200	470	365	52	30	120	162	257	315	244
16.....	715	470	1,200	435	350	60	30	120	162	270	315	330
17.....	550	510	1,200	435	400	44	30	100	140	285	315	330
18.....	550	510	1,200	417	300	44	30	90	140	285	300	382
19.....	550	550	1,175	417	315	44	44	90	177	300	315	382
20.....	550	550	1,150	417	300	44	37	90	270	300	300	382
21.....	530	570	1,150	470	315	44	60	80	435	300	315	382
22.....	530	590	1,175	457	270	44	60	80	435	315	300	417
23.....	....	590	1,200	400	270	44	60	70	400	315	300	435
24.....	530	590	1,200	417	202	44	60	70	400	315	300	452
25.....	510	590	1,200	435	60	44	60	60	400	330	300	417
26.....	510	610	1,250	435	100	37	110	60	400	330	300	417
27.....	470	630	1,175	452	190	30	110	60	365	382	315	435
28.....	470	630	1,000	452	120	30	110	52	330	365	315	435
29.....	....	....	950	452	100	30	120	52	315	400	315	435
30.....	400	....	950	470	100	30	120	52	285	400	330	435
31.....	510	....	....	....	100	.....	120	44	....	400	....	417

Monthly Discharge of Sevier River near Gunnison, Utah, in 1910.

(Drainage area, 3,990 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	805	400	600	0.150	0.17	36,800
February	630	470	540	.135	.14	30,000
March	1,400	715	1,130	.283	.33	69,500
April	875	400	537	.134	.15	31,950
May	590	60	334	.084	.09	20,500
June	110	30	60	.015	.02	3,570
July	120	30	52	.013	.01	3,190
August	315	44	115	.029	.03	7,070
September	435	44	207	.052	.06	12,300
October	400	203	282	.071	.08	17,400
November	715	300	353	.099	.10	21,000
December	452	300	348	.097	.10	21,500
The year....	1,400	30	380	0.095	1.28	274,780

MONTHLY RUN-OFF

In Thousands of Acre Feet of Sevier River near Gunnison, Utah, 1900 to 1910.

(Drainage area, 3,990 Square Miles.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	The Year	Run-Off	
														Sec. Ft. per Sq. Mile	Depth in inches on Drainage Area
1900	.....	.....	.....	.....	.....	.....	1.60	1.11	1.31	2.09	2.32	2.89	.....	....	....
1901	7.26	6.94	2.44	2.68	7.50	2.44	0.55	1.48	0.71	0.48	2.02	4.98	40.48	0.014	0.19
1902	9.29	8.28	4.67	3.87	1.23	0.89	0.86	1.05	1.01	0.55	0.83	6.15	38.68	0.014	0.18
1903	.....	.....	13.59	4.40	4.67	7.20	1.91	1.48	1.49	1.91	2.86	.....	.....	.....	....
1904	15.68	15.26	1.69	1.36	5.71	3.51	1.58	2.02	1.76	1.58	3.06	5.18	58.49	0.020	0.28
1905	.....	17.66	12.24	3.99	13.65	9.76	1.13	1.99	2.75	5.49	5.44	.....	.....	.....	....
1906	24.00	17.10	17.60	30.90	84.20	64.30	7.99	13.10	16.10	16.30	17.70	25.40	335.00	0.116	1.52
1907	27.40	21.80	25.20	25.30	67.00	98.20	22.20	28.80	19.80	19.70	24.40	30.90	422.00	0.146	1.98
1908	20.90	27.10	25.60	20.40	22.30	13.90	8.36	32.00	13.90	23.60	25.60	22.40	266.00	0.092	1.26
1909	25.00	25.70	48.50	22.60	55.90	40.60	9.53	29.50	51.10	22.90	25.50	28.70	397.00	0.137	1.86
1910 ..	26.80	20.00	63.50	31.95	20.50	3.57	3.19	7.07	12.30	17.40	21.00	21.50	274.78	0.095	1.28
Mean.	22.04	18.88	22.20	16.85	28.22	24.44	5.45	10.90	11.02	10.18	11.90	16.25	229.05	0.793	1.07

BEAVER RIVER NEAR MINERSVILLE, UTAH.

This station, which was established April 13, 1909, to determine the amount of unappropriated water available for irrigation at this point, is located about one-half mile below the Beaver County bridge and about three-fourths of a mile northwest of Minersville, Utah.

The station is below all tributaries, Indian Creek, North Creek, and South Creek entering 10, 12, and 15 miles, respectively, above the station. The Minersville Canal diverts all the normal low-water flow at a point about 2 miles above the station, at which the river is usually dry during several months in the summer.

Measurements are made from a footbridge, built for the purpose. An inclined staff gage is located just above the bridge. The gage datum has remained unchanged since the station was established.

The records are not affected by ice nor by artificial control below. The section is fairly permanent and the records may be considered good.

Discharge Measurements of Beaver River near Minersville, Utah, in 1909.

Date.	Hydrographer.	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 13	E. A. Porter	24	38.3	2.60	68
June 3	do	30	80.4	3.95	343
October 4	do	19.5	21.9	1.85	8.4

Daily Discharge in Second-feet of Beaver River near Minersville, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	155	161	.....	....	93	17	17	68
2	....	....	....	....	155	268	.....	....	107	17	11	68
3	....	....	....	....	174	326	.....	....	30	9	11	68
4	....	....	....	....	218	358	.....	....	38	9	11	57
5	....	....	....	....	282	358	.....	....	47	11	6	68
6	....	....	....	....	326	440	.....	....	242	11	6	68
7	....	....	....	....	374	423	.....	....	122	11	6	68
8	....	....	....	....	374	493	.....	....	57	11	6	68
9	....	....	....	....	406	268	.....	....	47	11	30	80
10	....	....	....	....	457	230	.....	....	47	6	30	68
11	....	....	....	....	475	174	.....	26	38	6	30	68
12	....	....	....	68	423	138	.....	30	30	6	38	68
13	....	....	....	68	342	93	.....	26	23	6	38	68
14	....	....	....	68	282	93	.....	....	17	6	38	68
15	....	....	....	93	230	68	.....	17	23	6	57	57
16	....	....	....	107	139	57	.....	93	11	6	57	57
17	....	....	....	130	138	23	.....	57	6	6	57	57
18	....	....	....	138	138	17	.....	12	6	6	57	57
19	....	....	....	195	138	.....	.....	164	6	6	68	57
20	....	....	....	195	155	.....	.....	122	11	6	68	57

Daily Discharge in Second-feet of Beaver River near Minersville, Utah, for 1909—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21	....	....	....	195	174	.....	.....	47	11	11	68	47
22	....	....	....	155	218	.....	.....	42	11	11	68	47
23	....	....	....	155	218	.....	.....	30	11	11	68	47
24	....	....	....	80	184	.....	.....	6	23	11	80	62
25	....	....	....	80	138	.....	.....	2	62	6	80	57
26	....	....	....	86	138	.....	.....	11	80	6	93	68
27	....	....	....	138	184	.....	.....	26	17	6	93	74
28	....	....	....	218	206	.....	.....	6	6	6	93	122
29	....	....	....	218	195	.....	.....	2	3	6	80	122
30	....	....	....	184	164	.....	.....	....	17	6	68	122
31	....	....	....	....	138	.....	.....	80	....	....	....	57

Monthly Discharge of Beaver River near Minersville, Utah, in 1909.

(Drainage area, 549 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
April 12-30	218	68	135	0.25	0.17	5,090
May	475	130	236	.43	.50	14,500
June	493	0	133	.24	.27	7,910
July	0	0	0	.0	.00	0
August	164	0	27	.05	.06	1,670
September	242	2	41	.08	.08	2,460
October	17	6	8	.02	.02	512
November	93	6	48	.09	.10	2,840
December	122	47	68	.13	.14	4,210
The period	493	0	.....	.....	.....	39,200

Discharge Measurements of Beaver River near Minersville, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
December 16	G. C. Baldwin	26.5	26.9	2.13	34

Daily Discharge in Second-Feet of Beaver River near Minersville, Utah for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	375	58	58	49	80	.....	.....	....	....	....	26	41
2.....	605	58	58	49	68	.....	.....	....	....	....	26	41
3.....	120	58	68	49	68	.....	.....	....	....	....	26	41
4.....	80	63	68	49	41	.....	.....	....	....	....	33	41
5.....	80	58	68	41	37	.....	.....	....	....	....	33	41
6.....	80	58	63	41	26	.....	.....	....	....	....	33	41
7.....	120	63	63	49	8	.....	.....	....	....	....	33	41
8.....	113	58	68	41	.....	.....	.....	....	....	....	33	41
9.....	154	63	68	41	.....	.....	.....	....	....	....	33	41
10.....	154	45	80	41	.....	.....	.....	....	....	....	33	41
11.....	106	41	68	33	.....	.....	.....	....	....	....	33	41
12.....	74	41	106	41	3	.....	.....	....	....	....	33	41
13.....	68	41	86	63	5	.....	.....	....	....	....	33	41
14.....	80	41	56	58	2	.....	.....	....	41	....	33	41
15.....	80	49	4	49	.....	.....	.....	....	1	....	33	41
16.....	136	41	37	49	.....	.....	.....	....	....	....	33	41
17.....	164	49	4	49	.....	.....	.....	....	....	11	33	41
18.....	80	45	3	41	.....	.....	.....	....	....	5	33	41
19.....	80	41	2	41	.....	.....	.....	....	20	5	33	41
20.....	68	41	63	41	.....	.....	.....	....	....	5	33	41
21.....	68	45	80	41	.....	.....	.....	....	....	15	33	41
22.....	68	45	92	41	.....	.....	.....	....	....	15	33	41
23.....	92	54	106	45	.....	.....	.....	....	....	15	33	41
24.....	86	49	92	58	.....	.....	.....	....	....	26	33	41
25.....	92	49	99	68	.....	.....	.....	....	....	26	33	41
26.....	80	54	106	80	.....	.....	.....	....	....	26	33	41
27.....	58	58	86	80	.....	.....	.....	....	....	33	41	41
28.....	58	54	113	92	.....	.....	.....	....	....	33	41	41
29.....	58	....	74	120	.....	.....	.....	....	....	33	41	41
30.....	58	....	58	92	.....	.....	.....	....	....	26	41	41
31.....	58	....	54	....	.....	.....	.....	....	....	26	....	41

Note—River dry from May 8 until October 17, except as noted.

Monthly Discharge of Beaver River near Minersville, Utah, in 1910.

(Drainage area, 549 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	605	58	116	0.21	0.24	7,130
February	63	41	51	.09	.09	2,820
March	113	0	67	.12	.14	4,120
April	120	33	54	.10	.11	3,240
May	80	0	11	.01	.01	670
June	0	0	0	.0	.0	0
July	0	0	0	.0	.0	0
August	0	0	0	.0	.0	0
September	41	0	2	.0	.0	122
October	33	0	10	.01	.01	595
November	41	26	33	.06	.07	1,990
December	41	41	41	.07	.09	2,520
The year....	605	0	32	0.06	0.76	23,200

SANTA CLARA RIVER NEAR CENTRAL, UTAH.

This Station, which is located ——— miles below the town of Central, below the mouth of Pine Valley, was established April 21, 1909, to determine the amount of water discharging from Pine Valley.

Discharge Measurements of Santa Clara River near Central, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 21	E. A. Porter	20	31.0	3.8	10.2
June 1	do	30	38.5	3.60	60.2
July 15	do	20	19.5	3.12	15.1
October 6	do	22.5	30.9	3.60	39.3
October 16	do	22.5	29.6	3.50	30.4

Daily Discharge in Second-feet of Santa Clara River near Central, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	117	69	27	15	475	37	27	37
2	....	....	....	....	106	77	27	15	100	37	30	37
3	....	....	....	....	117	69	46	15	64	43	27	34
4	....	....	....	....	124	75	32	15	64	43	25	32
5	....	....	....	....	124	75	27	12	64	37	25	32
6	....	....	....	....	136	75	27	12	64	37	25	32
7	....	....	....	....	136	75	27	15	56	37	25	32
8	....	....	....	....	136	66	27	15	49	37	25	32
9	....	....	....	....	132	56	23	15	43	37	27	43
10	....	....	....	....	132	56	23	15	37	37	27	43
11	....	....	....	....	110	50	21	15	37	34	27	37
12	....	....	....	....	110	50	21	12	37	34	27	32
13	....	....	....	....	90	44	21	14	34	32	27	32
14	....	....	....	....	77	41	15	12	34	32	27	30
15	....	....	....	....	77	41	15	12	32	32	27	30
16	....	....	....	....	86	41	15	19	32	34	27	30
17	....	....	....	....	77	41	15	23	32	32	27	27
18	....	....	....	....	77	41	15	23	32	32	27	27
19	....	....	....	....	74	34	15	23	27	32	27	27
20	....	....	....	....	74	34	15	23	27	30	27	30
21	....	....	....	102	84	34	15	23	27	30	30	30
22	....	....	....	92	84	29	12	23	27	30	30	32
23	....	....	....	92	74	29	15	19	27	30	30	32
24	....	....	....	79	63	26	15	19	27	30	30	27
25	....	....	....	79	63	26	15	19	27	30	30	27
26	....	....	....	89	72	26	15	17	23	30	32	27
27	....	....	....	109	72	22	15	19	43	30	32	27
28	....	....	....	132	63	22	15	19	64	30	34	27
29	....	....	....	140	69	24	15	23	49	30	34	27
30	....	....	....	96	69	24	15	23	43	30	34	27
31	....	....	....	....	69	.....	15	37	....	27	....	393

Monthly Discharge of Santa Clara River near Central, Utah, in 1909.

(Drainage area, 68 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
*April	140	79	101	.....	.....	2,000
May	136	63	93	1.37	1.58	5,750
June	77	22	46	0.68	0.76	2,700
July	46	12	20	.29	.34	1,200
August	37	12	18	.26	.30	1,100
September	475	23	57	.84	.94	3,400
October	43	27	33	.48	.56	2,050
November	34	25	28	.41	.49	1,700
December	393	27	43	.63	.73	2,650
The period	475	12	45	0.62	5.70	22,550

*10 days.

Discharge Measurements of Santa Clara River near Central, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 19	E. A. Porter	27	24.7	3.43	37
January 29	do	27	25.7	3.35	28
April 27	Leonard Tanner	29	52.4	3.9	116
June 17	do	21.2	15.47	3.35	22
August 4	do	20.5	13.1	3.25	12
September 16	do	21.5	15.12	3.3	18
October 11	do	22	11.8	3.2	9
November 18	do	21	12.83	3.25	12
December 22	G. C. Baldwin	21.3	11.7	3.22	9

Daily Discharge in Second-feet of Santa Clara River near Central, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1.....	835	25	25	55	107	39	18	14	9	9	9	9
2.....	....	25	37	63	98	32	18	14	9	9	9	9
3.....	....	....	47	63	89	32	18	14	18	9	9	9
4.....	....	....	63	47	80	25	18	14	14	9	9	9
5.....	....	....	80	47	80	25	14	14	14	9	9	9
6.....	....	....	80	55	80	25	14	9	14	9	9	9
7.....	....	....	80	55	80	32	9	9	14	9	9	9
8.....	....	....	80	55	80	32	9	9	9	9	9	9
9.....	....	18	63	55	80	32	9	9	9	9	9	9
10.....	....	18	63	63	89	25	9	18	9	9	9	9
11.....	....	25	63	80	89	25	9	32	9	9	9	9
12.....	....	32	63	98	89	25	9	18	9	9	9	9
13.....	....	47	55	98	98	18	9	18	14	9	13	9
14.....	....	47	55	80	98	18	9	18	14	9	18	9
15.....	....	25	55	80	98	18	9	18	14	18	18	9
16.....	....	18	55	80	98	18	9	18	18	18	18	9
17.....	....	25	63	89	98	25	14	14	18	13	13	9
18.....	....	25	71	89	89	25	9	14	14	13	13	9
19.....	....	25	71	89	80	25	9	14	80	13	13	9
20.....	....	25	98	89	63	18	9	14	14	13	9	9
21.....	32	25	107	89	63	18	9	14	14	9	9	9
22.....	32	25	116	98	55	14	14	18	9	9	9	9
23.....	25	25	98	98	55	14	18	18	9	9	9	9
24.....	25	32	63	98	47	18	14	14	9	9	9	9
25.....	....	25	63	98	47	13	32	14	9	9	9	9
26.....	....	25	63	98	47	18	18	14	9	9	13	9
27.....	....	25	55	116	47	18	18	14	9	9	13	9
28.....	....	25	55	116	47	18	18	9	9	9	13	9
29.....	....	....	47	135	47	18	14	9	9	9	9	9
30.....	....	....	47	125	39	18	14	9	9	9	9	9
31.....	25	....	47	....	.....	.....	14	9	....	9	....	9

Monthly Discharge of Santa Clara River near Central, Utah, in 1910.

(Drainage area, 68 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per Square Mile	Depth in inches on drainage area	Total in Acre feet
January	835	25	*100	1.47	1.69	6,150
February	47	18	25	.37	.38	1,360
March	116	25	65	.96	1.10	4,000
April	116	47	83	1.28	1.43	4,950
May	107	39	74	1.09	1.22	4,550
June	39	14	22	.32	.36	1,310
July	32	9	13	.19	.22	800
August	32	9	14	.20	.23	860
September	80	9	13	.19	.21	770
October	18	9	10	.15	.17	620
November	18	9	10	.15	.16	600
December	9	9	9	.13	.15	550
The year....	835	9	30	0.54	7.32	26,520

*Estimated.

SANTA CLARA RIVER NEAR ST. GEORGE, UTAH.

This station was established April 16, 1909. It is located below all diversions and is used to determine the amount of surplus water discharging into the Virgin River, the junction being about 2½ miles below the gaging station. Conditions are not good for accurate results at any stage.

Discharge Measurements of Santa Clara River near St. George, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
April 19	E. A. Porter	.....	34.4	3.1	172.0
May 27	do	18.5	13.2	2.02	34.7
May 31	do	20.0	14.4	2.1	44.6
July 14	do	5.0	1.20	1.35	0.82
October 8	do	25.5	9.50	2.62	32.8
October 15	do	18	7.6	2.30	20.1

Daily Discharge in Second-feet of Santa Clara River near St. George, Utah, for 1909.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	....	....	79	42	.....	....	....	3	1	28
2	....	....	....	....	69	42	.....	....	....	3	1	28
3	....	....	....	....	69	50	.....	....	....	28	....	28
4	....	....	....	....	79	50	.....	....	....	35	....	22
5	....	....	....	....	90	59	.....	....	....	35	....	22
6	....	....	....	....	102	59	.....	....	....	35	....	22
7	....	....	....	....	115	59	.....	....	....	43	9	22
8	....	....	....	....	115	59	.....	....	....	35	18	22
9	....	....	....	....	115	50	.....	....	....	35	28	61
10	....	....	....	....	115	42	.....	....	....	35	43	43
11	....	....	....	....	102	20	.....	....	....	35	17	38
12	....	....	....	....	79	16	.....	....	....	28	12	33
13	....	....	....	....	69	.5	.....	....	....	17	12	28
14	....	....	....	....	69	.5	.....	....	....	17	17	25
15	....	....	....	....	69	.5	.....	....	....	17	22	22
16	....	....	....	145	69	.5	.....	....	....	17	18	20
17	....	....	....	179	69	.5	.....	....	....	14	16	18
18	....	....	....	150	59	.5	.....	....	....	12	12	17
19	....	....	....	120	59	.5	.....	....	....	7	12	20
20	....	....	....	90	59	.5	.....	....	....	7	12	22
21	....	....	....	90	59	.5	.....	....	....	7	14	22
22	....	....	....	79	69	.5	.....	....	....	7	17	22
23	....	....	....	59	64	.5	.....	....	....	3	17	28
24	....	....	....	50	59	.5	.....	....	....	3	17	28
25	....	....	....	60	50	.5	.....	....	....	3	17	28
26	....	....	....	69	42	.5	.....	....	....	3	30	28
27	....	....	....	59	42	.5	.....	....	....	3	43	28
28	....	....	....	69	42	.5	.....	....	....	3	36	22
29	....	....	....	69	69	.5	.....	....	....	3	28	22
30	....	....	....	59	56	.5	.....	....	....	3	28	22
31	....	....	....	....	42	.....	.....	....	....	2	....	153

Monthly Discharge of Santa Clara River near St. George, Utah, in 1909.

(Drainage area, 475 Square Miles.)

Month	Discharge in Second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....
*April	179	50	90	.....	.....	2,700
May	115	42	72	0.15	0.17	4,450
June	59	0.5	19	.04	.05	1,100
July	.....	.....	0.5	.....	.....	.....
August	.....	.....	0.5	.....	.....	.....
September	.....	.....	.....	.....	.....	.....
October	43	2	16	.03	.04	1,000
November	43	0	17	.03	.03	1,000
December	153	17	30	.06	.07	1,850
The period	179	0	31	0.06	0.36	12,100

*15 days.

Discharge Measurements of Santa Clara River near St. George, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 22	E. A. Porter	18	13.6	2.85	37
April 13	Leonard Tanner	16	17.00	2.42	36
April 28	do	19	20.33	2.8	93
May 12	do	14	13.05	2.1	51
June 4	do	9	3.7	1.3	8
June 20	do	9	3.62	1.28	8
July 11	do	8	2.5	1.1	4
August 2	do	8	3.66	1.4	11
August 14	do	11.5	5.62	1.40	16
September 14	do	12	5.80	1.5	16
October 6	do	8	2.85	1.2	5
November 2	do	9.4	4.95	1.35	14
November 21	do	12.5	8.92	1.6	32
December 21	G. C. Baldwin	13.2	7.98	1.57	27

Daily Discharge in Second-feet of Santa Clara River near St. George, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	....	....	22	....	.....	8	8	11	....	6	....	....
2	....	35	....	67	98	10	8	13	....	....	14	21
3	....	....	32	....	.....	11	11	8	5	5	....	21
4	....	30	....	61	80	10	6	11	20	....	12	....
5	....	32	56	....	76	13	5	11	....	5	....	21
6	....	35	....	52	73	10	6	10	....	....	16	....
7	....	....	75	....	67	10	8	....	6	7	16	....
8	....	30	....	49	64	7	7	6	6	....	14	21
9	....	28	72	....	64	10	6	6	....	7	12	21
10	....	....	....	52	52	10	5	34	6	....	....	21
11	....	22	66	....	55	8	5	43	....	6	14	....
12	....	....	....	49	49	8	6	21	6	....	....	21
13	....	22	60	....	55	8	5	18	....	....	....	....
14	....	....	....	52	55	7	6	....	15	6	24	21
15	....	25	70	....	58	8	6	12	....	34	18	18
16	....	....	....	55	43	10	5	9	10	....	....	18
17	....	28	78	....	43	8	7	8	11	39	....	....
18	....	....	....	55	58	8	5	9	....	....	21	....
19	....	25	90	....	43	8	4	8	200	24	27	18
20	....	....	....	58	46	10	.....	5	31	....	....	....
21	38	22	107	....	55	15	4	....	....	24	27	24
22	40	....	....	61	43	8	4	5	25	....	....	24
23	35	20	102	....	43	7	.....	6	20	....	24	24
24	38	....	....	67	40	8	4	....	18	21	....	24
25	32	18	100	....	40	6	4	6	....	....	27	....
26	35	....	....	80	18	7	.....	....	10	....	27	24
27	40	20	100	....	43	8	8	5	10	18	....	....
28	40	....	....	90	20	6	.....	5	....	14	27	24
29	40	....	97	....	8	8	31	5	7	16	27	24
30	....	....	....	108	8	7	40	....	....	....	18	21
31	38	....	81	....	20	.....	15	5	....	16	....	....

Monthly Discharge of Santa Clara River near St. George, Utah, in 1910.

(Drainage area, 475 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	.....	32	*253	0.54	0.62	15,700
February	36	18	26	.05	.06	1,430
March	107	22	76	.16	.18	4,690
April	108	49	63	.13	.15	3,760
May	102	8	51	.11	.12	3,130
June	15	6	9	.02	.02	520
July	40	4	8	.02	.02	520
August	43	5	10	.02	.02	630
September	200	5	19	.04	.04	1,150
October	30	5	16	.03	.04	950
November	27	12	20	.04	.05	1,190
December	24	18	21	.04	.05	1,320
The year	200	4	48	0.10	1.37	34,990

*Estimated from data by Mr. J. X. Gardner, Salt Lake City.

VIRGIN RIVER NEAR VIRGIN CITY, UTAH.

This station was established April 18, 1909, and is located about ½ mile above and east of the town of Virgin, about 600 feet below the mouth of North Creek.

Discharge Measurements of Virgin River near Virgin City, Utah, in 1909.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
May 30	E. A. Porter	89.0	139.0	2.65	457
July 13	do	84.0	64.1	1.65	89
July 23	Walter Spencer	90.0	151.0	2.8	557
October 13	E. A. Porter	56	56.1	2.80	163

Discharge Measurements of Virgin River near Virgin City, Utah, in 1910.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet.	*Sq. ft.*	*Feet.*	*Sec.-ft.*
January 26	E. A. Porter	127	67	2.85	204
April 15	Leonard Tanner	118	113	3.57	505
May 6	do	114	104	3.42	397
June 28	do	115	59	2.25	130
August 17	do	110	40	2.1	81
September 23	do	61	44	2.75	134
November 9	do	64	41.8	3.00	133
December 19	C. C. Badlwin	71	44.8	3.03	119

Daily Discharge in Second-feet of Virgin River near Virgin City, Utah, for 1910.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2,770	205	445	Estimated mean daily discharge, 630 second-feet.	755	155	98	....	127	....	....	111
2	530	205	501		720	140	112	....	142	....	100	111
3	205	240	530		650	130	127	....	1,350	...	90	....
4	173	259	620		472	120	112	112	174	138	100	111
5	205	240	620		418	110	112	335	210	....	90	100
6	173	205	615		393	100	112	730	142	100	....	....
7	158	173	620		450	100	112	....	158	....	100	111
8	205	189	530		425	100	98	....	158	80	111	100
9	173	144	650		380	100	84	....	142	90	111	111
10	158	205	650		330	90	98	210	174	....	....	....
11	189	240	685		390	105	98	174	142	252	111	122
12	205	240	650		300	105	84	174	174	....	111	122
13	205	240	685		395	100	98	112	158	112	122	111
14	205	259	720		305	100	84	127	1,510	292	274	111
15	222	240	705		285	110	81	127	800	1,020	171	....
16	222	222	830		315	110	98	112	270	338	....	....
17	173	205	1,050		340	110	127	....	1,230	....	80	122
18	205	189	1,140		260	100	112	142	....	189	70	122
19	189	205	1,310		245	100	112	112	182	....	....	122
20	205	222	1,400		270	120	98	142	167	100	90	111

Daily Discharge in Second-feet of Virgin River near Virgin City, Utah, for 1910—Continued.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
21.....	189	240	1,190	Estimated daily discharge, 620 second-feet.	300	120	98	....	....	....	90	122
22.....	158	240	2,410		240	100	112	....	138	70	....	111
23.....	144	259	1,240		220	80	84	....	138	60	....	....
24.....	205	240	1,050		210	105	98	875	....	....	100	....
25.....	205	222	870		190	85	98	127	....	90	100	274
26.....	189	240	650		190	105	84	127	138	100	122	122
27.....	173	259	590		180	85	.....	112	138	90	100	....
28.....	205	300	720		160	127	.....	112	138	100	100	274
29.....	205	....	472		160	127	.....	112	....	100	90	....
30.....	205	....	650		180	112	.....	98	138	100	111	274
31..	205	....	530		165	.....	.....	98	....	100	....	....

Monthly Discharge of Virgin River near Virgin City, Utah, in 1910.

(Drainage area, 905 Square Miles.)

Month	Discharge in second-feet				Run-off	
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in Acre-feet
January	2,770	144	286	0.32	0.36	17,600
February	300	144	226	.25	.26	12,600
March	2,410	445	991	1.10	1.26	60,900
April	1,570	755	822	1.15	1.28	50,500
May	755	160	620	.37	.42	38,100
June	155	80	108	.12	.13	6,430
July	127	84	100	.11	.12	6,150
August	875	98	247	.27	.31	15,200
September	1,510	127	317	.35	.39	18,900
October	1,020	60	163	.18	.21	10,000
November	274	70	108	.12	.13	6,430
December	274	100	147	.16	.19	9,040
The year....	2,770	60	337	0.37	5.06	245,550

MISCELLANEOUS MEASUREMENTS.

Date 1908	Stream	Locality	Discharge *Sec.-ft.*
July 11	Ten Mile Creek, near Marysvale		2.26
December 4	do		1.20
September 10	Cottonwood Creek, near Marysvale		6.25
December 4	do		3.38
November 30	City Creek near Junction		2.10
December 5	Bullion Creek near Marysvale		8.70
July 7	Barnson Springs near Junction		15.94

Date 1909	Stream	Locality	Discharge *Sec.-ft.*
September 15	Strawberry River dam site, Strawberry Valley		41.0
September 12	Trail Hollow Creek, Strawberry Valley		4.84
June 3	Payson Creek near Payson		69
July 3	do		23
September 17	do		10

Date 1910	Stream	Locality	Discharge *Sec.-ft.*
December 2	Barnson Springs near Junction		14.48
May 20	Trail Hollow Creek, Strawberry Valley		14.0
July 23	do		2.0
August 20	do		2.0
August 22	Duck Creek near Duck Lake, Kane County		12.8
June 14	South Fork Sevier River, Kingston		190.0
June 15	do		267.0
June 23	do		128.0
June 17	Long Canal ¼ mile below Hatchtown Diversion Dam, near Panguitch		83.0
June 17	East Bench Canal near head, near Panguitch		62.0
August 5	Payson Creek near Payson		9.7
August 24	do		10.0

MONTHLY AND ANNUAL PRECIPITATION.

Beaver, Beaver County.

Elevation, 6,000 Feet.

Applicable to Beaver Creek.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1889.....	....	....	....	....	1.20	0.86	0.38	1.93	0.40	1.62	0.14	3.79	.....
1890.....	1.03	0.67	0.53	0.60	0.12	T.	0.51	0.44	1.22	0.17	0.27	0.50	6.06
1891.....	0.41	1.17	0.33	1.09	0.61	1.14	1.36	1.25	1.24	T.	0.00	1.50	10.10
1892.....	0.81	....	1.17	1.12	....	0.10	1.20	....	....	....	....	1.75	....
1893.....	0.45	1.38	1.45	2.04	0.50	0.00	....	....	....	....	....	....	.....
1904.....	....	....	....	....	....	....	1.20	1.13	0.38	0.67	0.00	0.40	.....
1905.....	0.06	2.35	1.34	1.13	2.49	0.00	0.47	0.95	2.07	0.30	0.85	0.20	12.21
1906.....	1.10	1.09	3.59	1.62	1.86	0.25	1.00	2.04	1.27	0.00	0.85	0.70	14.87
1907.....	1.20	....	0.60	1.43	3.01	....	....	....	0.16	1.99	0.25	0.93	.....
1908.....	0.90	1.23	0.82	0.18	2.34	0.10	2.07	1.53	2.28	1.87	0.65	1.06	15.04
1909.....	1.30	1.77	1.38	1.25	0.12	T.	1.12	5.12	1.83	0.20	2.36	1.56	18.01
1910.....	1.19	0.42	1.38	0.18	0.14	0.86	2.08	2.36	1.77	2.73	1.10	1.72	15.93
Mean..	0.85	1.26	1.26	1.06	1.24	0.33	1.14	1.86	1.26	0.96	0.65	1.41	13.28

Castle Dale, Emery County.

Elevation, 5,500 Feet.

Applicable to San Rafael River, Cottonwood Creek, Huntington Creek, and Green River.

1899.....	1.25	1.00	0.38	T.	0.00	0.29	1.41	1.24	0.25	0.25	0.45	0.27	6.79
1900.....	0.00	0.00	0.00	1.38	0.05	0.25	0.00	0.23	2.18	0.00	0.40	0.00	3.49
1901.....	0.25	1.46	0.11	0.38	0.28	0.10	0.82	1.83	0.00	0.40	T.	T.	5.63
1902.....	0.20	0.11	0.62	0.30	0.45	T.	0.15	0.23	0.29	0.00	1.72	0.10	4.17
1903.....	0.08	0.28	0.57	0.10	0.13	1.01	0.74	0.15	0.49	0.78	T.	0.00	4.33
1904.....	1.00	0.30	0.45	0.15	1.00	0.69	0.09	0.35	0.30	1.35	0.00	0.00	5.68
1905.....	0.50	2.00	0.93	0.90	0.40	0.00	0.45	0.98	2.23	0.80	2.55	0.25	11.99
1906.....	1.59	T.	0.97	2.71	0.60	T.	0.77	0.89	0.60	0.40	2.30	1.88	12.71
1907.....	0.00	0.40	T.	0.40	1.03	1.16	0.07	2.91	0.62	1.63	0.47	0.70	9.39
1908.....	0.70	1.50	0.45	0.86	1.25	0.40	1.30	0.75	1.25	0.70	0.55	0.80	10.51
1909.....	1.44	1.66	T.	0.80	0.05	0.41	T.	3.00	1.60	0.00	2.28	2.08	13.32
1910.....	0.92	0.70	0.50	0.00	0.00	2.25	0.65	0.60	1.05	0.85	0.95	1.15	9.62
Mean..	0.66	0.79	0.42	0.67	0.44	0.55	0.54	1.10	0.91	0.59	0.97	0.60	8.14

Coyoto, Garfield County.

Elevation, 6,250 Feet.

Applicable to Sevier River.

1901.....	...	...	...	...	...	0.20	0.72	1.70	0.00	...	...	0.10	...
1902.....	0.45	0.20	0.95	1.40	0.26	0.26	0.54	0.48	0.30	0.18	2.19	0.80	8.01
1903.....	0.01	0.03	0.35	0.01	0.53	0.26	0.47	0.30	0.11	0.06	0.00	T.	2.13
1904.....	T.	0.08	0.05	0.50	0.17	2.30	0.11	0.95	0.40	0.10	0.00	0.40	5.06
1905.....	0.47	0.99	0.76	0.88	1.82	0.00	0.38	0.75	1.46	0.30	1.69	0.01	9.45
1906.....	2.23	0.10	1.38	2.00	0.31	0.25	2.01	1.48	2.55	T.	1.25	0.70	14.20
1907.....	...	...	...	...	1.05	0.00	...	2.15	0.80	2.20	...	0.40	...
1908.....	0.35	0.40	1.10	0.25	0.90	0.13	1.20	0.17	1.40	1.85	0.10	0.70	8.55
Mean..	0.59	0.30	0.76	0.84	0.84	0.44	0.78	1.00	0.88	0.67	0.87	0.39	8.35

Escalante, Garfield County.

Elevation, 5,700 Feet.

Applicable to Escalante River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1901.....	....	....	....	....	0.16	....	...	3.46	T.	0.56	T.	T.	...
1902.....	1.90	0.30	2.55	0.90	0.23	T	1.00	1.40	0.25	0.21	1.52	...	...
1903.....	1.50	0.50	0.30	0.56	0.60	1.43	1.87	0.48	1.10	0.41	0.00	0.00	8.75
1904.....	0.10	0.38	1.55	0.54	0.60	0.21	0.86	2.58	1.61	0.46	0.00	0.10	8.99
1905.....	1.40	2.90	1.20	...	0.87	T.	...	...	...	...	...	...	...
1906.....	...	...	...	...	0.66	0.00	...	...	1.21	0.14	2.31	2.99	...
1907.....	2.90	1.58	1.06	0.64	1.40	0.35	0.58	1.53	0.33	2.70	0.19	0.40	13.66
1908.....	1.60	1.17	0.05	0.48	0.63	0.08	0.20	1.06	1.61	1.39	0.17	1.40	9.84
1909.....	1.31	0.90	0.23	0.05	0.03	0.00	1.63	4.21	2.61	0.00	1.40	1.24	13.61
1910.....	2.45	1.00	0.32	0.43	0	0.72	3.21	2.72	1.63	1.31	0.22	1.04	15.05
Mean ..	1.64	1.09	0.91	0.51	0.58	0.31	1.34	2.18	1.15	0.80	0.65	0.90	12.06

Fort Duchesne, Uinta County.

Elevation, 5,000 Feet.

Applicable to Uinta River.

1890.....	1.01	2.05	0.02	0.21	0.00	0.00	1.35	0.85	0.32	1.17	0.03	0.27	7.28
1891.....	0.22	0.28	0.57	0.99	0.96	0.34	0.24	1.42	1.46	0.00	0.00	1.06	7.54
1892.....	0.46	0.30	0.78	1.24	1.35	0.03	0.16	0.85	T.	0.46	0.14	0.46	6.23
1893.....	0.42	0.44	3.10	2.01	0.92	0.00	0.47	0.57	0.36	0.16	0.24	0.49	9.18
1894.....	0.08	0.19	0.56	T.	0.20	0.34	0.26	0.30	1.88	0.34	0.00	0.69	4.84
1895.....	0.09	0.03	0.09	0.00	1.53	1.02	0.17	0.20	0.03	0.13	0.90	0.31	4.50
1896.....	0.06	0.09	0.14	0.20	1.40	0.03	1.46	0.64	2.23	0.54	0.20	0.00	6.98
1897.....	0.87	0.90	0.28	0.01	0.16	0.02	0.17	0.21	4.61	3.00	0.00	1.20	11.43
1898.....	0.60	0.10	0.75	0.17	0.01	0.15	0.06	0.66	0.08	0.05	0.13	0.10	4.36
1899.....	0.20	0.40	2.10	0.60	T.	0.05	0.71	0.90	0.00	0.83	0.77	0.12	6.68
1900.....	0.35	0.00	0.00	1.72	0.15	0.06	0.03	0.40	1.25	0.27	0.51	0.30	5.04
1901.....	0.25	0.95	0.15	0.20	0.60	0.08	0.14	2.47	0.03	0.64	0.16	0.51	6.18
1902.....	0.17	0.05	0.14	0.70	0.30	0.50	0.05	...	...	0.00	...	...	...
1903.....	0.40	0.80	0.08	0.00	1.02	0.28	1.49	0.20	1.20	0.48	0.00	0.00	5.95
1904.....	0.55	0.01	1.10	0.25	2.78	0.70	0.37	0.66	0.32	0.44	0.00	0.07	7.25
1905.....	0.50	0.60	1.55	0.69	0.89	0.10	0.09	0.06	5.92	0.28	1.25	0.20	12.13
1906.....	0.35	0.30	1.10	0.37	1.19	0.10	0.30	1.50	0.95	0.58	1.83	0.60	9.17
1907.....	0.50	T.	0.00	0.25	1.02	1.72	0.95	0.80	0.15	0.70	0.23	0.54	5.86
1908.....	0.39	0.70	1.10	0.40	0.30	0.77	0.13	1.14	1.62	1.26	0.46	1.40	9.61
1909.....	2.40	1.60	0.40	0.65	0.10	T.	0.65	1.26	0.67	0.08	1.09	0.66	9.56
1910.....	0.62	0.44	0.12	0.10	0.18	0.39	0.67	0.61	0.64	0.91	0.25	0.37	5.30
Mean ..	0.50	0.48	0.67	0.51	0.75	0.30	0.50	0.79	1.97	0.59	0.41	0.44	7.91

Greenriver, Emery County.

Elevation, 4,080 Feet.

Applicable to Green River, Price River and San Rafael River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1893.....	...	...	0.94	0.02	0.45	...	0.04	0.93	0.57	...	0.20	...	...
1894.....	...	...	...	...	...	...	...	...	...	...	0.00	0.50	...
1895.....	0.75	...	...	...	0.50	...	0.00	0.12	...	...	...	...	...
1896.....	...	...	...	...	...	...	...	...	...	...	...	...	...
1897.....	...	...	...	...	0.30	...	..	...	...	...	...	...	...
1898.....	...	...	...	...	...	...	...	...	...	...	...	...	...
1899.....	...	...	...	...	...	...	...	...	...	0.06	0.23	0.07	...
1900.....	0.02	0.03	T.	0.86	0.00	0.05	0.00	0.66	1.27	0.50	0.27	0.00	3.66
1901.....	0.19	1.33	T.	0.25	0.73	0.11	T.	0.97	0.00	0.18	0.00	0.00	3.76
1902.....	0.28	0.63	0.08	0.00	0.10	0.09	T.	0.62	1.66	0.03	2.38	0.52	6.39
1903.....	0.00	0.55	0.02	0.50	0.67	0.05	0.37	1.01	0.12	0.00	0.00	0.01	3.30
1904.....	0.25	0.35	0.48	0.20	0.97	0.07	0.92	0.72	0.26	0.60	0.00	0.05	4.87
1905.....	0.40	1.15	0.65	1.00	1.65	0.05	T.	0.06	2.10	0.25	2.30	0.10	9.71
1906.....	...	0.00	...	3.50	0.90	0.00	0.05	...	...	...	...	...	...
1907.....	...	1.20	...	...	...	...	...	...	...	...	0.20	0.03	...
1908.....	0.30	0.50	0.70	0.00	0.34	T.	0.70	1.50	1.37	0.40	T.	0.65	6.46
1909.....	0.05	0.23	0.00	0.29	0.00	T	0.00	1.96	0.89	0.00	0.75	0.62	4.79
1910.....	0.24	T.	0.75	0	...	0.33	0.67	0.11	0.34	0.30	1.09	...	...
Mean..	0.25	0.54	0.36	0.60	0.55	0.07	0.23	0.79	0.91	0.23	0.57	0.23	5.33

Heber, Wasatch County.

Elevation, 5,606 Feet.

Applicable to Provo River.

1893.....	1.80	2.95	3.35	2.15	0.76	0.02	0.27	0.68	0.28	0.73	1.90	3.95	18.84
1894.....	3.65	1.60	1.65	0.41	0.54	0.79	0.62	1.16	2.47	1.70	0.00	2.60	17.19
1895.....	3.22	1.93	1.45	0.48	1.54	0.25	1.37	T.	0.50	0.40	2.20	1.70	15.04
1896.....	2.10	0.95	2.46	2.40	1.85	0.09	3.35	0.55	1.44	0.50	0.50	0.75	17.94
1897.....	1.30	4.10	2.90	0.90	0.70	0.38	0.56	0.49	3.14	1.50	1.00	1.20	18.17
1898.....	1.40	0.50	3.30	1.25	7.04	0.83	0.25	0.64	0.08	1.44	1.60	1.10	19.43
1899.....	2.95	5.85	3.00	0.89	1.14	0.97	1.61	2.10	0.15	3.20	0.85	1.55	24.26
1900.....	1.06	1.50	0.34	2.53	0.16	0.20	0.25	0.31	1.20	1.47	4.42	0.22	13.66
1901.....	2.20	2.20	1.56	0.31	1.72	0.08	0.40	2.00	0.16	1.70	1.40	1.50	15.29
1902.....	0.50	1.03	1.46	1.88	0.49	0.37	0.15	0.50	0.45	0.45	1.77	1.04	10.09
1903.....	2.17	0.70	1.95	0.76	1.42	0.25	0.69	0.20	1.17	0.76	1.90	1.33	13.32
1904.....	2.10	3.00	3.48	0.96	2.01	0.73	0.29	0.88	0.16	1.22	0.00	1.91	16.74
1905.....	1.22	1.03	1.69	2.06	1.27	0.43	0.40	0.58	2.12	0.31	0.79	0.80	12.94
1906.....	3.10	1.58	3.93	1.28	2.61	1.10	0.07	3.11	0.85	0.43	1.54	2.45	22.00
1907.....	3.00	3.96	3.20	1.33	2.00	1.47	0.07	0.87	T.	1.03	0.33	2.71	20.05
1908.....	0.84	0.78	1.56	0.50	2.58	1.42	1.57	1.46	2.32	2.68	0.80	0.90	17.43
1909.....	8.81	2.25	1.31	2.53	1.00	0.16	0.57	3.04	0.71	0.20	2.86	4.43	27.92
1910.....	1.10	2.09	0.95	0.46	0.31	0.08	1.01	0.11	1.25	1.10	0.60	1.47	10.62
Mean..	2.37	2.11	2.20	1.28	1.66	0.53	0.80	1.04	1.02	1.16	1.35	1.76	17.60

Henefer, Summit County.

Elevation, 5,301 Feet.

Applicable to Weber River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1900.....	0.75	2.00	0.35	1.20	0.88	0.20	0.05	0.56	2.06	1.82	3.13	0.43	13.43
1901.....	1.12	2.65	2.02	1.51	2.07	0.12	0.27	2.08	0.72	1.32	1.05	1.68	16.61
1902.....	1.39	1.80	1.86	2.09	1.49	0.43	0.47	0.12	0.89	0.52	1.51	1.61	14.18
1903.....	2.91	1.23	1.93	1.11	1.78	0.13	0.40	0.13	0.93	0.97	3.27	1.23	16.02
1904.....	2.03	3.17	4.61	0.95	2.57	0.38	0.53	1.39	0.06	1.29	0.00	1.57	18.55
1905.....	1.09	1.37	1.67	2.45	1.14	0.22	0.98	0.93	1.32	0.86	1.11	1.16	14.30
1906.....	3.40	1.96	3.73	1.32	3.78	1.81	0.29	2.07	0.56	0.16	2.43	1.86	23.37
1907.....	3.35	5.12	2.76	2.36	2.50	1.48	0.48	2.43	0.37	1.05	0.20	3.96	26.06
1908.....	0.90	0.46	2.64	0.84	3.25	2.20	1.68	0.55	3.36	2.28	0.69	1.00	19.85
1909.....	6.85	2.98	3.53	1.48	1.50	0.40	0.96	2.51	1.58	0.77	4.64	2.02	29.22
1910.....	2.06	3.44	1.60	1.17	0.41	0.24	2.66	0.45	0.73	1.54	0.66	1.90	16.86
Mean..	2.35	2.38	2.43	1.50	1.94	0.70	0.80	1.20	1.42	1.14	1.70	1.67	18.95

Kanab, Kane County.

Elevation, 4,925 Feet.

Applicable to Kanab Creek.

1875.....	3.30	0.30	0.30	0.06	0.10	...	0.80	...	0.10	...	3.20	1.30	...
1876.....	2.20	1.40	1.75	1.30	...	...	1.50	0.50	1.25	4.40	0.30	...	...
1877.....	0.90	3.00	0.20	0.70	0.22	...	0.90	0.20	0.10	0.26	...	0.80	...
1878.....	0.95	3.55	...	0.80	...	0.20	0.30	0.50	...	0.20	0 30	...	...
1879.....	...	0.05	...	0.10	...	...	...	...	..	...	...	...	...
1902.....	...	...	...	...	...	...	...	...	...	0.00	3.98	1.37	...
1903.....	0.89	1.24	5.55	2.79	0.71	0.06	0.89	1.34	0.75	0.80	0.00	0.00	15.02
1904.....	0.10	1.00	1.01	0.10	0.90	T.	2.50	1.40	0.70	0.80	0.00	0.10	8.61
1905.....	2.10	4.30	2.10	1.40	1.20	0.00	0.30	1.10	1.80	0.90	3.20	0.50	18.90
1906.....	4.00	T.	8.50	0.30	0.10	0.00	1.30	2.00	0.30	0.20	1.50	2.50	20.70
1907.....	...	1.00	1.30	1.40	2.30	0.40	T.	...	...	...	...	...	...
Mean..	1.80	1.58	2.59	0.76	0.79	0.26	0.94	1.01	0.71	0.04	1.56	0.94	13.88

Loa, Wayne County.

Elevation, 7,000 Feet.

Applicable to Fremont River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1892.....	0.35	0.28	0.25	0.15	0.76	0.05	0.32	0.12	0.00	0.37	0.15	0.25	3.05
1893.....	0.40	1.12	0.52	0.70	T.	0.00	1.42	2.25	0.83	0.00	1.08	0.30	8.62
1894.....	0.13	0.55	1.41	0.13	0.25	0.19	1.05	1.56	0.37	0.49	0.00	0.79	6.92
1895.....	1.42	1.00	0.35	0.05	0.16	0.16	0.71	0.39	0.77	1.00	0.50	2.20	8.71
1896.....	0.05	0.05	0.15	0.10	0.10	0.35	2.57	1.94	0.78	0.42	0.34	T.	6.85
1897.....	1.05	1.80	0.69	1.05	0.71	0.22	0.49	1.39	2.00	1.83	0.27	0.06	11.56
1898.....	0.33	0.00	0.17	0.45	1.50	0.15	0.60	1.12	0.09	0.00	0.40	0.25	5.06
1899.....	0.40	0.48	0.29	0.65	0.17	0.42	2.20	0.77	0.00	0.22	T.	0.20	5.80
1900.....	T.	0.10	0.20	1.80	T.	0.45	0.95	0.74	0.52	0.42	0.50	T.	5.68
1901.....	T.	0.50	0.35	0.30	0.10	0.10	0.67	3.76	0.00	0.26	0.00	0.40	6.44
1902.....	0.80	0.40	1.50	0.60	0.10	0.00	0.00	0.78	0.33	0.00	1.20	0.65	6.36
1903.....	0.60	0.00	0.41	0.00	0.65	0.35	0.95	0.40	0.35	0.85	0.00	0.00	4.56
1904.....	0.00	0.50	0.80	1.00	0.19	0.15	0.40	1.40	0.20	0.00	0.00	0.00	4.64
1905.....	0.30	1.90	0.20	0.30	0.10	0.00	0.06	0.67	1.05	0.10	1.05	0.40	6.13
1906.....	1.50	0.15	4.00	3.00	0.35	0.00	0.90	0.56	1.30	0.00	0.90	0.45	13.11
1907.....	0.00	0.20	0.00	0.00	0.26	0.35	0.65	1.80	0.10	0.75	0.00	0.60	4.71
1908.....	0.60	0.30	0.20	0.60	0.80	0.00	1.15	0.17	0.60	0.70	0.00	0.60	5.72
1909.....	0.40	1.40	0.09	0.00	0.00	0.00	0.90	2.50	0.75	0.00	0.30	0.90	7.24
1910.....	0.80	0.20	0.20	0.00	...	...	...	...	...	...	...	...	...
Mean..	0.48	0.58	0.62	0.57	0.34	0.16	0.89	1.24	0.52	0.41	0.37	0.45	6.63

Logan, Cache County.

Elevation, 4,507 Feet.

Applicable to Logan River and Bear River.

1891.....	...	...	...	...	2.48	1.16	0.13	0.19	1.44	0.20	0.57	...	...
1892.....	1.45	0.85	2.00	0.99	3.00	3.36	0.34	0.00	0.30	0.32	0.50	1.70	12.81
1893.....	0.65	2.45	2.64	2.16	1.73	0.14	0.01	0.11	1.67	0.59	0.92	1.44	14.51
1894.....	1.86	1.45	1.81	1.41	0.83	0.74	0.28	0.58	2.60	0.07	T.	2.13	14.36
1895.....	2.13	0.45	1.71	1.05	2.27	0.51	0.56	0.18	1.96	0.04	1.70	0.95	13.51
1896.....	1.31	0.35	1.73	2.11	3.17	0.46	1.40	1.49	0.91	0.68	1.97	0.57	16.15
1897.....	0.90	2.33	2.84	1.74	0.56	0.56	0.71	0.25	1.28	2.62	2.44	1.22	17.45
1898.....	0.88	0.52	1.34	1.58	5.03	0.85	0.15	0.11	0.18	1.34	0.73	0.48	13.18
1899.....	1.20	0.73	1.79	0.86	1.37	0.60	0.60	0.70	0.02	2.58	1.32	0.80	12.57
1900.....	0.56	0.78	0.58	4.07	1.42	0.19	0.51	0.71	0.94	2.38	2.60	0.23	15.06
1901.....	1.13	1.55	1.40	1.35	2.43	0.41	0.07	1.60	1.03	1.83	0.35	1.32	14.47
1902.....	0.28	0.95	2.53	2.52	2.19	0.74	0.52	0.27	T.	0.51	1.80	1.02	13.33
1903.....	2.62	0.33	0.52	2.01	2.89	0.25	0.35	0.12	0.90	1.01	2.29	0.68	13.97
1904.....	1.23	2.25	3.13	1.61	0.85	0.47	0.52	0.83	0.17	1.57	0.00	0.00	13.52
1905.....	0.40	1.22	2.23	1.60	2.13	0.63	0.20	0.73	2.07	0.37	0.64	0.30	12.51
1906.....	2.28	3.02	2.61	2.47	5.05	1.43	0.71	4.55	1.62	0.60	1.07	1.99	20.40
1907.....	4.85	2.69	3.54	1.58	2.80	2.44	0.00	0.90	0.13	1.45	0.13	1.46	21.96
1908.....	0.78	0.81	1.76	0.34	3.71	2.60	0.87	1.07	1.32	4.01	1.37	0.13	18.77
1909.....	2.97	2.59	2.01	0.59	2.51	0.22	0.94	1.08	2.28	1.53	3.21	2.38	22.31
1910.....	1.87	1.90	1.25	0.20	1.08	0.00	0.70	0.05	0.55	1.73	0.87	1.45	11.74
Mean..	1.55	1.36	1.97	1.60	2.38	0.79	0.48	0.78	1.07	1.30	1.28	1.11	15.78

Marion, Summit County.

Elevation, 6,750 Feet.

Applicable to Weber River and Provo River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1905.....	0.75	0.75	2.33	3.05	1.15	0.58	0.91	0.48	2.08	0.43	1.22	0.67	14.40
1906.....	2.73	2.27	4.69	1.79	3.09	1.22	0.47	3.87	0.71	0.09	2.86	2.49	26.28
1907.....	3.89	2.81	3.62	1.55	4.28	1.93	0.37	1.01	0.42	0.75	0.73	3.51	24.87
1908.....	0.78	1.34	1.43	0.42	4.18	2.26	0.77	1.88	...	...	...	...	...
1909.....	4.61	2.72	1.98	1.77	1.23	0.26	0.67	2.79	2.50	0.75	3.82	2.40	25.50
1910.....	1.39	3.25	0.81	0.99	0.28	0.17	0.86	...	...	1.86	0.72	1.78	...
Mean..	2.36	2.19	2.48	1.60	2.37	1.07	0.68	2.01	1.43	0.78	1.87	2.17	21.01

Manti, Sanpete County.

Elevation, 5,575 Feet.

Applicable to Sevier River.

1892.....	...	...	...	...	0.95	...	0.32	0.00	0.15	...	...	0.00	...
1893.....	0.00	...	5.25	...	...	...	...	...	...	...	...	...	...
1894.....	1.20	...	...	0.60	T.	0.15	0.28	0.17	1.91	0.20	0.00	1.60	...
1895.....	2.00	1.10	1.70	0.07	0.90	0.07	0.85	0.76	0.40	0.12	1.25	0.70	9.92
1896.....	0.15	0.10	0.60	0.95	0.16	T.	1.60	0.43	0.29	0.64	0.30	0.30	5.52
1897.....	2.90	2.40	2.05	0.10	T.	0.18	0.28	0.14	2.85	...	...	...	...
1898.....	...	...	...	...	...	...	...	...	...	...	...	0.55	...
1899.....	1.90	2.00	...	...	...	...	1.02	1.13	T.	2.38	0.31	1.30	...
1900.....	0.61	0.25	0.10	...	...	0.00	0.00	...	...	0.60	0.80	0.00	...
1901.....	0.02	2.50	1.00	0.80	1.06	0.15	0.22	1.23	0.08	1.05	0.50	0.55	9.10
1902.....	0.52	0.90	1.50	1.08	0.49	0.04	0.26	T.	0.83	0.40	1.38	0.86	8.26
1903.....	0.73	1.18	1.16	1.22	2.20	0.28	0.53	0.11	0.98	1.21	0.20	0.40	10.20
1904.....	1.10	1.13	1.71	0.93	2.03	0.40	0.61	0.37	0.48	0.94	0.00	1.50	11.20
1905.....	0.85	3.42	1.90	1.54	2.25	0.05	T.	0.20	3.09	0.54	2.99	1.10	17.93
1906.....	2.48	0.61	2.82	3.37	1.96	0.36	0.45	1.69	1.52	T.	1.73	1.53	18.57
1907.....	1.65	2.11	0.42	0.92	3.75	1.33	1.00	...	...	...	...	...	...
1908.....	...	...	...	...	...	2.12	1.06	1.39	2.22	2.00	0.50	0.75	...
1909.....	2.25	1.05	0.80	1.80	0.23	0.32	0.77	1.99	1.85	0.68	1.60	1.86	15.20
1910.....	0.72	1.19	0.65	0.31	0.67	0.03	0.79	0.30	2.19	1.52	0.89	0.98	10.24
Mean..	1.19	1.39	1.55	1.05	1.18	0.36	0.59	0.66	1.25	0.88	0.89	0.87	11.86

Marysvale, Piute County.

Elevation, 6,180 Feet.

Applicable to Sevier River.

1899.....	2.10	1.96	4.29	1.19	1.50	0.12	1.14	1.50	T.	2.00	1.15	1.46	18.35
1900.....	1.00	0.95	1.20	1.65	1.35	...	0.01	...	...	...	...	...	...
1901.....	...	1.29	0.66	0.22	0.54	0.47	0.82	1.94	0.02	0.80	0.14	0.25	...
1902.....	0.50	0.78	1.02	0.69	0.29	0.19	0.85	1.20	0.79	0.36	1.81	0.63	9.11
1903.....	0.40	0.36	0.66	0.70	0.81	0.56	0.64	1.19	1.04	1.35	T.	0.52	8.23
1904.....	0.29	0.91	1.99	0.37	1.69	0.83	1.12	2.10	0.98	0.40	T.	0.41	11.09
1905.....	0.49	3.03	1.36	1.23	1.85	T.	0.67	1.05	2.28	0.46	1.78	0.16	14.36
1906.....	0.85	0.63	3.02	1.47	0.65	0.01	0.90	0.91	1.33	0.06	1.09	1.45	12.37
1907.....	0.36	0.53	0.61	0.97	2.27	0.44	0.57	3.90	0.50	1.97	0.02	0.65	12.78
1908.....	0.74	0.87	0.65	0.04	1.25	0.26	2.21	1.77	2.26	1.17	0.07	0.00	12.19
1909.....	1.37	0.78	0.26	0.72	0.33	0.65	2.20	2.02	1.52	0.26	2.22	1.53	13.26
1910.....	0.57	0.30	0.36	0.09	0.10	0.38	0.62	0.77	2.38	1.24	0.85	0.01	8.57
Mean..	0.79	1.03	1.34	1.77	1.05	0.30	0.98	1.67	1.19	1.18	0.83	0.80	11.98

Meadowville, Rich County.

Elevation, 6,200 Feet.

Applicable to Bear River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1900.....	0.15	1.77	0.13	1.09	0.08	0.01	0.02	0.30	1.31	1.70	3.00	0.41	9.97
1901.....	1.10	1.90	0.60	2.22	1.92	0.15	1.70	0.95	0.25	0.75	0.55	1.85	13.94
1902.....	0.40	0.85	1.00	2.90	1.50	0.90	T.	0.30	0.40	0.40	0.95	1.30	10.90
1903.....	4.10	0.60	1.25	0.80	0.90	1.00	0.75	T.	1.20	0.90	3.20	0.20	14.90
1904.....	1.10	4.70	4.50	1.30	1.55	0.45	0.50	0.55	0.40	1.60	0.05	1.30	18.00
1905.....	2.30	1.25	1.35	2.10	4.15	1.15	0.35	1.77	1.40	0.75	0.90	0.40	17.87
1906.....	5.45	1.10	3.40	1.75	4.10	1.30	0.90	2.80	0.90	1.05	0.75	1.55	25.05
1907.....	3.10	6.40	3.50	2.75	2.82	1.49	T.	1.20	1.55	1.12	0.10	2.21	26.24
1908.....	0.92	1.17	2.01	2.50	2.39	2.66	0.20	1.76	2.07	4.25	0.50	0.80	18.98
1909.....	8.00	3.37	2.00	1.40	1.65	0.30	0.75	1.45	2.40	0.62	3.50	0.55	25.99
1910.....	1.50	0.85	0.53	1.10	T.	T.	0.50	0.15	0.45	1.35	0.75	1.15	8.33
Mean..	2.56	2.18	1.84	1.82	1.91	0.85	0.52	1.02	1.12	1.23	1.30	1.07	17.29

Ogden, No. 1, North Side, Weber County.

Elevation, 4,310 Feet.

Applicable to Weber River and Ogden River.

1902.....	0.90	2.39	1.15	2.70	1.60	0.27	0.82	0.34	0.21	0.42	1.36	1.96	14.12
1903.....	4.77	0.53	1.38	1.48	4.34	0.00	0.07	0.35	0.94	1.57	1.74	0.95	18.12
1904.....	1.46	2.70	6.54	2.34	1.96	0.52	0.03	0.55	0.09	1.78	0.00	1.47	19.53
1905.....	1.20	1.71	3.36	2.45	4.25	0.85	0.10	1.17	1.51	0.29	0.92	1.35	19.25
1906.....	2.12	2.41	3.05	2.67	5.63	1.47	0.44	4.11	1.30	T.	2.78	2.63	28.11
1907.....	4.30	4.37	3.50	1.65	1.80	3.27	0.23	1.01	0.02	1.26	0.48	2.24	24.22
1908.....	0.08	1.35	1.01	0.39	4.92	3.28	T.	0.55	2.42	4.94	2.05	0.97	22.56
1909.....	4.65	3.37	2.15	1.05	3.10	0.26	1.05	1.36	2.70	0.00	4.17	3.86	28.62
1910.....	2.66	2.64	1.52	0.21	1.33	T.	0.26	0.13	0.18	1.52	0.19	1.16	11.80
Mean..	3.53	2.39	2.63	1.66	3.22	1.10	0.34	1.07	1.04	1.41	1.52	1.84	20.70

Ogden, No. 2, Union Station, Weber County.

Elevation, 4,310 Feet.

Applicable to Weber River and Ogden River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1870.....	...	0.38	1.08	2.08	...	0.05	0.00	1.08	0.00	0.00	0.00	0.57	...
1871.....	0.65	1.33	0.77	1.50	1.96	0.00	0.05	0.00	0.00	0.20	1.93	2.60	10.99
1872.....	0.76	0.00	0.35	1.70	0.21	0.11	0.00	0.05	0.00	0.05	0.22	3.15	6.54
1873.....	1.62	3.35	0.22	0.90	4.44	0.50	T.	...	0.15	1.85	0.30	1.40	...
1874.....	0.70	1.00	1.50	0.33	3.25	0.10	1.17	0.40	0.00	1.84	1.50	...	...
1875.....	2.70	0.42	1.28	0.60	2.56	0.98	0.70	1.50	0.59	0.78	5.57	3.01	20.69
1876.....	2.38	1.00	1.27	0.96	3.05	0.28	1.25	T.	0.46	2.51	0.52	1.12	14.80
1877.....	1.01	0.10	4.30	1.07	2.84	0.61	T.	0.00	0.64	0.18	2.28	0.92	13.95
1878.....	0.99	2.90	1.26	1.58	2.17	0.27	0.15	0.97	2.82	1.50	0.45	0.05	15.11
1879.....	1.35	0.65	0.32	2.71	0.21	0.94	0.01	0.12	0.23	2.82	0.63	2.36	12.35
1880.....	0.70	2.55	0.92	1.22	0.74	0.00	0.00	0.59	0.34	0.83	0.50	1.85	10.24
1881.....	4.20	2.66	0.58	0.00	0.00	0.00	0.14	0.02	...	1.74	0.54	0.25	...
1882.....	0.75	2.14	0.20	...	0.20	0.68	0.00	0.22	0.27	3.58	0.37	0.66	20.64
1883.....	1.03	0.32	1.14	0.47	2.11	T.	T.	0.62	0.00	2.21	1.46	1.62	10.98
1884.....	0.77	2.21	3.63	3.85	1.51	0.61	0.00	0.08	2.41	1.46	0.00	2.96	19.49
1885.....	2.12	2.62	0.00	4.12	0.95	2.64	0.00	0.51	0.52	0.47	3.63	1.82	19.40
1886.....	2.10	0.88	1.82	1.57	0.00	0.30	0.00	0.42	1.23	1.97	1.72	0.59	12.60
1887.....	1.80	2.28	0.49	1.88	0.08	0.25	0.43	0.43	0.55	0.15	0.00	0.80	9.14
1888.....	2.60	1.06	1.20	0.21	0.28	1.07	1.00	0.36	0.61	0.15	1.06	2.43	12.03
1889.....	0.55	0.40	1.15	1.57	1.95	0.05	0.00	1.03	0.65	3.81	0.79	4.96	16.91
1890.....	2.09	3.92	4.23	1.69	0.85	0.54	0.54	0.12	0.07	1.36	0.00	2.22	17.63
1891.....	1.45	2.23	5.12	2.75	2.56	2.12	0.10	0.14	2.16	0.25	0.33	3.90	23.11
1892.....	1.82	1.22	2.18	1.02	0.89	1.55	0.80	0.00	0.54	2.16	0.75	3.05	15.98
1893.....	0.95	2.72	3.10	1.93	0.95	0.05	0.08	0.78	1.36	0.74	1.26	2.11	16.03
1894.....	2.48	1.02	1.43	1.92	1.04	0.87	0.00	0.64	1.59	0.61	0.25	1.86	13.71
1895.....	2.61	0.96	2.17	0.10	1.80	0.68	0.36	0.10	0.50	0.25	1.71	0.85	12.09
1896.....	1.62	0.30	2.87	1.25	3.57	0.10	0.20	0.28	0.58	0.70	1.93	0.95	14.35
1897.....	1.80	2.85	2.37	1.47	0.30	0.98	0.47	0.00	0.88	2.13	1.51	1.89	16.65
1898.....	1.05	0.19	2.20	0.37	5.23	0.81	0.00	0.30	0.30	1.47	1.12	0.60	13.64
1899.....	1.25	1.98	2.05	0.53	0.89	0.98	T.	0.45	0.00	2.45	0.85	1.50	13.53
1900.....	0.20	1.08	0.10	1.93	1.10	0.31	0.15	0.28	1.32	2.01	3.87	0.18	12.53
1901.....	0.71	2.63	0.45	0.62	2.36	0.22	T.	2.65	0.85	2.12	0.36	0.83	13.80
1902.....	1.15	1.43	1.38	2.20	1.47	0.15	0.79	0.23	0.06	0.22	1.60	2.11	12.79
1903.....	3.86	0.90	1.18	0.40	0.85	0.00	0.00	0.00	0.92	0.30	0.55	0.95	9.91
1904.....	0.97	2.60	5.57	1.05	2.14	0.19	T.	0.64	0.14	1.47	T.	1.20	15.97
1905.....	1.22	1.62	2.03	2.14	2.90	0.82	0.03	1.04	1.16	0.23	1.31	1.66	17.00
1906.....	1.19	1.38	3.67	1.44	4.68	1.00	0.20	3.75	1.34	0.20	1.82	1.94	22.65
1907.....	4.25	3.52	2.53	1.20	0.83	2.87	T.	0.52	0.05	0.89	0.24	2.24	19.23
1908.....	0.87	0.90	1.59	0.35	5.02	3.11	0.04	0.09	2.15	4.06	1.27	0.39	20.44
1909.....	3.45	2.53	1.91	1.01	3.18	0.21	1.74	1.57	2.58	0.80	3.37	2.46	24.81
1910.....	0.92	...	...	...	...	...	...	T.	0.48	...	...	2.01	...
Mean..	1.61	1.61	1.83	1.35	1.83	0.68	0.26	0.55	0.75	1.31	1.19	1.64	14.61

Park City, Summit County.

Elevation, 7,800 Feet.

Applicable to Provo River, Weber River and Big Cottonwood Creek.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1896.....	...	...	3.02	3.83	4.22	0.00	0.71	0.05	0.13	0.70	2.25	0.90	...
1897.....	1.70	5.50	8.00	1.50	0.08	0.39	0.15	0.15	0.28	0.28	...	...	...
1898.....	...	...	...	...	...	...	...	...	...	...	...	...	...
1899.....	...	...	...	...	...	...	...	...	...	...	...	1.80	...
1900.....	0.93	1.87	0.38	3.56	0.30	0.00	0.10	0.32	2.23	0.90	0.90	1.30	15.39
1901.....	2.24	2.35	3.15	1.92	1.50	0.20	0.90	1.40	0.45	0.18	3.50	2.20	17.89
1902.....	1.98	1.18	4.04	1.96	0.67	...	...	...	...	...	1.40	...	...
1903.....	3.88	1.34	2.60	0.95	2.80	0.00	...	...	1.17	1.10	2.47	1.45	...
1904.....	2.15	5.00	7.85	1.69	2.44	...	...	1.99	...	...	...	...	...
1905.....	...	...	...	...	...	0.39	...	...	...	...	...	...	...
1906.....	4.58	...	...	...	...	...	...	...	...	...	...	2.12	...
1907.....	10.95	4.45	...	0.47	2.20	2.38	1.25	1.80	0.44	2.00	0.00	3.90	...
1908.....	1.05	1.00	2.20	0.45	1.57	1.59	1.80	0.69	2.34	1.53	0.62	...	...
1909.....	4.07	10.53	...	...	2.14	0.31	2.66	4.04	1.30	1.30	4.80	4.68	...
1910.....	4.73	2.28	0.09	0.71	...	...	...	...	0.54	4.17	1.01	0.61	...
Mean..	3.47	3.55	3.48	1.70	1.79	0.59	1.08	1.30	0.99	1.35	1.88	2.11	23.29

Plateau, Sevier County.

Elevation, 7,000 Feet.

Applicable to Sevier River and Fremont River.

1902.....	0.99	1.24	1.89	0.83	0.63	0.31	0.29	0.52	1.18	0.35	2.25	1.35	11.83
1903.....	1.09	1.22	1.02	1.31	2.60	0.47	0.95	0.58	1.65	1.28	0.02	1.22	13.41
1904.....	1.26	1.61	2.54	0.79	3.11	2.09	1.71	1.31	0.50	0.35	0.00	0.60	15.87
1905.....	0.63	1.88	2.10	1.50	1.42	0.00	0.43	0.70	1.44	0.22	1.97	0.91	13.20
1906.....	2.52	0.51	4.04	2.40	1.17	0.01	1.15	1.24	2.94	0.41	1.98	1.27	19.64
1907.....	1.00	2.32	1.12	1.40	3.59	0.69	1.70	1.96	0.47	1.55	0.77	1.71	18.28
1908.....	1.12	1.32	0.62	0.34	1.36	0.38	0.99	1.94	1.34	1.82	0.06	0.60	11.39
1909.....	1.23	1.41	1.79	1.22	0.29	0.22	1.01	5.31	0.99	0.33	1.57	1.91	17.33
1910.....	0.70	1.14	0.53	0.23	...	...	...	...	...	...	...	...	...
Mean..	1.17	1.41	1.74	1.11	1.77	0.52	1.03	1.70	1.31	0.79	1.08	1.20	14.83

Pinto, Washington County.

Elevation, 5,907 Feet.

Applicable to Santa Clara Creek, and Virgin River.

1897.....	2.00	3.05	4.11	0.78	0.52	0.05	0.90	0.89	2.17	3.76	0.40	1.16	20.69
1898.....	1.28	0.68	1.33	0.30	2.30	0.25	0.07	0.60	0.00	0.00	0.11	0.11	7.12
1899.....	0.25	0.35	2.17	0.40	0.58	0.27	0.05	1.06	0.00	1.75	0.07	0.49	8.54
1900.....	0.38	0.27	0.34	2.31	0.65	0.25	0.13	0.08	1.32	0.77	3.16	0.05	9.71
1901.....	1.72	2.74	0.23	0.85	0.85	0.45	0.80	5.07	0.00	1.43	0.39	0.57	15.10
1902.....	0.01	0.95	2.66	0.25	0.19	T.	0.01	1.71	0.20	0.93	3.09	0.70	11.30
1903.....	0.93	1.06	1.57	1.30	0.80	0.17	T.	1.74	1.37	1.75	0.00	0.21	10.90
1904.....	0.80	1.91	1.72	0.44	1.90	0.35	3.25	1.97	0.90	0.91	0.00	0.17	14.41
1905.....	0.61	1.88	2.28	1.48	2.09	0.00	1.41	1.83	4.82	0.77	1.67	0.08	18.95
1906.....	2.72	1.52	0.46	2.15	0.93	0.17	1.65	2.82	1.82	0.10	2.43	2.85	25.60
1907.....	2.63	2.00	2.92	...	1.84	0.62	2.14	...	...	3.09	...	0.52	...
1908.....	1.20	2.40	1.59	2.10	0.95	0.09	2.15	3.45	2.53	2.24	0.25	0.90	19.85
1909.....	2.50	1.64	0.79	0.29	0.18	0.00	1.13	3.33	2.46	0.00	3.50	2.77	18.59
1910.....	2.13	0.21	0.84	0.30	0.01	0.00	2.05	1.99	1.36	1.37	1.48	0.71	12.48
Mean..	1.48	1.48	2.07	1.00	0.99	0.23	1.12	2.04	1.46	1.35	1.32	0.81	15.35

Provo, Utah County.

Elevation, 4,532 Feet.

Applicable to Provo River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1889.....	...	...	...	...	...	...	...	0.00	0.50	1.12	1.15	2.88	...
1890.....	1.04	0.50	0.60	0.00	1.00	...	...	...	...	0.00	0.00	...	...
1891.....	1.15	1.65	0.56	...	..	...	0.50	0.31	0.76	0.43	T.	2.90	...
1892.....	1.30	1.10	1.57	1.50	1.40	0.41	0.10	0.20	0.15	1.70	0.63	2.32	11.38
1893.....	0.60	1.25	1.35	3.09	1.60	0.05	0.36	0.56	0.59	0.36	0.63	0.44	10.88
1894.....	2.35	1.50	1.30	0.40	0.10	0.50	0.03	0.60	0.39	0.70	0.00	1.70	9.57
1895.....	0.82	2.00	1.15	0.19	2.27	0.21	0.51	0.21	0.03	0.20	1.61	1.37	10.57
1896.....	...	0.18	1.75	1.00	1.80	2.00	2.43	0.63	...	0.47	0.70	0.20	...
1897.....	1.20	2.05	2.06	...	...	0.77	0.58	0.66	2.19	...	...	1.04	...
1898.....	0.82	0.64	0.87	0.72	5.47	1.55	0.35	0.31	0.00	1.34	1.08	0.80	13.95
1899.....	1.54	2.89	2.45	0.39	1.37	0.60	0.75	1.00	0.00	2.79	0.94	1.05	15.77
1900.....	0.45	0.35	0.05	1.65	0.32	0.05	0.05	0.40	1.13	0.66	3.50	0.12	8.73
1901.....	0.22	2.06	1.09	0.29	0.39	0.18	T.	3.00	0.20	T.	0.85	0.98	9.26
1902.....	0.35	1.12	1.30	2.14	0.36	0.10	0.11	0.20	0.50	0.68	1.55	1.28	9.69
1903.....	2.65	0.65	1.80	0.51	2.69	0.30	0.39	0.42	0.72	0.55	1.14	0.49	12.31
1904.....	1.72	2.27	3.75	1.56	2.11	0.42	0.39	0.45	0.04	1.56	0.00	1.05	15.32
1905.....	3.15	7.60	3.07	2.07	1.88	0.00	2.28	0.24	3.26	0.60	3.25	0.26	27.66
1906.....	1.05	0.90	2.80	3.18	2.80	1.45	0.10	1.80	0.70	0.20	3.20	2.75	20.93
1907.....	3.30	3.10	2.80	1.30	2.80	1.70	0.30	1.95	0.40	1.20	0.30	2.60	21.75
1908.....	1.10	1.08	1.68	0.23	3.48	1.06	0.32	0.15	2.77	3.25	1.20	0.75	17.07
1909.....	4.93	1.63	1.24	2.84	1.12	0.25	0.47	2.03	1.31	0.57	2.26	1.35	20.00
1910.....	1.29	2.27	1.17	0.33	0.50	0	0.58	0.31	1.38	1.72	1.15	1.85	12.55
Mean..	1.47	1.50	1.62	1.23	1.76	0.63	0.43	0.73	0.89	0.95	1.09	1.41	13.71

Ranch, Kane County.

Elevation, 6,700 Feet.

Applicable to Sevier River, Virgin River and Kanab Creek.

1902.....	2.41	2.54	6.06	1.08	0.64	T.	0.05	2.25	0.25	0.50	5.59	1.66	23.03
1903.....	1.03	1.11	4.31	2.28	1.40	1.56	0.88	0.45	3.02	1.00	T.	T.	17.13
1904.....	T.	2.63	3.99	0.44	1.80	0.08	2.64	3.01	0.27	T.	0.00	0.10	14.96
1905.....	3.15	7.60	3.07	2.07	1.88	0.00	2.28	0.24	3.26	0.60	3.25	0.26	27.66
1906.....	2.50	1.65	12.02	2.55	0.64	T.	2.94	3.85	0.70	T.	2.16	3.51	32.52
1907.....	6.69	2.01	3.87	2.02	2.58	0.34	0.50	0.71	0.10	3.41	0.35	2.01	24.65
1908.....	0.80	3.08	2.88	1.00	1.08	T.	2.22	2.05	1.74	2.62	0.22	2.34	10.03
1909.....	4.44	5.36	2.55	T.	T.	T.	1.46	7.68	3.80	0.00	4.67	4.89	34.85
1910.....	2.52	0.81	0.42	0.44	T.	0.46	2.88	2.28	3.76	2.97	2.01	1.32	19.87
Mean..	2.61	2.98	4.35	1.32	1.11	0.26	1.76	2.51	1.88	1.24	2.03	1.78	23.74

Richfield, Sevier County.

Elevation, 5,350 Feet.

Applicable to Sevier River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1889.....	...	...	...	...	...	...	...	1.75	...	0.47	0.23	1.78	...
1890.....	1.00	0.60	0.61	1.51	0.06	T.	0.52	0.30	0.53	0.51	T.	0.38	6.02
1891.....	0.60	1.60	...	...	...	...	0.89	0.44	0.81	T.	T.	1.76	...
1892.....	T.	0.50	0.60	1.09	0.57	0.16	0.11	0.28	0.00	0.72	0.09	0.52	4.64
1893.....	1.05	1.10	0.99	0.65	...	...	0.62	2.12	...	0.04	0.02	1.32	...
1894.....	0.95	0.60	1.25	1.18	0.02	0.91	0.83	1.10	1.15	0.23	0.00	0.75	8.97
1895.....	...	...	...	...	...	...	...	...	...	...	...	...	...
1896.....	...	...	...	...	...	...	...	...	...	0.55	0.63	0.00	...
1897.....	1.00	1.85	1.95	0.12	0.06	0.00	0.04	0.25	1.45	1.59	0.90	0.40	9.61
1898.....	0.70	0.30	0.40	0.15	1.20	1.00	0.40	0.35	0.00	0.00	0.75	0.40	5.65
1899.....	0.30	0.55	4.65	0.70	T.	0.14	0.16	0.12	0.07	0.38	0.20	1.05	8.32
1900.....	0.45	0.20	0.00	0.60	0.08	T.	0.00	0.07	0.07	0.05	0.30	0.00	1.82
1901.....	0.60	1.75	1.07	0.23	0.10	0.07	0.14	0.03	0.00	0.75	0.15	0.74	5.63
1902.....	0.35	0.65	1.35	0.17	0.32	0.24	0.18	0.22	0.64	0.26	1.77	0.47	6.62
1903.....	0.60	1.10	0.57	1.50	1.39	T.	0.31	0.30	1.00	0.83	0.50	0.04	8.14
1904.....	0.55	0.20	0.16	0.07	1.03	0.80	0.27	0.37	0.05	0.95	0.00	0.80	5.25
1905.....	0.90	1.66	...	...	...	...	...	...	...	...	...	0.28	...
1906.....	0.30	0.29	1.51	1.24	1.30	0.10	0.85	1.04	2.10	0.65	1.39	0.41	12.18
1907.....	1.40	0.85	0.06	0.02	0.79	0.15	1.14	0.86	0.43	4.50	0.32	0.65	11.17
1908.....	0.15	0.40	0.10	0.30	0.41	1.40	2.40	1.75	1.15	1.45	T.	0.50	10.01
1909.....	1.25	1.10	0.50	1.00	0.50	0.10	0.61	2.59	1.08	0.60	2.03	1.46	12.82
1910.....	T.	1.20	0.20	T.	T.	0.16	1.00	0.10	1.10	1.17	0.37	0.92	6.22
Mean..	0.64	0.87	0.94	0.62	0.49	0.33	0.58	0.74	0.68	0.79	0.48	0.70	7.86

St. George, Washington County.

Elevation, 2,880 Feet.

Applicable to Virgin River.

1890.....	2.97	1.05	1.47	1.04	0.00	0.00	0.00	0.15	1.20	0.00	1.24	0.55	9.67
1891.....	0.00	2.15	0.10	0.00	2.20	0.00	1.15	0.80	1.60	0.00	0.00	0.40	8.40
1892.....	1.28	1.00	0.82	0.15	0.20	0.00	0.11	0.12	0.00	0.48	0.00	0.80	4.96
1893.....	0.77	1.20	1.66	0.15	0.11	T.	0.81	0.61	T.	0.09	0.05	1.28	6.73
1894.....	0.21	0.40	0.18	0.01	0.00	0.00	0.26	0.49	0.01	0.06	0.00	1.90	3.55
1895.....	1.99	1.21	0.84	0.32	0.54	0.04	0.06	0.00	0.02	0.12	1.01	0.35	6.50
1896.....	0.40	0.10	0.15	0.03	0.71	0.00	2.98	2.59	0.12	0.11	0.26	0.20	7.65
1897.....	2.66	2.35	1.05	0.08	0.15	0.00	0.28	0.45	1.00	1.21	0.13	0.45	9.81
1898.....	1.15	0.56	0.44	0.60	0.93	0.39	0.05	0.74	0.00	0.00	T.	0.12	4.98
1899.....	0.32	T.	0.29	0.24	0.05	0.28	0.05	2.98	0.00	0.45	0.23	0.33	5.17
1900.....	0.05	0.00	0.27	2.07	0.46	0.20	0.16	0.51	0.29	0.54	0.89	0.00	5.44
1901.....	0.75	2.72	0.08	0.01	0.18	0.00	0.48	1.70	0.00	1.06	0.00	0.00	6.98
1902.....	0.73	0.77	1.35	0.36	0.23	0.03	1.82	1.23	0.29	0.10	1.49	0.39	8.79
1903.....	0.27	0.26	0.99	0.60	0.32	0.00	1.50	0.50	1.92	1.86	0.00	0.07	8.29
1904.....	T.	1.33	0.57	0.02	0.35	0.02	0.59	1.50	0.34	0.19	0.00	0.17	5.08
1905.....	1.60	2.38	1.58	0.34	1.11	0.00	1.23	0.76	3.25	0.55	1.15	0.37	14.32
1906.....	0.66	0.71	2.51	0.90	0.39	T.	0.71	1.04	0.50	0.00	1.21	2.45	11.08
1907.....	2.42	0.76	0.88	0.82	0.44	0.05	10.25	0.50	0.33	2.09	0.00	0.17	18.71
1908.....	1.84	1.54	0.72	0.56	0.61	0.00	0.80	1.66	0.91	0.67	0.10	1.28	10.49
1909.....	1.30	1.55	1.16	0.22	0.37	0.00	3.00	2.72	2.33	0.00	1.92	1.93	16.50
1910.....	0.44	0.03	1.08	T.	0.00	0.60	1.72	0.26	1.20	0.91	1.04	0.86	8.19
Mean..	1.04	1.05	0.87	0.40	0.45	0.08	1.33	1.01	0.73	0.50	0.51	0.67	8.63

Scofield, Carbon County.

Elevation, 7,365 Feet.

Applicable to Price River and Green River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1909.....	18.38	5.40	2.47	7.49	3.34	0.58	4.12	10.15	3.21	0.26	5.55	3.31	64.26
1910.....	3.76	...	...	0.00	...	...	...	...	...	...	...	...	...

Salt Lake City, Salt Lake County.

Elevation, 4,366 Feet.

Applicable to City Creek, Emigration Creek and Parley's Creek.

1874.....	...	...	1.31	0.90	2.84	0.74	2.42	1.63	0.20	1.74	2.16	0.73	...
1875.....	3.05	0.79	2.81	1.50	2.91	0.90	1.01	0.25	1.22	1.36	5.81	2.03	23.64
1876.....	1.23	1.52	4.00	2.09	4.30	0.09	0.83	0.92	0.42	3.27	0.81	1.80	21.28
1877.....	0.87	0.38	2.93	2.14	3.49	0.80	0.02	0.28	0.90	2.41	1.02	1.11	16.35
1878.....	1.07	3.49	2.54	2.63	2.50	0.35	1.08	0.81	3.15	1.39	0.63	0.11	19.75
1879.....	1.87	0.71	0.67	3.26	0.10	1.34	0.07	0.06	0.01	1.62	0.32	3.03	13.11
1880.....	0.29	1.02	0.43	2.37	1.85	0.01	0.20	0.74	0.56	0.40	1.17	1.90	10.94
1881.....	1.24	2.44	0.88	2.37	2.55	0.28	0.21	1.61	0.43	2.19	1.44	1.24	16.88
1882.....	1.50	0.42	1.12	3.81	0.26	2.24	0.30	1.61	0.37	2.89	0.54	0.92	15.98
1883.....	1.47	0.72	1.75	2.92	0.98	0.33	0.10	0.62	0.13	2.24	1.78	1.20	14.24
1884.....	0.71	2.23	3.69	2.89	1.78	0.33	0.27	0.73	1.91	0.36	0.50	2.12	17.52
1885.....	1.48	1.56	0.64	3.47	2.49	2.67	0.58	0.90	1.29	0.59	3.10	0.92	19.69
1886.....	1.91	1.36	2.60	4.43	0.06	1.02	T.	0.59	1.88	1.98	1.79	1.27	18.89
1887.....	2.36	1.41	0.35	1.87	0.73	0.37	1.23	0.69	0.55	0.30	0.25	1.55	11.66
1888.....	1.52	1.22	2.18	0.99	0.34	0.98	0.24	0.63	0.51	0.80	2.00	2.21	13.62
1889.....	0.73	0.81	1.64	1.52	2.97	0.01	0.08	0.92	0.52	3.85	1.04	4.37	18.46
1890.....	3.07	2.05	1.12	0.94	0.16	0.32	0.02	0.79	T.	1.44	T.	0.42	10.33
1891.....	0.74	0.76	4.66	1.49	0.72	1.08	0.47	0.46	1.19	1.26	0.90	2.19	15.92
1892.....	1.61	0.68	2.21	1.90	1.65	1.21	T.	0.05	0.12	1.58	0.72	2.35	14.08
1893.....	0.82	1.64	2.68	2.72	1.68	0.04	1.10	0.71	1.30	1.02	1.18	2.37	17.35
1894.....	1.31	0.83	1.73	1.07	1.22	1.38	0.82	0.87	2.87	1.01	0.28	1.28	15.27
1895.....	1.32	0.85	0.81	0.73	2.29	0.99	0.42	0.02	0.05	0.24	2.44	0.89	11.95
1896.....	1.26	0.69	1.99	2.53	3.67	0.25	1.35	1.47	0.52	0.70	3.15	0.84	18.42
1897.....	1.16	3.81	2.20	2.00	0.98	0.52	0.69	0.33	0.48	1.91	1.10	1.47	16.74
1898.....	0.58	0.38	1.71	1.30	4.19	1.45	0.18	1.35	0.16	1.57	1.95	1.28	16.09
1899.....	0.84	2.98	2.93	0.81	2.59	0.96	0.42	1.06	T.	2.85	1.52	0.61	17.57
1900.....	0.44	1.30	0.33	2.91	0.44	0.08	0.32	0.72	1.44	1.99	1.40	0.16	11.53
1901.....	0.95	1.77	2.48	0.87	4.27	0.49	0.31	1.22	0.66	0.98	0.92	1.16	16.08
1902.....	0.80	1.17	1.22	3.69	0.33	0.37	0.56	0.15	0.05	0.52	1.24	1.31	11.41
1903.....	2.11	0.82	1.35	1.11	3.55	0.74	0.14	0.43	0.84	0.81	2.21	0.51	14.62
1904.....	1.45	2.25	3.90	2.20	3.08	0.27	0.59	0.28	0.12	1.18	0.00	0.90	16.31
1905.....	0.65	1.22	2.62	1.70	2.74	0.23	0.62	0.58	2.07	0.24	0.73	0.83	14.23
1906.....	1.10	1.06	2.84	3.08	3.17	1.49	0.23	2.28	1.49	0.39	2.10	1.06	21.28
1907.....	1.75	3.45	2.35	1.46	2.87	1.40	0.19	1.69	0.10	1.16	0.50	2.21	19.22
1908.....	0.63	1.24	1.79	0.80	5.76	1.81	0.25	1.39	2.72	2.07	1.91	0.48	20.85
1909.....	2.70	1.89	2.85	1.60	2.34	0.17	0.75	1.74	1.55	1.13	1.46	1.50	19.08
1910.....	0.99	1.00	1.58	0.66	0.47	0.17	0.52	0.33	0.74	2.64	0.99	1.16	11.25
Mean..	1.32	1.46	2.07	2.04	2.09	0.75	0.51	0.81	0.91	1.46	1.38	1.39	16.20

Soldier Summit, Utah County.

Elevation, 7,800 Feet.

Applicable to Price River, Spanish Fork River and Green River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1892.....	...	0.20	0.89	0.83	2.20	0.29	0.12	2.13	...	...	...	...	...
1893.....	...	...	...	...	0.53	0.00	0.23	0.22	0.27	...	0.71	1.19	...
1894.....	3.55	2.20	3.40	0.33	0.45	0.55	1.01	0.17	0.89	0.56	0.00	4.10	17.21
1895.....	3.50	1.08	1.40	0.32	0.62	0.29	0.34	0.32	0.37	0.17	1.90	1.65	11.96
1896.....	1.16	1.15	1.47	1.02	0.30	0.14	0.86	0.49	0.48	0.60	3.25	0.90	11.90
1897.....	1.82	2.80	5.23	0.67	0.10	0.12	0.02	0.06	2.45	0.65	1.34	2.50	17.76
1898.....	1.25	0.68	2.92	1.56	3.12	0.13	0.00	0.10	0.02	0.65	1.15	1.15	12.73
1899.....	1.70	3.80	1.40	0.20	0.65	0.44	0.55	0.45	0.00	1.60	0.70	2.35	13.84
1900.....	0.50	1.80	0.30	0.49	0.00	0.10	0.25	0.39	0.20	0.20	...	...	...
1901.....	0.85	3.60	...	...	0.21	0.05	1.00	1.68	0.81	0.92	...	0.90	...
1902.....	0.55	0.70	0.80	0.04	0.02	0.00	...	...	...	...	...	...	...
1903.....	...	...	0.20	...	...	0.00	2.00	...	...	...	...	...	...
1904.....	1.35	1.30	2.98	0.60	2.22	0.73	0.55	1.15	0.62	1.21	0.00	0.66	13.37
1905.....	0.59	1.26	1.23	0.81	0.49	0.00	...	...	2.05	0.00	1.25	0.37	...
1906.....	0.38	1.65	0.64	0.24	1.17	0.21	0.19	1.20	...	0.00	...	...	...
1907.....	...	1.82	1.55	1.70	1.09	0.05	0.57	0.85	0.15	...	0.30	1.60	...
Mean..	1.43	1.72	1.74	0.68	0.88	0.20	0.55	0.71	0.69	0.54	1.06	1.58	11.78

Strawberry Tunnel, Utah County.

Elevation, 7,500 Feet.

Applicable to Strawberry River and Indian Creek.

1909.....	9.10	6.50	1.85	3.35	1.00	T.	1.04	2.41	1.93	0.68	5.09	5.00	38.01
1910.....	2.95	6.70	1.30	1.06	0.88	0.29	0.71	0.91	2.66	2.11	1.20	2.70	23.47

Sunnyside, Carbon County.

Elevation, 5,282 Feet.

Applicable to Price River and Green River.

1905.....	0.60	0.45	3.05	1.01	2.83	0.13	0.64	1.63	4.72	0.20	0.97	0.40	16.63
1906.....	0.75	0.40	2.25	4.30	1.52	0.20	2.59	1.15	1.83	0.47	3.80	0.57	19.83
1907.....	0.85	1.20	0.26	0.78	1.45	1.45	0.66	1.97	0.40	0.55	0.80	0.80	11.17
1908.....	0.80	1.45	0.80	0.50	1.74	1.42	0.16	1.30	1.60	1.05	1.25	1.00	13.07
1909.....	2.65	1.45	0.80	0.69	0.61	0.30	1.64	2.53	1.92	T.	0.17	1.00	13.75
1910.....	0.90	0.80	0.35	0.14	0.17	0.45	1.46	0.42	1.20	2.39	1.18	0.95	10.50
Mean..	1.09	0.96	1.25	1.24	1.39	0.66	1.20	1.30	1.96	0.78	1.36	0.79	14.16

Theodore, Wasatch County.

Elevation, 5,507 Feet.

Applicable to Duchesne River and Green River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1906.....	...	...	...	0.47	0.61	0.12	0.56	1.28	1.51	1.40	2.31	0.70	...
1907.....	1.30	0.69	0.25	0.15	0.85	1.61	0.79	1.27	0.09	0.53	0.29	0.58	8.40
1908.....	0.52	0.88	0.26	0.96	0.45	0.65	0.38	1.19	1.17	1.03	0.25	0.85	8.59
1909.....	1.15	1.00	0.15	0.42	0.26	0.26	1.27	2.38	2.72	0.09	1.00	0.97	11.67
1910.....	0.78	0.55	0.29	0.03	0.01	0.51	1.05	0.83	1.57	1.52	0.11	0.66	7.91
Mean..	0.94	0.78	0.24	0.41	0.44	0.63	0.81	1.39	1.22	0.92	0.79	0.75	9.32

Thistle, Utah County.

Elevation, 5,075 Feet.

Applicable to Spanish Fork River.

1892.....	....	1.43	3.45	1.13	1.73	0.26	0.03	...	...	0.67	0.50	0.90	...
1893.....	1.50	...	...	...	0.05	0.00	...	2.40	0.24	0.12	1.06	1.20	...
1894.....	1.60	2.25	1.50	...	...	...	...	1.24	1.80	0.18	0.25	3.58	...
1895.....	0.82	1.30	0.70	0.91	0.35	...	0.51	...	...	0.00	1.61	...	...
1896.....	...	0.18	1.75	1.00	1.80	2.00	2.43	0.63	...	0.47	0.70	0.20	...
1897.....	1.05	2.05	3.00	...	...	0.77	0.58	0.66	2.19	...	...	1.35	...
1898.....	1.05	0.30	0.75	0.00	2.30	0.00	...	...	...	1.20	1.20	1.85	...
1899.....	1.60	2.40	1.30	0.05	0.88	0.00	...	...	...	0.40	2.08	...	...
1900.....	0.30	0.47	0.00	1.77	0.05	0.10	0.10	0.46	1.00	0.75	1.80	0.30	7.10
1901.....	...	2.35	2.40	1.15	0.85	0.05	0.11	3.05	0.25	1.15	0.93	2.00	...
1902.....	1.90	2.05	2.00	2.23	0.35	0.00	0.35	0.20	0.85	0.41	2.10	1.45	13.89
1903.....	...	...	...	1.75	1.60	0.35	0.53	0.10	0.66	1.43	0.80	1.40	....
1904.....	1.90	1.55	...	0.90	2.05	0.82	0.32	0.46	1.90	0.27	0.00	1.50	...
1905.....	0.97	0.60	1.65	2.00	0.70	0.00	0.30	0.24	3.18	0.35	1.15	1.50	12.64
1906.....	3.00	1.50	4.77	2.02	2.28	0.80	0.10	2.77	0.00	0.05	0.81	1.50	....
1907.....	3.80	2.40	0.80	1.70	2.60	1.30	...	...	0.00	0.20	0.60	2.70	...
1908.....	0.60	1.81	1.12	0.20	1.66	1.77	1.71	0.08	1.75	1.50	0.70	0.14	13.04
1909.....	3.95	3.02	0.07	0.21	T.	0.00	...	...	...	...	...	...	...
Mean..	1.80	1.60	1.68	1.14	1.24	0.51	0.59	1.03	1.15	0.57	1.02	1.43	13.76

Vernal, Uinta County.

Elevation, 5,050 Feet.

Applicable to Ashley Creek and Green River.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1895.....	1.00	0.54	1.30	0.08	1.51	0.53	0.76	0.40	0.38	1.03	1.33	0.27	9.13
1896.....	0.48	0.29	0.38	0.89	0.94	0.04	1.86	0.58	2.48	0.69	0.42	0.04	9.09
1897.....	0.96	1.11	0.86	0.58	0.62	0.23	1.08	0.26	2.83	2.34	0.42	1.20	12.49
1898.....	0.63	0.47	0.60	0.50	2.03	0.50	0.34	0.75	1.04	0.30	0.39	0.17	7.72
1899.....	0.40	0.55	1.93	0.39	0.09	0.78	0.64	1.63	T.	1.04	0.46	0.50	8.41
1900.....	0.47	0.[illegible]	0.15	2.00	0.26	0.14	0.03	0.22	1.46	0.57	1.21	0.04	6.67
1901.....	0.71	1.36	0.31	0.33	0.86	0.21	0.21	0.73	0.04	0.42	0.27	0.48	5.93
1902.....	0.21	0.51	0.86	0.72	0.52	0.51	0.12	0.46	0.99	0.05	0.12	0.97	7.04
1903.....	0.39	0.96	1.02	0.67	1.30	0.89	1.83	0.13	1.50	0.88	0.18	0.00	9.75
1904.....	...	...	...	...	...	...	...	...	...	...	...	...	...
1905.....	0.25	1.20	1.85	1.22	1.38	0.21	0.52	0.41	1.81	0.15	0.97	0.21	10.18
1906.....	0.96	0.29	1.11	1.52	2.55	0.25	1.18	1.02	1.00	0.39	2.77	1.72	14.76
1907.....	0.51	0.41	0.76	0.41	1.37	0.50	0.29	0.92	...	...	...	...	...
1908.....	...	...	...	...	...	...	...	0.84	1.89	2.40	0.55	0.80	...
1909.....	1.64	0.52	0.16	0.62	0.08	0.17	0.87	1.97	1.48	0.15	1.10	0.86	9.62
1910.....	0.50	0.01	0.07	0.00	0.01	0.15	1.12	0.72	0.82	1.28	0.17	0.65	5.50
Mean..	0.65	0.60	0.81	0.71	0.96	0.36	0.70	0.74	1.26	0.84	0.74	0.75	9.12

Average Monthly and Annual Precipitation for the State of Utah.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Precipitation	Number of Stations
1892	0.85	0.77	1.52	1.06	1.55	0.46	0.28	0.27	0.09	1.08	0.30	1.27	9.50	20
1893	0.94	1.35	2.05	1.15	0.77	0.02	0.79	0.23	0.84	0.29	0.83	1.30	10.56	30
1894	1.18	1.11	1.66	0.86	0.44	0.84	0.71	0.81	1.36	0.47	0.05	1.94	11.43	30
1895	1.67	1.25	1.24	0.58	1.16	0.43	0.57	0.35	0.60	0.56	1.47	0.78	10.66	30
1896	0.81	0.46	0.99	1.07	1.52	0.20	1.81	1.04	1.00	1.61	1.23	0.46	12.20	30
1897	1.53	2.35	2.22	0.89	0.42	0.25	0.55	0.40	1.64	2.18	0.96	1.16	14.55	30
1898	1.07	0.47	1.24	0.72	3.02	0.78	0.35	0.60	0.10	0.67	0.96	0.63	10.61	35
1899	1.14	1.73	2.46	0.58	0.79	0.58	0.66	0.96	0.05	1.50	0.70	0.95	12.19	40
1900	0.43	0.57	0.19	2.46	0.36	0.16	0.09	0.34	1.26	0.87	1.51	0.14	9.22	50
1901	0.69	1.90	0.84	0.69	1.29	0.25	0.41	1.63	0.21	1.04	0.29	0.81	11.11	55
1902	0.71	0.87	1.28	1.16	0.64	0.17	0.32	0.51	0.56	0.28	1.78	0.89	9.89	60
1903	1.40	0.75	1.19	1.01	1.60	0.47	0.52	0.38	0.90	0.89	0.73	0.37	10.56	65
1904	0.83	1.53	2.33	0.76	1.71	0.47	0.68	1.06	0.40	0.92	T	0.74	12.21	65
1905	0.86	1.67	1.76	1.47	1.77	0.18	0.52	0.74	2.10	0.36	1.53	0.62	14.24	65
1906	1.60	0.88	3.14	2.10	1.98	0.59	0.85	2.09	1.33	0.34	1.81	1.63	19.59	65
1907	2.30	1.95	1.65	0.96	2.04	1.22	0.58	1.56	0.44	1.45	0.34	1.58	16.05	65
1908	0.79	1.16	1.10	0.49	2.35	1.09	0.96	1.20	1.87	2.22	0.62	0.97	15.46	65
1909	2.88	2.15	1.16	1.13	1.02	0.14	1.17	3.02	1.69	0.42	2.37	2.16	19.07	70
1910	1.51	1.12	0.78	0.39	0.42	0.38	1.07	0.79	1.35	1.51	0.78	1.15	11.25	75
Mean	1.22	1.32	1.52	1.03	1.31	0.46	0.68	0.95	0.94	0.98	0.96	1.03	12.65	..

The above table is the average for all precipitation stations. It does not represent a fair average for the whole State because of the lack of information regarding the mountain district. The larger the number of stations, the better the averages are.

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