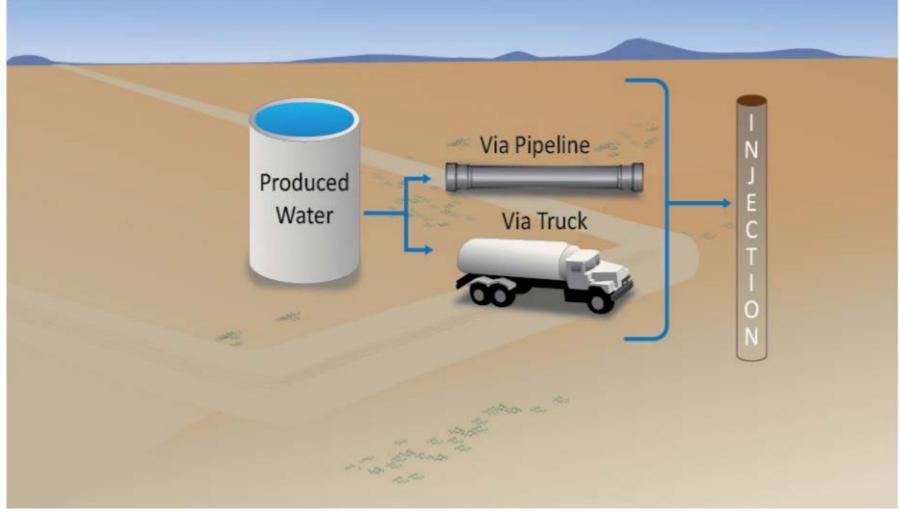
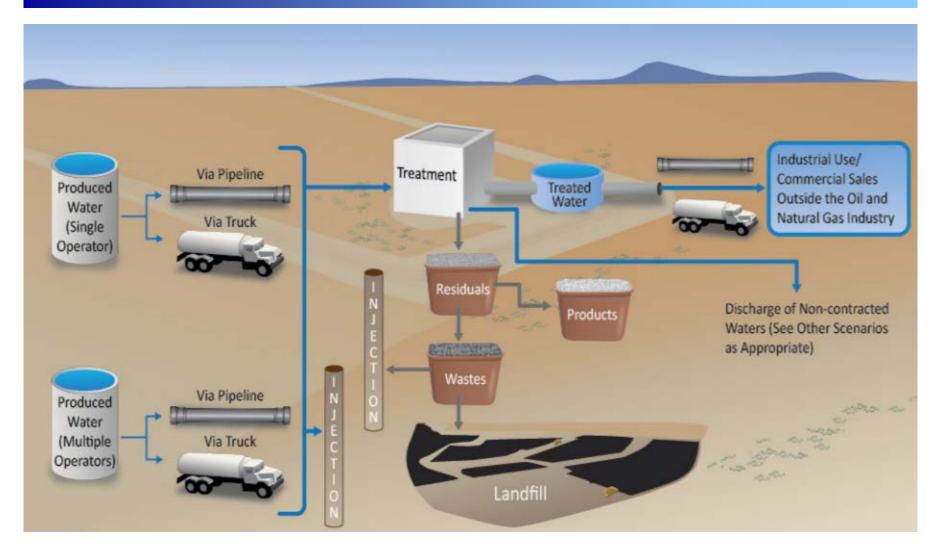


Less-Sustainable Produced Water Economy





More-Sustainable Produced Water Economy





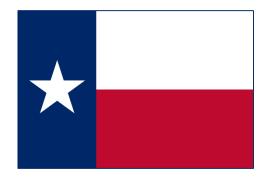
NGL PW Re-use & NPDES Permitting Considerations



- No NPDES Primacy
- NPDES Applications to EPA Region 6
- NM fulfills § 401 Cert.
- <u>TODAY</u>: NM not prepared to certify



- NPDES Primacy
- WY DEQ issues WYPDES permit
- <u>TODAY</u>: Anticline Disposal operates under WYPDES permit (orig. 2009).



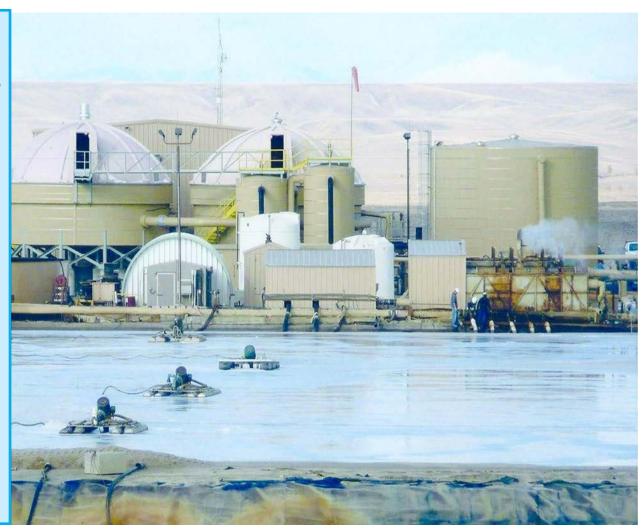
- NPDES Primacy
- TCEQ issues TXPDES permit
- <u>TODAY</u>: TX will review individual applications for permit to discharge



Anticline Disposal / Recycling / Discharge

WYPDES discharge specs:

- Technology-Based Effluent Limits:
 - Chapter 2, Appendix H, Wyoming Water Quality Rules and Regulations
 - Oil and Grease Daily Max
 - Chloride Daily Max
 - Specific Conductance Daily Max
 - Sulfate Daily Max
- Water-Quality-Based Effluent Limits:
 - Chapter 1, Wyoming Water
 Quality Rules and Regulations
 - pH range and Daily Max Grab Sample
- Colorado River Salinity Forum:
 - Chapter 6, Wyoming Water
 Quality Rules and Regulations,
 and the Colorado River Salinity
 Forum
 - TDS Daily Max





NGL PW Re-use & NPDES Permitting Considerations





Regulatory Pathway

Economically Competitive



Social License to Operate

Regulatory Pathway

Economically Competitive



Social License to Operate

Regulatory Pathway

Economically Competitive

