Texas Drought 2010-2011
Texas Drought

Purpose of Brief

- Informal Situational brief for Federal partners.

- Goal of the activity is to initiate appropriate contingency planning and information gathering at the Federal level to support Texas.
Texas Drought

Texas is in the middle of an unprecedented weather phenomena with possible national implications!
Texas Drought

- 2011 is the worst one year drought in Texas history.
- It has been described as a 500 year drought.
Normalized Difference Vegetation Index
NASA Terra MODIS
August 29, 2010

MODIS telemetry received and processed by the MAGIC DBRS
Center for Space Research, University of Texas at Austin
NASA MODIS thermal detections (Fire Radiative Power >1 megawatt) in Texas collected by the MAGIC DBRS, University of Texas at Austin
Texas Drought

According to most forecasters, Texas is entering into another La Nina situation!
Texas Drought

Cascading Effects:

Cities running out of water.
Texas Drought

Groesbeck, Tx

- Surface Water only.
- Upstream of a reservoir.
- Water supply was estimated to be depleted the first week of December.
- Affected population is 6000.
Texas Drought

There are between 100 - 200 systems in Texas that are

- Surface water only.
- Upstream of a reservoir.
Pendleton Harbor, Texas

Normal Water Level

Courtesy of TCEQ
Texas Drought

Power Generating Plants
## Texas Drought

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Sum of Summer 2011 capacity in MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cedar Bayou</td>
<td>2044</td>
</tr>
<tr>
<td>Granbury</td>
<td>705</td>
</tr>
<tr>
<td>Lake Bardwell/City of Ennis sewage</td>
<td>312</td>
</tr>
<tr>
<td>Lake Colorado City</td>
<td>407</td>
</tr>
<tr>
<td>Lake Granbury</td>
<td>278</td>
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<td>Lake Houston</td>
<td>1016</td>
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<tr>
<td>Lake Limestone</td>
<td>1689</td>
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<tr>
<td>Lake Ray Hubbard</td>
<td>916</td>
</tr>
<tr>
<td>Lake Texana</td>
<td>56</td>
</tr>
<tr>
<td>Martin Lake Reservoir</td>
<td>2425</td>
</tr>
<tr>
<td>Twin Oak Reservoir</td>
<td>1616</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>11464</strong></td>
</tr>
</tbody>
</table>
Texas Drought

The loss of this amount of generating power is enough to cause rolling blackouts at a MINIMUM.
Texas Drought

Information Needed on the status of:

- Refineries
- Chemical plants
Texas Drought

The drought in Texas is massive in scale, as a state, Texas is:

- An area larger than France.
- Has a greater population than that of Australia.

In short, the drought is a national problem.