| Red River Basin, Above Lake Texoma | Pathogen Data Analysis |
Data

• Pathogen data on the Red River above Lake Texoma compiled by Brian Haggard and Scott Longing from the Arkansas Water Resource Center.

• The data was collected from the Oklahoma Water Resources Board (OWRB), Oklahoma Conservation Commission (OCC), and the United States Geological Survey (USGS) on the Oklahoma side and the Texas Commission on Environmental Quality (TCEQ) on the Texas side.
303(d) Lists

• 2006 303(d) List compared to the 2008 303(d) List for both TX and OK
• OK - 21 streams
• TX - 6 streams
## Texas List

- Category 5c- Total Maximum Daily Load (TMDL) underway
- Classified v. Unclassified
- Indicator bacteria- Fecal Coliform and *E. coli*
Oklahoma List

- Category 5a- TMDL is scheduled
- Designation
- Indicator bacteria- Fecal Coliform, Enterococcus, and *E. coli*
Use Attainability Analysis Texas

• 2010 Draft
  – If an unclassified stream presumes Primary Contact Recreation (PCR) and an analysis shows PCR is unlikely to occur, and Secondary Contact Recreation 1 (SCR1) may be presumed, if during base flow conditions:
    • The average depth at thalweg is less than 0.5 meters,
    • No pools with a depth of 1.0 meter or greater,
    • No existing activities that create a significant risk of ingestion.
  – Change in numeric criteria
    • Classified
    • Unclassified
Use Attainability Analysis
Oklahoma

• 2001 Protocol
  – Primary Body Contact Recreation (PBCR) Guideline

• Thalweg water depth equal to or exceeding 0.5 meters in at least 20% of stream segment.
• Exceptions
Data Gaps

• The criteria for PCR or PBCR is based on full day exposure
• The criteria are based on illness from sewer overflows (non-point source)
• The criteria are based on the amount of water that may be ingested during specific activities
• Data during high flow or low flow
• Possible change in criteria
<table>
<thead>
<tr>
<th>Individual Stream Outlines</th>
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</thead>
<tbody>
<tr>
<td>Includes</td>
</tr>
<tr>
<td>- Stream I.D.</td>
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<tr>
<td>- Location</td>
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<tr>
<td>- Indicator bacteria</td>
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<tr>
<td>- Category of TMDL status</td>
</tr>
<tr>
<td>- Possible non-point sources (Except one OK stream)</td>
</tr>
<tr>
<td>- Possible progression steps</td>
</tr>
</tbody>
</table>
Possible Progression Steps

- Additional sampling and/or monitoring
- Removing PCR or PBCR use
- Modifying application of the existing criteria
- Revising existing numeric criteria
- Remediation of stream
Next Steps

• Addition of recent data
• Statistical data analysis
• Prioritization of streams
• Report