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RESERVOIR DRYING UP



SPECIAL TO THE TIMES

Because of the region's prolonged drought, Elephant Butte Lake will have less water available to downstream users, including El Paso Water Utilities and its hundreds of thousands of customers.

City to shift from river to well water

By Diana Washington Valdez

EL PASO TIMES

The water level at Elephant Butte Lake is down significantly compared with previous irrigation seasons because of the region's prolonged, severe drought.

Water at the lake — so popular for boating, fishing and swimming — sits at less than 4 percent of water available to downstream users, including El Paso water customers and farmers, according to El Paso Water Utilities.

► **Tips on conserving water both indoors and outdoors 5A**

► **Texas on track to second-worst drought on record 4A**

Martin Bartlett, spokesman for the utility, said recent photographs taken by the U.S. Bureau of Reclamation show dramatic effects of drought on the lake. As a result, the water utility plans to shift away from relying heavily on the Rio Grande for the city's drinking water.

"El Paso Water Utilities plans to make up the difference by relying more heavily on well water," President and CEO John E. Balliew said. "We're preparing by drilling new wells and building new pipelines to more efficiently move that water around the city.

"The bottom line is that we expect less river water again this year. For now, it's just too early to know how much less," Balliew said.

Please see **Water 5A**

Water

Continued from 1A

Water officials said that El Paso Water Utilities generally pumps half of its water supply from wells in the city. The other half comes from water released from Elephant Butte Lake into the Rio Grande.

The persistent drought in New Mexico and Colorado also means less river water than usual will be available to El Paso.

Most of the water stored at Elephant Butte begins as rain and snow falling in northern New Mexico and Colorado.

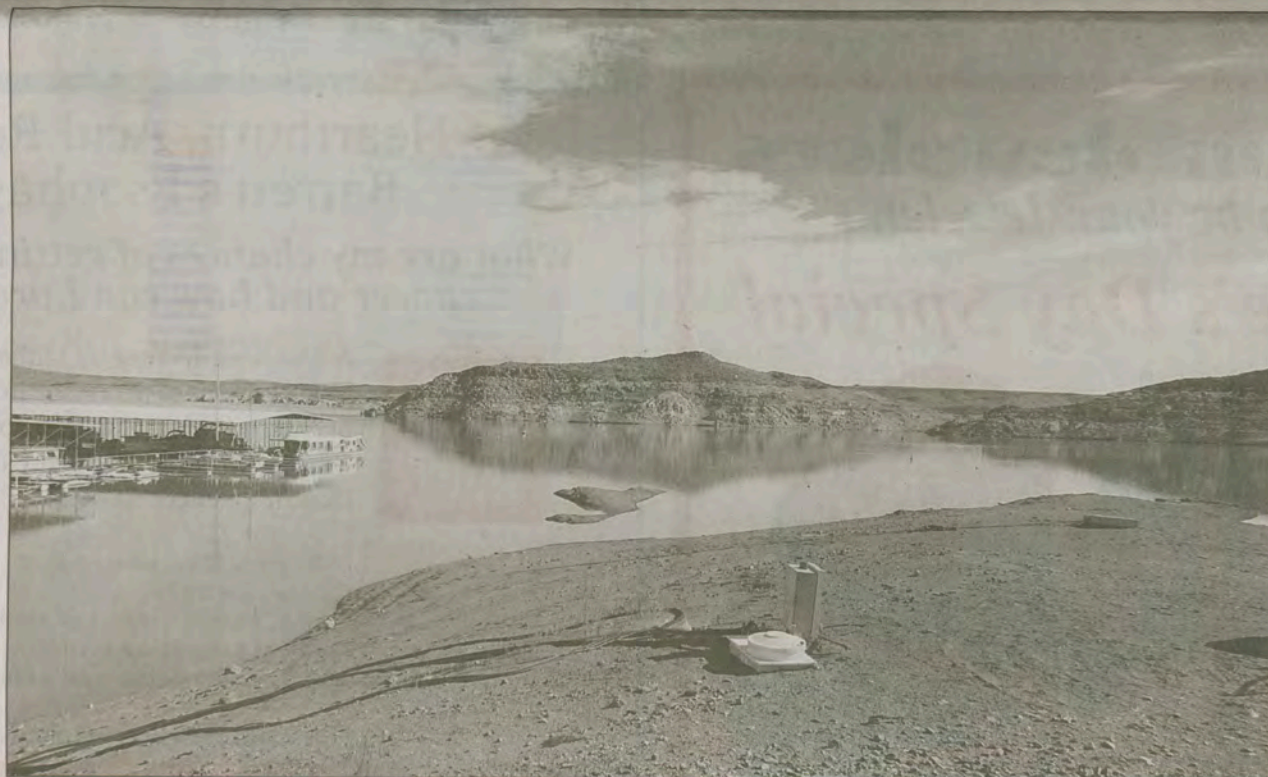
Balljew said the ongoing drought, temperatures, wind speeds and humidity in those regions dictate how much of that water eventually reaches El Paso.

Jesus "Chuy" Reyes, general manager of El Paso County Water Improvement District No. 1, said the district's customers, who include farmers, are being affected.

"I recently came back from southern Colorado, the Alamosa-Wolf Creek area, where the snowpack we depend on comes from, and things did not look good," Reyes said.

"The farmers up there and other locals said they are concerned. We can still get some good snowfall up there between now and April, but we don't really know that that will happen. We are at the mercy of the weather."

Reyes said the irrigation season usually begins with water releases from Elephant Butte in March, but because of the drought, releases will



SPECIAL TO THE TIMES

Water stored at Elephant Butte Lake near Truth or Consequences — popular for boating, fishing and swimming — begins as rain and snow falling in northern New Mexico and Colorado. The ongoing drought has drastically reduced the amount of water in the lake. That reduction will affect downstream users including farmers who rely on the lake for irrigation and El Paso Water Utilities customers.

be delayed until June.

"The water allocations may be also smaller this year," Reyes said. "We have 58 wells in the district, but they don't provide the same amount of water that we get from pumping the Rio Grande."

Mexico, which by treaty is entitled to some of the Rio Grande water for Juárez area farmers, agreed to wait until June to receive its share of irrigation water.

The National Oceanic and Atmospheric Administration defines drought as a period of persistent dry weather that

endures long enough to cause serious problems, such as crop damage, water supply shortages or both.

According to NOAA's website, these were the biggest droughts on record in the U.S. in modern history:

►1933-38: The "Dust Bowl" period that covered 80 percent of the country with moderate to more severe degrees of drought, and at least 60 percent with extreme drought.

►1953-57: Severe drought gripped half the country.

►1988: Considered the costliest drought year ever, which caused crop losses of

\$15 billion and other losses to the economy.

Bartlett said the utility plans to raise public awareness of the water situation at Elephant Butte, and encourage residents to keep practicing water conservation.

Last year in May, El Paso Water Utilities asked El Pasoans to voluntarily conserve water for two weeks to prevent having to institute mandatory watering restrictions. The voluntary run was successful, and residents later were able to water their lawns twice a week instead of only once a week.

For now, the regular lawn watering schedules remain in effect in El Paso: Watering for homes with even-numbered addresses is permitted on Tuesday, Thursday and Saturday, and for homes with odd-numbered addresses on Wednesday, Friday and Sunday. Residential watering is not allowed on Mondays.

El Paso Water Utilities has posted some conservation tips at epwu.org/conservation

Diana Washington Valdez may be reached at dvaldez@elpasotimes.com; 546-6140.

Ways you can conserve water

Find these and more water-conservation tips at epwu.org/conservation and wateruseitwisely.com

- **Turn off the faucet** while washing your hair, lathering your hands, shaving or brushing your teeth.
- **Fix leaky faucets, toilets and valves.** Don't forget to check outside faucets, too.
- **Install a water-efficient showerhead and toilet.**
- **Shorten your shower** by one to two minutes.
- **Run the clothes washer and dishwasher only** when they are full.
- **Wash fruits and vegetables** in a pan of water instead of running water. Collect the rinse water and use it to water houseplants.
- **Designate one glass** for your drinking water each day or refill a water bottle.
- **Adjust sprinklers** so only your lawn is watered, not the sidewalk.
- **Spread a layer of organic mulch** around plants to retain moisture.
- **Use a broom** instead of a hose to clean your driveway and sidewalk
- **Don't water your lawn** on windy days.
- **Use a commercial car-wash** that recycles water.

Source: *El Paso Water Utilities, wateruseitwisely.com*

DROUGHT WATCH on the RIO GRANDE – February 8, 2013 Press Release & Graphs

Rio Grande Reservoirs at 8.5% – Forecast spring inflow just 39% of average

Severe drought conditions throughout the southwest and Rio Grande basin continue to leave the region with very low reservoir levels and low projected mountain snowpack runoff. Runoff from mountain snowpack in southern Colorado and Northern New Mexico typically provides 70% of the inflows to this part of Rio Grande basin. The Natural Resources Conservation Service, U.S. Department of Agriculture's February 1 forecast for this spring's inflows to Elephant Butte reservoir is just 39% of the long-run average and is far less than the amount of river water demanded for use by agriculture and urban users. Over the last 15 years there have only been three years (1997, 2005 and 2008) with above average spring runoff to replenish the reservoirs. The Climate Prediction Center's three-month forecast for the entire Upper Rio Grande basin calls for continuing above average temperatures, below average chances of precipitation, and severe drought conditions to persist or intensify. While these are early season projections, expectations by water managers and farmers are there will be even less water in the river than last year.

Derrick O'Hara at the U.S. Bureau of Reclamation El Paso Office reports that the water level in Elephant Butte reservoir is almost 100 feet below the dam spillway. Currently the amount of water stored in both Elephant Butte and Caballo reservoirs is 189,342 acre-feet or just 8.5% of the 2.23 million acre-foot combined capacity. This is half of the amount of water that was in the reservoirs one year ago. And, of this amount 106,031 acre-feet is not available for use in southern New Mexico or Texas because it is "Credit Water" owned by upstream users. This leaves just 4% of reservoir storage capacity available for downstream use.

The U.S. Bureau of Reclamation's El Paso Office determines the amount of water that can be allocated to water right holders based on actual supplies available in the Rio Grande Project reservoirs. So far this year there has been no allocation of water. Because of the small amount of water in storage and very low reservoir inflow projections, this season's first releases of the limited supplies from the reservoirs are planned by the Texas, New Mexico and Mexico's irrigation districts to start in early June, much later than the usual February to March start of releases. This is a hardship on farmers who need to make decisions soon about how much acreage to plant based on knowledge of the water supply allocation available and need to plant early enough in the season for the crops to fully mature. Last year many farmers only planted half of their acreage. The severe lack of river water and late season start could have a huge negative impact on agricultural production and income so important to farmers and the area economy. In 2011 Texas agriculture across the state experienced losses of \$7.6 billion according to Texas A&M University AgriLife economists.

Rio Grande water typically supplies half of the urban water used in El Paso, Texas. Because of the low river supply projected "El Paso Water Utilities plans to make up the difference by relying more heavily on well water," said EPWU President and CEO John E. Balliew, P.E. "We're preparing by drilling new wells and building new pipelines to more efficiently move that water around the city."

Drought Watch on the Rio Grande is provided by the Texas AgriLife Research Center at El Paso and Texas Water Resources Institute, The Texas A&M University System, with support from the USDA-NIFA Rio Grande Basin Initiative, in collaboration with the United States Bureau of Reclamation El Paso Field Office. E-mail or call to receive future issues of Drought Watch.

Ari M. Michelsen, Ph.D., Research Director
Texas A&M AgriLife Research Center at El Paso
The Texas A&M University System
a-michelsen@tamu.edu / 915-859-9111

Filiberto Cortez, Division Manager
El Paso Field Office
U.S. Bureau of Reclamation
fcortez@uc.usbr.gov / 915-534-6300

Texas AgriLife Research Center at El Paso
1380 A&M Circle
El Paso, Texas 79927-5020
Tel. 915-859-9111
Fax. 915-859-1078

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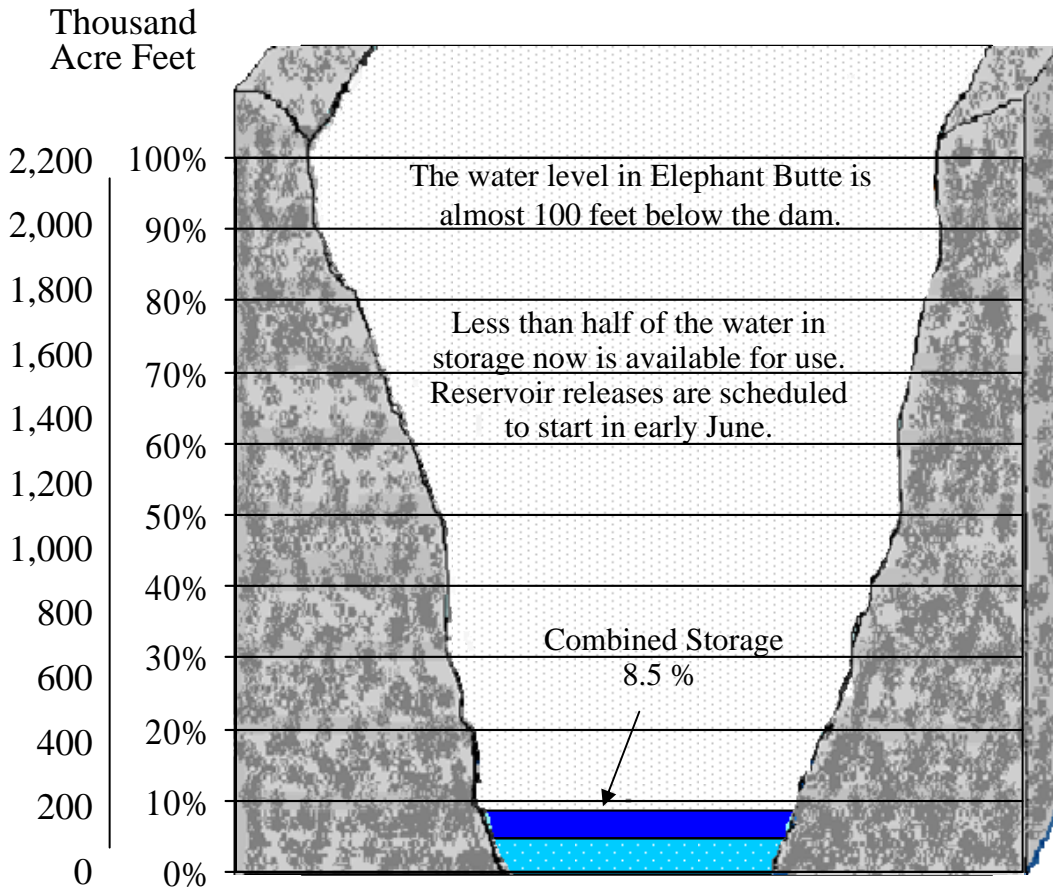


Drought Watch on the Rio Grande

Surface Water Supply Conditions February 8, 2013

Combined Elephant Butte and Caballo Reservoir Storage

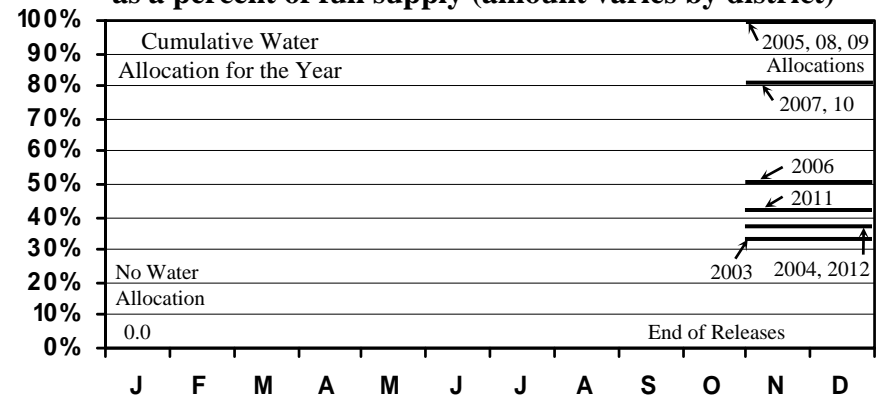
Water Available for Allocation
 Water Not Available for Allocation



Water Supply Conditions & Forecasts

- **Water in Storage** is 189,342 acre-feet or **8.5%** of the combined reservoir capacity of 2.23 million acre-feet. Of this 106,031 acre-feet or 56% of the amount in storage is Rio Grande Compact and San Juan-Chama credit water which is not available for use.
- **Spring snow-pack inflow to Elephant Butte Reservoir is forecast to be only 39%** of the 30-year March-July average. In the last 15 years only three have had above average runoff; 1997, 2005 and 2008. The Climate Prediction Center three month forecast calls for above normal temperatures and average chances of precipitation. Severe drought conditions are projected to persist or intensify across the region.
- **2013 Rio Grande Project average water allocation: to-date no water has been allocated.** The total water allocation for 2012 was 38.7%.

Water allocation to agricultural and urban users as a percent of full supply (amount varies by district)



Produced by: **Texas A&M AgriLife Research Center at El Paso, Texas A&M University System**
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For additional information: <http://elpaso.tamu.edu/research>
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