

Hydraulic Fracturing “fracking” 101

- ❖ The process of creating fissures, or fractures, in underground formations (shale) to allow natural gas and oil to flow up the wellbore to a pipeline or tank battery
- ❖ Water, sand and other additives are pumped under high pressure into the formation to create fractures
- ❖ Newly created fractures are “propped” open by the sand, which allows the natural gas and oil to flow into the wellbore and be collected at the surface.
- ❖ The fluid is approximately 98% water and sand, along with a small amount of special-purpose additives

Visit www.FracFocus.org for the quantities of additives used to frack specific wells

Water Use

125,000 gallons/well for drilling

4,000,000 gallons/well for fracking (Eagle Ford deep shale)

South Texas Water Use

Irrigation- 64%

Municipal- 17%

Fracking- 6%

North American shale plays (as of May 2011)





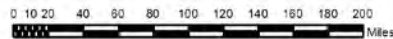
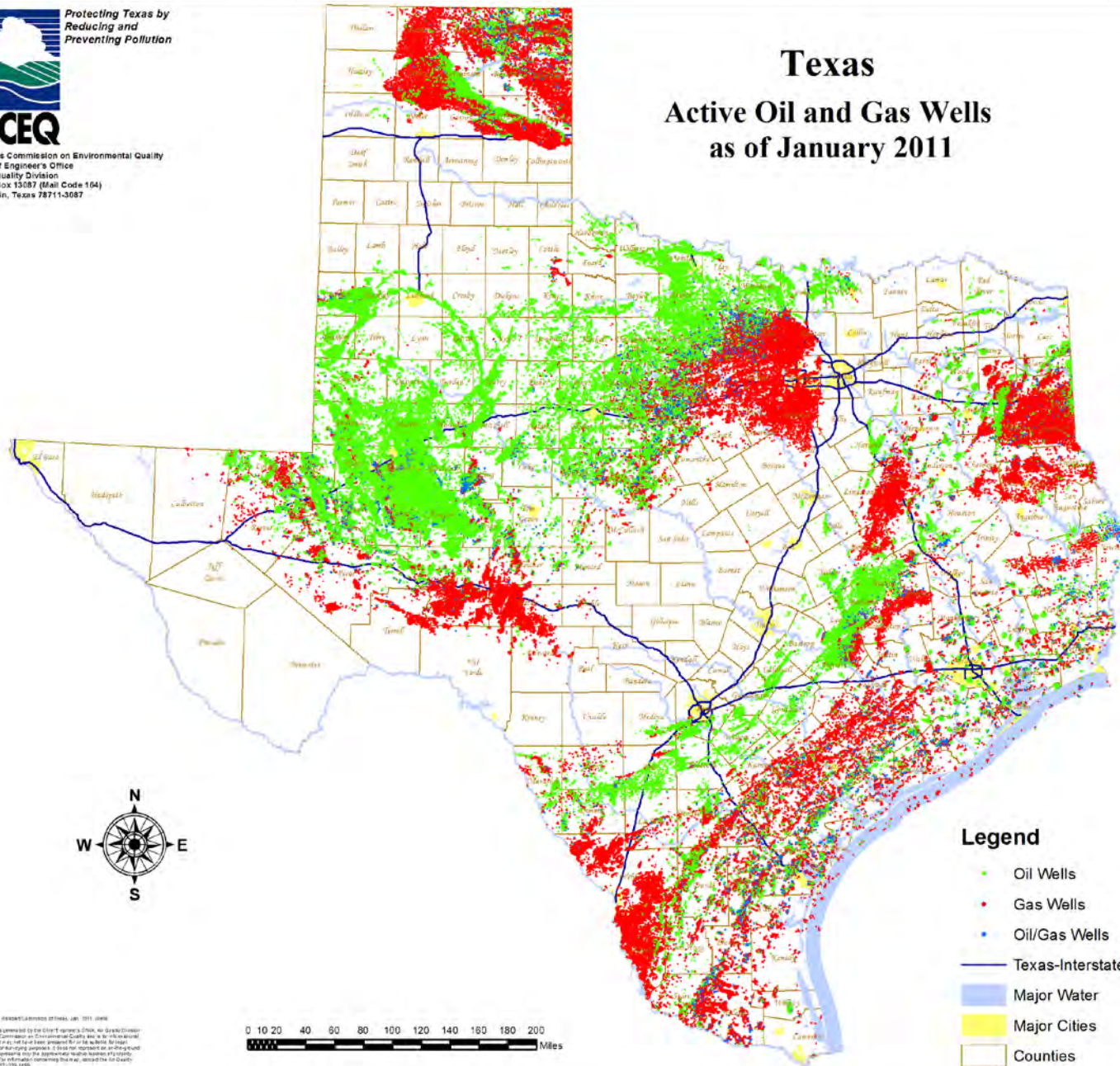
Protecting Texas by
Reducing and
Preventing Pollution

TCEQ

Texas Commission on Environmental Quality
Chief Engineer's Office
Air Quality Division
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Texas

Active Oil and Gas Wells as of January 2011



Legend

- Oil Wells
- Gas Wells
- Oil/Gas Wells
- Texas-Interstates
- Major Water
- Major Cities
- Counties

Source: TCEQ, 01/20/2011. Data from TCEQ, 01/20/2011.
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Eagle Ford Shale Play, Western Gulf Basin, South Texas

