BUDGET & POLICY BRIEF
Water

Continued focus on more efficient water use; aligning move for water users to pay the true cost of water

HIGHLIGHTS

- **$5 million** toward more efficient water use, including rebates to improve outdoor watering efficiency ($2.2 million), advertising ($300,000), state facility efficiency ($500,000), and agricultural water efficiency incentives ($2 million)
- **$4.5 million** to collect data and study water use throughout the state
- **$100,000** for water rights adjudication
- **$90,000** for dam safety
- **$500,000** to remediate phragmites, an invasive species that consume large amounts of water
- **$123,000** for algal bloom costs

OBJECTIVE

To develop water funding policies and mechanisms that ensure:

- the State of Utah maintains a financial role that is fiscally prudent and sustainable;
- a sufficient, safe, and reliable supply of water meets appropriate usage levels for a growing population and balances residential, commercial, recreation, agricultural, and environmental uses;
- Utah's limited water resources are used wisely;
- an appropriate alignment exists between the costs of water and the use of water;
- the water quality of our lakes, rivers, and streams is protected; and
- policymakers to make informed financial decisions regarding water based on accurate and reliable data.

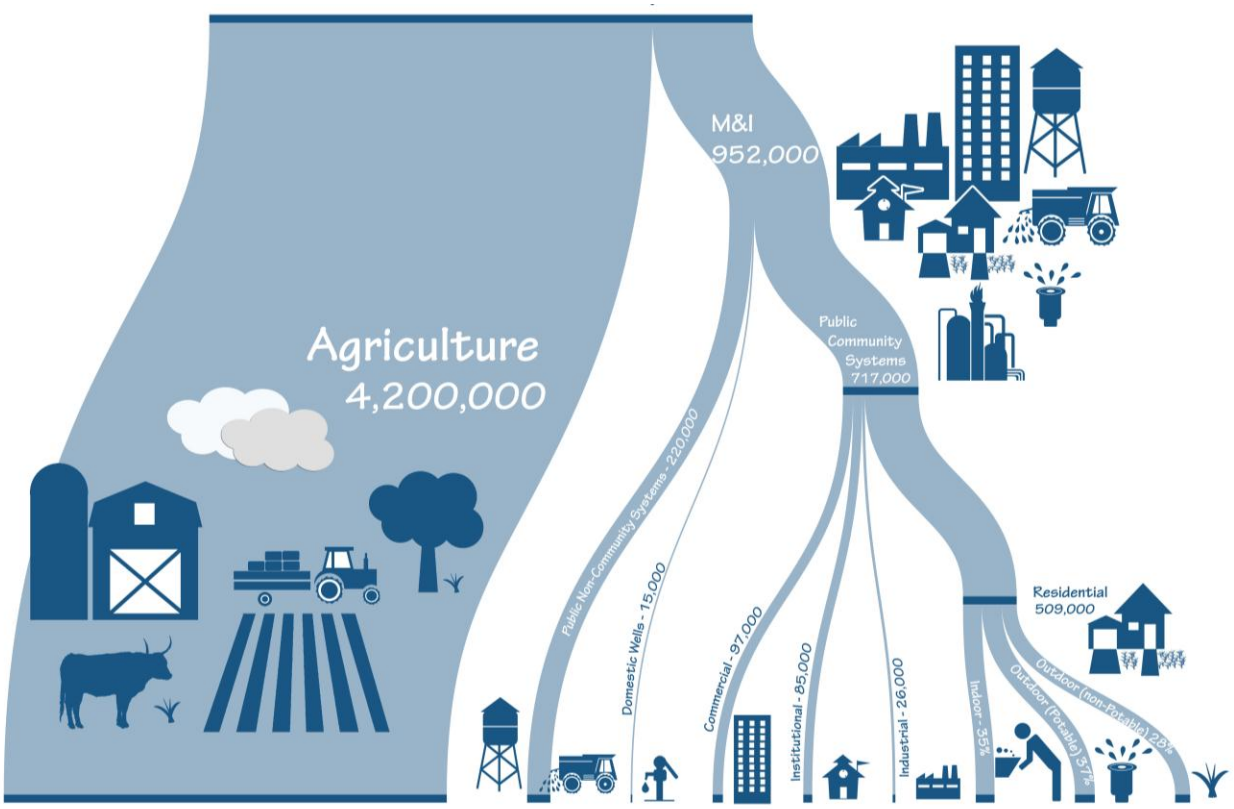
BACKGROUND

As one of the driest states in the country, water is always a topic of concern within Utah. Although the state as a whole is very dry, most of Utah's major population centers enjoy favorable circumstances with higher precipitation rates than the statewide average and close proximity to mountains and their even higher precipitation and snowpack. Snowpack offers a clean, annually renewed water source that is largely delivered by gravity to the state's major population centers. However, some projections suggest future changes in weather patterns and precipitation could affect snowpack.

WATER USE

Figure 1 shows the distribution of diverted water in Utah. Diverted water is generally categorized into agricultural water (estimated at 82 percent) and municipal and industrial (M&I) water (estimated at 18 percent). Of the 18 percent statewide total diverted M&I water use, an estimated 3.5 percent is residential indoor use; 6.5 percent is residential outdoor use; 2.5 percent is commercial and industrial use; 1.5 percent is institutional use (such as governments and schools); and 4 percent is public non-community use, which includes specific industrial uses.

FIGURE 1. WATER DISTRIBUTION IN ACRE FEET PER YEAR



M&I WATER USE

Looking to the future, policymakers should take a comprehensive view of water and seek to improve the efficient use of water across the board.

Recognizing that water use data reporting among states is imperfect and sometimes based on inconsistent methodologies, the U.S. Geological Survey indicates that Utah has the highest per capita M&I water use in the nation. Whatever the state's exact ranking in per capita water use, the State of Utah should continue to push for more efficient use of water and better data that provides more meaningful water use comparisons within Utah and among other states.

Much emphasis is rightly placed on more efficient M&I water use. The emphasis should continue, in particular for outdoor water use that is often excessive. The Governor's budget recommends $2.2 million to improve efficiency in outdoor watering, including rebates for high-efficiency sprinkler control systems, as well as $300,000 to inform the public of the rebates and of ways to enhance outdoor water efficiency. In addition, the budget recommends $500,000 to improve water efficiency at state facilities.

AGRICULTURAL WATER USE

As the single largest water use, it is also important to review and better understand agricultural water use. Recognizing that any changes should protect existing water rights and include proper economic incentives, relatively minor increases in true agricultural efficiency (accounting for return flow) could have a sizeable impact on water use overall.

The Governor's budget includes $2 million to study, develop, and implement strategies that provide incentives for agricultural producers to voluntarily improve water efficiency without reducing food production or undermining water rights. Potential strategies could include grants to convert from water-inefficient irrigation equipment, adopt smart meter technology to avoid over-irrigating, lining or enclosing canals, and modernizing irrigation infrastructure. This effort should be collaborative in an effort to seek ideas on how to implement solutions that are both beneficial to agriculture and to the state's long-term water future.

In addition, the state should determine if there are feasible options that both respect water rights and allow agricultural water uses to financially benefit from more efficient water use, such as by leasing water rights for M&I use.

STATE AND LOCAL ROLES IN WATER INFRASTRUCTURE

The State of Utah itself does not own major water delivery infrastructure. Rather, water has historically been a local responsibility, generally through local government entities and some private providers. Local water wholesalers and water retailers develop water sources and deliver water to the end user. In some cases, local water providers have neglected to build sufficient revenues into their water prices to cover the repair and replacement of infrastructure—one of the several reasons for Utah's low water rates. Another reason is the practice of using property taxes (rather than user fees) to pay for a portion of water costs.

Future population growth and local repair and replacement costs will likely result in increased future water costs. The easiest and least expensive water development projects have already been completed. Future projects will be very costly due to the nature of the projects themselves, as well as increased environmental review and permitting processes.

With Utah's projected population growth in mind, policymakers, water providers, and water users must work together toward solutions that lead to much greater conservation of existing developed water; use existing infrastructure more efficiently; and develop future water in ways that are fiscally and environmentally sustainable.

CHOICES ABOUT WATER USE

Assuming current water usage levels continue as-is or only minor additional conservation occurs, the demand for M&I water is projected to exceed supply over the coming decades as Utah's population continues to grow. Utahns have an important choice to make about water use. If Utah's population continues to grow at current rates, the need for additional water supply at some point is a given; however, the timing of water system development can vary dramatically depending on water use levels. More judicious use of existing water could delay major development projects for decades while the failure to conserve water will lead to accelerated building schedules and their associated increased costs sooner.

As previously mentioned, the U.S. Geological Survey indicates that Utah has the highest per capita M&I water use in the nation, even though Utah's water use has been estimated to be 18 percent lower than the reported water use in a 2000 report commonly used as a benchmark. Some existing projections assume little to no improvement in the efficient use of water after 2025. Costly water development projects could be postponed for decades if Utah's water sources were used more efficiently. However, if water use continues at existing levels or only minor additional conservation efforts are made, the state will face the need to develop costly water supply systems sooner.

Although no one wants to pay more for water, existing funding levels are inadequate to pay for costly new development projects. For example,

debt service on just one of the proposed infrastructure projects could range from about $100 million to $250 million in ongoing revenue annually, depending on the term of the bond. While local water user fees are unpopular, so are state tax increases. Depending on the level of costs incurred by the state, Utahns may soon face a real choice between state tax increases or increases in local water user rates.

Currently, about $45 million is earmarked from state sales tax for water—an amount that automatically increases with an increase in sales tax revenues. Of this, about $7.5 million is earmarked for a recently-created water infrastructure account. The Governor recommends that about $3.5 million from this new earmark (and about $9.6 million in total from various water funds) be used for water efficiency incentives for both M&I and agricultural water, large-scale metering and data study, and water rights adjudication.

WATER INFRASTRUCTURE FUNDING REQUEST

Considering current per-capita usage, projected population growth, and the condition of existing infrastructure, a group representing some large water conservancy districts has identified $33 billion in water projects they believe should be built in the state over the next 45 years ($18 billion in repair and replacement projects and $15 billion in new projects). In some cases, a fair amount of detail has been provided on the projects while in other cases minimal detail is available. Given the very long time period for these estimates, the dollar amounts provided should be considered only a very rough approximation of future water project costs if the proposed projects are built.

Under the proposal, existing local revenues would cover some of the projects and new local revenues in the form of property taxes or water user fees would also be required to cover all future water projects identified. The proposal also suggests that state taxpayers pay for roughly $12 billion of the estimated $33 billion.

The proposal also assumes that the State of Utah use state bonding capacity to construct major water development projects costing billions of dollars. The State of Utah would cover all project costs up front, with repayments to the state delayed to begin from one to ten years after completion of construction, depending on when water is supplied. This means that state taxpayers would pay for much of the proposed project costs prior to repayment beginning.

Under both the Lake Powell Pipeline Act (enacted in 2006) and the Bear River Development Act (enacted in 1991), projects are subject to future funding decisions. Under the acts, after the projects are built and repayments to the State of Utah begin; full repayment would not be reached for over 50 years. Repayments for 70 percent of the project costs would be made within 50 years after local entities take water that was contracted for prior to construction. However, the remaining 30 percent of project costs are completely open-ended, meaning no set time period is in place for repayment to the state, although this portion of the water must be repaid within 50 years after the water is taken. Under current statute, repayments to the state would be made at an indeterminate interest rate, which could be less than the state's borrowing costs. Under the proposal, the State of Utah's General Fund would never be repaid and the ongoing allocation of tax revenues would create a permanent sizable state taxpayer subsidy for water development.

Some advocate for the State of Utah to assume a role of financing water projects previously filled by the federal government. It should be recognized that allocating state tax revenues for major water development projects constitutes a massive expansion of the state's role. Unlike the federal government, the State of Utah balances its budget. This means that this type of major

funding expansion would ultimately affect other state-funded programs (in particular education) or lead to future tax increases.

Out of respect to the taxpayer, it is recommended that the State of Utah only allocate very scarce resources to financing major water projects after all other alternatives are exhausted and the significant concerns raised in the recent legislative audits on water are resolved. Of particular concern is the current pressure on the General Fund to meet meeting core existing state government functions.

Depending on the actual cost and bonding terms, annual bonding costs for a project such as the Lake Powell pipeline could range from $100 to $250 million of ongoing revenue.

Prior to undertaking a major expansion of the state's role in water project financing, the following minimum conditions should be met:

- The need for better water data and data reporting prior to any state financing, including universal metering of water in all areas that would receive state-funded water and a minimum of three years of data reporting of water usage under new state water reporting standards.
- Building upon previous efforts, the implementation of new and meaningful water efficiency targets that strongly emphasize more efficient use of existing developed water, including reductions of government water use.
- Independent validation, including a comprehensive price elasticity and repayment feasibility study, verified accurate reporting of water use data, and independent validation of project costs.
- Strong local funding effort and an increased emphasis on user fees, including local conservancy districts paying up front for a meaningful portion of any project (for example, the federal government required a 35 percent local contribution on recent projects); water user fees that (a) reflect a local water user effort demonstrating a strong local commitment when compared with the water rates of other state taxpayers that will be paying to finance the projects and (b) fund needed local repair and replacement projects; and movement away from property taxes in favor of user fees for water (which will enhance economic incentives for conservation).
- Transparency and local voter engagement through public processes, including public hearings disclosing projected water user fee increases and a local vote agreeing to the

project and full state repayment, including any needed water user fee increases.

- Appropriate financing and repayment terms, including all interest capitalized into the loan; an interest rate set in statute that reflects the state's borrowing costs (given the long repayment period, either adjusting for inflation or adjusting over time to reflect the state's latest borrowing rate); a fixed repayment period for 100 percent of the project costs; payments that at least partially begin concurrently with the state's bond repayment; and repayment directly to the state General Fund rather than a revolving loan fund so that the legislature has the ability to prioritize each water project against other competing state priorities.

Recognizing that the projects are not currently funded and that current statutes will require changes, ongoing discussions will be needed to ensure appropriate terms are put in place prior to the state allocating additional funds for these purposes.

GUIDING PRINCIPLES

- Utah should take a more comprehensive view of water management. Policies and strategies must be developed or better implemented to encourage all water users (residential, commercial, agricultural, and government) to more efficiently use water. Strategies include meaningful price signals, enhanced public education, use of existing and emerging water-saving technologies, increasing wastewater reuse, encouraging water-wise landscaping, and the elimination of conservation barriers in local and state laws. Solutions should recognize the increasing value of limited water resources as growing demands stress existing supply and maximize the efficient use of existing water infrastructure and supplies.
- Better data and greater transparency into water usage and funding sources to help policymakers and consumers make informed decisions on how best to use and conserve water. Better information, including thorough water metering, and market price signals such as user fees will allow market forces to influence the efficient use of water.
- Local governments should implement plans to locally fund the repair and replacement of local infrastructure, in particular when receiving any state taxpayer funding. The State of Utah should adjust its policies to remove any obstacles, real or perceived, to local entities setting aside funds to repair and replace their water infrastructure.
- Funding responsibility should increasingly shift to end users. Any state involvement should be prudent and fiscally sustainable. Further earmarks should not be used. When state funds are provided to assist water development, local recipients should meet basic criteria such as planning, maintenance, appropriate rate structuring, and conservation to advance the state's overall water goals. The state should continue to support strategies and education that encourage the judicious use of water.
- The state water engineer must have the administrative and legal tools sufficient to efficiently enforce water rights law. The state should improve its water right adjudication process to clarify which water rights are valid and bring more certainty and speed to water transactions.
- Increased use of private financing sources for water development projects should be encouraged.

BUDGET RECOMMENDATIONS

- $5 million toward more efficient water use, including rebates to improve outdoor watering efficiency ($2.2 million), state facility efficiency ($500,000), advertising ($300,000), and agricultural water efficiency incentives ($2 million)
- $4.5 million to collect data and study water use throughout the state

- $100,000 for water rights adjudication
- $90,000 for dam safety
- $500,000 to remediate phragmites (an invasive species that consume large amounts of water) on sovereign lands
- $123,000 to address algal blooms