Request for Appropriation (2019 General Session)
(See instructions on reverse side and JR4-3-201)

SECTION I – To be completed by requesting legislator

Name: Senator/Representative _Senator Jani Iwamoto__________ Date _January 26, 2019

Funding Request Name  Water Banking Continued Study Funding

Description of Funding Item  Funding to support the continued study of water banking, administration of water banking pilot projects, and completion of Water Banking Strategy Report. Funding will support Senate Joint Resolution 001 and the Governor’s 2017 Water Strategy Report recommendation to study water banking.

Agency through which funds would be administered: Div. of Water Resources and Div. of Water Rights

What is the statewide public purpose?* Prudently managing Utah’s scarce water resources is vital to continued growth and prosperity. In its most simple form, a water bank facilitates the voluntary temporary transfer of the use of water rights from one user to another. In the face of demographic and water supply changes, water banks may provide Utahans a flexible market means to more efficiently use water. Continued study and pilot projects will inform the content for a statewide Water Banking Strategy Report detailing best practices and recommendations.

What type of organization(s) will receive this funding? (check all that apply)

___X  Government     _____Gov’t Not for Profit ___ Private for Profit _____Private Not for Profit

Amount Requested: $ 400,000

___X  General Fund   _______Educ. Fund   _______Transp. Fund   _______Other:

___X  FY19 (One Time)   _______FY20 (One-time) _______FY20 (Ongoing) ___X  Nonlapsing

Project Contact Information:  Name  Steve Clyde (See Other Notes below)
Title  Attorney
Organization  Clyde Snow & Sessions, Law Firm
Phone #  801-322-2516
Email  sec@clydesnow.com or eel@clydesnow.com

Attach Supporting Documentation (Required)

___X  Itemized Budget
___X  Deliverables and/or Performance Measures

Does this organization receive other State financing?  ___ Yes ___ No If yes, attach explanation

___X  Please attach any other supporting documentation

Appropriation Committee Recommendation  In support of appropriation

*All appropriations must be made to state agencies. State agencies must follow state procurement laws which require competitive bids, requests for proposal, or sole determination. (Over)
Intent Language Request

For ease of coordinating, Steve Clyde of the law firm of Clyde Snow & Sessions is listed as the contact for the project. Mr. Clyde represents several clients who are members of the water banking study group. The current water banking study group consists of 20 plus organizations and partner agencies. The appropriation will be primarily used to fund the Utah Division of Water Resources and the Utah Division of Water Rights. The appropriation is not intended to fund any private organizations or groups, unless through a contract with a state agency.

Section II – To be completed by Legislative Fiscal Analyst’s Office

Entered on ____________________  Entered by ________________

Date                initials

1. Completed forms must be filed with the Legislative Fiscal Analyst by noon of the 11th day of the general session (JR4-3-101).

2. Requesting legislators complete Section I and return the form to the Office of the Legislative Fiscal Analyst.

3. Attach required supporting documentation, including an itemized budget, deliverables/performance measures, whether the requesting organization receive other State Financing, and any other clarifying material.

4. The Legislative Fiscal Analyst will enter your request into the online system and complete Section II.

5. The Request for Appropriation will be assigned to a subcommittee by the appropriate co-chair (House or Senate depending on membership of the sponsor) or the Executive Appropriations Committee sing the online system.

6. Working with the co-chairs of the assigned subcommittee, staff will scheduled the request for an appropriations meeting and note that meeting date in the online system.

NOTE: Appropriations subcommittee co-chairs have the option of when to schedule hearings. However, all hearings should be completed in time for actions to be included in the final report to the Executive Appropriations Committee.
Continued Water Banking Study Itemized Budget

Senate Joint Resolution 1 and accompanying $400,000 onetime non-lapsing appropriations request supports the continued study of water banking in Utah. As an ongoing study effort, an itemized budget is not yet available as the specific needs of the project will be determined with additional study. The continued study of water banking is anticipated to take 1-3 years to complete and will include proposed Legislation for the 2020 General Legislative session, pilot projects to test the efficacy of the water banking legislation, and a final Water Banking Strategy Report summarizing recommendations and best practices for statewide implementation of water banking. It is anticipated a successful water banking program in Utah will eventually be self-funded.

While specific dollar allocations per item are not yet available, the $400,000 appropriation is anticipated to be applied to some or all of the following items:

- **General Water Banking Administration:**
  - Project Manager - Division of Water Resources employee or contractor time to coordinate continued water banking study efforts, preparation of recommended Legislation for 2020, pilot projects, and final Water Banking Strategy Report
  - Seeking Additional Funding - Division of Water Resources employee or contractor time to apply for additional funds to support the continued study of water banking

- **Public Education:**
  - Educational Materials – preparation and distribution of written or electronic materials explaining water banking, proposed pilot projects, and final report
  - Speaking and other Public Engagement – Division of Water Resources employee or contractor time to engage in public speaking/engagement on behalf of the Water Banking Study Group

- **Water Banking Pilot Project:**
  - Administration - Division of Water Resources employee or contractor time to coordinate water banking pilot projects, including:
    - overseeing scoping efforts to choose pilot project locations
    - coordinating with local water users to implement a local water bank in conformance with water banking legislation
    - working with Division of Water Rights employees to execute distribution of approved water rights within the water bank service area
  - Water Distribution:
    - Division of Water Rights employee time to conduct expedited review of Change Application seeking to place water rights in a pilot water bank
    - Division of Water Rights employee time, primarily relevant River Commissioners, to assist in distributing banked water rights
    - Additional software or electronic hardware to assist River Commissioners in distributing banked water rights
- Additional telemetry or other monitoring or measures devices to facilitate physical distribution of water (may require additional funding)
- Potentially lease water rights for use in pilot study

- **Final Water Banking Strategy Report**
  - Division of Water Resources employee or contractor time to prepare a final Water Banking Strategy Report detailing the findings of the water banking pilot projects and recommendations/best practices for statewide implementation
  - Division of Water Resources employee or contractor time to present Final Water Banking Strategy Report to water user community

*** Please note – the current members of the Water Banking Study Group have expended considerable in-kind and other resources to facilitate the study of the topic to date. Due to the scope and scale of the project, it is anticipated these groups will continue to provide support. However, an additional appropriation of money is needed to move the group from the study phase to the pilot project and Water Banking Strategy Report stage of the project.
Continued Water Banking Study Deliverables and or Performance Measures

Continued study of water banking is anticipated to take 1-3 years to complete and will include proposed Legislation for the 2020 General Legislative session, pilot projects to test the efficacy of the water banking legislation, and a final Water Banking Strategy Report summarizing recommendations and best practices for statewide implementation of water banking.

- **Proposed Water Banking Legislation for 2020 General Session:**
  - The Water Banking Study group presently has working concepts about how to design a water bank that meets Utah’s unique needs
  - With continued study, the Study Group intends to have proposed Legislation for the 2020 General Session governing water banking in the State
  - Most likely, the proposed Legislation will be on a term basis to allow for the implementation of pilot projects
  - If proven successful, the 2020 legislation will form the template for a future permanent water banking statute

- **Water Banking Pilot Projects:**
  - To determine the efficacy of the water banking legislation, it is intended to conduct 1-3 water banking pilot projects
  - While several locations have been discussed, pilot project areas have not yet been chosen and part of the continued study effort is to conduct additional scoping:
    - Additional scoping will include reviewing considerations such as:
      - Local interest and support
      - Extent of physical infrastructure needed to distribute water within proposed service area
      - Availability of monitoring or measuring devices, such as telemetry, to regulate the distribution of water
      - Local River Commissioner support and interest in participating in pilot study
      - And other considerations as determined by additional study
  - Pilot projects will most likely extend for one water year
  - The pilot projects will be monitored and administered by a Division of Water Resources employee or contractor and be assessed against criteria established by the Water Banking Study Group

- **Final Water Banking Strategy Report:**
  - At the conclusion of the pilot projects, it is anticipated a Water Banking Strategy Report will be prepared detailing recommendations and best practices for implementing water banking statewide
  - The report will include any recommended changes to any Water Banking Legislation approved in 2020 as well as practical considerations for successful water banking
  - The report will be distributed widely amongst water user community
Dear Utah House and Senate Members:

Utah is one of the driest states in the nation and has always faced water scarcity concerns. The anticipated increase of Utah’s population to 5.5 million people by 2060 will only heighten the risks and challenges ahead. Meanwhile, the availability of Utah’s water supply is expected to become increasingly unpredictable due to climate variability and fluctuating weather patterns. To maintain a competitive economy and healthy environment, Utah must continue to engage in water planning and also develop new, flexible water management tools.

The undersigned represent a working group of diverse stakeholders that includes representatives from the agricultural community, environmental interests, public water suppliers, and state agencies with water responsibilities. Collectively, we have identified water banking as one of the potential tools that Utah could employ to address many shared water security concerns.

Water banks exist in many forms in surrounding states. In its most simple form, a water bank facilitates the voluntary temporary transfer of the use of water from one user to another. Other states utilize water banking because it invites willing water right holders to advertise the availability of their water rights for lease in a transparent system where all potential lessees have equal opportunity to secure use of the water quickly. Water banking maintains the private property interests of the water rights involved in a bank, while also promoting the State’s interest in having the public’s water put to the most beneficial uses. Importantly, water banking could contribute toward addressing many of the Governor’s 2017 Recommended State Water Strategy recommendations, such as:

- Sustaining Utah agriculture by providing alternatives to permanent “buy and dry” water transfers;
- Adding flexibility to rigid water rights;
- Improving water quality, recreation, and the environment through greater access to water that could be used to secure instream flows;
- Providing additional water to meet increased municipal and industrial demand;
- Facilitating and supporting water markets; and
- Promoting greater collaboration amongst the water user community.
Using these principles, the stakeholder group is collaboratively developing a water banking concept that empowers local water users to create and manage local water banks with appropriate State oversight and safeguards for banked water rights. Since starting this conversation in 2017, the dialogue has been uniquely positive and productive. In the coming year, we hope to continue working to finalize recommended language for water banking legislation in 2020. We also believe a physical pilot project to inform a statewide water banking strategy would be particularly helpful at this juncture.

In sum, we hope to see progress continue under Joint Resolution SJR001 and the associated appropriations request. Continued study of water banking is in Utah’s best interests and we urge you vote in favor of the joint resolution.

Respectfully,

**Utah Farm Bureau Federation**  
Sterling Brown, Vice President – Public Policy

**Utah Division of Water Resources**  
Eric Millis, P.E., Director

**Utah Division of Water Quality**  
Erica Gaddis, Ph.D., Director

**Steve Clyde**, Attorney and Utah Water Task Force Member

**The Nature Conservancy**  
Elizabeth Kitchens, Utah Director of Conservation Programs

**Wendy Crowther**, Attorney

**FRIENDS of Great Salt Lake**  
Lynn de Freitas, Executive Director

**Nathan Bracken**, Attorney

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**Utah Department of Agriculture and Food**  
LuAnn Adams, Commissioner

**Utah Division of Water Rights**  
Kent Jones, P.E., State Engineer

**Central Utah Water Conservancy District**  
Gene Shawcroft, P.E., General Manager/CEO

**Trout Unlimited**  
Paul Burnett, Utah Water and Habitat Program Lead

**John Mabey**, Attorney and Utah Water Task Force Member

**Emily Lewis**, Attorney

**National Audubon Society**  
Marcelle Shoop, Director, Saline Lakes Program
Recommended State Water Strategy

July 2017

Compiled by the Governor’s Water Strategy Advisory Team

Invited by

The Honorable Gary R. Herbert
Governor, State of Utah

Facilitated by Envision Utah
3.10. Establish an education center dedicated to providing information on agriculture, water, and food production.

4. **What should we do to preserve natural systems in the face of increasing water demands?**
   4.1. Improve science and conservation planning and funding.
   4.2. Expand tools to protect instream flows.
   4.3. Facilitate creation of a state water trust to acquire rights for instream flows.
   4.4. Study opportunities and risks of more efficient water delivery.
   4.5. Facilitate development of environmental water markets.

5. **How do we protect and sustain the quality of Utah’s water?**
   5.1. Implement nutrient controls where excess nutrients pose a problem.
   5.2. Maintain sufficient stream flows and lake levels to sustain water quality and healthy ecosystems.
   5.3. Incentivize agricultural practices that improve water quality.
   5.4. Collaborate on salinity controls.
   5.5. Recognize the connectivity between surface water and groundwater and manage those resources accordingly.
   5.6. Control invasive species.
   5.7. Adequately fund needed drinking water and water quality infrastructure.
   5.8. Upgrade wastewater treatment plants and improve stormwater systems.
   5.9. Regulate water quality in ways that protect the Great Salt Lake and its ecosystem.
   5.10. Improve monitoring and mitigation strategies for nonpoint sources associated with mining, oil, and gas industries.
   5.11. Improve drinking water source protection plans.
   5.12. Embrace a holistic watershed planning approach.

6. **How will Utah plan for, adequately fund, and use innovative solutions to maintain, replace, and redesign existing water infrastructure and build new water infrastructure over the next 40-50 years?**
   6.1. Plan for infrastructure to support a growing population and economy and make investments consistent with best scientific, engineering, management, and accounting practices.
   6.2. Increase returns on investments for water infrastructure through designing and funding optimization strategies that integrate across the different domains of water infrastructure.
   6.3. Ensure that water users and uses with less financial capacity, such as rural areas, less wealthy communities, and the environment, also receive necessary infrastructure investments to secure their water futures.
   6.4. Ensure safety, reliability, and continuing service of existing water infrastructure by financing timely rehabilitation, expansion, and redesign.
   6.5. Utilize judicious prioritization and sequencing in approving and funding new infrastructure.
   6.6. Implement cybersecurity and physical security measures for water infrastructure.
   6.7. Develop a state water infrastructure financing plan to account for changing levels of federal financing and competing water needs.
   6.8. Water providers should pursue grants, loans, bonds, public-private partnerships, and other creative funding opportunities when and where appropriate to fund new infrastructure and appropriately allocate costs to beneficiaries.
3.1. Providing water in the face of competing water demands to sustain agriculture and the multiple benefits it provides

Agriculture plays and has played many key roles in Utah’s history, culture, economy, and landscapes. Consequently, significant water resources have historically been devoted to agricultural production. However, in the face of competing demands for water from Utah’s current urbanization trends and land use transitions, the multiple social values supported by water allocated to agriculture are too often overlooked. These values include security of local food production, sustaining rural Utah economies and communities, open space in increasingly urbanized areas, improved capacity for both drought management and flood control, and other ecosystem services such as providing wildlife habitat and buffering wetlands and other critical lands from impacts of urban development. In several recent Utah surveys, respondents expressed strong support for agriculture and Utah’s food security and self-sufficiency, affirming that agriculture is a legitimate and viable use of water now and in the future.

Finding the best balance between water used for agriculture and related ecosystem services on one hand and water demands for other uses on the other is one of Utah’s key water policy issues. Suitable water, land, and climate are essential natural resources for production agriculture, raising the important question of how much agricultural production can and should be sustained in Utah. In arid regions like Utah, agricultural viability requires that land and water be bound together, with food production as the most direct and primary beneficial use of agricultural water. The strong public interest in allocating sufficient water to agriculture and local food production recommends careful development of related water policy.

Yet, questions regarding the uses of water allocated to agriculture have increased, given that approximately 82% of water diverted from natural sources goes to agriculture.10 The questions raised illustrate the complexity of water allocation in an arid region. One question often raised is why agriculture, an economic sector that represents $21.2 billion (15.1%) of the state economy, after adjusting for multipliers, requires so much water. A common response is that society should give priority to an industry devoted to meeting such basic human needs. Another question is whether production of Utah hay products sold into international trade11 essentially constitutes an export of water that would be better redirected through local water markets to satisfy future water demands and at more reasonable infrastructure costs than regional water projects. Farmers note that this water export analysis has not been applied to computer chips and other export products, that Utah hay products enjoy a significant comparative advantage because of world-class quality, and that most of the water so used has such low quality and is in such remote places that it would require expensive regional water systems to transport it to urban areas and at great environmental cost. Transporting the agricultural products to cities is simply more efficient, especially in an economically efficient and competitive global market economy. Another question relates to the amount of water consumed in raising animal feed rather than food for direct human consumption. In direct production numbers, Utah produces adequate

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10 See introduction to Key Policy Question 2.
11 Hay and forage exports account for less than 15% of Utah irrigated direct production agriculture during the 2012 to 2015 period.
4. What should we do to preserve natural systems in the face of increasing water demands?

**Issues**

1. Threats to natural systems
2. The Great Salt Lake
3. Limited legal protections for in-stream flows
4. Opportunities and risks from more efficient water delivery
5. The role of water markets

**Recommendations**

1. Improve science and conservation planning and funding.
2. Expand tools to protect instream flows.
3. Facilitate creation of a state water trust to acquire rights for instream flows.
4. Study opportunities and risks of more efficient water delivery.
5. Facilitate development of environmental water markets.

**Issues**

4.1. Threats to natural systems

In Utah, many species of plants and wildlife depend on rivers and riparian, wetland, and lake systems for at least a portion of their life cycles. These areas also contribute significantly to recreational opportunities and our overall quality of life. They also reduce water temperatures, improve water quality for all users and build resilience to extremes like drought. Healthy water ecosystems adjacent to and within urban areas bring economic value in the form of increased property values, business and tourism dollars, and as components of water infrastructure systems. However, increasing demands on these scarce resources, with the added uncertainty of climate change, threaten these values. Impaired systems provide fewer ecosystem services (benefits humans derive from the proper functioning of the natural system) and also put water users at risk through federal control associated with endangered species listings.

While there are numerous isolated efforts to address these issues, basin-wide planning approaches remain limited. As a result, the State may miss opportunities to leverage programs and solve challenges at the watershed scale.

4.2. The Great Salt Lake

While all lakes in Utah provide important ecosystem services, the Great Salt Lake is unique. Estimated direct and indirect economic benefits total more than $1.3 billion annually, reflecting jobs and revenues associated with the mineral extraction and brine shrimp industries as well as recreation on the lake and surrounding wetlands. Higher lake levels decrease dust storms and contribute significantly to snow accumulations along the Wasatch Front in the form of lake-effect snow. Additionally, important ecologic benefits include providing critical habitat for many native birds as well as a major stopover for migratory
birds—one of the most important in North America and, for some species, in the world. Declining water levels jeopardize all these benefits. While there are consistent sources of water from Colorado River importations, the lake is also subject to depletions due to agricultural, mineral, and other human uses. Invasive species and lack of sufficient coordinated management are additional concerns that impact lake health. See Issue 5.3 for further discussion.

4.3. **Limited legal protections for in-stream flows**

Instream flows sustain fish and wildlife, provide recreational opportunities, and supply critical components of healthy river ecosystems. It is possible to legally secure instream flows in Utah, but the law is complicated. The existing legal tools fall into two categories: first, the instream flow statute (Utah Code 73-3-30); and, second, other legal tools such as water leasing, non-diversion agreements, and changes to the point of diversion. The existing instream flow statute is restricted to two state agencies (the Department of Parks and Recreation and the Division of Wildlife Resources) and non-profit fishing groups. While the provisions for each organization differ, they are all complex and limited. For example, state agencies must get the approval of the Legislature to fund purchase of water for in-stream flows, and non-profit fishing groups are limited to 10-year leases for three native trout species. These and other restrictions have resulted in limited use of the statute and few stream segments protected. As noted above, other legal tools are available but remain rarely used, limited, poorly understood, and subject to high transaction costs.

While shifting public values support managing water to protect and enhance the environment, change applications to shift water instream are often viewed as competing with other, consumptive uses. Around the West, innovative flow restoration strategies demonstrate that such conflicts are often more perceived than real. Given scarce resources and ever-increasing demands, Utah must continue to explore these and other strategies and adapt them as necessary to meet our particular needs.

4.4. **Opportunities and risks from more efficient water delivery**

In some areas, agricultural water users divert large volumes of water to provide a relatively small delivery at the end of the ditch or canal. New and improved technologies make it possible to divert far less water and still provide for the same consumptive uses. However, the financial investment in these new and improved technologies sometimes creates an expectation by water right holders that they should be able to benefit from the “conserved” part of their water rights to expand acreage or to lease or sell the surplus water that results. However, the original consumptive use cannot be enlarged, so investors in new and improved technology may not see the anticipated benefit from their investment. In addition, changes in conveyance systems can alter water tables, return flows, and even artificial wetlands that have grown up around leaky ditches and canals. Effective diversion strategies must consider these realities.

4.5. **The role of water markets**

Water markets—mechanisms used for trading water that provide incentives for wise use and efficient allocation of water—have not been harnessed to recognize or promote the value of water for the environment. As society places greater value on those uses, the power of the market should be harnessed to promote environmental water transactions.
Watershed Health
Because water moves both vertically—between the atmosphere, the surface, and subsurface aquifers—and laterally, it must be managed in a holistic way. As a result, stakeholders must develop collaborative and multi-faceted watershed management plans that maintain or improve natural watershed systems. Such plans should balance the needs to sustain or increase watershed supply yields that are essential for human needs, water quality, and maintaining and enhancing natural systems. Examples of plan components include protective riparian corridor and floodplain ordinances. See Recommendation 3.4 for further discussion.

4.2. Expand tools to protect instream flows.
To more effectively protect stream flows, Utah should further refine the legal and regulatory structure around existing tools such as water leasing, non-diversion agreements, and point of diversion changes. The State should also develop new tools and improve existing tools like water banking and consider expanding both the entities which can participate and the purposes for which instream flows can be protected.

4.3. Facilitate creation of a state water trust to acquire rights for instream flows.
While Utah allows the Division of Wildlife Resources and the Division of Parks and Recreation to acquire water rights for instream flows by donation or using money directly appropriated by the State Legislature, several other western states have much more robust (and less restrictive) programs. While not all those programs may be suitable for Utah, Utah should explore how best to enable state agencies like the Division of Wildlife resources to acquire and maintain instream flows.

4.4. Study opportunities and risks of more efficient water delivery.
While more efficient delivery of water represents a laudable goal, it can have unintended negative effects on natural ecosystems, systems that it some cases have been augmented by “inefficiencies” (e.g., flood irrigation recharges an aquifer or a leaky canal creates a permanent wetland). For that reason, the state must foster a constructive dialogue among agricultural users, municipal water providers, conservation organizations, the Office of the State Engineer, and others to identify opportunities (interested water users, funding sources, etc.) to improve delivery efficiencies in ways that benefit natural systems and do not inadvertently harm those systems. To that end, the State should move forward with a pilot basin project to demonstrate the potential of this strategy, consistent with Recommendation 3.4. See also Recommendation 5.4 for further discussion.

4.5. Facilitate development of environmental water markets.
Because economic incentives (market forces) represent one of the most effective and lasting ways to promote a desirable goal, the State should develop legal, financial, and governance structures to enable water transactions and water markets that benefit the environment and traditional consumptive users alike. Examples of such innovations (many of which have been successfully tested in this and other states) include non-diversion agreements, dry-year options, deficit irrigation, crop substitution, split-season leases, infrastructure improvements or re-operation, groundwater recharge and storage, alternative water sources, and water right sales and leases. Beyond having the tools available, the State must find ways to keep transaction costs low so as to facilitate such innovations and keep markets operating smoothly and efficiently.
**Recommendations**

9.1. **Give the State Engineer more direction on “public welfare.”**

Utah water code requires that the State Engineer consider whether an appropriation application or a change application is detrimental to the public welfare. However, the statute has no standard defined for public welfare. The water code should be updated to provide this defined standard.

9.2. **Expedite and fund water rights adjudications of water basins.**

Utah’s Prior Appropriation Doctrine is based on the concepts of “first-in-time, first-in-right” and beneficial use. One of the important methods in moving water from lack of beneficial use by senior water right holders to needed beneficial use by junior appropriators is the adjudication process. Experience has shown that adjudications progress very slowly because of process difficulties and lack of funding. The water code has recently been modernized to provide a more streamlined adjudication process. Additional process improvements can be identified and defined. Accelerated funding for adjudications is needed from the Legislature. See Issue 10.5 and Recommendation 10.5 for further discussion of this issue.

9.3. **Clarify and strengthen the State Engineer’s authority in administering change applications to avoid depletion enlargement.**

As uses for Utah’s limited water evolve and increase, it is becoming increasingly important that the State Engineer maintain balance in hydrologic systems. This can best be done by avoiding “depletion creep.” The Utah water code has recently been amended to describe State Engineer authority in administering change applications and providing his authority to prevent “quantity impairment.” Additional clarifications in the water code can be made to provide the State Engineer with more tools to avoid depletion enlargement and to keep hydrologic systems in balance.

9.4. **Allow the State Engineer to define water duties.**

Work with the State Engineer through rulemaking and statutory opportunities to define water duties.

9.5. **Facilitate temporary transfers of water.**

Facilitating temporary transfers of all or portions of water rights through lease, contract or other easily administered arrangements would enable water to be used for various competing uses on a sequential basis during the same year to meet not only current authorized uses, but also to meet short-term needs for instream flows or other similar public uses of water. Laws and administrative rules may need adjusting to accommodate split season leases or other sharing arrangements. These shared use arrangements could be accomplished by individual voluntary transactions or through more institutionalized water banking programs administered under the direction of the Division of Water Rights. To be useful, such temporary transfers would need to be accomplished quickly, with minimal administrative processes and low transaction costs, but with sufficient transparency to assure no injury to other water users. Interested water groups should be encouraged to make recommendations for legislative adjustments that would facilitate water transfers to meet the needs of the public.

9.6. **Allow water right holders to subordinate water rights.**

The Utah water code allows for water right holders to develop “voluntary arrangements” for reversing over-drafted groundwater basins in critical groundwater management areas. These voluntary
arrangements, which must be approved by the State Engineer, supersede the strict enforcement of water rights priority schedules and may include a subordination of water rights where it may be accomplished without injuring interests of the public or parties who are not part of the arrangement. Subordination may allow a junior appropriator to share the water resource with a senior appropriator or even use the water under the junior water right before the senior water right uses it. There may be opportunity for similar voluntary arrangements and subordination of water rights, with State Engineer acceptance, in surface water system administration. These voluntary arrangements could be identified and guided by watershed councils. This process could also be facilitated by establishing water banking procedures through legislative action that could allow flexibility in the availability of water for various uses in a particular drainage system depending on the needs and water availability. A water bank is an institution that exists to facilitate the temporary transfer of water. If a bank were in place, rights to the water could be banked for another water user in the region to buy or lease. A benefit of a water bank includes more transparency in terms of both transactions and costs. Banked water could be available for agricultural, environmental, M&I, or other purposes. These banks allow water users to put unused water into the bank in years when they do not need it (without it counting against them for purposes of forfeiture “use it or lose it”) and, conversely, to go to the bank to lease additional water when they need it for any lawful purpose.

9.7. **Review constitutional requirements that preclude cities from selling surplus water.**

Article XI, Section 6 of the Utah Constitution was adopted to protect cities from shortsighted decisions and to preserve their limited water resources for future growth within their expanding communities. While projected population growth underscores the wisdom of this approach, it may be reasonable to allow cities greater flexibility to market water (but not water rights) when there is a clear surplus.

9.8. **Provide regular and robust forums for stakeholder involvement in modernizing Utah water law and policy.**

The Utah Executive Water Task Force has been a good forum for developing modernization of Utah water law. This forum, or a similar one, should continue to meet regularly and to advertise its meetings widely. The Utah Water Development Commission membership was changed during the 2017 legislative session. The Commission is also a valuable forum for developing and modernizing Utah water law and policy. Its meetings should also continue to be widely advertised. Additional forums such as watershed councils or advisory councils are encouraged to help guide long-term sustainable water management decisions.

Utah’s water laws can be modernized within the framework of the appropriation doctrine while protecting vested rights. This should be accomplished through a process that is open and inclusive so that those individuals and entities affected by legislative changes are engaged in the decision-making process. See Recommendation 4.2 and 4.5 for examples of this type of modernization.

9.9. **Provide increased ongoing funding and resources for Division of Water Rights activities.**

This document identifies the critical nature of limited water resources in arid Utah to provide for a rapidly growing population and economy. The Executive Branch and Legislative Branch of Utah government should seek consensus on accelerated funding levels for the Utah Division of Water Rights. These additional funds can accelerate river basin adjudications and more expedited administrative actions by the State.