

AN ANALYSIS OF WATER RIGHTS IN THE  
SEVIER RIVER BASIN

Part 2. Zone B (Lower Sevier River) Primary

by

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## FOREWORD

This report is the second in a three part series dealing with two principal reaches in the Sevier River Basin where waters are divided between primary and storage interests and where the rights are prorated when less than the decreed water is available. Most of the other irrigated areas are supplied water on a direct flow basis and the administration consists of limiting the diversion to the flow right on a day to day basis. The first and second report in this series describe primary rights, their calculation, and their allocation. However, because these rights have storage facilities, the actual accounting of water cannot be made until the third in the series, "Analysis of Reservoir Operations", is completed.

The purpose of the analysis presented herein is to clarify the day-to-day operation of the river encompassing interests to the Zone B primary water. The Cox Decree serves as the basis for water allocation, but subsequent legal or administrative modifications have been made to address particular problems or changes that have occurred. The contents of this report have been documented by reference to these writings as far as possible. Occasionally specific practice has resulted from Commissioner decision and these occurrences will also be noted.

The writers invite interested parties to respond to this work and delineate any errors that are herein incorporated.

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## INTRODUCTION

In compromising water claims in the Sevier River Basin at the time the Cox Decree was handed down, the river system was divided into Zone A (upper) and Zone B (lower). In Zone B, the river was divided into two sections; the Sanpitch River section and the Lower Sevier River section which includes the main channel of the Sevier River below Vermillion Dam and tributaries other than the Sanpitch River (Fig.1). Within the lower section most of the water interests share in the accumulation of tributary, groundwater, and irrigation return flows in the river reach between Vermillion Dam and the river gauging station near Delta. Each of these rights, with the exception of the Rocky Ford Canal and Willow Bend Irrigation Companies, are part of a proration procedure whenever sufficient flows are not available to satisfy each right in its entirety. All of these rights diverting from the main stem have certain prescribed storage rights in Sevier Bridge, Fool Creek, DMAD, or Gunnison Bend Reservoirs.

Although the history of this region is noteworthy because of the efforts to protect water rights, a review of history many years in the future will probably assess salinity as the problem most difficult to resolve. Until recently salinity was viewed as a drainage problem, but many irrigators now perceive the hydrological context as well. The policy for allocating and managing water resources has been found to be

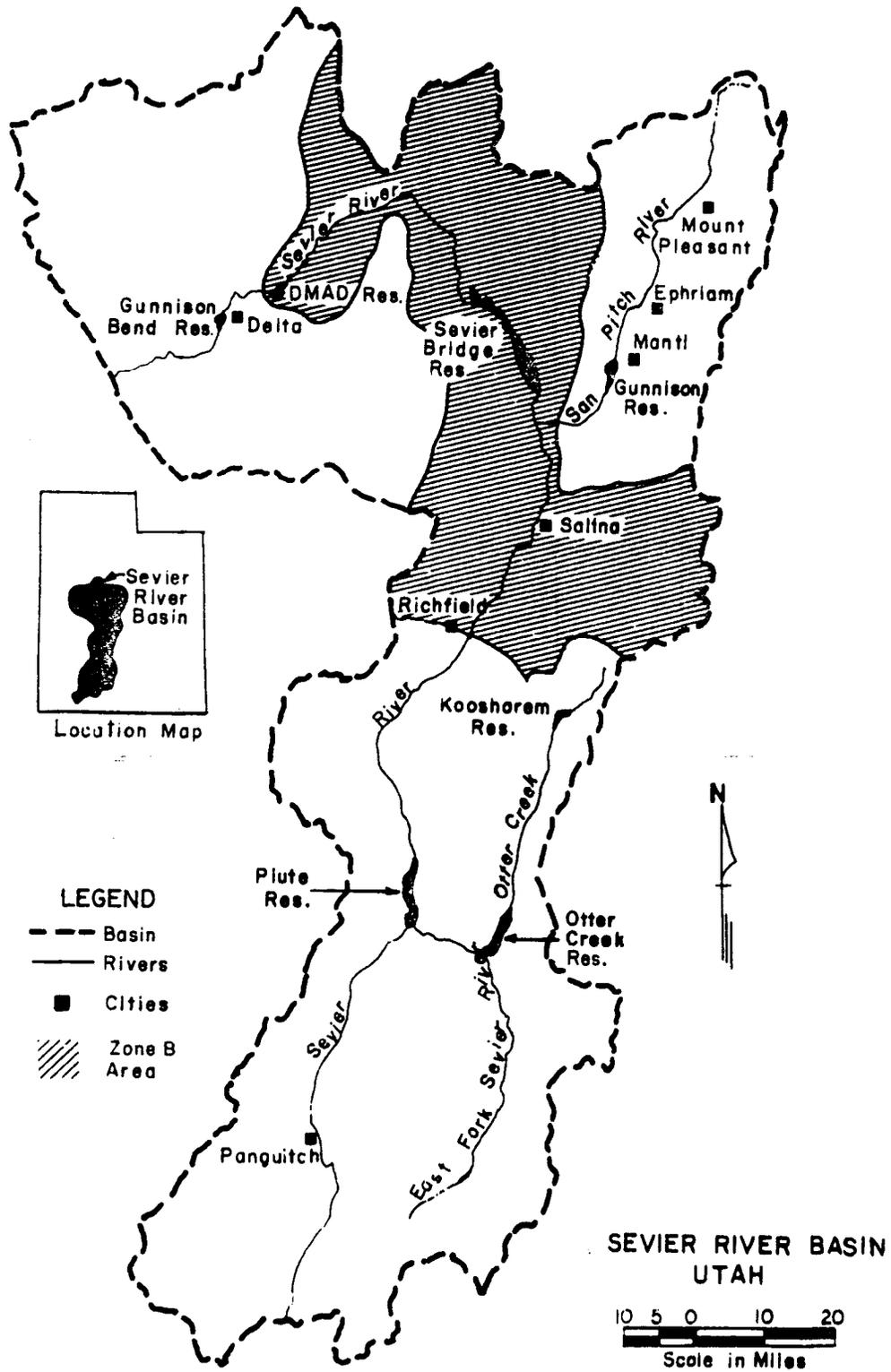


Fig. 1. Location of the Zone B, Lower Sevier River Section, primary area.

an important variable in controlling salinity, and thus, a clear understanding of the policy should be understood as a prerequisite to any planning for water quality improvements.

At any instant in time, river flows in the lower section may be exclusively or a combination of:

- (1) Storage releases from Piute Reservoir enroute to Sevier Bridge Reservoir;
- (2) Flows over Vermillion Dam awarded to storage rights either through high primary in Zone A, Section A, or declined diversions in Sevier Valley;
- (3) A regulating stream from Section A (pending);
- (4) Releases from Rocky Ford, Sevier Bridge, Fool Creek, DMAD, and/or Gunnison Bend Reservoirs;
- (5) Irrigation return flows; and
- (6) Tributary and groundwater inflows.

The quantity and quality of each of these flows are both variable with time and spatially distributed in the region. Therefore, prediction of water quality in the system depends on essentially predicting the mix of these flows. This report attempts to mathematically simulate the disbursement of water as practiced by the Sevier River Commissioner in an effort to aid in delineating the respective flows. In addition, it is intended that a clearer understanding of actual water management policies will be provided to individual water interests, state or federal administrative agencies, and research groups.

## WATER RIGHTS AND THEIR DEFINITION

Development occurred along the Sevier River simultaneously so that by the 1890's all the water that could be diverted by direct diversion was fully utilized during the irrigation season. The water rights that developed as a result of these diversions were called direct flow or primary rights. Diversions were made from existing stream channels and the limits of the diversions were either what was needed or that which was available at the turnout. As state involvement in water administration expanded, upper limits on these rights were established. In years of below normal precipitation and insufficient runoff to irrigate the lands under cultivation, irrigators generally reduced their irrigated acreage to accommodate the supply and then expanded when more water was available. However, this condition was substantially more pronounced at the end of the river system as could be expected, and consequently, reservoir development commenced to salvage the waters that historically had been going to waste. Waters thus captured by reservoirs then became a supplemental supply for the existing acreage. During the following wet cycle period, additional reservoir construction was initiated to salvage more water going to waste and thereby provide irrigation to new lands. Thus, the storage rights were appropriations to all the water from "each and every source whatsoever" that was otherwise going to waste.

This all encompassing concept also gives to the storage rights all the water decreed to the prior direct flow rights that for any of a multitude of reasons was not or could not be diverted. The Cox Decree, in the writers' opinion, lists the rights in a way that quite accurately describes the hydrological sequence as it existed at the time the users stipulated their rights. The following quotes are cited to further clarify the interrelationships among water rights;

Hutchins in Discussing "The Law of Water Rights" maintains that;

..."The appropriator is entitled to have the stream conditions maintained substantially as they existed at the time he made his appropriation. This applies equally to senior and junior appropriators;"

..."The appropriator's right to divert water for irrigation extends only to the quantity necessary for that purpose; 'any excess of the amount so needed properly belonging to the natural stream or source of supply and should be left there.' He cannot give away waste, or otherwise dispose of his surplus water to the injury of subsequent appropriators." (Lambeye V. Garcia 18 Arizona 179, 157, P. 997)

Kinney on "Irrigation And Water Rights" (2nd Ed., Section 870) says;

..."but the extent of the appropriator's claim is limited to the needs of the purpose for which he makes the appropriation."

The Cox Decree on page 1 points out;

..."It is further Ordered, Adjudged and Decreed that beneficial use shall be the basis, the measure and the limitation of all the rights to the use of the waters of said Sevier River System herein determined."

And on page 231;

... "That the rights herein decreed are founded upon appropriations of water for beneficial uses, and the rights herein decreed are subject to the condition that they are required and necessary for beneficial uses, and such rights are subject to the limitations and conditions that the same are used for beneficial purposes, economically and without waste. Any water diverted from the river and/or its tributaries not beneficially used under the rights of the respective parties to this decree shall be returned to the river by the most practical and direct route."

The recitation of the above quotes emphasizes that when the rights are direct flow or on a "use or lose" basis the right consists of the water diverted regardless of the decreed flow. It can generally be assumed that the user would certainly divert what was needed at least up to the maximum allowable, thereby leaving no basis for claiming any of the decreed right that was not diverted.

It should be emphasized that no feasible way exists to adjust or compensate direct flow rights other than to limit the diversion daily as to maximum flow rights for the purpose intended. This concept is particularly important under the Cox Decree where maximum claims were recognized and the determination of need was a decision left to the discretion of the water user himself provided ample water was available. Many rights have thought it necessary to divert their full decreed rights regardless of need in order

to protect the right, when in fact, diverting and then by-passing back into the river only confirms that the diversion is in excess of the needs. Diverting water not needed for irrigation and by-passing the same back into the river causes a computation and allocation of primary waters contrary to the decreed rights. \*The interconnection of the direct flow rights and storage rights is further explained in the Cox Decree page 194:

..."The water available to satisfy such primary rights shall be applied first to the satisfaction of A rights in full and thereafter to the satisfaction in turn of B, C, D, E, and F rights respectively in full. No water shall go to the satisfaction of Class B or Class C or Class D or Class E or Class F rights unless and until there is in the river a quantity of water in excess of the water necessary to fully satisfy all prior classes and rights, irrespective of how much water belonging to the respective prior class or classes or rights shall be used by the owners of such prior class or classes or rights. If at any time there is not sufficient water available to satisfy in full any class, then and in that event the owners of the respective rights in any such class shall pro rate the water available for satisfying such class in proportion to the respective quantities each is entitled to use of such class, but the quantity of water to which any user within any class shall be entitled shall not be increased by the failure of any other user within such class to use or store, as decreed in this case, any of the water to which he or it is or would otherwise be entitled if it were not for this decree; and the water saved by reason of the failure of any primary of "AA" or well water user to use or store the water to which he or it is entitled or would otherwise be entitled to if it were not for the other provision of the decree in this case, shall be allocated to the Sevier Bridge Reservoir and Piute Reservoir as hereinbefore decreed."

The storage rights are as stated previously, not only filled by the peaks in the flow hydrology but also water decreed to prior rights that was not diverted.

#### DESCRIPTION OF WATER RIGHTS

The Zone B (Lower Sevier) Primary rights are described on pages 193-204 of the Cox Decree although subsequent clarifications and/or changes have occurred via various agreements, stipulations, and State Engineer or Court actions. Further information concerning these rights can be found in Bacon's Bible, particularly description of the lands served, on pages 99-102, 207-208, and 226-233.

Primary flows fluctuate over a wide range and as such the water rights were usually adjudicated on the basis of "first in time, first in right". However when the first adjudication became necessary the claims were so diverse and conflicting the resulting Higgins Decree (1901) placed most of the rights on a common priority. In the interval between the Higgins Decree and the Cox Decree the Sevier Bridge Reservoir was constructed. The allocation as provided for in the Higgins Decree was adopted with few exceptions by the Cox Decree. A few changes, however, were significant. During that period of the irrigation season when there would be no question that the irrigation demand was to supply growing crop needs, the direct flow rights were allowed to

place their rights on the call system. This was accomplished by allowing the direct flow rights to by-pass the high flows to Sevier Bridge Reservoir and draw on credits, or overdraft, later in the season. One other change worth noting was that the exception to all rights having a common priority was eliminated so that all the major direct flow rights would have a basic comparative supply.

An exception to the above described conditions are the water rights of Rocky Ford Canal Company and the Willow Bend Irrigation Company. It is probably most helpful to delineate these rights from other lower section primary rights and then describe special storage and exchange provisions available to various rights.

Primary Rights above Rocky Ford Reservoir. This segment of the Lower Sevier section, being somewhat independent in nature from the rest of the section, must be described as a separate unit. The Rocky Ford Canal Company and the Willow Bend Irrigation Company are entitled to all of the water yielded by the river between Vermillion Dam and the Rocky Ford Reservoir Dam. The right is limited to a maximum of 24,000 acre-feet between April 1 to October 15. In addition, the two companies are entitled to fill their reservoir with up to 2,000 acre-feet of the accumulated flow in the reach during the month of March, ( the stage-capacity curve rating

currently in use shows the Rocky Ford Reservoir as being filled at 1,650 acre-feet). This water stored is charged against their maximum right of 24,000 acre-feet and is also limited for use to the April 1 - October 15th period. It should be emphasized that this filling of the Rocky Ford Reservoir must be entirely from the water accumulating in this section during the month of March to avoid reducing or altering the rights below the reservoir. For example, if Rocky Ford and Willow Bend could not or did not desire to use the available water, the by-passed flows would enlarge the lower primary and/or storage rights. Since April water is generally more valuable in meeting crop demands, the storage of April water in Rocky Ford Reservoir would diminish the river flows below the reservoir, thereby having damaging impact to the rights below.

To further clarify the administration of Zone B Primary it should be recalled that the primary is all the water yielded between Vermillion Dam and the Delta gauging Station after the Rocky Ford and Willow Bend rights have been satisfied. The only possibilities of the yield between Vermillion Dam and Rocky Ford Reservoir being a part of the primary rights below is when the quantity exceeds 24,000 acre-feet or by non-use. It is therefore necessary to differentiate the limitations of the Rocky Ford - Willow Bend rights from those below where the non-use of water does not increase the other rights.

Commencing March 1st, the water over Vermillion Dam must be delivered through Rocky Ford Reservoir into Sevier Bridge Reservoir as a right segregated from any of the primary flows. A 2% loss is taken on the water over Vermillion Dam as delivered to the "Sevier River near Sigurd" station. From Sigurd to Sevier Bridge Reservoir as measured at the U.S.G.S. gauge, "Sevier River below Sanpitch near Gunnison" a 10% loss is taken on the storage water being moved. After July 1, this loss is increased to 12%. These figures used over a period of many years seem to be sufficient to protect the primary waters from having to share any of the carrier loss attributable to storage water.

The quantities and flow rates that have to be delivered through the Rocky Ford Reservoir are usually indeterminate until the records are worked at the end of each month. Consequently, a release procedure has evolved to protect the Rocky Ford and Willow Bend rights as well as the rights below. With a full reservoir April 1, the canal companies may release a quantity necessary to have a safe regulating capacity, and to minimize water tables in the surrounding communities. A daily record of the reservoir contents is necessarily recorded. The Rocky Ford and Willow Bend Irrigation companies, in the event too much is released, receive credits against future water over Vermillion Dam which is limited to an amount that would not exceed the unused capacity of their reservoir as computed daily. The right is

thereby limited by the physical conditions that they must either divert or have capacity to store the yield of the river in this section as provided for in the Cox Decree. It should also be noted that should these companies overdraft, the deficits must be repaid by September 30th.

These administrative procedures were adopted by the River Commissioners to improve conditions adjacent to the reservoir. Without this procedure no credit can be allowed for any excess released, consequently the reservoir would be held as high as possible to insure against any such loss. This practice would have two adverse effects; increase reservoir loss and decrease groundwater inflow. It was the opinion of the Commissioner that the Rocky Ford and Willow Bend companies were unduly penalized by an accounting procedure that could not give daily control. Fig. 2 shows the determination and allocation of the Rocky Ford Canal and Willow Bend Irrigation Companies right under existing conditions. A further modification is that a part of the right is diverted from a well, Exchange Application No. 638 (63 area). It was agreed by the Commissioner and irrigation companies that the diversion would be increased by the amount pumped at the end of each two month period starting with April 1, and that this quantity would be subtracted from the right and added to the primary below.

A very small percentage of the total right going to

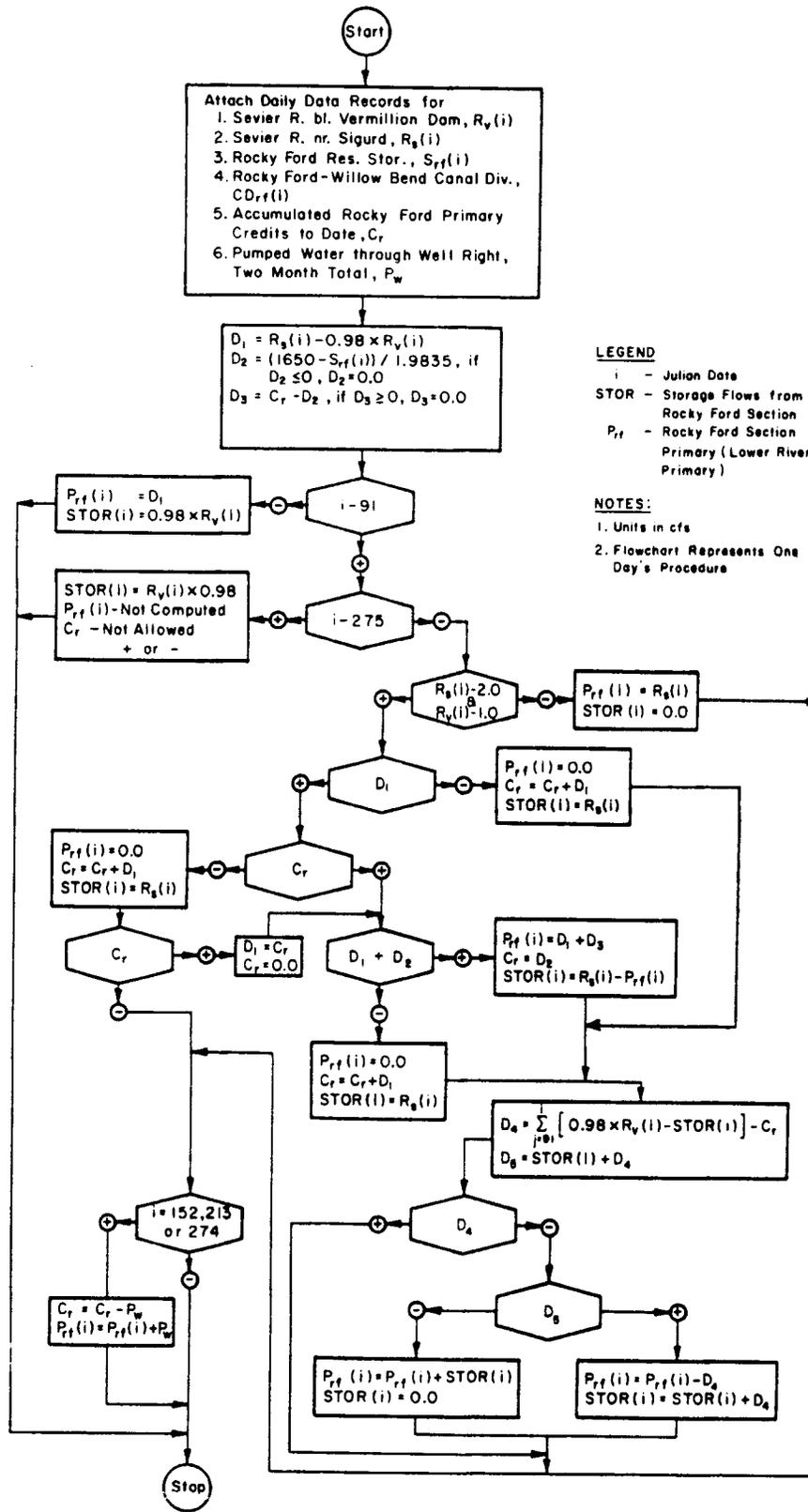


Fig. 2. Flowchart of Rocky Ford-Willow Bend water rights.

Rocky Ford Canal Company and Willow Bend Irrigation Company comes as surface flow, although an occasional flash flood, non-use or high water from minor tributaries will contribute some water. The computation of the primary in this reach of the river is therefore essentially a computation of the groundwater return flow. It is also appropriate to point out that careful and frequent measurements are necessary to protect this right when a large quantity of storage water is being moved from Piute to Sevier Bridge reservoirs. This is one of the reasons that it is advantageous to move as much storage water as possible before the irrigation season commences.

Primary Rights below Rocky Ford Reservoir. The lower Sevier primary is subdivided into eight classes listed as AA, Wells, A, B, C, D, E, and F rights. Table 1 summarizes these rights with notes describing changes since the Cox Decree. Any water in the system above that required to fill the limits of each of these classes belongs to Sevier Bridge and Piute Reservoir storage rights.

First priority to the primary waters as defined quantitatively in a following section belongs to the "AA" rights and are not subject to prorata:

..."and being in their nature miscellaneous and independent and having their sources in springs and other tributaries are hereby designated as AA rights and are to be satisfied in full from

Table 1. Summary of the per Sevier River primary rights.

WATER RIGHTS								
Irrigation System	AA (cfs)	Wells (cfs)	A (cfs)	B (cfs)	C (cfs)	D (cfs)	E (cfs)	F (cfs)
1. West View Irr. Co.	1.5	1.0	23.7 <sup>1/</sup>					28.6
2. Gunnison-Fayette Canal Co.	1.4		16.5					14.3
3. a. Fritsch Loan & Trust Co.			3.2					
4. b. Dyring & Wintch			6.0					1.0
5. c. Nielson			1.0					
6. d. Bown			0.67 <sup>2/</sup>					
7. e. Roberts			0.33 <sup>2/</sup>					
8. f. Mellor	0.7							
9. Dover Irr. Co.	1.0 <sup>3/</sup>		9.65					
10. a. Roberts	0.7		1.1 <sup>6/</sup>					
11. Central Utah Water Co.	3.3		18.7 <sup>4/</sup>		12.5		5.8	4.3
12. Samuel McIntyre Inv. Co.			22.0					
13. Leamington Irr. Co.			23.6					
14. Abraham Irr. Co.		6.0	59.0	5.0		4,285.6		9.0
15. Deseret Irr. Co.			74.0	10.7		5,714.4		
16. Lincoln Cropper	1.4		5.8 <sup>4/</sup>					
17. Piute Res. & Irr. Co.			20.4 <sup>5/</sup>					
18. Piute Res. & Irr. Co.		1.0	9.35 <sup>6/</sup>					
	10.0	8.0	295.0	15.7	12.5	10,000	5.8	57.2

1/  
2/  
3/  
4/  
5/  
6/  
-

From Dover Irr. Co.'s 45 cfs right.  
 1.0 cfs of J.S. Nielson's 1.2 cfs (from Dover Irr. Co.'s 45 cfs right).  
 Originally A.H. Christensen's 1.0 cfs of AA water.  
 6.3 cfs to Central Utah and 5.8 cfs to Nicholson Seed Farm are from Dover Irr.Co.'s 12.1 cfs.  
 Wellington Irr. Co.'s right.  
 From Dover Irr. Co.'s 45 cfs right.

Table 1. Continued.

PERIOD OF USE OF EACH CLASS					
	Class	March (cfs)	Apr-Sept (cfs)	Oct. 1-15 (cfs)	
1. West View	AA		1.5	1.5	
	Wells		1.0	1.0	
	A	23.7	23.7	23.7	
	F	28.6	28.6	28.6	
2. Gunnison Fayette	AA	1.4	1.4	1.4	
	A	16.5	16.5	16.5	
	F	14.3	14.3	14.3	
	a. Fritsch	A	3.2	3.2	3.2
	b. Dyring	A	6.0	6.0	6.0
		F	1.0	1.0	1.0
	c. Nielson	A	1.0	1.0	1.0
	d. Bown	A	.67	.67	.67
	e. Roberts	A	.33	.33	.33
	f. Mellor	AA		0.7	0.7
3. Dover Irr. Co.	AA		1.0	1.0	
	A	9.65	9.65	9.65	
	a. Roberts	AA		0.7	0.7
		A	1.1	1.1	1.1
4. Central Utah Water Co.	AA	3.3	3.3		
	A	18.7	18.7		
	C	12.5	12.5		
	E	5.8	5.8		
	F	4.3	4.3		
5. McIntyre	A	22.0	22.0		
6. Leamington	A	23.6	23.6		
7. Abraham Irr. Co.	Well		6.0		
	A	59.0	59.0		
	B	5.0	5.0		
	D		4285.6	Ac.Ft. (Apr.1-July 1)	
	F	9.0	9.0		
8. Deseret Irr. Co.	A	74.0	74.0		
	B	10.7	10.7		
	D		5714.9	Ac.Ft. (Apr.1-July 1)	
9. Lincoln Cropper	AA	1.4	1.4		
	A	5.8	5.8		
10. Piute Res. & Irr. Co.	Wells		1.0		
	A		20.4 <sup>1/2</sup>		
	A		9.35 <sup>2/7</sup>		

<sup>1/</sup> Water is credited to owners of Sevier Bridge Reservoir. Piute is guaranteed 3750 acre-feet by exchange. 250 acre-feet goes to compensate return flow. Any shortage is made up by the Sevier Bridge owners.

<sup>2/</sup> Right starts March 1. Water is measured as part of the contents of Sevier Bridge Reservoir April 1st. April 1 to Oct. 1 right is totaled for exchange credits.

the waters flowing in the Sevier River as hereinafter stated in lieu of the water directly available from such sources," (Cox Decree, p. 197).

In Table 1, the "AA" rights are shown to be 6.1 cfs during March of each year and 10 cfs from April to October 1st or 15th depending on the individual right.

The second priority to water flowing in the Sevier River accrues to four water rights which developed artesian ground-water wells. This water is from wells driven adjacent to the Sevier River;

..."and are hereby limited to the quantity of water available for satisfying their respective rights from their respective sources of supply" (Cox Decree, p. 198).

The allocation of the well water thus depends on periodic measurements of the various groups of wells. The Group A, Dover Dam well allocation, has been modified by court action to give the West View Irrigation Company the water yielded by the north wells in lieu of the first 1.0 cfs yielded by the north and south groups of wells, and the Piute Reservoir and Irrigation Company the yield of the south group of Dover Dam wells. In no instances since the Cox Decree was instituted has the yield from either group exceeded 1.0 cfs and each usually measures approximately .75 cfs. Group B, the Kearns Ranch Wells, have never yielded any water to the river and consequently no allocation has ever been made nor have any claims been made for the water since administration under

the Cox Decree began. The Spaulding Livinston Wells, Group C, are now limited by stipulation to the Abraham Irrigation Company as a maximum of 6 cfs. The Abraham Irrigation Company desired to repair and clean these wells and accepted a limitation as to what the record indicated they had actually received in the past (as with many of the rights listed in the Cox Decree the decreed right exceeded the water yielded, and every development of water that exceeded the historic yield would be an enlargement of the right). Under D, Sanpitch River Rights, page 198 of the Cox Decree, the Gunnison-Fayette Canal Company rights to waters of the Sanpitch River system are detailed. This right has nothing to do with well rights as might be construed from the way the right is listed. This water would come into their canal below their measured diversion from the main Sevier River channel. The administration is to limit the diverting of the Sanpitch River water to the 40 cfs listed and any additional Sanpitch River water would be by-passed to the Sevier River channel to be measured as primary flow at the U.S.G.S. gauge just downstream from the confluence of the Sanpitch and Sevier Rivers.

The final priorities for the primary flows go to A, B, C, D, E, F, and storage;

..."The water available to satisfy such primary rights shall be applied first to the satisfaction of A rights in full and thereafter to the satisfaction in turn of B, C, D, E, and F rights respectively in full" (Cox Decree, page 194).

In the event there is insufficient water to satisfy in full any particular class the supply is prorated. These rights as well as those described above are calculated and allocated on a daily basis. The allocation of these rights along with the AA and Well rights is illustrated in flow chart format as shown in Fig 3.

Storage and Exchange Provisions. During the March 1st to April 15th period, several of the lower section rights operate on a "use or lose" basis. In other words, their rights are not utilized by any means other than diverting their full entitlement as computed on a daily basis. In exchange for 10% of these calculated rights (3% for Gunnison-Fayette Canal Company), the primary rights above Sevier Bridge Reservoir may in effect utilize available storage in Sevier Bridge to stabilize their rights. The "exchange users" include West View Irrigation Company, Gunnison-Fayette Canal Company and the multiple primary rights it serves (see Table 1), and the Dover Irrigation Company. The exchange (limited to the April 16th to October 10th period) is accomplished by allowing the exchange users to divert according to their needs while their right is accumulated as credits from which the diversion quantities are subtracted. A collective overdraft up to 1,000 acre-feet is allowed but must be repaid prior to October 10th. After October 10th, any surplus primary storage credits are forfeited to the Sevier Bridge and Piute

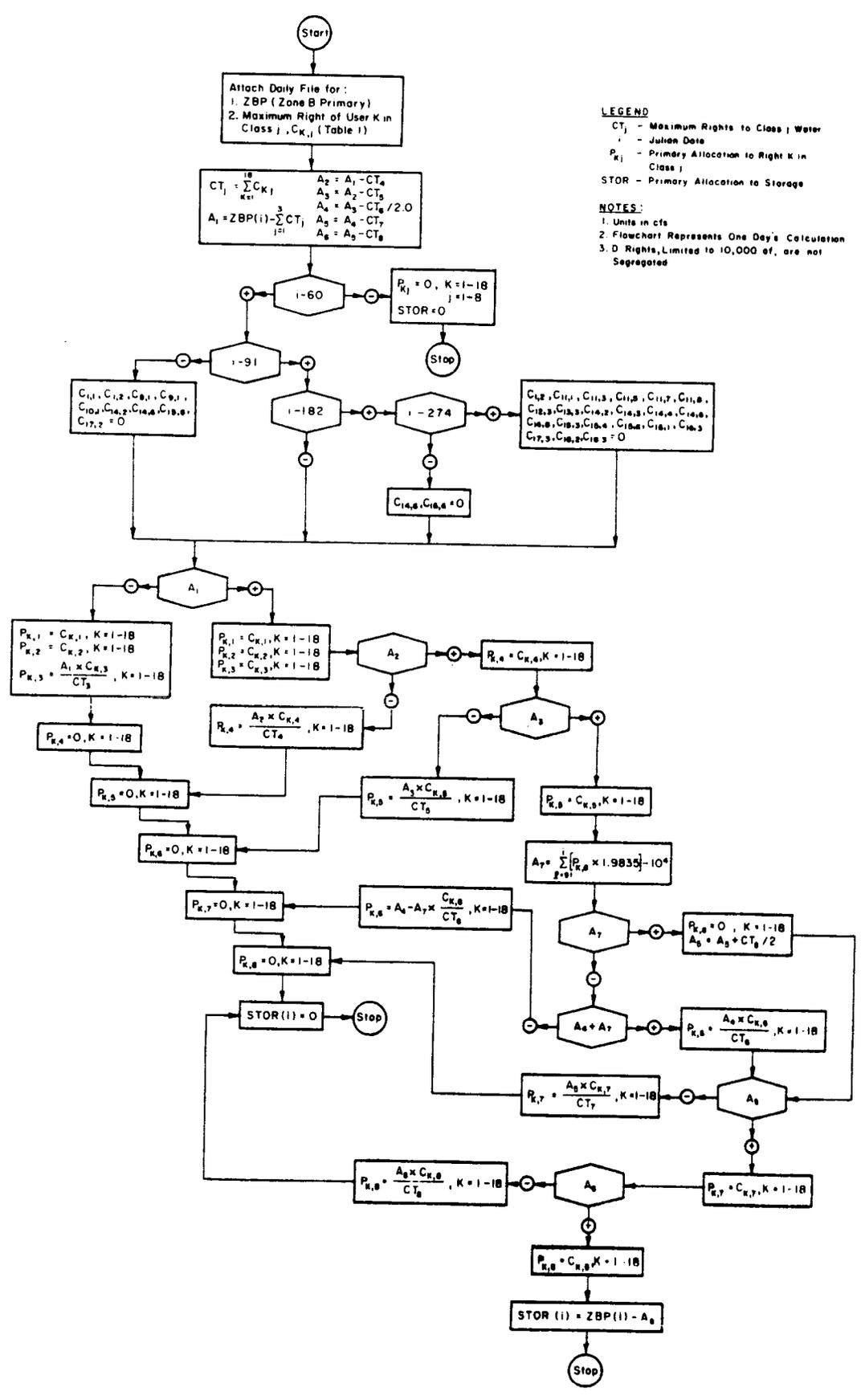


Fig. 3. Flowchart procedure for allocating lower section primary.

storage rights. The 3% or 10% "charges" for the exchange privileges are issued as credits to the storage companies owning Sevier Bridge Reservoir. The description of these procedures are detailed in pages 199 and 200 of the Cox Decree.

These same provisions were extended to the Leamington Irrigation Company, Samuel McIntyre Investment Company, and the Wellington Irrigation Company below Sevier Bridge Reservoir with the exception that: (1) period of storage exchange extends only to October 1st; and (2) storage credits are forfeited under the same provisions as for the exchange users at the close of the irrigation season.

The rights listed to be diverted to the Nicholson Seed Farms originated from the original primary rights although no provisions were made in the decree to regulate this water through the reservoirs as discussed above. Because the Nicholson Seed Farms (Lincoln Cropper) had no means to divert other than through one of the Deseret Irrigation Company canals, a contract was entered into by which the Deseret Irrigation Company would receive the total credits accruing to the Nicholson Seed Farms, stand all reservoir and transmission losses, and deliver to the river below Gunnison Bend Reservoir 90% of the total right. Any of the water belonging to the right, as now accruing as credits, at the end of the irrigation season is forfeited as per the Cox Decree to the storage rights of Sevier Bridge and Piute Reservoirs.

It may be useful to detail administrative procedures used during the transistion between primary and storage rights in October and March to provide a clearer understanding of how flows are allocated in these intervals. Keeping in mind that the primary flow is the river accretions between Vermillion Dam and the Delta gauging staion, the primary rights above Sevier Bridge Reservoir continue until October 15th whereas those below terminate October 1st with only accrued credits being diverted thereafter. After October 1st, the remaining primary flows are re-allocated to winter storage rights. Flows originating below the reservoir are segregated and allocated to Abraham, Deseret, and Central Utah to be stored in their respective reservoirs (Gunnison Bend, DMAD, and Fool Creek Reservoirs). Water above Sevier Bridge Reservoir in excess of the rights of the exchange users during this period go to the storage rights of Piute and Sevier Bridge Reservoirs. Since the flow records are not available soon enough to enable the exchange users to draw any credits they might have accumulated (in the October 1st to 10th period), the Commissioners extend the September ratio of rights to the October 1st through 15th period. This procedure makes it possible to notify these users concerning their credits in enough time for them to use if needed.

Between October 1st and March 1st, the Cox Decree awards

Deseret and Abraham Irrigation Companies 10,000 acre-feet of water arising below Sevier Bridge Reservoir to use and/or store during the non-irrigation season (this quantity was reduced to 9,300 acre-feet by stipulation with the construction of DMAD Reservoir). The Central Utah Water Company receives all water over the 9,300 acre-feet until March 1st, and all water originating below Sevier Bridge Reservoir beyond the rights of the primary rights during March. This procedure allocates water that would be in excess of primary rights below Sevier Bridge Reservoir and would represent surpluses awarded to Central Utah Water Company under their 1367-A filing.

Another administrative procedure introduced by the Commissioners applies to the decreed provision to close the irrigation season for the primary rights below Sevier Bridge Reservoir. Three primary companies below Sevier Bridge (Leamington, McIntyre, and Lincoln Cropper) are allowed to accumulate credits until October 1st of each year with water thereafter decreed to other than primary rights as noted above. For these primary companies to receive any credits they might have accumulated before the first of October it was necessary to release water from Sevier Bridge Reservoir. The storage companies being specifically prohibited from releasing water from Sevier Bridge Reservoir to store downstream and because storage space other than Fool Creek Reservoir could not accommodate any additional water, deliveries

to the primary rights was limited to a period when the irrigation demand below exceeded the natural yield of the river. When this irrigation demand ceased, the outlet gates of Sevier Bridge Reservoir was closed and the irrigation season was closed as it pertained to Sevier Bridge Reservoir. Because the companies for many years past have not taken the formal action required, the River Commissioner arbitrarily allows Leamington and McIntyre Companies until November 1 to draw on their credits. Lincoln Cropper by a separate agreement was given until October 15 to use any credits on hand. An accounting is accomplished by exchanging the use below for holdover credits in Sevier Bridge Reservoir.

One additional block of water to be accounted for is the right of August C. Sievers and Freemont D. Graue, subsequently sold to the Central Utah Water Company, of 1,000 acre-feet from Lower Mohlen Springs. This spring is located a short distance below Sevier Bridge Reservoir (Cox Decree, P. 204).

#### COMPUTATION OF PRIMARY FLOW

For purpose of evaluating the Zone B Primary, the river between Vermillion Dam and the Delta gauging station is divided into four segments:

- (1) "Sevier River below Vermillion Dam" to Sevier River near Sigurd";

- (2) to "Sevier River below Sanpitch near Gunnison";
- (3) through Sevier Bridge Reservoir; and
- (4) to "Sevier River near Delta".

Simplicity may be well served by designating the primary in these segments as Sigurd Primary, Gunnison Primary, Sevier Bridge Reservoir Primary, and Primary below Sevier Bridge Reservoir, respectively. The Sigurd primary is computed as part of the Rocky Ford - Willow Bend rights as illustrated previously in Fig. 2, and the Sevier Bridge Reservoir primary is defined as 20 cfs by the Cox Decree (p. 204). The Construction of Sevier Bridge Reservoir left the normal ungauged inflows in this reach indeterminate so the definition by the Cox Decree was based on earlier measurements and experiences of the river commissioners. A diagrammatic description of the Zone B Primary computational procedure is shown in Fig. 4.

Gunnison Primary. Between the river gauging station near Sigurd and Gunnison the primary is the difference between total outflows and the net storage inflows from Zone A (recall earlier provisions for accounting for storage water conveyance losses). Outflows in addition to the river near Gunnison are the West View, Gunnison-Fayette, and Dover Canals.

Primary below Sevier Bridge Reservoir. The determination of primary flows below Sevier Bridge Reservoir is complicated by the fact that large releases from the reservoir create

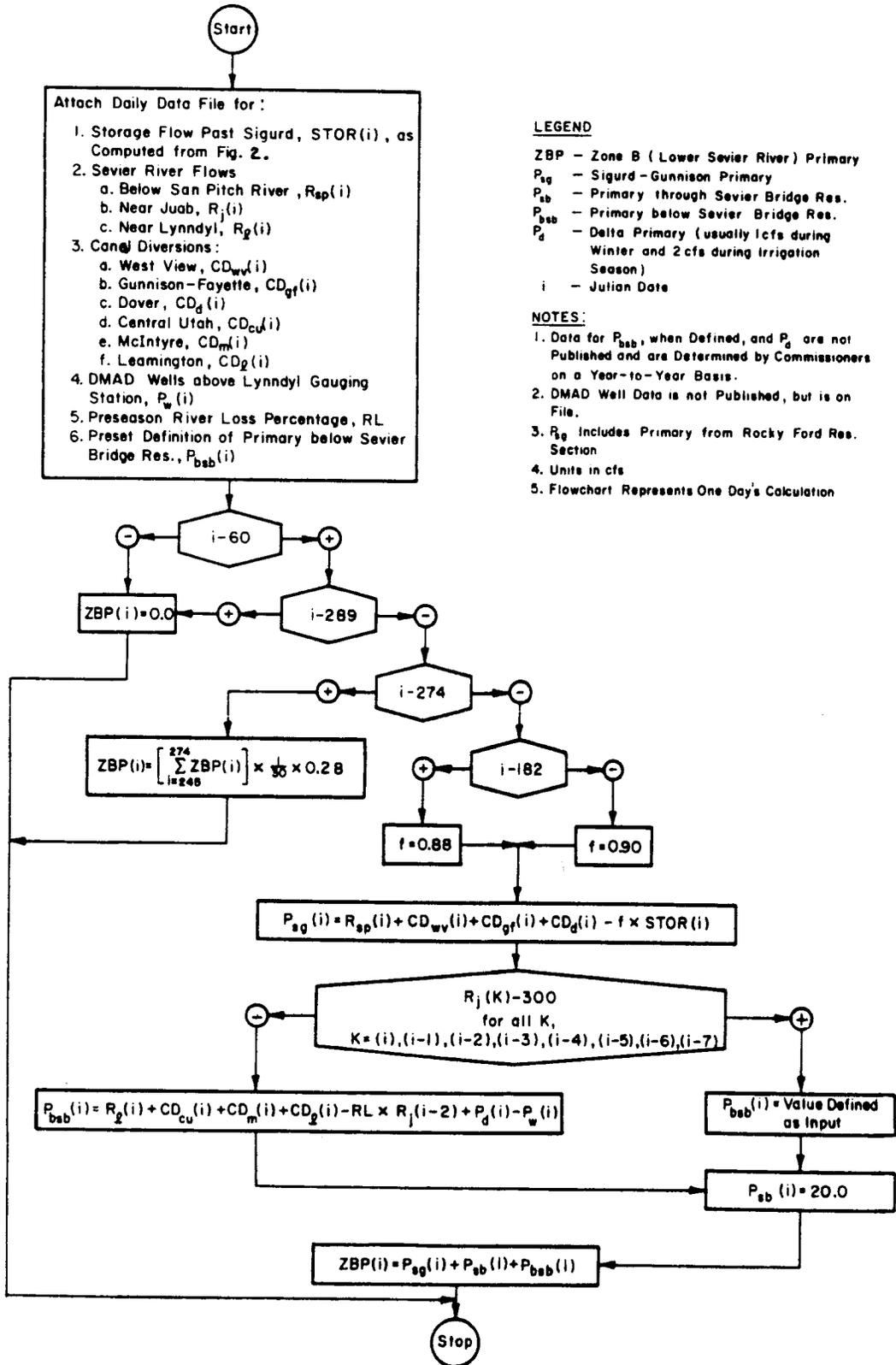


Fig. 4. Procedure for calculating lower section primary flow.

such a large transient reservoir of in-channel storage that typically used inflow-outflow methods become extremely difficult if not impossible to apply. Two alternatives can be employed, both of which have historical precedence upstream. The first method is to assign river losses to reservoir releases and the second involves defining a primary flow during periods when it cannot be accurately calculated.

The principal problem with determining river losses and then assigning them against all released storage is that a daily accounting important to dividing water between AA, Wells, A, B, C, D, E, and F rights cannot be effectively made. For instance, the hydrograph of the record for Sevier River near Lynndyl indicates that primary flow in the river does not stabilize for several days after water is shut off at Sevier Bridge Reservoir. In other words, the in-channel storage of the river in this sixty mile stretch is very large. This is compounded by the fact that travel time between Sevier Bridge Reservoir and the Lynndyl station is approximately two days.

Analysis of data over a period of several years has led to the conclusion that the river loss approach is also less accurate than attempting to judge the primary during release periods. Support for this conclusion is given by the areas' hydrology itself. With the exception of the

periodic rains or unusually rapid snow melt, most of the primary below Sevier Bridge Reservoir comes from relatively constant springs or groundwater inflows, and irrigation return flows. The primary is therefore not only relatively stable during the irrigation season but also from year to year as data tend to indicate. Consequently, the approach that has evolved is to compute the primary for all extended (after at least 7 days) periods when the releases from Sevier Bridge do not exceed 300 cfs and assume the latest stable computed primary flow rate as applying to the periods of high releases. Flash floods or other unusual primary flows can be computed from the Lynndyl gauging station although available hydrographs from the station show that these contributions to the primary below Sevier Bridge Reservoir are generally negligible.

The calculation of primary flows below Sevier Bridge Reservoir is therefore divided into two parts depending on whether or not releases from the reservoir are greater or less than 300 cfs. (Leakage from the reservoir when no releases are being made is considered part of the primary ). If a period of at least 7 days of Sevier Bridge releases of less than 300 cfs is occurring, the primary is determined by first adding the flow past the Lynndyl gauging station to the diversions into the Central Utah, Leamington, and McIntyre

canals. Then from this sum is subtracted the net releases from Sevier Bridge Reservoir and the yield of two large wells above the Lynndyl gauging station. And finally, from the resulting figure is added the primary flow past the Delta gauging station as determined when no releases are being made from DMAD Reservoir. The percentage loss assessed against storage waters utilized in determining the net releases can be evaluated before the irrigation season based on anticipated use of water from Sevier Bridge Reservoir. All anticipated releases above 135,000 acre-feet annually are reduced by 6%, and between 115,000 and 135,000 acre-feet the losses are 7%. Expected annual releases below 115,000 acre-feet are reduced 8%. Because the Central Utah Water Company diversion is further upstream than the other four storage companies, their transit loss assessments are taken at 60% of the per unit value at the end of the river. It might be of interest to note that these river losses on released storage water, ranging between 6% and 8%, are determined from a continuing computation of the losses from past years when the total record is available for analysis.

#### SUMMARY

This report has described the documentation and operation of the Zone B, Lower Sevier River, primary flow system. A detailed example for the 1975 irrigation season is presented in the following appendix in order to clarify the procedures outlined previously. Actual water credits for each right

are not given herein because of the need to understand reservoir operations, the subject of a succeeding report.

The concepts utilized by the originators of the Cox Decree to allocate water in this section of the Sevier River are exemplary for other regions where water resources are approaching full development. For instance, the system of proration rather than absolute priority allows irrigators along the entire river to maintain a substantial fraction of their productivity even during the driest years. This practice undoubtedly facilitates higher water use efficiencies and maximizes the economic output in the area. This system of water management, however, is not without problems of its own. All irrigators must be cognizant of the system and subscribe to it. Thus, this report is intended to serve the need in the Sevier River Basin insofar as a better understanding of actual water management practices as developed from the Cox Decree is desired.

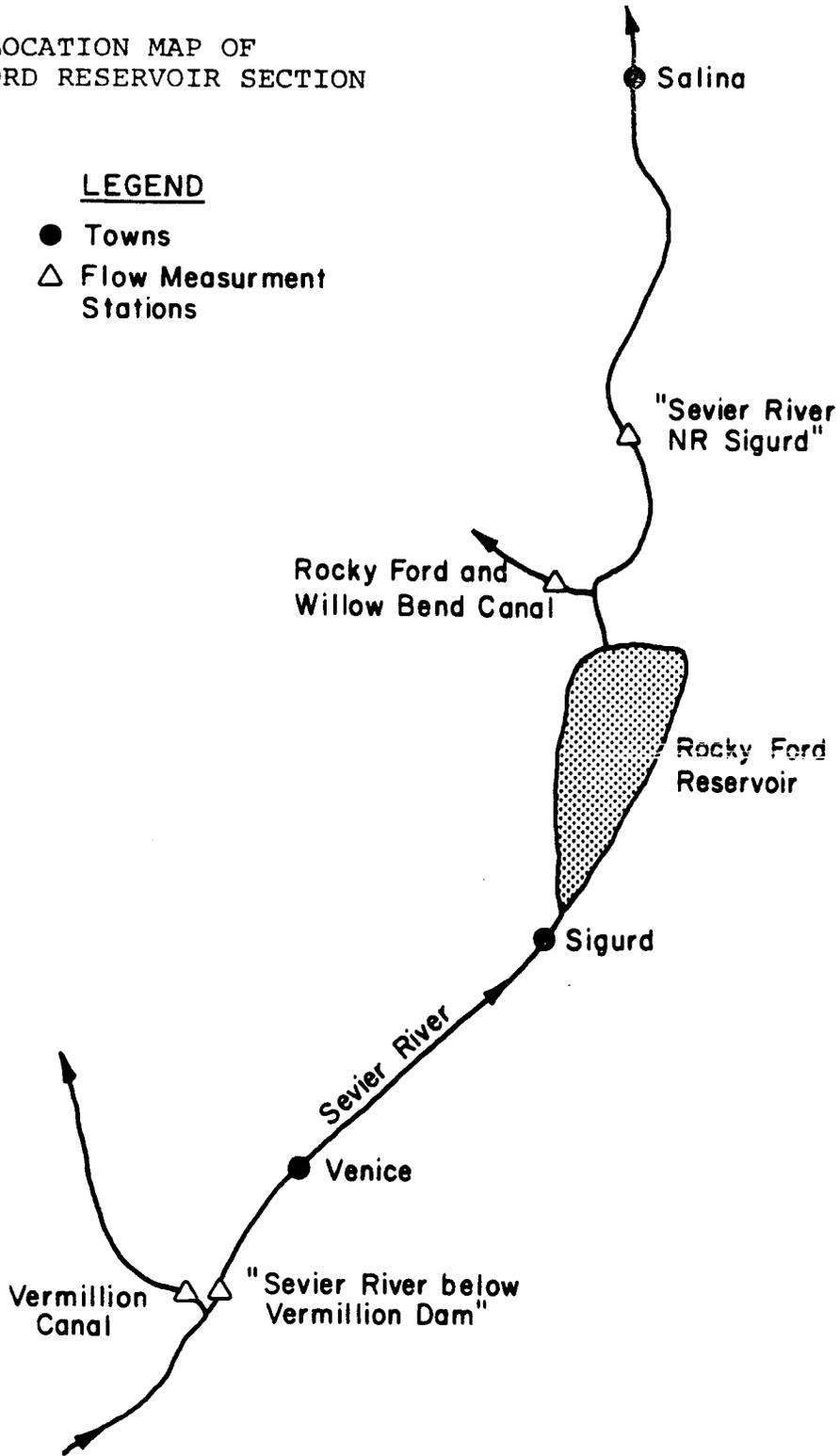
A P P E N D I X

DETAILED ILLUSTRATION OF CALCULATION  
PROCEDURES FOR 1975

LOCATION MAP OF  
ROCKY FORD RESERVOIR SECTION

LEGEND

- Towns
- △ Flow Measurement Stations



ROCKY FORD RESERVOIR SECTION

March 1975

Day	River flow past Sigurd (cfs)	River flow over Vermilion -2% (cfs)	Difference <u>2/</u> (cfs)	Rocky Ford Res. Capacity (cfs) <u>1/</u>	Cumulative RF & WB Credits (cfs) <u>1/</u>	Storage by Sigurd (cfs)	Sigurd Primary (cfs)
1	113	45	68			45	68
2	107	44	63			44	63
3	106	44	62			44	62
4	104	51	53			51	53
5	108	49	59			49	59
6	106	45	61			45	61
7	104	44	60			44	60
8	100	40	60			40	60
9	100	39	61			39	61
10	106	42	64			42	64
11	115	44	71			44	71
12	74	45	29			45	29
13	36	43	- 7			43	- 7
14	36	41	- 5			41	- 5
15	37	40	- 3			40	- 3
16	38	41	- 3			41	- 3
17	40	41	- 1			41	- 1
18	44	37	7			37	7
19	36	37	- 1			37	- 1
20	41	27	14			27	14
21	49	19	30			19	30
22	50	13	37			13	37
23	50	14	36			14	36
24	50	15	35			15	35
25	51	19	32			19	32
26	58	16	42			16	42
27	66	16	50			16	50
28	70	12	58			12	58
29	71	9	62			9	62
30	66	11	55			11	55
31	59	19	40			19	40
cfs	2191	1002				1002	1189
af	4350	1987				1987	2358

1/ Doesn't apply during March.

2/ Net storage subtracted from total at Gunnison leaving the Sigurd primary to be measured as a part of the flow at Gunnison.

ROCKY FORD RESERVOIR SECTION

April 1975

Day	River flow past Sigurd (cfs)	River flow over Vermillion -2% (cfs) 1/	Difference (cfs)	Rocky Ford Res. Capacity (cfs)	Cumulative RF & WB Credits 2/ (cfs) 3/	Storage by Sigurd 4/ (cfs)	Sigurd Primary (cfs)
1	61	27	34	0	0	27	34
2	71	9	62	0	0	9	62
3	76	6	70	0	0	6	70
4	74	6	68	25	25	31	43
5	64	4	60	45	45	24	40
6	43	0	43	62	62	17	26
7	28	0	28	75	75	13	15
8	15	0	15	75	75	0	15
9	12	0	12	55	55	0	12
10	6	0	6	45	45	0	6
11	4	0	4	45	45	0	4
12	14	0	14	25	25	0	14
13	24	0	24	25	25	0	24
14	29	0	29	0	0	0	29
15	29	0	29	0	0	0	29
16	28	2	26	0	0	0	28
17	31	0	31	0	0	0	31
18	37	2	35	0	0	0	37
19	24	2	22	0	0	0	24
20	18	2	16	0	0	0	18
21	7	2	5	25	5	0	7
22	0	2	- 2	35	3	0	0
23	0	2	- 2	45	1	0	0
24	0	63	- 63	62	- 62	0	0
25	47	78	- 31	45	- 93	0	47
26	66	50	16	62	- 77	53	13
27	52	34	18	62	- 59	52	0
28	50	24	26	75	- 33		0
29	55	3	52	82	19	55	0
30	48	39	9	137	28	48	0
31							
cfs	1013	357			28	385	628
af	2009	708			56	764	1246

1/ Reduced by 2% for carrier losses.

2/ Negative values represent cfs due river.

3/ Positive values represent water owed to Rocky Ford & Willow Bend canal. Limited to reservoir capacity.

4/ Primary water released in exchange for future water over Vermillion Dam. When subsequent lack of storage won't allow the exchange the first storage water by Sigurd repays the excess credit allowed earlier.

ROCKY FORD RESERVOIR SECTION

May 1975

Day	River flow past Sigurd cfs	River flow over Vermilion -2% cfs	Difference cfs	Rocky Ford Res. Capacity cfs	Cumulative RF & WB Credits cfs	Storage by Sigurd cfs	Sigurd Primary cfs
1	52	98	- 46	139	- 18	52	
2	55	97	- 42	108	- 60	55	
3	87	77	10	38	- 50	87	
4	107	56	51	63	1	107	
5	78	72	6	121	7	78	
6	58	61	- 3	101	4	58	
7	50	33	17	121	21	50	
8	50	6	44	126	65	50	
9	60	4	56	181	121	60	
10	66	16	50	257	171	66	
11	63	6	57	308	228	63	
12	23	4	19	171	171	0	23
13	<u>1/</u> 0	3	- 3	151	151	0	
14	0	2	- 2	308	149	0	
15	0	3	- 3	292	146	0	
16	0	33	- 33	275	113	0	
17	0	69	- 69	257	44	0	
18	0	41	- 41	164	3	0	
19	0	10	- 10	121	- 7	0	
20	0	52	- 52	5	- 59	0	
21	34	175	-141	0	-200	0	34
22	152	114	38	0	-162	116	36
23	199	133	66	0	- 96	199	
24	182	93	89	121	- 7	182	
25	154	7	147	184	140	154	
26	106	9	97	242	237	106	
27	43	38	4	171	171	0	43
28	13	155	-142	139	29	0	13
29	47	168	-121	0	- 92	32	15
30	142	133	9	25	- 83	142	
31	169	93	76	0	- 7	169	
cfs	1990	1861			- 7	1854	164
af	3947	3691				3677	325

1/ No Releases.

ROCKY FORD RESERVOIR SECTION

June 1975

Day	River flow past Sigurd (cfs)	River flow over Vermilion -2% (cfs) <u>1/</u>	Difference (cfs)	Rocky Ford Res. Capacity (cfs)	Cumulative RF & WB Credits (cfs)	Storage by Sigurd (cfs)	Sigurd Primary (cfs)
1	137	45	92	0	0	52	85
2	118	38	80	0	0	38	80
3	108	56	52	101	52	108	
4	45	40	5	139	57	45	
5	19	3	16	101	73	19	
6	18	18	0	88	73	18	
7	29	94	- 65	154	8	29	
8	31	154	-123	121	-115	31	
9	44	124	- 80	15	-195	44	
10	92	81	11	0	-184	92	
11	102	11	91	25	- 93	102	
12	88	0	88	139	- 5	88	
13	37	0	37	267	- 32	37	
14	5	76	- 71	292	- 39	5	
15	12	154	-142	257	-181	12	
16	45	211	-166	156	-347	45	
17	103	156	- 53	60	-400	103	
18	99	22	77	50	-323	99	
19	68	30	38	121	-285	68	
20	43	11	32	174	-253	43	
21	37	3	34	181	-219	37	
22	56	70	- 14	141	-233	56	
23	64	112	- 48	219	-281	64	
24	60	48	12	141	-269	60	
25	57	28	29	121	-240	57	
26	57	29	28	136	-212	57	
27	53	4	49	154	-163	53	
28	47	3	44	166	-119	47	
29	40	10	30	207	- 89	40	
30	30	2	28	237	- 61	30	
31							
cfs	1745	1633				1468	165
af	3460	3239				2912	327

ROCKY FORD RESERVOIR SECTION

July 1975

Day	River flow past Sigurd (cfs)	River flow over Vermilion -2% (cfs)3/	Difference (cfs)	Rocky Ford Res. Capacity (cfs)2/	Cumulative RF & WB Credits (cfs)	Storage by Sigurd (cfs)	Sigurd Primary (cfs)
1	26	0	26		- 35	26	0
2	35	4	31		- 4	35	
3	12	28	- 16		- 20	12	
4	7	12	- 5		- 25	7	
5	4	0	4		- 21	4	
6	0	0	0		- 21	0	
7	4	0	4		- 17	4	
8	4	0	4		- 13	4	
9	4	0	4		- 9	4	
10	3	65	- 63		- 72	3	
11	3	166	-163		-235	3	
12	9	96	- 88		-323	9	
13	31	142	-111		-434	31	
14	55	74	- 19		-453	55	
15	57	48	9		-444	57	
16	49	6	43		-401	49	
17	46	0	46		-355	46	
18	38	0	38		-317	38	
19	16	11	5		-312	16	
20	4	4	0		-312	4	
21	4	0	4		-308	4	
22	0	0	0		-308	0	
23	0	0	0		-308	0	
24	0	0	0		-308	0	
25	0	4	- 4		-312	0	
26	0	57	- 57		-369	0	
27	0	78	- 78		-447	0	
28	24	67	43		-404	24	
29	47	55	- 8		-412	47	
30	63	55	8		-404	63	
31	76	10	66		-338	76	well 8
cfs	621	982			Well 8 -346	621	8
af	1232	1948			-686	1232	16

1/ No reservoir capacity needed for credits.

ROCKY FORD RESERVOIR SECTION

August 1975

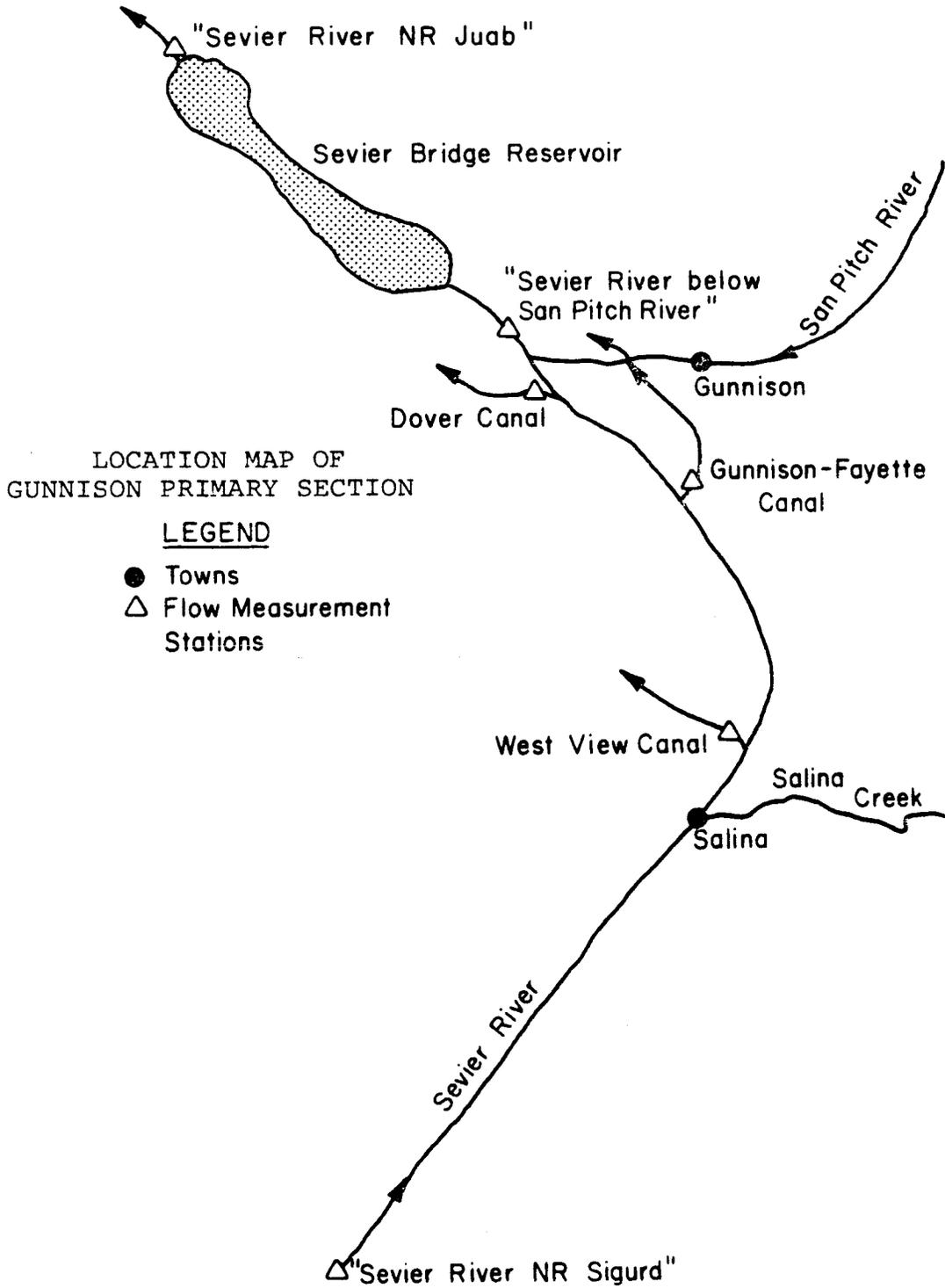
Day	River flow past Sigurd (cfs)	River flow over Vermilion -2% (cfs)	Difference (cfs)	Rocky Ford Res. Capacity (cfs)	Cumulative RF & WB Credits (cfs)	Storage by Sigurd (cfs)	Sigurd Primary (cfs)
1	78	17	61		-285	78	0
2	55	66	- 11		-296	55	
3	45	75	- 30		-326	45	
4	49	87	- 38		-364	49	
5	44	98	- 54		-418	44	
6	40	33	7		-411	40	
7	47	29	18		-393	47	
8	45	15	30		-363	45	
9	38	2	36		-327	38	
10	31	2	29		-298	31	
11	41	3	38		-260	41	
12	48	22	26		-234	48	
13	34	7	27		-207	34	
14	25	0	25		-182	25	
15	22	2	20		-162	22	
16	11	9	2		-160	11	
17	10	23	- 13		-173	10	
18	8	35	- 27		-200	8	
19	7	8	- 1		-201	7	
20	5	6	- 1		-202	5	
21	4	23	- 19		-221	4	
22	6	25	- 19		-240	6	
23	6	30	- 24		-264	6	
24	7	42	- 35		-299	7	
25	10	34	- 24		-323	10	
26	15	39	- 24		-347	15	
27	14	37	- 23		-370	14	
28	13	35	- 22		-392	13	
29	16	41	- 25		-417	16	
30	27	34	- 7		-424	27	
31	40	20	20		-404	40	0
cfs	841	899				841	
af	1668	1783				1668	

ROCKY FORD RESERVOIR SECTION

September 1975

	River flow past Sigurd (cfs)	River flow over Vermil- lion -2% (cfs)	Differ- ence (cfs)	Rocky Ford Res. Capa- city (cfs)	Cumula- tive RF & WB Credits (cfs) <sup>1/</sup>	Storage by Sigurd (cfs)	Sigurd Primary (cfs)
1	40	18	22		- 382	40	
2	45	13	32		- 350	45	
3	44	11	33		- 317	44	
4	49	26	23		- 294	49	
5	53	52	1		- 293	53	
6	63	36	27		- 266	63	
7	65	18	47		- 219	65	
8	61	31	30		- 189	61	
9	59	35	24		- 165	59	
10	63	32	31		- 134	63	
11	63	15	48		- 86	63	
12	53	7	46		- 40	53	
13	55	31	24		- 16	55	
14	54	92	- 38		- 54	54	
15	50	159	-109		- 163	50	
16	65	141	- 76		- 239	65	
17	75	127	- 52		- 291	75	
18	129	111	18		- 273	129	
19	203	80	123		- 150	203	
20	167	64	103		- 47	167	
21	135	37	98		+ 51	84	51
22	107	36	71		+ 122	36	71
23	88	33	55		+ 177	33	55
24	79	19	60		+ 237	19	60
25	68	14	54		+ 291	14	54
26	58	18	40		+ 331	18	40
27	55	25	30		+ 361	25	30
28	56	22	34		+ 395	22	34
29	59	24	35		+ 430	24	35
30	60	22	38		+ 468	22	38
31							
cfs	2221	1349				1753	468
af	4405	2676				3477	928

<sup>1/</sup> No credits or deficits allowed beyond September 30.



GUNNISON PRIMARY

March 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd <sup>1/</sup> (cfs)	Sigurd Gun-nison Primary (cfs)
1	1			258	259	41	218
2	1			278	279	40	239
3	1			266	267	40	227
4	1			264	265	46	219
5	1		1	264	266	44	222
6	1		1	264	266	41	225
7	1		1	248	250	40	210
8	1		1	242	244	36	208
9	1		1	240	242	35	207
10	1		1	242	244	38	206
11	1		1	256	258	40	218
12	1		1	260	262	41	221
13	1		2	217	220	39	181
14	1		2	187	193	37	156
15	1		5	187	193	36	157
16	1		5	178	184	37	147
17	1		5	171	177	37	140
18	2		5	172	179	33	146
19	2		5	176	183	33	150
20	2	0	5	242	249	24	225
21	2	1	5	248	256	17	239
22	2	3	5	256	266	12	254
23	2	8	5	252	267	13	254
24	2	8	5	272	287	13	274
25	2	8	5	276	291	17	274
26	2	7	5	270	284	14	270
27	2	7	5	270	284	14	270
28	2	7	5	282	296	11	285
29	2	7	5	307	321	8	313
30	2	7	5	326	340	10	330
31	2	7	5	298	312	17	295
cfs	45	70	100	7669	7884	904	6980
af	90	139	198	15211	15638	1793	13845

<sup>1/</sup> Flow over Vermillion Dam is by-passed directly to Sigurd during March.

GUNNISON PRIMARY

April 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd <sup>1/</sup> (cfs)	Sigurd Gun-nison Primary (cfs)
1		11	4	298	313	24	289
2		14	4	296	314	8	306
3		14	4	328	346	5	341
4	0	14	4	304	322	28	294
5	2	13	5	248	268	22	246
6	13	16	7	154	190	15	175
7	8	25	7	124	164	12	152
8	11	23	7	120	161	0	161
9	21	20	6	100	147	0	147
10	19	23	6	88	136	0	136
11	16	22	8	81	127	0	127
12	17	23	9	79	128	0	128
13	18	22	9	79	128	0	128
14	17	23	9	83	132	0	132
15	16	17	9	88	130	0	130
16	0	0	1	112	115	0	115
17		0	0	133	133	0	133
18				133	133	0	133
19				138	138	0	138
20	0			128	128	0	128
21	2			120	122	0	122
22	7			116	123	0	123
23	8			108	116	0	116
24	15			101	116	0	116
25	18			103	121	0	121
26	16			166	182	53	129
27	20			183	203	52	151
28	16			146	162	50	112
29	13			150	163	55	108
30	13			154	167	48	119
cfs	286	282	99	4461	5128	372	4756
af	567	559	196	8850	10171	738	9433

<sup>1/</sup> Reduced 10% for carrier losses.

GUNNISON PRIMARY

May 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd (cfs)	Sigurd Gun-nison Primary (cfs)
1	11	0		153	164	47	117
2	11			164	175	49	126
3	16			167	183	78	105
4	18			182	200	96	104
5	15			217	232	70	162
6	3			208	211	52	159
7	5	0		196	201	45	156
8	20	2		181	203	45	158
9	22	14		163	199	54	145
10	24	17	12	137	190	59	131
11	26	21	22	144	213	57	156
12	27	36	22	166	251	0	251
13	25	34	23	156	238	0	238
14	27	42	23	139	231	0	231
15	29	44	20	179	272	0	272
16	35	39	15	237	326	0	326
17	32	41	7	251	331	0	331
18	31	39	6	271	347	0	347
19	30	38	5	267	340	0	340
20	17	32	6	386	441	0	441
21	0	20	6	436	462	0	462
22	8	20	7	304	339	104	235
23	23	22	8	302	355	179	176
24	16	9	8	350	383	164	219
25	15	10	4	399	428	139	289
26	15	5	2	487	509	97	412
27	18	1		465	484	0	484
28	11	1		521	533	0	533
29	10	1		405	416	29	387
30	10	1		352	363	128	235
31	12	1		411	424	152	272
cfs	562	490	196	8396	9644	1644	8000
af	1115	972	389	16650	19129	3261	15868

GUNNISON PRIMARY

June 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd (cfs)	Sigurd Gun-nison Primary (cfs)
1	11		1	538	550	47	503
2	13		5	667	685	34	651
3	19		2	650	671	97	574
4	13		2	601	616	41	575
5	17		18	539	574	17	557
6	14		24	510	548	16	532
7	13	0	25	559	597	26	571
8	10	1	21	677	709	28	681
9	0	3	16	665	684	40	644
10	0	1	12	541	554	83	471
11	0	8	8	487	503	92	411
12	4	19	5	462	490	79	411
13	14	32	6	417	469	33	436
14	28	24	6	415	473	4	469
15	28	20	6	547	601	11	590
16	27	10	6	662	705	41	664
17	33	6	5	692	736	93	643
18	31	9	5	691	736	89	647
19	28	8	5	687	728	61	667
20	24	6	4	628	662	39	623
21	20	2	5	628	655	33	622
22	15	1	5	611	632	50	582
23	12	1	5	604	622	59	563
24	11	0	2	567	580	54	526
25	10		0	501	511	51	460
26	10			449	459	51	408
27	7			408	415	48	367
28	7			376	383	42	341
29	8	0		340	348	36	312
30	21	2		275	298	27	271
31							
cfs	448	153	199	16394	17194	1422	1572
af	889	303	395	32520	34104	2820	31284

GUNNISON PRIMARY

July 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd (cfs)	Sigurd Gun-nison Primary cfs)
1	20	2	10	266	298	23	275
2	18	2	16	229	265	31	234
3	13	2	16	213	244	11	233
4	12	0	21	193	226	6	220
5	14	3	21	168	206	4	202
6	14	5	20	144	183	0	183
7	21	5	19	124	169	4	165
8	22	8	18	109	157	4	153
9	21	12	18	110	161	4	157
10	21	15	11	115	162	3	159
11	18	19	5	131	173	3	170
12	3	22	5	177	207	8	199
13	5	17	5	191	218	27	191
14	17	22	5	177	221	48	173
15	23	18	4	180	225	50	175
16	22	15	4	175	216	43	173
17	25	16	4	155	200	40	160
18	28	15	4	146	193	33	160
19	27	19	4	128	178	14	164
20	28	17	3	121	169	4	165
21	30	14	3	100	147	4	143
22	31	14	4	109	158	0	158
23	31	12	5	120	168	0	168
24	31	7	14	92	144	0	144
25	31	6	17	79	133	0	133
26	31	8	18	104	161	0	161
27	31	20	18	97	166	0	166
28	29	24	19	66	138	21	177
29	30	36	19	63	148	41	107
30	30	48	20	71	169	56	113
31	25	53	19	88	185	67	118
cfs	702	476	369	4241	5788	549	5239
af	1392	944	732	8412	11480	1089	10392

GUNNISON PRIMARY

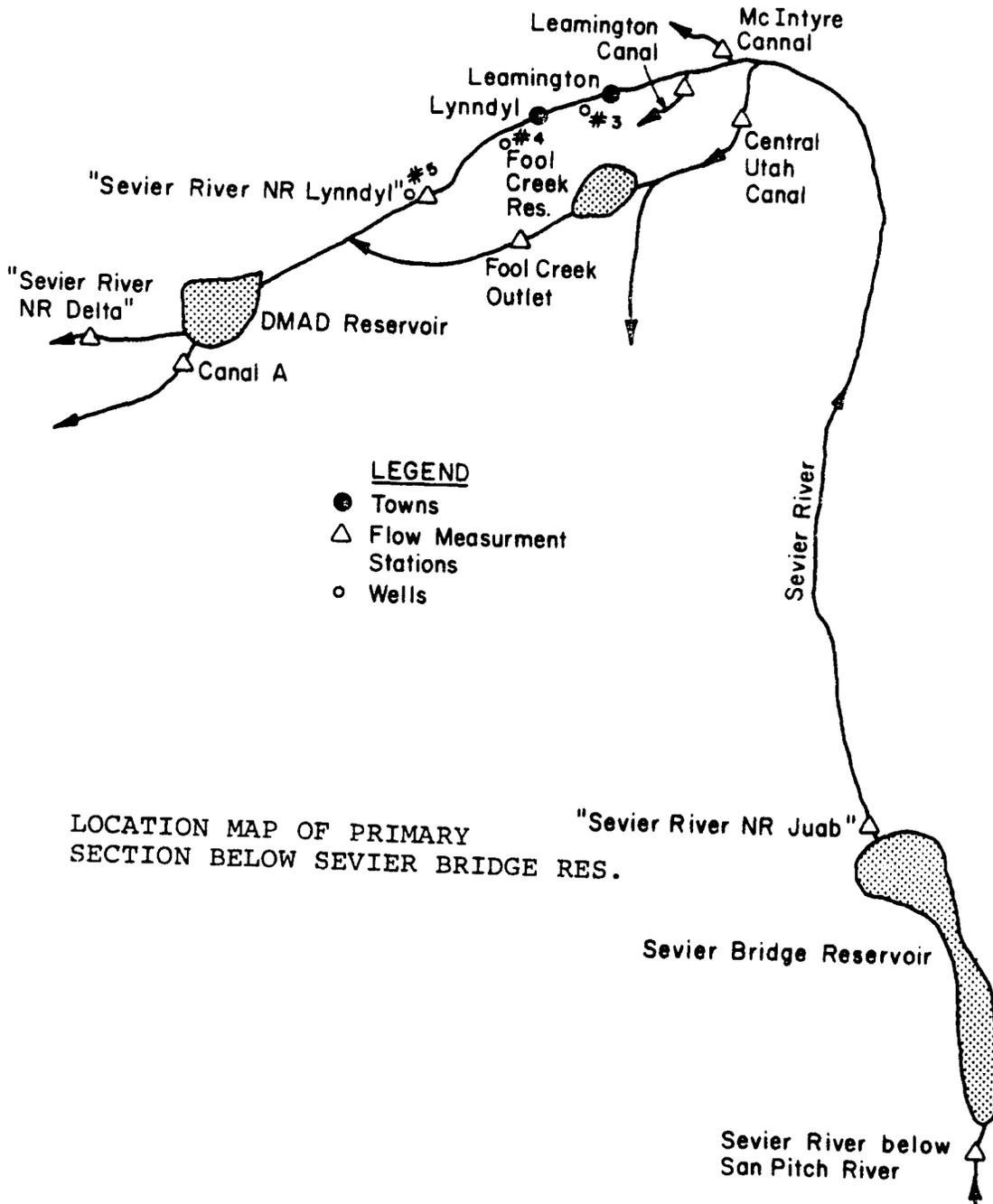
August 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd (cfs)	Sigurd Gun-nison Primary (cfs)
1	26	54	20	107	207	69	138
2	26	52	20	109	207	48	159
3	27	47	11	104	189	40	149
4	27	47	5	98	177	43	134
5	27	47	0	102	176	39	137
6	26	45		97	168	35	133
7	22	47		93	162	41	121
8	22	47		97	166	40	126
9	13	47	0	96	156	33	123
10	1	45	6	98	150	27	123
11	3	41	6	110	160	36	124
12	4	42	5	119	170	42	128
13	10	41	6	125	182	30	152
14	9	46	13	84	152	22	130
15	10	45	22	69	146	19	127
16	13	44	22	70	149	10	139
17	12	42	23	66	143	9	134
18	13	42	22	63	140	7	133
19	15	40	21	61	137	6	131
20	17	40	20	60	137	4	133
21	18	42	21	63	144	4	140
22	17	46	23	76	162	5	157
23	18	42	6	86	152	5	147
24	16	36	0	89	141	6	135
25	16	31	0	91	138	9	129
26	22	32	3	91	148	13	135
27	24	35	5	81	145	12	133
28	25	36	5	76	142	11	131
29	26	38	4	71	139	14	125
30	27	40	4	70	141	24	117
31	28	42	4	75	149	35	114
cfs	560	1321	297	2697	4875	738	4137
af	1111	2620	589	5349	9670	1464	8206

GUNNISON PRIMARY

September 1975

Day	West View div. (cfs)	Gun-nison Fayette div. (cfs)	Dover div. (cfs)	Flow by Gun-nison (cfs)	Total (cfs)	Net Storage by Sigurd (cfs)	Sigurd Gun-nison Primary (cfs)
1	29	39	4	81	153	35	118
2	29	37	4	83	153	40	113
3	30	42	10	81	163	39	124
4	28	41	12	78	159	43	116
5	24	42	12	83	161	47	114
6	19	42	12	93	166	56	110
7	18	42	12	104	176	58	118
8	17	39	16	104	176	54	122
9	13	41	17	110	181	52	129
10	11	42	16	110	179	56	123
11	13	42	15	111	181	56	125
12	20	40	14	111	185	47	138
13	22	39	13	108	182	48	134
14	22	41	12	119	194	48	146
15	24	41	11	109	185	44	141
16	24	40	7	106	177	57	120
17	25	38	2	129	194	86	108
18	24	36	0	138	198	114	84
19	21	51		188	260	179	81
20	19	51		238	308	147	161
21	15	47		223	285	74	211
22	15	42		203	260	32	228
23	14	15		195	224	29	195
24	12	0		207	219	17	202
25	9	0		197	206	12	194
26	0	0		193	193	16	177
27	0	0		182	182	22	160
28	0	3		178	181	19	162
29	0	5		177	182	21	161
30	0	5	0	179	184	19	165
31							
cfs	497	943	189	4218	5847	1567	4280
af	986	1870	375	8366	11598	3108	8489



LEGEND

- Towns
- △ Flow Measurement Stations
- Wells

LOCATION MAP OF PRIMARY SECTION BELOW SEVIER BRIDGE RES.

PRIMARY BELOW SEVIER BRIDGE RESERVOIR

March 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by Lynndyl	Primary by Delta	Total	Flow by 1/ Juab	Net Storage Release	Primary	River Loss
1	98	0	0	13	1	102	8	0	102	
2	121			12	1	134	8	0	134	
3	94			12	1	107	8	0	107	
4	69			12	1	82	8	0	82	
5	60			12	1	73	8	0	73	
6	62			12	1	75	9	0	75	
7	62			12	1	75	9	0	75	
8	59			11	1	71	9	0	71	
9	57			11	1	69	8	0	69	
10	57			11	1	69	8	0	69	
11	60			11	1	72	9	0	72	
12	59			11	1	71	9	0	71	
13	57			11	1	69	8	0	69	
14	56			11	1	68	8	0	68	
15	54			11	1	66	8	0	66	
16	55			11	1	67	8	0	67	
17	57			11	1	69	8	0	69	
18	56			11	1	68	8	0	68	
19	55			10	1	66	7	0	66	
20	54			10	1	65	8	0	65	
21	53			10	1	64	8	0	64	
22	56			11	1	68	8	0	68	
23	57			11	1	69	8	0	69	
24	57			11	1	69	8	0	69	
25	58			11	1	70	8	0	70	
26	59			11	1	71	8	0	71	
27	48			11	1	60	8	0	60	
28	59			11	1	71	8	0	71	
29	60			10	1	71	6	0	71	
30	57			10	1	68	6	0	68	
31	54	0	0	11	1	66	6	0	66	
cfs	1920			344	31	2285				
af	3808			682	61	4532			2285	4532

1/ Seepage and leak through Sevier Bridge Reservoir.

PRIMARY ) LOW SEVIER BRIDGE

April 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by 1/ LynndyI	Primary by Delta	Total	Flow by 2/ Juab	Net Storage Releases	Primary	River Loss 6%
1	57	0		11	1	69		0	69	
2	55			10	1	65			65	
3	55			10	1	66			66	
4	55			10	1	66			66	
5	53			10	1	64			64	
6	53			10	1	64			64	
7	52			10	1	64			64	
8	55			10	1	63			63	
9	52		0	10	1	66			66	
10	38		8	10	1	63			63	
11	29		15	10	1	57			57	
12	28		15	10	1	55			55	
13	27		15	11	1	54			54	
14	28		15	11	1	54			54	
15	28		15	12	1	55			55	
16	32		8	16	2	56			56	
17	16		2	28	2	60			60	
18	0		0	52	2	48			48	
19				63	2	54			54	
20				64	2	65			65	
21				65	2	66			66	
22				65	2	67			67	
23				65	2	67			67	
24				66	2	67			67	
25				68	2	68			68	
26				69	2	70			70	
27				67	2	71			71	
28	0			68	2	69			69	
29	3			68	2	70			70	
30	5	0		68	2	70		0	70	
31				268	2	270	170	160	110	10
cfs	721		93	1246	45	2099	170	160	1939	10
af	1430		184	2470	90	4163	337	317	3846	20

1/ Primary reduces when releases start.

2/ Offset two days.

PRIMARY BELOW SEVIER BRIDGE

May 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by Lynndyl	Primary by Delta	Total	Flow by Juab offset	Net Storage Release	Primary + inflow	River Loss
1				368	2	370	353		60	+ 43
2				366	2	368	350		60	+ 42
3				430	2	432	350		60	- 22
4				721	2	723	517		60	-146
5				772	2	774	776		60	+ 62
6				769	2	771	779		60	+ 68
7				769	2	771	783		60	+ 72
8				661	2	663	783		60	+180
9				457	2	459	573		60	+174
10				440	2	442	424		60	+ 42
11			0	498	2	500	420		60	- 20
12	0		13	676	2	691	559		60	- 72
13	5	0	22	679	2	708	705		60	+ 57
14	39	1	24	659	2	725	705		60	+ 40
15	78	8	26	632	2	746	709		60	+ 23
16	111	16	27	575	2	731	713		60	+ 42
17	125	18	30	548	2	723	709		60	+ 46
18	135	20	32	533	2	722	709		60	+ 47
19	148	20	32	531	2	733	709		60	+ 36
20	57	10	9	583	2	661	709		60	+108
21	0	0	0	651	2	653	709		60	+116
22				211	2	213	410		60	+257
23				114	2	116	8		60	- 48
24				93	2	95	8		60	- 27
25				78	2	80	8		60	- 12
26				69	2	71	8		60	- 3
27	0		0	67	2	69	8		60	- 1
28	30		8	47	2	87	13		60	- 14
29	86		16	61	2	165	67		60	- 38
30	89		18	34	2	143	81	76	67	5
31	97		17	29	2	145	81	76	69	5
cfs	1000	93	274	13121	62	14550	13736	152	1876	1062
af	1984	184	543	26030	123	28860	27245	301	3721	2106

PRIMARY BELOW SEVIER BRIDGE

June 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by Lynndyl	Primary by Delta	Total	Flow by Juab 1/	Net Storage Release	Primary	River Loss
1	95	1	19	42	2	159	81		50	- 28
2	87	10	12	320	2	431	331		50	- 50
3	81	21	12	419	2	535	478		50	- 7
4	68	21	9	625	2	725	680		50	+ 5
5	61	21	10	682	2	776	794		50	+ 68
6	121	21	18	685	2	847	798		50	1
7	150	21	26	610	2	809	798		50	39
8	151	21	24	649	2	847	843		50	46
9	144	19	24	575	2	764	874		50	160
10	162	19	24	425	2	632	698		50	116
11	160	19	15	418	2	614	594		50	30
12	159	19	14	420	2	614	594		50	30
13	158	19	16	415	2	610	594		50	34
14	160	19	13	414	2	608	594		50	36
15	165	20	3	417	2	607	594		50	37
16	162	20	0	424	2	608	594		50	36
17	84	20		425	2	531	594		50	113
18	34	20		552	2	608	594		50	36
19	34	20		569	2	625	597		50	22
20	32	18		505	2	557	594		50	87
21	83	15		350	2	450	437		50	37
22	116	4		275	2	397	328		50	- 19
23	115	4		266	2	387	328		50	- 9
24	114	4		261	2	381	328		50	- 3
25	117	4		255	2	378	328		50	0
26	142	4		227	2	375	328		50	3
27	142	3	0	228	2	375	331		50	6
28	142	0	16	225	2	385	328		50	- 7
29	142		27	286	2	457	328		50	- 79
30	146		28	572	2	748	612		50	- 86
31										
cfs	3527	407	310	12536	30	16840	15994		1500	654
af	6996	807	615	24870	119	33402	31724		2975	1297

1/ Offset two days to give as nearly as possible same water at Lynndyl.

PRIM. X BELOW SEVIER BRIDGE RESERVOIR

July 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by Lynndyl	Primary by Delta	Total	Flow by Juab	Net Storage Release	Primary	River loss
1	180	0	31	567	2	780	776		45	+ 41
2	205	0	31	537	2	775	779		45	49
3	226	0	31	522	2	781	779		45	43
4	225	0	25	512	2	767	779		45	57
5	235	0	25	513	2	775	779		45	49
6	234	1	24	512	2	773	779		45	51
7	234	8	24	509	2	777	779		45	47
8	235	12	24	501	2	774	779		45	50
9	236	13	25	536	2	812	779		45	12
10	236	13	26	739	2	1016	997		45	26
11	216	13	26	848	2	1105	1130		45	70
12	194	13	20	880	2	1109	1130		45	66
13	179	12	8	890	2	1091	1130		45	84
14	188	16	0	586	2	792	874		45	127
15	185	21	0	543	2	751	724		45	18
16	181	24	0	533	2	740	724		45	29
17	173	24	0	535	2	734	724		45	35
18	174	24	0	532	2	732	724		45	37
19	164	24	18	528	2	736	724		45	33
20	165	23	21	515	2	726	724		45	43
21	169	23	21	514	2	729	724		45	40
22	165	23	23	507	2	720	724		45	49
23	165	23	25	500	2	715	720		45	50
24	165	23	23	498	2	711	724		45	58
25	168	22	19	462	2	673	720		45	92
26	181	21	19	351	2	574	608		45	79
27	181	21	19	340	2	563	541		45	23
28	179	21	19	338	2	559	541		45	27
29	157	22	19	352	2	552	541		45	34
30	92	14	19	365	2	492	538		45	91
31	10	8	18	489	2	527	538		45	+ 56
cfs	5700	462	583	16554	62	23361	23532		1395	1566
af	11306	807	1156	32835	123	46337	46676		2767	3106

PRIMARY BELOW SEVIER BRIDGE RESERVOIR

August 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by Lynndyl	Primary by Delta	Total	Flow by Juab	Net Storage Release	Primary	River Loss
1	50	8	12	519	2	591	538		45	8
2	138	8	10	424	2	582	538		45	1
3	153	8	6	374	2	543	538		45	40
4	133	5	6	378	2	524	538		45	59
5	133	0	4	393	2	532	538		45	51
6	134	0	1	399	2	536	538		45	47
7	139	0	0	393	2	534	541		45	52
8	139	0	0	388	2	529	541		45	57
9	153	0	0	414	2	569	545		45	21
10	157	0	0	492	2	651	637		45	31
11	155	0	0	496	2	653	687		45	79
12	159	0	0	453	2	614	691		45	122
13	177	0	21	295	2	495	552		45	102
14	177	1	23	265	2	468	471		45	48
15	163	5	23	262	2	455	475		45	65
16	167	8	23	266	2	466	475		45	54
17	171	8	23	291	2	495	478		45	28
18	160	8	22	414	2	606	615		45	54
19	154	8	23	428	2	615	687		45	117
20	143	8	23	440	2	616	687		45	116
21	136	8	23	454	2	623	687		45	109
22	127	10	23	410	2	572	687		45	160
23	122	12	23	235	2	394	489		45	140
24	115	12	23	224	2	376	373		45	42
25	115	12	23	220	2	372	373		45	46
26	115	14	23	226	2	380	376		45	41
27	137	16	13	216	2	384	376		45	37
28	139	16	13	208	2	378	376		45	43
29	139	16	13	213	2	383	376		45	38
30	139	16	16	214	2	387	376		45	34
31	146	16	13	206	2	383	376		45	38
cfs	4385	223	426	10610	62	15706	16175		1395	1864
af	8698	442	845	21045	123	31153	32083		2767	3697

PRIMARY . LOW SEVIER BRIDGE RESERVOIR

September 1975

Day	Central Utah	McIntyre	Leaming-ton	Flow by Lynndyl	Primary by Delta	Total	Flow by Juab	Net Storage Release	Primary	River Loss
1	147	16	2	210	2	377	376		45	44
2	168	16	14	229	2	429	376		45	- 8
3	172	16	26	287	2	503	478		45	20
4	163	20	26	273	2	484	541		45	102
5	160	23	26	180	2	391	434		45	88
6	161	24	26	181	2	394	373		45	24
7	160	25	26	264	2	477	448		45	16
8	153	26	26	335	2	542	555		45	58
9	141	25	26	329	2	523	590		45	112
10	139	24	26	277	2	468	517		45	94
11	139	24	26	272	2	463	471		45	53
12	140	25	26	272	2	465	471		45	51
13	139	24	20	281	2	466	471		45	50
14	133	20	15	261	2	431	471		45	85
15	134	20	12	129	2	297	337		45	85
16	131	19	5	110	2	267	248		45	26
17	122	17	8	87	2	236	217		45	26
18	122	16	9	82	2	231	200		45	14
19	115	14	9	78	2	218	203		45	30
20	96	13	8	84	2	203	206		45	48
21	25	13	0	110	2	150	206		45	101
22	14	12	0	90	2	118	83		45	10
23	14	8	0	53	2	77	7	0	77	0
24	20	4	3	48	2	77	6	0	77	0
25	6	4	8	39	2	59	6	0	59	0
26	0	4	12	41	2	59	6	0	59	0
27	0	4	16	42	2	64	5	0	64	0
28	0	4	9	37	2	52	5	0	52	0
29	0	4	8	42	2	56	5	0	56	0
30	0	4	6	42	2	54	4	0	54	0
31	0	4	6	42	2	54	4	0	54	0
cfs	2914	468	424	4765	60	8631	8316		1488	1129
af	5780	928	841	9451	119	17120	16495		2951	2239

ALLOCATION OF LOW SEVIER RIVER SECTION

March 1975

Day	Sigurd Gunnison Primary	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	218	20	102	340	6	295	16	12		6	5	
2	239	20	134	393	6	295	16	12		6	57	1
3	227	20	107	354	6	295	16	12		6	19	
4	219	20	82	321	6	295	16	4				
5	222	20	73	315	6	295	14					
6	225	20	75	320	6	295	16	3				
7	210	20	75	305	6	295	4					
8	208	20	71	299	6	293						
9	207	20	69	296	6	290						
10	206	20	69	295	6	289						
11	218	20	72	310	6	295	9					
12	221	20	71	312	6	295	11					
13	181	20	69	270	6	264						
14	156	20	68	244	6	238						
15	157	20	66	243	6	237						
16	147	20	67	234	6	228						
17	140	20	69	229	6	223						
18	146	20	68	234	6	228						
19	150	20	66	236	6	230						
20	225	20	65	310	6	295	9					
21	239	20	64	323	6	295	16	6				
22	254	20	68	342	6	295	16	12		6	7	
23	254	20	69	343	6	295	16	12		6	8	
24	274	20	69	363	6	295	16	12		6	28	
25	274	20	70	364	6	295	16	12		6	29	
26	270	20	71	361	6	295	16	12		6	26	
27	270	20	60	350	6	295	16	12		6	15	
28	285	20	71	376	6	295	16	12		6	41	
29	313	20	71	404	6	295	16	12		6	57	12
30	330	20	68	418	6	295	16	12		6	57	26
31	295	20	66	381	6	295	16	12		6	46	
cfs	6980	620	2285	9885	186	8715	303	169		78	395	39
af	13845	1230	4532	19607	369	17286	601	335		155	784	77

ALLOCATION OF LOWER SEVIER RIVER SECTION

April 1975

Day	Sigurd Gunnison Primary Bridge	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	289	20	69	378	18	295	16	12	37	0	0	0
2	306	20	65	391	18	295	16	12	50			
3	341	20	66	427	18	295	16	12	86			
4	294	20	66	380	18	295	16	12	39			
5	246	20	64	330	18	295	16	1	0			
6	175	20	64	259	18	241	0	0	0			
7	152	20	63	235	18	217						
8	161	20	66	247	18	229						
9	147	20	63	230	18	212						
10	136	20	57	213	18	195						
11	127	20	55	202	18	184						
12	128	20	54	202	18	184						
13	128	20	54	202	18	184						
14	132	20	55	207	18	189						
15	130	20	56	206	18	188						
16	115	20	60	195	18	177						
17	133	20	48	201	18	183						
18	133	20	54	207	18	189						
19	138	20	65	223	18	205						
20	128	20	66	214	18	196						
21	122	20	67	209	18	191						
22	123	20	67	210	18	192						
23	116	20	67	203	18	185						
24	116	20	68	204	18	186						
25	112	20	70	211	18	193						
26	129	20	71	220	18	202						
27	151	20	69	240	18	222						
28	112	20	70	202	18	184						
29	108	20	70	198	18	180						
30	119	20	110	249	18	231						
31												
cfs	4756	600	1939	7295	540	6414	80	49	212	0	0	0
af	9433	1190	3846	14470	1071	12722	159	97	420			

) ALLOCATION OF LOW ) SEVIER RIVER SECTION )

May 1975

Day	Sigurd Gunnison Primary	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	117	20	60	197	18	179						
2	126	20	60	206	18	188						
3	105	20	60	185	18	167						
4	104	20	60	184	18	166						
5	162	20	60	242	18	224						
6	159	20	60	239	18	221						
7	156	20	60	236	18	218						
8	158	20	60	238	18	220						
9	145	20	60	225	18	207						
10	131	20	60	211	18	193						
11	156	20	60	236	18	218						
12	251	20	60	331	18	295	16	2				
13	238	20	60	318	18	295	5					
14	231	20	60	311	18	293						
15	272	20	60	352	18	295	16	13	10			
16	326	20	60	406	18	295	16	13	64			
17	331	20	60	411	18	295	16	13	69			
18	347	20	60	427	18	295	16	13	85			
19	340	20	60	420	18	295	16	13	78			
20	441	20	60	521	18	295	16	13	210			
21	462	20	60	542	18	295	16	13	169			
22	235	20	60	315	18	295	2					
23	176	20	60	256	18	238						
24	219	20	60	299	18	281						
25	289	20	60	369	18	295	16	13	27			
26	412	20	60	492	18	295	16	13	150			
27	484	20	60	564	18	295	16	13	222			
28	533	20	60	613	18	295	16	13	271			
29	387	20	60	467	18	295	16	13	125			
30	235	20	67	322	18	295	9					
31	272	20	69	361	18	295	16	13	19			
cfs	8000	620	1876	10495	558	8027	240	171	1499			
af	15868	1230	3721	20817	1107	15922	476	339	2973			

ALLOCATION OF LOWER SEVIER RIVER SECTION

June 1975

Day	Sigurd Gunnison Primary	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	503	20	50	573	18	295	16	13	231			
2	651	20	50	721	18	295	16	13	379			
3	574	20	50	644	18	295	16	13	302			
4	575	20	50	645	18	295	16	13	303			
5	557	20	50	627	18	295	16	13	285			
6	532	20	50	602	18	295	16	13	260			
7	571	20	50	641	18	295	16	13	299			
8	681	20	50	751	18	295	16	13	409			
9	644	20	50	714	18	295	16	13	372			
10	471	20	50	541	18	295	16	13	199			
11	411	20	50	481	18	295	16	13	139			
12	411	20	50	481	18	295	16	13	139			
13	436	20	50	506	18	295	16	13	13	6	57	88
14	469	20	50	539	18	295	16	13		6	57	134
15	590	20	50	660	18	295	16	13		6	57	255
16	664	20	50	734	18	295	16	13		6	57	329
17	643	20	50	713	18	295	16	13		6	57	308
18	647	20	50	717	18	295	16	13		6	57	312
19	667	20	50	737	18	295	16	13		6	57	332
20	623	20	50	693	18	295	16	13		6	57	288
21	622	20	50	692	18	295	16	13		6	57	287
22	582	20	50	652	18	295	16	13		6	57	247
23	563	20	50	633	18	295	16	13		6	57	228
24	526	20	50	596	18	295	16	13		6	57	191
25	460	20	50	530	18	295	16	13		6	57	125
26	408	20	50	478	18	295	16	13		6	57	73
27	367	20	50	437	18	295	16	13		6	57	32
28	341	20	50	411	18	295	16	13		6	57	6
29	312	20	50	382	18	295	16	13		6	34	
30	271	20	50	341	18	295	16	12	0	0		
31												
cfs	15772	700	1500	17872	540	8850	480	389	3330	102	946	3235
af	31284	1190	2975	35449	1071	17554	952	772	6605	202	1876	6417

ALLOCATION OF LOWER SEVIER RIVER SECTION

July 1975

	Sigurd Gunnison Primary	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	275	20	45	340	18	295	16	11				
2	234	20	45	299	18	281						
3	233	20	45	298	18	280						
4	220	20	45	285	18	267						
5	202	20	45	267	18	249						
6	183	20	45	248	18	230						
7	165	20	45	230	18	212						
8	153	20	45	218	18	200						
9	157	20	45	222	18	204						
10	159	20	45	224	18	206						
11	170	20	45	235	18	217						
12	199	20	45	264	18	246						
13	191	20	45	256	18	238						
14	173	20	45	238	18	220						
15	175	20	45	240	18	222						
16	173	20	45	238	18	220						
17	160	20	45	225	18	207						
18	160	20	45	225	18	207						
19	164	20	45	229	18	211						
20	165	20	45	230	18	212						
21	143	20	45	208	18	190						
22	158	20	45	223	18	205						
23	168	20	45	233	18	215						
24	144	20	45	209	18	191						
25	133	20	45	198	18	180						
26	161	20	45	226	18	208						
27	166	20	45	231	18	213						
28	118	20	45	182	18	164						
29	107	20	45	172	18	154						
30	113	20	45	178	18	160						
31	118	20	45	183	18	165						
cfs	5239	620	1395	7254	558	6669	16	11				
af	10391	1230	2767	14388	1107	13228	32	22				

ALLOCATION OF LOW SEVIER RIVER SECTION

August 1975

	Sigurd Gunnison Primary	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	138	20	45	203	18	185	0	0	0	0	0	0
2	159	20	45	224	18	206						
3	149	20	45	214	18	196						
4	134	20	45	199	18	181						
5	137	20	45	202	18	184						
6	133	20	45	198	18	180						
7	121	20	45	186	18	168						
8	126	20	45	191	18	173						
9	123	20	45	188	18	170						
10	123	20	45	188	18	170						
11	124	20	45	189	18	171						
12	128	20	45	193	18	175						
13	152	20	45	217	18	199						
14	130	20	45	195	18	177						
15	127	20	45	192	18	174						
16	139	20	45	204	18	186						
17	134	20	45	199	18	181						
18	133	20	45	198	18	180						
19	131	20	45	196	18	178						
20	133	20	45	198	18	180						
21	140	20	45	205	18	187						
22	157	20	45	222	18	204						
23	147	20	45	212	18	194						
24	135	20	45	200	18	182						
25	129	20	45	194	18	176						
26	135	20	45	200	18	182						
27	133	20	45	198	18	180						
28	131	20	45	196	18	178						
29	125	20	45	190	18	172						
30	117	20	45	182	18	164						
31	114	20	45	179	18	161						
cfs	4137	620	1395	6152	558	5594						
af	8206	1230	2767	12202	1107	11096						

ALLOCATION OF LOWER SEVIER RIVER SECTION

September 1975

	Sigurd Gunnison Primary	Sevier Bridge	Below Sevier Bridge	Total	AA & Wells	A	B	C	D	E	F	Storage
1	118	20	45	183	18	165	0	0	0	0	0	0
2	113	20	45	178	18	160						
3	124	20	45	189	18	171						
4	116	20	45	181	18	163						
5	114	20	45	179	18	161						
6	110	20	45	175	18	157						
7	118	20	45	183	18	165						
8	122	20	45	187	18	169						
9	129	20	45	194	18	176						
10	123	20	45	188	18	170						
11	125	20	45	190	18	172						
12	138	20	45	203	18	185						
13	134	20	45	199	18	181						
14	146	20	45	211	18	193						
15	141	20	45	206	18	188						
16	120	20	45	185	18	167						
17	108	20	45	173	18	155						
18	84	20	45	149	18	131						
19	81	20	45	146	18	128						
20	161	20	45	226	18	208						
21	215	20	45	280	18	262						
22	228	20	45	293	18	275						
23	195	20	77	292	18	274						
24	202	20	77	299	18	281						
25	194	20	59	273	18	255						
26	177	20	59	256	18	238						
27	160	20	64	244	18	226						
28	162	20	52	234	18	216						
29	161	20	56	237	18	219						
30	165	20	54	239	18	221	0	0	0	0	0	0
31												
cfs	4284	600	1488	6372	540	5832						
af	8497	1190	2951	12639	1071	11568						

LOWER SEVI. ) RIVER SECTION )

1975 Summary <sup>1/</sup>

	March af	April 1-15 af	April 16-30 af	May af	June af	July af	August af	Sept. af	Total af
Total inflow Sigurd-Gunnison	15638	5962	4209	19129	34104	11480	9670	11598	111790
Net Storage by Sigurd	1793	226	511	3261	2821	1089	1464	3108	14272
Sigurd-Gunnison Primary	13845	5736	3698	15868	31284	10391	8206	8489	97517
Through Sevier Bridge	1230	595	595	1230	1190	1230	1230	1190	8490
Below Sevier Bridge	4532	1819	2027	3721	2975	2767	2767	2951	23559
Total Primary	19607	8150	6320	20819	35449	14388	12203	12639	129575
AA & Wells	369	536	535	1107	1071	1107	1107	1071	6903
A	17286	6938	5785	15922	17554	13227	11096	11568	99376
B	601	159		476	952	32			2220
C	335	97		338	772	22			1565
D		420		2973	6607				10000
E	155				202				357
F	784				1876				2660
Storage	77				6445				6522

<sup>1/</sup> An adjustment of approximately 600 af in yearly totals is made by reason of independent rights and exchanges (Mohlen Springs, Wellington, Piute water in Lower Zone).