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FINANCE
ADVISORS



PREPARED FOR:

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RESOURCES

DIVISION OF
WATER
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WATER
INFRASTRUCTURE
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EXECUTIVE SUMMARY

STUDY SCOPE



In 2023, LRB Public Finance Advisors (“LRB”) was engaged by the Utah Department of Natural Resources (DNR) Division of Water Resources in response to [2023 General Session Senate Bill 34](#). This legislation required the DNR to:

- study the use of property tax revenue for payment of costs related to supplying drinking and irrigation water, including infrastructure, treatment, and delivery; and
- make recommendations for funding of these costs

As part of the study there were additional specific requirements that DNR:

- perform a state survey of the use of tax revenue for water infrastructure
- review the use of property tax revenue for construction, operation, maintenance, repair, and replacement of water facilities, including facilities related to:
 - diversion, treatment, and storage of drinking and irrigation water; and
 - the delivery of drinking and irrigation water to end users;
- investigate policies that would ensure all users contribute to the cost of water infrastructure
- identify methods of developing tiered water rate structures that promote water conservation and ensure reasonable revenue stability;
- analyze the effect of eliminating or reducing property tax revenue as a funding source for costs related to water infrastructure, treatment, or delivery, including:
 - the effect on retail water rates and retail customer water use and demand;
 - wholesale water suppliers' ability to prepare for anticipated local and regional water demand; and
 - water development costs associated with new growth; and
- identify and study any water conservancy district or special service district that levies a property tax but does not provide water service.



RESEARCH FOCUS

The states surveyed were primarily within the Colorado River Basin, specifically: Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming, along with Idaho and Oregon (the report will refer to these states as the “Comparable States”).



LRB researched policies, practices and funding sources for water operations and infrastructure throughout the Comparable States. The effort included a survey of multiple entity types from both in-state and out-of-state water purveyors and professionals to understand value, impacts, opinions and practices. Those surveyed included cities, various types of districts, governmental entities, non-profits, economists, and industry professionals. This document reports the findings in policies and trends, potential financial impacts in changing the current funding structures, and analysis of potential scenarios should entities' ability to utilize their property tax levy for operations be limited or eliminated.

In conducting interviews, discussing policies, analyzing water pricing, reviewing operations, identifying revenue sources and the general "politics" around water, two general approaches to pricing water development and delivery were identified. Understanding these approaches is important to how water is developed and priced.

- 1) **Conservation:** Emphasis on a tiered rate structure to motivate water conservation. This approach limits base rates and property taxes to economically encourage water conservation by tying water rates to usage.

Perceived pros & cons:

- a. Pros: basis to provide economic incentives for water conservation; cost of water contained in a single bill; conserved water allows for future growth
- b. Cons: may increase the costs of supplying and providing water; requires additional management of revenues and fund balances with the elasticity in variable water use

- 2) **Lowest Cost:** Emphasis on providing water at the lowest costs possible. This approach utilizes base rates and property taxes to lower the costs of water.

Perceived pros & cons:

- a. Pros: lowers the costs of providing water and the water bill for all consumers; allows for economic growth; stable revenue stream
- b. Cons: may incentivize overconsumption of water; not all users pay property taxes; may enable one user classification to subsidize another with base rates and/or property taxes

Efforts to ensure a resilient water supply for the State can be aided by blending the strengths of each approach. Achieving a low cost of water and water conservation is possible by utilizing both of these approaches. This study explored the applications of these approaches.

UTAH'S CURRENT SYSTEM

Utah enjoys some of the most affordable water in the Comparable States. Water purveyors have kept water costs low through converting existing agricultural water to municipal and industrial (M&I) uses, federal & state funding programs, lower energy costs, and the use of property taxes.

- State Statute does not clearly establish priorities for water systems and define reasonable water rates



- The conversion from agricultural water to M&I helps maintain existing sources, limits additional development projects and is used in secondary systems.
- Federal funding, through the US Bureau of Reclamation, has originated hundreds of millions of dollars to support Utah's infrastructure needs. It should be noted it is not consistent, reliable and is not equally distributed amongst water suppliers.
- Utah's low energy costs, coupled with gravity that aids in transporting water from the mountains to the valleys, has significantly reduced pumping and transport costs.
- Similar to other the Comparable States, Utah utilizes base rates and property taxes.

KEY FINDINGS

Comparable States Use of Tax Revenue

- The study identified rate structures and other practices currently implemented in the Comparable States in motivating water conservation, supporting water services and maintaining cashflows to service operations and debt obligations. Nearly all have a base rate with tiered rates; many areas also use property taxes.
- Water is geographically driven and requires local flexibility over water management to address regional issues.
- Utah is not alone in how it funds its water operations and infrastructure, i.e. cities (often acting as retailers) primarily utilize water rates and impact fees while districts (often acting as both wholesalers and/or retailers) also leverage property taxes to expand and maintain infrastructure and to offset expenses; these are common practices seen throughout the Comparable States.

Uses of Property Tax Revenue

- There exists a wide range of applications of property taxes: funding and/or maintaining infrastructure, funding operations, securing debt directly or indirectly.
- Utilizing property taxes and base rates instills confidence and stability in revenue collections.
- Utilizing property taxes lowers the costs of developing and delivering water
- Utilizing property taxes and higher base rates dilutes the effectiveness of a tiered rate structure, as water usage usually only comprises 15-25% of a standard annual retail water bill
- There are administrative hurdles to engaging non-taxpaying entities to pay their equitable share in the costs of delivering water

Effect of Adjusting or Limiting the Property Tax System

- The water rates funding the costs of delivering water will increase.
- Depending on how new rates are implemented, there could be potential positive economic impacts to: certain businesses, high valued residences, secondary homes.
- Depending on how new rates are implemented, there could be potential negative economic impacts to: certain businesses, renters, non-tax paying entities like non-profit organizations, governmental entities like school districts, cities, parks, cemeteries, etc.



- Shifting costs more to water rates for cities, counties & school districts could likely increase their costs which might induce actions to increase taxes or adjust budgets to absorb higher water rates.
- The impact on a water district will vary depending on its size & age and whether it is a wholesaler or retailer.
- There would need to be a period to ween off from property taxes to avoid complications with existing contracts and debt obligations.
- Ancillary services (water conservation education programs, watershed protection, streamflow maintenance, flood control, fire protection, regional planning, species protection, recreation, environmental protection, regulatory support, public health & safety, etc.) may be limited or curtailed

Implementation of Tiered Water Rates

- Tiered rates have proven effective in encouraging water conservation.
- Tiered rates can be structured to allow efficient water users to pay less.
- 100% reliance on tiered rates introduces financial risks of variable revenues.
- Increasing fund balances to stabilize financial operations likely required.
- Creating tiered rates for secondary water is a significant opportunity to encourage water conservation.

OBSERVATIONS FROM THE STUDY PROCESS

- Continued education paired with real-time information on water usage has a material impact on water consumption practices, water conservation efforts and public support of programs and policies.
- Increasing social awareness around the benefits of water conservation to help overall needs like the Great Salt Lake, streamflow, species protection and similar applications are more effective than asking users to conserve water for future growth.
- Per Utah State code, water conservancy districts' stated missions dictate both direct and indirect services that include water delivery, increasing property value, regional planning, stabilizing stream flows and benefiting all industries in Utah.
- Much of the discussion on water rates has focused solely on the costs of direct water services whereas certain districts are also charged with providing a variety of additional ancillary services.
- Certain water development projects could be delayed with water conservation.

AREAS OF CONTINUED DISCUSSION

- Specific Statewide policies around water conservation
- Clarifying concepts in the State Code around priorities, water conservation, "reasonable" water rates, etc.
- Continued financial analysis of any modifications to the current water rate structure.
- Water abatement programs
- What ancillary programs and/or services should the wholesale districts be providing?
- Educational programs
- Secondary water management



CONCLUSION

This report concludes that Utah's water purveyors utilize commonly used best practices to deliver affordable water and have dependable revenues. Utahns enjoy some of the lowest costs of water in the Comparable States. To change how water is funded would require thoughtful implementation as to not threaten the stable financial operations established by Utah's water industry. Managing risk in revenue collections is a real consideration in establishing rates. Increasing water conservation measures will prepare the State for tomorrow's needs.

Balancing water conservation and revenue streams is a delicate matter that will require constant attention. Tiered rates economically motivate water conservation. Securing stable revenue streams through base rates and property taxes helps lower the costs of water. Seeking this balance to maintain reliable revenues and encourage water conservation. Coupled with continued secondary water management to increase water conservation are effective efforts to maintain a resilient water supply for Utah today and into the future.

RECOMMENDATION

To balance water conservation and revenues, continue to utilize property taxes and base rates and implement a more aggressive tiered rate.



RECOMMENDATIONS & OBSERVATIONS

Recommendations	Perceived Trade-Offs (Observations)
<p>1. Clarify priorities in statute and define “reasonable water rates”</p>	<ul style="list-style-type: none">  Should there be a priority in the State Code or defer to retailers  Some may interpret “reasonable” as “affordable”
<p>2. Any changes to the property tax system requires sufficient time, analysis and thoughtfulness to implement properly</p>	<ul style="list-style-type: none">  To maintain the existing level of service, eliminating property tax would increase costs of delivering water  Eliminating property taxes increases cost transparency of water bills
<p>3. Implement more aggressive tiered rates</p>	<ul style="list-style-type: none">  Tiered rates are effective at economically motivating water conservation  There is a smaller group of users in the higher tiers
<p>4. Consider implementing a special water rate for non-taxpaying entities.</p>	<ul style="list-style-type: none">  There are means to engaging non-tax paying entities to pay their fair share of water costs  There are administrative hurdles to effectively implement in delivering revenues to wholesaling entities
<p>5. Require metering of all drinking water and secondary water connections that culminates in universal metering with tiered rates to encourage water conservation</p>	<ul style="list-style-type: none">  Large water conservation opportunity  Converting public who have enjoyed unlimited secondary water  Will require change in certain communities and increased investment
<p>6. Incentivize cities and retailers to enhance their policies around wise water use and further enable cities to inspect and enforce policies with additional funding for staffing.</p>	<ul style="list-style-type: none">  Continued efforts to educate and motivate water wise actions  Efforts to enforce policies can be burdensome



REPORT BACKGROUND AND PROCESS

BACKGROUND



The cost of water in Utah has several components, including, but not limited to, costs associated with water ownership, collection, storage, treatment, delivery, infrastructure, operation and maintenance, and ensuring compliance with federal and state regulations. Revenue sources used to fund these costs include user charges (or rates and fees), property taxes, sales taxes (sales tax revenues fund various water development and loan funds at the State level) revenue bonds/debt, grants, and impact fees. Different types of water providers, including irrigation, drinking water, wholesalers, retailers, different types of governing bodies (districts, cities, cooperatives), and different sized communities (urban and rural) have great variability in their cost of service and employ different types of revenue sources to adequately cover their costs. This report focused on public water purveyors and not private water entities. The Utah Legislature authorizes sources of revenue, setting specific limits for their application. However, including property tax as a funding mechanism has sparked significant attention and analysis.

This study focused on water purveyors. Other utilities utilize property taxes, such as sewer, that might be similarly analyzed.

Opponents to utilizing property taxes to fund water operations argue that using property tax revenue to fund water services obscures the actual cost of water for users. This is because the costs are divided among various sources, making it less transparent for water consumers. While water users typically receive regular bills from their providers with information about water usage and costs, tax notices only display levying authorities and pro-rata rates, lacking specifics for ratepayers. Opponents of property taxes as a funding method also view them as a subsidy, arguing that some ratepayers do not shoulder their fair share which may contribute to excessive water use while some taxpayers pay for water supplies they cannot access.

Conversely, proponents of the use of property tax revenue to fund water services believe property taxes are not a subsidy since Utah water users pay user charges and property taxes through a split payment system. Supporters of property tax revenues contend that these taxes contribute to funding a wide array of public services, like conservation programs, benefiting the entire community. These values are not directly tied to the actual cost of water measured by water meters but are distributed among all members of the public living in the area. Because the State Constitution currently provides tax-exemptions for certain entities, proponents view any foregone tax revenues as part of the social benefit those entities provide.

In addition, some think property tax revenue is vital in facilitating efficient and cost-effective capital improvement bond financing for essential water infrastructure projects required to support Utah's rapidly growing population. Some of these projects, such as new water sources and infrastructure capacity enhancements, and in some cases, aging infrastructure and regulatory compliance, may take decades to fully develop and to start charging and

collecting revenue from water rates. They feel property tax revenue allows for the use of these taxes and borrowed funds, commonly secured through bonds, which distribute some of the expenses from current ratepayers to future users who will ultimately benefit from these projects, promoting a sense of generational equity.

Utah's water infrastructure encompasses a wide range of components. These include various water storage reservoirs, drinking water sources, storage tanks, treatment facilities, distribution pipelines, water treatment facilities, storm drains, catchment basins, drainage and agricultural canals, irrigation systems, and man-made wetlands, all working together to ensure a reliable and efficient water supply for the state as well as meeting federal and state water quality requirements for drinking water, and stormwater.

APPROVAL

In 2023, the Utah Legislature approved and the Governor signed, the [Water Infrastructure Funding Study SB 34](#) (Attachment 1). This legislation defined the objective of this study as follows:

1. Study the use of property tax revenue for payment of costs related to supplying drinking and irrigation water (including infrastructure, treatment, and delivery)
2. Make recommendations for funding the costs related to supplying drinking and irrigation water (including infrastructure, treatment, and delivery)

A workgroup within the Utah Water Task Force, including other interest groups, was formed to help guide this process. Monthly meetings were held to monitor progress and provide feedback and direction. LRB met with Division of Water Resources Staff regularly (more often than the workgroup meetings) to receive direction, review findings and brainstorm.

PROCESS

LRB was first engaged in the fall of 2023. The initial steps were understanding the financial operations of numerous entity types. This information was gathered first to outline questions around operations, policies and water rates. Interviews of various entities were conducted to gather operational insights and policies along with observations on how the water industry could achieve equity amongst its users. At this junction, LRB began to analyze the use of property taxes to fund operations and infrastructure to create possible scenarios of how water rates might react should entities lose their ability to levy a property tax.

With this information, LRB began to compile the report employing the information received over the months of inquiry. Policies, philosophies and observations were formalized with a the goal of bookending various philosophical approaches to funding water operations. The report navigated several drafts with feedback from the DNR Staff, the Workgroup and others.

To establish the requisite background to conduct the analysis, collect data and address the questions posed in the report, LRB conducted research utilizing the following sources of information:



- LRB Offering documentation utilized in marketing and selling publicly offered bonds as provided on the Electronic Municipal Market Access (“EMMA”) website (<https://emma.msrb.org/>).
- LRB interviewed numerous (30+) entities and professionals to collect firsthand information on operations, observations and policies from cities, districts, non-tax paying entities, developers, industry professionals and economists.
- LRB met regularly with the Workgroup to receive direction and feedback
- LRB contacted various water specific entities throughout the process to collect information.
- LRB accessed information from various entity websites, i.e. water rate data, audits, water usage, policies and the like

The following areas respond to the questions posed in the study.



THIS INITIAL SECTION FOCUSED ON ENTITIES WITHIN UTAH ONLY

UTAH'S WATER PURVEYORS

To initiate the discussion, it is important to understand the nature of the predominant water purveyors in Utah, our cities and districts. These entities act as many of the primary retailers and wholesalers to deliver water to residents, business, non-profit organizations, agricultural communities, canal companies, other cities & districts and everyone else in between. These entities coordinate between the original source of water and end user. There are locations when the wholesaler and retailer are the same entity, there are locations where there are multiple layers of providers to deliver water, there are times that there is no wholesaler and the city provides all of these critical services. This study did not focus on canal companies or other intermediaries.

This study highlights the diversity of operations within Utah; there is no one “fits all scenarios” as the needs of each community are unique. While there are best practices employed by many, respecting the local needs and conditions can teach us how to best serve the residents of the State.

DIFFERENCE BETWEEN CITIES AND DISTRICTS

There are distinct differences between cities and districts as noted in the lists below.

Cities

- Largely retailers, focused on immediate needs of residents as interface in delivering water on a daily basis
- Interact with end user typically with thousands of customers
- Funds segregated from the general funds (isolated from the various taxes used to operate the city) into enterprise fund to account for water services, amongst other services such as sewer, storm water, and power, amongst others
- Water rates have tiered structure, as required by State law
- Little to no reliance on property tax to fund operations or capital projects
- Often reliant on wholesaler for large water needs

-  District – Per the UASD website (www.uasd.org), and according to the State Auditor, there are more than 400 local and special service districts operating in Utah. Approximately one-third are designated as “special service districts” and two-thirds are designated as “special districts”, which includes water conservancy districts. The distinction is explained later in this report. More information on the history, formation procedures and legal precedence is provided in the Exhibits attached hereto.

SPECIAL SERVICE AND RETAIL DISTRICTS

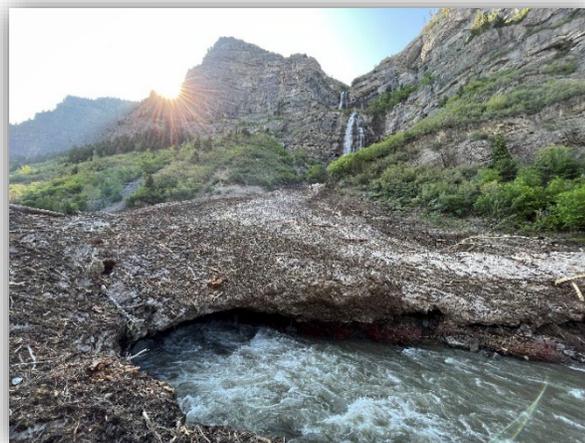
-  Largely similar to cities in interacting with end customer
-  Typically will cover a subset of the county, often aligning within city boundaries



- These districts mingle the shorter-term perspective of cities with long-term planning and projects
- Unlike cities, districts generally focus only on specific utility services which limits total revenue and creates funding challenges not faced by municipalities.
- These districts will cooperate with larger wholesale districts to support and facilitate regional planning, asset development and utilization
- One major difference is the vast majority of districts utilize property tax for operations
 - Used for O&M
 - Used for capital infrastructure
 - Sometimes secures or enhances debt, i.e. GO bonds

WATER CONSERVANCY DISTRICTS

- Largely wholesalers with some limited retail services
 - There are some water districts that have retail operations with similar characteristics of a city and/or special district above within the retail service area
- Largely focused on long-term planning and needs
- Support / facilitate regional planning and asset development / utilization
- All use property tax for operations, infrastructure and long-term debt obligations
 - Used for O&M
 - Used for capital infrastructure
 - Repayment of contracts, often for federal reclamation projects
 - Can be utilized to secure debt, i.e. GO bonds (see analysis further below)
- As wholesaler, rates are more linear and not tiered
 - Some entities blend all their rates into one single rate to customers
 - Some entities sell blocks of water based on the costs to develop each block so have varying rates depending on block of water purchased
 - Strictly passthrough of expenses
 - Many of these water districts coordinate with member entities on expenses and timing of increases and construction of regional capital infrastructure projects
- Take or pay contracts at the wholesale level
- Water Conservancy District purpose as defined in the Act:



17B-2a-1002 Legislative intent -- Purpose of water conservancy districts.

- (1) It is the intent of the Legislature and the policy of the state to:
 - (a) provide for the conservation and development of the water and land resources of the state;
 - (b) provide for the greatest beneficial use of water within the state;
 - (c) control and make use of all unappropriated waters in the state and to apply those waters to direct and supplemental beneficial uses including domestic, manufacturing, irrigation, and power;
 - (d) obtain from water in the state the highest duty for domestic uses and irrigation of lands in the state within the terms of applicable interstate compacts and other law;
 - (e) cooperate with the United States and its agencies under federal reclamation or other laws and to construct, finance, operate, and maintain works in the state; and
 - (f) promote the greater prosperity and general welfare of the people of the state by encouraging the organization of water conservancy districts.
- (2) The creation and operation of water conservancy districts are a public use to help accomplish the intent and policy stated in Subsection (1) and will:
 - (a) be essentially for the benefit and advantage of the people of the state;
 - (b) indirectly benefit all industries of the state;
 - (c) indirectly benefit the state by increasing the value of taxable property in the state;
 - (d) directly benefit municipalities by providing adequate supplies of water for domestic use;
 - (e) directly benefit lands to be irrigated or drained;
 - (f) directly benefit lands now under irrigation by stabilizing the flow of water in streams and by increasing flow and return flow of water to those streams; and
 - (g) promote the comfort, safety, and welfare of the people of the state.

- To provide these services, districts were given the authority to levy a property tax, by the State Legislature in the State Code. Additionally, CUWCD's and WCWCD's residents also voted to approve property taxes through a public vote to support their contracts associated with their federal water projects.

TWO CATEGORIES OF WATER SUPPLIERS: PRIMARILY A WHOLESALER AND A RETAILER UNDERSTAND THE RELATIONSHIP BETWEEN WHOLESALERS PASSING ON THE COST TO MUNICIPALITIES



Throughout the “interview” process, all entities sought to have sufficient or control adequate water resources for their customers, particularly the larger cities. However, they realize this largely is not possible between two constricting factors living in a desert: a) there is only so much water in a confined geographic area, particularly outside of the mountains and b) they do not have the geographic boundaries to develop large regional projects to cultivate or move more remote water sources. To that end, retailers (namely cities, towns and smaller districts), rely on larger wholesale entities to deliver water.

All cities that have a wholesale entity from which to purchase water value that relationship. Having a secondary source of water and a “back-up” provides peace of mind that water will be available. These cities value the regional projects the larger districts were charged to construct, operate, and maintain. The cities acknowledged that the wholesaling districts have the foresight and political power to see these regional projects completed. Regional projects often take years, if not decades, to complete and can cross multiple jurisdictions. Fragmented or smaller projects would not provide the scope to adequately address all their water needs.

The retailers, namely cities, which do not have a wholesaler from which to purchase water, i.e. Logan and Tooele Cities, suggested that they would relish the opportunity to be a part of a wholesale arrangement.

Wholesale districts are government entities by design. To that end, they operate on a simple pass-through mentality in sharing the expenses with their customer agencies. Wholesale entities work closely with their customer agencies to educate, plan, promote and develop projects for their residents. Wholesale entities look further into the future, as much as 50- yrs, to anticipate future demands based upon population trends and likely water demands, there typically are not excessive projects being constructed. As a result, wholesale district infrastructure projects have to be paid for by tax and bond resources because water rates are not yet available for those future areas.

There is no apparent opposition or angst at the need for regional projects. An example of this is the success of the Snyderville Basin Regionalization efforts managed by Weber Basin Water Conservancy District to aggregate the assets from Mountain Regional Water, Summit Water and Park City Public Utilities District for the benefit of the area. These entities saw the value of working together to better manage assets on a regional basis.

Similarly, the Central Utah Water Conservancy District purchased the water made available through the Geneva Steel bankruptcy. CUWCD was able to rely on its credit to ensure the water stayed in the valley for the collective benefit of the public rather than going to a private development. By combining resources, the Geneva Steel water is now being delivered to cities throughout Northern Utah County and Southern Salt Lake County to support the growth in these areas over a long period of time. Individual cities or retail districts could not have accomplished that feat on their own.

Retailers are not prickling at the projects necessarily, just how to absorb the costs. Districts that communicate clearly and regularly have garnered respectful relationships with their customer agencies. Steady rate increases (2-5% per annum) often are absorbed best rather than occasional, but large jumps in rates (10-50% every 10-20 yrs.).

When the wholesaler increases their costs of services, that increases the costs of service at the retail level. These increases are blended into other budgetary needs of the retailer.

SOURCES OF REVENUES GENERAL BREAKDOWN



The following tables break down approximate averages of the sources of revenues for districts inside of Utah. The first table is for all districts and the second table is for water conservancy districts only. These tables capture data from 2022.

As for Cities, roughly 85-90% of their budgets are water rate revenues with the balance coming from non-operating revenues, impact fees, interest income and the like.



Revenue Category	Average	Average Percent of Revenue	Low Percentage	High Percentage
System Revenues	\$7,607,827	47.2%	6.2%	99.8%
Non-operating Revenue	\$543,576	3.4%	1.0%	99.8%
Property Taxes	\$3,618,012	22.5%	1.0%	60.9%
Capital Contributions	\$2,236,229	13.9%	6.6%	49.7%
Grants	\$964,087	6.0%	30.1	61.9%
Impact Fees	\$1,141,373	7.1%	4.6%	41.6%
Average Total Revenue	\$16,111,103			

Water conservancy district only summary:

Revenue Category	Average	Average Percent of Revenue	Low Percentage	High Percentage
Revenue	\$19,921,330	53.2%	0.0%	99.9%
Non-operating Revenue	\$1,112,352	3.0%	0.1%	54.3%
Property Taxes	\$11,944,698	31.9%	2.6%	92.9%
Capital Contributions	\$1,444,578	3.9%	.03%	18.5%
Grants	\$3,053,939	8.1%	2.2%	42.0%
Average Total Revenue	\$37,476,896			

Specifically to CUWCD and WBWCD, who manage federal projects, their respective indicative allocations of property tax, capital expenses (CAPEX) and debt service obligations as a percentage of their budgets are as follows:

CATEGORY	5-YR AVERAGE	2024
	CUWCD	WBWCD
Total Revenues	\$221,768,985	\$91,227,072
Property Taxes	\$84,743,747	\$25,674,227
Percentage	38%	28%
Total Expenditures	\$190,864,651	\$104,178,559
CAPEX	\$81,958,186	\$71,915,077
Percentage	43%	69%
Total Debt Service	\$74,683,679	\$12,304,550
Percentage	39%	12%



THE USE OF PROPERTY TAX REVENUE FOR CONSTRUCTION, OPERATION, MAINTENANCE, REPAIR, AND REPLACEMENT OF WATER FACILITIES:



There are two primary entity types that deliver water: cities / towns and districts¹.

Cities do not levy a property tax to support their water enterprise funds. Cities have elected to have these enterprise funds self-sufficient from system revenues, impact fees and miscellaneous revenues, such as grants and revenue bonds. There are two major reasons why: 1) cities need their property and sales taxes for general operations of the cities and are most focused on administration, public safety and related services and 2) cities have been using this model for years of not applying property tax revenues to enterprise fund operations. There are a few cities that are beginning to examine the utilization of property taxes to support enterprise funds as system rates are not keeping up with the need for repair and replacement of aging infrastructure. Cities that operate water systems generally focus on providing water to end users and only incidentally deliver water to other retail water providers.

Many districts also provide water to end users while some districts operate primarily as water wholesalers with a relatively small number or no retail customers. Unlike cities, districts are limited purpose entities. As a result, districts of all kinds use taxes to support the purposes for which they were created. Districts generally blend their revenues to support overall operations, both for operation & maintenance (“O&M”) and infrastructure needs. Districts utilize property tax for the following purposes:

- **O&M**
 - Many have water rates
 - Also use property tax to offset O&M
- **Regional planning efforts**
- **Capital infrastructure projects: Both new and repair & replacement**
 - Depending on the entity, this approach varies
- **Securing debt service payments**
 - Directly for General Obligation (“GO”) Bonds
 - Offsetting O&M expenses to “free up” water revenues to secure bonds
 - 0.0001 back-up levy that can be used for any debt obligation
- **For newer Districts (those currently new and those who, at the point in time they were new)**
 - Property taxes are the only revenue source for operations
 - Property taxes are the only revenue source available until water infrastructure is built so that water can be delivered and user rates become sufficient to cover expenses
- **Larger districts use property taxes for ancillary regional services and projects that benefit the “public” or all landowners alike including:**
 - Watershed protection



¹ This general category includes all district types.

- Streamflow enhancement / protection
- Fire protection
- Species protection
- Flood control
- Treatment
- Distribution
- Education
- Regulatory support
- Storage
- Planning / funding assistance
- Maintaining reservoir
- Recreational venues
- Public health & safety
- Regional water conservation programs
- Facilitating economic growth and stability with water availability



- Water conservancy districts provide value to their customer base by regionalizing services and projects. There are a number of districts, BRWCD, CUWCD, JWCD, WBWCD and WCWCD to name a few, that have regionalized services to bring a common thread of projects and planning horizons. These discussions were occurring with individual cities / irrigation districts / water districts that were proving inefficient. By bringing in the water conservancy district, they were able to see the regional potential and provide solutions that were holistic and not one-off. While they might not deliver water to each entity in their service area, they facilitate water development throughout their footprints that typically benefit one or more counties or communities as a whole.

DIVERSION, TREATMENT, AND STORAGE OF DRINKING AND IRRIGATION WATER

Property taxes are used for all these purposes. During the interview process, the districts generally confirmed there is no specified “segregation” of property taxes for a particular purpose outside of allocating property taxes to either O&M or specifically to issue or enhance a debt issuance.

THE DELIVERY OF DRINKING AND IRRIGATION WATER TO END USERS

Property taxes are used for all these purposes. During the interview process, the districts generally confirmed there is no specified “segregation” of property taxes for a particular purpose outside of allocating property taxes to either O&M or specifically to issue or enhance a debt issuance. The end users who are generational investors because they have been paying water district property taxes for many years with the expectation that water will eventually be delivered to their area.

WHAT ARE THE FUTURE PROJECTS FOR THE NEXT 5, 10, AND 20 YEARS?

As for major projects, the largest projects are naturally associated with districts who are primarily wholesale water providers. CUWCD (Federal Components), JWCD (growth related), WBWCD (growth related), the Bear River Project impacts multiple agencies and WCWCD (additional storage and augmentation of water supplies (wastewater reuse and desalination projects concepts) because they are the most prominent water districts. Other water entities have the typical water system needs of water treatment plants, pipelines, purchasing water rights, storage tanks and standard water projects projected to meet the demands of growth and aging infrastructure.



A note about aging infrastructure is that both cities and districts have significant repair and replacements costs looming for very large projects, such as water treatment plants and pipelines. These are not associated with growth but will need to be addressed. For instance, the State's oldest and largest retail water system, Salt Lake City Public Utilities, has at least \$1 billion worth of aging water infrastructure projects to address between over the next 20 years. Raising enough revenue for aging infrastructure projects, while keeping non-discretionary water affordable is a recognized national challenge, and Utah is not unique in facing this challenge. New regulations, such as lead service line replacements and water quality, such as PFAS, add to future cost burden for cities and districts.

When asked about the nature of capital infrastructure programs, there was a wide range of responses:

- 80-90% for new construction | 10-20% for Repair & Replacement
- 10-20% for new construction | 80-90% for Repair & Replacement
- Some entities simply don't have major projects, but seeking to maintain systems

FEDERAL WATER PROJECTS WHERE GENERAL VOTES WERE HELD TO COLLECT TAXES TO PAY FOR PROJECTS

There are two districts that are dedicated local sponsors of larger federal water development projects. These are sizeable in transporting across large distances and funding significant dollars towards decades long projects. Central Utah Water Conservancy District ("CUWCD") is charged with bringing northern Utah's share of the Colorado River to the Wasatch Front amongst other important duties and responsibilities. Weber Basin Water Conservancy District ("WBWCD") manages assets on the Ogden and Weber Rivers in the north bringing water to the Wasatch Front.

There are other districts, such as the Carbon Water Conservancy District, which work closely with the Bureau of Reclamation for dam related issues while working with the residents in Carbon County concerning the water released from the dam. These entities cooperate with other agencies, municipal, county, State and sometimes the Federal Government. These districts are authorized to levy a tax per their local authorization.

For reference to acknowledge various federal projects, there are federal projects that were not voter approved. There are special districts and/or interlocal agencies that support these projects.

- Provo River Project – CUWCD, JWCD, MWDSL and PRWUA all support this project in various roles
- Weber River Project – Weber River Water Users Association
- There are other similar entities and projects

Specific to CUWCD and WBWCD, they both obtained district-wide voter approval to utilize property taxes to fund the program. These voters who may now have been paying property taxes related to water for a generation have been subsidizing water related infrastructure and programs with the expectation that their water related property taxes will benefit their area and later beneficiaries. These property taxes have been and remain critical to obtaining federal funding for the water related infrastructure and programs and are specifically implicated in these federal funding agreements. Federal funding is inconsistent and is predicated upon local funding contributions. **Their voter approval has allowed them to: i) secure government funding, ii) enter into long-term operating agreements, iii) issue GO bonds that have prepaid federal obligations for significant savings, to the tune of hundreds of millions of dollars, and iv) generally operate the federal facilities along with District facilities.**



CUWCD

On October 30, 1992, the Central Utah Project Completion Act (“CUPCA”) (P.L. 102 57 5 (106 Stat. 4600)) was signed into federal law. CUPCA authorized approximately \$924M in federal funds to complete water projects in the then 8-county area included in the CUWCD. CUWCD must petition Congress for funding on a year-to-year basis and must provide a 35% cost share to match the reimbursable share of the federal portion. The federal reimbursement for the year ended June 30, 2023, totaled \$25,417,695. Total funding to date equals: \$782M.

CUPCA gives CUWCD the authority to oversee the planning, design, management, and construction of the remaining facilities of the Central Utah Project; however, the U.S. Department of the Interior retains ownership of such facilities. CUPCA emphasizes districtwide public involvement, addresses protection and enhancement of the environment, and creates stream flow levels to protect present and future fisheries. CUPCA also calls for significant water conservation programs and specific water management plans.

WBWCD

Capital projects of WBWCD include both repair and replacement projects as well as new supply projects. WBWCD continues to annually review revenues to ensure proper funding of its state-mandated Capital Assets Repair and Replacement Subfund. In addition to the major District owned and operated capital projects listed below, WBWCD expensed \$4.6M for Federal facilities capital projects in FY2023 alone.

WBWCD participates in several Federal grant programs that reimburse it for qualifying expenses. The grants receivable balance is the amount of qualifying expenses that were not yet paid to WBWCD as of June 30, 2023.

WBWCD does not capitalize or depreciate facilities constructed under the Weber Basin Project (the federal project) since the federal government retains title to these assets. Consequently, costs related to the operation, maintenance, repair, and replacement of federal assets are expensed in the year they occur. Internally, the District accounts for revenues and expenses associated with the federal project to fulfill various Bureau of Reclamation reporting obligations. Within the water stock, rights, and privileges category \$81,069,791 represents the book value of United States water rights WBWCD has been granted the perpetual right to use. This estimate is derived from the costs paid by WBWCD to develop these federal water rights and is not subject to depreciation and appreciation.

This table depicts revenues and expenses specific to federal projects of CUWCD and WBWCD.

CATEGORY	2019	2020	2021	2022	2023	TOTAL
CUWCD						
Federal Revenue	\$10,404,625	\$36,813,656	\$54,122,784	\$52,505,940	\$25,417,695	\$179,264,700
District Revenue	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	75,000,000
Federal Project Expense	(13,088,530)	(22,891,918)	(39,014,217)	(47,254,906)	(41,140,198)	(163,389,769)
Federal Block Notice (Debt) Expense		(23,066,656)	(39,652,784)		(12,926,195)	(75,645,635)
Fund balance change	12,316,095	5,855,082	(9,544,217)	20,251,034	(13,648,698)	15,229,296
WBWCD						
Fish and Wildlife Credits	\$250,654	\$224,869	\$297,557	\$377,737	\$444,150	\$1,594,967
Expense for R&R	(3,099,166)	(1,060,429)	(14,105,388)	(5,644,914)	(4,637,484)	(28,547,381)
Fund balance change	(2,848,512)	(835,560)	(13,807,831)	(5,267,177)	(4,193,334)	(26,952,414)

Notes:

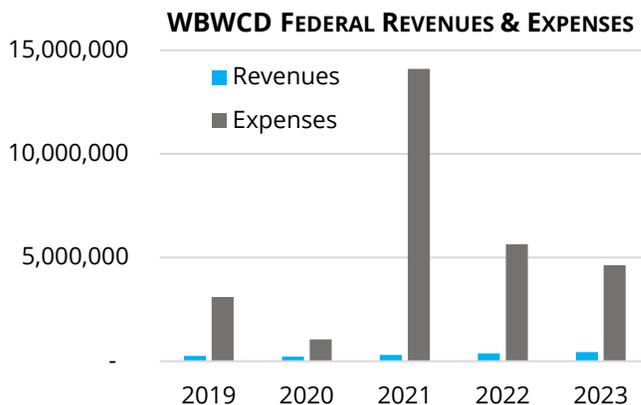
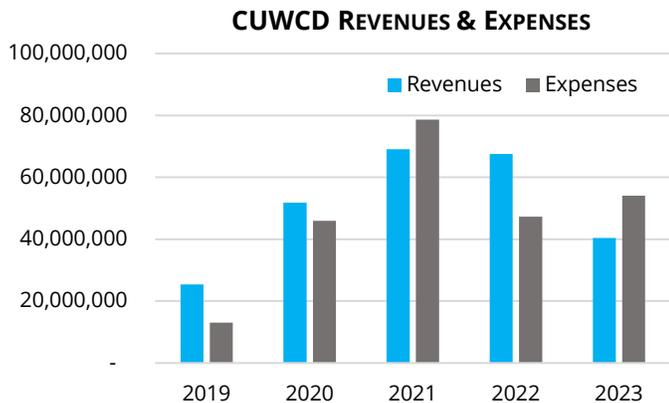
CUWCD

- CUWCD has obligation to support Project with 35% of “local” dollars
- “Transfer in” is CUWCD’s local share
- “Transfer out” is Federal Block Notice (debt) expenses
- Without local financial support, there wouldn’t be federal Congressional funding support

WBWCD

- WBWCD has historically received about 25% of its “federal project” expenses through the Fish & Wildlife “revenues”
- Balance of expenses covered from “local” dollars, i.e. property taxes





SECONDARY WATER SUPPLIER ASSESSMENT ON PROPERTY TAXES.

Secondary water systems have been utilized across the state to deliver untreated water. While untreated water requires a parallel delivery system to drinking water, eliminating the treatment costs has historically reduced the operational expenses of the providers.

The exact history and purpose are hazy but years ago, it was determined to collect the assessment for many secondary systems on the property tax bill. The fees for this service were historically flat rates for a specific volume of water, although it was unmetered. There has been a fundamental shift to start metering secondary water usage. The State and participating districts have funded millions of dollars in grants to place meters on secondary water lines to both monitor the use of water and facilitate a means for entities to charge for services based on actual usage.

Many residential connections use secondary water for outside irrigation. When connections are not metered, it is difficult to track and conserve secondary water. Meters have been proven to help reduce water waste by informing users of their consumption without mandating water restrictions.



LEGISLATIVE AND LOCAL EFFORTS TO IMPLEMENT METERING ON SECONDARY WATER

In 2018, the Utah Legislature passed HB168 to provide clarity on how secondary water charges and ‘other tax notice charges’ are allowed on the tax notices. The bill, among other things, prohibits a county treasurer from including an item on the property tax notice unless the item's inclusion is expressly authorized in statute; amends the items that a county treasurer is required to include on a property tax notice; and addresses the priority status of a political subdivision lien listed on the property tax notice.

This is important because it also highlights that there are approximately 30 authorizations for which a governmental entity is statutorily allowed to include an additional tax or fee on the tax bill. This is in addition to the direct taxes authorized under the “Truth In Taxation” process. These are narrow allowances, but they are routinely utilized to ensure revenue collections.



In 2022, the Utah Legislature passed HB242 followed by SB 251 in 2023. These two bills resulted in Utah Code §73-10-34 which requires that all secondary pressurized connections be metered by January 1, 2030.

In addition, Utah Code §73-10-34.5 appropriated \$250M in ARPA grants for the purchase and installation of secondary water meters. The Board of Water Resources was tasked with distributing these funds.

PREVIOUSLY ISSUED AND REMAINING OUTSTANDING GENERAL OBLIGATION BONDS

GO bonds are secured by the full faith and credit of an entity which comprises a property tax levy. To offer this security, the entity requires the approval of the simple majority of the voters. The following Utah entities have issued general obligation bonds for water projects.

ISSUER	OUTSTANDING AMOUNT (AS OF JUNE 30, 2023)	FINAL MATURITY	BOND RATING
CUWCD	\$116,365,000	2034	AA+ (S&P) / AA+ (Fitch)
WBWCD	\$8,560,000	2037	AA+ (S&P) / AAA (Fitch)
American Fork City	\$35,675,000	2035	AA+ (S&P) / AA2 (Moody's)
Highland City	\$0 today Original - \$9,600,000	2017	Aaa

Outside of Utah, the following entities, amongst others, have utilized GO Bonds to fund water infrastructure projects:

ISSUER	ORIGINAL PAR AMOUNT	FINAL MATURITY	BOND RATING
COLORADO			
Castle Pines Metropolitan District	\$55,000,000	Authorized but unissued (per the 2022 OS)	AA Category
IDAHO			
Sun Valley Water & Sewer District	None	2027	AA3
NEVADA			
Virgin Valley Water District	\$4,005,000	2022	A1
State of Nevada	\$482,710,000	2043	AA+ / Aa1
	\$5,910,000 (water only)	2029	AAA
Carson City	\$17,045,000	2037	AA/Aa3
Las Vegas Valley Water District	\$185,860,000	2053	AA/Aa1
City of North Las Vegas	\$55,430,000	2037	AA (A+/A2)
City of Henderson	\$18,435,000	2019	AA/Aa2
OREGON			
City of Seaside	\$4,650,000	2027	AAA (insured)



THE SECTION FOCUSES ON ENTITIES OUTSIDE OF UTAH

RESEARCH PERFORMED FOR ENTITIES OUTSIDE OF UTAH

TAX REVENUE UTILIZED FOR WATER INFRASTRUCTURE IN OTHER STATES WITH SIMILAR CLIMATE AND WATER SUPPLY CHALLENGES



Generally speaking, water agencies throughout the west, both municipal and district, utilize various revenue sources to fund their capital infrastructure and operations and maintenance. To research, mine and assemble data on the application of tax revenues for infrastructure and operations for similar type entities throughout the Comparable States, LRB sought official statements² that describe various bond offerings specifically for water infrastructure. These bond offerings included general obligation and revenue bonds. Investors in such bonds can be both institutional buyers (large, sophisticated entities such as insurance companies, mutual funds, investment advisors and the like) and retail buyers (individual investors and smaller purchasers). Official statements obtained describe the bond type, funding sources for the bond repayments, and information on the issuers.

The following sections highlight the cross section of transactions LRB found on the Electronic Municipal Market Access (“EMMA”) website (<https://emma.msrb.org/>). EMMA is a repository for all publicly offered bonds in the marketplace and includes official statements, continuing disclosure undertaking reports, and other transaction related information. Provided in the tables below is a sampling of bond offerings from issuers in the following states: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah and Wyoming. The bond issuers include cities, special districts and water conservancy districts. While certain states had many bond issuers, others had limited offerings.

TAXES THAT APPEARED IN OFFICIAL STATEMENTS OBTAINED ARE PROPERTY, EXCISE AND SALES TAX REVENUES IDENTIFIED AS FOLLOWS:

In reviewing financing documents for the Comparable States, it was determined that those states have utilized various taxes to support water infrastructure:

-  Excise tax utilized by a city in Arizona to secure bonds for water improvements
-  Sales tax utilized by entities in Nevada
-  Property taxes utilized throughout the western states with similar climates. While property taxes are predominantly utilized by districts, there were a few cities that utilized property taxes to support their water infrastructure. A few cities in Nevada had general obligation bonds, which are secured by property taxes, along with a few that had property taxes in their funding sources. A handful of entities applied their

TAXES UTILIZED FOR INFRASTRUCTURE IN THE WEST

Property Taxes: most common

Sales Taxes: mostly in Nevada

Excise Taxes: utilized in Arizona

² Official Statements are legal disclosure documents generated by bond issuers (with input from their legal counsels) and utilized by underwriters to sell municipal bonds to the investing public

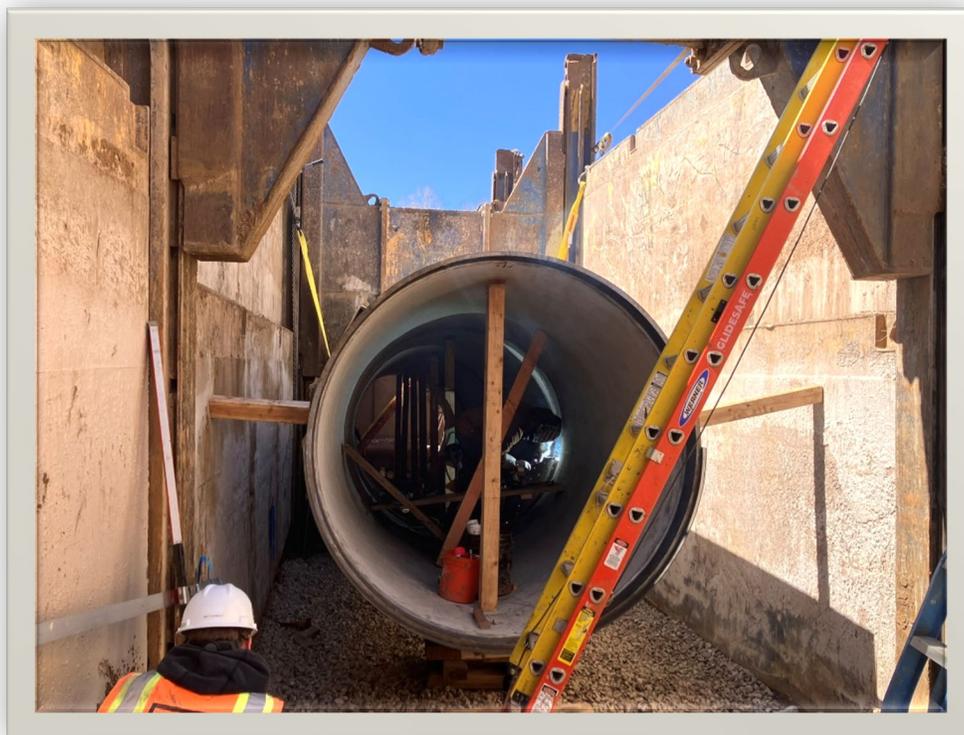
legal authority to levy a property tax to enhance the credit strength to obtain lower interest rates but didn't actually levy the tax.

The following chart highlights the application of taxes in the various states

Item	Arizona	California	Colorado	Idaho	Nevada	New Mexico	Oregon	Utah
Sales Tax Revenues					✓			
General Use of Property Tax	Sparingly	Heavily	Heavily	Sparingly	Heavily	Little to None	Little to None	Heavily
District (Property Tax)	✓	✓	✓	✓	✓			✓
City (Property Tax)					✓			Only 2 Cities

* This chart shows revenue sources directly available to water providers in the respective states. It does not show the collection or use of sales tax or other tax revenue dollars that may be provided to various Water Boards as resources to fund their states' respective loan or grant programs serving entities throughout the state, both public and private. In Utah for instance, 1/16% of sales tax revenues go to State loan funds and 1/16% goes to the Water Infrastructure Restricted Account (WIRA, Lake Powell, Bear Lake and repair and replacement of Federal Projects)

Of note, below are additional thoughts on tax applications to water provider operations:



Item	Arizona	California	Colorado
Special Notes	<ul style="list-style-type: none"> Property Tax has limits Excise tax used by ciities There are entities with taxing power that don't use it 	<ul style="list-style-type: none"> Property taxes to offset expenses to increase net revenues available for debt service Statutory limit on property taxes for cities/counties Covenanted to levy property tax to pay debt service on bonds 	<ul style="list-style-type: none"> Property taxes to offset expenses to increase net revenues available for debt service Statutory limit on property taxes for cities/counties
	Nevada	New Mexico	Oregon
Special Notes	<ul style="list-style-type: none"> Property tax used Sales tax used There are entities with taxing power that do not use it GO Bonds outstanding 	<ul style="list-style-type: none"> There are entities with taxing power that do not use it 	<ul style="list-style-type: none"> Oregon entities are allowed to levy property tax rates to fund capital construction and improvement While entities have authority to tax, they don't use it
	Idaho	Utah	
Special Notes	<ul style="list-style-type: none"> Property tax utilized to offset expenses Lien (assessment) on homes GO Bonds outstanding 	<ul style="list-style-type: none"> Property tax has limits Property taxes utilized to offset expenses and pay for capital projects 	



REVENUES THAT MAY OFFSET WHAT IS CHARGED TO THE USER AND IS COLLECTED BY THE ENTITY OR STATE (SURCHARGE FOR FEDERAL PROJECTS)

While not uniformly available or applied, there are a variety of revenue sources throughout the west that can offset costs of operations:

- Federal income that can include grants, loans, partnerships, contracts, etc. (these revenues are not always consistent)
- Grants and appropriations
- Development / connection / impact fees (names vary by state)
- Capital contributions
- Requirements by the governmental entity to have the developer deed or transfer sufficient water rights for development
- Interest earnings
- Power generation
- Sale of assets
- Excess revenues or other proceeds can be applied towards future projects which would pare future rate increases



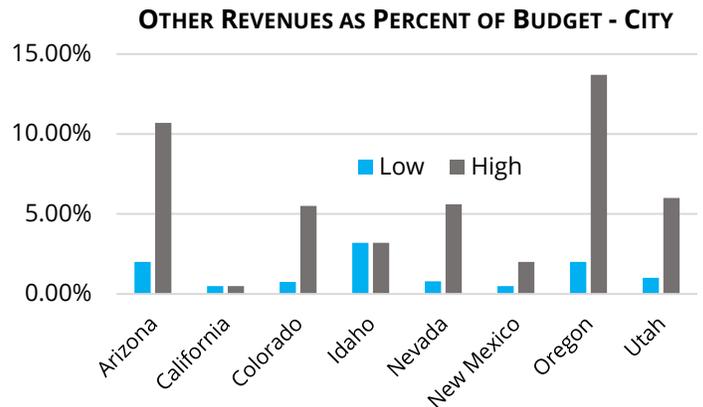
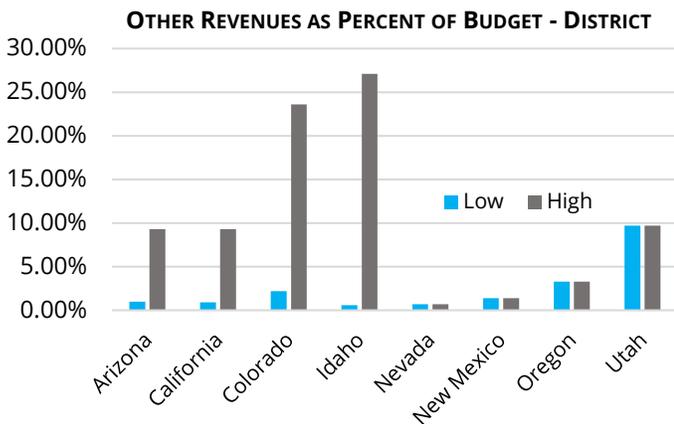
Certain entities have cross pledged various enterprise funds to enhance security for bonds³. Some cities in the Comparable States have been strict to not transfer monies between funds wherein other cities rely on the revenues of one enterprise fund to support another. This strategy is widely used nationwide. Most often, the enterprise funds are co-mingled simply to secure the bonds and not for operations:

-  Water
-  Sewer
-  Storm water
-  Electric
-  Power

The following table highlights “other” revenues as a range of percentages of budgets for entities throughout the west. Other revenues typically capture sources such as interest earnings, power generation, minor federal revenues, grants, asset sales and other non-operating related activities.

CATEGORY	ARIZONA		CALIFORNIA		COLORADO		IDAHO	
	DISTRICT	CITY	DISTRICT	CITY	DISTRICT	CITY	DISTRICT	CITY
Other Water Revenues range of percent of budget	1 - 9%	~10%	1 - 9%	~1%	2 - 24%	~1%	1 - 27%	3.2%
“Other” range of percent of budget	15 - 21%	1 - 18%	2 - 12%	3 - 9%	1 - 31%	1 - 6%	0%	1 - 6%

CATEGORY	NEVADA		NEW MEXICO		OREGON		UTAH	
	DISTRICT	CITY	DISTRICT	CITY	DISTRICT	CITY	DISTRICT	CITY
Other Water Revenues range of percent of budget	~1%	1 - 6%	~2%	1 - 2%	~4%	1 - 14%	~10%	2 - 10%
“Other” range of percent of budget	~5%	~5%	0 - 3%	0 - 3%	0 - 3%	0 - 3%	1 - 5%	1 - 5%



³ For example, instead of only having water revenue bonds, an issuer will also pledge sewer revenues or electric revenue bonds.



HOW DO OTHER WESTERN STATES USE PROPERTY TAXES FOR AGING INFRASTRUCTURE? WHAT DRIVES THE INTEREST OF THESE STATES?



Similar to Utah, other states do not isolate property taxes for water providers' aging infrastructure alone but use property taxes to support their overall operations. The property taxes were used in these primary instances:

-  Offset annual operational & maintenance expenses
-  Fund both new and replacement infrastructure
-  Directly secure debt service payments
-  Utilized as an enhancement for debt payments – such enhancement strengthens the credit (producing a higher bond rating) which reduces the interest rate on the bonds.
 - To highlight this point, the average annual debt service payment on a \$10M bond will decrease by approximately \$15k (over \$360k over the life of the bonds) for every 25 basis points or 0.25% interest rate reduction.

There are consistent themes in utilizing tax revenues to support operations and/or enhance capital infrastructure funding. As shown in the table below on page 30, these themes can be estimated per state and more granular at district vs. city level.

Property taxes can be utilized by water providers in a variety of ways. The following are a few applications to either offset the costs of operations or increase the credit strength of an entity to obtain lower costs of funds in the bond market.

GENERAL OBLIGATION BONDS



Several states, including Utah, utilize General Obligation (“GO”) Bonds to fund water infrastructure. The annual debt service payments (payment of principal and interest) for GO Bonds are secured by the full faith and credit of the entity which levies a tax on all properties to collect sufficient property tax revenues to make the bond payment. There are two types of GO Bonds:

- Unlimited tax revenue bonds typically issued by cities, counties or school districts that can increase the tax levy as needed to pay the bond payments.
- Limited tax revenue bonds have a ceiling on the tax rate, most often for water districts that have statutory limits on their tax rates, i.e. Central Utah Water Conservancy District has a tax limit of 0.0004, and Weber Basin Water Conservancy District has a limit of 0.0002. Both have GO Bonds outstanding. Washington County Water Conservancy District has a tax rate of 0.001 but does not have GO bonds outstanding.
- GO bonds require a simple majority voter approval at a general election.

BOND ENHANCEMENT

Certain entities issue revenue bonds (bonds that are secured by water rates rather than property taxes) that can be enhanced by property taxes. Water revenue bonds do not require voter approval, simply board approval. Any pledging of property taxes to a debt obligation requires the approval of the voters. Examples include:

- While revenue bonds are issued, the bonds can have a backstop of property tax revenues as a failsafe; this would likely require voter approval
- Certain entities covenant to levy a property tax to directly offset operational expenses that then “frees up” water revenues to secure the debt payments. This can create a “gross” pledge of water revenues which increases the credit strength of the issuer and lowers interest rates
- Utah has statutory authority to levy tax, up to 0.0001, to timely pay any debt, general obligation or water revenue bonds and other debts. This is for an emergency situation.
 - This does not require voter approval
 - This equates to 10%, 25% or up to 50% of most water conservancy district tax rates
 - Another way of keeping water rates low as “on paper reserves” without having to put money in the bank

These enhancements increase the security for the bond and positively impact the bond rating. A higher rating will subsequently lower the borrowing costs of these entities.

- Hard to define exact amount that a particular tax rate will provide due to the fact that property tax is part of overall credit strength
- One rating agency indicated their model allows for anywhere between one and four notch upgrades for entities that have multiple “meaningful” and stable sources of revenues. Common practice realizes one or two notch upgrades given for diversified revenue streams with a component of highly stable revenue.
- The “value” of an upgrade can roughly be quantified as follows:
 - Interest rate impact between single rating categories, i.e. from “AA” to “AA+” in any given market can range from 5 – 15 bps (one basis point is 0.01%).
 - For a \$10M dollar issue with a 30-yr amortization (a standard period for water revenue bonds), the impact to pricing could range between \$75,000 – \$250,000 over the life of the bonds
- Fund capital projects



WHAT PORTION OF REVENUE DOES PROPERTY AND OTHER TAXES MAKE UP?

The following tables highlight the funding sources of entities both inside and outside of Utah:

OUTSIDE UTAH

	Arizona		California		Colorado	
	District	City	District	City	District	City
Water Rates range of % of budget	47-77%	82-99%	13-98%	82-100%	26-97%	94-97%
Other Water Revenues range of % of budget	2-10%	5-18%	1-9%	1-5%	2-24%	1-5%
Property Tax range of % of budget	20-30%	0%	3-80%	2-4%	3-95%	0%
Other range of % of budget	16-21%	1-18%	2-12%	3-10%	1-30%	1-6%

	Idaho		Nevada		New Mexico	
	District	City	District	City	District	City
Water Rates range of % of budget	23-89%	97-99%	70-100%	49-99%	94-99%	94-99%
Other Water Revenues range of % of budget	1-28%	2-4%	10-30%	4-7%	1-5%	1-5%
Property Tax range of % of budget	10-49%	0%	0-20%	8-49%	0%	0%
Other range of % of budget	1-3%	1-6%	2-15%	1-11%	0%	0%

	Oregon		Utah	
	District	City	District	City
Water Rates range of % of budget	83-99%	97-97%	47-92%	92-99%
Other Water Revenues range of % of budget	2-12%	0%	4-10%	3-7%
Property Tax range of % of budget	0%	1-3%	7-50%	0%
Other range of % of budget	2-12%	1-3%	3-12%	2-8%



INSIDE UTAH



The following breaks down budgets for districts inside Utah and the average source of revenues. The first table is for all districts and the second table is for water conservancy districts only. These tables capture data from 2022 due to certain districts being on a calendar year, and the audited financial information wasn't available at the time the data was collected. All district summary:

Revenue Category	Average	Average Percent of Revenue	Low Percentage	High Percentage
System Revenues	\$7,607,827	47.2%	6.2%	99.8%
Non-operating Revenue	\$543,576	3.4%	1.0%	99.8%
Property Taxes	\$3,618,012	22.5%	1.0%	60.9%
Capital Contributions	\$2,236,229	13.9%	6.6%	49.7%
Grants	\$964,087	6.0%	30.1	61.9%
Impact Fees	\$1,141,373	7.1%	4.6%	41.6%
Average Total Revenue	\$16,111,103			

Water conservancy district only summary:

Revenue Category	Average	Average Percent of Revenue	Low Percentage	High Percentage
Revenue	\$19,921,330	53.2%	0.0%	99.9%
Non-operating Revenue	\$1,112,352	3.0%	0.1%	54.3%
Property Taxes	\$11,944,698	31.9%	2.6%	92.9%
Capital Contributions	\$1,444,578	3.9%	.03%	18.5%
Grants	\$3,053,939	8.1%	2.2%	42.0%
Average Total Revenue	\$37,476,896			

HOW HAVE OTHER WESTERN STATES CREATED MARKET SIGNALS IN THE VALUE OR COST OF WATER THAT PROMOTE WATER CONSERVATION AND CREATE REVENUE STABILITY OUTSIDE OF ELIMINATING PROPERTY TAXES OR USING TIERED RATES?

As a part of the study, a survey was disseminated to various water purveyors throughout the Colorado River Basin. The following section highlights feedback received from those surveys representing the Comparable States. Outside of pricing water, there have been a variety of methods implemented to motivate water conservation throughout the West.



SPECIFIC FEEDBACK OF CURRENT WATER CONSERVATION EFFORTS:

- EDUCATION, EDUCATION, EDUCATION: knowledge is power to motivate action
- Real time data has proven valuable. There are various efforts to provide usage information to customers more frequently to notify them of their water consumption compared to both their immediate neighbors and to comparable situations. Certain retailers have seen up to a 5%+ reduction alone from providing real-time information.
- Across the board, agencies feel that asking customers to conserve for future growth gained no traction. However, asking for conservation measures to preserve a specific social causes garnered support, i.e. maintaining aquifers (both for their sake and their children's and grandchildren's), saving the critical water habitats like lakes and rivers, preserving wetlands for bird migrations, stream flows for fisheries are examples.
- Education around water conservation methods, i.e. using the cycle and soak method to reduce water lost due to runoff
- Watering schedules with limited number of days per week to water promoting drought tolerance
- Public education and outreach
- Generally speaking, entities have established two different water rates:
 - a "standard" rate during typical water years
 - a "drought" rate that require users to curtail both their use and a steeped tiered rate increasing the costs of water as many providers will access more expensive water due to additional pumping requirements, purchasing water from more expensive sources or requiring additional infrastructure.
- Grant funding for retrofit kits for sprinkler controls, shower heads, toilets and upgrading other appliances (one time private funded)
- Patrolling / enforcing:
 - Those entities patrolling 24/7 seeking water waste either with excess or to identifying visible leaks/malfunctions enabled avenue to share water wise methods
 - Door hangers with resolutions to issues
 - Enforcement authority to promote quick resolutions
 - Fines for wasteful water practices
 - Utah is currently limited on patrolling for improper water usage; the Legislature might want to consider adding authority to better police water waste and educate on proper water methods. The Legislature has not supported bills that would require policing or enforcement to date. Many municipalities and districts are reluctant to either expand their current enforcement efforts or aggressively pursue water waste with fines. Although wholesalers do not have authority to patrol water use by customers of their retail partners, they generally focus their resources on conservation incentives.



- Requiring seed and sod permits with limited grass areas
- Smart meters to allow for checks for leaks
- Customer service performing randoms check related to increased water usage to assist with recognizing leaks or better watering methods
- Education: newsletter, social media, website, rotating slideshows on monitors in City buildings, messages in pay portal, bill inserts, phone hold messaging, at City events
- Education:
 - Real time information has been helpful
 - Importing water supplies are variable
 - Conserving water today makes tomorrow's supplies more reliable / available
 - Water conservation is keeping water in the environment
- Billboards and other media 2
- Youth education through classes and landscape transformation projects at schools
- Treating wastewater for irrigating parks and golf courses
- Reviewing of landscaping plans
- Prohibitions of non-functional turf that uses Colorado River water in Nevada and California
- New septic systems
- Residential swimming pool size limits
- Prohibitions on ornamental fountains
- Prohibitions on evaporative cooling
- Prohibitions on septic tanks
- Emergency water conservation program that limits water usage in water shortages
- People per home argument in California:
 - Water structure accounts for numbers of people per household
 - Prior to 2016 rate based on 3 people and residents could call in to adjust rates if more / less people; was very hard to maintain / validate
 - After Prop 218 (1996); new ordinance doesn't allow for people in home
 - Do not account for number of people, allowance based upon 4 people



BY REFERENCE, HOW IS UTAH DOING ON WATER CONSERVATION:

Measuring water usage various state by state. There are differing focuses and state mandates that motivate varying statistics. The following statistics from water conservancy districts highlight efforts in their regions of the State.



CUWCD

CUWCD has a long history of focused conservation efforts resulting in extensive savings across the District's service area. Over the last 20 years CUWCD has funded efficiency projects throughout its service area resulting in over 2 million-acre feet of water saved. Since 2000, our customer agencies have reduced their per capita water use by over 25% and continue to exceed reduction goals set by CUWCD.



Along with aggressive conservation goals, CUWCD has developed and implemented a variety of rebates and incentive programs with great success. CUWCD's largest incentive program over the last 2 years has been turf removal programs. These programs have resulted in 1,681,208 square feet of non-functional turf removed with an estimated savings of 22,710,569 million gallons annually. In addition to incentive programs, CUWCD has provided over 250 community education classes focused on providing water conservation resources to the community.

JVWCD

JVWCD began concerted efforts to lower water usage rates in 1999. A few years later it set a goal to reduce per capita use by 25% by 2025 to align with the Governor's water conservation goal. As measured by water entering the potable M&I system and pressurized secondary irrigation systems, per capita usage rates within the JVWCD service area have dropped about 28% between 2000 to 2023.

In 2015 a Utah legislative audit was published which was critical of the accuracy of water use data collected at the State level. In response to that audit report, the point of reference for measuring water use data was changed to measure water leaving the system, or "end use" measurement. By 2018, the "end use" water use data submitted to and published by DWRights was generally accepted as being more accurate than previously published data. Between 2018 and 2023, water usage rates per capita (measured by end use meters) in JVWCD service area dropped about 15%. JVWCD is continuing to invest in water conservation programs to achieve substantial additional water savings.

WCWCD

Washington County leads the state in conservation in terms of per capita water use reduction, water efficient development standards, rebate participation and rate incentives. In the last five years, per capita water consumption has decreased nearly 20%. All customers served by WCWCD have adopted uniform water efficiency standards that are the most aggressive in the state. The standards prohibit non-functional grass in new commercial, institutional and industrial developments and limit grass in residential developments to 8% of the lot size with a cap for large lots. With only 6% of the state's population, Washington County accounted for 34% of the grass replaced statewide in 2023. The WCWCD also passed an excess water use surcharge with a rate of \$10 per 1,000 gallons of water for use above established thresholds of 8,000 gallons in the winter, 15,000 gallons in the spring and fall and 20,000 gallons in the summer. The WCWCD is also the first in Utah to use aerial technology to identify non-compliance with conservation easements.

WBWCD

Ensuring the efficient and highest beneficial use of the Weber drainages finite water resources has been a priority for the District since our creation. With a mission statement that prioritizes this effort, the District has created programs, both educational and incentive based, to move these efforts aggressively forward. Partnerships with our customer agencies have also been a critical and important factor in achieving our goals to-date.

Since 2000 the per capita use of our customer agencies has dropped over 25%. This reduction in water use is a direct result of the incorporation of technologies improving our efficient use of water, behavioral changes from all our water users emphasizing the importance of being sustainable and mindful of the value of water, structural changes in the form of indoor plumbing codes and outdoor landscaping, and policy changes dictating how water is allocated, beneficially used, and paid.

The District continues to work on customer engagement programs that provide insights into water use, how they can become more efficient (smart controllers, toilet replacement), participate in turf replacement programs, utilize portals, etc.



THE BALANCE OF THE STUDY FOCUSES ON RESEARCH ON POLICIES, RATE SETTING APPROACHES, ANALYSIS OF PROPERTY TAX APPLICATIONS AND RELATED RESEARCH

POLICIES, RATES AND EQUITY

POLICIES

INVESTIGATE POLICIES THAT **WOULD ENSURE ALL USERS CONTRIBUTE TO THE COST OF WATER INFRASTRUCTURE. CONSIDERATIONS TO INCLUDE:**



Most all users contribute to the costs of water as everyone pays a water rate for their water consumption. There will be outliers in cities that don't charge themselves for green space, illegal water connections and the like. The common retail rate structure utilizes a base rate which typically accounts for capital expenses of connecting each user across the system along with fixed expenses of the operations. Paired with this is a tiered rate which attempts to capture revenues for variable costs of an entity and encourages water conservation through increasing the costs of water.

Property taxes are generally utilized by districts, not cities, to offset operational and certain capital expenses. This will vary entity to entity. This property tax revenue reduces the expense that would likely otherwise be accounted for in the base and tiered rate structure. Under the current Utah Constitution and State Statutes, there are certain types of entities that are exempt from paying property taxes. There is an argument that these tax-exempt entities provide a community benefit and thus "earn" or "qualify" for this benefit of reduced expenses (not paying property tax). Opponents argue, in the case of water supply, the tax-exempt entities' water is being subsidized by the other property tax rate payers. Without constitutional amendment, they believe the most straightforward policy to ensure every user contributes an equitable amount to the costs of water infrastructure and delivery is to eliminate property taxes and put 100% of the costs into the water rate.

On the surface, it may appear simple to ensure every user contributes an equitable amount to the costs of water infrastructure by eliminating property taxes and putting 100% of the costs in water revenues into the water rate. However, as with any significant change in revenue collection, implementing such a shift in funding water operations might create other unintentional inequities.

To properly ascertain the costs of water, water providers would conduct costs of service and rate studies to truly quantify and allocate costs of operating a system across the users, wholesale vs. retailers. A costs of service analysis is an evaluation of costs of the various users on the system and the tiering structure insuring that it is refining the equitable sharing of costs amongst all user classes. The fact is that not many entities seek this level of detail in their user rate analysis due to the extra time and expense associated



with these studies. And even for those that do, there can be legitimate differences of opinion about how costs should be distributed between users.

To properly ascertain the costs of water, water providers would conduct costs of service and rate studies to truly quantify and allocate costs of operating a system across the users, wholesale vs. retailers. A costs of service analysis is the quantification of costs to operate a water system. A cost-of-service analysis is used to inform a rate study to determine the equitable allocation of the cost of service across users of the water system that may have different types of cost burden on the system. A rate study will evaluate rate design alternatives to meet several, sometimes competing, objectives, including revenue stability, rate reliability, water conservation, fairness, affordability, and defensibility. The fact is that not many entities seek this level of detail in their rate design due to the extra time and expense associated with these studies. And even for those that do, there can be legitimate differences of opinion about how costs should be distributed between users and how a rate structure should be designed.



Standard utility rates are a more general analysis of what costs could be allocated across users. This approach satisfies the necessary analysis to determine revenue sufficiency to cover operating and capital expenses. Many water rates do not include a thorough costs-of-service study.

If the costs of services study is completed, the peak demand might adjust the costs of services and price per unit (gallons or cubic feet) which, if the system charges per unit, might mitigate the difference of low and higher users; there would be less subsidization and more rate equity if costs are truly allocated on a costs basis rather than the law of averages.

Some have argued that higher water consumption customers are subsidizing lower water users as the entity manages its overall budgets.

RATE SETTING POLICIES AND AUTHORIZATION

While interviewed entities acknowledged that they don't necessarily have an overarching policy dictating rate setting terms, all adhere to seeking fairness and equity amongst classifications and making water as affordable as possible, particularly to the low-income, fixed income or otherwise depressed demographic. Many entities do adhere to recognized rate setting standards of practice in the water sector published by the American Water Works Association in its M1 Manual concerning rates, fees, and charges (<https://store.awwa.org/M1-Principles-of-Water-Rates-Fees-and-Charges-Seventh-Edition>). Under Code §10-8-22 (<https://le.utah.gov/xcode/Title10/Chapter8/10-8-S22.html>), a municipality shall establish, by ordinance, reasonable rates for the services provided to the municipality's retail customers.

Utah Code § 10-8-22(5) reflects the standard water rate setting practices in its authorization of municipal entities to set rates based on different classifications:

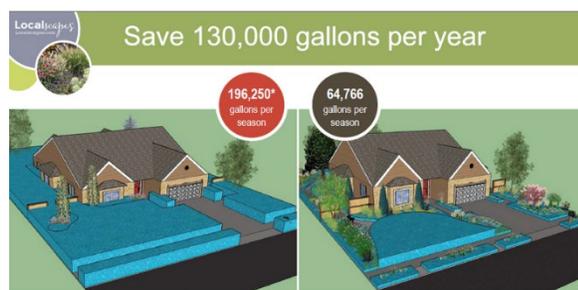
- (5) (a) A municipality may establish different rates for different classifications of retail customers within the municipality's designated water service area, if the rates and classifications have a reasonable basis.

- (b) A reasonable basis for charging different rates for different classifications may include, among other things, a situation in which:
 - (i) there is a difference in the cost of providing service to a particular classification;
 - (ii) one classification bears more risk in relation to a system operation or obligation;
 - (iii) retail customers in one classification invested or contributed to acquire a water source or supply or build or maintain a system differently than retail customers in another classification;
 - (iv) the needs or conditions of one classification:
 - (A) are distinguishable from the needs or conditions of another classification; and
 - (B) based on economic, public policy, or other identifiable elements, support a different rate; or
 - (v) there is a differential between the classifications based on a cost-of-service standard or a generally accepted rate setting method, including a standard or method the American Water Works Association establishes.
- (c) An adjustment based solely on the fact that a particular classification of retail customers is located either inside or outside of the municipality's corporate boundary is not a reasonable basis.

Based upon the above statutory language, particularly 5(b), should the municipal entity identify a justification for charging one class more, there might be room for municipalities to increase rates for a specific classification of retail customers. Some have argued that the principles behind this code section would be applicable to districts as well, but it is found only in the Utah Municipal Code so additional legal review may be necessary to validate that premise for a water rate setting, particularly if the basis for the differential in treatment is based on taxpayers versus non-taxpayers.

RATE SETTING CONCEPTS

In conducting interviews, discussing policies, analyzing water pricing, reviewing operations, identifying revenue sources and the general “politics” around water, two general approaches to pricing water development and delivery were identified. Understanding these approaches is important to how water is developed and priced.



* Typical use of 40" of water per season on a quarter acre lot, applied with automatic sprinklers

LRB Conservation: Emphasis on a tiered rate structure to motivate water conservation. This approach limits base rates and property taxes to economically encourage water conservation by tying water rates to usage.

Perceived pros & cons:

- c. Pros: basis to provide economic incentives for water conservation; cost of water contained in a single bill; conserved water allows for future growth



- d. Cons: may increase the costs of supplying and providing water; requires additional management of revenues and fund balances with the elasticity in variable water use
- 3) **Lowest Cost**: Emphasis on providing water at the lowest costs possible. This approach utilizes base rates and property taxes to lower the costs of water.
Perceived pros & cons:
- Pros: lowers the costs of providing water and the water bill for all consumers; allows for economic growth; stable revenue stream
 - Cons: may incentivize overconsumption of water; not all users pay property taxes; may enable one user classification to subsidize another with base rates and/or property taxes

Water rates generally include a base rate and some form of additional charge based on water usage. A base rate is a fixed customer charge assessed each billing period that is not affected by the amount of water delivered to the end user. Usage rates are those portions of the bill based on the amount of water delivered. Tiered or block rates are usage rates that increase the per unit charge as more water is used, often both reflecting the higher cost of service associated with peak demands on the water system and/or a conservation incentive. State code now requires retail water suppliers to incorporate tiered charges with increases in rates as more water is used. The amount charged and the amount of water included in each tier is determined by the retail water supplier.

- IRB Base rate: established to cover fixed operating expenses
- IRB Tiered rate: geared to cover variable and peaking capital and operating costs
- IRB Number of tiers varies per system, but often between 3 – 5. For example, the 1st tier: essential or non-discretionary water needs, 2nd tier: efficient outdoor watering, 3rd tier: less efficient or higher than standard outdoor watering and 4th tier: excessive outdoor watering.

Rate setting methods and principles can be quite complex and require careful analysis that considers, amongst other inputs, system size, customer base, operational demand, capital requirements, funding resources and the like. For example, the American Water Works Association Manual M1, which is relied on by many drinking water providers, is over 350 pages long not including appendices. This manual focuses on standard and defensible rate setting concepts, including advantages and disadvantages of rate alternatives, recognizing there is a wide variability among water systems that can drive rate setting alternatives.

There are various thoughts about how water rates could or should be established:



- Many entities prefer having a higher base rate to cover all or a significant share of the essential operating and capital costs required to maintain their respective systems. They are supportive of the tiered structure to promote water conservation, rewarding those who use less water to pay the lowest amount possible while those who use extra water pay an escalating rates.
- Retail entities are managing multiple rate objectives including the operational risk of maintaining sufficient revenues while encouraging water conservation that inherently introduces the variability of water revenues collected annually to meet ongoing operational expenses. Real considerations include revenue reliability, affordability, and water conservation. It is important to balance the rate objectives so that water revenues can meet operational, capital, and debt costs, while incorporating an effective price signal to incentivize and encourage water conservation. These objectives are not necessarily mutually exclusive, but require careful consideration of the design of the rate structure.
- Many argue a larger base rate accounts for the costs to access the water system which capital and operational expense is consistent across users while the tiered rate pays for the water consumption. Meaning for two neighbors, the costs to connect them to the system are the same regardless of how much water is utilized; capital costs associated with infrastructure capacity can be the lion share of the expense, although operational costs, such as water treatment and infrastructure maintenance can also represent a large portion of the expense. If one customer uses more water, they pay for that added "expense" in the tiered water rate which amplifies when more water is consumed.
- Others suggest that the larger base rate with lower tiered rate components diminish the value of water conservation pricing. For illustrative purposes, the following highlights rates for a handful of cities and retail districts in Utah:

Entity Type	Average City Water Bill			Average District Water Bill		
	10k	20k	30k	10k	20k	30k
Assumed Consumption in Gallons	10k	20k	30k	10k	20k	30k
Average Bill	\$30.62	\$52.48	\$85.64	\$42.31	\$69.48	\$102.50
Stepped Percent Increase		71%	63%		64%	48%
Increase from 10k to 30k			180%			142%

- In the above illustration, when the users consumed 2x or 3x the amount of water, they didn't pay this same percentage increase in rates
- However, the chart below shows the difference between rates for the same bill when the base rate is removed and this difference between the usage rates is more pronounced.



Entity Type	Average City Water Bill (Without Base Rate)			Average District Water Bill (Without Base Rate)		
	10k	20k	30k	10k	20k	30k
Assumed Consumption in Gallons	10k	20k	30k	10k	20k	30k
Average Bill	\$14.07	\$35.93	\$69.09	\$22.57	\$49.74	\$82.76
Stepped Percent Increase		155%	92%		120%	66%
Increase from 10k to 30k			391%			267%

- While that argument works for overall water consumption, it does not account for the actual costs as the infrastructure and system operation costs for storage and delivery are normally considerably more expensive than the costs of water treatment, particularly in areas where the water costs are largely only in the water pumping charges.
- There are arguments for revenue stability with larger base rates due to the fixed costs of operating a system balanced with motivating conservation. There are also arguments that support larger tiered rates to motivate conservation.
- Water utilities measure and calculate multiple objectives, including the level of risk they feel reasonable in establishing rates. One of the most important objectives is whether the rates adequately address revenue requirements of the utility. In general revenue risk inherent in rate design can be evident in the following ways:
 - More risk averse (less revenue risk/greater revenue reliability): higher base rate, lower tiered component of the cost of service
 - Lower risk averse (greater revenue risk/less revenue reliability): lower base rate, higher tiered component of the costs of service.
- Secondary water has largely gone unmanaged until recently. Until a tiered water rate is placed on secondary water, it may likely continue to incentivize overconsumption of water. Furthermore, systems with secondary water will continue to dilute the impact of tiered rates on drinking water as customers have a nominal impact on water conservation from indoor use. Focusing conservation efforts on secondary water could see material savings in reducing water consumption.
- For those receiving state funds, they are required to provide information water statement on water use. Providing data on proper water use vs. actual use to educate residents on water wise watering standards. Language from code: https://le.utah.gov/xcode/Title73/Chapter10/73-10-S34.5.html?v=C73-10-S34.5_2024050120240501 provide an educational component for end users as determined by the division by rule made in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, either on a monthly statement or by a customer specific Internet portal that provides information on the customer's usage more frequently than monthly.



In exploring policies that would seek equity, there is not a one-size fits all. The interviewed agencies highlighted that each area has unique issues. For example, what would work in area “a” might not have the same efficacy in area “b”.

It should be noted that uniformly throughout the Comparable States, there was a base rate with a tiered rate formula. This approach attempts to appease both philosophies to manage risk while encouraging water conservation.

ADDITIONAL CONCEPTS

There are competing demands in establishing water rates, particularly between providing low costs of water vs. driving water conservation. An entity’s first and foremost obligation, per Utah Code cited above, is to deliver water at reasonable pricing. Second to this is setting water pricing to motivate water conservation. Water delivery is a unique market, it sells a product that it tells its customers to use sparingly while charging a rate that increases to cover its expenses.

During this study, it came to our attention that there are no State-wide requirements for metering by all retail water purveyors. While commonly practiced along the Wasatch Front, many rural entities continue to charge a flat, or uniform, rate. This could be derived from sufficient water sources, expense of retroactively installing meters, lack of concern and lack of demand amongst other reasons.

Obviously, meters are required to charge based upon water consumption. Should entities not charge by actual consumption but a uniform rate, that may send signals to either “use what you want” and not motivate those to conserve water based on costs signals alone. Statewide measures could be considered to require all entities to have meters to enable charging by actual water consumption and drive water conservation. There might be patrons who are not willing to pay the costs of metering. On top of these concerns is the additional costs of installing the meters.

Select private entities are regulated by the Public Service Commission. While private entities enjoy certain flexibility being non-governmental, having statewide efforts to manage water consumption might be warranted to ensure all are coordinating efforts in water conservation.

Utah enjoys some of the most affordable water in the Comparable States due to a variety of factors as reported by the Division of Natural Resources in a 2010 Report (<https://water.utah.gov/wp-content/uploads/2019/01/The-Cost-of-Water-in-Utah-2010.pdf>). Firstly, water purveyors have been very cognizant of the water costs and have striven to keep them as low as possible. This is largely enable due to the following factors: converting existing agricultural water to M&I uses, federal & state funding programs and lower energy costs. The conversion helps with maintaining existing sources, limits additional development projects and is used in secondary systems. The



federal program has originated hundreds of millions of dollars of federal support. Utah’s low energy, coupled with gravity, has significantly reduced pumping and transport expenditures.

STATE CODE AMBIGUITY

There appears to be ambiguity in the State Code around water conservation when it comes to setting water rates. Utah Code § 10-8-22(5) does not mention water conservation when directing municipalities in setting water rates, simply stating that water rates should be “reasonable”. On the other hand, Utah Code § 17B-2a-1004 directs water conservancy districts to “investigate and promote water conservation and development”.

Many municipalities interpret “reasonable basis” as being to mean both fair and low cost for the consumer.

Some believe that these inconsistencies in the State Code are at least partly responsible for the disparities we see between entities in whether or not they prioritize water conservation when establishing water rates.



DISADVANTAGED COMMUNITIES UNDER THE SAFE DRINKING WATER ACT INCLUDING UNDERSERVED, SMALL, AND DISADVANTAGED COMMUNITIES

During the interview process, every Utah entity reported back that there is no specific policy to “help” with the disadvantaged communities to lower their rates. However, every entity acknowledged the need to minimize the first block of water to make it as affordable as possible. While very few entities throughout the western states included any water in the base rate, the first tier was set up to deliver essential water for basic needs. The second tier was intended for water wise outdoor users, third tier was standard outdoor water use and the 4th tier, and higher, for excessive water use.

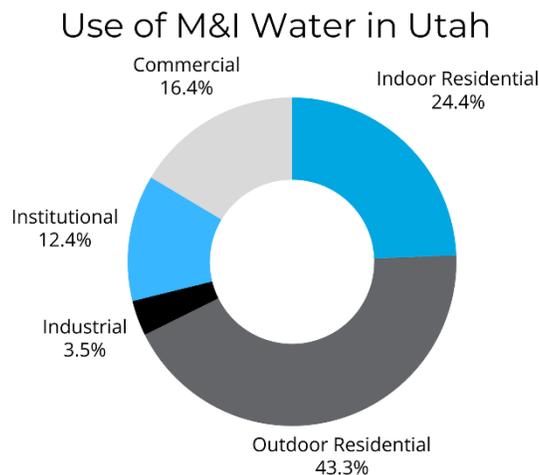
While retailers have limited ability to curtail rate structures, there are state-wide property tax abatement programs available to help the disadvantaged, elderly and veterans. These programs are often administered through counties with credits on their property tax bill each year.

To further assist disadvantaged customers, many water providers establish some sort of a rate committee that considers one-off situations to apply special rates or “hardship rates” addressing specific needs in accordance with their policies. Others provide customer assistance programs in partnership with service providers such as the Salvation Army, churches, and other non-profit human welfare groups. During the pandemic, the federal government authorized the Low-Income Household Water Assistance Program (LIHWAP) with grants available to each state. This is modeled after an energy assistance program (LIHEAP) that has been in place for many years. Utah received funding for this program, partnering with water providers to ensure eligible customers could receive help with their water bills. The LIHWAP funding has since ceased, although the water sector has been working with members of Congress to encourage making this a permanent program.

POTENTIAL SOLUTIONS FOR NON-TAX PAYING ENTITIES TO CONTRIBUTE TO WATER INFRASTRUCTURE COSTS IN ADDITION TO REMOVING PROPERTY TAX

Because some water users do not pay property tax, they may not be contributing to the revenue of the water provider in the same way as those users who do pay tax. To quantify this notion, consider the following uses amongst various water classes, based upon data from the Division of Water Rights website: https://waterrights.utah.gov/asp_apps/generalWaterUse/WaterUseList.asp

- Average Water Usage Allocations (may not be exact across all cities, but generally speaking):
- Residential – just residences
- Commercial – business, restaurants, hotels, shopping centers, might have private golf courses, multi-family residential
- Industrial – manufacturing (bottling, steel mill, textiles factories)
- Institutional – usually means all city facilities (rec center, fields, parks, cemeteries), churches, schools, universities, colleges, hospitals (might cross lines with commercial – clinic in strip mall might be commercial), city golf courses
- Non-profits fall under the type of building they're using,



Although non-taxpaying entities are predominantly found in the institutional water use category, it is not accurate to assume that all institutional water users are not taxed or to say that non-taxpaying water users are always shouldering less of the payment burden than those users who do pay property tax. For those systems who do not use property tax revenue for water services (such as most municipalities or areas with no taxing districts), non-taxpaying entities do not receive relief compared to water users who are taxed. And even where there is a difference in the relative cost share of taxed and non-taxed entities, there may be public policy reasons why this difference is justified.

For example, many non-taxpaying entities, such as schools and certain government entities, are funded substantially by property tax or other taxes. Increases in water billing to offset the lack of tax collection may just become a pass-through increase in the property tax of those entities.

AMEND UTAH CONSTITUTION & CODE

The UTAH Constitution (Article XIII, Section 3) and applicable State Code could be amended to alter or even eliminate tax-exemption. By eliminating this tax-exemption, non-tax paying entities would then pay taxes equal to others. More precisely to the concerns initiating this study, the general tax exemption could stay in place for the majority of tax-exemption

benefits but specifically create a carve out for non-tax paying entities to pay taxes that directly support utility expenses, i.e. water, sewer, other. This approach and amendment would require county assessors and treasurers to value these additional properties and collect taxes on them. However, if passed, it would be on the most solid ground to withstand any legal challenge for levying additional taxes or fees on these non-tax paying entities.

SPECIAL WATER RATE OR SURCHARGE FOR SERVICES

Before considering the Payment in Lieu of Tax or PILT discussed below, there could be a special charge placed on non-tax paying entities for services rendered. As outlined above, the Utah Code §10-8-22 specifically recognizes the ability to charge a special rate to certain user classifications. Additional legal review and consideration should be given to how these rates are calculated and assigned based on taxation status.

In the case of *Larson v. Pleasant Grove City* that the Utah Supreme Court ruled on Pleasant Grove City charging a special transportation utility fee to help maintain the roads in the City. The Court state: “The Property Owners argued that the City lacked authority to enact the TUF because a —transportation utility is not specifically authorized in the Municipal Code. And they argued in the alternative that the TUF was not really a fee but was a tax for which the City had not followed the proper enactment procedures.”

While the court acknowledged that a service was being provided, it was a new service for transportation and road repairs. As water service is already being provided, it could be argued that a special water service fee arrangement could implemented similar to a TUF to cover water access and that fee would be paid also by non-tax paying entities. However, Utah Code § 10-8-22 does acknowledge in subsection 5(b)(i) that there is a difference in the cost of providing service to a particular classification and subsection 5(b)(iv)(B) based on economic, public policy, or other identifiable elements, support a different rate, there might be justification to charging this increased rate for certain classifications. Further legal review is warranted to validate this approach.

As will be discussed below, many retailers are not funded with property taxes. As such, they do not directly realize a lack of equity between customers paying or not paying property taxes. This special water fee would most likely be implemented by the cities and districts with retail services that do levy a property tax to balance their revenue sharing and cost allocation and that do already send out bills to the end users. For the wholesale districts, could they and would they want to compel their retail clients to impose a special water fee that the retail entities charge and collect on behalf of the wholesale districts? This may be necessary for wholesale districts because they do not send out bills to end users. The questions then arise on how to set the rate, how to assess it, how to collect it and related administrative items.

PAYMENT IN LIEU OF TAX OR PILT

There is a mechanism to establish payments in lieu of taxes (PILT). This concept allows a governmental entity to charge a specific entity a fee representing the approximate value of property taxes that would have been paid by a tax-paying entity. Many examples of this are payments on a voluntary basis when a non-profit organization or non-taxpaying entity agrees to pay PILT in exchange for some other benefit. For example, a tax-paying entity was



able to convert to a non-taxpaying entity to secure project financing on a tax-exempt basis. This entity agreed to then pay the PILT in exchange for this benefit.

Additionally, local governments and many rural counties contain Federal lands owned or governed properties not subject to property taxes. The local governments still provide services, i.e. public safety, housing, and transportation, and utilizing PILT allows a means to compensate local governments for those services on those Federal lands.

Under these circumstances, PILT payments have been on a voluntary basis and not forced upon the non-taxpaying entities. If this is applied moving forward on a grander scale, it should be discussed if this will be authorized under Utah Code or be a voluntary measure.

Should the PILT be implemented, there are various future actions to take into consideration to apply the PILT:

- LRB If the fee was based upon assessed value or property tax monies, county assessors would need to now assess these properties
- LRB As mentioned above with special water fee, if it was a fixed charged, how to determine this amount to validate equity and maintain total revenues of any eliminated property tax revenues
 - For example church properties averaged \$100 in tax revenues and a surcharge was established at \$100 but the actual value was actually \$115, how would the extra \$15 per property be absorbed into the entity's budget?
 - Would they increase rates to cover the gap? Would they eliminate or decrease services? Would they adjust their budget?
- LRB How would the wholesale entities communicate with the individual retail entities to identify the surcharge for each property?
- LRB If the onus is on the retailers to collect revenues for the wholesale entities
 - While individual retail districts would likely have motivation to educate and appeal to their customer base, this approach could introduce new angst for cities in addressing their residents' concerns over increased water bills that do not increase the cities' budgets.
 - Would the wholesale districts be motivated to compel their customers to impose a surcharge to the maximum rate if it enraged their customer base?
- LRB The Legislature would want to consider unfunded mandates
- LRB The larger the PILT, the more unlikely of voluntary participation



During the interview process, there was no single entity that charged a surcharge for non-tax paying entities for a couple of reasons.

Firstly, most retailers that interact with these non-taxpaying entities are cities and don't levy a property tax for water enterprise funds. Cities impose a monthly water rate that is equitable amongst all users thus no one class is paying a fee not paid by another class. As such, they don't realize inequity amongst their customers.

Entities that researched this potential solution are districts as they do levy a property tax and see the discrepancy in revenues between tax-paying and non-taxpaying entities. They ultimately came to the conclusion that it would likely constitute a “special assessment” or “perceived” tax. With that consensus, they haven’t pursued this avenue further as it could be deemed unconstitutional and not allowed.

If this concern could be resolved, there are means to having non-tax paying entities pay a fee-in-lieu or PILT or surcharge to better resembled payments to account for their perceived use of water. This surcharge revenue could be limited to certain types of entities based upon water consumption, property type, location or some other means.



This surcharge could be concentrated on large water users to motivate water conservation and not impact the lower income, renters or other smaller non-profit organizations with particularly constrained or limited budgets.

The dilemma then becomes how to charge the PILT. For districts that either have retail customers or wholesale contract directly with these non-taxpaying entities, they could adjust their water rates accordingly. For cities with wholesale contracts, they would likely need to coordinate with the wholesale district on: i) what the PILT would be charged, ii) to which customers, iii) incorporate that into the monthly billing and iv) remit payment back to the wholesale district.

To date, this has not been an acute focus for wholesale entities as they do not maintain individual contracts with these types of entities; they are more regular with retail accounts. The city retailers do not levy a property tax so do not have this issue as all customers pay their respective rates without any type of subsidies.

ADMINISTRATIVE QUESTIONS



For both the PILT and special water fee scenarios, there are a myriad of administrative items that **must** be considered before blindly implementing these tools. While there could be additional revenues from certain properties, it will also increase additional expenses for others, both expenses for other property owners and expenses at counties and cities for the additional administrative duties. The issues are referenced above, but again are mentioned here:

- Would the “fee” be related to the property tax that property would have paid?
- If these are to be based upon “property value”, this will introduce new properties to be assessed, thus increasing that responsibility
- Would it be related to fixed charge? If it was a fixed charge, how to create equity amongst the classes to absorb any increased or decreased revenue as compared to what the eliminated element of property tax would have generated.
- How would the wholesalers “assign” and notify each of the retailers of the “fees” to pass along to specific properties.
 - Time period for assigning and notification
 - Appeal process

- Public hearing process
- What happens if a property is accidentally charged?
- If an entity doesn't pay the surcharge, what consequences would arise?
- There could be severe issues in applying a surcharge. Amongst the questions to consider would be:
 - As the wholesalers do not maintain relationships with the end users, the onus is on the retailer to collect the rate
 - Many of these retailers don't levy a property tax, so they will be introduced to new angst of rate payers as they address concerns about these "fees"
- Should this approach be considered, the State code could be amended to allow these district(s) to maintain agreements with these non-taxpaying entities to collect these additional revenues directly rather than being processed through the local retailers.
- Alternatively, these additional revenues could be assessed similarly to secondary water on the property tax bills each year.

ADDITIONAL CONSIDERATIONS

All entities are required to pay their impact fees; certain abatements happen on a case-by-case basis. At times school districts may not pay impact fees but will include their respective "connection type expenses" in their construction, thus covering the expense.

Other than removing property tax component, there appears to be no way to charge an ongoing "make whole" fee to non-tax paying entities.

During the interview process, there were clear mixed sentiments on whether non-profits / governmental entities should pay a "make-whole" fee. While some believe they should pay their fair share of the water system expenses, many felt they were providing a community benefit so maybe not paying taxes was their "benefit" and were comfortable with them paying a lower amount when accounting for property taxes paid by other entities. In the surveys received from outside Utah, the data suggested there are no special rates for non-tax paying entities. Certain western states even prohibit one class subsidizing another class in how rates are established.

REVIEW OF THE SCOPE OF TAX EXEMPTION IN UTAH CONSTITUTION

Tax-exemption originally was established to promote those entities providing a community benefit. As can be derived from the list below, tax-exemption is only admitted to those entities serving the community and not seeking profits.

The following language references the Utah Constitution regarding tax exemption. The key taxation and tax exemption provisions of the Utah Constitution are contained in Article XIII, including, in particular, Section 3 of Article XIII, which covers the principal property tax exemptions. Article XIII, Section 3 is, for example, the source of property tax exemption for water districts and other governmental entities along with the source of legislative authority to exempt up to 45% of the fair market value of residential property.



We have not explicitly researched other states for their allowable tax-exemptions, but in conducting a “2-minute” search, it revealed all states have various types of tax-exemptions. Should the State Constitution be amended, it might be prudent to research neighboring states and how others treat tax-exemption.

ARTICLE XIII, SECTION 3 [PROPERTY TAX EXEMPTIONS.]

(1) The following are exempt from property tax:

- (a) property owned by the State;
- (b) property owned by a public library;
- (c) property owned by a school district;
- (d) property owned by a political subdivision of the State, other than a school district, and located within the political subdivision;
- (e) property owned by a political subdivision of the State, other than a school district, and located outside the political subdivision unless the Legislature by statute authorizes the property tax on that property;
- (f) property owned by a nonprofit entity used exclusively for religious, charitable, or educational purposes;
- (g) places of burial not held or used for private or corporate benefit;
- (h) farm equipment and farm machinery as defined by statute;
- (i) water rights, reservoirs, pumping plants, ditches, canals, pipes, flumes, power plants, and transmission lines to the extent owned and used by an individual or corporation to irrigate land that is:
 - (i) within the State; and
 - (ii) owned by the individual or corporation, or by an individual member of the corporation; and
- (j)
 - (i) if owned by a nonprofit entity and used within the State to irrigate land, provide domestic water, as defined by statute, or provide water to a public water supplier:
 - (A) water rights; and
 - (B) reservoirs, pumping plants, ditches, canals, pipes, flumes, and, as defined by statute, other water infrastructure;
- (k) land occupied by a reservoir, ditch, canal, or pipe that is exempt under Subsection (1)(j)(i)(B) if the land is owned by the nonprofit entity that owns the reservoir, ditch, canal, or pipe; and
- (l) land immediately adjacent to a reservoir, ditch, canal, or pipe that is exempt under Subsection (1)(j)(i)(B) if the land is:
 - (i) owned by the nonprofit entity that owns the adjacent reservoir, ditch, canal, or pipe; and
 - (ii) reasonably necessary for the maintenance or for otherwise supporting the operation of the reservoir, ditch, canal, or pipe.



OTHER FEE COLLECTION METHODS

We did not learn of any other more efficient collection methods from the entities interviewed. Ultimately, if the goal of requiring additional payments from non-taxpaying

entities is to reduce water use, the consensus was that having monthly bills appeared to be the best opportunity to share timely information with customers on their water consumption. This frequency allowed for regular communication with customers and opportunities to share additional information as it becomes available.

It was evident this is not on many radars in that the current approaches are sufficient.

There was consensus that sharing more information in a timely manner would be best. Many entities would like to share current water consumption information in a timely manner so that customers have more firsthand knowledge of their usage.

WATER RATE STRUCTURES TO PROMOTE WATER CONSERVATION AND REVENUE SUSTAINABILITY

1. Identify methods of developing tiered water rate structures that promote water conservation and ensure reasonable revenue stability. Considerations to include:

As entities establish rates, they identify their operating expenses and establish a water rate to cover those expenses while managing risk. As governmental entities, they are not seeking a profit, rather need to manage cashflows to timely meet their obligations for both best practices and to maintain a high credit rating⁴. As such, reliable cashflow is valuable not only to the entity to obtain the lowest costs of capital but is valuable to the customer for consistency in their bill and finding comfort in stable operations.

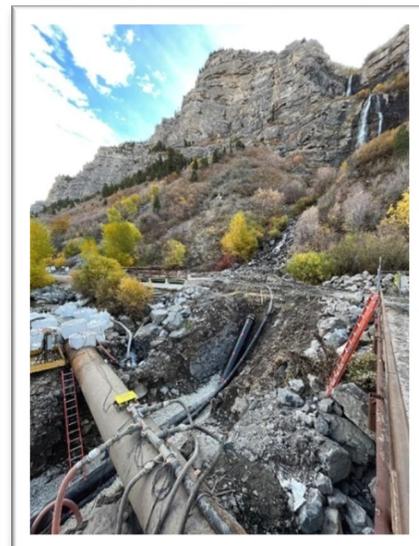
The sheer nature of a tiered rate structure promotes water conservation based on costs. This is the case even for non-taxpaying entities since their water usage is subject to the same tier increases as all other water users. This approach to conservation can be from necessity of one’s budget and can be influenced by the ramping of tiered rates.

The following models offer insights on the tiered water rate structure:

- Base rate: established to cover fixed operating expenses
- Tiered rate: geared to cover variable operating expenses
- Number of tiers varies, but often between 3 – 5. 1st tier: essential water needs, 2nd tier: efficient outdoor watering, 3rd tier: standard outdoor watering and 4th tier: excessive outdoor watering.

Calculating and managing risk:

- More risk averse – higher base rate, lower tiered component
- Lower risk averse – lower base rate, higher tiered component



⁴ This is particularly important if they have bonds outstanding or plan to see a bond issuance in the future.



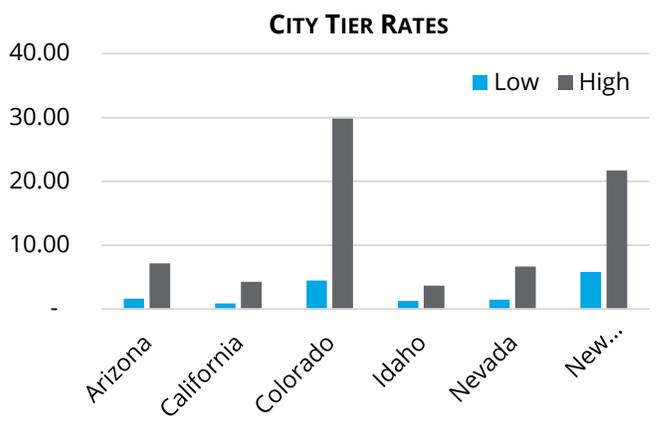
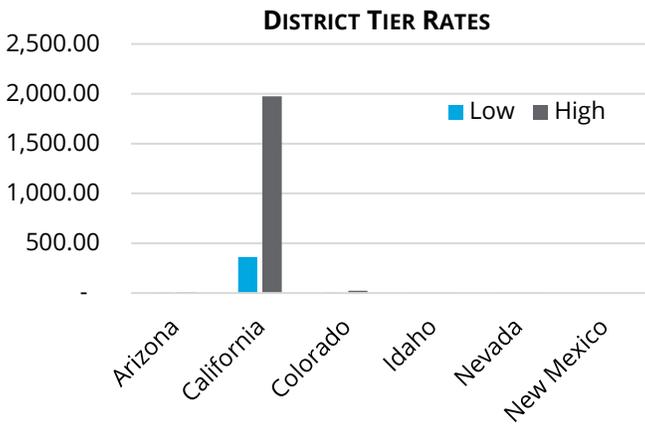
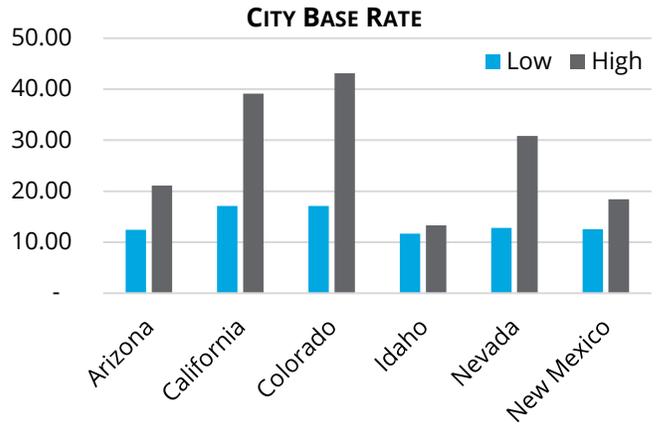
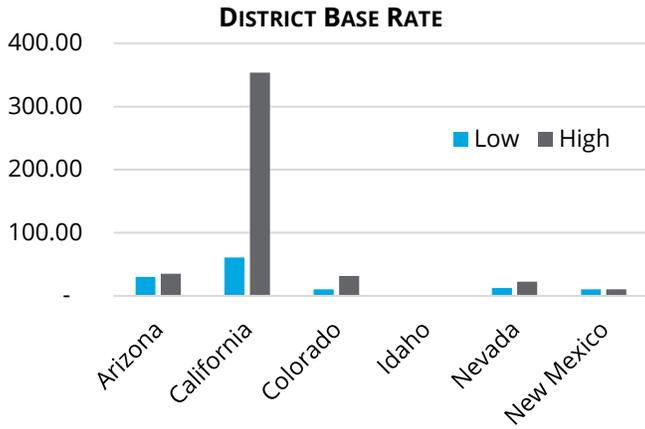
The following table highlights research completed with the study:

Utah Overall	District	City
Range of Base Rates	\$13.26-\$28.46	\$10.20-\$38.19
Number of Tiers	4 to 7	3 to 7
Range of Water Usage Allowance	6,000-50,000+ gal.	7,000-40,000+ gal.
Range of Tiered Rates	\$1.72-\$4.24	\$1.01-\$5.54

Cities				
ITEM	City 1	City 2	City 3	City 4
Base Rates	\$14.15	\$22.75	\$10.73	\$10.20
Number of Tiers	4	7	6	3
Range of Water Usage Allowance	100-6100 Cubic Feet	7,500-45,000 gal.	10,000-91,000 gal.	6,000-18,000 gal.
Range of Tiered Rates	\$2.09-\$4.22	\$1.30-\$4.35	\$.77-\$2.04	\$1.14-\$2.14
ITEM	City 5	City 6	City 7	City 8
Base Rates	\$15.91	\$38.19	\$17.75	\$28.15
Number of Tiers	2	3	3	5
Range of Water Usage Allowance	6,000-16,000 gal.	8,000-32,000 gal.	3,000-12,000 gal.	6,000-75,000 gal.
Range of Tiered Rates	\$1.01-\$2.65	\$4.50-\$5.50	\$2.40-\$4.00	\$1.79-\$5.54

Districts			
ITEM	District 1	District 2	District 3
Base Rates	\$3.00	\$13.26	\$17.49
Number of Tiers	4	4	4
Range of Water Usage Allowance	6,000-38,000 gal.	7,000-45,000+ gal.	7,000-45,000+ gal.
Range of Tiered Rates	\$1.70-\$5.39	\$1.72-\$3.88	\$1.59-\$4.24
ITEM	District 4	District 5	
Base Rates	\$28.46	\$22.75	
Number of Tiers	5	7	
Range of Water Usage Allowance	8,000-50,000+ gal.	7,500-45,000 gal.	
Range of Tiered Rates	\$3.00-\$8.09	\$1.30-\$4.35	





	Arizona		California		Colorado	
	District	City	District	City	District	City
Range of Base Rates	\$30.00-\$35.00	\$12.40-\$21.13	\$60.78-\$378.66	\$17.11-\$39.15	\$10.59-\$31.80	\$17.08-\$43.13
Number of Tiers	4	4 to 5	1 to 4	2 to 3	3 to 6	3 to 7
Range of Water Usage Allowance	per 1,000 gal.	4,000-31,000+	per gallon and AF	7-51+ HCF	1,000-120,000+	3,000-21,000+
Range of Tiered Rates	\$3.25-\$7.65	\$1.65-\$7.14	\$1.75-\$8.00	\$0.90-\$4.28	\$4.60-\$25.00	\$4.47-\$29.83

	Idaho		Nevada		New Mexico	
	District	City	District	City	District	City
Range of Base Rates	\$24.00-\$27.87	\$11.71-\$13.32	\$12.63-\$22.70	\$12.81-\$30.83	\$20.88-\$30.86	\$12.57-\$18.42
Number of Tiers	4 to 5	1 to 2	3 to 4	3 to 4	2-4	2 to 3
Range of Water Usage Allowance	7,000-100,000+	1,000-25,000+	5,000-55,000+	5,000-30,000+	1-8,000+	6,000-10,000+
Range of Tiered Rates	\$1.50-\$5.39	\$1.29-\$3.66	\$1.46-\$5.76	\$1.46-\$6.64	\$2.07-\$6.71	\$5.80-\$21.72



Outside of the standard rate per tier, these additional approaches were identified throughout the west:

CITY OF BOULDER, COLORADO

ITEM	INSIDE CITY	OUTSIDE CITY
Base Rate	\$17.08-28.76	\$25.61-43.13
Tier 1	\$4.47 per 1000 gallons 60% of monthly budget	\$4.47 per 1000 gallons 60% of monthly budget*
Tier 2	\$5.97 per 1000 gallons 61-100% of monthly budget	\$5.97 per 1000 gallons 61-100% of monthly budget*
Tier 3	\$11.93 per 1000 gallons <150% of monthly budget	\$11.93 per 1000 gallons <150% of monthly budget*
Tier 4	\$17.90 per 1000 gallons 150-200% of monthly budget	\$17.90 per 1000 gallons 150-200% of monthly budget*
Tier 5	\$29.83 per 1000 gallons 200%+ of monthly budget	\$29.83 per 1000 gallons 200%+ of monthly budget

The rate structure is based on "water budgets", or the amount of water that you are expected to use during a specific month. Each customer's water budget will be different based on their unique water needs, as well as their past usage levels. To learn more about how these are determined, or to request an adjustment, please see <https://bouldercolorado.gov/services/water-utilities#section-287>.

CITY OF DENVER, COLORADO

ITEM	INSIDE CITY	OUTSIDE CITY
Base Rate	\$17.08-28.76	\$25.61-43.13
Tier 1	\$2.63 for average winter consumption ("AWC")	\$2.75 for average winter consumption ("AWC")
Tier 2	\$4.73 of AWC + 15,000 gallons	\$4.95 of AWC + 15,000 gallons
Tier 3	\$6.31 of AWC + 15,000+ gallons	\$6.59 of AWC + 15,000+ gallons

CITY OF BOISE, ID

Base rate is pegged to sewer usage rather than water usage

NORTH KOOTENAI WATER & SEWER DISTRICT, ID

North Kootenai has a "Debt Service Surcharge" per dwelling unit or commercial unit per month. The repayment of revenue bond was authorized by in 2009 by Special Election. The Bonds are secured by the Net Revenues of the System, not property taxes. This "Debt Service Surcharge" will appear on the monthly statement until the bond is paid in full.

CITY OF HENDERSON, NEVADA

Base rate is pegged to daily charge (varies per month as each month has different days which impacts "monthly" usage



ITEM	RATE
Base Rate	daily water charge \$0.495
Tier 1	\$1.61 for 200 gallons / day
Tier 2	\$2.54 for next 333 gallons / day
Tier 3	\$3.58 for next 467 gallons / day
Tier 4	\$6.64 for over 1000 gallons / day

CITY OF NORTH LAS VEGAS, NEVADA

Base rate is pegged to daily charge (varies per month as each month has different days which impacts “monthly” usage

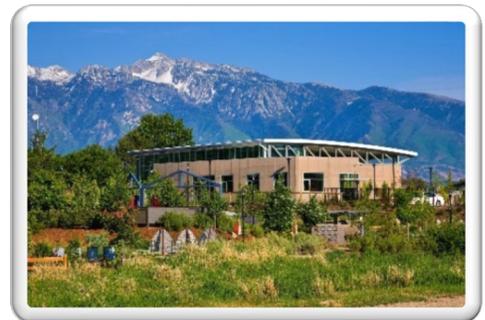
ITEM	RATE
Base Rate	daily water charge \$0.495
Tier 1	\$2.34 for 0,000 - 6,000 gallons
Tier 2	\$3.03 for 6,000 - 15,000 gallons
Tier 3	\$3.94 for 15,000 - 24,000 gallons
Tier 4	\$5.09 for 24,000+ gallons

CITY OF SANTA FE, NEW MEXICO

Tiered rates adjusted for time of year

ITEM	RATE
Base Rate	\$18.42
	September - April
Tier 1	\$6.06/1,000 for the first 7,000 gallons
Tier 2	\$21.72/1,000 gallons thereafter
	May - August
Tier 1	\$6.06/1,000 for the first 10,000 gallons
Tier 2	\$21.72/1,000 gallons thereafter

The following tables on the following pages highlights various random entities across the Comparable States and within Utah. They are in no particular order other than to demonstrate the difference in rates amongst varying states and entities. The rates reflected in these tables were gathered from websites available in 2024 (rates could be older depending on how the individual websites were managed). Rates and rate structures often change. Depending on the rate structure, commercial uses may have different rates than residential uses.



Comparable States' Entities

City of Boulder, Colorado

Item	Rate	Inside City
Base Rate (3/4")		\$18.44
Base Rate (1")		\$31.06
Base Rate (2")		\$117.11
Tier 1	\$4.84	per 1000 gallons 0-60% of monthly budget
Tier 2	\$6.45	per 1000 gallons 61-100% of monthly budget
Tier 3	\$12.90	per 1000 gallons 101-150% of monthly budget
Tier 4	\$19.35	per 1000 gallons 150-200% of monthly budget
Tier 5	\$32.25	per 1000 gallons 200%+ of monthly budget

Town of Eagle, Colorado

Item	Rate	Inside City
Base Rate		\$40.91
Base Rate (1")		
Base Rate (2")		
Tier 1	\$3.48	0-6000
Tier 2	\$7.67	6001-17000
Tier 3	\$11.51	17001-28000
Tier 4	\$17.25	29000+

Centennial, Colorado

Item	Rate	Inside City
Base Rate (3/4")		\$32.00
Base Rate (1")		\$57.00
Base Rate (2")		\$207.00
Tier 1	\$4.75	0-5,000
Tier 2	\$7.30	6,000-18,000
Tier 3	\$10.55	19,000-28,000
Tier 4	\$13.85	29,000+

City of Denver, Colorado

Item	Rate	Inside City
Base Rate (3/4")		\$18.40
Base Rate (1")		\$27.01
Base Rate (2")		\$90.71
Tier 1	\$2.78	0-average winter consumption ("AWC") (using 5000)
Tier 2	\$5.00	AWC + 15,000 gallons (up to 20000)
Tier 3	\$6.67	greater than AWC +15,000 (21000-30000)
Comm Tier 1	\$3.22	AWC (using 0-10000)
Comm Tier 2	\$4.51	AWC to 4x awc (using 11000-30000)
Comm Tier 3	\$5.15	AWC to 4x awc (using 30000+)

Utah Entities

Logan, Utah

Item	Rate	Inside City
Base Rate (3/4")		\$26.86
Base Rate (1")		\$26.86
Base Rate (2")		\$40.30
Tier 1	\$1.66	0-10000
Tier 2	\$2.68	10000+
Comm Tier 1	\$1.89	\$1.89 all gallons

Tooele, Utah

Item	Rate	Inside City
Base Rate (3/4")		\$10.73
Base Rate (1")		\$16.09
Base Rate (2")		\$32.18
Tier 1	\$0.77	0-10 HCF
Tier 2	\$1.02	11-30 HCF
Tier 3	\$1.28	31-50 HCF

Kearns Improvement District, Utah

Item	Rate	Inside City
Base Rate (3/4")		\$13.07
Base Rate (1")		\$22.43
Base Rate (2")		\$78.52
Tier 1	\$2.62	0-10000
Tier 2	\$3.29	11000-25000
Tier 3	\$4.47	26000-45000
Comm Tier 1	\$3.08	per 1000 gallons

Salt Lake City, Utah

Item	Rate	Rate
Base Rate (3/4")		\$14.15
Base Rate (1")		\$18.52
Base Rate (2")		\$42.50
Res Block 1 (Winter Rate)	\$2.09	1 unit thru 10 units (HCF)
Res Block 2	\$2.85	11 units thru 30 units (HCF)
Res Block 3	\$3.95	31 units thru 60 units (HCF)
Res Block 4	\$4.22	61 units & above (HCF)
Comm Block 1 (Winter Rate)	\$2.27	1 unit thru 100% of AWC (HCF)
Comm Block 2	\$3.12	>100% to 300% of AWC (HCF)
Comm Block 3	\$4.34	>300% to 600% of AWC (HCF)
Comm Block 4	\$4.61	>600% of AWC (HCF)



Comparable States' Entities

City of Henderson, Nevada

Base rate is pegged to daily charge (varies per month as each month has different days which impacts "monthly" usage)

Item		Rate
Base Rate (3/4")		\$17.02
Base Rate (1")		\$31.87
Base Rate (2")		\$94.94
Res Tier 1	\$1.68	0-6000 gallons
Res Tier 2	\$2.79	6001-9990 gallons
Res Tier 3	\$3.93	9991-14010 gallons
Res Tier 4	\$9.05	14011-30000+ gallons
Comm Tier 1 (1")	\$1.68	0-22980 gallons
Comm Tier 1 (2")	\$1.68	0-78000 gallons

City of North Las Vegas, Nevada

Base rate is pegged to daily charge (varies per month as each month has different days which impacts "monthly" usage)

Item		Rate
Base Rate (3/4")		\$13.02
Base Rate (1")		\$34.41
Base Rate (2")		\$100.13
Tier 1	\$2.34	0 - 6,000 gallons
Tier 2	\$3.03	7,000 - 15,000 gallons
Tier 3	\$3.94	16,000 - 24,000 gallons
Tier 4	\$5.09	25,000+ gallons
Non-Residential	\$3.98	per 1000 gallons, not tiered

City of Santa Fe, New Mexico

Tiered rates adjusted for time of year

Item		Rate
Base Rate (3/4")		\$18.42
Base Rate (1")		\$36.83
Base Rate (2")		\$147.36
		September - April
Res Tier 1	\$6.06	for the first 7,000 gallons
Res Tier 2	\$21.72	1,000 gallons thereafter
		May - August
Res Tier 1	\$6.06	for the first 10,000 gallons
Res Tier 2	\$21.72	1,000 gallons thereafter
		September - April
Comm Tier 1 (1")	\$6.06	1000 for the first 14000 gallons
Comm Tier 2 (1")	\$21.72	1,000 gallons thereafter
		May - August
Comm Tier 1 (1")	\$6.06	1000 for the first 20000 gallons
Comm Tier 2 (1")	\$21.72	1,000 gallons thereafter
		September - April
Comm Tier 1 (2")	\$6.06	1000 for the first 56000 gallons
Comm Tier 2 (2")	\$21.72	\$21.72/1,000 gallons thereafter
		May - August
Comm Tier 1 (2")	\$6.06	1000 for the first 80000 gallons
Comm Tier 2 (2")	\$21.72	1,000 gallons thereafter

Utah Entities

Spanish Fork, Utah

Item		Rate
Base Rate (3/4")		\$10.20
Base Rate (1")		\$10.20
Base Rate (2")		\$40.80
Res Tier 1	\$1.14	0-6000 gallons
Res Tier 2	\$1.39	6001-18000
Res Tier 3	\$2.14	19000+
Comm Tier 1	\$1.14	0-6000
Comm Tier 2	\$1.39	6001+

St. George, Utah

Item		Rate
Base Rate (3/4")		\$22.75
Base Rate (1")		\$56.88
Base Rate (2")		\$162.43
Tier 1	\$1.30	0-7000
Tier 2	\$1.80	8000-15000
Tier 3	\$2.10	16000-22000
Tier 4	\$2.40	23000-30000

Lehi, Utah

Item		Inside City
Base Rate		\$18.84
Res Tier 1	\$1.26	1-30000 gallons
Res Tier 2	\$2.53	>30000 gallons
Comm Tier 1	\$1.26	per 1000 gallons

Cedar City, Utah

Item	Rate	Inside City
Base Rate		\$17.00
Re Tier 1	\$1.00	0-8000 gallons
Re Tier 2	\$2.18	9000-20000
Re Tier 3	\$4.21	21000-35000
Comm Tier 1	\$1.00	0-20000
Comm Tier 2	\$2.62	21000-50000

Vernal, Utah

Item		Rate
Base Rate		\$40.80
Res & Comm Tier 1	\$0.00	1st 8,000 gallons is included in the base rate
Res & Comm Tier 2	\$2.58	Over 8,000 gallons

Manti, Utah

Item		Rate
Base Rate		\$32.00
Res & Comm Tier 2	\$2.00	8000-30000 gallons



Comparable States' Entities

Mesa, Arizona

Item	Rate	Inside City
Base Rate (3/4")		\$30.93
Base Rate (1")		\$34.65
Base Rate (2")		\$63.62
Tier 1	\$3.51	4000-6000
Tier 2	\$5.30	next 8000
Tier 3	\$6.43	next 10,000
Tier 4	\$7.18	all additional 1000
Commercial Tier 1	\$4.14	\$4.14 in excess of 3000, plus a surcharge rate of \$2.15 per 1000. Surcharge applies to all water used each billing cycle that exceeds the average of usage for the

San Diego, California

Item	Rate	Inside City
Base Rate (3/4")		\$25.15
Base Rate (1")		\$40.66
Base Rate (2")		\$125.97
Tier 1	\$6.40	0-5 HCF, 0-4487 gallons
Tier 2	\$7.24	6-11 HCF, 4488-8975
Tier 3	\$9.12	per 1 HCF thereafter
Commercial/Industrial	\$7.33	per 1 HCF

Santa Clara, California

Item	Rate	Inside City
Base Rate (3/4")		\$23.42
Base Rate (1")		\$36.67
Base Rate (2")		\$109.51
Tier 1	\$8.90	PER HCF
Tier 2	\$14.00	Next 10K
Tier 3	\$27.00	Next 20K
Tier 4	\$41.00	Over 30K

Hailey, Idaho

Item	Rate	Inside City
Base Rate		\$9.22
Tier 1	\$0.51	\$0.51 1-10000
Tier 2	\$1.03	\$1.03 11000-20000
Tier 3	\$1.56	\$1.56 21000-30000

Utah Entities

Hooper Water Improvement District, Utah

Item	Rate
Base Rate (5/8")	\$28.46
Base Rate (1")	\$50.66
Base Rate (1 1/2")	\$113.85
Base Rate (2")	\$202.37
Base Rate (3")	\$455.39
Res Tier 1	\$3.00 1,000-8,000
Res Tier 2	\$3.46 8,001-20,000
Res Tier 3	\$5.27 20,001-35,000
Res Tier 4	\$6.73 35,001-50000
Res Tier 5	\$8.09 over 50,000

Granger Hunter Water Improvement District, Utah

Item	Rate
Base Rate (3/4" & 1")	\$17.49
Base Rate (1 1/2")	\$87.45
Base Rate (2")	\$129.92
Res Tier 1	\$1.59 <7,000
Res Tier 2	\$2.23 7,001-15,000
Res Tier 3	\$3.18 15,001-45,000
Res Tier 4	\$4.24 45,000 and above
Commercial	\$2.44 over 50,000
Mobile Home Water Rate	\$1.59

Uintah Highlands Improvement District, Utah

Item	Rate
Base Rate	\$20.00
Base Rate Out of District	\$40.00
Res Tier 1	\$0.50 0-5,000
Res Tier 2	\$1.00 5,001-10,000
Res Tier 3	\$3.00 10,001-15,000
Res Tier 4	\$3.50 15,001-20,000
Res Tier 5	\$4.00 20,001-30,001
Res Tier 6	\$4.50 30,001-40,001
Res Tier 7	\$5.00 40,001+

Jordan Valley Water Conservancy District, Utah

Item	Rate
Base Rate (5/8")	\$3.00
Base Rate (3/4")	\$3.00
Base Rate (1")	\$4.00
Base Rate (1 1/2")	\$5.00
Base Rate (2")	\$8.00
Meter Size	Tier 1 Tier 2
5/8"	1-6 7-16
3/4"	1-9 10-23
1"	1-18 19-46
1-1/2"	1-36 37-92
2"	1-58 59-147
3"	1-140 141-359
4"	1-257 258-658
6"	1-515 516-1316
8"	1-1024 1025-2617
	Tier 3 Tier 4
	17-37 38+
	24-53 54+
	47-106 107+
	93-212 213+
	148-339 340+
	360-827 828+
	659-1516 1517+
	1317-3032 3033+
	2618-6031 6032+



Other methods considered by entities throughout the western states:

- **Los Angeles approach**
 - Pricing fluctuates with source of water – during drought conditions and the need to access more expensive water, tiered water rates will reflect these factors
 - Household numbers were used to adjust for larger numbers of people living in a single spot – how to police?
 - California is not allowed to have subsidized retail or tiered water rates
- **From the article published by Science Direct Similar**



- Blanding, UT:

In 2019, the city launched a color-coded rate structure for water availability and price tiers (Blanding City, n.d.). Each spring, engineers forecast Blanding's water supply for the rest of the year according to a calibrated hydrologic model of mountain snowpack, runoff estimates, and reservoir storage. They then recommend a water supply condition to the city council to set the rates. The approach is similar to Sydney, Australia's dynamic prices in that the availability of water dictates the rates for a time. While Sydney monitors a single variable and has a single response, Blanding has several. Results are communicated to residents in a simple color-coded designation:

- Green: Water levels are high and sufficient water is available for all outdoor watering needs.
- Yellow: Water levels permit outdoor watering, but everyone should act prudently to avoid waste.
- Orange: Water is scarce and outdoor watering is restricted. Lawns and crops may suffer.
- Red: Water is extremely scarce and only indoor water use is permitted.

The total available water volume is divided by the number of residential water connections to determine each connection's water allotment (a level of service). In a word, it is "rationing," but more proactive than reactive, and without the dire overtones that the term usually implies (Lund and Reed 1995). The allotment meets a specific conservation goal, as is the intent of water budget rates, and has a defensible hydrologic basis. While it may change from one year to the next, it is simple to understand in Blanding's context of an isolated and finite water supply.

- Saratoga Springs: allocating users a limited allotment of water sufficient to cover essential needs and adjusting prices based on the severity of local drought conditions. The City separated the drinking water from the irrigation water and established a monthly allowance, a set number of gallons sufficient for the size of each property. The City then established pricing to incentivize remaining in these usage allotments. For instance, a resident that utilizes 150% of their water pays approximately 6x more per gallon than someone who only uses 75% of their allotment. On top of that, the City has the power

to reduce the size of those irrigation buckets based on drought conditions, like it did last year when it cut allotments by 20%. From a conservation standpoint, it worked. Saratoga Springs residents reduced their water use by [22%, 19% and 10%](#) in July, August and September of 2022, respectively, compared to the previous year. (cited from an article by KUER 90.1)

- Research Article - [Innovative water rates as a policy tool for drought response: Two case studies from Utah, USA](#)
- News Article - [Here’s how 2 Utah cities conserved more water — and what others can learn from them](#)

- **IRB** Charging by number of people living at a residence
 - This concept is helpful to adjust charges by people living at each residence but proves difficult to verify and police
 - As numbers fluctuate, owners are not timely in making adjustments
- **IRB** For outdoor watering, adjust rate to match property size with an allowance for per acreage watering standards
 - Additional analysis on this approach should be considered

COMPARABLE RATE STRUCTURES

As discussed herein, there is a balancing act of implementing both base rates and tiered rates. The following tables outline random entities in the Comparable States have structured their rates as compared to those in Utah. A few highlights include:

- **IRB** Water in Idaho and Utah are amongst the cheapest in the Comparable States
- **IRB** Based upon the small pool of random candidates, we observed the following ratios when comparing water costs amongst different users:
 - It should be noted that there are two ratios:
 - One calculates the difference with the base rate in the total costs
 - One calculates the difference without the base rate in the total costs

ITEM	WITH BASE RATE: AVERAGE	WITH BASE RATE: LOW	WITH BASE RATE: HIGH
OUTSIDE UTAH			
Difference from 10K to 20K	56%	21%	54%
Difference from 10K to 30K	122%	54%	126%
INSIDE UTAH			
Difference from 10K to 20K	25%	15%	30%
Difference from 10K to 30K	57%	31%	68%

WITHOUT BASE RATE: AVERAGE	WITHOUT BASE RATE: LOW	WITHOUT BASE RATE: HIGH
OUTSIDE UTAH		
157%	93%	202%
355%	192%	508%
INSIDE UTAH		
188%	100%	176%
405%	200%	517%



Detailed information is provided below:

NON-UTAH RANGE OF ANNUAL WATER COSTS W/ PROPERTY TAX	LOW	HIGH
Residential (10K Gallons) (3/4" Meter)	\$287	\$1,641
Residential (20K Gallons) (3/4" Meter)	\$349	\$2,262
Residential (30K Gallons) (3/4" Meter)	\$443	\$2,932
Business (20K Gallons) (1" Meter)	\$349	\$2,342
Non-profit (30K Gallons) (2" Meter)**	\$327	\$3,428
NON-UTAH RANGE OF ANNUAL WATER COSTS W/O PROPERTY TAX	LOW	HIGH
Residential (10K Gallons) (3/4" Meter)	\$459	\$688
Residential (20K Gallons) (3/4" Meter)	\$661	\$988
Residential (30K Gallons) (3/4" Meter)	\$897	\$1,388
Business (20K Gallons) (1" Meter)	\$750	\$970
Non-profit (30K Gallons) (2" Meter)**	\$1,364	\$1,622
NON-UTAH RANGE OF ANNUAL WATER COSTS COMBINED	LOW	HIGH
Residential (10K Gallons) (3/4" Meter)	\$287	\$1,641
Residential (20K Gallons) (3/4" Meter)	\$349	\$2,262
Residential (30K Gallons) (3/4" Meter)	\$443	\$2,932
Business (20K Gallons) (1" Meter)	\$349	\$2,342
Non-profit (30K Gallons) (2" Meter)**	\$327	\$3,428
UTAH RANGE OF ANNUAL WATER COSTS W/ PROPERTY TAX	LOW	HIGH
Residential (10K Gallons) (3/4" Meter)	\$380	\$787
Residential (20K Gallons) (3/4" Meter)	\$463	\$985
Residential (30K Gallons) (3/4" Meter)	\$547	\$1,218
Business (20K Gallons) (1" Meter)	\$553	\$1,315
Non-profit (30K Gallons) (2" Meter)**	\$528	\$1,542
UTAH RANGE OF ANNUAL WATER COSTS W/O PROPERTY TAX	LOW	HIGH
Residential (10K Gallons) (3/4" Meter)	\$270	\$456
Residential (20K Gallons) (3/4" Meter)	\$350	\$576
Residential (30K Gallons) (3/4" Meter)	\$453	\$736
Business (20K Gallons) (1" Meter)	\$382	\$576
Non-profit (30K Gallons) (2" Meter)**	\$555	\$696
UTAH RANGE OF ANNUAL WATER COSTS COMBINED	LOW	HIGH
Residential (10K Gallons) (3/4" Meter)	\$270	\$787
Residential (20K Gallons) (3/4" Meter)	\$350	\$985
Residential (30K Gallons) (3/4" Meter)	\$453	\$1,218
Business (20K Gallons) (1" Meter)	\$382	\$1,315
Non-profit (30K Gallons) (2" Meter)**	\$528	\$1,542

* Non-Utah includes Colorado, Nevada, Arizona, California, Idaho, and New Mexico

** Property tax levy not included in the calculation

Assumptions: 31 days per month, \$500,000 real estate value



HOW DO WE CREATE MARKET SIGNALS THAT PROMOTE WATER CONSERVATION AND REVENUE STABILITY? (RETAIL SUPPLIERS)

- Tiered water rates is pricing water that incentivizes lower usage to pay lower amounts.
 - That has been effective to the degree of the public understanding the need to conserve water while their willingness to pay an amount for a green lawn
 - Base rates seem to fluctuate based upon three pressure valves: i) recovering the costs of operating individual systems, ii) capital needs and iii) risk tolerance to collect sufficient revenues to operate the system
 - The tiered approach recognizes the various levels of water: a) essential needs, b) water wise outdoor use, c) “typical” outdoor use and d) excessive use.
- Elevating the analysis to established tiered rates. Costs of service study is an evaluation of costs of the various users on the system and the tiering structure insuring that the equitable sharing of costs amongst the classes. It is a refined analysis of sharing costs and introduces additional costs above what entities are willing to pay and need to pay. Current studies only consider averages and general classes of entities, thus being broader in nature.
- Secondary water has largely gone unmanaged until recently. Until a tiered water rate is placed on secondary water, it may likely continue to incentivize overconsumption of water. Furthermore, systems with secondary water will continue to dilute the impact of tiered rates on drinking water as customers have a nominal impact on water conservation from indoor use. Focusing conservation efforts on secondary water could see material savings in reducing water consumption.
- Provide education
 - Hired consultants to generate videos, mailed popcorn with stickers to watch water conservation films, 10,000 views in first month, entered float in parade (won award), got all parade viewers engaged.
 - Message needs to touch them emotionally, otherwise it will be ignored
 - Need \$2M more for education – radio, commercials, billboards, county fairs, 4th of July event, on teaching importance of water conservation
 - Most citizens not interested in saving water for more development
 - However many citizens committed to good causes
 - Stream flows
 - Species preservation
 - Great Salt Lake needs and similar needs
 - There was a focused response that the best conservation will come in fixing existing infrastructure with significant leakage issues.
 - Greater efficiencies
 - Eliminating leaks



- WCWCD
 - WCWCD took proactive measures towards water conservation by drastically increasing the costs of high-water usage by implementing a surcharge for excessive water use by purchasers of newly constructed buildings. As of the date of this report, the data was still sparse but showing signs of curbing use. While this is a proactive step, it's currently limited to new construction and not customers whose properties were developed before the policy was adopted, hence a smaller portion of current customers. This might be expanded in years to come.
- Work with homebuilders to reduce impact fees if they build water efficient homes (up to \$5-6K per home in savings)
- Consider City of Boulder
 - <https://bouldercolorado.gov/services/water-utilities#section-287>
- Better information to users in a timely manner
 - Actual usage faster
 - Regular update
- Economists view
 - Right now with tiered structure often this is the case:
 - Customer 1: \$40 for base rate, plus variable usage \$20 for 10K gallons
 - Customer 2: \$40 for base rate, plus variable usage \$40 for 20K gallons
 - Even though Customer 2 used 2x of much water, they only paid 33% more
 - Have rich / excessive water users offset the costs of those low-income / low-water users
 - Not recommending taking base rate to \$0, but reduce to very nominal amount then divide total water delivered and individual use (100K gallons divided by each household use)
- Credit side:
 - Splitting revenues amongst the funding sources helps mitigate credit risk
- Need to be careful about implementing a one-size fits all approach to financing infrastructure. Each system is unique with population, size, topography, demographics, costs etc. Each community has different resources, missions or focuses that influence policy decisions. Do not create collateral damage by trying to create a simple, single infrastructure funding model, consider differences of communities.
- Is there a concerted effort to work with School Districts on efficiencies?
 - Who is targeting bigger users?
 - Who is coordinating with developers?
 - Older communities flipping strips? New communities really can benefit from proper policies today.

This needs to be top down. Many citizens are frustrated with perceived bad governance or water usage at the state, city and/or district levels when they see poor watering habits.



Examples include when governmental entities are watering midday, watering park strips, watering flowers in medians, and not implementing waterwise landscaping.

The input from the interview process provided the following feedback:

- Continued education and programs
- Community wide elimination of park strips and badly watered areas
- Better education and programs to larger users, i.e. school districts feel they do not have support of certain districts
- Provide education, there is really not too much education and information on this front:
 - One District hired consultants to generate videos then mailed popcorn with stickers to entice residents to watch water conservation films and related materials. The District experienced 10,000 views in first month
 - The same District entered float in parade, even winning an award, that was successful engaging the parade viewers.
 - Message needs to touch them emotionally, otherwise it will be ignored
 - Most entities would welcome additional funding for more education – radio, commercials, billboards, county fairs, 4th of July event, on teaching importance of water conservation
- In addressing what motivates residents on water conservation, most citizens are not interested in saving water for more development. However, they seem to be responsive to social benefits or environmental benefits such as:
 - Stream flows
 - Species preservation
 - Great Salt Lake and similar needs
- There was a focused response that the best conservation will come in fixing existing systems:
 - Greater efficiencies
 - Eliminating leaks
 - Ogden & Moab good examples of high leaks
- Community benefits
 - Reservoirs for recreation, economic development and residential / commercial purposes
 - GSL - industry
- Some believe that the greatest progress has been made
 - Only so much older entities can do
 - Focus on fixing leaks
- Future progress will be continued efforts to implement policies for new construction
- Continued efforts around replacing old infrastructure with newer more efficient items, i.e. water meters, toilets, flipping strips, landscape conversions and reducing waste



DISADVANTAGED COMMUNITIES & WATER AFFORDABILITY AND IMPACTS TO MEDIAN HOUSEHOLD INCOME AND LOW INCOME.

As mentioned above, most entities do not have a specific policy dictating rates for the disadvantaged communities. However, many entities that seek State funding must adhere to the limit of setting rates so that they are less than ~2% of household median gross income.

During the application process for loans and permits, they must demonstrate that their rates are within these limits to qualify for the loan. As such, many entities pay attention to the costs of water as it relates to median household income to remain candidates for these loan interest rate loans and seeking permits.

The water community is very cognizant of the impact of water rates on low-income households. The base rate and tiered structure of water rates was established to create equity amongst all those accessing the water network while making access to essential amounts of water the most affordable. The practices in place today attempt to balance the scales of being equitable while being affordable.

The tiered water structure allows those who either use little water or are water efficient to be subsidized by those who use standard and excess amounts of water.

On initial review of the state code, there is no prohibition on direct subsidization of upper water users for those lower income households. Policy makers must be cognizant of the impacts to other users if certain classes were subsidized by others.

Potentially lowering base rates and placing more burden on higher water users could reduce the burden on lower income households.



Elimination of Property Tax and Shifting Burden

If the reduction or elimination of property tax revenues is considered, a transitional time period should be considered to reduce the impact on low-income families. As properties by lower-income households can be valued lower and/or represent more of the renting community, depending on how water rates are adjusted, those increased rates could outpace the reduction these properties would see in their property taxes. Particularly for renters, until the market self corrects, unless the landlord shared in the benefit for lower property taxes, most renters will not see that benefit but will be required to pay higher monthly water rates.

While the analysis in this study has focused on 100% elimination of property tax as a means to understand the book ends of the analysis, collecting some level of property taxes could provide a middle ground to a) expand and maintain the regional infrastructure and services that districts provide, b) ease the burden on shifting to a 100% water rate and c) capturing stable revenues from all property owners in a region could be a happy medium. Additional studies would need to be undertaken to understand what level of property tax is required.

Would there be a goal of replacing abatement programs run through property tax collections

 How would those run without property taxes?

- IRB If placed on cities, how to get uniformity city to city?
- IRB If placed on cities, further burdens lower income areas to increase rates to offset approximately 3-4% of users on abatement programs.

Most retail providers do not have the staffing or technical capacity to evaluate qualifications for abatement programs.

BASE RATE (FIXED COSTS) VS. TIERED WATER RATE (CONSERVATION)

As discussed throughout this study, there are various thoughts about how water rates, base rates and tiered rate structures should be established, balanced and overall applied. We observed the following opinions during the interview and research periods:

- IRB Some argue base rate needs to be higher to offset elasticity of water while others argue base rate should be lower to have tiered rates account for difference in water usage
- IRB Entities evaluate their risk tolerance vs. revenue stability in establishing rates
- IRB Many entities prefer having higher base rates to cover the essential operating and capital infrastructure costs required to maintain their respective systems. They support the tiered structure to promote water conservation, rewarding those who use less water to pay the lowest amount possible while those who use extra water pay the escalating price.
- IRB Many suggest a larger base rate accounts for the costs to access the water system which capital infrastructure expenses consistent across users while the tiered rate pays for the water consumption. Meaning, for two neighbors, the costs to connect them to the system are the same regardless of how much water is utilized; capital costs can be the lion's share of the expense. If one customer uses more water, they pay for that added "expense" in the water rate which is amplified when more water is consumed.
- IRB Others suggest that the larger base rate with lower tiered rate components diminish the value of water conservation pricing. For example:
 - o \$40 base rate with average use could produce \$20 tiered rate component for total bill of \$60 per month
 - o \$40 base rate with 2x the average use could produce \$40 tiered rate component for total bill of \$80 per month
 - o Even though the second user used 2x the amount of water, they only paid 33% more than their neighbor
- IRB There are arguments for revenue stability due to the core costs of operating a system balanced with motivating conservation.
- IRB Water utilities measure and calculate the level of risk they feel reasonable in establishing rates.
 - o More risk averse: higher base rate, lower tiered component
 - o Lower risk averse: lower base rate, higher tiered component
 - o When measuring risk, entities consider affordability, stability of revenue flows to support operations and equity amongst classifications



In exploring policies that would seek equity, all agencies highlighted that each area has unique issues. What would work in area “a” might not have the same efficacy in area “b”. Additional considerations and alternatives to what is commonly applied today include the following ideas:

- Introduce more base rate structures:
 - Additional base rate classes more specific to users
 - Commercial (various types), residential (apartment vs. single family home), agricultural (type) and large consumer vs. small consumer
 - Tiered rates could adjust further based upon class of users
 - Base rate for residential user could be smaller along with tiered rates to cover basic costs
 - Base rate for commercial could be scaled higher to not only cover higher water consumption, but also larger fixed component to cover their required scaled infrastructure
 - This scale allows for elderly individuals to pay their fair share as a small user vs. the hotel whose infrastructure / water needs are much higher
 - Changed to make sure multifamily units each have a base rate rather than simply the complex; \$57 divided by 10, each apartment was \$5.7 where a single-family home was \$27
- Certain entities have water included in base rate where others do not
- First tier usually reserved for essential water
- Tier 2 is standard use
- Tier 3 is implementing conservation efforts
- Tier 4 trying to be punitive to over watering
- Standard is 3-4 tiers, while some have 2 and some have 6

DIFFERENCES BETWEEN PRIMARILY A WHOLESALER AND PRIMARILY A RETAILER

The table below highlights the differences between a wholesaler and a retailer

WHOLESALER	RETAILER
Providing water to retailer	Providing water to end user
Thinking current and future infrastructure expansion with boards usually able to address water needs 30+ years down the road	Focused on immediate needs; often city councils are focused on 4-yr increments
Only have handful of customers, fewer contracts than retailers	Interact with end users which typically are numerous
Take or pay contracts are common	Month to month contracts; feel elasticity of water firsthand
Revenues are typically much more stable	Revenues can fluctuate more broadly

A particular difference between wholesalers and retailers is how they charge for services. Where wholesalers sell larger “blocks” (quantities) of water, they are usually priced on a take-or-pay medium with no tiered structure. While conservation is important to wholesalers so they can delay the development of new water sources, their pricing has not necessarily



motivated conservation through tiered water rates. This practice is due to the fact that they sell blocks of water and pass-through costs.

To that end, all wholesaler districts in Utah require their retail customers to implement water wise and/or water conservation practices before they purchase more water. While tiered rates are not applicable at the wholesale level, they strictly encourage and enforce water conservation practices across their retail partners.

Many districts partner with their retail partners on grant incentives for water wise projects, education grants, flipping strips funding, swapping out inefficient appliances, etc. The water conservation gardens are also managed at the larger wholesale district level.

HOW DOES AN ENTITY HANDLE EXCESS REVENUE FROM CONSERVATION RATES?

All entities chuckled when this question was posed during the interview process. There is no such thing as extra revenues in the water world with all the needs on the systems. Any revenues from a given year that exceed the entity's budget are applied as follows:

- LRB More often than not, extra monies from a given year are transferred into the capital project fund to either:
 - Fund deferred projects or
 - Offset future needs
- LRB It was never reported that extra revenues in a given year resulted in a rate decrease
- LRB However, there are rare instances of deferring or decreasing a planned rate increase should sufficient monies be on hand to address capital needs



WHERE IS THE BEST PLACE TO ADDRESS WATER CONSERVATION EFFORTS (LEGISLATIVELY AND/OR ADMINISTRATIVELY AND/OR EDUCATION)

Everyone responded to this question suggesting that conservation initiatives, including tiered rate structures, are a local issue as every community has unique characteristics / culture that should be taken into account. Being told what to do from afar can be off putting if local needs or priorities are different. There are not statewide single solutions that comprehensively will address local issues. These messages are best focused on regions with specific needs and efforts in mind.

That being said, everyone acknowledged that responsible stewardship starts from the top down with the state and larger districts standing as good examples. **The State** can set the tone, can create programs, fund incentives and be a good example. **Districts** can implement local programs and educate. **Retailers** can help price and educate / share information.

MAKE RECOMMENDATIONS BASED ON THE SIZE AND TYPE OF SYSTEM

No one supported a statewide system for setting tiered rates, uniform policies or State lead management. Everyone, cities, districts, non-profits, professionals and economists alike, supported the regional water wholesalers to think regionally while allowing cities and retail

districts to deliver water to the end customers. Many commented about how many regional assets would not exist without larger, regional districts. The larger districts are able to think long-term and not get bogged down in politics or costs that affect individual entities.

Empowering individual retailers to address needs area by area while allowing regional districts to develop water has been efficient.

ANALYSIS OF ELIMINATING A PROPERTY TAX

ANALYZE THE EFFECT OF ELIMINATING OR REDUCING PROPERTY TAX REVENUE AS A FUNDING SOURCE FOR COSTS RELATED TO WATER INFRASTRUCTURE, TREATMENT, OR DELIVERY:

To analyze eliminating or reducing property tax revenues, additional detail is required for consideration, including:

- URB Understanding generally what portion of Utah districts’ respective budgets are derived from property tax revenues

All Utah district summary (retail districts and whole districts combined):

Revenue Category	Average	Average Percent of Revenue	Low Percentage	High Percentage
System Revenues	\$7,607,827	47.2%	6.2%	99.8%
Non-operating Revenue	\$543,576	3.4%	1.0%	99.8%
Property Taxes	\$3,618,012	22.5%	1.0%	60.9%
Capital Contributions	\$2,236,229	13.9%	6.6%	49.7%
Grants	\$964,087	6.0%	30.1	61.9%
Impact Fees	\$1,141,373	7.1%	4.6%	41.6%
Average Total Revenue	\$16,111,103			

Water conservancy district (primarily wholesale):

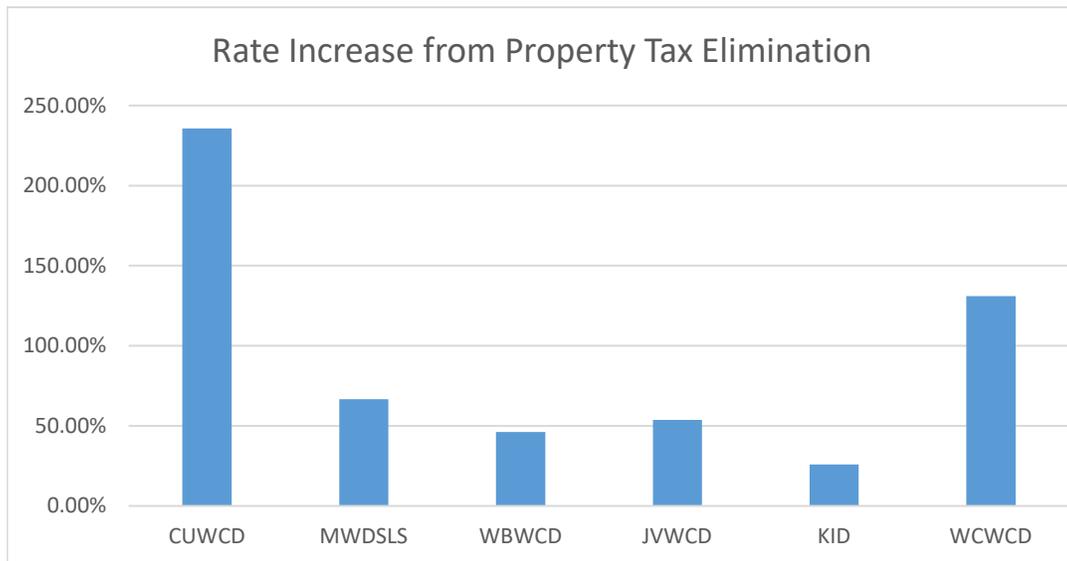
Revenue Category	Average	Average Percent of Revenue	Low Percentage	High Percentage
Revenue	\$19,921,330	53.2%	0.0%	99.9%
Non-operating Revenue	\$1,112,352	3.0%	0.1%	54.3%
Property Taxes	\$11,944,698	31.9%	2.6%	92.9%
Capital Contributions	\$1,444,578	3.9%	.03%	18.5%
Grants	\$3,053,939	8.1%	2.2%	42.0%
Average Total Revenue	\$37,476,896			



For additional context, the tables above are depicted here as charts:

- The following table suggests potentially how much Utah districts could need to increase their water rates to offset the reduced revenues from property taxes. This analysis includes both wholesale districts along with regional districts that have retail customers.

PERCENT INCREASE TO WATER RATES TO OFFSET PROPERTY TAX REVENUE						
FISCAL YEAR	2019	2020	2021	2022	2023	2024
CUWCD	197.07%	73.08%	247.71%	249.74%	294.09%	279.91%
5yr AVG					212.34%	
MWDSLS	64.00%	67.60%	68.80%	68.50%	66.32%	66.32%
5yr AVG					67.05%	
WBWCD	39.11%	38.62%	35.03%	33.32%	53.78%	59.32%
5yr AVG					39.97%	
JVWCD	48.92%	43.40%	43.62%	55.77%	58.18%	57.95%
5yr AVG					49.98%	
KID	23.86%	20.28%	23.36%	27.57%	27.57%	27.57%
5yr AVG					24.52%	
WCWCD	152.39%	124.16%	136.30%	127.80%	127.80%	127.80%
5yr AVG					133.69%	



- By eliminating property taxes, how would this potentially alter monthly rates? The following table highlights potential adjustments to retail water rates by accounting for the elimination of property tax revenues and shifting those costs to monthly water rates. This table is illustrative of potential impacts; actual circumstances and analysis



will likely adjust these figures based upon thorough analysis and isolation of the myriads of variables impacting setting water rates.

To read the table below, here is the flow:

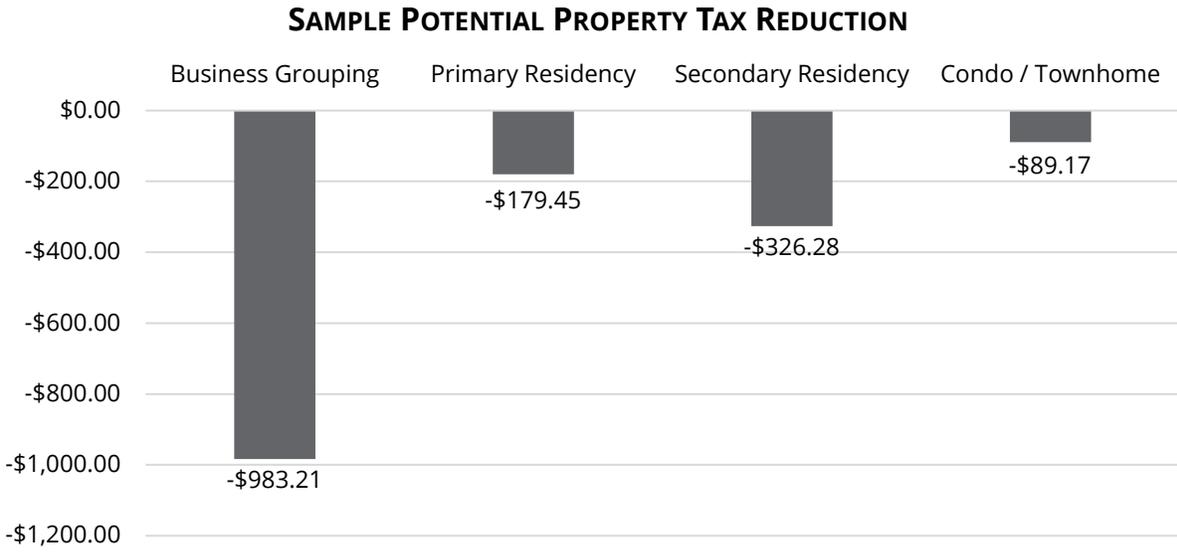
- Column #1: an average tax bill based upon available tax rates based on an average on a small grouping of references properties (if tax is removed, the tax bill would be decreased by this amount)
- Column #2: potential categorical rate increases should property tax be removed
- Column #3: adding 1 & 2
- Column #4: based upon the pool of properties, minimum increase in costs
- Column #5: based upon the pool of properties, maximum increase in costs
- Column #6: based upon the pool of properties, average increase in costs

Positive figures in this chart depict decreases in water-related costs while (negative) figures in this chart depict increases in water costs.

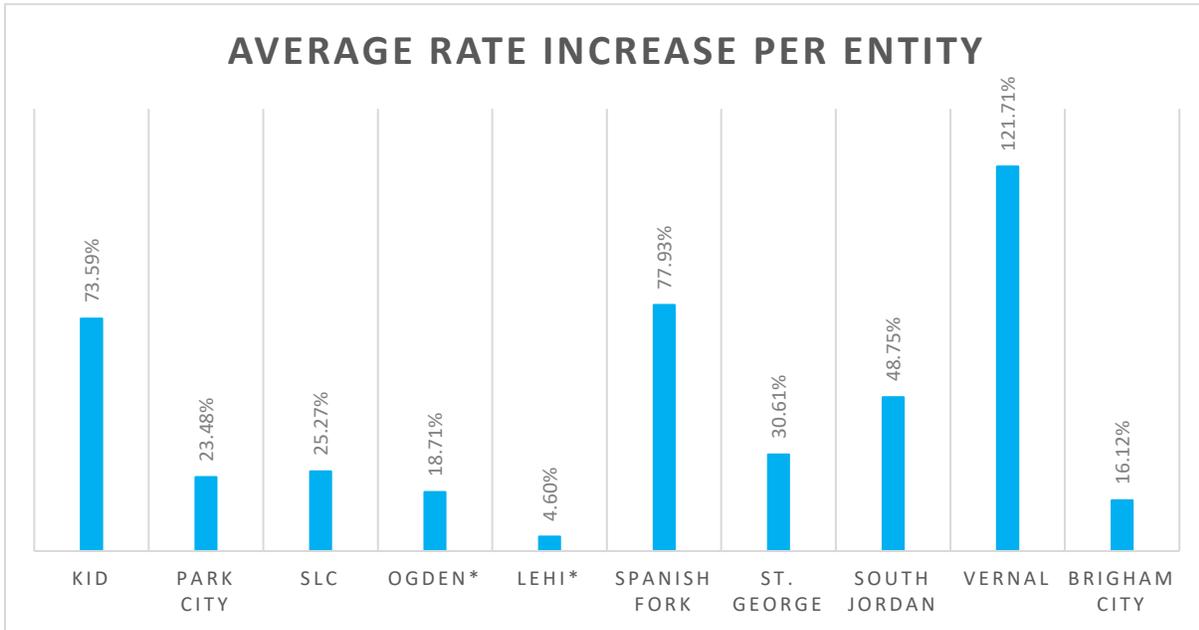
AVERAGE SAMPLING OF IMPACTED WATER RATES						
TYPE OF REAL ESTATE	1 TOTAL AVERAGE TAX BILL DECREASE	2 PROJECTED CHANGE (INCREASE) IN ANNUAL WATER BILL	3 DECREASE OR (INCREASE) IN TOTAL WATER RELATED EXPENSES	4 AVERAGE LOW WATER COSTS IMPACT DECREASE OR (INCREASE)	5 AVERAGE HIGH WATER COSTS IMPACT DECREASE OR (INCREASE)	6 AVERAGE WATER BILL DECREASE OR (INCREASE)
Business Group #1	983.21	(1,352.19)	(368.99)	(5,510.34)	1,984.03	(1,763.15)
Business Group #2	993.18	(533.92)	459.26	157.94	2,336.24	1,247.09
Primary Residency	179.45	(245.64)	(66.18)	(48.82)	135.65	43.41
Secondary Residency	326.28	(252.52)	73.76	(2.53)	363.05	180.26
Renter	-	(232.17)	(232.17)	(295.93)	(13.33)	(154.63)
Schools	-	(4,812.44)	(4,812.44)	(18,528.50)	(84.34)	(9,306.42)
Parks	-	(14,026.71)	(14,026.71)	(98,888.78)	(24.78)	(49,456.78)
Churches	-	(1,128.35)	(1,128.35)	(2,518.64)	(15.32)	(1,266.98)
Other	-	(1,919.66)	(1,919.66)	(8,277.75)	(22.32)	(4,150.04)



POTENTIAL DECREASE IN PROPERTY TAXES (AVERAGE BASED ON SAMPLE TEST CASES):



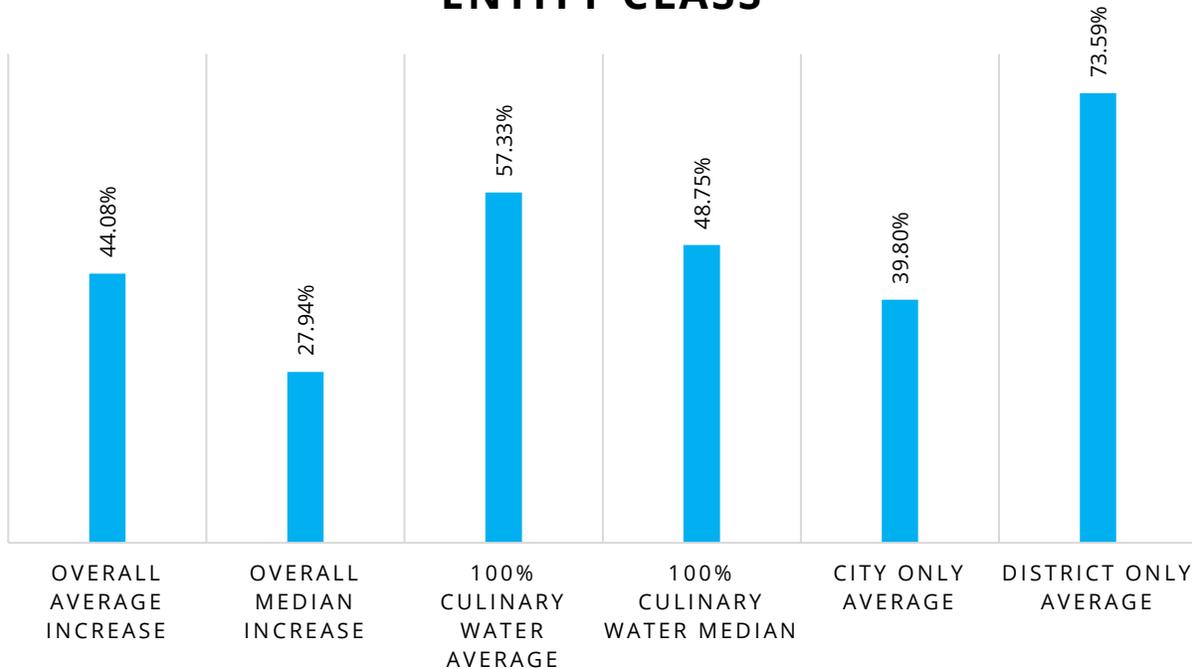
POTENTIAL AVERAGE INCREASED RATE REVENUE NEEDS PER RETAIL ENTITY (AVERAGE BASED ON SAMPLE TEST CASES):



* Cities with secondary systems that may see alternative impacts.

POTENTIAL AVERAGE RATE INCREASE PER ENTITY CLASS (AVERAGE BASED ON SAMPLE TEST CASES):

AVERAGE WATER RATE INCREASE PER ENTITY CLASS



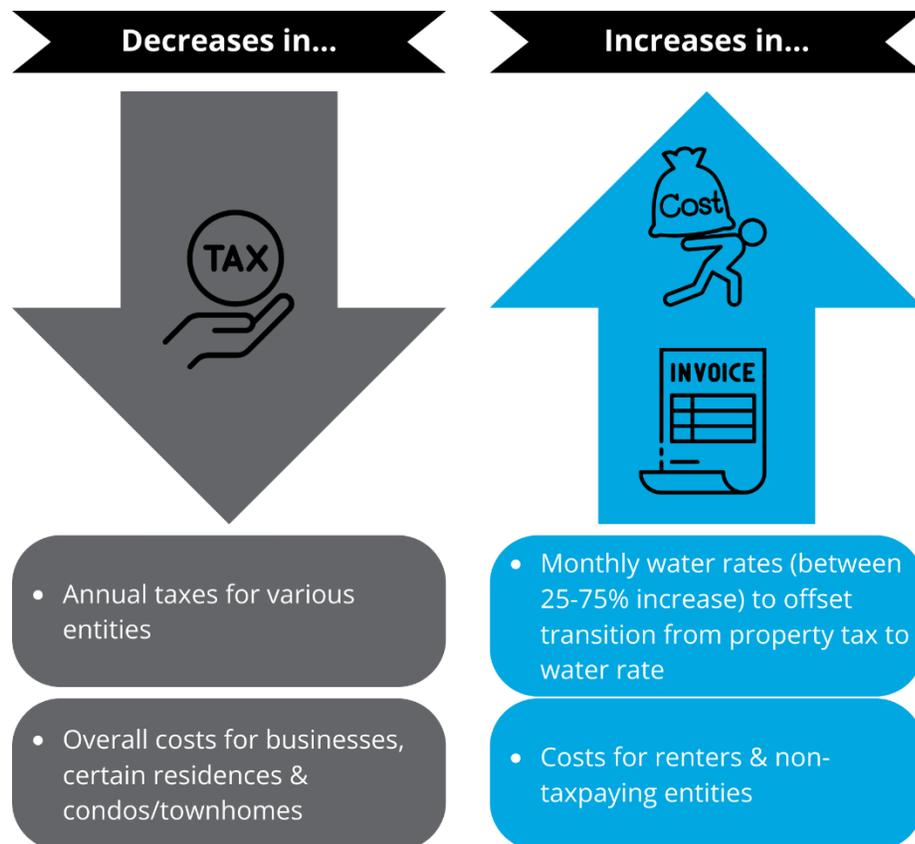
IMPACT OF SECONDARY WATER

Those retail entities with a separate secondary water distribution system realized more modest increases from eliminating property taxes as compared to those entities with 100% drinking water systems. This is due to the fact that secondary water is untreated and utilized 100% outdoors and largely charged on a flat rate basis. Being untreated, it is normally sold at a remarkably lower rate (often a fixed rate) than drinking water. As mentioned above, there is a focused effort statewide to install meters to both charge for water usage, educate the public about their secondary water usage and curtail excessive use.

Systems that also supply secondary water will likely not see the same rate of conservation from aggressive tiered rates. This is because the impact of tiered rates on indoor water use alone is nominal when compared to systems where outdoor use is supplied by drinking water. In these situations, focusing conservation efforts on secondary water and outdoor use could see material savings in reducing water consumption.

BALANCING FACTORS

As with many aspects of life, what benefits one party can be at the detriment of another. The table below highlights a potential series of tradeoffs compared with the status quo with the reduction or elimination of property tax revenue. The following charts restate a few of these tradeoffs. Some of them could have a significant impact on water providers and water customers. One of the questions for policy makers to consider is whether these tradeoffs will actually help achieve the goals or objectives that motivated the change in policy in the first place.



ELIMINATING PROPERTY TAXES	INCREASING WATER RATES
Due to the reliable nature of property taxes, transferring to water rates would increase the costs of water as water rates are more elastic and less certain, thus rates would need to be higher to offset this irregularity	Certain parties (likely renters, non-profits, higher education, and governmental entities like cities, school districts, cemeteries, parks) could likely pay more depending on how the new rates are set
All costs on water bill	Could increase costs of water
Eliminating property taxes directly impacts districts	Could influence costs of water higher
Certain entities have legal obligations to retain property tax revenues	Certain entities have no legal obligations to retain property tax revenues
Utah's cities haven't tapped property taxes yet as a source of revenues	Cities do not utilize property taxes, but would see an increase in costs from districts
Property taxes offset expenses, support capital projects and enhance debt; removing taxes would transfer that dependency to water rates	Place 100% costs on water rates is more transparent but could increase costs and/or lower services if revenues are curtailed
Certain parties (likely business and residences) could pay less depending on how the new rates are set	Places larger burden to fund regional providers on certain customer and not others, such as undeveloped property that will benefit from development of future water supplies.

There are several different means to adjust property taxes to both limit the impact to the end users and shift the perception of fair and equitable sharing of water rates amongst all classes. To achieve that end goal, the following are potential implications with perceived winners and losers along the way:

- The overall costs of water could increase due to the following reasons:
 - Because property taxes are an extremely consistent and reliable source of revenue, to replace it with a more elastic revenue stream could potentially require increased cashflow to mitigate the risk of under-collection
 - Cashflows could potentially increase to both account for elasticity as well as increasing reserves to enhance the credit profile and maintain their bond ratings (similar to a credit rating)
 - As property taxes are largely utilized to directly offset expenses, which frees up water revenues for debt service coverage, water rates could potentially increase at 125% to offset property tax losses
 - For every dollar of property taxes that are eliminated, that could potentially require \$1.25 increase in water revenues
- In analyzing the potential impact of reducing property taxes, the analysis considered reducing the property tax expenses while increasing the monthly water rate bill
 - Customers that could potentially realize lower overall water costs:
 - Businesses with standard or lower water usage
 - Secondary homes
 - Mid to upper valued homes
 - Customers that could potentially realize higher overall water costs:
 - Renters
 - Lower valued homes



- Higher water user business
- Governmental entities, i.e. cities, counties and school districts
- Non-profit organizations
- City / county greenspaces like parks, golf courses and open fields
- Naturally this is all dependent on how water rates are adjusted for whatever change occurs with limiting any or all property tax revenues

WHOLESALE WATER SUPPLIERS' ABILITY TO PREPARE FOR ANTICIPATED LOCAL AND REGIONAL WATER DEMAND

The common thread among all water districts that levy a property tax is that tax revenue is used in three major categories: 1) deliver treated and untreated water to its customers, 2) provide general ancillary services to the public consisting of the services listed in the table below and 3) provide long-term water development of assets to transport and treat water and water rights acquisition. All districts recognize the value of property tax and stewardship placed upon them to deliver value to their current and future customers, regardless of how much water is provided to any particular property. The following direction from the water conservancy act is at the forefront of water districts' mentality in their services:

MISSION SERVICES*	MISSION DIRECTIVE
<ul style="list-style-type: none"> ○ Water-shed protection ○ Streamflow enhancement / projection ○ Fire protection ○ Species protection ○ Flood control ○ Treatment ○ Distribution ○ Regulatory support ○ Storage ○ Planning / funding assistance ○ Recreational opportunities - reservoirs, fishing, campsites ○ Increasing property values ○ Example: thinking about Jordanelle: would MIDA or other major developments happen but for these types of reservoirs 	<ul style="list-style-type: none"> ○ The Water Conservancy Act provides direction on the role WCD provides in their respective service areas and the property tax has allowed them to universally fund and support these larger projects. ○ Expecting new and growing districts to fund infrastructure to serve future development without the use of property tax places a significant burden on current users. ○ The timeframe for planning, funding and constructing future water supply projects may span multiple decades and is significantly different than the types of projects funded through impact fees which usually meet needs over a shorter term. ○ Taking away the property tax would effectually require water conservancy districts to act like a private water provider. ○ There are perceived efficiencies from acting like a private entity, but the property tax introduces public accountability that keeps them serving the greater good rather than specific clients or needs.

* The water conservancy districts regularly provide all of these services. Regional water districts will provide a focused list of services, most often including fire protection, treatment, distribution, storage and limited planning.

When asked about the ability to meet anticipated local and regional water demand with the elimination of property taxes, all wholesale districts were skeptical of their ability to continue providing their current level of service for various reasons:



- While they have the authority to raise water rates sufficient to replace property tax revenues, because of how the shift from property taxes to water rates could potentially occur, would their boards, their customers and the public support an equivalent dollar amount of rate increases? Water revenues might be curbed and limit their operations in meeting future demand.
- Currently, water conservancy districts levy a tax across entire service areas which often align with county boundaries, but they may not necessarily deliver water to each real property directly. They often directly or indirectly support other entities that allow for water development to occur or makes water available to these properties.
- By collecting property taxes, these districts feel a stewardship to all members of the public to develop local and regional water projects. If the property tax went away, their stewardship would shift and only focus on their direct paying customers. They would not have the inducement or responsibility to these non-paying and future customers.
- Water conservancy districts are not able to collect water rates on areas of future demand until infrastructure and growth are brought to those areas; so without collecting property taxes, then districts would have to further increase water rates on current customers to fund infrastructure to those areas of future demand.
- Would they continue to participate in regional projects? Time would tell.

To quantify the amount of property tax utilized to support the local and regional projects, the following outlines examples of potential impacts:

- The larger districts have spent millions of dollars to support local and regional projects by direct support or facilitating bonding activities
- The districts do not necessarily place the property tax revenues into a separate “bucket” for isolated projects but blend it with their overall operations
- As discussed above, larger districts have the means to raise water rates to replace property taxes, but time will tell how that would occur
- Newer districts like Cache County Water District only have property tax revenues and would essentially cease to exist until they could develop water projects to support rate revenues. They would have to enter into water contracts requiring entities to raise water rates until they could deliver the water
- Construction of new water projects might be delayed to ensure that the timing of demand is closer to the completion of the project. If demand rises faster than projected, this may mean some development must wait for supply to catch up.
- Depending on how the revenue shift occurs, bond rates could be negatively impacted. The difference between a “AA” rated bond entity and a “A” would be approximately 0.25% (25 basis points). The impact to a \$10M bond deal would be approximately \$10-15K per annum or \$360K over the life of the bonds.
 - This could potentially be mitigated by purchasing bond insurance, if available

WATER DEVELOPMENT COSTS ASSOCIATED WITH NEW GROWTH

The following list outlines the indicative costs of water development projects for growth (subject to inflation):



- Smaller to midsize water treatment plant: \$75-100M+
- Large water treatment plant: \$200M+
- Treatment plant expansion: \$10-20M
- Wells: \$3-10M
- Transmission lines: \$10-100M
- Water tanks: \$5-20M
- Booster / pump stations: \$1-5M
- Water rights acquisition: \$1-20M



DISADVANTAGED COMMUNITIES & WATER AFFORDABILITY FOR ALL SECTORS

As discussed above, eliminating property tax revenues could potentially increase the costs of water development, treatment and delivery. Early analysis suggests that without a specific effort to adjust rates for low-income households, this community segment is poised to see a cost increase by eliminating property tax revenues.

UNDERSTAND THE DIFFERENT AGES OF WATER CONSERVANCY DISTRICTS AND THE VARYING LEVELS OF DEVELOPMENT

The following table highlights the water conservancy districts current picture. Information was limited for the smaller districts:

WATER CONSERVANCY DISTRICT	FOUNDED / CREATED	TAX RATE	MAX TAX RATE	STATE OF DEVELOPMENT
Bear River	1988	0.000238	0.0003	Despite its age, BRWCD is a district that is in its infancy. It currently owns and operates 6 retail drinking water systems in Box Elder County. Box Elder County as a whole is largely undeveloped. ~ 63,000 served in Box Elder County.
Cache County	2016	0.000019	0.0003	Brand new district, no real assets. ~130,000 served in Cache County.
Carbon County	1942	0.000114	0.0002	Maintaining current assets. ~ 21,000 served in Carbon County.
Central Iron	1997	0.000355	0.001	In the midst of tremendous growth. There are thousands of developable acres in Cedar Valley. ~60,000 served in Iron County.
Central Utah	1964	0.0004	0.0004	Significant buildout remains. Growth still anticipated in South Utah Country & Juab County. ~2 million served in Salt Lake, Utah, Wasatch, Summit, Juab, Uintah, & Duchesne Counties.
Charleston	1981	0.000019	0.0002	Limited growth
Duchesne County	1998	0.000207	0.0003	Limited growth in rural Utah
Jordan Valley	1951	0.000321	0.0004	Expects strong growth to continue in their service area for many decades. ~775,000 served in Salt Lake County and portions of Utah County. Projected to serve ~1.1 million by 2065.



WATER CONSERVANCY DISTRICT	FOUNDED / CREATED	TAX RATE	MAX TAX RATE	STATE OF DEVELOPMENT
Kane County	1994	0.000357	0.001	Still growing. ~1,500 served in Kane County.
Roy Water	1965	0.000045	0.0002	Nearing buildout. ~47,000 served in Weber County.
Uintah Water	1956	0.000401	0.0004	In the midst of accelerating urban development. ~ 38,000 served in Uintah County.
Upper Sevier		0.000168	0.0002	Limited growth in rural Utah
Washington County	1962	0.000404	0.001	Still growing. ~263,000 served in Washington County.
Wayne County		0.000018	0.0002	Limited growth in rural Utah
Weber Basin	1950	0.000196	0.0002	Many counties are still experiencing growth. ~700,000 served in Box Elder, Weber, Davis, Morgan & Summit Counties.
Wellsville-Mendon	##	##	##	No data reported

IMPACTS ON BOND RATING AND CURRENT BOND COVENANTS

In inquiring indirectly with rating agencies on how they view property taxes, they quickly acknowledge that the consistent, reliable nature of property taxes clearly enhances the credit strength of an entity. This credit strength comes primarily from the reliability and consistency of tax revenues. Property taxes have the following inherent value-added qualities:

- Consistent revenues year to year regardless of water year
- Reliability of collections year to year, stable revenue sources
- Built in mechanism to capture growth each year that grows property tax revenues year to year assuming new growth in the area
- As there is an inherent new growth component, this reduces the burden on water agencies to overtly increase their water rates year over year
- Entities with meaningful property tax revenues do not require as significant of fund balances
- Those agencies that were able to enhance their bonds with some type of property tax support realized higher bond ratings and lower interest rates in securing debt

When rating agencies were asked to consider two hypothetical utilities equal in all respects except one of the utilities generates approximately 25% of its revenue from property tax, one agency responded that their model allows for anywhere between one and four notch upgrades for such a situation and they commonly see one or two notch upgrades given for diversified revenue streams with a component of highly stable revenue.

Property tax revenues significantly increase the credit strength of issuers which lowers the interest rates when securing debt.

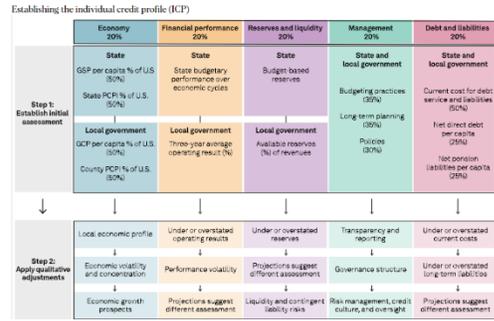
The following table outlines highlights of criteria from the rating agencies to depict how they rank / score various credit components.



AGENCY **NOTES**

S&P

- For the enterprise risk profile:
-  Economic fundamentals 20%
 -  Financial performance: 20%
 -  Reserves and liquidity: 20%
 -  Management: 20%
 -  Debt and liabilities: 20%



For more information:
<https://view.ratings.spglobal.com/viewer/8184111c5361b5db01c6e9191039d27b?iid=66df4c99dd81edf879df20ad>

Moody's

Factor	Factor Weighting	Sub-factor	Sub-factor Weighting
System Characteristics	30%	Asset Condition (Remaining Useful Life)	10%
		System Size (O&M)	7.5%
		Service Area Wealth (Median Family Income)	12.5%
Financial Strength	40%	Annual Debt Service Coverage	15%
		Days Cash on Hand	15%
		Debt to Operating Revenues	10%
Management	20%	Rate Management	10%
		Regulatory Compliance and Capital Planning	10%
Legal Provisions	10%	Rate Covenant	5%
		Debt Service Reserve Requirement	5%
Total	100%	Total	100%

Moody's: <https://ratings.moody.com/rmc-documents/416489>

Fitch

Revenue Defensibility: This entails an assessment of a utility's exposure to demand volatility and the flexibility within its rate-setting framework to recover costs of service and maintain operating profitability.

Operating Risk: This entails an assessment of a utility system's operating cost burden and operating cost flexibility, as well as its current capital spending and future capital requirements.

Financial Profile: Metrics are used to evaluate the utility's leverage and liquidity profiles in the context of its overall risk profile. These metrics are evaluated on both a historical and forward-looking basis, which considers an individual utility's overall financial flexibility to withstand a stress scenario through a five-year horizon.

Asymmetric Additive Risk Considerations: Risk factors, such as debt structure, management and governance, legal and regulatory, are also considered when assigning a rating. These risk factors are not scaled, and only weaker-than-standard characteristics affect the final rating.

For more information: <https://www.fitchratings.com/research/us-public-finance/us-water-sewer-rating-criteria-03-03-2023>



FEDERAL FUNDS AND HOW THEY PLAY INTO THE EQUATION

Both CUWCD and WBWCD are local sponsors of federal projects, meaning the assets are owned by the Federal Government, but they are locally operated, maintained and sponsored. Carbon Water Conservancy District works closely with the Bureau of Reclamation for dam related issues and works with the Water Users of Carbon County concerning the water released from the dam.

- These types of actions are directly referenced in the intent and policy that authorizes Conservancy Districts: UCA 17B-2a-Part 10, Water Conservancy Act, which recognizes the need to cooperate with the United States and its agencies under federal reclamation or other laws and to construct, finance, operate, and maintain works in the state. 17B-2a-1002(1)(e).

CUWCD and WBWCD work hand in hand with the Federal Government to fund, construct, and maintain the assets⁵. Both entities sought and received the public's approval to support their projects with property taxes. These taxes are important to: a) secure federal funding, b) provide the local cost share, c) the districts' ability to legally comply with the terms in their federal contracts⁶, to repay capital costs of the project and d) support the operational expenses of the system. Property taxes are a stable funding source, demonstrate local support for the project and encourages constant support from the Federal Government, which could be jeopardized without the backing of property taxes.



In the early 1990's, the Central Utah Project Funding Tax Force, created by then Governor Leavitt and the State Legislature, reviewed all aspects of the Central Utah Project, including finances. It was determined by this Task Force that property taxes would be an integral part of funding CUWCD and its responsibility on the CUP and the newly completed Central Utah Project Completion Act.

It can be argued but for the property tax revenues, the CUWCD and WBWCD projects may not exist or may not be what they are today. With these projects, much of the development along the Wasatch Front from Weber County in the north to Utah County in the south would have been limited but for bringing water from the Colorado and Weber River Basins. Also, the Utah Legislature has provided some protection to taxpayers by enacting maximum tax rates that water conservancy districts can adopt annually.

⁵ CUWCD is obligated to fund about 35% of the project locally.

⁶ These district's contracts with the Federal Government specifically reference their ability to levy a property tax to support the projects.

PURPOSE AND ROLES OF WATER DISTRICTS

IDENTIFY AND STUDY ANY WATER CONSERVANCY DISTRICT OR SPECIAL SERVICE DISTRICT THAT LEVIES A PROPERTY TAX FOR SUPPLYING WATER BUT DOES NOT PROVIDE WATER SERVICE.

Before evaluating this question, we sought to understand how these districts first obtained the permission or direction to levy a property tax past the borders of the proposed water delivery service area. First, consider the Water Conservancy Act language:

17B-2a-1002 Legislative intent -- Purpose of water conservancy districts.

- (1) It is the intent of the Legislature and the policy of the state to:
 - (a) provide for the conservation and development of the water and land resources of the state;
 - (b) provide for the greatest beneficial use of water within the state;
 - (c) control and make use of all unappropriated waters in the state and to apply those waters to direct and supplemental beneficial uses including domestic, manufacturing, irrigation, and power;
 - (d) obtain from water in the state the highest duty for domestic uses and irrigation of lands in the state within the terms of applicable interstate compacts and other law;
 - (e) cooperate with the United States and its agencies under federal reclamation or other laws and to construct, finance, operate, and maintain works in the state; and
 - (f) promote the greater prosperity and general welfare of the people of the state by encouraging the organization of water conservancy districts.
- (2) The creation and operation of water conservancy districts are a public use to help accomplish the intent and policy stated in Subsection (1) and will:
 - (a) be essentially for the benefit and advantage of the people of the state;
 - (b) indirectly benefit all industries of the state;
 - (c) indirectly benefit the state by increasing the value of taxable property in the state;
 - (d) directly benefit municipalities by providing adequate supplies of water for domestic use;
 - (e) directly benefit lands to be irrigated or drained;
 - (f) directly benefit lands now under irrigation by stabilizing the flow of water in streams and by increasing flow and return flow of water to those streams; and
 - (g) promote the comfort, safety, and welfare of the people of the state.

In describing the public benefits under subsection (2), these districts were essentially mandated back in the 1950s to provide both direct and indirect services to its customers. They continue that same mission today.

Most special districts provide services to a specific service area so are precluded from this section. As for water conservancy districts, all districts that have a county-wide tax would fall under this umbrella as they do not typically directly provide water to every piece of property but support them by providing water to other service entities who provide water or provide the ancillary services referenced above.

While these districts might not provide water directly, they often provide regional support that delivers water to these residents through:

- LRB Delivering water to local provider that then services the resident
- LRB Freeing up water / generating water in the area that allows other service providers to provide water
- LRB Increasing property value
- LRB Regional planning efforts supporting region to deliver water
- LRB EPA support



- Grant support
- Water conservation programs that extend usefulness of existing water sources
- Regional watershed management and protection



In speaking with these entities, while they might not provide water to each individual resident, they described other services they provide that do provide value for the payment of property taxes:

- Water-shed protection
- Streamflow enhancement / protection
- Fire protection
- Species protection
- Flood control
- Treatment
- Distribution
- Education
- Regulatory support
- Storage
- Planning / funding assistance
- Recreational opportunities – reservoirs, fishing, campsites
- Example: thinking about the Jordanelle area, would MIDA or other major developments happen but for reservoirs?

WHAT IS THE PROCESS TO GET OUT OF THE TAX?

Before “getting out of a tax”, it will be requisite to consider the district’s existing obligations, both operational, federal and debt secured by taxes. Certain entities have existing legal obligations to levy property tax. Many entities have direct or indirect obligations of their property tax revenues:

- Debt directly secured by taxes, i.e. GO bonds and certain federal obligations / contracts
- Indirect obligations by levying tax to offset operating expenses to free up water revenues to pay debt obligations
 - While there are methods to exit levying a tax, this will take time to unwind as to not upset the investor community and not negatively impact the independent bond rating agencies
 - The cost of water would increase for the following reasons:
 - Additional reserves may be funded
 - Additional revenues required to increase cashflows for debt service coverage requirements
 - Increasing revenues to offset elasticity of water revenues
 - Increasing revenues to fund infrastructure to those areas of future demand



- Increasing revenues to offset costs of regional water planning, flood control, conservation, etc.

In theory and upon initial examination, a district could choose to eliminate its property tax by simply having the district board vote to reduce or cease levying the tax.

- Obviously, the analysis immediately above would impact these decisions
- There would need to be additional legal review but theoretically the process would be simple outside of the debt considerations and legal obligations referenced above



UNDERSTAND THE DIFFERENT AGES OF WATER CONSERVANCY DISTRICTS AND THE VARYING LEVELS OF DEVELOPMENT

- See tables above on page 77 & 78

WHAT VALUE DOES THE DISTRICT PROVIDE?

As discussed herein, districts play a critical role in securing, developing and delivering water throughout their service areas.

- Regional planning
- Regional water development
- Reservoir management that provides the following services:
 - Water storage
 - Recreation
 - Economic development
 - Flood control
- Examples:
 - WBWCD Snyderville Basin regionalization project brought the major water providers in Summit County together to better manage the assets and meet the overall demands of the area.
 - CUWCD Geneva Water Rights purchase and subsequent Central Water Project development made sure the water secured from the Geneva Steel Bankruptcy remained in the area at the lowest cost possible.
 - BRWCD recent efforts to unify and build upon prior individual water management efforts across the county, incorporating best management practices (“BMP’s”) and assessments of local water resources. This strategic initiative aims to synchronize with the county’s water resource realities and stakeholder aspirations to ensure sustainable water resource management into the future. Scheduled for completion by December 2025.
 - Kane County WCD: As of 2022, the District has constructed nearly \$70M in water system infrastructure and owns over 40,000 acre-feet of water rights. It works with its residents to manage water development and delivery in the County.



- EPA support, management and participation
- Backstop to retail sources of water
- Education, i.e. conservation gardens, school programs
- Funding programs
- Forcing / enforcing tiered water rates
- See histories above and incorporate properly
- Reference WCD act above
 - Development around reservoirs
 - Recreation
 - Ancillary services mentioned above

KEY FINDINGS FROM THE STUDY

Comparable States Use of Tax Revenue

- The study identified rate structures and other practices currently implemented in the Comparable States in motivating water conservation, supporting water services and maintaining cashflows to service operations and debt obligations. Nearly all have a base rate with tiered rates; many areas also use property taxes.
- Water is geographically driven and requires local flexibility over water management to address regional issues.
- Utah is not alone in how it funds its water operations and infrastructure, i.e. cities (often acting as retailers) primarily utilize water rates and impact fees while districts (often acting as both wholesalers and/or retailers) also leverage property taxes to expand and maintain infrastructure and to offset expenses; these are common practices seen throughout the Comparable States.

Uses of Property Tax Revenue

- There exists a wide range of applications of property taxes: funding and/or maintaining infrastructure, funding operations, securing debt directly or indirectly.
- Utilizing property taxes and base rates instills confidence and stability in revenue collections.
- Utilizing property taxes lowers the costs of developing and delivering water
- Utilizing property taxes and higher base rates dilutes the effectiveness of a tiered rate structure, as water usage usually only comprises 15-25% of a standard annual retail water bill
- There are administrative hurdles to engaging non-taxpaying entities to pay their equitable share in the costs of delivering water

Effect of Adjusting or Limiting the Property Tax System

- The water rates funding the costs of delivering water will increase.
- Depending on how new rates are implemented, there could be potential positive economic impacts to: certain businesses, high valued residences, secondary homes.
- Depending on how new rates are implemented, there could be potential negative economic impacts to: certain businesses, renters, non-tax paying entities like non-



profit organizations, governmental entities like school districts, cities, parks, cemeteries, etc.

- Shifting costs more to water rates for cities, counties & school districts could likely increase their costs which might induce actions to increase taxes or adjust budgets to absorb higher water rates.
- The impact on a water district will vary depending on its size & age and whether it is a wholesaler or retailer.
- There would need to be a period to ween off from property taxes to avoid complications with existing contracts and debt obligations.
- Ancillary services (water conservation education programs, watershed protection, streamflow maintenance, flood control, fire protection, regional planning, species protection, recreation, environmental protection, regulatory support, public health & safety, etc.) may be limited or curtailed

Implementation of Tiered Water Rates

- Tiered rates have proven effective in encouraging water conservation.
- Tiered rates can be structured to allow efficient water users to pay less.
- 100% reliance on tiered rates introduces financial risks of variable revenues.
- Increasing fund balances to stabilize financial operations likely required.
- Creating tiered rates for secondary water is a significant opportunity to encourage water conservation.

OBSERVATIONS FROM THE STUDY PROCESS

- Continued education paired with real-time information on water usage has a material impact on water consumption practices, water conservation efforts and public support of programs and policies.
- Increasing social awareness around the benefits of water conservation to help overall needs like the Great Salt Lake, streamflow, species protection and similar applications are more effective than asking users to conserve water for future growth.
- Per Utah State code, water conservancy districts' stated missions dictate both direct and indirect services that include water delivery, increasing property value, regional planning, stabilizing stream flows and benefiting all industries in Utah.
- Much of the discussion on water rates has focused solely on the costs of direct water services whereas certain districts are also charged with providing a variety of additional ancillary services.
- Certain water development projects could be delayed with water conservation.

ADDITIONAL QUESTIONS AND OBSERVATION FOR CONTINUED DISCUSSION

THE FOLLOWING QUESTIONS WERE NOT INCLUDED IN THE ORIGINAL SCOPE AND ARE MORE PHILOSOPHICAL IN NATURE.

- ✓ Specific Statewide policies around water conservation
- ✓ Clarifying concepts in the State Code around priorities, water conservation, "reasonable" water rates, etc.
- ✓ Continued financial analysis of any modifications to the current water rate structure.



- ✓ Water abatement programs
- ✓ What ancillary programs and/or services should the wholesale districts be providing?
- ✓ Educational programs
- ✓ Secondary water management
- ✓ Is a voter approved tax different from an imposed tax? Meaning, if a district obtained voter approval of a property tax to support either the federal project they're sponsoring or their general operations, should they be treated differently in any future legislative action?
- ✓ Additional analysis is warranted on understanding the potential impacts both drastically changing a water rate structure or altering how property taxes are utilized

RECOMMENDATIONS & OBSERVATIONS

Recommendations	Perceived Trade-Offs (Observations)
1. Clarify priorities in statute and define "reasonable water rates"	<ul style="list-style-type: none"> LRB Should there be a priority in the State Code or defer to retailers LRB Some may interpret "reasonable" as "affordable"
2. Any changes to the property tax system requires sufficient time, analysis and thoughtfulness to implement properly	<ul style="list-style-type: none"> LRB To maintain the existing level of service, eliminating property tax would increase costs of delivering water LRB Eliminating property taxes increases cost transparency of water bills
3. Implement more aggressive tiered rates	<ul style="list-style-type: none"> LRB Tiered rates are effective at economically motivating water conservation LRB There is a smaller group of users in the higher tiers
4. Consider implementing a special water rate for non-taxpaying entities.	<ul style="list-style-type: none"> LRB There are means to engaging non-tax paying entities to pay their fair share of water costs LRB There are administrative hurdles to effectively implement in delivering revenues to wholesaling entities
6. Require metering of all drinking water and secondary water connections that culminates in universal metering with tiered rates to encourage water conservation	<ul style="list-style-type: none"> LRB Large water conservation opportunity LRB Converting public who have enjoyed unlimited secondary water LRB Will require change in certain communities and increased investment
6. Incentivize cities and retailers to enhance their policies around wise water use and further enable cities to inspect and enforce policies with additional funding for staffing.	<ul style="list-style-type: none"> LRB Continued efforts to educate and motivate water wise actions LRB Efforts to enforce policies can be burdensome



CONCLUSION

This report concludes that Utah’s water purveyors utilize commonly used best practices to deliver affordable water and have dependable revenues. Utahns enjoy some of the lowest costs of water in the Comparable States. To change how water is funded would require thoughtful implementation as to not threaten the stable financial operations established by Utah’s water industry. Managing risk in revenue collections is a real consideration in establishing rates. Increasing water conservation measures will prepare the State for tomorrow’s needs.

Balancing water conservation and revenue streams is a delicate matter that will require constant attention. Tiered rates economically motivate water conservation. Securing stable revenue streams through base rates and property taxes helps lower the costs of water. Seeking this balance to maintain reliable revenues and encourage water conservation. Coupled with continued secondary water management to increase water conservation are effective efforts to maintain a resilient water supply for Utah today and into the future.



EXHIBIT A: ORIGINAL SCOPE OF WORK

#AS24-18

RFP - WATER INFRASTRUCTURE FUNDING STUDY AND FACILITATION- 2023

Water Infrastructure Funding Study (SB 34)

<https://le.utah.gov/~2023/bills/static/SB0034.html>

SCOPE OF SERVICES

The project manager/facilitator will:

- A. Kick off meeting with Division of Water Resources and Workgroup
- B. Research required for the above questions
- C. Conduct Workgroup Meetings
 1. Coordinate with a designated employee of Utah Division of Water Resources to:
 - o Select and reserve meeting location space
 - o Ensure meeting notices are issued in a timely fashion and any requirements for public notice have been met
 2. Develop meeting agendas in consultation with Workgroup members
 3. Facilitate meetings and discussion with an aim toward full participation and achieving goals of the Workgroup
 - o It is anticipated there will be at least ten (10) Workgroup monthly meetings lasting approximately 1 to 2 hours each.
 - The proposed schedule begins September 5, 2023, intending to meet on the first Tuesday of every month from 3:30-5:00 pm
 - o There is a potential for at least 1 to 2 meetings to run at least 4 hours.
 4. Ensure that the collaborative process is efficient, resulting in effective and widely supported strategies for addressing the “issues of mutual concern” that the Workgroup is trying to address
 5. Prepare meeting notes (notetaking and meeting summaries) and distribute in accordance with the direction of
- D. Interviews with Workgroup Members and Prepare Non-Attributed Write-up
 1. Interview willing Workgroup members to capture ideas, issues, challenges, recommendations, etc. and incorporate key points of the interviews into a summary write-up that does not attribute content to any one particular interviewee (e.g., mini- situation assessment). This may include 10 – 15 virtual interviews. This will be included in the final report as an appendix.
- E. Prepare Reports and Presentation
 1. Prepare draft and final reports and presentations incorporating recommendations and other information derived as outcomes from the Workgroup discussions, as directed by the Workgroup. This effort may include:
 - a. Coordinating and incorporating written sections or inputs developed by members of the Workgroup



- b. Addressing and incorporating comments and feedback on draft versions of the report and/or working through conflicting viewpoints, if any
- c. Provide two to three written status updates available to stakeholders during the course of this study
- d. Anticipate at least 3 drafts
- e. Assisting DWR with presentations to key stakeholders, including interim and final presentations as needed

DELIVERABLES

What are the Key Deliverables that we want:

- Executive summary document
- Finalized Study and key questions answered, and any recommendations as appropriate
- Prepare presentation

PROJECT TIMELINE

- Draft plan due August 31, 2024
- Final Report / Deliverables due September 30, 2024



EXHIBIT B: SELECT HISTORIES FOR LARGER WATER CONSERVANCY DISTRICTS

HISTORY

CUWCD

When the Latter-day Saint pioneers first entered the Salt Lake Valley their first priority was to divert part of City Creek to irrigate fields for planting. As the new territory was settled, new settlements sprung up where there was a water supply. As the population grew the demand for water exceeded the ready supply from mountain streams and the need for storage facilities became apparent.

The vision of bringing water from the Uintah Mountains to the Wasatch Front is attributed to an early Utah State Engineer, Abraham Fairbanks Doremus. He proposed the idea in 1902 in response to a severe multi-year drought. His vision was ahead of his time. The state simply did not have the resources to build a project of that size. Over the decades, technology and engineering advances made the project more feasible but huge financial and political hurdles still had to be overcome.

Strawberry Project pioneered the way of the CUP by bringing the Colorado River Water to the Wasatch Front via aqueducts and tunnels to the South Utah County.

Construction of the project, which became known as the Central Utah Project ("CUP"), did not start until 1967 after the Central Utah Water Conservancy District was formed as the local repayment agency, responsible for distributing CUP water and funneling payments back to the U.S. Treasury. It is important to note that without the revenue stream authorized by the state legislature (property tax authorization), the repayment mechanism, the project would never have been approved. Originally the project was under the auspices and control of the federal Bureau of Reclamation ("BOR"). Cost overruns, delays and new environmental legislation threatened to leave the project unfinished as Congress lost interest in western water projects and President Carter put the CUP on his infamous "hit list".

Prospects for the completion of the project were bleak in the late 80's and early 90's, sponsored by Congressman Wayne Owens. After several years of intense work by Don Christiansen and Marcus Faust, a compromise bill, The Central Utah Project Completion Act ("CUPCA") was passed in 1992 and was signed into law by President George Bush Sr. The bill was a drastic departure from the old way of building federal projects and was the first time that a project had been taken from the jurisdiction of the BOR and the responsibility of construction given to the local project sponsor, in this case Central Utah Water Conservancy District. It was the first bill of its kind in the country. The District works directly with the Department of Interior ("DOI") CUPCA program manager who in turn reports to the Assistant Secretary of Interior. Along with the responsibility of building the project, CUPCA also imposed preconstruction payment obligations of up to 35% on the District and required that 90% of the water be subscribed for prior to construction. There were also environmental mitigation obligations to restore any environmental damage that may have occurred as a result of the construction of the project.



In 1965 and again in 1985, District patrons were asked to approve the use of property tax to pay for the development of their water. Both ballot measures passed with overwhelming majorities.

After the package of the CUPCA was passed in 1992, the Governor and the Legislature formed the Water Funding Task Force in 1993. The Governor's Central Utah Project Funding Task Force which recognized the value of the CUPCA and provided direction for the District to utilize all resources at its disposal to fund and operate the Project. That includes the use of property taxes. The State Legislature further acknowledged the vital purpose of water and the need to fund it. It directed CUWCD to utilize all funding sources available to fund its operations and develop the essential water assets. The Legislature listed the following sources: "bonding, property taxes, appropriations, water and power rate revenues, water development funds or loans, and other similar financing tools". The District has continued to rely on those funding sources to minimize the costs of development and maintain its relationship with the Federal Government as co-sponsor in funding the Central Utah Project.

WBWCD

The United States Bureau of Reclamation began planning for the Weber Basin Project in 1942, and Congressional authorization of the Project was received in 1949. The Weber Basin Water Conservancy District was created on June 26, 1950, by a decree of the Second District Court of Utah, under the guidelines of the Utah Water Conservancy Act (17b-2a-Part 10). The District was formed to act as the local sponsor of the federal project and to further supply water resources to the population within its boundaries. The original Weber Basin Project was constructed by the Bureau of Reclamation from 1952 through 1969 and includes canals, power plants, irrigation and drainage systems, and six major reservoirs on the Ogden and Weber rivers. Subsequent to the original Project, the District constructed a seventh dam, Smith and Morehouse. Four of the seven reservoirs—Wanship, Lost Creek, East Canyon, and Smith and Morehouse—regulate the flow of the Weber River before it emerges from its mountain watershed to the Wasatch Front. Causey and Pineview reservoirs regulate the flow of the Ogden River before it emerges from its watershed and joins the Weber River. Willard Bay, the largest reservoir, is an off-stream reservoir that stores water from the lower reaches of both the Ogden and Weber rivers for uses and exchanges on the Wasatch Front.

The complex transmission system that was constructed as part of the Project includes facilities such as Gateway Canal and Tunnel, Weber and Davis aqueducts, Ogden Valley Canal and Diversion Dam, Slaterville Diversion Dam, and Stoddard Diversion Dam as well as dozens of secondary reservoirs and many miles of canals, pipelines, and other laterals. Hydropower stations located at Causey Dam, Wanship Dam, and Gateway Canal generate power for District consumption and excess power sales.

In 1952 and 1961, the voters within its boundaries authorized the District to enter into contracts with the United States to repay the original construction costs and the ongoing operation and maintenance of the federal project. The funding for those costs is generated through water sales and the original ad valorem tax approved by the voters in both elections.



In addition to the original federal project, the District continues to expand the necessary water supplies and infrastructure to deliver water to the growing population. District projects and facilities include four water treatment plants along the Wasatch Front and Snyderville Basin area, Smith & Morehouse Dam, Causey Hydropower Plant, the Layton Canal pipeline extension, wells, aquifer storage and recovery, and hundreds of miles of distribution and transmission lines.

WCWCD

Washington County Water Conservancy District, a 17b-2a-Part 10 water conservancy district, was established in 1962 to manage Washington County's water needs. It is charged with conserving, developing, managing and stabilizing water supplies within the county in an ongoing effort to provide a safe, sustainable water supply for current and future generations.

The district was formed at the request of local property owners, who signed a petition authorizing the district to develop and manage the county's water supplies, including taxing their properties to accomplish these goals. During its 50-plus year history, the district has significantly expanded its infrastructure, services and capabilities in an ongoing effort to serve the county's growing population.

Today, the District manages reservoirs, pipelines, wells, water storage tanks, treatment plants, hydro power plants, diversion dams and more. The facilities are currently capable of producing more than 60 million gallons of water a day.

The majority of the District's water is sold wholesale to its municipal customers including the cities of St. George, Washington, Hurricane, Santa Clara, Ivins, Toquerville, La Verkin and the town of Virgin.

Providing wholesale water to municipalities is the District's central operation, but the District also manages small retail, secondary and wastewater systems.



EXHIBIT C: SPECIAL DISTRICT HISTORY (SOURCED FROM THE UTAH ASSOCIATION OF SPECIAL DISTRICTS)

HISTORY OF DISTRICTS IN UTAH

In 1790, the first district was formed in the United States of America for the purpose of providing prison services. In 1898, Utah's first district for library services was formed. As we know them today, the first district in Utah was formed as a drainage district sometime before statehood. Since 1913, the Utah Code has continuously carried specific authorization for the formation of districts.

According to the State Auditor, there are 400 local and special service districts operating in Utah. Approximately one-third are designated as "special service districts" and two-thirds are designated as "special districts". The distinction is explained below.

After statehood, the following types of districts were created by the Utah Legislature in the corresponding years:

-  Drainage Districts – 1913
-  Irrigation Districts – 1919
-  Metropolitan Water Districts – 1935
-  Water Conservancy Districts – 1941
-  Cemetery Maintenance Districts – 1945
-  Improvement Districts – 1949
-  Fire Protection Districts – 1951
-  Mosquito Abatement Districts – 1953
-  Service Areas – 1957
-  Public Transit Districts – 1969
-  Special Service Districts – 1975

LEGISLATIVE HISTORY

The State Legislature created Title 17A of the Utah Code and consolidated much of state law regarding districts into that title. At that time, the term "Special District" was defined by the Legislature to refer to taxing entities that were brought together under Title 17A and became a generic term intended to refer to all of the district types that fell under that title of the statute. Chapter 1 of Title 17A, contained general provisions that were applicable to special districts (often including special service districts), while Chapter 2 of the Code primarily consisted of Acts governing each particular type of independent special district.

RECODIFICATION

In the 1990's, the Legislature began a long process of recodifying those sections of the Utah code dealing with Districts. In 2007, the legislature embarked on a massive recodification effort to complete the process. The adoption of H.B. 65 in 2007 repealed Chapter 1 and the bulk of Chapter 2 of Title 17A and the remainder of Title 17A was repealed in 2008 and 2009. UASD worked cooperatively with the Legislature and its staff throughout this lengthy process.



TITLE 17B

H.B. 65, passed in 2007, also created Title 17B Chapters 1 and 2a of the Utah Code. In these sections, uniform definitions were adopted along with uniform provisions governing such things as the appointment and election of special district boards, the powers of those boards, the naming of special districts, long range planning, releasing liens, retaining architects and engineers, nepotism restrictions, a preference for recycled goods, the adoption of impact fee resolutions, publishing district information in local telephone directories, special district property tax parity, validation of previously created districts and the exemption of special district property and assets from taxation. Although renumbered and amended, many of these provisions were carried over from the law in effect prior to H.B. 65.

The term “Special District” was eliminated by H.B. 65, primarily due to confusion over the difference between a “special district” and a “special service district”. The new generic term for all entities that fall under Title 17B of the Utah Code is “special district”. The Legislature in 2024 revert back to “special” districts.

TITLE 17D

The only type of district in Utah that is not a “special district” is a “special service district”. Title 17D Chapter 1 of the Utah Code was created to deal with the creation and administration of special service districts and is known as the “Special Service District Act”.

Through the recodification process, uniform provisions were adopted, to the extent uniformity was possible, in place of corresponding provisions in the various individual Acts of former Title 17A Chapter 2. To the extent uniformity was not feasible, the various Acts were renumbered and, to some degree, amended. H.B. 65 was intended to clean up provisions scattered throughout the Utah Code that used the phrase “special districts” or included a reference to a now repealed or renumbered section of the Code.

SPECIAL DISTRICTS

Special districts are independent governmental entities that may be created by cities or counties to provide the following services:

-  Airport Operations
-  Cemetery Operations
-  Fire Protection, Paramedic and Emergency Services
-  Garbage Collection and Disposal
-  Health Care (including health department or hospital service)
-  Library Operations
-  Mosquito Abatement and Control
-  Municipal Services
-  Parks Operations, Recreational Facilities and Services
-  Sewage System Operations
-  Street Lighting
-  Right-of-way Construction and Maintenance
-  Transportation (including public transit, streets and roads)



- Water Systems Operations
- Acquisition or Assessment of a Groundwater Right
- Law Enforcement Services
- Control or Abatement of Earth Movement or Landslide
- Animal Control Services

Within Title 17B, the Utah Code contemplates the following eleven types of special districts:

1. Basic Special districts – 17B-1-1401
2. Cemetery Maintenance Districts – 17B-2a-101
3. Drainage Districts – 17B-2a-201
4. Fire Protection Districts – 17B-2a-301
5. Improvement Districts – 17B-2a-401
6. Irrigation Districts – 17B-2a-501
7. Metropolitan Water Districts – 17B-2a-601
8. Mosquito Abatement Districts – 17B-2a-701
9. Public Transit Districts – 17B-2a-801
10. Service Areas – 17B-2a-901
11. Water Conservancy Districts – 17B-2a-1001
12. Municipal Services District Act - 17B-2a-1101
13. Infrastructure Financing District - 17B-2a-1301

Any one of the ten historic district types listed above (numbers 2-11) may be created, or a basic special district (number 1) might be formed. A special district may be formed to provide up to four of the services listed above. The area of any special district does not have to be contiguous.

Each of the historic district types is governed by the uniform statutory provisions in addition to remnants of the original Act for the specific district type, as recodified. Some of the reconstituted Acts have very little left in them, in which case the uniform provisions control most of the activities of the district. For other district types, such as drainage districts, irrigation districts, water conservancy districts and, in particular, public transit districts, there are many remaining statutory provisions that apply just to that district type.

SPECIAL SERVICE DISTRICTS

A Special Service District created under Title 17D is a hybrid entity in that it is an independent governmental entity, except when it comes to the levy of taxes or assessments, the issuance of debt, or the holding of an election. Those actions must be approved by the governmental entity that created the special service district. In reality, special service districts are still ultimately under the control of their creating entities.

A special service district may be created by a city or a county to provide any combination of the following services:

- Water
- Sewer
- Drainage



- LRB Flood Control
- LRB Garbage Collection and Disposal
- LRB Health Care
- LRB Transportation
- LRB Recreation
- LRB Fire Protection (includes emergency medical services, ambulance, search and rescue)
- LRB Correctional and Rehabilitation Facilities
- LRB Consolidated 911 and Emergency Dispatch
- LRB Animal Shelter and Control
- LRB Receipt of Federal Mineral Lease Funds to Mitigate Impacts from Mining
- LRB Extended Police Protection (in counties of the first class)
- LRB Control or Abatement of Earth Movement or Landslide

OTHER LAWS GOVERNING DISTRICTS

Districts in Utah are also subject to a variety of other Utah laws. Some of the specific provisions under the Code that apply to districts are as follows:

1. Historic Property Protection (indirectly through state approvals) – Section 9-8-404
2. Interlocal Cooperation Act – Section 11-13-101 et. seq.
3. Local Government Bonding Act – Sections 11-14-101 and 17B-1-1101 et. seq.
4. Utah Refunding Bond Act – Section 11-27-1 et. seq.
5. Utah Bond Validation Act – Section 11-30-1 et. seq.
6. Utah Public Finance Act – Section 11-31-1 et. seq.
7. Impact Fees Act – Section 11-36a-101 et. seq.
8. Bidding Requirements for Building Improvements and Public Works – Section 11-39-101 et. seq.
9. Criminal Background Checks by Political Subdivisions Operating Water Systems – Section 11-40-101 et. seq.
10. Assessment Area Act – Section 11-42-101 et. seq.
11. Fiscal Procedures for Special districts Act – Section 17B-1-601 et. seq.
12. Board Member Training Requirements – Section 17B-1-312
13. Personnel Management – Section 17B-1-801 et. seq.
14. Statutory Limits on Taxing and Bonding – Sections 17B-1-1002 and - 1102(4)
15. “EX” License Plate Use – Section 41-1a-407.
16. Accounting Reports from Political Subdivisions, Interlocal Organizations, and other Local Entities Act – Section 51-2a-101 et. seq.
17. Deposit of Funds Due State – Section 51-4-1 et. seq.
18. State Money Management Act – Section 51-7-1 et. seq.
19. Anti-Nepotism – Section 52-3-1 et. seq.
20. Open and Public Meetings Act – Section 52-4-101 et. seq.
21. Reimbursement of Legal Fees and Costs to Officers and Employees Act – Section 52-6-101 et. seq.
22. Reports and Notices – Section 52-8-101 et. seq.\



23. Property Tax Act (Title 59, Chapter 2, of the Utah Code) particularly Truth in Taxation Requirements – Section 59-2-919 et. seq.
24. GRAMA (Government Records Access and Management Act) – Section 63G-2-101 et. seq.
25. Utah Procurement Code – most provisions – Section 63G-6-101 et. seq.
26. Governmental Immunity Act of Utah – Section 63G-7-101 et. seq.
27. Identity Documents and Verification – Section 63G-12-302, 401, 402
28. Constitutional Takings Issues Act – Section 63L-4-101 et. seq.
29. Utah Public Officers’ and Employees’ Ethics Act – Section 67-16-1 et. seq.
30. Criminal Offenses Against the Administration of Justice – Section 76-8-101 et. seq.



EXHIBIT D: HOW DISTRICTS ARE CREATED

Special Districts (17B) and Special Service Districts (17D) can only be created by cities or counties. The process is initiated either by the cities or counties themselves by resolution, or by petition from a group of citizens.

SPECIAL DISTRICTS

For special districts⁷, a citizen petition to create must be signed by:

- 33% of the private property owners within the proposed district whose property values total at least 25% of the value of all private real property within the proposed district; or
- 33% of the voters within the proposed district who voted in the last general election for Governor.

Except when a petition is signed by two thirds of voters, the final step in creating a special district culminates in an election wherein a majority of voters approve the creation.

The resolution or petition to create a special district must contain a description of the proposed boundaries of the district, a map that shows those boundaries, a description of the services to be provided, the type of special district to be created, the anticipated method of paying the costs of providing the service(s), and the number of board members for the proposed district.

If the special district being created is a basic special district, the petition must also state whether the board members will be appointed or elected, and if one or more board members will be elected, the basis of the election, and, if applicable, how the election or appointment of board members will transition over time from one method to another.

In the process of creating a special district, if owners of at least 25% of the total private land area with value equal to at least 15% of the total value of all real private property in the proposed district protest the creation, then the cities and/or counties involved in the creation must cease the process of creation. In such cases, the process can begin again after a two-year period.

SPECIAL SERVICE DISTRICTS

For a special service district, a citizen petition to create must be signed by:

- Property owners within the proposed district whose property values total at least 10% of the taxable value of all taxable property within the proposed special service district; or
- At least 10% of the registered voters within the proposed special service district.

⁷ A special district can also be created by resolution of the Board of another special district as long as the proposed district is being created to provide one or more components of the same service that the creating district is authorized to provide, but which they are not currently providing.



The resolution or petition to create a special service district must contain a description of the proposed boundaries of the district, a description of the services to be provided, and a proposed name for the district.

For either special districts or special service districts, once the resolution or petition has been adopted and validated, there is a public notice period after which a final resolution creating the district may be adopted by the cities and/or counties involved. Once created, the creation documents are sent to the Lieutenant Governor's office for certification of incorporation.

Special Districts (17B) and Special Service Districts (17D) can only be created by cities or counties

