

## FOR IMMEDIATE RELEASE

# Media Contact

Michael Sanchez Utah Division of Water Resources 385-226-8967 <u>masanchez@utah.gov</u>

# **Drought Update**

**SALT LAKE CITY** (August 25, 2022) – So far this year, Utahns have saved billions of gallons (again), programs such as <u>Flip your Strip</u> across all agencies have seen a 200% increase in applications when compared to last year and many municipalities have passed ordinances that will conserve water. Due to the ongoing drought conditions, water conservation is a top priority for the <u>state</u>.

"Efforts to advance water conservation are having a significant impact on our ability to stretch the water supply," said Joel Ferry, acting executive director of the Department of Natural Resources. "Utah communities are responding by implementing waterwise ordinances, and residents are turning off their sprinklers and removing unnecessary turf. All of this helps reduce our water use."

Soil moisture is generally high around the state. The improved soil moisture will help more water get to reservoirs during spring runoff next year. According to the <u>U.S. Drought Monitor</u>, 62.27% of the state is in extreme drought or worse.

#### At-a-glance highlights:

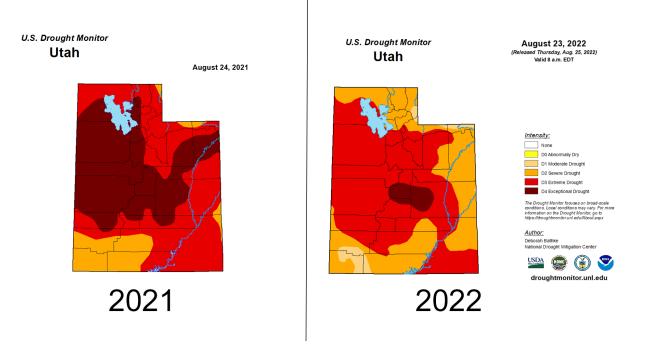
- Jordan Valley Water Conservancy District's water deliveries are **12% lower** than the previous year through July. The district has delivered **1.05 billion** fewer gallons this year compared to this time last year.
- Salt Lake City Public Utilities has seen a **17% reduction** so far this year when compared to the last three-year average. This is **2.5 billion gallons** fewer gallons used.
- Washington County Water Conservancy District has used **11.5 million gallons** fewer this year than last year, despite a 4.6% increase in the amount of connections.



- Cities in Washington County recently passed the most water restrictive ordinances for new development in Utah. The new ordinances are projected to save nearly 11 billion gallons over the next 10 years.
- The ordinances also require the use of secondary (untreated) water and reuse (treated wastewater) for outdoor irrigation where available.
- Weber Basin Water Conservancy District's water deliveries, calendar year-to-date through July, are **27% lower** than 2021's water usage.
- Monsoonal rains continue to have a positive impact on many river flows leading to three of the four river systems reported here seeing an increase in the percentage of water rights satisfied over what was reported two weeks ago.
- Harmful algal blooms (HABs) are increasing throughout the state. Visitors are advised to check <u>habs.utah.gov</u> for current conditions and report suspicious algae.
- Recreators should check reservoir levels before they head out. Conditions vary, and some boat ramp closures are in place due to low water levels.
- Several years of ongoing drought conditions have impacted mule deer populations across the state. <u>Visit the Utah Division of Wildlife Resources website</u> for a few things you should know for the fall deer and elk hunts.
- So far this year we have seen a 20% reduction in wildfires with a total of 795 starts. To date human-caused starts account for 48% of all wildfire starts in the state. Monsoonal rains continue to keep fuel moisture at a higher level than we have seen in recent months.
- Thirty of the 47 reservoirs the division monitors are below 55%, which is slightly better than last year, but still about 18% lower than normal for this time of year.
- 34% of streams are flowing below or much below normal.
- According to the latest information released by the U.S. Drought Monitor, drought conditions continue to plague the state, with 62.27% of the state experiencing "Extreme" or "exceptional" drought conditions. Extreme and exceptional drought conditions are the Drought Monitor's most serious categories.
- Great Salt Lake continues to decline. Currently, the average daily surface elevation is 4,189.4. It dropped past the previous record low (4,190.2) on July 3 and will likely continue to decline until mid-October.
- Residents looking for tips on how to help reduce water consumption can be found at <u>SlowtheFlow.Org</u>.

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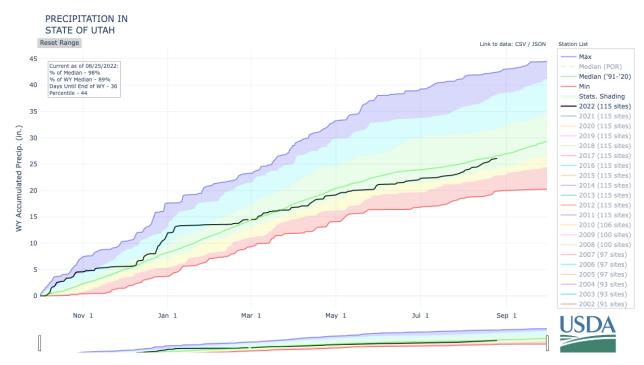
## FULL REPORT



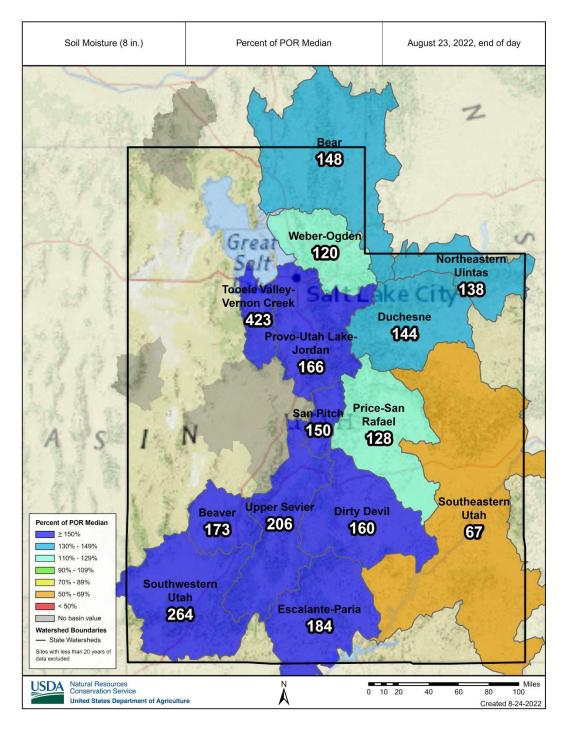
Graphic compares Utah's current drought situation to 2021. Exceptional drought (the worst category) covers 3.63% of the state. Last year at this time 43.69% of the state was in exceptional drought.

#### Precipitation and soil moisture

- Soil moisture has seen improvements and is trending slightly above normal for this time of year.
- Summer monsoons have benefited much of the state. Precipitation from summer rain adds to the soil moisture, helps vegetation and reduces demand. Summer rains typically don't add to reservoir levels, however the decrease in demand can stop reservoirs from dropping further.



Total Precipitation is below typical for this time of year. Precipitation statewide has been lower than normal since late *April*, but is getting closer to normal for this time of year as a result of the recent monsoon activity.



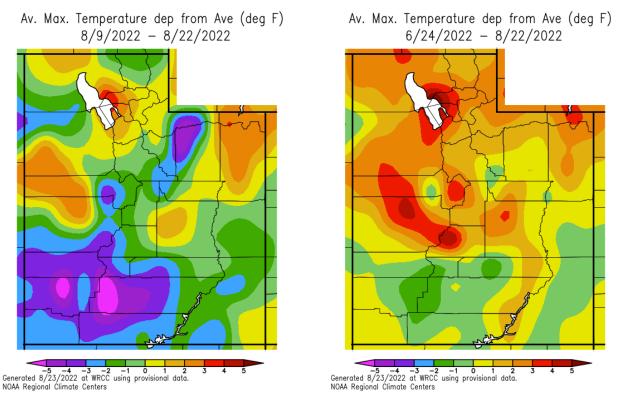
Soil moisture based on regions; most of the state has high soil moisture. High soil moisture is important in the fall before the soil freezes for the winter.

#### **Temperature and Evaporation**

• Temperatures over the last two weeks have cooled. Most of the state is seeing average temperatures. Lower temperatures mean less loss of water to evaporation. Due to monsoon activity, evapotranspiration in the western part of the state was negative. This means that more rain fell than was needed by the vegetation. In the eastern half of the

state, evapotranspiration was positive. This is likely due to higher temperatures and less monsoon rain. Evapotranspiration is essentially how thirsty the air is for water.

• Salt Lake City continues to be a hotspot. Currently, Salt Lake City has seen 25 days of 100 degree plus temperatures, breaking the previous record of 21.



The image on the left is the average max temperature for the last two weeks, while the image on right is the last four weeks. Comparing these two images shows where temperatures have cooled over the last week.

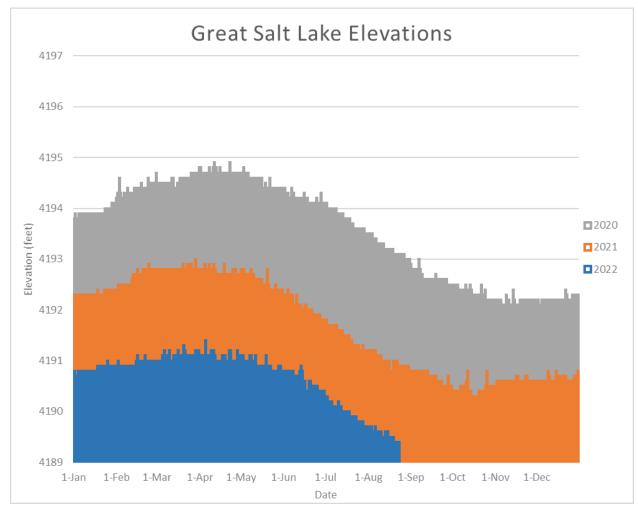
#### **Streamflows**

- Despite monsoon rains, cumulative streamflows are lower than typical for the year. This is due to the below average snowpack and spring runoff.
- 34% of streams are flowing below or much below normal.

#### **Reservoir and Lake Levels**

- Reservoir storage statewide continues to drop and now averages 48%. Thirty of Utah's 47 reservoirs are below 55% of available capacity.
- Current statewide reservoir levels are about the same as they were last year at this time.
- The median (normal) percentage for this time of year is 65%. There is a little over one month remaining in the irrigation season when water use is traditionally at its peak.
- This year, reservoir storage started quite a bit lower than last year. With current reservoir storage equal to last year's percentage, this means much more water made it to our streams and reservoirs.

• Great Salt Lake continues to decline. Currently, the average daily surface elevation is 4,189.4. It surpassed the previous record low (4,190.2) on July 3 and will likely continue to drop until mid-October.



The graph compares elevations of Great Salt Lake for the last three years.

#### **Department of Environmental Quality**

- As drought conditions continue and temperatures remain high, harmful algal blooms (HABs) are increasing throughout the state. Visitors are advised to check <u>habs.utah.gov</u> for current conditions and report suspicious algae.
- Do not swim, water ski, or drink the water, clean fish well and discard guts, and keep animals away from the following water bodies:
  - Warning Advisories
    - Mantua Reservoir; the Pond at Willard Bay; Clinton Pond; East Canyon Reservoir; Payson Lakes; Scofield Reservoir; Otter Creek Reservoir; Calf Creek; Willis Creek; Panguitch Lake; Baker Reservoir; the North Fork of the Virgin River (including the Narrows); Right and Left Fork of North Creek at Zion National Park.
    - Utah Lake: There is a lakewide advisory in place, and advisories at Lindon Marina, Saratoga Springs Marina, Lincoln Marina, Utah Lake State Park, Sandy Beach, and Provo Bay at Utah Lake.

- Health Watch
  - Green River (Split Mountain Campground in Dinosaur National Monument), Matt Warner Reservoir, La Verkin Creek (Zion National Park)

## **Department of Agriculture**

Agricultural Water Optimization grant applications are now being accepted through September 1st. The purpose of this grant is to effectuate the following goals:

- Improve Water Optimization by reducing consumptive water use while maintaining or improving agriculture production and profitability, and providing increased operational flexibility for agriculture water users moving forward.
- Improve Water Quantification by showing accurate, real-time measurement of diverted water to demonstrate actual water savings in CFS and acre foot.
- Document the availability of water after implementation of a Water Optimization Project.
- Improve and protect surface and ground water quality by reducing overwatering of crops.
- Many farmers are finding that they're able to significantly reduce their water usage while increasing crop yields.
- This grant provides a 50/50 cost share with a \$500k cap
- Finished projects from the initial round of funding have a reported savings of 21,459 acre feet of water that's about 7 billion gallons of water! (25% of projects have not been completed yet, so savings have not yet been recorded)
- Projects funded in 2021 have a projected water savings of 15,283 acre feet of water or 5 billion gallons of water.

For more information on the program and how to apply, visit: <u>https://ag.utah.gov/farmers/conservation-division/water-optimization-program/</u>

# Wildlife Impacts

Several years of ongoing drought conditions have impacted mule deer populations across the state. Here are a few things people hunting deer and elk in Utah this fall should know. Drought impacts deer by decreasing their body fat (because there are fewer plants and available food sources on the landscape). If the does have poor body fat and nutrition, it leads to smaller fawns, and those fawns have a decreased chance of surviving. If an adult deer has too little body fat at the beginning of the winter — especially a severe winter — it will often not survive the winter months. Recent deer research, conducted in Utah, has shown that the amount of fat deer have going into the winter has more of an impact on their likelihood to survive than the conditions and severity of the winter itself.

• Drought conditions have persisted for several years in Utah, and long-term drought-related impacts to Utah's deer and elk populations are still lingering. However, monsoon rains last fall and again this summer have improved vegetative conditions, especially at higher elevations, and deer appear to be in good body condition.

- The current statewide mule deer management plan includes an objective to have just over 400,000 deer across Utah there are currently an estimated 305,700 deer in the state. While hunting bucks doesn't impact the total population growth rate, the DWR has decreased hunting permit numbers for the last several years, tracking with population-level declines, in order to better manage to the buck-to-doe ratios outlined in the management plans.
- Elk are impacted differently by drought because survival of adults typically remains high, while pregnancy rates have been shown to decline during extreme drought conditions. Much of the rest of the state, including central, southern and southeastern Utah, have elk populations that are at or slightly below their population objectives.

<u>Visit the Utah Division of Wildlife Resources website</u> for tips to be successful during the fall deer and elk hunts.

#### State Parks

- With water levels continuing to drop, we encourage the public to continue checking water and launch ramp conditions BEFORE heading out to a park.
- Low water levels may also expose additional navigation hazards and decrease the overall amount of boatable water. As such, it is essential that boaters remain vigilant and follow Utah's boating laws, rules, and safety practices.

#### Wildfire Risks

- So far this year we have seen a 20% reduction in wildfires with a total of 795 starts. To date human-caused starts account for 48% of all wildfire starts in the state.
- Monsoonal rains continue to keep fuel moisture at a higher level than we have seen in recent months.
- Utah is currently considered little to no risk for fire danger according to the Great Basin Coordination Center's <u>7-day outlook</u>. This weekend, Box Elder and Tooele counties will be considered low risk.
- This past week we saw 51 new starts, however, only 7 of them were human-caused. The rest of the starts were all due to lightning.

### Water Rights

#### **Overview of the State of Surface Water Rights**

Monsoonal rains continue to have a positive impact on many river flows leading to three of the four river systems reported here seeing an increase in the percentage of rights satisfied over what was reported 2 weeks ago. Surface water rights in Utah are limited by the available natural flow in the river system. Normally, as conditions get drier, the flow diminishes and fewer water rights can be satisfied. Because Utah water law follows the prior appropriation doctrine, older (senior) water rights have preference—or "priority"— over younger (junior) water rights.

The four systems identified below (i.e., Bear River, Duchesne River, Provo River, and Sevier River) are a good representation of the various river systems throughout the state. The percentages shown in the table are based on the total amount of water rights. For example, 47% of the water rights on the Bear River system are currently being satisfied compared to 24% two weeks ago. River Commissioners oversee these systems to ensure water is being diverted by those entitled to receive it according to their priority dates.

Since the water supply varies each year, we have provided data for the current year with data from the same day for the previous three. For example, last year at this time, only 34% of the water rights on the Bear River system were being satisfied. In 2019, however, 65% of rights were being satisfied. Please note, when a system shows a number greater than 100%, it means that all water rights on the system are being satisfied and additional water is being stored in reservoirs.

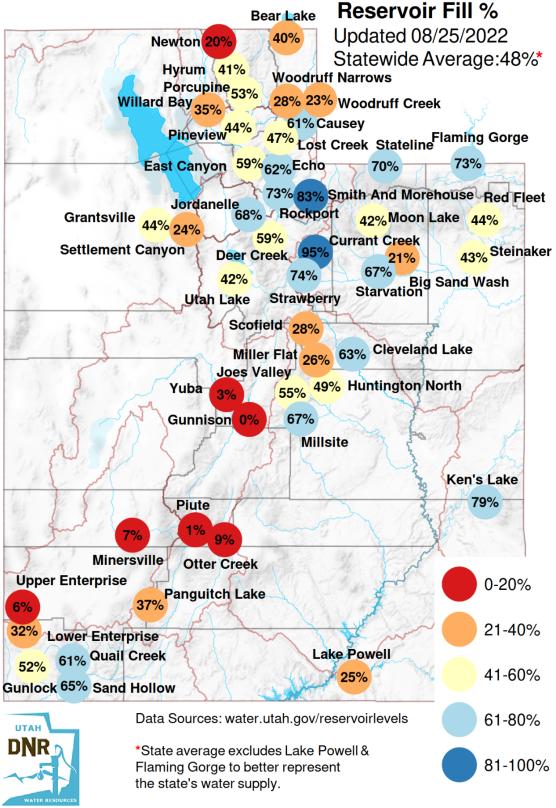
	Bear River	Rights Satisfied	Stream Flow
0-20%	2022	47%	659 <u>cfs</u>
BEAR RIVER 0 2140% 41-60% 61-80%	2021	34%	477 <u>cfs</u>
	2020	39%	555 <u>cfs</u>
O >100%	2019	65%	920 <u>cfs</u>
PROVO	Provo River	Rights Satisfied	Stream Flow
RIVER	2022	27%	123 cfs
DUCHESNE RIVER	2021	67%	304 <u>cfs</u>
	2020	10%	46 <u>cfs</u>
	2019	20%	92 <u>cfs</u>
	Duchesne River	Rights Satisfied	Stream Flow
SEVIER	2022	26%	265 <u>cfs</u>
	2021	65%	672 cfs
	2020	17%	179 cfs
	2019	40%	420 <u>cfs</u>
	Sevier River	Rights Satisfied	Stream Flow
	2022	23%	93 <mark>cfs</mark>
	2021	81%	328 <u>cfs</u>

2020

16%

67 cfs

Utah Department of Natural Resources, 1594 W. North Temple Suite 3710, PO Box 1456



Total capacity including these is 39%