Corpus Christi Caller Times

Here's what happens if rain stays away

By Dan Kelley (Contact) Sunday, August 2, 2009

http://www.caller.com/news/2009/aug/02/heres-what-happens-if-rain-stays-away/

CORPUS CHRISTI — Q: The year could go down as one of the worst droughts in history, and is being called the second-driest on record. Why aren't we being asked to stop watering our lawns and washing our cars?

A: The city's drought management plan calls for voluntary reductions in water use when the combined capacity of Choke Canyon Reservoir and Lake Corpus Christi fall below 50 percent. Lake levels as of Saturday stood at 61.3 percent. Mandatory restrictions begin when water levels fall below 40 percent.

In prior droughts, we would have needed water restrictions already, according to Rocky Freund, deputy executive director of the Nueces River Authority. But tropical storms in 2006 and a few wet years have left lake levels pretty full.

"We're doing better in that the lakes were full for quite a while," Freund said. "We were full for almost three years."

We aren't depleting the supply as we have in past droughts because the city built the Mary Rhodes Pipeline in 1998 to draw water from Lake Texana, 100 miles away.

Q: If we don't get rain, when will we see restrictions?

A: Lakes lose about one-tenth of one percent daily, Freund said. At that rate, city residents would be asked to cut water use voluntarily sometime in October. Mandatory restrictions, would be eyed sometime in late 2009 or early 2010.

Q: I see Lake Corpus Christi levels are already below 40 percent, while Choke Canyon is much more full. What's going on there?

A: It's intentional. Lake Corpus Christi has a broad surface area. It consequently loses a lot of water to evaporation. Choke Canyon, meanwhile, is narrower and deeper. Water officials keep water in Choke Canyon to limit the amount of water lost to evaporation. The trigger for the two reservoirs is the combined capacity.

Residents can check lake levels at the Web site for the Nueces River Authority, at www.nueces-ra.org.

Q: If we get water from Lake Texana, why isn't its capacity taken into account for drought restrictions?

A: Unlike Lake Corpus Christi and Choke Canyon, Lake Texana isn't controlled by they city. The city only has rights to draw a certain amount of water from it, and the option to buy more in years with heavy rain. According to Mark Van Vleck, the city's deputy water director, water from Lake Texana is used first, which slows the use of water from the city's reservoirs.

Q: So what happens in October if we hit 50 percent?

A: The city will begin asking residents and industry to use less water. Some cities begin doing this earlier than their drought management plans call for, because they don't want to create a panic situation.

"A funny thing happens," said Ray De Los Santos Jr., the city manager of Alice. "When you tell people there's no water, everybody gets thirsty." One effect of this is that when cities begin publishing lawn watering schedules, people who don't normally water their lawns begin doing so. Alice, which is not under mandatory or voluntary water restrictions, has already begun conservation measures. Corpus Christi increased public service announcements for water conservation Aug. 1.

Q: What happens when lake levels fall to 40 percent?

A: Residents will be ordered not to water their lawns between 10 a.m. and 6 p.m. Residents are also ordered to fix defective plumbing, such as dripping faucets. The city must reduce overall water use by 5 percent.

Q: At 30 percent?

A: The city will publish a schedule that restricts watering lawns to no more than once every five days. The city must reduce overall water use by 10 percent.

Q: At 20 percent?

A: Residential customers are allocated about 6,000 gallons per month for water use. Going above allocation could lead to surcharges and disconnection of water service

Q: Why does the city have percentage goals for water reduction?

A: In the 1980s, environmentalists sued the state, arguing that the construction of Choke Canyon Reservoir had cut off flows from the Nueces River to Corpus Christi Bay. Their fear was that the diminished flows would result in increased levels of salinity in the bay. The city agreed to release certain amounts of water into the Nueces River to provide freshwater to the bays. That agreement has complex rules, but a lot of it is based on how much water flows into the reservoirs. Right now, with the area under a major drought, there are no inflows. Hence, there are no releases of water. But there are scenarios under which the city has had to release water during a drought, and to get relief from those, the city must meet its percentage targets. The city does not have to release water when the capacity of the lakes falls below 30 percent.

Q: What other ways can the city stop us from using too much water?

A: Under the city's drought management ordinance, the rules issued at 40, 30 and 20 percent go into effect automatically. The city's ordinance also gives the city manager a broad bag of tools to curb water use. The city manager can implement any of these rules for conservation purposes, but the city's official policy gives first priority to preserving water for drinking. The second is preventing job losses.

Those restrictions include prohibiting car washing, use of slip and slides and limiting water for golf courses. The city may also begin denying applications for new water service and prohibit use of water for dust control. Industrial customers would also be mandated to cut water use by 10 percent for three months, and an additional 5 percent after that.

Q: How much rain do we need to get out of this drought?

A: A lot. If it rained today, it wouldn't be enough unless that rainfall came with a name attached to it. Rainfall totals since September are 19.7 inches below normal. The National Weather Service predicts normal rainfall for coming months, but warns even that will not reverse this drought.

FAIR USE NOTICE

This document contains copyrighted material whose use has not been specifically authorized by the copyright owner. The Texas Living Waters Project, which is a nonprofit undertaking, is making this article available in our efforts to promote comprehensive water planning in Texas. We believe that this constitutes a "fair use" of the copyrighted material as provided for in section 107 of the US Copyright Law. If you wish to use this copyrighted material for purposes of your own that go beyond "fair use", you must obtain permission from the copyright owner.