



Prepare60's Guide to Securing Utah's Water Future

Prepare60 Approach

Utah's population is projected to double by 2060, and by 2030 our statewide demand for water will outpace supply. We need to act now to secure Utah's economic future and continue providing our families with a high quality of life.



We must protect current water systems by investing in the repair and replacement of our aging infrastructure. This will ensure our homes, businesses and schools will continue to have a safe, reliable water supply.



We must use the water we have wisely. Conservation is the foundation of all current and future efforts. Investing in new technology and using best practices extend our current water supply, but it won't be enough.



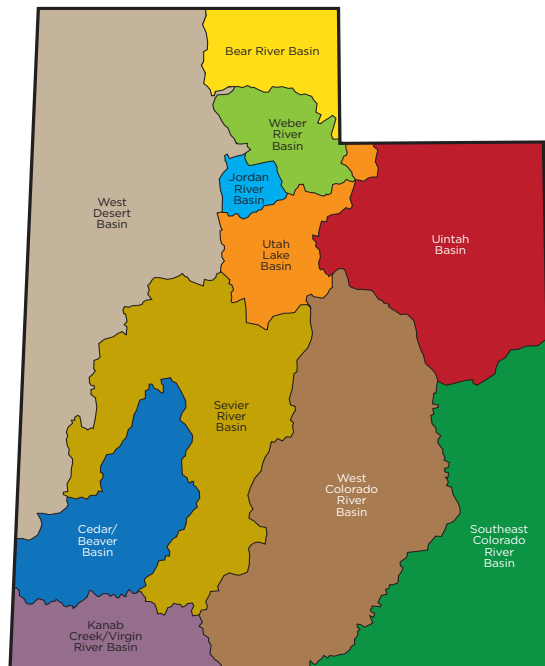
We need to provide for the future, just as those who came before did for us. The Statewide Water Infrastructure Plan identifies the most critical new projects to meet future growth and capture Utah's existing water shares.

Statewide Water Infrastructure Plan

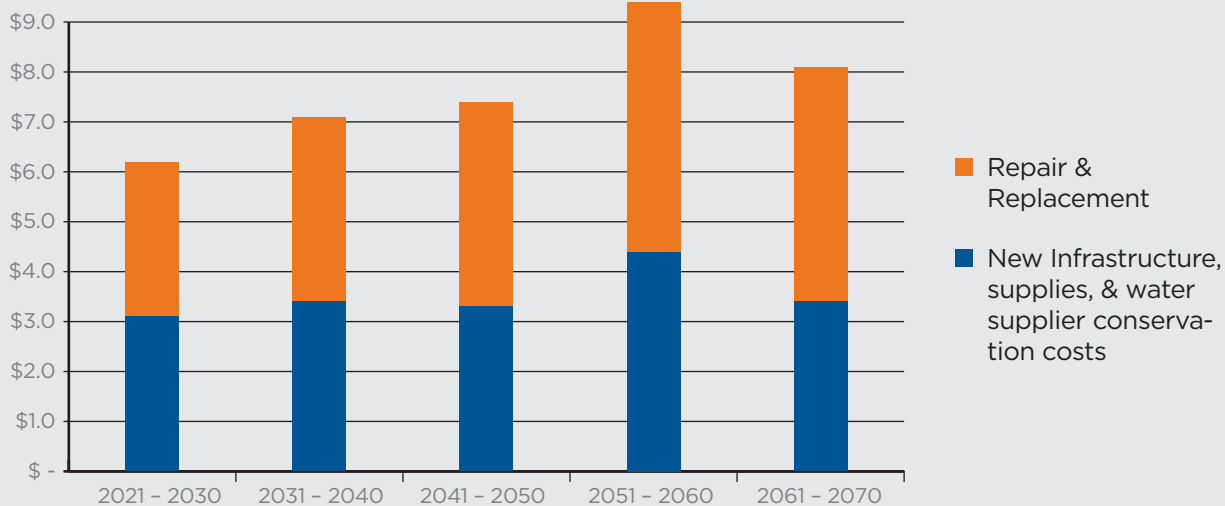
The Statewide Water Infrastructure Plan (SWIP) is a comprehensive, long-term blueprint of Utah's future water needs. Organized by the state's 11 river basins, the report considers municipal and industrial water needs and incorporates projected population growth, per capita water use and conservation achievements. Visit www.prepare60.com to see the full report.

\$20.6B Repair & Replacement +
\$17.6B New Supply & Infrastructure
**= \$38.2B Total
Investment by 2070**

Utah River Basins



Statewide Cost Projections by Decade in Billions of Dollars



SWIP Steps – How the Plan Works

Population growth, aging infrastructure, climate variability, new technology, and a shift in federal involvement in financing water projects have brought us to a pivotal point in water infrastructure planning. With much of Utah now plumbed together, regional planning is no longer adequate without also considering statewide need. The SWIP* is the only statewide effort that quantifies that need and recognizes specific steps that each basin must take to ensure our children and grandchildren enjoy the same quality of life we have now.

Conservation

Conserving water is essential to meeting the state's future water needs. Conservation will buy us time, but even aggressive measures will not be enough to meet forecasted demand.

Repair & Replacement

Utah's water system is made up of large dams, water treatment plants, and more than 10,000 miles of pipelines. However, much of the water infrastructure delivering water to our taps is approaching the end of its 50-year lifespan. Water agencies must repair, replace and update this aging infrastructure to maintain current water supply.

Regional & Federal Projects

Water agencies are constantly updating their network of facilities to meet demand. As federal funding for water projects steadily declines, state and local government will have to assume

additional responsibility in building new infrastructure and maintaining regional systems, including the 24 dams built by the federal government.

State Projects

The Utah Legislature has approved two state projects to capture Utah's undeveloped allocation of interstate rivers. Utah's share of the Bear River will go into new storage facilities for future population and business growth along the Wasatch Front. Development of the Bear River accounts for 59% of Utah's new water supply. Utah's share of the Colorado River will provide a more reliable and diverse water supply for Southern Utah by capturing 5% of Utah's Colorado River allocation via the Lake Powell Pipeline before it flows downstream and out of the state.

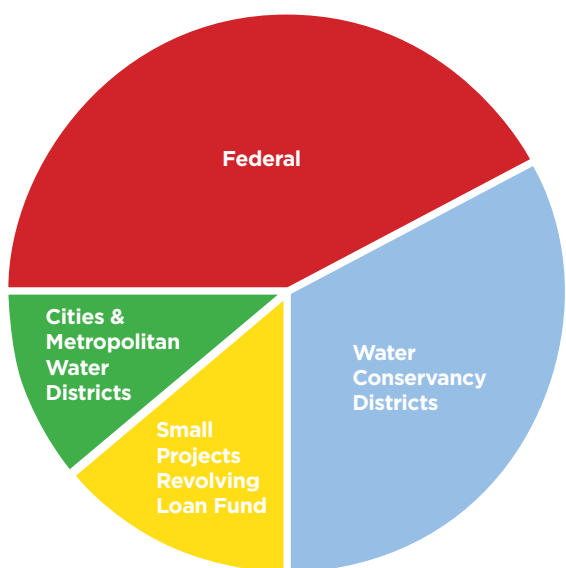
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**The SWIP was commissioned by Governor Herbert in 2013 and compiled by eight water agencies. It has been presented to state House and Senate leadership, legislative caucuses, statewide chambers of commerce, and hundreds of local elected officials.*

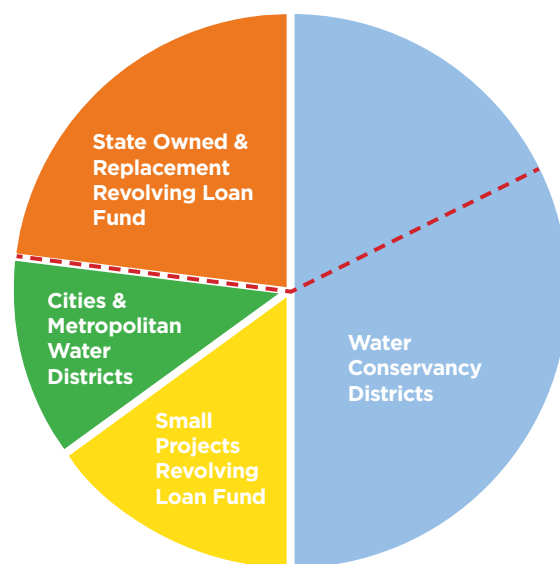
Water Infrastructure Financing

The federal government has played a major role in Utah water projects for the past century, financing a third of all municipal and industrial water infrastructure in the state. However, federal budget cuts are forcing us to change the way we plan and pay for water projects.

**1903-2015
Financing Model**



**2016-2060 Proposed
Financing Model**



How much will be paid by the end water user?

ALL OF IT!

Water is the only essential infrastructure for which users pay back loans used to build major projects.



Water Infrastructure Funding

Utah law gives water three essential funding tools to pay for services and community benefits. This solid financial structure provides a way to deliver affordable water today and plan for the future.

Water Rates



These charges fund ongoing operation and maintenance costs of the treatment and delivery of water to our taps. Water rates are tied to current use, which varies seasonally. A portion of water rates are used to pay back loans and bonds financed to build water projects.

Impact Fees



Water users pay these fees to help support new infrastructure necessitated by growth. The fees appear on closing statements for the purchase of a new home or business, or are paid when a building permit is issued. The majority of new water users are our own children and grandchildren.

Property Tax



This tax allows future generations to help pay the capital costs of infrastructure that will benefit them. Water projects incur costs long before the first customer receives water. Property tax provides a stable revenue source to support bonding for new water supplies being developed but not yet in use.

Public Good

Unlike other infrastructure, water is not a commodity that can be managed by market principles. As the most essential public service supporting life, safety and prosperity for people and the environment, water requires sophisticated funding models to ensure stability and fairness. Water is a limited natural resource, owned by the public, that provides benefits not measured through a meter. The public value of water is best paid for by the property owners of the communities that benefit from the following public services.

RECREATION



ENDANGERED SPECIES



FLOOD PROTECTION



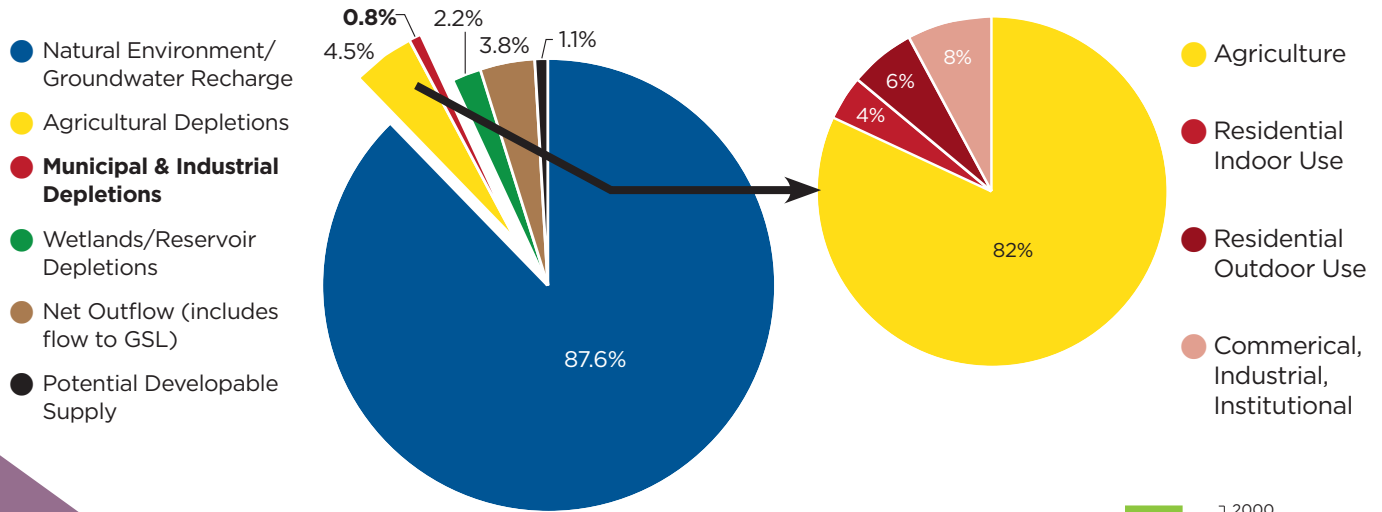
GROUNDWATER PROTECTION



LAND VALUE



Where Does Utah's Precipitation Go?

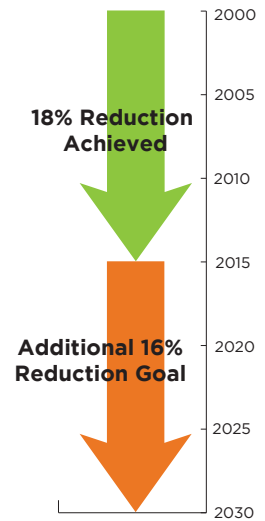


Source: Utah Division of Water Resources

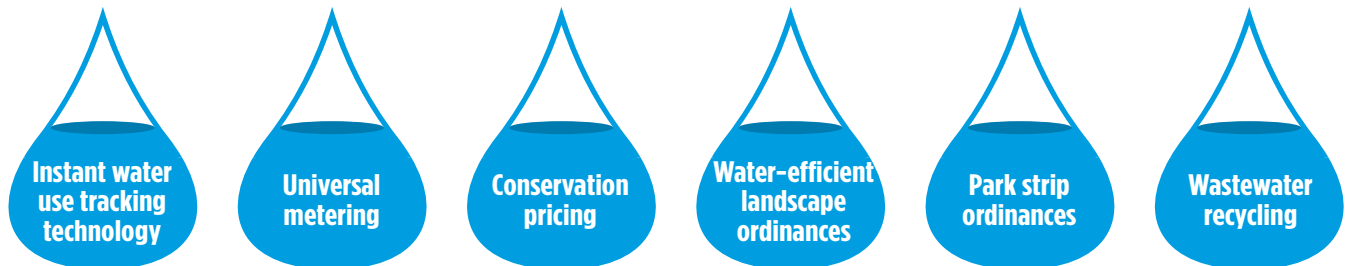
1 lawn watering uses 1,500 - 3,000 gallons

Conservation Efforts

New technology and best practices will help us meet the state's regional goal of reducing per capita water use an additional 16% by 2030. It will take substantial effort to achieve this goal.



NEXT CONSERVATION STEPS



Frequently Asked Questions

Why do we need to pay for projects that aren't needed for years?

Water development projects don't happen overnight. It takes decades to go through the planning, design, regulatory and construction process. Right-of-way purchases for the Bear River project have been underway for more than 20 years. The Lake Powell Pipeline is currently undergoing federally mandated environmental studies. It will be more expensive and difficult to develop the needed supply if we don't plan properly and wait until the water is needed.

Should Utah raise water rates to pay for this plan?

Raising water rates is inherent to the user pay model, but rate increases should correspond to the actual cost to capture, treat and deliver water. As our infrastructure wears out and more expensive water sources are tapped, we will see a significant increase in our rates. However, Utah's unique climate and geography will likely keep average water bills affordable and lower than other states' rates.

What would happen if property taxes were removed as a source of water funding?

Eliminating or reducing property taxes would remove water conservancy districts' most stable income source and threaten their ability to bond, which would require significant rate increases without adding services or facilities. Residential customers and non-profits would see the highest rate increases while those with higher value properties, such as warehouses or retail stores, would pay less. Property taxes are legally committed to repay federal loans used to construct many water projects in the state. Without these funds, water users would bear the burden of public good benefits like flood control and endangered species protection, instead of it being shared by the public at large. Utah is one of eight Western states that use tax in some form to support water infrastructure.

What will it take for Utah's to achieve its conservation goals?

Utahns have already successfully reduced consumption 18% since 2000, but additional conservation will require difficult choices about how water is used going forward. Districts and municipalities are working together to

enhance tiered water rates to incentivize conservation. Wastewater recycling facilities and advanced metering infrastructure are also being put in place, but at a premium cost. All Utah citizens need to be more conscientious about their water use to provide a sustainable water supply for our children.

Do Utahns use more water than our Western neighbors?

No, we don't. There is no standard national formula to calculate how many gallons are used per person per day, resulting in confusing and inaccurate water use comparisons. New estimates by the U.S. Geological Survey and a recently completed multi-state report designed to standardize how water use is measured based on climate differences, development density, and other variables puts Utah's average water use in the middle of the western states.

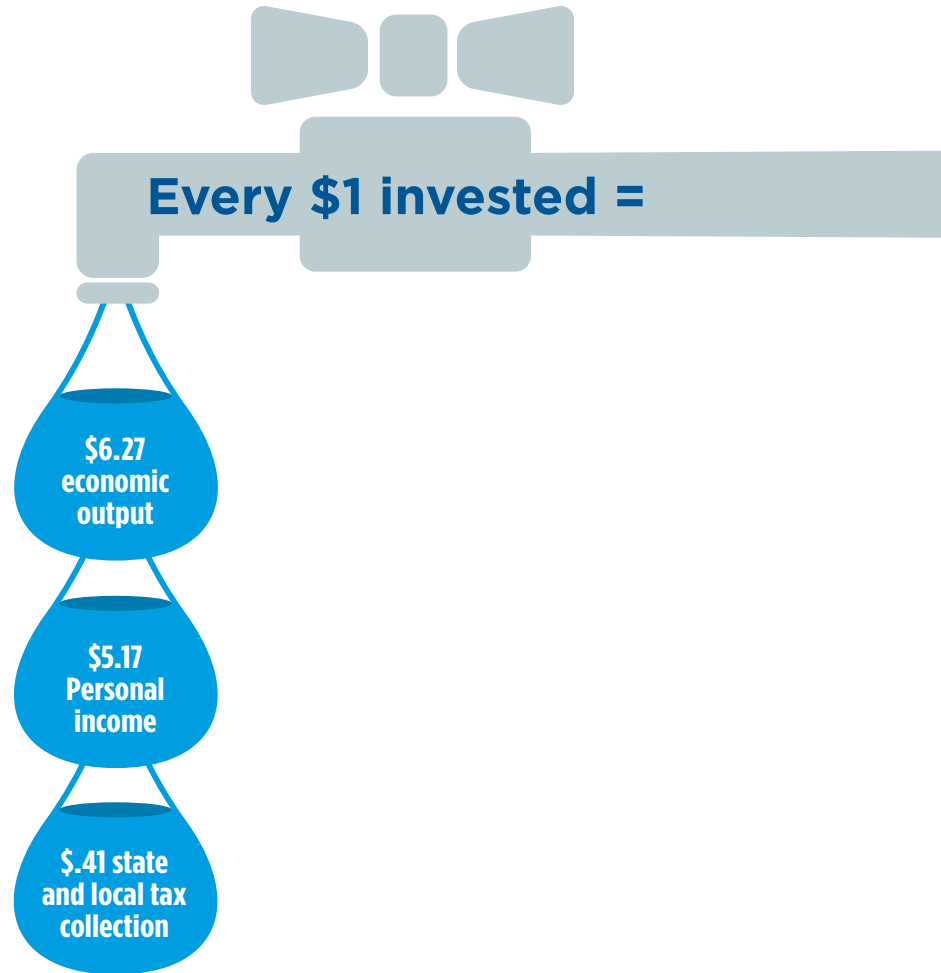
Should secondary water use be metered?

Technological advances have started the discussion about metering the use of all secondary water, as we do with culinary water. Secondary water refers to the non-potable pressurized water that is delivered to property owners for outdoor use. Since being implemented in northern Utah in the 1950s, secondary water systems have expanded along with population growth, but metering technology for small connections did not exist until about 2010. Weber Basin Water Conservancy District has conducted a large-scale research project installing meters on secondary water connections and preliminary results show significant usage reductions. However, retrofitting existing connections is expensive and invasive. In Davis and Weber counties alone, there are over 100,000 secondary connections that still need to be metered by cities, districts and irrigation companies.

A leaky faucet that drips 3 times per minute wastes up to 157 gallons per year.

90% of Utah's population growth in 2014 was internal. (U.S. Census Bureau)

Economic Return on Water Investment



Prepare60 is the center established by the four largest water conservancy districts to protect what we have, use it wisely and provide for the future.

www.prepare60.org