BUDGET & POLICY BRIEF
Water

Continued focus on more efficient water use; highlighting the need for water users to pay true water costs

HIGHLIGHTS

- **Executive Water Finance Board** established by the Governor in 2017 to conduct financial and economic reviews of state-funded water projects
- **State Water Strategy** recommendations provided to Governor in 2017 include a **focus on efficient use of water, accurate water data, and users paying for water according to water use**
- **$1 million** to measure agricultural water use, with a recommendation that the USU Extension Water Advisory Board allocate part of its water funds to study agricultural water use and optimization strategies
- **$8.4 million** for dam safety upgrades
- **$500,000** to remediate phragmites (a water-consuming invasive species)
- **$305,000** 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
- accurate and reliable data is available to policymakers to make informed financial decisions

BACKGROUND

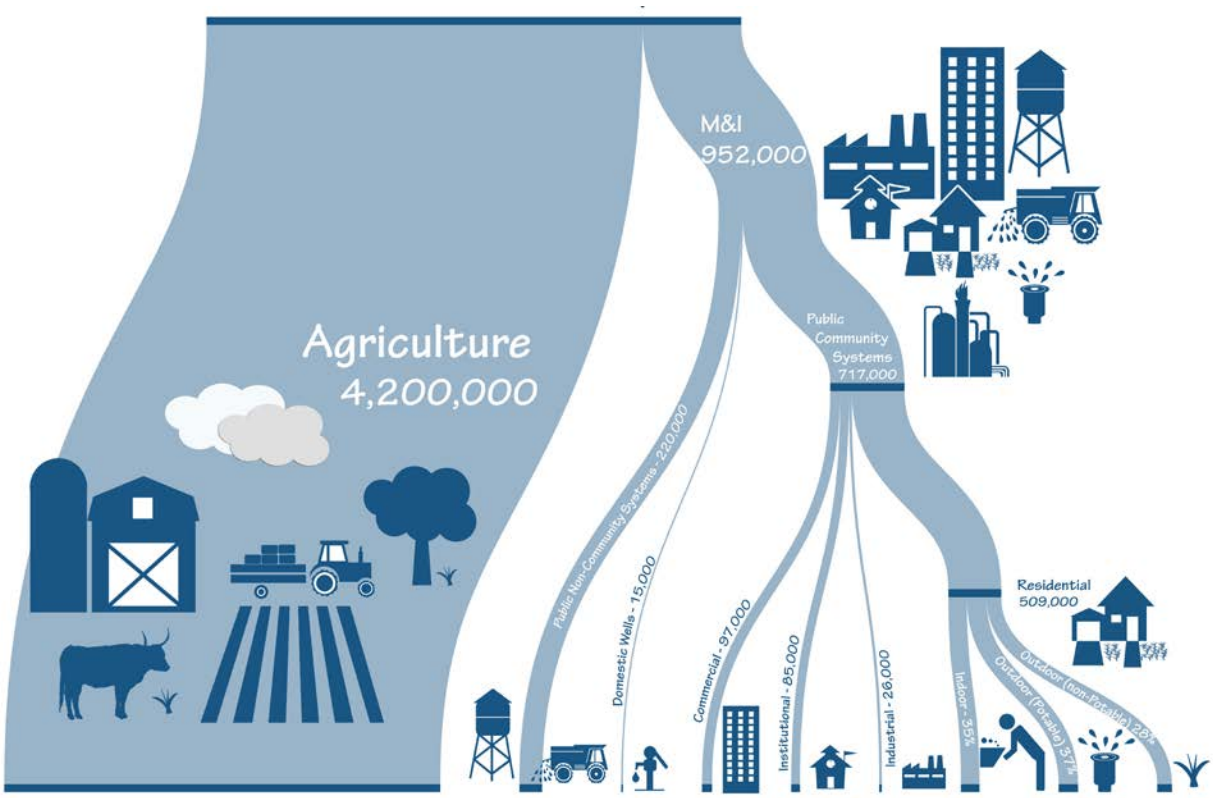
As one of the driest states in the country, water is always a topic of concern in Utah. While the state has successfully thrived despite its arid environment, the challenges of persistent population growth, an uncertain climate, and aging water infrastructure require creativity, determination, and leadership. Utahns have consistently proven they are up to the task.

The increased recent focus on water has yielded positive results. Improved processes and strategic investments have accelerated the slow pace of water rights adjudication. The challenge to improve water data has been met head-on, with efforts underway to improve insight into current water use. Additionally, individuals, businesses, researchers, communities, and agricultural producers across the state have contributed to conservation efforts that move Utah toward a more sustainable water future. However, much work still remains in order to optimize Utah's limited water supply.

WATER USE

Figure 1 shows the distribution of diverted water in Utah. Diverted water is generally categorized as agricultural water (estimated at 82 percent) and municipal and industrial (M&I) water (estimated at 18 percent). Since water diversion numbers are estimated, the Governor's budget recommends $1 million in new funding to better measure and understand actual water use, particularly for agriculture.

FIGURE 1. ESTIMATED UTAH WATER DIVERSIONS IN ACRE FEET PER YEAR



Of the estimated 18 percent statewide total diverted M&I water use, 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.

Looking to the future, policymakers should take a comprehensive view of water and seek to optimize water use across the board. The emphasis for more efficient M&I water use is rightly placed and, in particular, should continue for excessive outdoor water use.

As Utah's single largest water user, it is also important to review and better understand agricultural water use. Recognizing that any policy change 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 the state's overall water use.

CHOICES ABOUT WATER USE

Assuming current water usage levels remain 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 our population continues to grow at the current rate, the need for additional water supply at some future point in time is a given; however, the timing of water system development can vary dramatically based on water usage. More judicious use of existing water could delay costly major development projects, while the failure to conserve water will more quickly lead to

accelerated building schedules and the associated cost increases.

No one wants increased water rates; however, water rates will need to increase over time to pay not only for costly new development projects, but to repair and replace aging infrastructure. While local water user fees are unpopular, so are state tax increases. Depending on the level of cost incurred by the state, Utahns may soon face a real choice between state tax increases or increases in local water rates to pay for water costs. Moving from a weak and muddled water price signal to a strong and clear price signal will encourage more efficient water usage.

STATE WATER STRATEGY RECOMMENDATIONS

Recognizing that an increasingly prudent stewardship of our limited water resources is necessary to meet the challenges of a growing population, in 2013 the Governor convened a team of stakeholders with diverse and extensive backgrounds across the water spectrum to form the State Water Strategy Advisory Team. After years of discussion, public meetings, written comments, and online surveys, the team produced and submitted a state water strategy in July 2017. The *Recommended State Water Strategy* document provides helpful insights as Utahns navigate the unique challenges of a growing population in an arid, water-constrained region. Many of the recommendations are being addressed or have been prioritized for implementation in the near future.

Among the many strategies identified, optimizing the use of existing developed water and the need for improved water data emerge as clear near-term priorities that will inform decision-makers in charting the state's course for long-term water use and fiscal sustainability. The Governor recommends $1 million be invested to strategically deploy stream gauges and water meters to increase understanding of agricultural water use and optimization efforts as we continue to add upon existing efforts to augment water data in the state.

Additionally, the Governor recommends that the USU Extension Water Advisory Board designate a portion of its $950,000 appropriation to study agricultural water use and optimization strategies. The Governor further recommends developing processes to determine the highest-value and most urgent research questions and to prioritize future research funding accordingly.

For example, significant improvement for water planning and management could be provided through basin-level advisory councils. These stakeholder-led councils may balance the unique needs of each basin while optimizing water usage. Determining an administrative framework to enable these basin-level councils could be a near-term priority.

Given that much of the M&I water supply goes to outdoor watering and that Utah's population continues to grow, another near-term priority should be to ensure that future land development is water-efficient by design. Communities should integrate water and land use planning to ensure that community plans and ordinances consider and implement water-saving strategies. State financing should be contingent on these efforts.

FUNDING UTAH'S WATER FUTURE

Considering current per-capita usage, projected population growth, the age and condition of existing infrastructure, and a decrease in federal funding, numerous individuals and entities have proposed ideas on ways to maintain, replace, and develop new water infrastructure. This dialogue provides welcome perspectives and much-needed information. Ultimately, however, expanding the state's role in water financing—including any use of state funds or bonding capacity—must thoroughly be considered with respect to the impact to taxpayers and should only be considered after all other alternatives have been exhausted.

To ensure the State of Utah maintains a fiscally-prudent and sustainable water finance policy, the Governor created the Executive Water Finance Board in the summer of 2017. The Board brings together individuals with a wealth of experience and expertise in water, planning, budgeting, economics, and finance to provide critical insights regarding the financial and economic aspects of both the demand and supply of water. As the state grapples with various funding proposals for water projects that may rely on state financing, the Board will conduct financial and economic reviews and analysis.

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

- Better water data and data reporting such as universal metering of water and a minimum of 3 years of water usage data reporting under new state water reporting standards.
- New and meaningful water efficiency targets that strongly emphasize the optimization of existing developed water to include reductions in government water use.
- Independent validation, including a comprehensive price elasticity and repayment feasibility study, verified accurate reporting of water use data, and an independent validation of project costs.
- A strong local funding effort and an increased emphasis on user fees including a sizeable up-front local contribution to any project—for example, the federal government required a 35 percent local contribution on recent projects. Water user fees should reflect a robust effort that demonstrates a strong commitment as compared to the water rates of other state taxpayers that also pay to finance the projects; local funding to cover all needed local repair and replacement costs; and movement away from property taxes in favor of water user fees in order to enhance economic conservation incentives.
- Transparency and local voter engagement through public processes, including public hearings to disclose projected water user fee increases and a local election where residents vote to approve the project and full state repayment based on any necessary water user fee increases.
- Appropriate financing and repayment terms, including all state interest costs capitalized into the loan; an interest rate set in statute that fully reflects the state's borrowing and opportunity costs; a fixed repay-

ment period for 100 percent of the project costs; payments that begin concurrently with the state's bond repayment; and repayment directly to the state General Fund rather than a revolving loan fund so the legislature has the ability to prioritize each water project against other competing state priorities.

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

GUIDING PRINCIPLES

- Utah should take a more comprehensive view of water management. Policies and strategies must be developed or better implemented to encourage a more efficient use of water by all water users (residential, commercial, agricultural, government, and non-profit entities). Strategies should include strong and clear price signals, enhanced public education, increased use of existing and emerging water-saving technologies, increased wastewater reuse, increased water-wise landscaping and the elimination of conservation barriers in local and state laws. As growing demands stress existing supply and maximize the efficient use of existing water infrastructure and supplies, solutions should recognize the increasing value of limited water resources.
- The state needs better data and greater transparency into water usage and funding sources to help policymakers and consumers strategize on how best to use and conserve water. Better information, including more 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 state taxpayer financing. The State of Utah should adjust its laws and policies to remove any obstacles, real or perceived, to local entities setting aside funds to repair and replace existing 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 continue to improve its water right adjudication process to clarify which water rights are valid and bring more certainty and speed to water transactions.
- The state should encourage the increased use of private sector and federal financing sources for water development projects where those sources are available.