Utah’s Coordinated Action Plan for Water

Introduction

January 2022

Rapid growth and new challenges, including climate change, means that Utah must take a comprehensive, proactive approach to conservation and planning for our future. Recognizing the interconnectedness of water through our communities, through the geography of our state, and through the water cycle, Gov. Cox instructed state agencies to undertake a groundbreaking effort to tackle water issues through bold action. Strategies outlined in this action plan will secure a sustainable and prosperous future for Utahns.

A Coordinated Action Plan

Utah's Coordinated Action Plan for Water is a collaborative effort between the state Governor's Office of Planning and Budget (GOPB), the Department of Natural Resources (DNR), the Department of Environmental Quality (DEQ), and the Department of Agriculture and Food (UDAF), as directed by Gov. Cox's One Utah Roadmap action item "Establish a statewide water cooperative action plan that prioritizes conservation, storage, agriculture preservation, and use optimization." Much planning work has been completed in the water space over the past decade. Past planning efforts, including the 2021 State Water Resources Plan, the 2017 Water Strategy, the work of the Legislative Water Development Commission, the Water Task Force, the Agricultural Water Optimization Task Force, HCR-10 on the Great Salt Lake, the state's Water Finance Board, the work of the Great Salt Lake Advisory Council, the Prepare 60 and Reclaim 60 partnerships, and others. These efforts have generated a list of over 200 recommendations and actions to safeguard and improve the state's water resources for a healthy and prosperous Utah.

Some of these recommendations are in conflict with each other, some have potential for greater impact, and some can be implemented by the executive branch, while others require partnerships. The goal of *Utah's Coordinated Action Plan for Water* is to compile past recommendations, prioritize them, negotiate trade-offs among competing objectives, and create a plan of action for the state's top priorities to ensure the best use of this valuable resource.

This action plan will be used by Gov. Cox to guide the work of Utah's executive branch. Outcomes may include executive orders, directives to state agencies, recommendations for policy changes, new studies and initiatives, or prioritization of projects in the state's budget. Gov. Cox also hopes to establish a culture of collaboration across state agencies to guide future water planning efforts.

Participating Agencies

Department of Natural Resources

- Division of Water Rights
- Division of Water Resources
- Division of Fire, Forestry, and State Lands
- Division of Wildlife Resources
- Public Lands Policy Coordinating Office

Department of Environmental Quality

- Division of Drinking Water
- Division of Water Quality

Department of Agriculture and Food

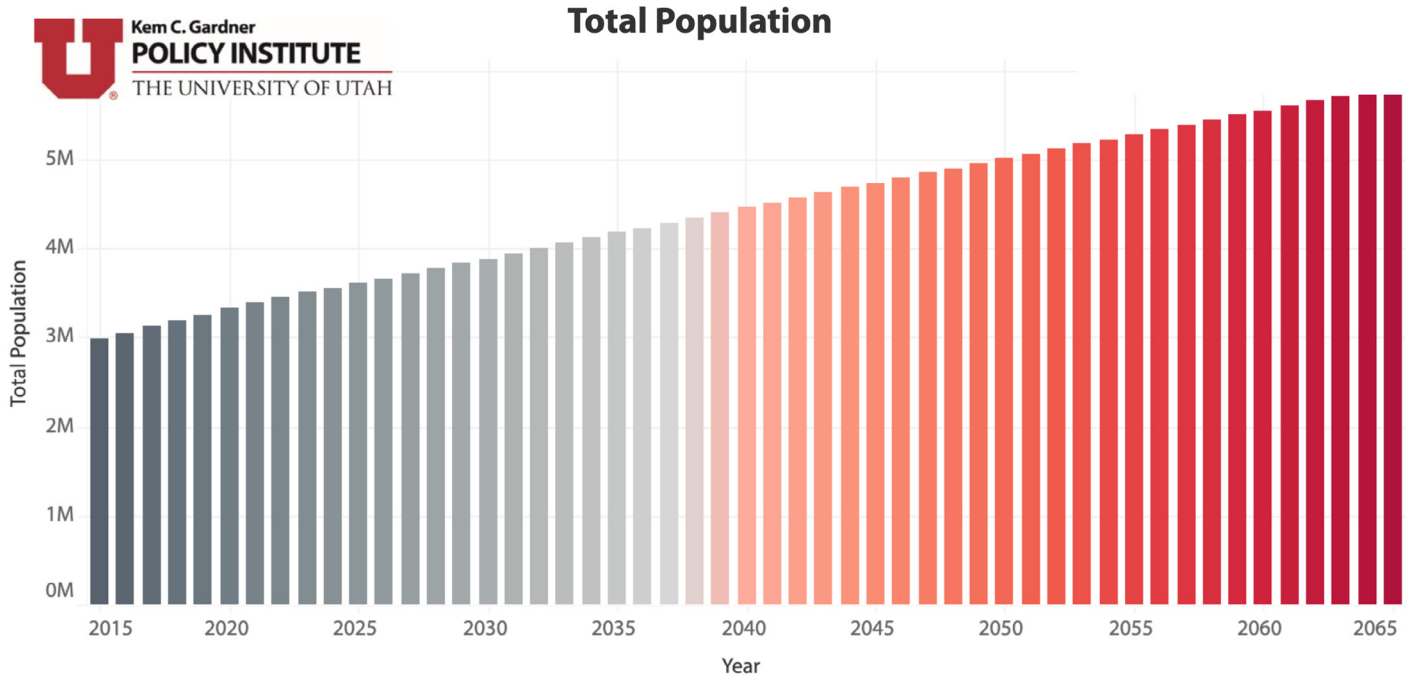
Governor's Office of Planning & Budget

Governor's Office of Economic Opportunity

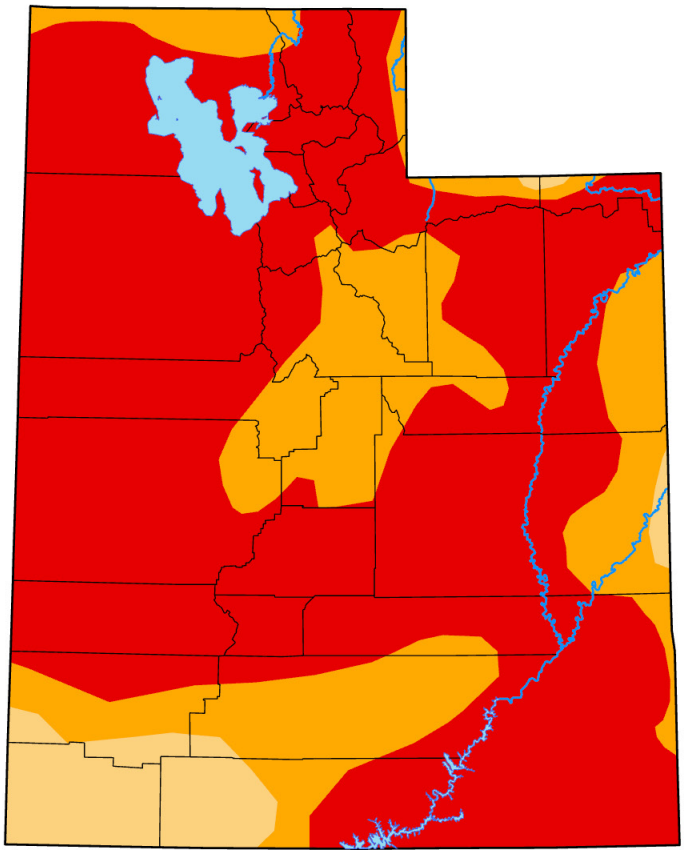
An Uncertain Future

Utah is facing dual challenges: rapid growth and increasing uncertainty of water resources. Utah has experienced nearly 20 years of below-average precipitation trends, with the summer of 2021 breaking records for both heat and drought. Storage reservoirs are reaching historic lows, harmful algal blooms are increasing, exceptionally dry soil moisture levels are reducing spring runoff, and the state's drinking and agricultural water sources are increasingly at risk.

Beyond simply reducing the availability of water, drought creates the environment for a series of cascading disasters. As our state becomes increasingly arid, the risk of wildfires increases. Fighting wildland fires requires significant amounts of water, depleting water storage, increases risk of landslides in burn scar areas, impacting communities, and directly threatens essential drinking water infrastructure. Further, thunderstorms following fire events increase water quality impacts within and downstream of burned areas which poses problems for water-supply reservoirs, drinking-water treatment plants, and downstream aquatic ecosystems.



Source: Kem C. Gardner Institute



State of Utah

Drought map as of December 20, 2021

Intensity

- None
- D0 (Abnormally dry)
- D1 (Moderate drought)
- D2 (Severe drought)
- D3 (Extreme drought)
- D4 (Exceptional drought)
- No Data

Source: U.S. Drought Monitor

Growth also increases pressures on water resources. Over the last decade, Utah has been the fastest-growing state in the nation, a fact confirmed by the latest census data showing an 18.4 percent growth rate during the past decade. The trend does not appear to be slowing down. Growing population and the expansion of cities require a tremendous amount of water. With the uncertainty of Utah's water resources, the future of our communities must include careful consideration about land use, conservation, healthy watersheds, urban landscaping practices, drinking water supply, storage, and treatment, and household and industry water consumption.

Much of Utah's water infrastructure is nearing the end of its engineered lifespan. Risk of a major earthquake further threatens the reliability of these critical infrastructure resources and an event could pose devastating public safety risks.

Growth in the state also puts increasing pressure on sewer and stormwater systems. Persistent drought will only exacerbate water quality challenges, meaning that our state must make investments in new infrastructure and implement policies to ensure that our streams, rivers, and lakes can continue to provide us with safe recreational opportunities, productive industry, and healthy habitats for Utah's wildlife.

Ensuring the continued prosperity and high quality of life that makes our One Utah vision possible will require swift and bold action in water policy. It is critical that we face challenges head-on through increased collaboration, direct investments, and addressing the difficult decisions about conflicting goals. We need Utah-based solutions that are designed to meet our state's unique needs, and that reflect Utah's collaborative approach to problem solving.

Statewide Water Commitments

The state of Utah has established the following commitments to better secure Utah's water future:

1 Utah is committed to increasing the resiliency of our water supply and quality by maintaining and improving our current **water infrastructure**, improving data collection, and by investigating opportunities for new water supply and storage.

2 Utah is committed to using our existing water supply as wisely as possible, by reducing the amount of water consumed through **conservation**, ensuring access to safe and reliable drinking water, and improving the quality of water as it leaves our communities.

3 Utah is committed to optimizing the use and management of our finite water supplies in order to preserve the state's **agricultural economy** and ensure a sustainable and prosperous future.

4 Utah is committed to maintaining and improving the **health of our waters and watershed**–with emphasis on our forests, Great Salt Lake, Bear Lake, and Utah Lake–to support their continued multiple uses.

Plan Structure

Utah's Coordinated Action Plan for Water will be delivered in a series of quarterly reports, each focused on a different aspect of the state's water commitments:

1. **Investing in Infrastructure** - *January 2022*
2. **Vibrant Communities** - *release scheduled for April 2022*
3. **Productive Agriculture** - *release scheduled for July 2022*
4. **Healthy Waters and Watersheds** - *release scheduled for October 2022*

Each report will summarize key issues, present executive branch priority strategies, and outline an action plan for implementing each strategy. The action plans will outline a clear plan, including identifying:

- initiative champion(s),
- participants,
- resources needed,
- timelines, and
- performance metrics.

1 Investing in Infrastructure
January 2022

Utah is committed to increasing the resiliency of our water supply by maintaining and improving our current water infrastructure, improving data collection, and by investigating opportunities for new water supply and storage.

Utahns today are benefitting from historic investments in our state's water infrastructure which facilitated the expansion of jobs, created new recreation opportunities, and allowed new neighborhoods to develop. These aging facilities are in need of significant capital investments and improvements. As our community continues to grow, so do our new infrastructure needs. Protecting public health will require us to fund new water treatment and distribution avenues to ensure all Utahns have access to safe, reliable, and clean drinking water. A generational investment in water infrastructure is needed to meet the needs of current and future generations.

This report will outline the magnitude of the water infrastructure needed to accommodate the growth of our state as well as the protection of our natural resources, delineate resources already available to the state for infrastructure projects, and clarify the state's role in addressing these needs. Project needs identified will take a holistic approach to our state's water system, ranging from water storage and delivery projects to wastewater treatment, and investments in municipal, industrial, and agricultural water optimization. Critically, this report will outline an action plan for prioritizing the state's advancement of necessary investments.

2 Vibrant Communities
Anticipated release April 2022

Utah is committed to using our existing water supply as wisely as possible, reducing the amount of water used in our communities, and ensuring the continued vibrancy, success, and growth of the state's cities and towns.

Utah's population is expected to reach 5 million by 2050, requiring an increase in drinking water supply, treatment, and storage. As our state grows, agricultural lands have and will continue to transition to developed communities. While developed lands typically utilize less water than agriculture, growth which occurs on non-irrigated land increases demand for municipal and industrial water use—making conservation an even more critical need.

The vast majority of municipal and industrial water in Utah's cities and towns is used for outdoor landscaping irrigation. Factors that affect how much water a community uses include lot sizes, park strip and local open space requirements, planting choices, irrigation technology, water prices, landowner water use awareness, and homeowner association codes, covenants, and restrictions.

Commercial and industrial land uses provide Utahns with important employment opportunities and support Utah's overall economy. Some uses consume more water than others, such as data centers, bottling plants, and paper product manufacturers. As a business input, water must be recognized as a cost to production consistent with its scarcity such that efficient market outcomes can be achieved.

Utah communities also play a role in protecting downstream water quality. Water that travels through our sewer systems and the stormwater that runs off impervious streets and parking lots are all tied to the health of Utah's water bodies. These wetlands, rivers, and lakes provide much of the state's recreation opportunities and aesthetic beauty, as well as supporting wildlife habitat and additional economies.

The state holds regulatory authority over water quality and drinking water to protect public health and the environment. Federal land management agencies govern ⅔ of the land in the state, and land use regulations and economic development are primarily the jurisdiction of local governments. Therefore, the state's role in these areas is largely one of education and support. This report will present a series of priority actions that the state will undertake to support local communities in becoming better stewards of our water resources, while maintaining a prosperous, high quality of life.

3 Productive Agriculture
Anticipated release July 2022

Utah is committed to optimizing the use and management of finite water supplies in order to preserve the state's agricultural economy and ensure a sustainable and prosperous future.

Long before our state was established, agriculture has been essential to civilization in this area. Utah's agricultural heritage retains a critical role in the continuation of our society, in our culture, and in our state's future. Utah's agricultural industry accounts for 2 percent of the state economy. Today most of Utah's diverted water resources, approximately 75 percent, go toward agricultural uses. This is a reduction from 80 percent in 2015 due to optimization efforts as well as conversion of agricultural water to municipal and industrial water.

Agriculture is facing relentless pressure from growth that is transforming agricultural lands and increasing demands on a limited water supply. Long-term climate trends are decreasing the supply of available water. The state is committed to continuing to support agricultural industry growth, while minimizing any unnecessary or excessive water use.

This report will focus on action items the state can undertake to support Utah's agricultural producers as they optimize irrigation practices. Agricultural optimization increases agricultural resiliency, expands the industry's ability to survive periods of drought, and can increase production by stretching limited water resources.

Investments must be coupled with policy changes that incentivize consuming less water, while still maintaining commercially viable production of agricultural goods. Gov. Cox is committed to working with the legislature to implement needed tools.

4 Healthy Waters and Watersheds
Anticipated release October 2022

Utah is committed to maintaining and improving the health of our waters and watersheds, specifically focusing on our forests, the Great Salt Lake and Utah Lake, and Bear Lake, to support their continued multiple uses.

With Utah's population growing, and less precipitation falling in the form of snow, it is important for our state to protect surface water resources and ensure that they can continue to serve the state into the future.

Utah's watersheds span from high mountain summits, canyon streams and rivers, reservoirs, communities, farmlands, natural open spaces, the wetlands of the Great Salt Lake, Bear Lake, Utah Lake, and to places beyond the state's borders. Each part of the state's many watersheds supports multiple uses that benefit the state including drinking and agricultural water, recreation, industry, and wildlife. Protecting and managing Utah's watersheds and water bodies requires a multi-pronged approach. Source protection, wastewater treatment, stormwater management, aquifer recharge, agricultural practices, and riparian restoration all play a role in maintaining healthy waters.

The forest management practices of the last century have led to conditions ripe for catastrophic wildfires and the subsequent water quality and erosion issues that occur post-fire. Water levels in Great Salt Lake are in decline, threatening billions of dollars in economic activity, a globally important ecosystem, local public health, and the lake's essential contribution to Utah's water cycle. Increasing occurrences of harmful algal blooms have heightened concerns over the future of Utah Lake, and Bear Lake is facing declining lake levels, invasive species, water quality and increased use.

This report will focus on priority actions that state agencies will undertake to advance watershed health. These actions may include the use of regulatory tools, education and outreach efforts, and incentive programs to ensure responsible management of our watersheds and long-term protection of our water resources.