# Measuring Success

10 Year Assessment

Spokane River – Lake Spokane DO TMDL

# Adaptive Management

*"The Spokane River TMDL advisory committee will work together to monitor progress towards this TMDL's goals, evaluate successes, obstacles, and changing needs, and make adjustments to the cleanup strategy as needed."*

*(from DO TMDL Spokane River / Lake Spokane Dissolved Oxygen Water Quality Improvement Report, page 78)*

# Decision Making Framework for 10-YR Assessment

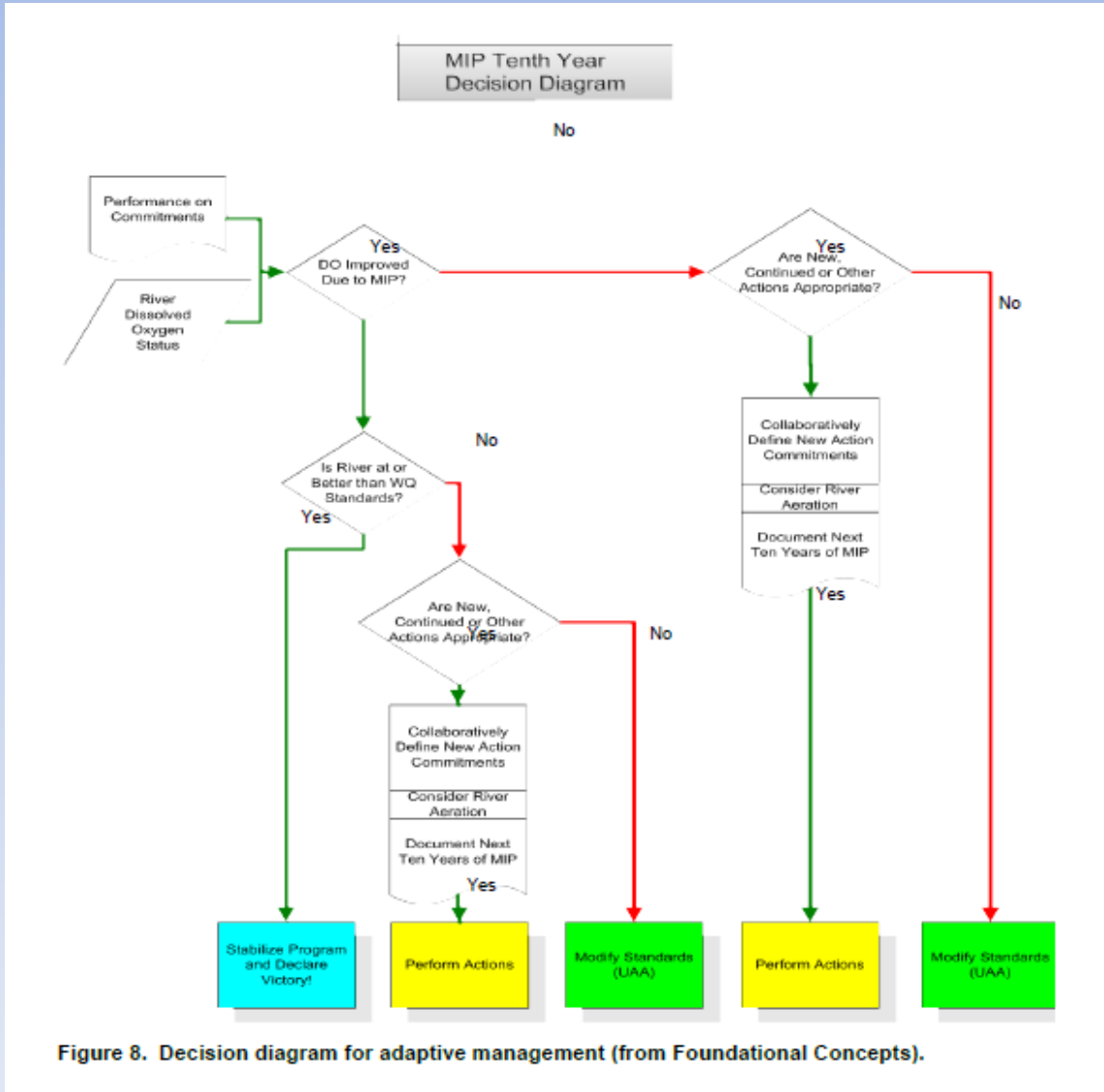


**Figure 8. Decision diagram for adaptive management (from Foundational Concepts).**

# What is the Definition of Success?

- Usable river and lake with good water quality
  - Good fishing?
  - Swimmable?
  - Minimal algae blooms
  - Appropriate aquatic weed growth

- Other?  Discussion/Brainstorm

# Potential Success Measurements

- Nutrient loading into Lake Spokane
- Lake Spokane dissolved oxygen
- Trophic state index
- Sechi depth
- Macroinvertebrates biomass and community composition
- Algae biomass and community composition
- Macrophyte extent and community composition
- Fishing success and participation
- User surveys
- BMP implementation in watershed
- Length of shoreline buffers
- Phosphorus dishwater detergent and fertilizer bans

# Existing Standards

**Spokane River**

- Dissolved oxygen of 8 mg/l

**Lake Spokane**

- If dissolved oxygen is less than 9.5 mg/l, human actions considered cumulatively may not decrease dissolved oxygen more than 0.2 mg/l below natural conditions (this includes all depths of the lake, as measured in the model)
- Average euphotic zone concentration of TP cannot exceed 25 μg/l from June 1 – October 31

# Next Steps

- What do we currently have?
  - Model run identifying WLA, LA, and Table 7
  - 14 years of river and lake monitoring data
- What do we need?
  - Quantitative review of  monitoring data
  - Summary of qualitative successes
  - Review of what existing standard means from a modeling and monitoring perspective
- Other?  Brainstorm/Discussion