Options for Watershed Prioritization in North Dakota

• Identified as the most important element in the EPA framework
• Prioritization is the systematic ranking in order of importance.
Watershed prioritization is the systematic ranking of watersheds

• Priorities will vary based on purpose
  – Monitoring and assessment
  – Planning
  – Permitting
  – Restoration (Section 319 projects, NWQI)
  – Protection
• Priorities will vary based on scale
  – 8 digit sub-basin
  – 10 digit watershed
  – 12 digit sub-watershed
  – Stream segment
  – Lake or reservoir
Prioritization Considerations

Prioritization may be tiered:
- Tier 1 - 8 digit sub-basins
- Tier 2 – 10 or 12 digit watersheds
- Tier 3 – stream segments, lakes, reservoirs
Prioritization Decision Tools

• Use of different metrics/indicators based on prioritization purpose, scale, and approach
  – Indicators/metrics may be weighted based on importance
Prioritization Methods

- Decision tree method
- Score card method
- EPA’s Recovery Potential Screening Tool
Decision Tree Method

What is the watershed’s overall biological?

- **Good**
  - What is the condition of the watershed?
    - >75 % grass or permanent cover: Implement protection strategies (i.e., I&E, ordinances, etc)
    - <75 % grass or permanent cover: Conduct additional monitoring & assessment

- **Fair**
  - Conduct additional monitoring & assessment

- **Poor**
  - What is the condition of the watershed?
    - >75 % grass or permanent cover: Conduct additional monitoring & assessment
    - <25 % grass or permanent cover: Impaired/low priority
    - Develop TMDL
Decision Tree Method

Overall Biological condition:
- Good:
  - Watershed % natural cover:
    - >75%:
      - Healthy Watershed (protection)
    - 50-75%:
      - Stakeholders
    - <50%:
      - Threatened Watershed (priority for assessment)
- Fair:
  - Watershed % natural cover:
    - >75%:
      - Stakeholders
    - 50-73%:
      - Threatened Watershed (priority for assessment)
    - <50%:
      - Impaired Watershed (low priority)
- Poor:
  - Watershed % natural cover:
    - >75%:
      - Impaired Watershed (priority for assessment)
    - 50-75%:
      - Impaired Watershed (low priority)
    - <50%:
      - Impaired Watershed (low priority)
Score Card Method

- Select indicators/metrics
  - Ecological/health
  - Stressor
  - Societal

- Scale indicators and select scoring criteria
# Indicator/Metric Scoring

<table>
<thead>
<tr>
<th>Biological condition</th>
<th>Watershed % natural cover</th>
<th>Total Phosphorus Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Good = 1</td>
<td>• &gt;75% = 1</td>
<td>• Low = 1</td>
</tr>
<tr>
<td>• Fair = 3</td>
<td>• 50-75% = 3</td>
<td>• Moderate = 3</td>
</tr>
<tr>
<td>• Poor = 5</td>
<td>• &lt;50 = 5</td>
<td>• High = 5</td>
</tr>
</tbody>
</table>
# Indicator/Metric Scoring

## TMDL Completed
- Yes = 5
- No = 1

## Drinking Water Intakes
- No = 1
- Yes = 10

## Fishery Value
- Tier 1 = 5
- Tier 2 = 3
- Tier 3 = 1
**Indicator/Metric Scoring**

<table>
<thead>
<tr>
<th>Section 319 Watershed Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Yes = 5</td>
</tr>
<tr>
<td>• No = 1</td>
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</tbody>
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## Score Card Method

<table>
<thead>
<tr>
<th>Biological Condition</th>
<th>Watershed % Natural Cover</th>
<th>TP Yield</th>
<th>TMDL Complete</th>
<th>Drinking Water Intakes</th>
<th>Fishery Value</th>
<th>319 Project</th>
<th>Total Score</th>
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</thead>
<tbody>
<tr>
<td>Watershed A</td>
<td>3</td>
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<td>3</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td>5</td>
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<tr>
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<td>3</td>
<td>1</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>Watershed C</td>
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<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Watershed D</td>
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<td>3</td>
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<td>5</td>
<td>1</td>
<td>5</td>
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