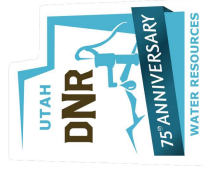


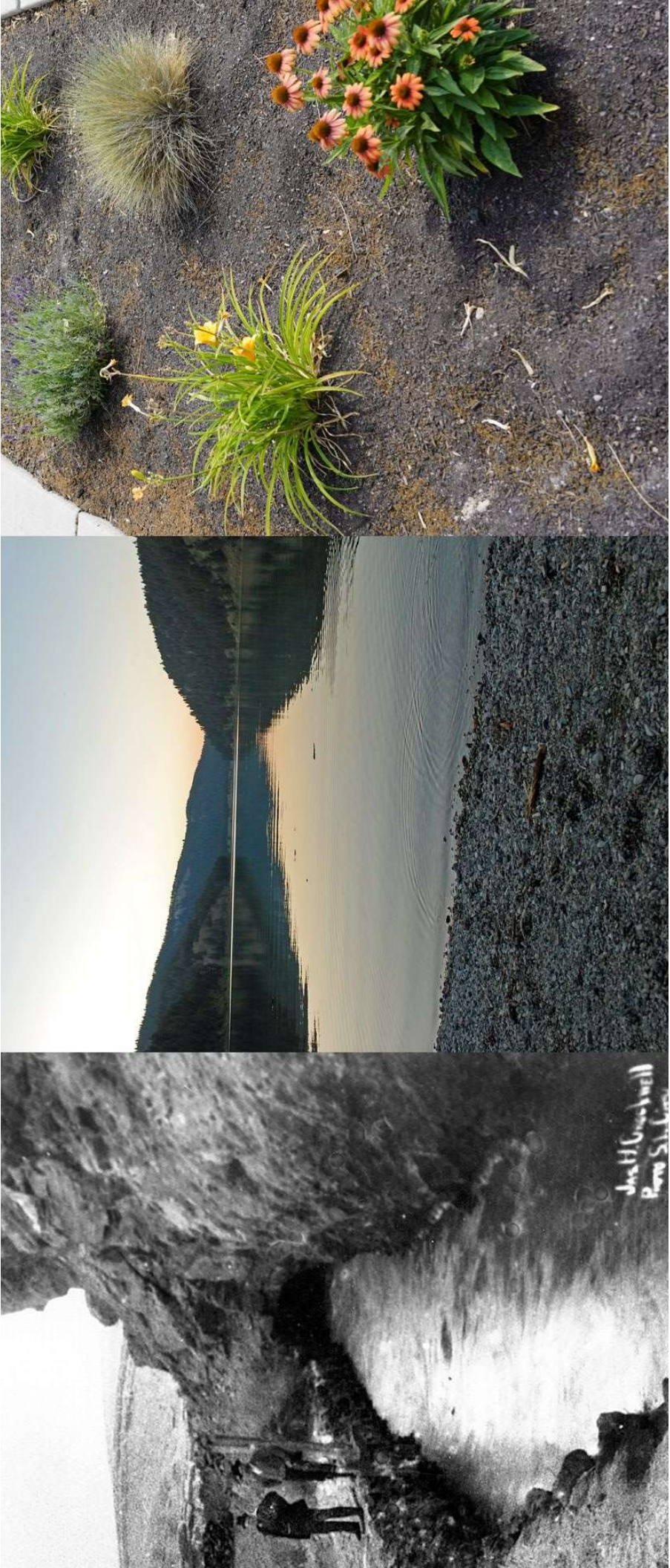
October 25, 2022

Utah Land Use Institute

Water Supply & Drought



Shelby Ericksen | Water Conservation Section Manager
Division of Water Resources



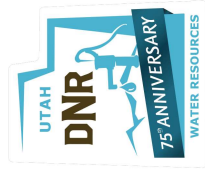
PLAN | CONSERVE | DEVELOP | PROTECT

Utah's Water Resources



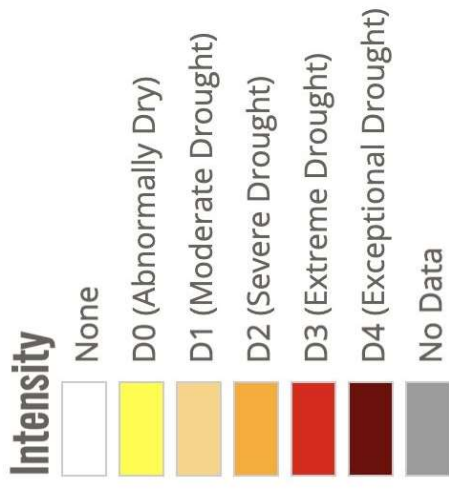
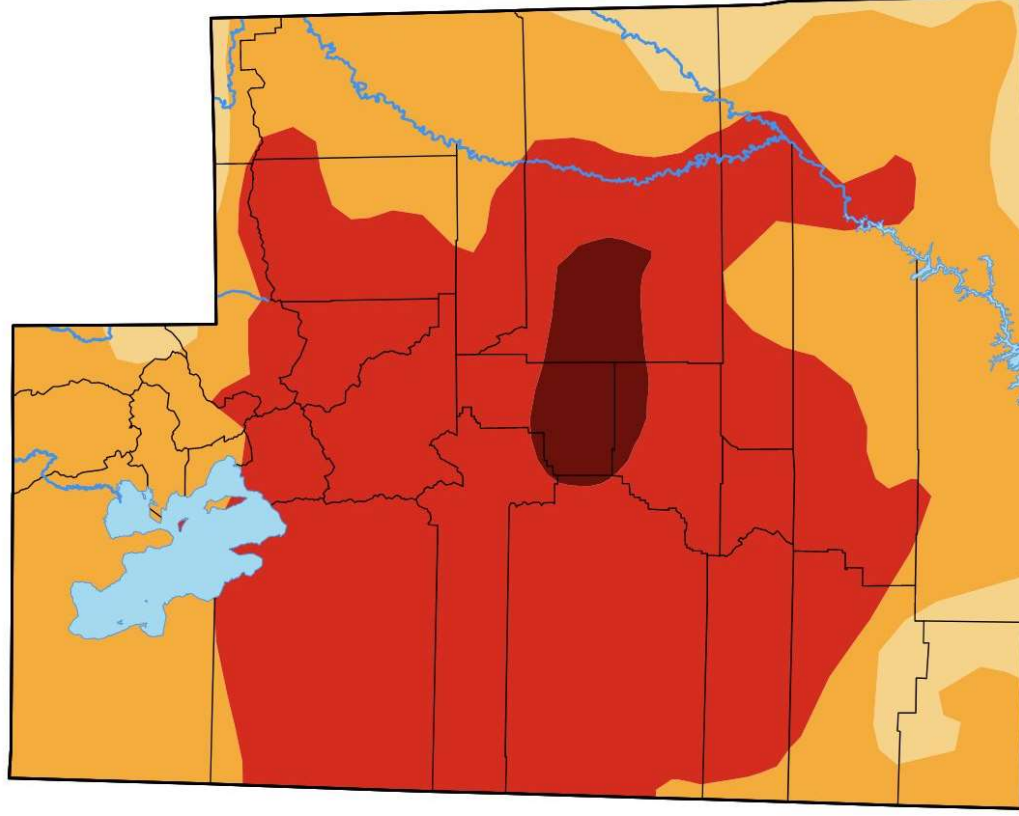


Drought



Map released: Thurs. October 20, 2022

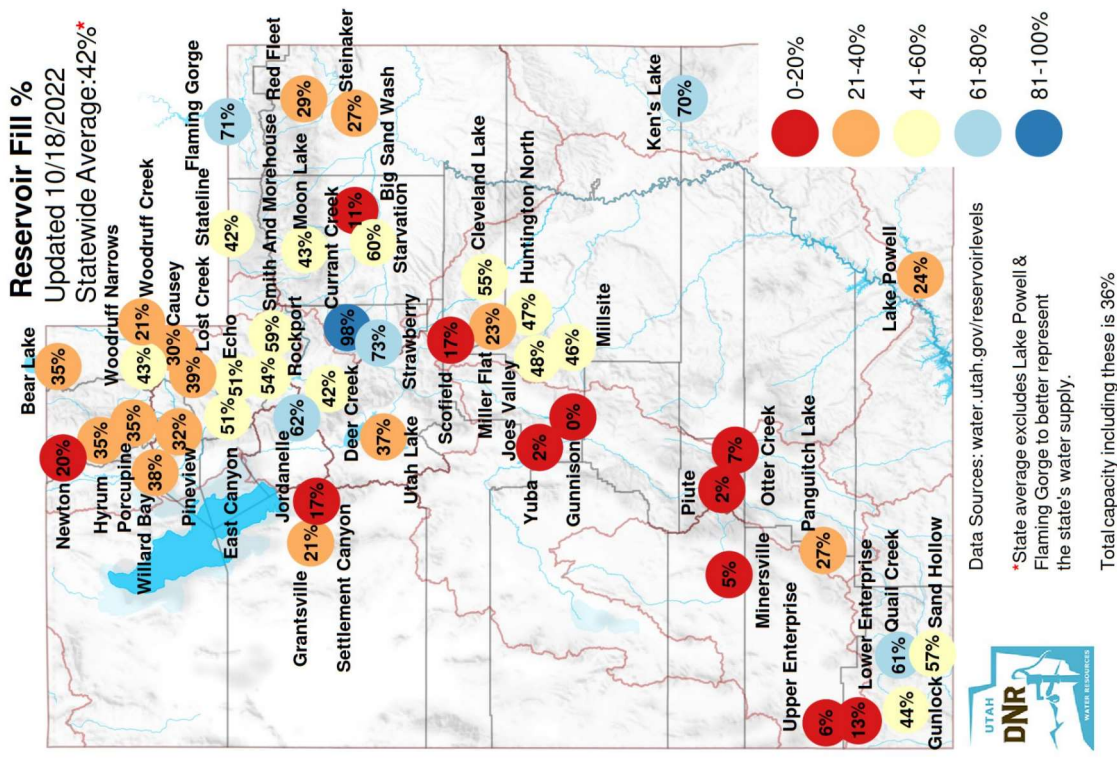
Data valid: October 18, 2022 at 8 a.m. EDT



Author: Adam Hartman NOAA/NWS/NCEP/CPC
U.S. Drought Monitor Utah
droughtmonitor.unl.edu

Reservoir Levels

- Statewide storage is 44% of capacity – about the same as this time last year
- Monsoons and conservation have helped keep water in our reservoirs
- Conditions vary throughout the state, reservoirs shown in “red” are below 20%
- Reservoirs vary in size – some storing a year’s worth of water and some storing multiple year’s
- Snowpack refills reservoirs



Seasonal Outlook – Likely Warmer & Maybe Drier



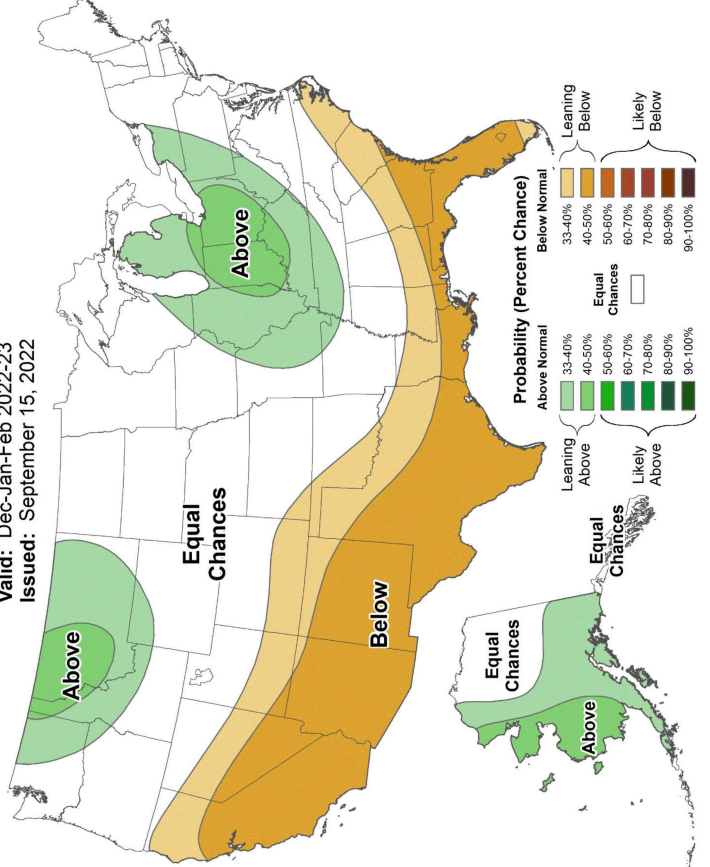
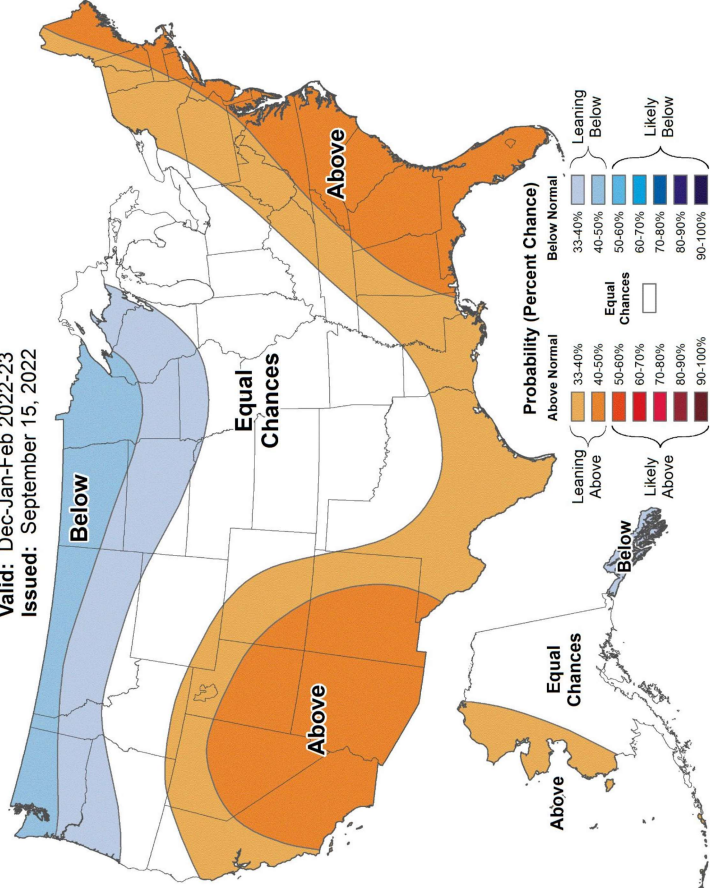
Seasonal Temperature Outlook

Valid: Dec-Jan-Feb 2022-23
 Issued: September 15, 2022



Seasonal Precipitation Outlook

Valid: Dec-Jan-Feb 2022-23
 Issued: September 15, 2022



GREAT SALT LAKE ELEVATION



1986

2000

2022

RECORD HIGH

4211.65 FEET

AVERAGE

4202.2 FEET

CURRENT LEVEL

4188.9 FEET

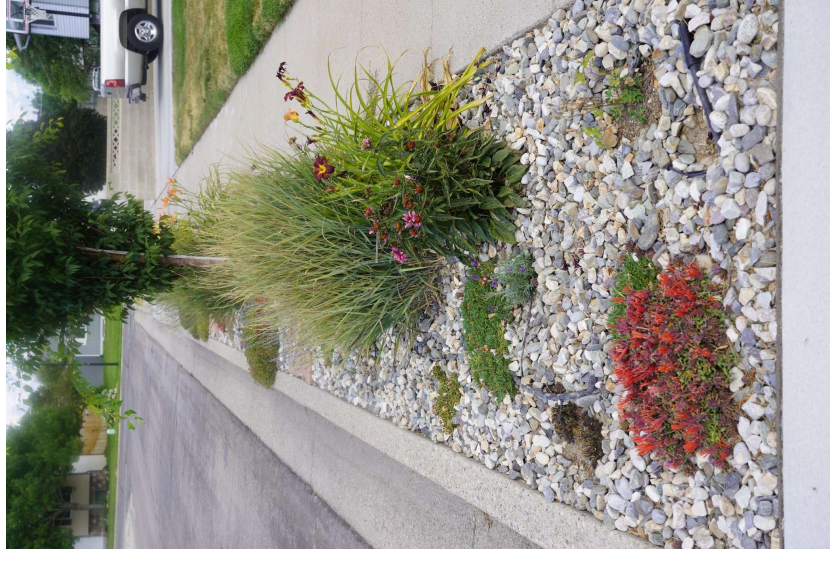
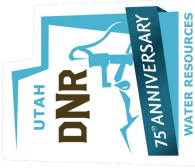
As of October 12, 2022

** Levels have continued to drop since the new low of 4190.1 on July 3 and are not expected to rise until fall/winter storms move in and irrigation stops for the season.*



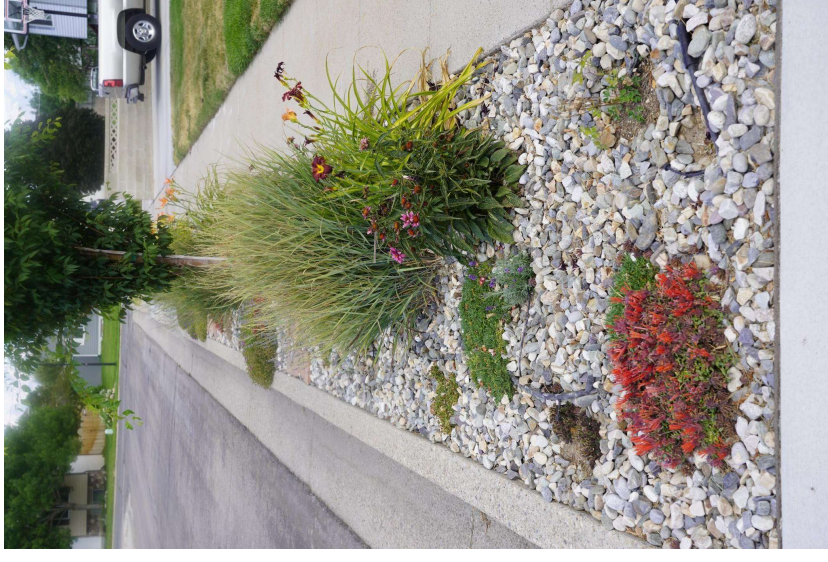
Drought Response

- SLC saved **2.9 billion gallons** in their service area (compared to three-year average demand)
- Sandy City saved **726 million gallons** (from January 1-August 31)
- Washington County's water production is **111 million gallons less** compared to last year, despite a nearly 5% increase in the number of connections
- Weber Basin's year-to-date deliveries are down 22%, about **5 billion gallons** compared to last year
- JWVCD has maintained a reduction of half a billion gallons of water compared to last year
- Utah Water Savers processed 23,640 smart irrigation controller rebates and 3,000 toilet rebates (since program inception in 2018)



Additional Conservation

- WCWCD's new ordinances are projected to save nearly **11 billion gallons over the next 10 years**
- 17 communities in Weber Basin's service area have adopted water efficiency standards
- 200% increase in Flip Your Strip applications
- SLC has water checks, low-water grass seed, rain barrels and incentive programs





Growth

Statewide Population Growth

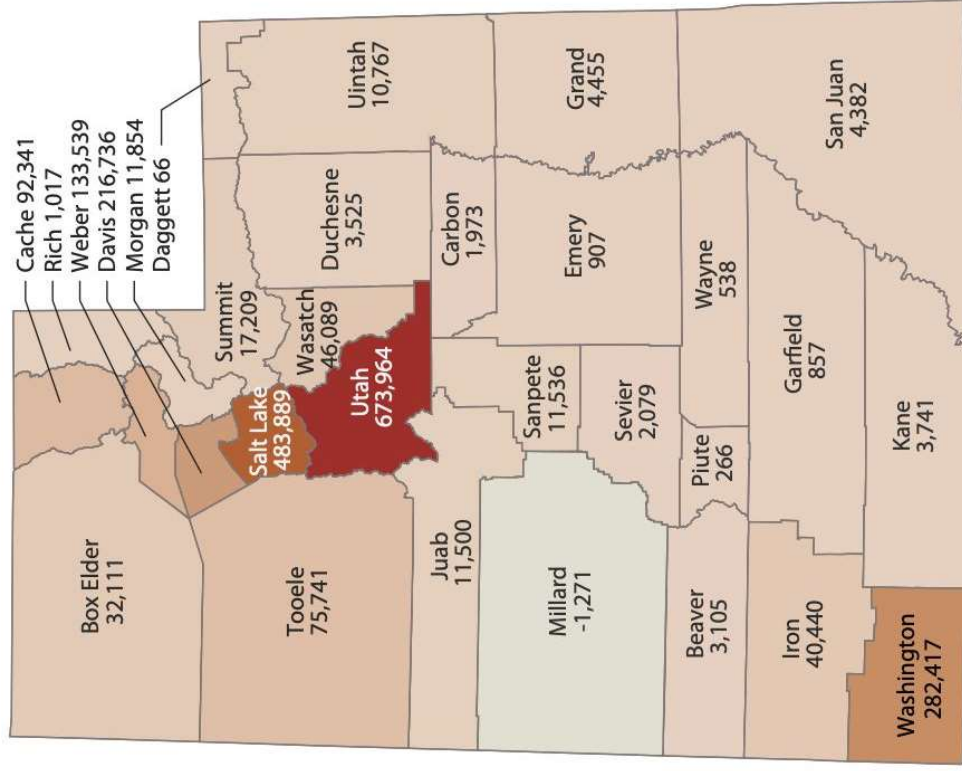


Five counties projected to add over 100,000 residents each and account for 83% of growth— Utah, Salt Lake, Washington, Davis, and Weber

-Kem C Gardner Policy Institute



Figure 8: Utah Projected County Population Change, 2020 to 2060



Source: Kem C. Gardner Policy Institute, 2020–2060 Projections

Growth Stats

- Utah is among the fastest-growing states in the country
- Utah also among the driest states in the country in terms of its annual precipitation
- Water resources are finite and, as in many parts of the world, their future is uncertain
- As Utah's population continues to grow, so will its demand for water
- Water development and water conservation should be considered in parallel

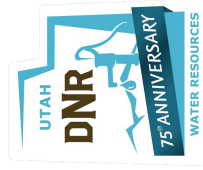


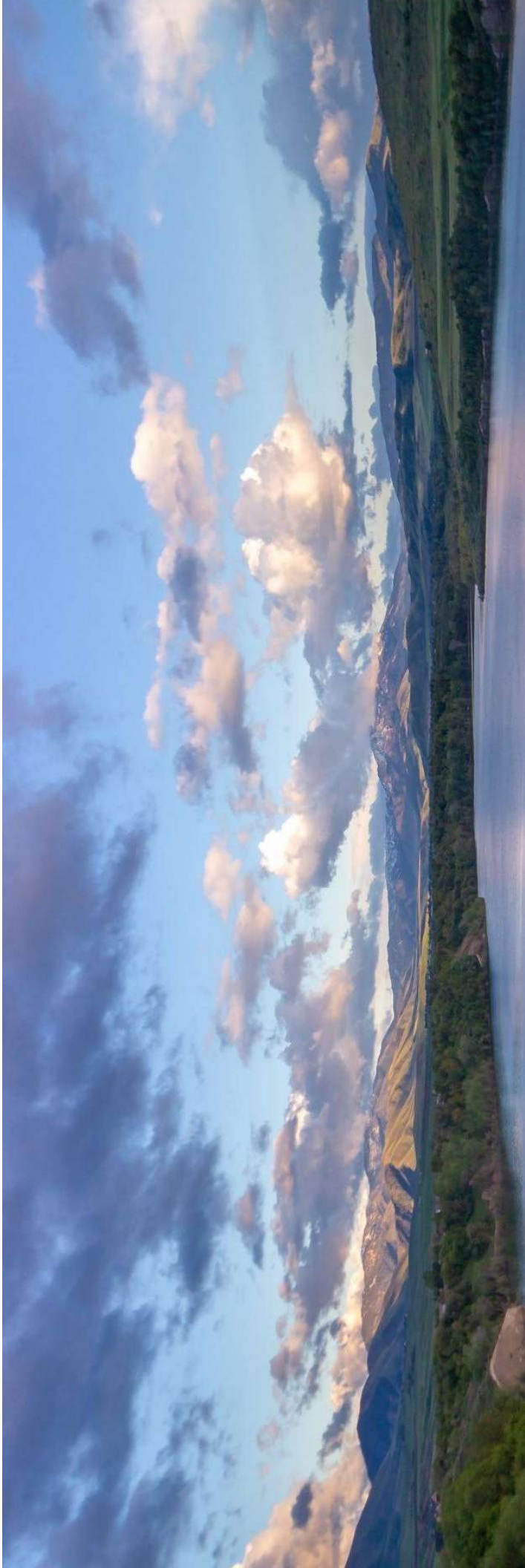
-Regional Water Conservation Goals Report

A Statewide Challenge

In 2021, Iron County Experienced:

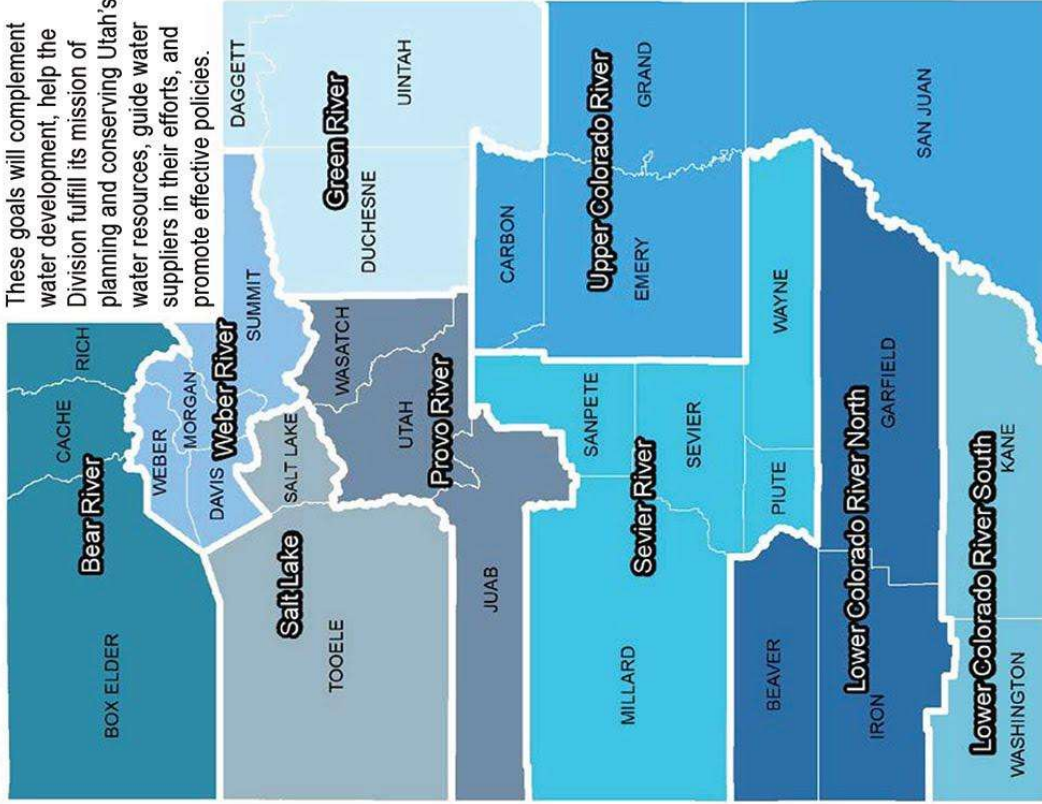
- The State's Groundwater Management Plan.
- Highest growth rate of all Utah counties.
- Its second driest consecutive years on record.
- Its second warmest year on record.
- The most costly and damaging flooding.





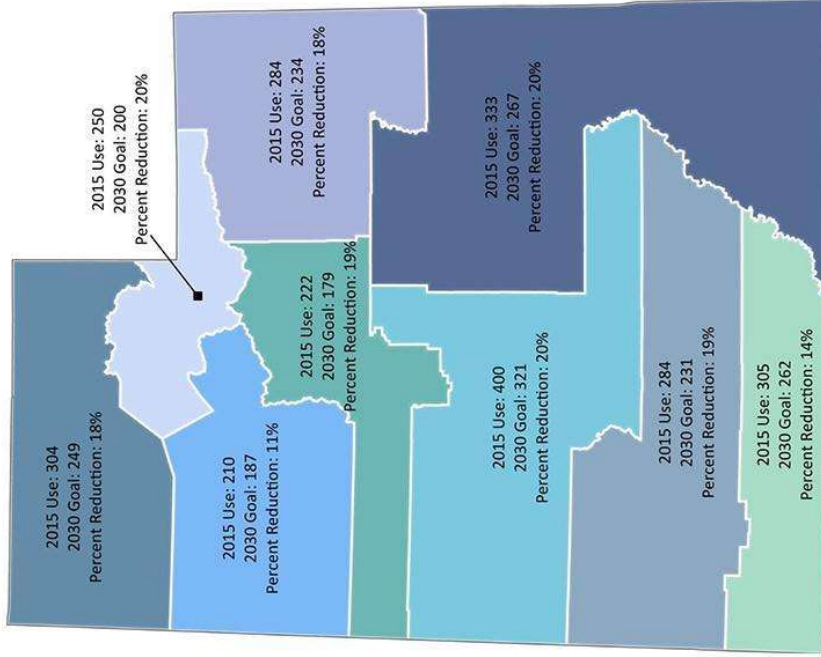
Water Conservation Goals

These goals will complement water development, help the Division fulfill its mission of planning and conserving Utah's water resources, guide water suppliers in their efforts, and promote effective policies.





M&I Water Conservation Regions 2015 Use Vs 2030 Goals

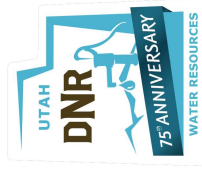


A regional approach allows the goals to be tailored for nine different regions and takes into account climate, elevation, and each region's characteristics.
Note: Use is measured in gallons per capita per day.



Considerations

- Decreasing household size
 - 2022: 3.02
 - 2060: 2.45
- Increasing population size
 - 2022: 3,403,190
 - 2060: 5,450,598
- Decreasing lot sizes
 - Land availability
 - Smaller lot preferences
 - Increasing number of multi-family units



Utah Long-Term Planning Projections, Kem C Gardner Institute



Solutions



Long Term Water Conservation

Regulation

- Water conservation plans
- Regional water conservation goals
- Metering requirements
 - Tiered water rates
- Landscape ordinances
- Plumbing standards



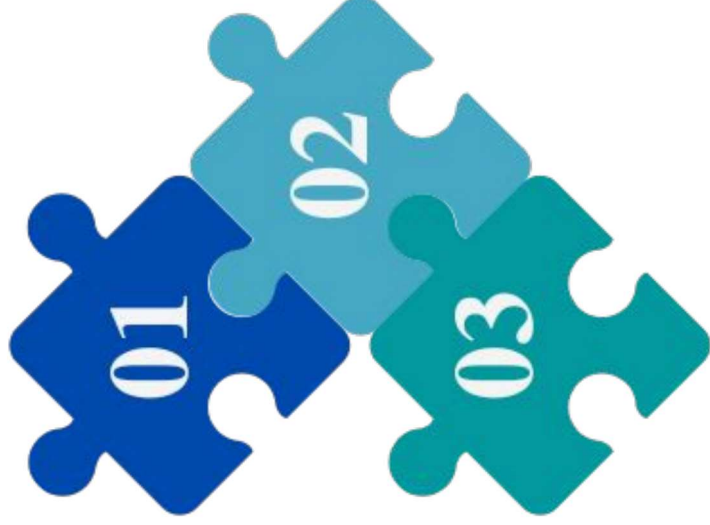
Education

- Slow the Flow
- Smart Billing
- K-12 water education
- Municipal plan assistance



Incentives

- Smart controller rebates
- High-efficiency toilet rebates
- Landscaping Rebates
- Transparent water billing grants
- Secondary metering grants



Biggest BANG for Our Collective \$\$\$



EXPANDED TURF BUYBACK PROGRAM

Outdoor water use makes up 60% of our municipal and industrial use.



Expanded turf removal programs show we are serious about water conservation.

INTEGRATED LAND USE & WATER PLANNING



Land and water use planning are currently done separately. Adopting water efficiency standards is proactive and more cost effective than future turf replacement.

WATER CONSERVATION MEASURES

STATEWIDE INSTALLATION OF SECONDARY WATER METERS

1/3 of Utah uses secondary or untreated water. Systems with meters have saved between 20% and 30%.



Very few of these connections are metered. You can't manage what you don't measure.

AGRICULTURAL OPTIMIZATION

Agriculture accounts for approximately 75% of Utah's water use.



Investment in agricultural optimization will create supply flexibility, benefits for farmers and improve water quantity and quality.

Secondary Meters

- \$190 million has been authorized to install about 114,000 meters
- These metered connections will help save almost 54,000 acre-feet of water (about the size of East Canyon Reservoir)
- Additional funding of \$120 million is needed to install about 60,000 meters on the remaining connections
- Average water reduction of 20-30%
- 30% of the state's M&I water use is estimated secondary water



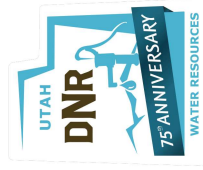
Landscape Rebate – HB 121

- A waterwise landscape can use up to **2/3 less** water than a traditional Utah landscape
- Applications expected to be available by spring 2023, soft launch expected mid/late-October
- Residents can sign up for email updates to be notified of program launch *ConserveWater.Utah.Gov*
- State program will likely follow similar programs offered on the local level by several water districts



Resources

- [Kem C Gardner Institute](#)
- [Regional Water Conservation Goals Report](#)
- Drought.utah.gov
- Droughtmonitor.unl.edu



THANK YOU

