



Texas CWSRF Water Reuse Projects

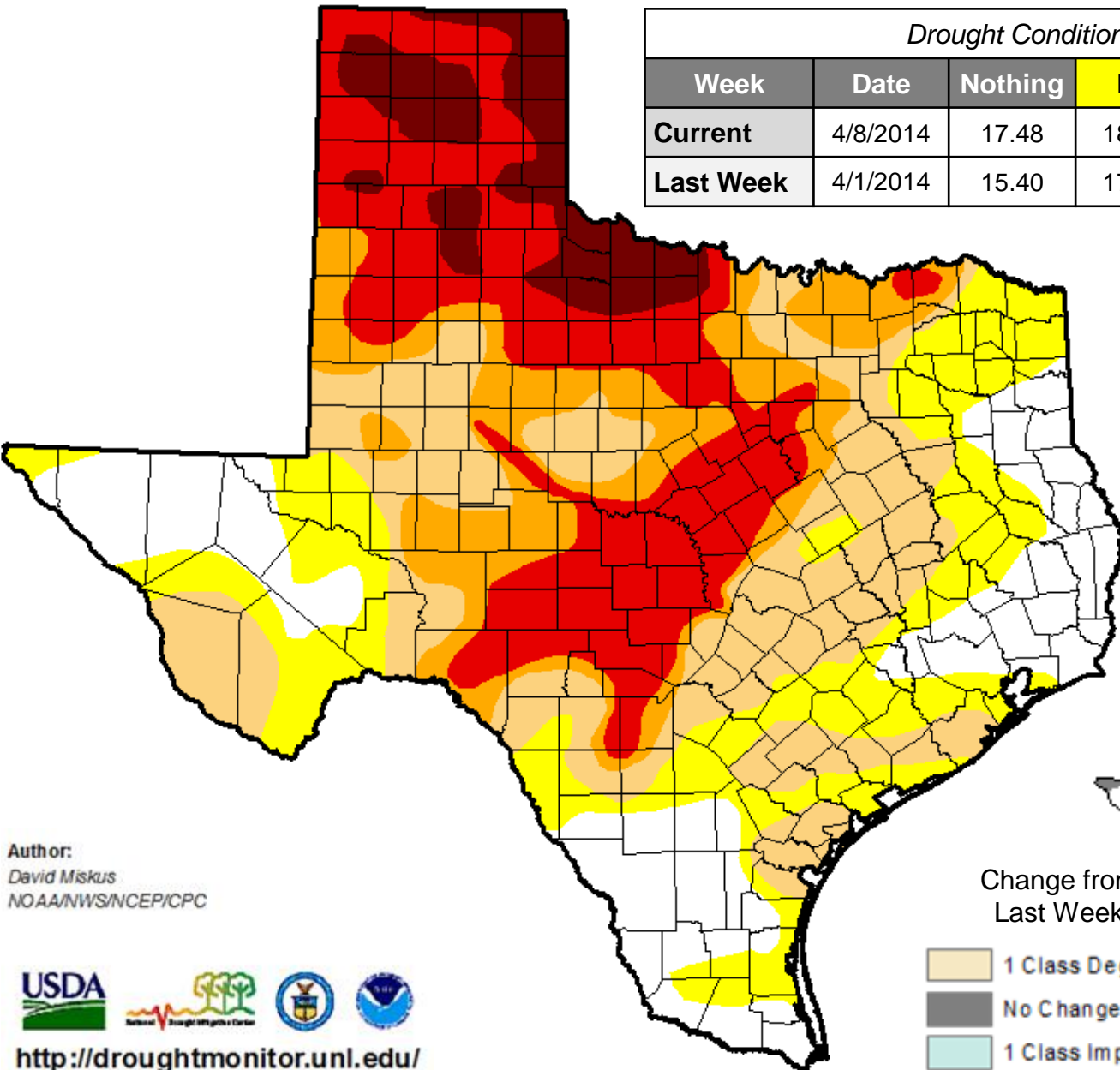
Presented at CIFA Policy Conference
May 19, 2015

Texas Water 
Development Board

WRRDA – Promoting Reuse

- Section 602(b)(13)(B) – Cost & Effectiveness
 - “has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient...**reuse**...”
- Section 603(c)(6) – Demand Reduction at POTWs
 - “to any [*political subdivision*] for measures to reduce the demand for POTWs’ capacity through...**reuse**;
- Section 603(c)(9) – Reuse & Recycling
 - For wastewater, stormwater, or subsurface drainage water

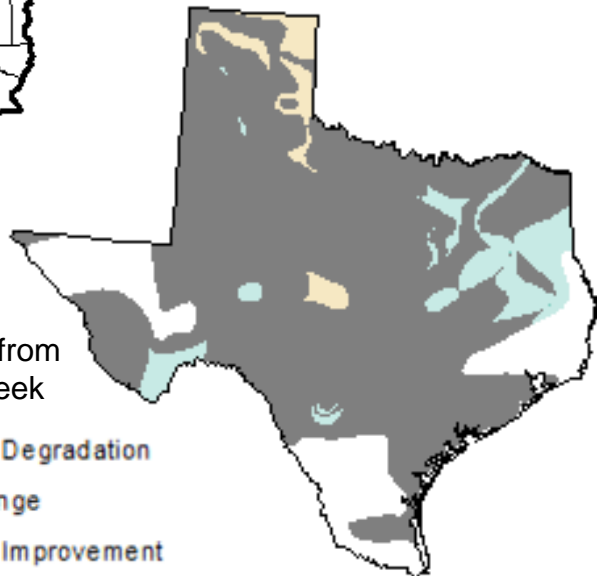
<i>Drought Conditions (Percent Area)</i>							
Week	Date	Nothing	D0	D1	D2	D3	D4
Current	4/8/2014	17.48	18.93	23.12	12.86	20.52	7.08
Last Week	4/1/2014	15.40	17.80	24.75	14.70	22.94	4.42



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



Change from Last Week

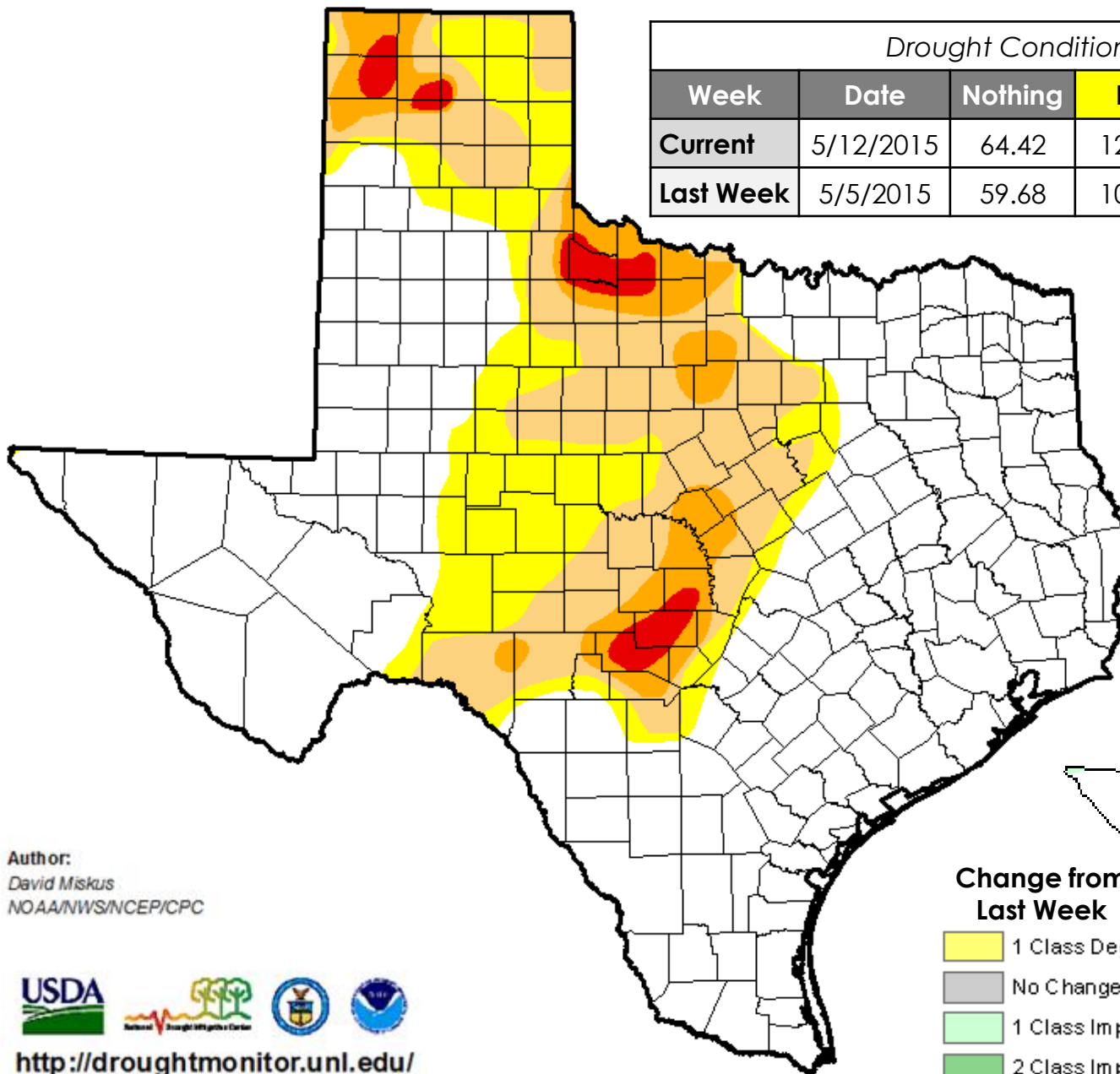
- 1 Class Degradation
- No Change
- 1 Class Improvement

Author:
David Miskus
NOAA/NWS/NCEP/CPC



May 12, 2015

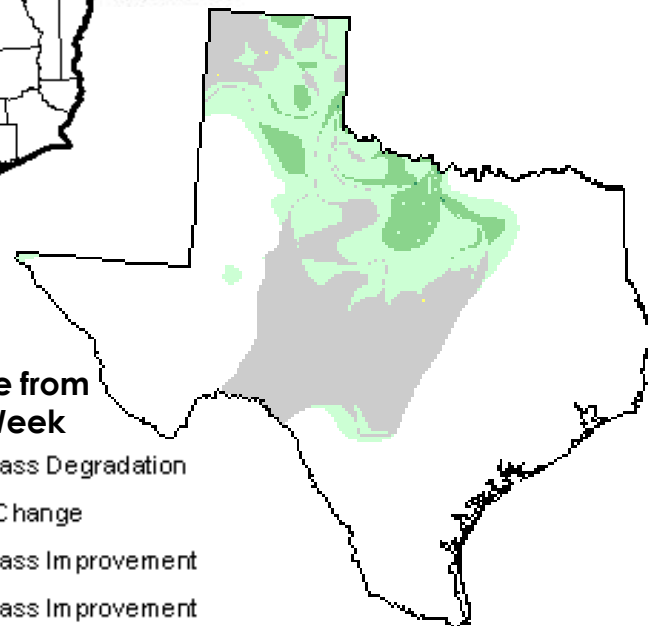
Drought Conditions (Percent Area)							
Week	Date	Nothing	D0	D1	D2	D3	D4
Current	5/12/2015	64.42	12.83	15.06	5.76	1.93	0.00
Last Week	5/5/2015	59.68	10.78	14.04	10.03	3.62	1.86



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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Change from Last Week

- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement

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<http://droughtmonitor.unl.edu/>

Reuse at the TWDB

- First Reuse Project in the CWSRF
 - City of Laredo – 1989; \$1,700,000
 - Effluent Reuse Line from WWTP to Public Golf Course for Irrigation
- Reuse Projects To Date
 - 28 Projects from 1989 to date
 - Total Project Funding –over \$292,000,000
- Types of Projects Funded/Uses
 - WWTP Improvements/Modifications, Reuse Effluent Distribution Lines, Irrigation, Industrial Reuse, Wholesale Water Reuse, Aquifer Recharge, Augmenting/Conserving Scarce Water Supplies

Authorized Reuse Types in Texas

Type I

Public Exposure Possible

- Residential irrigation
- Urban irrigation – golf courses, athletic fields, public parks
- Fire protection – internal or external sprinklers
- Food crop irrigation – contact with edible portion
- Pasture irrigation – for milking cows
- Impoundment maintenance – contact recreation
- Toilet flush water

Type II

No Public Exposure

- Irrigation of sod farms, silviculture, limited access ROW
- Irrigation of covered or pasteurized food
- Irrigation of animal feed crops
- Maintenance of impoundments with no human contact
- Soil compaction or dust control
- Cooling tower make-up water
- Irrigation or other non-potable uses at WWTP

Direct Potable Reuse

- “The use of reclaimed water that is piped directly from a wastewater treatment facility to a drinking water treatment and distribution facility.”
 - Currently, no approved rules administered by Texas Commission on Environmental Quality (TCEQ)

Direct Potable Reuse

- City of Big Spring
 - Improvements at City WWTP and transmission line to inject potable reuse water into water line from source water lake to WTP
 - \$11,900,000 funded by TWDB State financial program, Water Infrastructure Fund
- City of Wichita Falls
 - Pilot project made possible with special approval from TCEQ
 - Not funded by TWDB

Big Spring Potable Reuse



New Interest-CWSRF SFY '16

- March 2015 deadline new projects and updates for SFY 2016
- Reuse Projects
 - 8 projects
 - \$230M



New Interest Direct Potable Reuse

- El Paso
- Brownwood
- Kerrville
- Ballinger
- Dripping Springs
- San Angelo
- Buda
- Abilene

TWDB Contact Information

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