Water Resource Management

Current Practices and Challenges

With Focus on:

1) Agricultural
2) Municipal
3) Oil & Gas

Computer Science Department
Texas Tech University
July 2018

Objectives of the Study

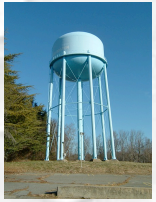
- Learn about
  - Current practice
  - Technology use
  - Existing problems
  - Future challenges

Focusing on:

Water Resource Management

Approach

- Identified three major consumers/stakeholders of water:
  1. Agricultural and farming
  2. Municipal and residential
  3. Oil & Gas industry



Approach

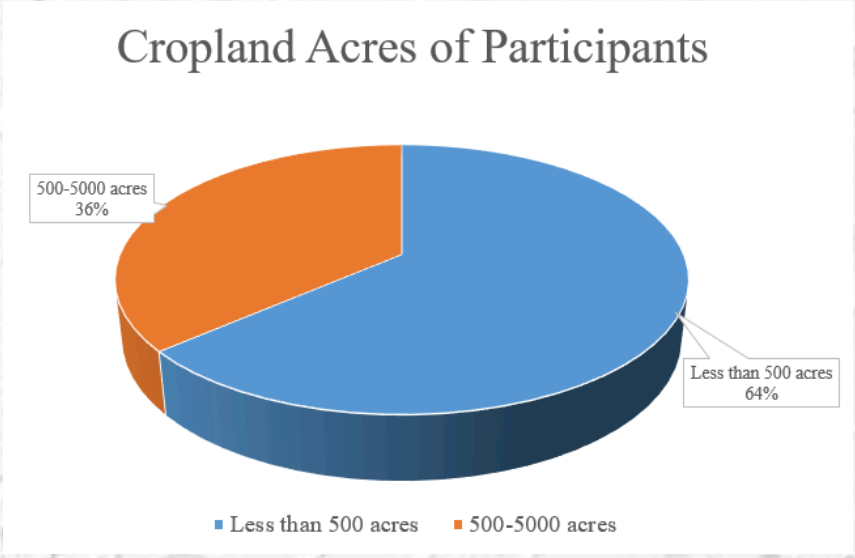
- Organized, recruited, and conducted three focus groups:
  1. Agricultural and farming
  2. Municipal and residential
  3. Oil & Gas industry

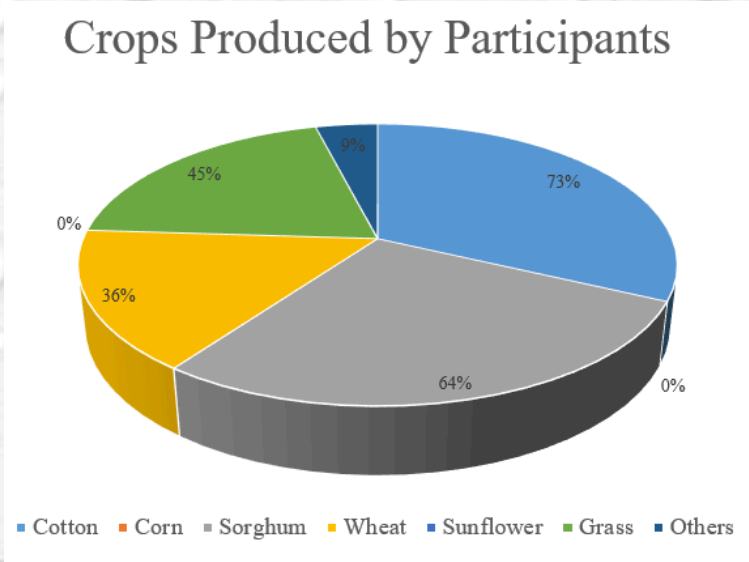
- Each focus group included:
  - A set of survey questions
  - Discussions on selected problems
  - Recording and taking notes

1) Agricultural and Farming

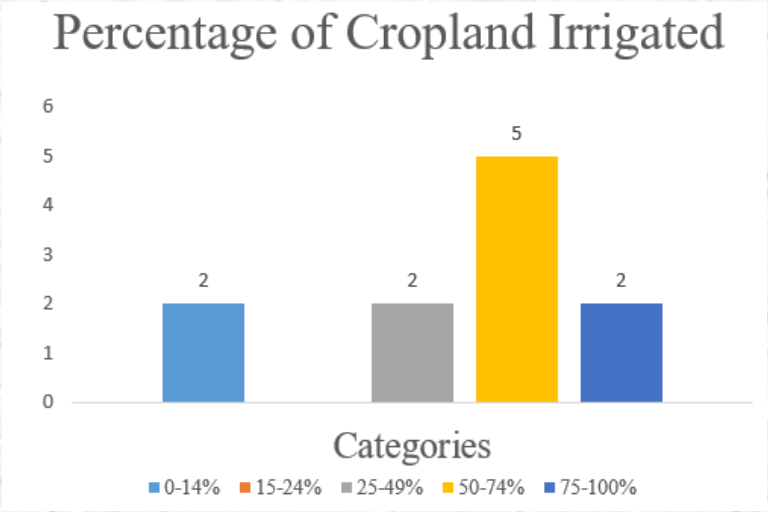
- Recruited 8 participants from Lubbock and surrounding counties
- The survey & discussion parts consisted of15 questions

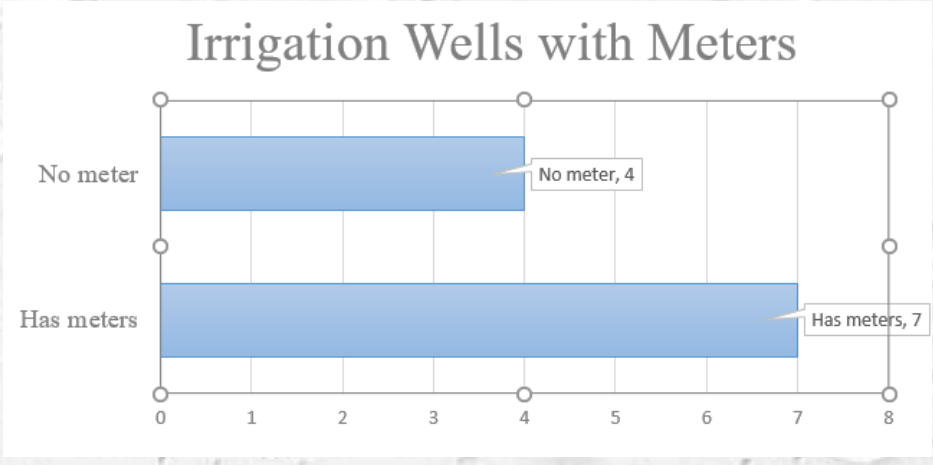
Agricultural focus group discussion on water resource Manager





Agricultural focus group discussion on water resource Manage





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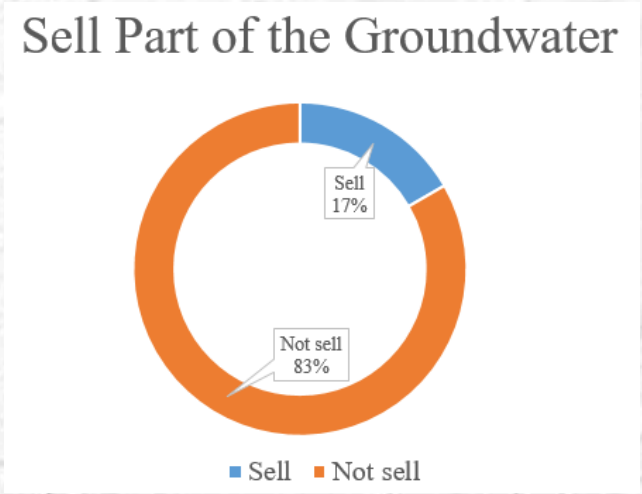

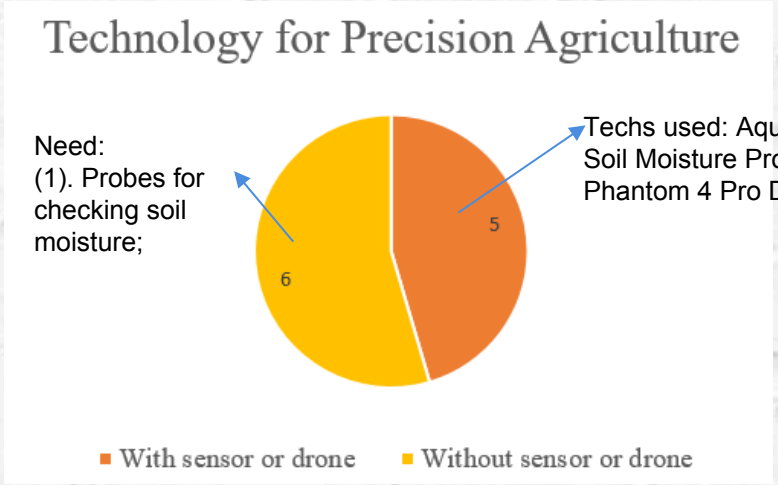

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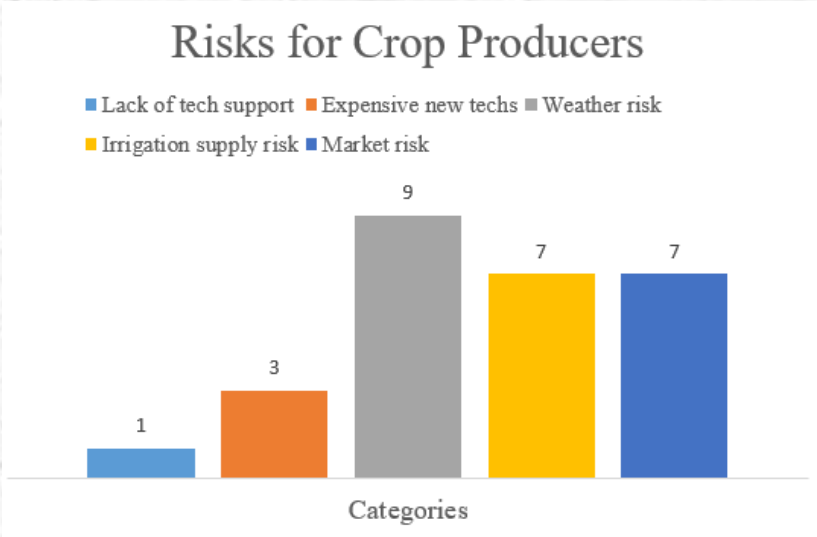
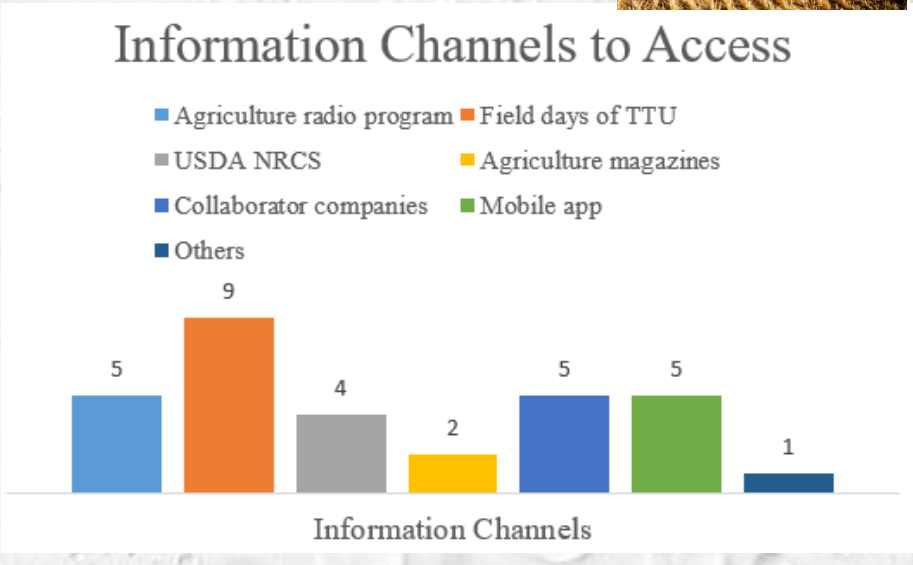
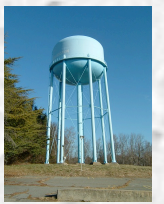


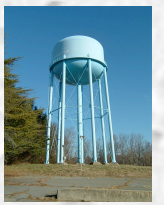


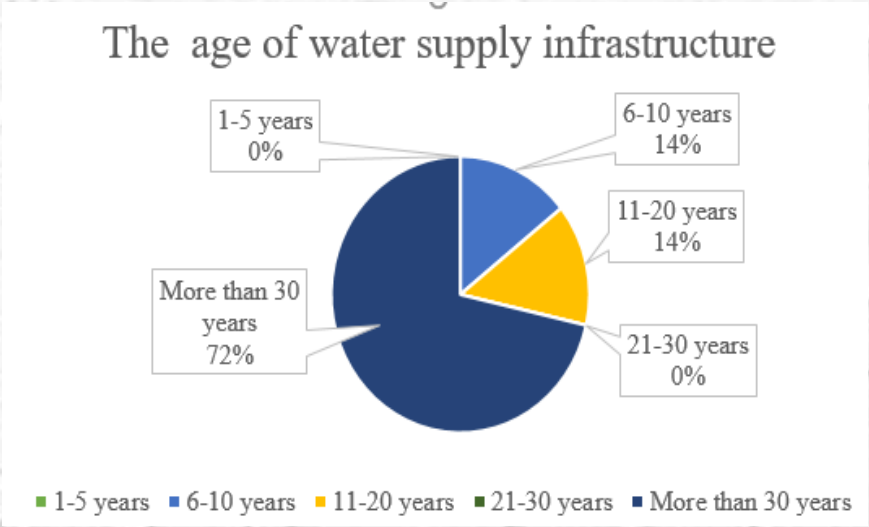
2) Municipal & Residential

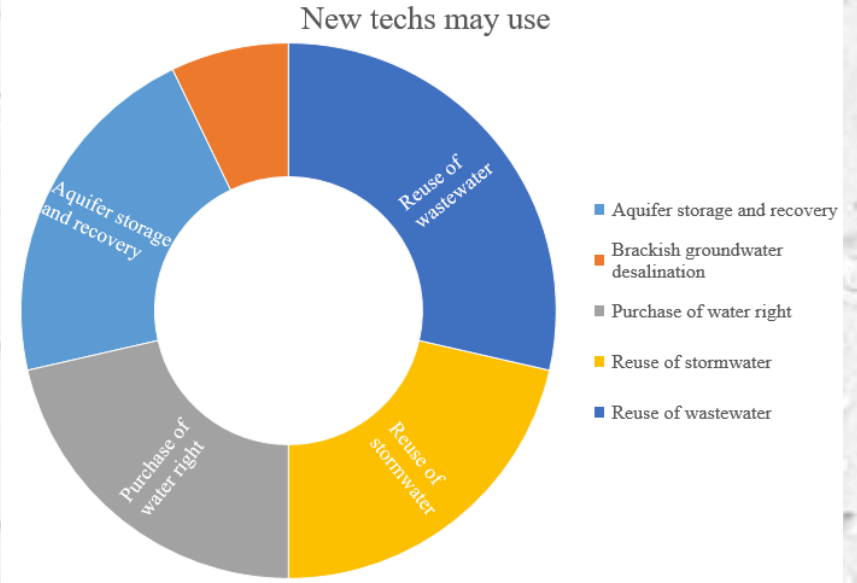


- Recruited 7 participants from Lubbock and surrounding counties
- The survey and discussion parts consisted of 28 questions:

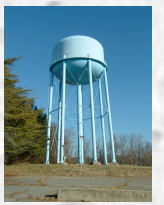
- Municipal focus group discussion on water resource Management

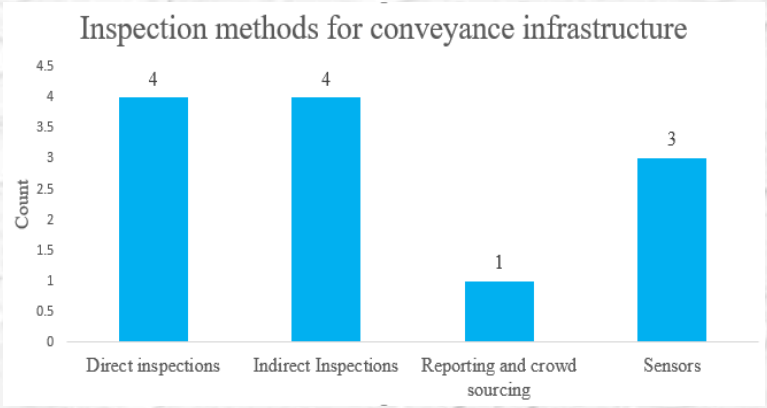






- Municipal focus group discussion on water resource Management





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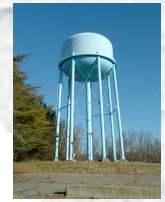
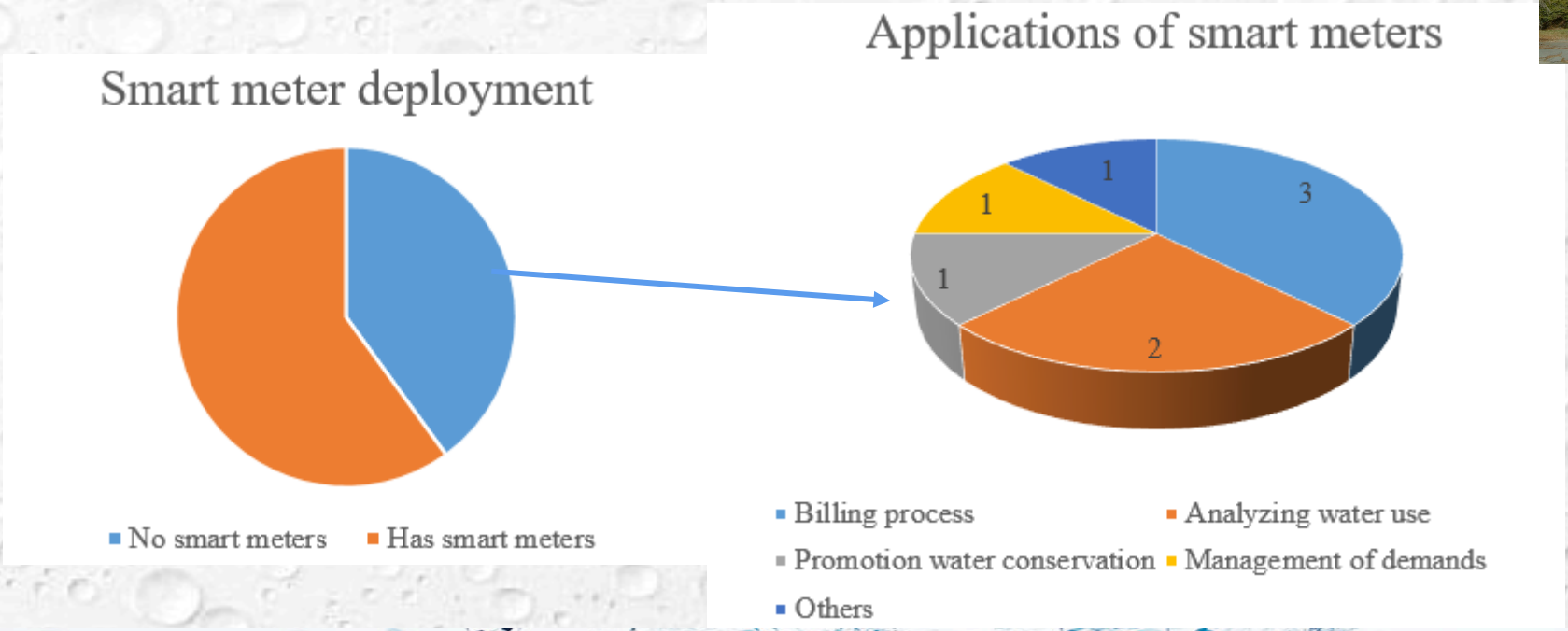
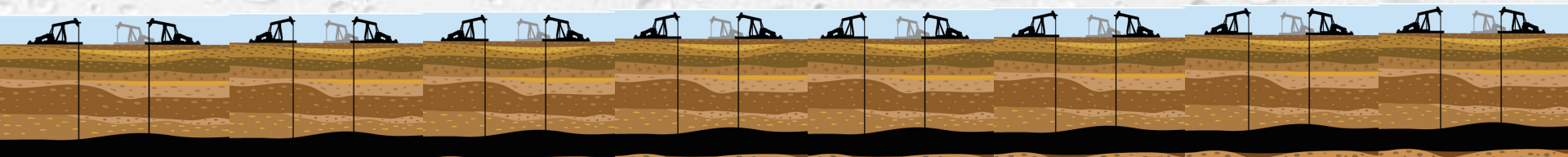


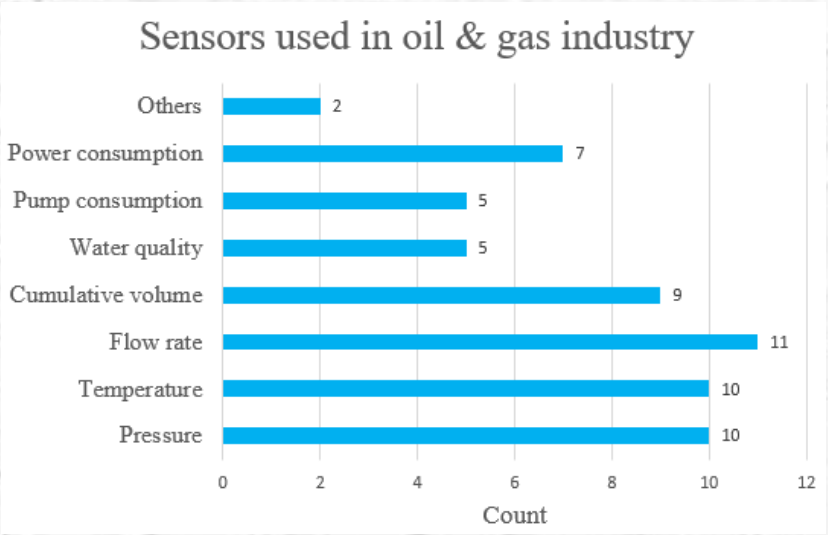


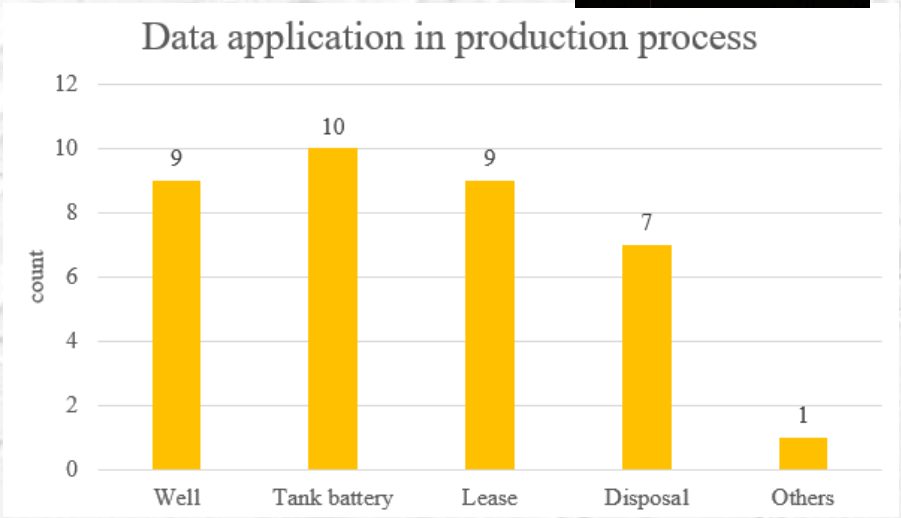
3) Oil & Gas

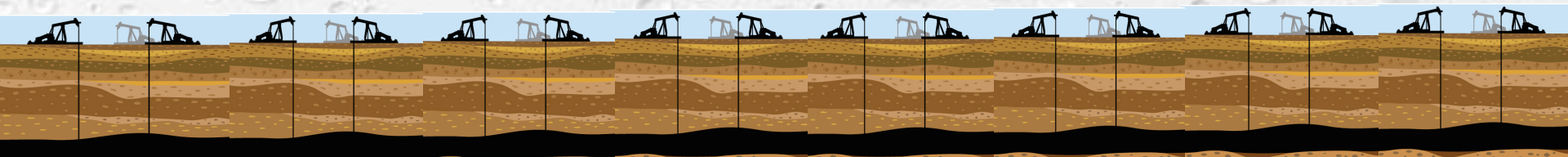
- Recruited 11 participants from Midland and surrounding counties
- The survey part included 24 questions:



- Oil & gas focus group discussion on water resource Management







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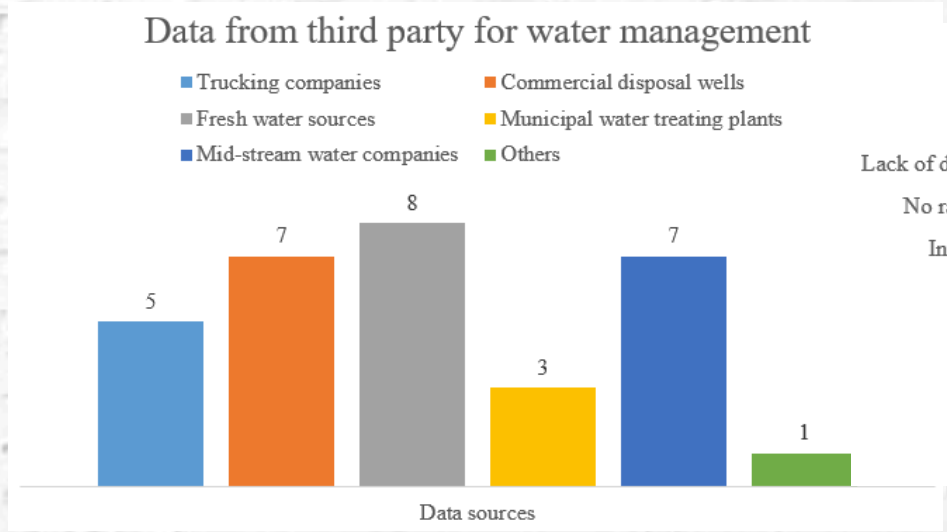

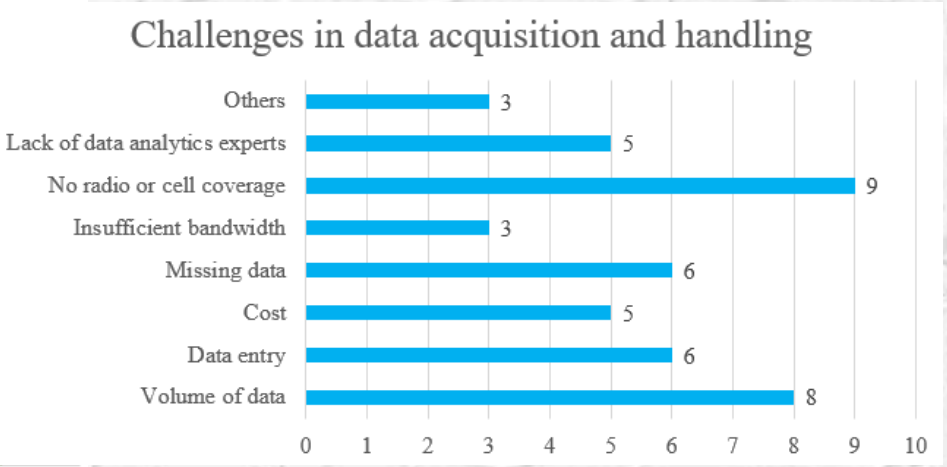

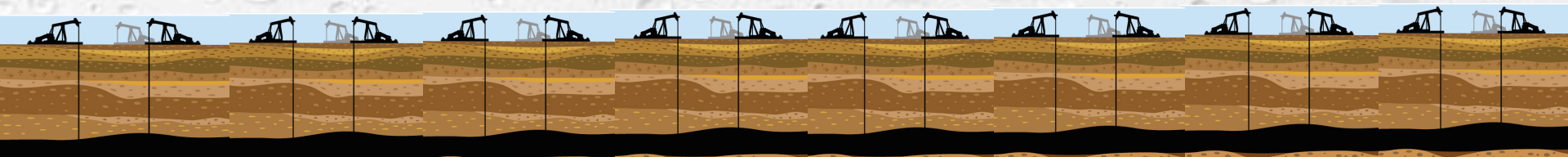

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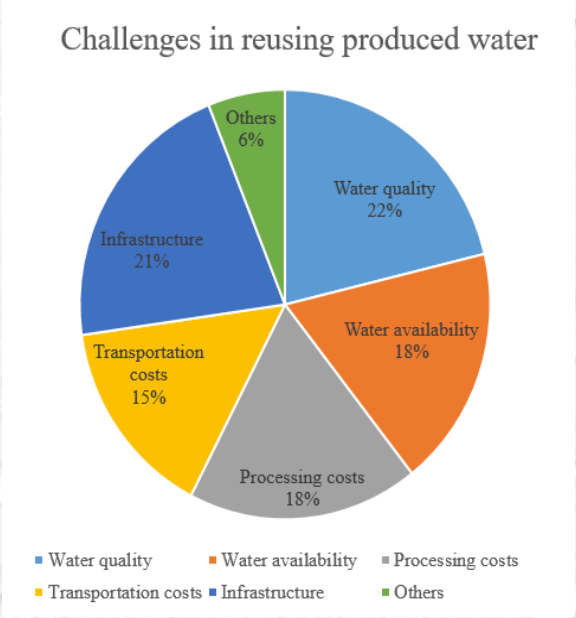

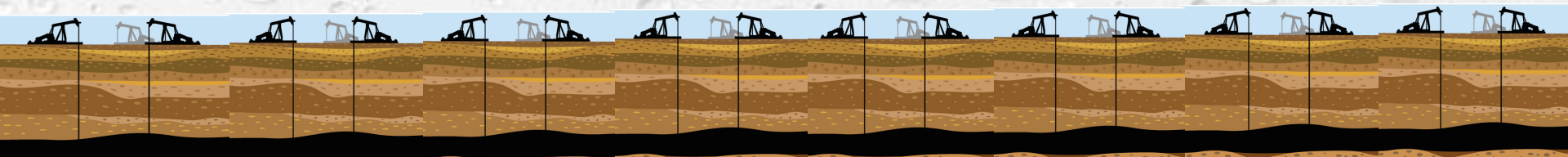


Thank You