



Search  chron.com  Web Search by YAHOO!  Businesses

HOME NEWS SPORTS BUSINESS ENTERTAINMENT LIFE TRAVEL BLOGS JOBS HOMES CARS CLASSIFIEDS COUPONS INDEX

**SciGuy**  
A science blog with Eric Berger

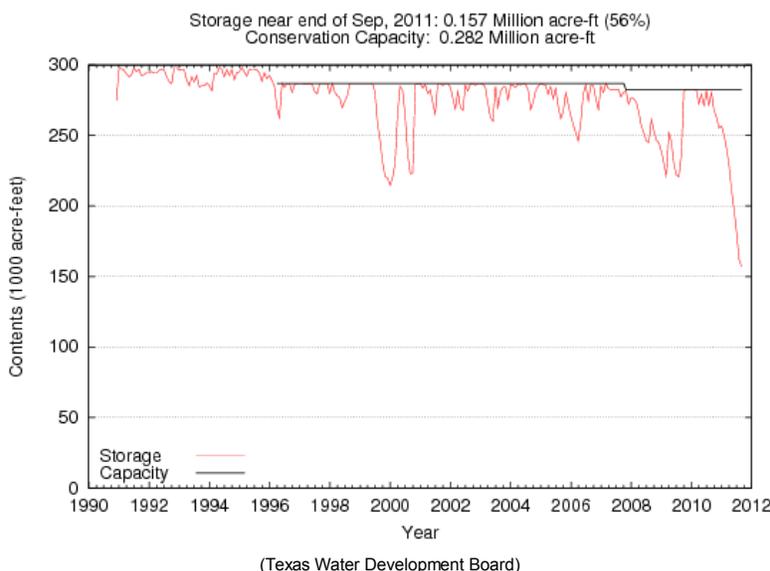
Larger | Smaller

**More concerns about drought as fall deepens**

Even though temperatures along the upper Texas coast have dropped pleasantly, it's now been 10 days since the blessed deluge that brought the region's best rainfall since September, 2010. Therefore it's worth taking another look at our drought conditions, and where we stand water-wise heading into the winter of 2011-2012.

I'll also discuss the medium-term outlook for rain.

Let's start with the water storage levels of the upper Texas coast, defined as [region 14](#) by the Texas Water Development Board. Here's the most recent map of storage levels, versus capacity, for the region's water reserves.

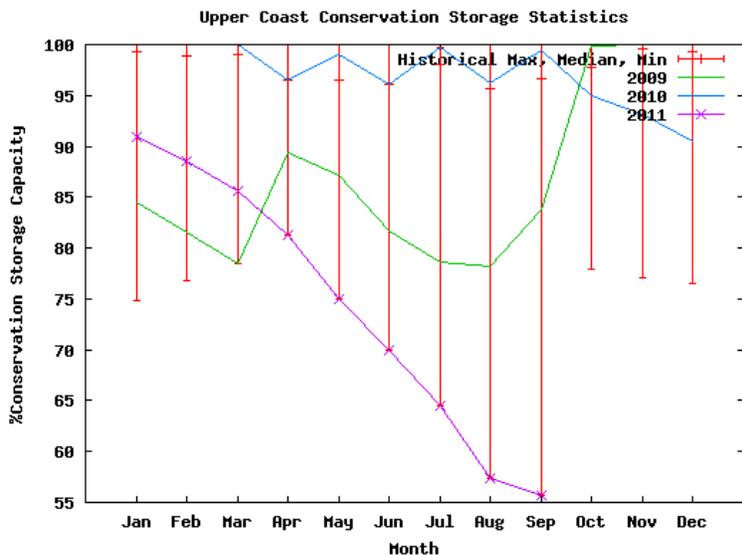


As you can see the water levels after this summer's drought are the lowest, by far, since these kinds of records were first kept in 1990.

Now let's zoom in on the last year:

© 2011 Hearst Communications Inc.

HEARST newspapers RSS MY YAHOO!



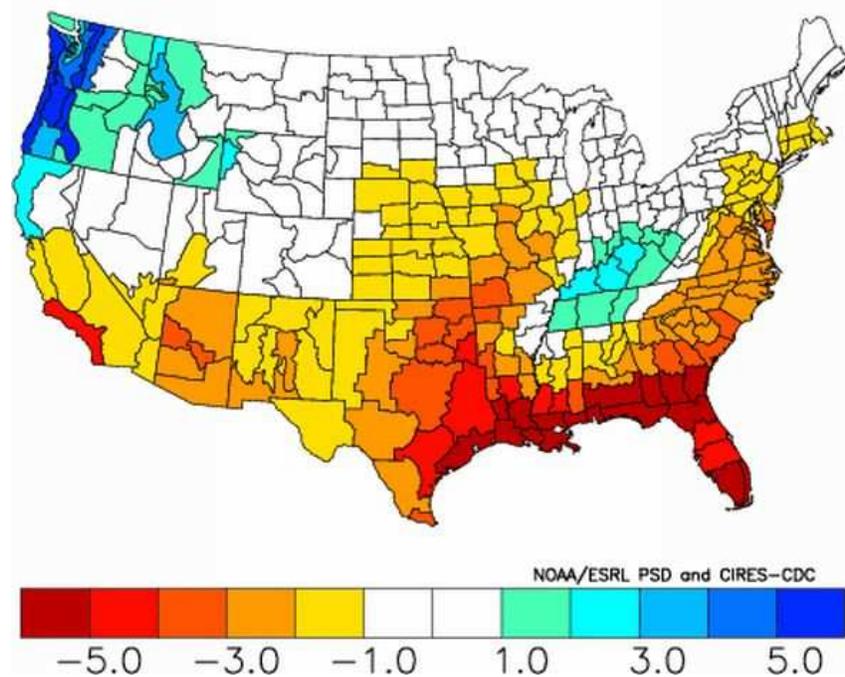
(Texas Water Development Board)

Water levels are at about 55 percent capacity. This, in and of itself, wouldn't be truly alarming because we might expect some recovery this winter and spring, with normal rainfall levels. That's because water use tends to fall off during colder months.

The big concern remains the likelihood of a second [La Niña winter](#), which tends to suppress cold-month rainfall in Texas. That is starkly illustrated on the graph below, which shows the rainfall difference (for November through March) between nine La Niña events from 1948 to the present, and a "normal" rainfall winter.

The greater Houston region of Texas can expect, on average, to receive 5 inches less of rain during a La Niña winter.

**Composite Precipitation Anomalies (inches)**  
 Nov to Mar 1954-55, 1955-56, 1970-71, 1973-74, 1975-76, 1988-89, 1964-65, 1999-00  
 Versus 1971-2000 Longterm Average



(NOAA/Earth System Research Laboratory)

Now the good news is that we might see some relief during the next couple of weeks. The [National Weather Service mentions](#) the chance of rain in about a week's time, and [ImpactWeather's](#) Fred Schmude is optimistic as well.

Here's his latest outlook:

I don't see much in the way of rain through at least Saturday as high pressure at the surface and aloft dominates the weather pattern. We do have our eyes focused on a weak cold front forecast to move by the area this Sunday. Even though moisture is limited, there appears to be just enough instability associated with the front which could bring some scattered showers and possibly even a few stronger thunderstorms to the region, especially during the morning and afternoon hours. If we do see rain on Sunday, expect accumulations to average generally less than 0.25 inch, but there could be some isolated amounts up to 0.50 to 1.00 inch across the metro area.

Looking a little farther into the future, there are encouraging signs the storm track will slow down and buckle sending a strong upper level storm and cold front southward across the Rockies and Plains during the middle part of next week. If the upper level trough axis develops far enough to the west we could see a few days of unsettled and colder air by next Thursday or Friday over southeast Texas. Currently we are gaining confidence there will be a significant change in the weather pattern by the middle to latter part of the work week which could easily result in more widespread rainfall and colder temperatures. Confidence in the exact timing of the rainfall still is on the low side; however, the extended range flow pattern data is certainly encouraging for those looking for some much need rainfall.

Here's hoping we get some before the onset of our La Niña winter.

Share 0 3 share

Posted by [Eric Berger](#) on October 20, 2011 at 7:51 am | [Permalink](#) | [Leave a comment](#)

Categories: [Weather](#)

Tags: [drought](#), [la nina](#), [rain](#), [texas winter](#)



### Eric Berger

Eric Berger is the Houston Chronicle's space, weather and science reporter. He covers everything from nanometers to parsecs. You can follow him on twitter at [@chronsciguy](#).

CONTACT: FOLLOW:

#### LATEST POSTS:

[Are 'bias,' 'error' and 'manipulation' bad words? Not to scientists.](#) 10/18/11

[When an iPhone becomes a spy phone](#) 10/18/11

[Scientists reconstruct brain activity in color.](#) Amazing. 10/19/11

[Rex Walheim answers the question: How hard is it to draw a butterfly in space?](#) 10/19/11

[More concerns about drought as fall deepens](#) 10/20/11

#1 Stock Pick: [EMBA](#)

[www.TechStockWire.com](http://www.TechStockWire.com)

WE RECOMMEND

FROM AROUND THE WEB

[Look who has a beef with Android phones](#)  
[Topless photos of Madonna leak online](#)  
[Texas on the verge of limiting academic freedom of climate scientists](#)  
[A chance of heavy rain later today](#)  
[Kerplunk! Down went the tree . . .](#)  
[City takes more water from Lake Conroe to Lake Houston](#)

[Kelsey Grammer Does it Again in BOSS \(Starz\)](#)  
[7 Little-Known Credit Card Perks \(Kiplinger\)](#)  
[Queen Elizabeth 2 Retires \(HowStuffWorks Videos\)](#)  
[The Best Thanksgiving Shortcuts \(Real Simple\)](#)  
[Returning Adopted Kids: Unthinkable? \(The Responsibility Project\)](#)

[Sponsored links]

## 0 Responses to *More concerns about drought as fall deepens*

**Dora Smith** says:

*Your comment is awaiting moderation.*

October 20, 2011 at 8:15 am

SciGuy:

Can you please tell us exactly what area is included in "Northeast Texas".

Can you please tell us where this data or the charts came from, because I'd sure like to look at them for the rest of the state.

It would be really helpful to provide the stats for the rest of the state, unless you're specifically interested in Houston. I'm specifically interested in Austin and the lower Colorado River.

Finally, are you aware that the draft 2012 water plan by the Texas Water Development Board projects a 10% decrease in water availability by 2060, mostly due to reduced supply from the Ogallala Aquifer and reduced use of the Gulf Coast Aquifer. This looks from another planet to me. Above you show water availability decreasing 50% in northeastern Texas, wherever that is, alone.

Yours,

Dora Smith

Reply

---

**Dora Smith** says:

*Your comment is awaiting moderation.*

October 20, 2011 at 8:35 am

SciGuy:

I found where you define "northeast Texas", but you mean the greater Houston area!

How would you expect Houston to fare relative to the rest of the state in the drought?

Dora Smith

Reply