The Eagle Ford Shale: Mitigating Oil and Gas Impacts in the Last Great Habitat

Chase Currie: San Pedro Ranch
“The Last Great Habitat”: South Texas

• Lies south of a line from Del Rio to San Antonio and southeast to Victoria and Port O’Connor
• Privately owned
• Hyperdiverse ecological community
The Eagle Ford Shale

• Oil and gas play
• 11,624 permitted wells: 9/4/2013
• Impacts
  • Direct: loss of habitat and increased fragmentation
  • Indirect: soil erosion, spread of exotic plant species, increased rainfall run-off
Mitigation and Reclamation: Your Situation

• Each situation is unique
  • Property size
  • Available resources
  • Mineral rights

• ALWAYS....
  • A good surface use agreement
  • Seek legal advice
Mitigation Process (Pre-Construction)

• Develop a baseline for surface locations and pipelines
  • Identify sensitive areas (map)
• Topography
• Access: Road?
• Oil Field Corridor
Identify sensitive areas with mapping

Pipelines: position along existing roads
Mitigation Process (Construction)

• Environmental friendly drilling mats
• Stockpiling topsoil
• Clean equipment
• Bore sensitive areas
  • Riparian areas
Bore sensitive areas
Reclamation Process (Post Construction)

• Re-distribute topsoil back over the site
• Seed bed
• Plant natives
• Erosion blankets
• Screening techniques
Planting Native Seeds

- Plant a diverse mix
- Use the correct ecotype
- Timing?
  - August 15-October 15 (South Texas Natives)
- Use correct equipment
Use erosion blankets
Monitoring
Conclusions

• Plan, Plan, Plan!!!
• Be steadfast in your monitoring
• Use oilfield related disturbance to your advantage
• Be creative and flexible
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Questions??