

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.



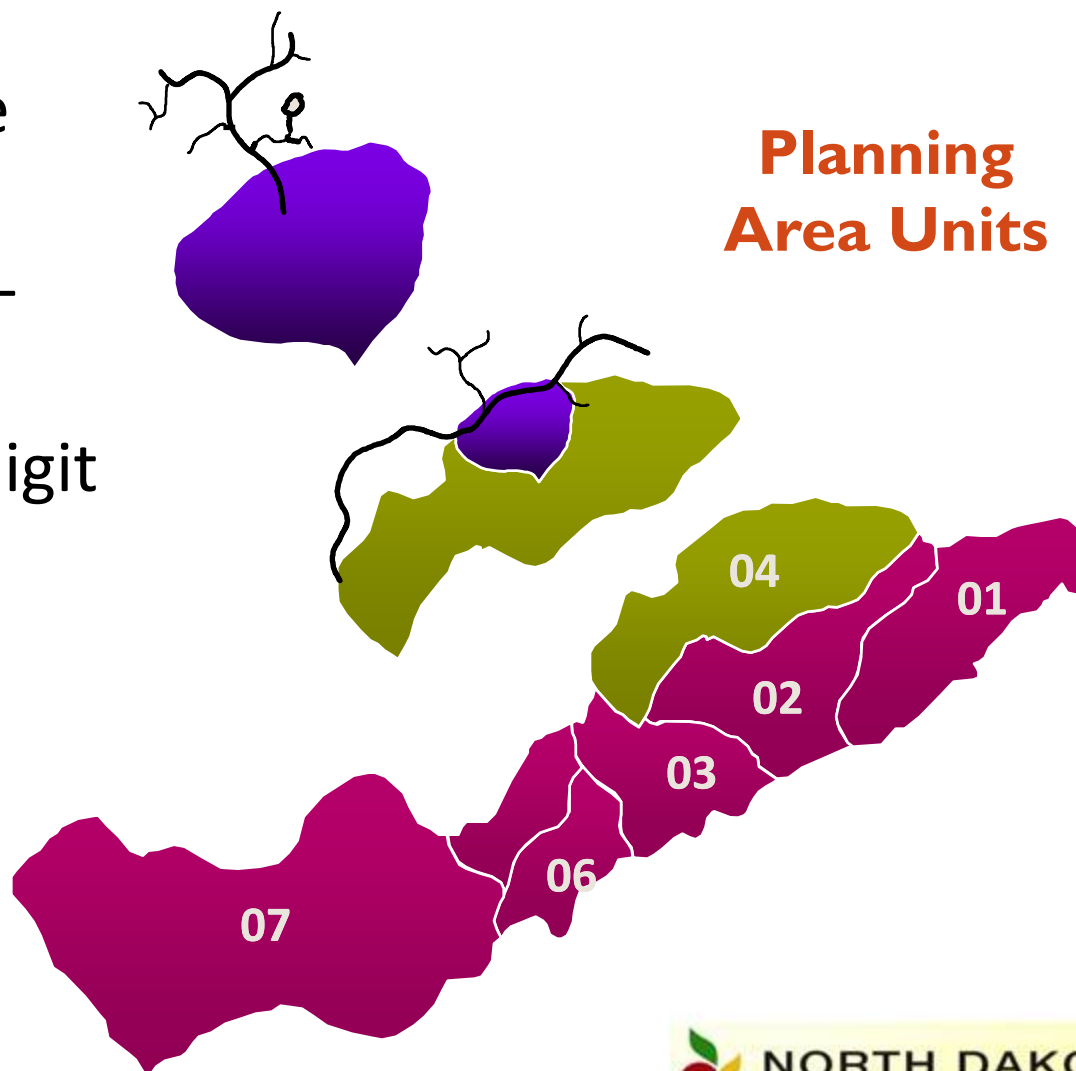
Watershed prioritization is the systematic ranking of watersheds

- 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

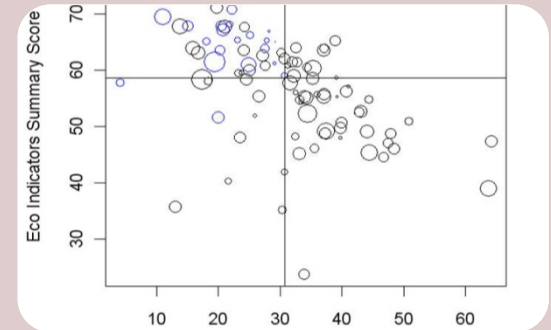
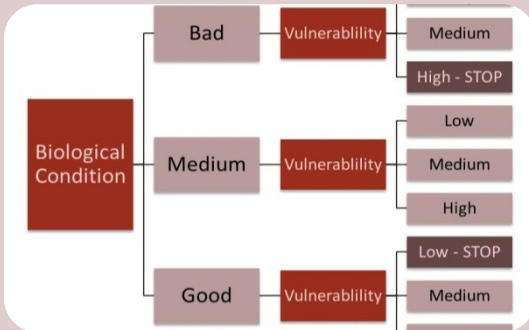


Prioritization Decision Tools

- Use of different metrics/indicators based on prioritization purpose, scale, and approach
 - Indicators/metrics may be weighted based on importance



Prioritization Methods

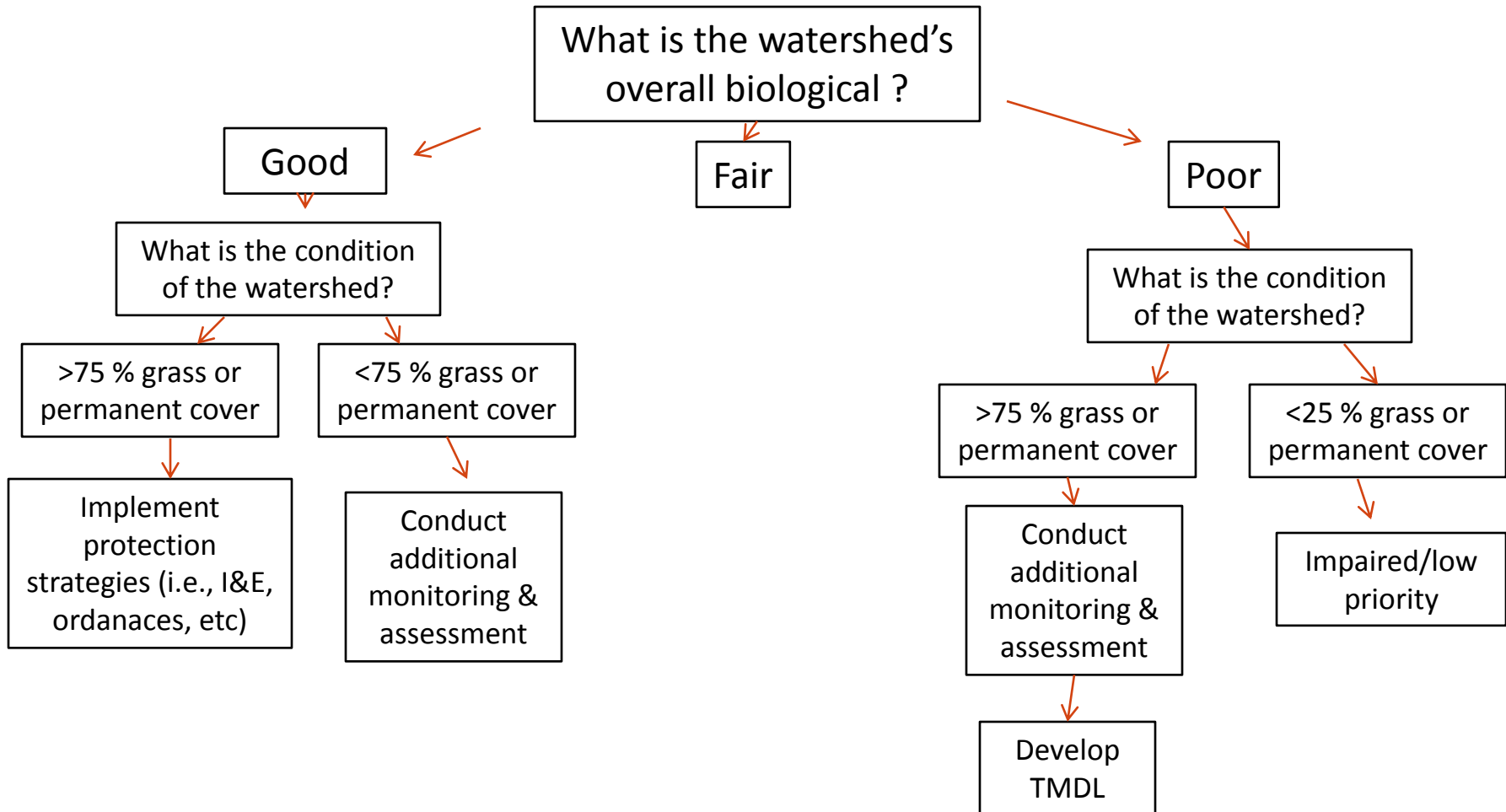


Decision
tree method

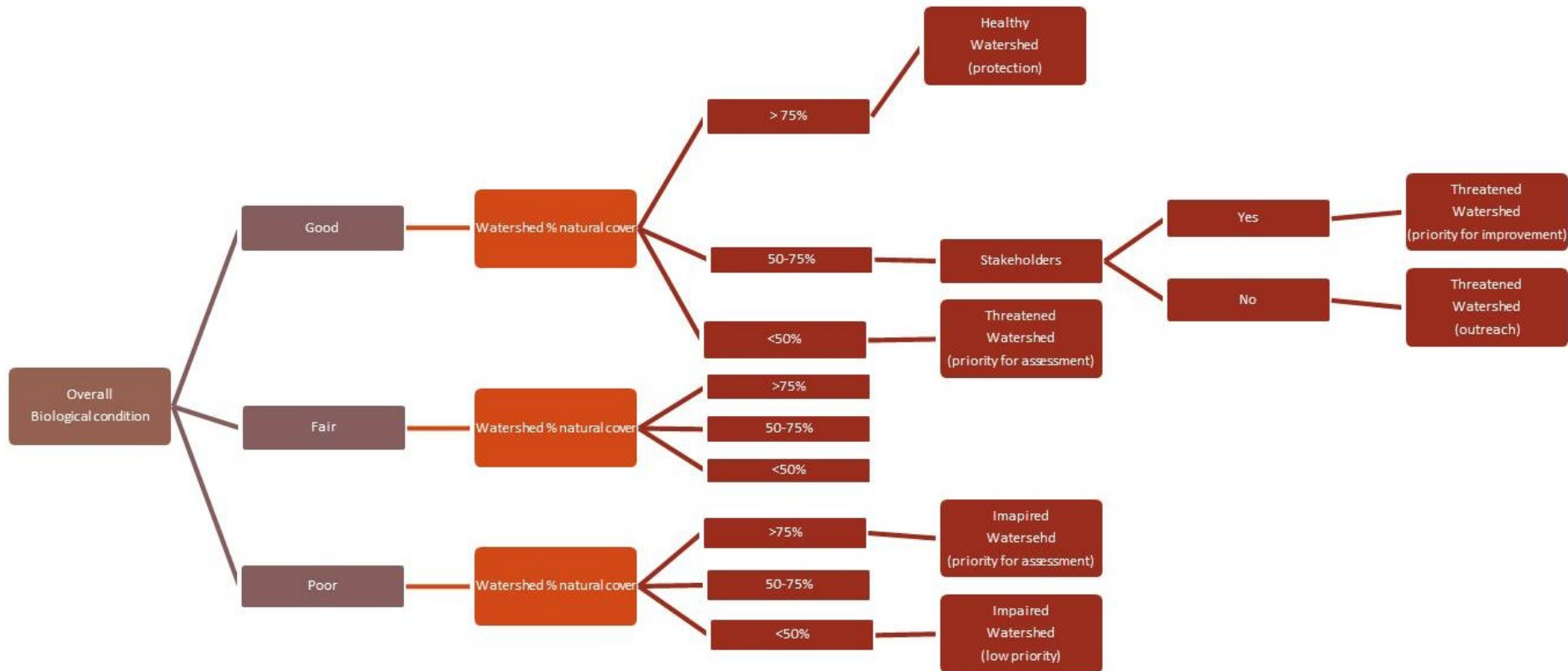
Score card
method

EPA's
Recovery
Potential
Screening
Tool

Decision Tree Method

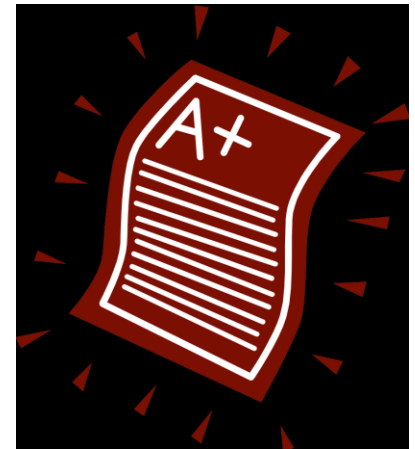


Decision Tree Method



Score Card Method

- Select indicators/metrics
 - Ecological/health
 - Stressor
 - Societal
- Scale indicators and select scoring criteria



Indicator/Metric Scoring

Biological condition

- Good = 1
- Fair = 3
- Poor = 5

Watershed % natural cover

- >75% = 1
- 50-75% = 3
- <50 = 5

Total Phosphorus Yield

- Low = 1
- Moderate = 3
- High = 5

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

Section 319 Watershed Project

- Yes = 5
- No = 1

Score Card Method

| | Biological Condition | Watershed % Natural Cover | TP Yield | TMDL Complete | Drinking Water Intakes | Fishery Value | 319 Project | Total Score |
|-------------|----------------------|---------------------------|----------|---------------|------------------------|---------------|-------------|-------------|
| Watershed A | 3 | 1 | 3 | 1 | 10 | 1 | 5 | 24 |
| Watershed B | 5 | 5 | 3 | 1 | 1 | 3 | 1 | 19 |
| Watershed C | 1 | 1 | 3 | 1 | 1 | 3 | 1 | 11 |
| Watershed D | 1 | 3 | 3 | 5 | 1 | 5 | 1 | 19 |