

Water Use and Preservation Element Program Report

September 2026



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Division of
Water Resources



Division of
Drinking Water



Department of
Agriculture & Food

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Introduction

In 2022, SB 110 was passed, requiring class four and larger municipalities (67 entities) and all counties (29 entities) to include a water use and preservation element in their general plans by December 31, 2025.

In 2023, SB 76 created an interagency general plan team from the Division of Water Resources (Department of Natural Resources), the Department of Agriculture and Food, and the Division of Drinking Water (Department of Environmental Quality) to support the integration of water into land planning. \$500,000 in grant funding was also appropriated to assist communities with updating their general plans.

This report describes the state’s general plan team’s outreach, the grant program and a review of plan submissions completed under the program.

Outreach overview

The general plan team initiated one-on-one appointments, presentations, conferences and workshops from 2022-2025. The team reached out to and regularly attended conferences and provided presentations for: the Utah chapter of the American Planning Association, the Utah Office of the Ombudsman’s Utah Land Use Academy, the Utah League of Cities and Towns, government associations (like the Mountainland Association of Governments), Wasatch Front Regional Council, Six County Association of Governments, Five County Association of Governments, other state agencies and individual consulting firms to provide information about planning requirements.

Throughout the planning process, the general

plan team engaged with various stakeholders, including city and county planners, commissioners and councils, through meetings. This communication was further strengthened by hosting five Growing Water Smart workshops, which saw participation from over 30 communities. These workshops provided a forum for all involved groups to discuss water and land use planning and develop concrete action plans. Furthermore, in collaboration with the American Planning Association and Psomas, the general plan team met with 28 entities to present a comprehensive overview of the water element’s specific requirements.

The team’s interagency nature has bolstered the state’s ability to provide planning information to cities, counties and various associations.



Facilitation session at a Growing Water Smart Workshop.

Technical assistance grant program

SB 76 (2023) appropriated \$500,000 for coordinated planning by a city or county directly related to the general plan’s water use and

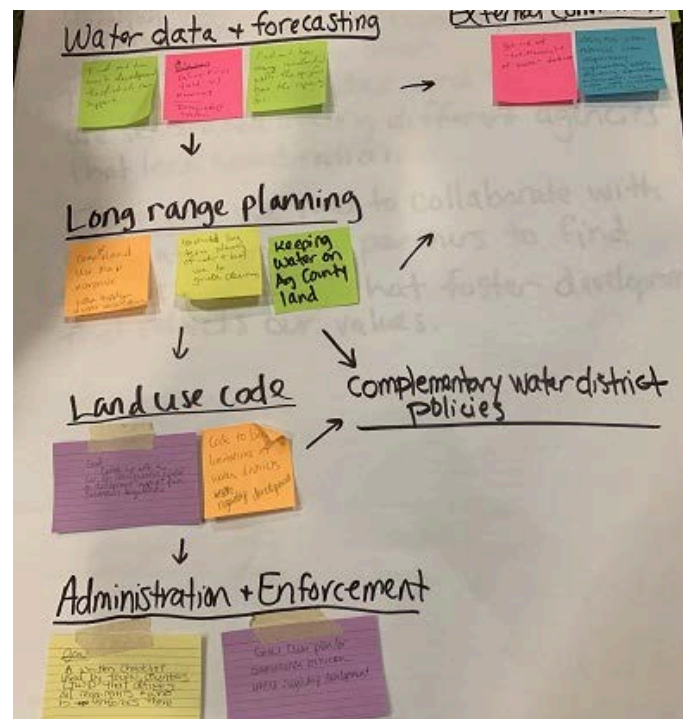
preservation element. The general plan team created a grant program that focused on equity, ensuring smaller, more rural cities and counties were incentivized to apply. The grant program opened Sept. 9, 2024 and closed Oct. 24, 2024. 37 applicants were awarded funding based on the tiered structure outlined below:

- First-class municipalities would have two awardees and a minimum of \$5,000 for assistance.
- Second-class municipalities would have three awardees and a minimum of \$5,000 for assistance.
- Third-class municipalities would have 13 awardees and a minimum of \$10,000 for assistance.
- Fourth-class municipalities would have 16 awardees and a minimum of \$15,000 for assistance.
- Counties with a population greater than 80,000 would have three awardees and a minimum of \$5,000 of assistance.
- Counties with a population between 20,000 and 80,000 would have five awardees and a minimum of \$10,000 of assistance.
- Counties with a population of 20,000 or less will have eight awardees and a minimum of \$15,000 of assistance.
- Cities and counties could receive a minimum of \$5,000 for coordinated general plan water element planning with water providers, water districts, canal owners and irrigation companies. 10 awardees would receive this funding for coordinated planning.

Grant program reporting

Of the 37 entities that were awarded funding, 35 completed grant program requirements and received their total award. These entities provided the Division of Water Resources with a complete general plan water use and

preservation element that met SB 110 (2022) and SB 76 (2023) requirements as well as HB 331 and other contractual standards. Overall, \$500,000 was awarded, and all grant program contracts are complete. Currently there is no additional funding to support integrated water and land use planning from the Division of Water Resources, although there is a need for smaller cities and towns (under a population of 10,000) to receive technical assistance related to water planning as they were ineligible for funding under SB 110 (2022).



A brainstorm session at a Growing Water Smart Workshop.

Submissions and discussion

The interagency general plan team acts as a consulting entity rather than an approving agency for the water use and preservation element. Each city or county governing body is responsible for the final determination and approval of the

general plan's water use and preservation element. In an effort to promote transparency and accessibility, the Division of Water Resource hosts a catalog of completed water use and preservation elements at [Water.utah.gov/water-general-plan](https://water.utah.gov/water-general-plan) under "Communities and Outreach." The division compiled statistics from the water use and preservation elements listed on the site to provide an analysis across 73 water use and preservation elements based on four required water use and preservation elements components:

1. Effect of permitted development on water demand and infrastructure
2. Methods for reducing water demand and per capita consumption for future development
3. Methods for reducing water demand and per capita consumption for existing development
4. Opportunities to modify city or county operations to eliminate or reduce conditions that waste water

The following section will discuss the statistical analysis of these plans as they relate to the four legislative components.

Water demand and water infrastructure

The first planning requirement asked cities and counties to understand the effect of permitted development on water demand and water infrastructure. Water use and preservation elements were to assess current and future growth and their impact on water systems, including the development of a water budget ([Utah Code 10-20-404](#) and [Utah Code 17-79-403](#)).

What is a water budget?

A water budget is a comprehensive planning tool used to assess and project the hydrological costs

and demands associated with land use.

An important data point in a water budget is water supply, because it acts as the budget's input and indicates water availability for current and future planning decisions. In a water budget, a reliable supply (taking into account source reduction due to climate variability, curtailments or aquifer decline) and water rights should be used together (Figure 1). The tool quantifies the water supply and outputs (including consumption, runoff and secondary/irrigation water, if applicable), providing a detailed forecast of water sustainability under different growth and usage scenarios. Overall, a water budget ensures informed decision-making regarding water resources allocation and future planning.

Figure 1. Key takeaways for water supply planning



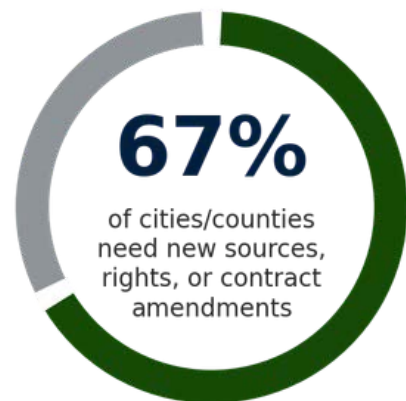
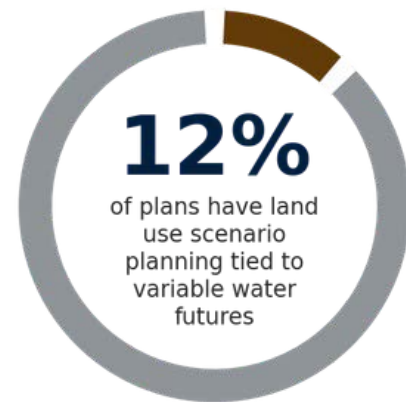
Within the water use and preservation elements, planners attempted to create a city or county water budget to assess water supply. Many water use and preservation elements chose to omit discussion related to water supply completely. Of the elements that did include water supply, many detailed entire water rights portfolios in lieu of developing a true water budget based on reliable supply along with water rights. Only utilizing water rights when calculating a water budget does not account for source variability, which can ultimately result in unreliable scenario planning.

Currently, the state does not have comprehensive reliable water supply data. Analysis of the water use and preservation elements show how this data gap negatively impacts scenario planning. This represents an important topic for the state to support and study.

In lieu of reliable water supply data, discussion and understanding, most water use and preservation elements reported high-level population trends and average per-capita water usage across broad land use categories like municipal and industrial water use. A smaller percentage of water use and preservation elements utilized detailed methodology, using diverse land-use or Equivalent Residential Units (ERU) to budget or allocate their water. Integration between these land use analyses, growth strategies and water source reliability remained limited, with only 12% of entities creating scenario plans that tied water resources with variable futures (Figure 2). This absence of dynamic scenario planning, combined with incomplete supply evaluations, locks communities into rigid, single-scenario buildouts. Consequently, about two-thirds (67%) of cities and counties will eventually be forced to act reactively, reporting in their water use and preservation elements the need to develop new

water sources, acquire additional water rights or renegotiate supplier contracts just to accommodate future growth (Figure 2).

Figure 2. Statistics for scenario planning and supply

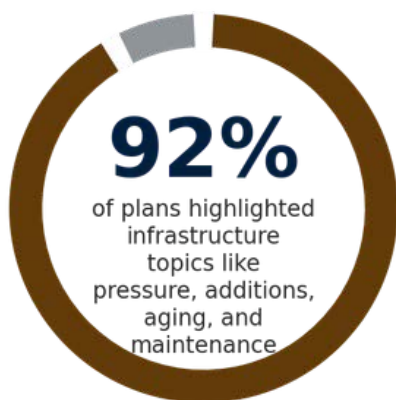


That's about two out of three cities



Water infrastructure remains a paramount concern for municipal and county governments across the state. Almost all water use and preservation elements highlighted infrastructure topics like development pressures, infrastructure additions, aging and maintenance as critical when discussing water and land use (Figure 3). However, a notable gap exists: among the water use and preservation elements proposing administrative, zoning or land use updates to curb water use, infrastructure considerations were not specifically coupled or integrated into those codes. Additionally, while a majority of the water use and preservation elements frequently emphasized leak detection and indoor water efficiency initiatives, these efforts were seldom connected back to broader infrastructure strategies. Ultimately, despite infrastructure being a heavily discussed topic, there remains a disconnect in demonstrating how strategic land use and water efficiency decisions can mitigate infrastructure costs and associated pressures.

Figure 3. Statistics for infrastructure topics



Current and future water use

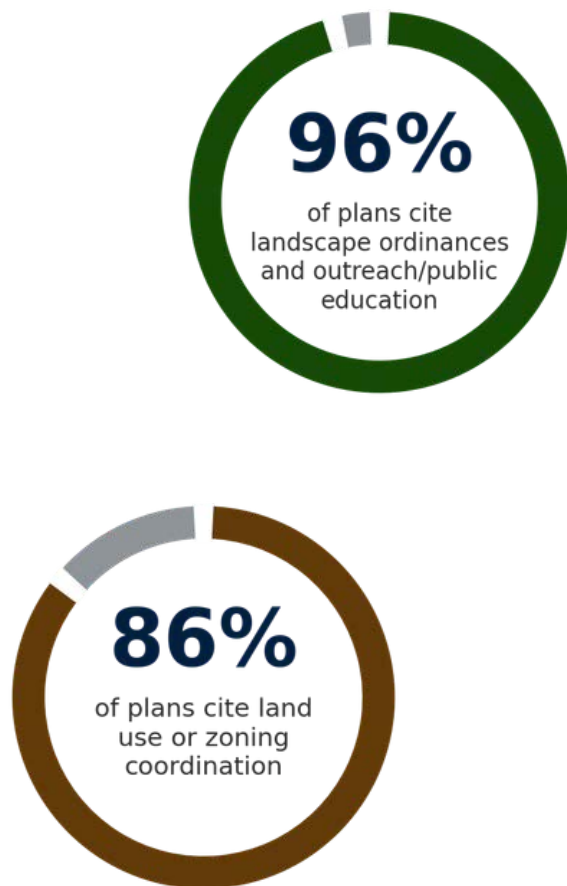
Cities and counties rely on conservation methods to decrease current and future water use. The second and third legislative requirements required

planners to describe this methodology ([Utah Code 10-20-404](#) and [Utah Code 17-79-403](#)).

In most water use and preservation elements, strategies for reducing water demand from future growth and from existing development were not addressed in separate sections. Instead, water conservation measures were presented along a spectrum, recognizing that many strategies benefit both new and existing development. For example, outdoor water efficiency standards primarily influence new development but can also reduce demand in existing neighborhoods when homeowners retrofit high water use landscapes. Similarly, public education and outreach programs encourage conservation behaviors across both existing and future populations.

Overall, sections related to strategies for reducing water demand from future growth and from existing development showed the greatest consistency in water conservation strategies across water use and preservation elements, with most jurisdictions relying on similar approaches. Landscape ordinances and outreach and public education were the most common strategy, within 96% of reporting cities and counties. Similarly, 86% of water use and preservation elements referenced land use or zoning coordination as a tool for promoting water conservation (Figure 4). Rebate programs, landscape incentive programs and other state or nonprofit conservation initiatives were included in almost all of the water use and preservation elements, demonstrating their widespread use as demand management strategies. The high level of consistency across water use and preservation elements indicates a shared understanding of the importance of demand management, with most communities relying on a similar portfolio of conservation strategies rather than developing substantially different local approaches.

Figure 4. Popular conservation tactics



City and county operations

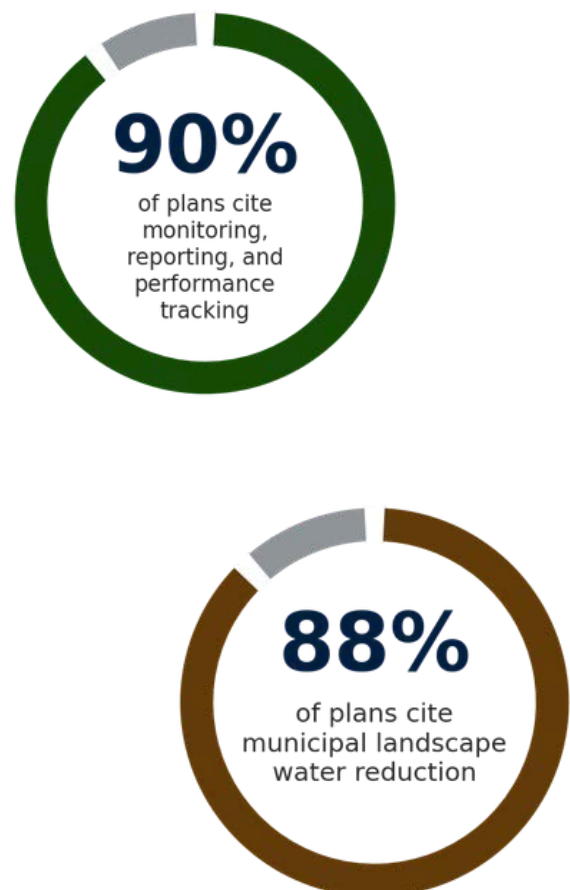
Along with conservation methods, cities and counties were asked to specifically identify opportunities to modify operations to eliminate conditions that waste water ([Utah Code 10-20-404](#) and [Utah Code 17-79-403](#)).

In contrast to the broader conservation strategies discussed throughout the water use and preservation elements, this section focused on the operational practices that cities and counties can implement to reduce water use. Many water use and preservation elements emphasized macro approaches, including collaboration across agencies and alignment with regional conservation goals, which appeared in the

majority of water use and preservation elements.

However, cities and counties also recognized the day-to-day operational management of water use. 90% of water use and preservation elements included monitoring, reporting and performance tracking (Figure 5). Municipal landscape water reduction was also widely cited, appearing in 88% of water use and preservation elements (Figure 5). Together these findings suggest that while regional coordination establishes the framework for water conservation, long-term success depends on consistent operational practices that improve the efficiency of local water systems.

Figure 5. How cities and counties preserve water



Drinking water discussion

Within the water use and preservation element, cities and counties were assigned to consult with the public water system or systems serving the community with drinking water regarding how the water use and preservation element would impact water supply planning, drinking water source and storage capacity, and other water master planning documents ([Utah Code 17-79-403](#)).

What is water diversification, consolidation and regionalization

Diversification: using multiple water sources (surface water, groundwater, reuse, storage and interconnections) to improve supply reliability and reduce dependence on a single source.

Consolidation: the voluntary merger of two or more public water systems into a single utility to improve operations, financial stability and long-term system reliability.

Regionalization: collaboration among neighboring water providers through shared infrastructure, emergency connections, regional treatment or coordinated planning without requiring system consolidation.

The review of water use and preservation elements demonstrates that long-term drinking water supply remains a significant planning consideration across Utah. 67% identified the need to develop additional water supplies, acquire new water rights or amend existing water contracts to accommodate projected growth (Figure 2). While many plans documented available water rights or contractual supplies, fewer evaluated whether those supplies would remain reliable during drought, aquifer decline, curtailment or other changing conditions.

These findings highlight an opportunity for communities to strengthen long-term water planning through supply diversification, regionalization and, where appropriate, voluntary system consolidation to improve reliability and resilience.

Water system coordination

The review also identified opportunities to strengthen regional coordination among drinking water systems. Many public water systems, particularly those serving smaller or rapidly growing communities, face similar challenges related to infrastructure investment, operational capacity, regulatory compliance and long-term water supply. Although many systems plan independently, opportunities frequently exist for neighboring water providers to coordinate through shared infrastructure, emergency interconnections, regional treatment facilities, and collaborative capital improvement planning.

Figure 6. Alignment on regional collaboration



Regional and local coordination was among commonly identified strategies within the water use and preservation elements, indicating broad recognition of cooperative planning (Figure 6).

The statutory consultation requirements within the water use and preservation element recognize that effective land use planning depends upon close coordination with public water systems. Growth decisions directly influence future water demand, infrastructure needs, storage capacity and long-term system planning. Consequently coordination between local governments and drinking water providers is essential to ensure that future development aligns with available water resources and infrastructure capacity.

As Utah's population continues to grow, continued collaboration between land use authorities and public water systems will support more resilient, informed and sustainable planning decisions.

Agriculture discussion

Within the water use and preservation element, county planning commissioners were tasked with identifying and considering each agriculture protection area within the county and avoiding proposing a use of land within an agriculture protection area that is inconsistent with or detrimental to the use of the land for agriculture. Coordination with canal and irrigation companies was also discussed ([Utah Code 17-79-403](#)).

County water use and preservation elements identified several challenges affecting the long-term viability of agriculture. The most frequently discussed issue was the conversion of agricultural land to residential development, which fragments lands and county heritage, increases demands on rural infrastructure and often results in the transfer of water rights away from agricultural use. Counties also emphasized the growing uncertainty surrounding irrigation water supplies, noting that drought and increasing competition for water threaten the long-term sustainability of

agricultural operations. In addition, many plans highlighted challenges associated with irrigation infrastructure. Canal rights-of-way are often poorly documented, creating maintenance difficulties and conflicts with adjacent property owners as development expands.



Farmland adjacent to residential housing.

Despite these challenges, counties identified planning tools to help preserve agricultural lands and reduce development conflicts. Agricultural protection areas were frequently cited as a land use strategy for maintaining working lands while accommodating growth. Established under Utah Code 17-81, agricultural protection areas provide participating landowners with protections from nuisance lawsuits, unreasonable local regulations, certain eminent domain actions and development-related conflicts for rolling 20-year periods. The use of protection areas varied considerably across water use and preservation elements, reflecting differences in local development pressures and agricultural land ownership. Some counties reported tens of thousands of protected acres through protection areas and agricultural covenants, while others established more limited protection areas based on locally defined eligibility criteria.

Beyond land use protections, counties also recognized the importance of improving

agricultural water efficiency. Many plans highlighted the Agricultural Water Optimization Program as a key statewide initiative that supports agricultural resilience by funding infrastructure improvements and innovative irrigation practices without increasing water depletions.

To date, the program has funded improvements across more than 85,000 acres, resulting in over 100,000 acre-feet of estimated water savings while maintaining productive agricultural lands.

County plans also emphasized the importance of efficient and coordinated irrigation conveyance systems. Because canals and irrigation networks are fundamental to agricultural production and can impact human health and safety, many plans included maps of canal infrastructure ([see Water Rights canal mapping](#)), irrigation district boundaries and contact information for local canal companies, where available. Several counties further recommended or required coordination between developers and canal companies during the development review process to protect canal infrastructure, preserve access for maintenance and avoid conflicts with existing water delivery systems.

These findings suggest that counties view agricultural preservation as an integrated land use and water planning issue. Rather than focusing solely on protecting farmland, many plans recognize that sustaining agriculture also requires safeguarding zoning, increased coordination, and irrigation infrastructure.

Conclusion

The review of 73 water use and preservation elements demonstrates that Utah cities and counties have made progress in integrating water

into local long range land use planning. Through extensive statewide outreach, technical assistance and \$500,000 in awarded grant funding, cities and counties developed water use and preservation elements that established a common framework for addressing water demand, conservation and operational efficiency.

Across the state, communities demonstrated a strong and consistent commitment to water preservation. Landscape ordinances (96%), public education and outreach (96%), rebate and incentive programs (93%) and land use coordination (86%) were among the most frequently cited strategies for reducing water demand. Similarly, operational practices such as regional collaboration (92%), performance monitoring (90%), system optimization (92%) and leak detection were widely incorporated, reflecting a shared understanding that effective water stewardship requires both coordinated planning and ongoing system management.

Despite this broad consensus on conservation, statistical analysis identified key gaps and opportunities to strengthen the integration of water and land use planning. While 67% of water use and preservation elements indicated that additional water supplies will be needed to accommodate future growth for current plans, only 12% incorporated scenario planning to evaluate how varying levels of water availability could influence future development. Similarly, although nearly every plan identified multiple water preservation strategies, only 48% included prioritized or time-bound implementation actions, suggesting that many plans describe what should be done without clearly establishing how or when those actions will be carried out.

Overall, Utah's first generation of water use and preservation elements has established a statewide foundation for water planning and

demonstrated widespread support for integrating water considerations into local planning decisions. Moving forward, the state of Utah should bolster planning, not by identifying additional conservation strategies, but by strengthening the connection between water availability, infrastructure, land use and implementation through adaptive, scenario-based planning and build-out flexibility (Figure 7). Building on this foundation will help Utah cities and counties make more resilient decisions as they navigate continued growth, changing water supplies and long-term resource uncertainty. Below are recommendations based on these findings.

Figure 7. Building on Utah’s water planning foundation



Recommendations

General Recommendations

- Update water use and preservation elements every 5 years to incorporate latest water use data.
- Support scenario and allocation planning that increases strategic preparation for multiple futures, including adaptable scenarios that promote build-out flexibility based on water availability.
- Support education topics on interconnected water sources and water production.
- Support water supply diversification to promote water security. Consider developing a process to determine reliable supply within a municipal water system.
- Support water-related technical assistance for growing towns and smaller cities.
- Promote waterwise planning through land use ordinance changes such as:
 - Annexation concurrency standards for infrastructure requirements.
 - A period of vetting for large water users prior to permitting.
 - Developers demonstrating wet water availability prior to permitting.
 - Statute of limitations on development plans that terms will be reviewed and re-negotiated after 5 years.

Agricultural Recommendations

- Expand access to agricultural land protection and succession planning tools
- Continue to work with canal companies to upgrade delivery and efficiency of secondary water sources.
- Conserve water use through programs like AgVIP and the Agricultural Water Optimization Program.

Contact: CityCountyPlanning@utah.gov

For more information, visit [Water.utah.gov/water-general-plan](https://water.utah.gov/water-general-plan)



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