Potential Implementation Discussions

Water Quality Standards

Regional Numeric Indicators and Site-Specific Numeric Criteria

- Advantages and disadvantages of phased implementations
- Should headwaters (Category 1 Waters) be immediately prioritized for numeric criteria?
- What process should be used for prioritization of site-specific criteria efforts elsewhere?
- Is it even possible to have a phased implementation given the GSL is in this state?

Development of Site-Specific Standards

- Empirical Approaches
- Mechanistic Models
- Consideration of Multiple Lines of Evidence
- All of the above

Monitoring and Assessment

Identification of Nutrient-Related Impairments (this assumes what, a standard is in place or the priority for one to be implemented?)

- Rotating Basin and Tiered Monitoring Approaches
- Development and Implementation of Nutrient-Specific Assessment Approaches
- Bioconfirmation: Integration of Numeric Indicators with Biological Response Information
 - o Site-specific demonstration of deleterious nutrient effects

Potential Site-Specific Modifications to Response Thresholds

- Development of Site-Specific Standards
- Determination of "Best Attainable" Conditions (will this address habitat and regime shift and include cost?)
 - o Irreversible Conditions
 - o Recovery Potential
 - Natural Confounding Factors (i.e., slope, channel shading, lake depth/residence time)

Protection of Downstream Resources

- "Near Field" and "Far Field" effects
- Moving upstream to Address Problems

Development and Implementation of Watershed Nutrient Reduction Strategies

A Collaborative Process Framework

- Assuring Continual and Iterative Progress (does this include adaptive management processes or just tightening standards on point sources?)
- Development of Collaborative Teams: Getting the Right People to the Table
- Combining Resources
 - Water quality trading <u>(there are very few of these programs that work and they are just shifting the responsibility to manage non-point discharges from the regulatory agency to point sources)</u>
- Statewide Prioritization Processes <u>(standard is in place then this is based on TMDL process if standard is exceeded)</u>
 - o Incorporate with NPS funding schedule?
- Accounting for Watershed-Specific Situations
 - o Relative Contribution of Different Sources
- Relative Ability to Address Problems (is this related to economic ability or technical ability?)

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- Accountability Concerns
- How to provide short- and mid-term regulatory certainty to partners?

Required and Optional Elements of Nutrient-Reduction Strategies

- o Stormwater Plans
- o Non-Point Source Reduction Strategy
- o Numeric Criteria Implementation
- o Adaptive Management Implementation Approaches
- o Monitoring and Progress Reports

Addressing Non-Point Sources

- Challenges and Opportunities with Identifying Problem Areas
- Appropriate Funding Mechanisms
 - o WI model: 80/20 or 90/20 cost share agreement for required reductions

o How to fund this approach?

Addressing Point Sources: UPDES Considerations

Technology-Based Permit Limits

- o What limits are appropriate? (<u>GSL basin vs non-GSL basin issues</u>)
- o Where should the limits apply?
 - Size of facility/size of receiving water
 - Surrounding land use (<u>Does this mean urban vs rural or something</u> else?)
- o Assuring mid- and long-term regulatory certainty to affected facilities

Developing Nutrient-Related Permit Limits

- o Use of Qual2Kw and other approaches
 - Model parameterization process
- o How to address effluent dominated receiving waters?
- o (waiver for wide spread economic harm)
- o (Procedure for mixing zones and economic limits of technology)

Antidegradation Considerations

- o Establishing "least degrading" alternatives
- o Different Requirements for new facilities? Major upgrades? (<u>This still has an economic component</u>)

Economic Considerations

- o Variance Policies
- o Determination of "Extensive and Widespread" Economic Impacts
 - Economic planning tools