Optimize Municipal and Industrial Water Pricing

February 8, 2023

By optimizing water pricing in Utah, policymakers can improve water management and increase water deliveries to Great Salt Lake.

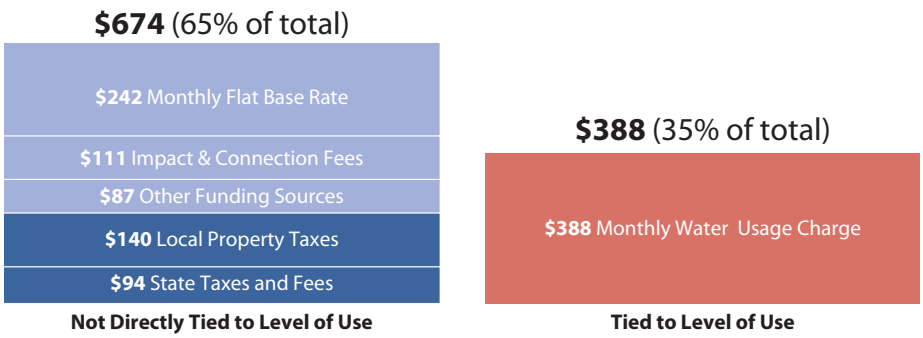
Summary

Water pricing impacts consumption. Economists estimate that for every 10% increase in water rates, water consumption declines by 2.5%-7.5%. By optimizing water pricing, policymakers can benefit from market forces and more closely align supply with demand. This will improve efficiency and fairness, while also reducing demand.

Key facts and insights

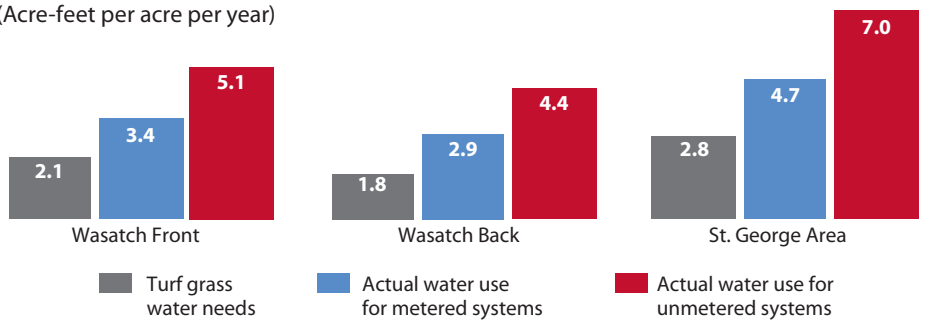
- **Metering –** An estimated 60% of municipal and industrial water in Utah is metered. The state's recent $265 million investment in secondary-metering infrastructure provides additional metering capabilities.
- **Water subsidies** – An estimated 65% ($674 million) of Utah's state and local water delivery costs in FY 2020 accrued from revenues *unrelated* to water use. The remaining 35% ($388 million) came from monthly water usage charges. Currently, more than 90% of Utahns pay subsidized water rates.
- **Property and sales taxes** – In FY2022 Utahns paid nearly $120 million in sales taxes for water and $160 million in local property taxes for water. Because water delivery in Utah is often metered, it does not require general tax financing, like many other government services.

Figure 13: Utah State and Local Water Revenues, FY 2020 (in millions)



Note: Does not include wholesale water sales to avoid double-counting revenues
Source: Office of the State Auditor, Division of Water Rights, and Governor's Office of Planning and Budget

Figure 14: Estimated Lawn Watering Use Compared to Plant Needs, 2018
(Acre-feet per acre per year)



Source: Utah Department of Natural Resources - State of Utah Water Use Data Collection Program Report

Note: Economists view water pricing as an area of public policy ripe for what is called *Pareto improvement* - a change in allocation that harms no one and benefits someone or society as a whole.

Expert Assessment Scorecard Results

	Low				High
Benefits					
Water brought to the lake	**1**	2	3	4	5
Air quality improvements	**1**	2	3	4	5
Biological health	**1**	2	3	4	5
Costs, Challenges, and Adaptations	Low				High
Financial cost	**1**	2	3	4	5
Agriculture changes	**1**	2	3	4	5
Extractive industry changes	**1**	2	3	4	5
Cultural shift	**1**	2	3	4	5
Feasibility	Low				High
Speed of implementation	1	2	**3**	4	5
Legal/regulatory feasibility	1	2	**3**	4	5

Source: Great Salt Lake Strike Team

Policy options and tradeoffs

Water managers and policymakers can refine water pricing proposals to maximize the public good and minimize unintended consequences. Water pricing options and trade-offs include, but are not limited to, the following:

Policy Options

- Increased secondary water metering
- Tiered water pricing
- Revenue-neutral water user charge increases
- Refined analysis on price elasticity of water
- Tax credit for homeowners and mobile homeowners who meet certain income and resident qualifications
- Additional optimization of state water loan funds for conservation and potential private market capitalization

Tradeoffs

- Adjusting to new landscapes
- Increased transaction costs
- Higher financing costs for water districts
- Switching costs associated with more efficient water use (ex. landscaping)