

Second Stakeholder Meeting for Nondegradation Rulemaking

Minnesota Pollution Control Agency

July 29, 2008, 9:00am-11:30am, MPCA Offices, Rochester

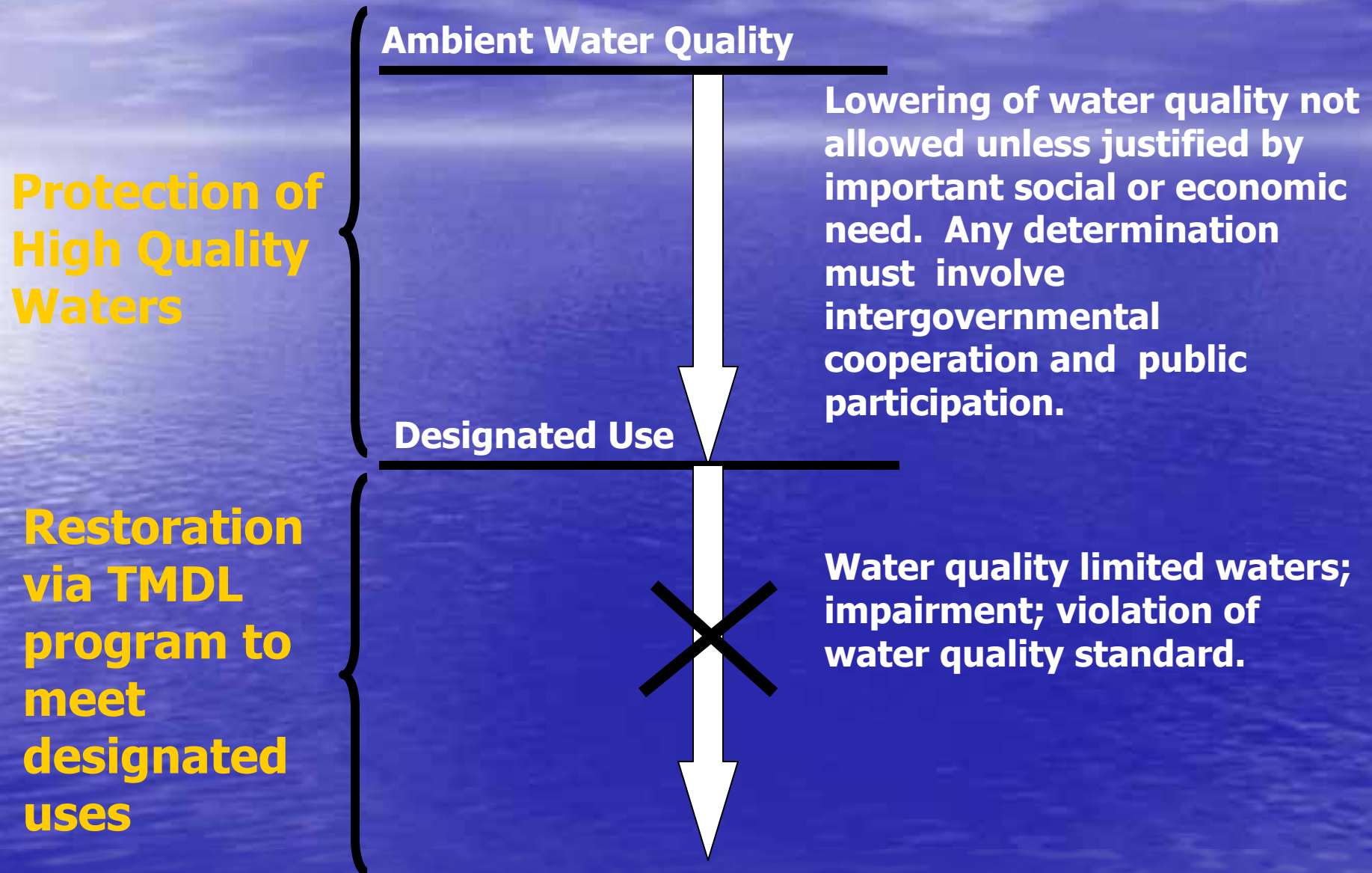
July 30, 2008, 8:30am-12:00pm, Dakota Lodge, West St. Paul

August 1, 2008, 1:00pm-3:30pm, MPCA Offices, Brainerd

Agenda

- Welcome, introductions
- Comments received from Issue Papers 2 and 3
- Issue Paper 4 – “What triggers a nondegradation review of potential impacts to high-quality waters?”
- Small group discussions
- Written response to discussion points
- Break
- Issue Paper 5 – “Nondegradation Review: alternatives analysis, economic and social justification, intergovernmental coordination and public participation.”
- Small group discussions
- Written response to discussion points
- Summary/Next Steps

Tier 2 Protection



Nondegradation Review Requirements

1. Determination or finding of necessity to lower water quality
2. Accommodations for important social or economic development
3. Intergovernmental cooperation and public participation
4. Assurance of highest statutory and regulatory requirements for point sources
5. Assurance of all cost-effective and reasonable BMPs for nonpoint sources

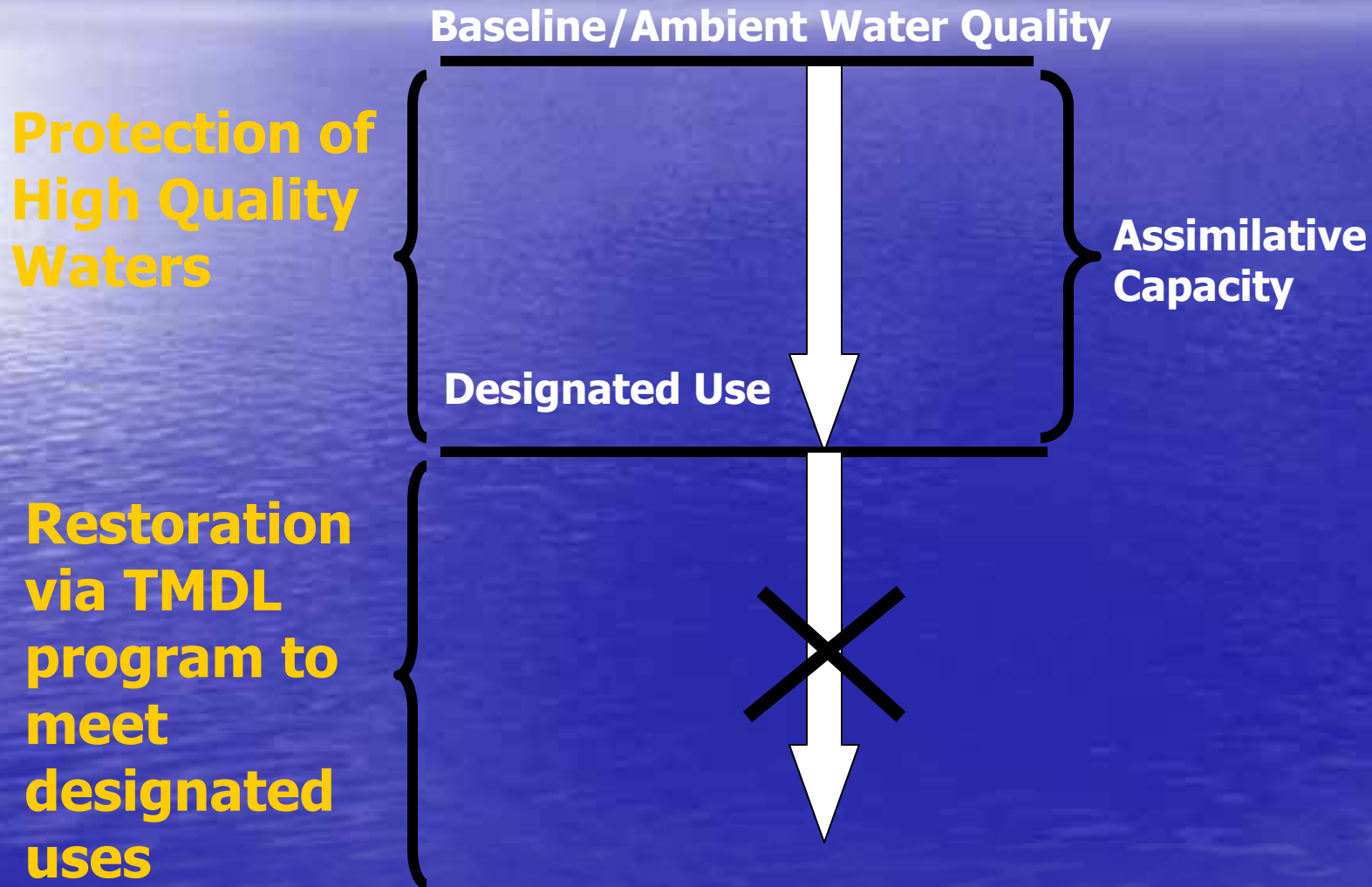
Issue Paper 4 – What triggers a nondegradation review?

- What is a “trigger”?
- Should there be a *de minimis* or minimal threshold?
- Should there be different levels of nondegradation review (scaled approach)?

Trigger: a projected lowering of water quality

- Requirements for determination:
 - Ambient water quality conditions
 - Actual or assumed
 - Projected impacts
- Measures for lowered water quality
 - Changes in assimilative capacity, loadings, dilution ratios, etc. at critical conditions
 - Nature and persistence of pollutants
 - Impacts to biota
 - Confidence in data or modeling used

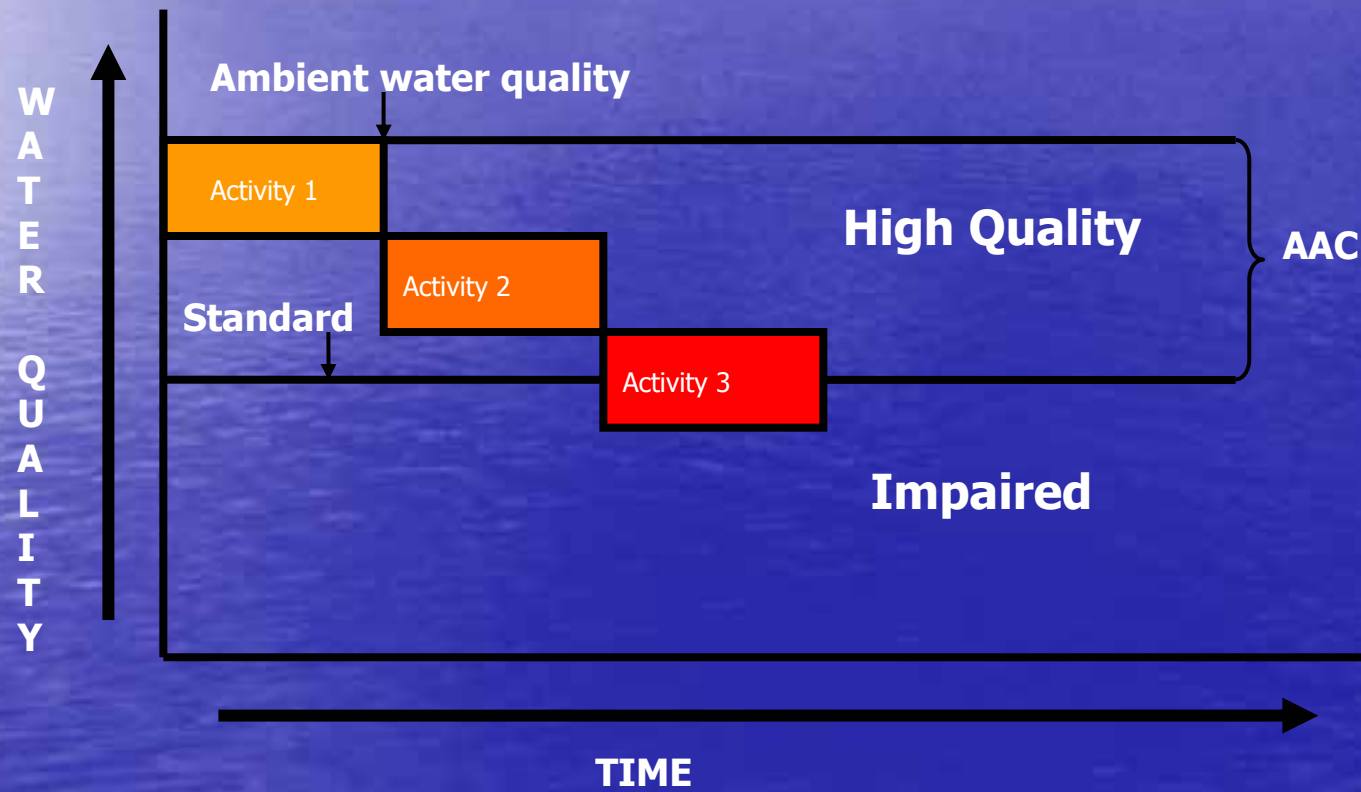
Protection of High Quality Waters = Protection of Assimilative Capacity



Can review be triggered by type or level of activity?

- Requirements for determination:
 - Presumption that water quality will be lowered
 - Magnitude of potential degradation
- If the activity is not somehow tied to the changes in the quality of the receiving water...., there is the risk of undetected degradation.

When activities are not in some way tied to the water quality of the receiving water, there is a risk of undetected degradation.



Considerations for activity-based triggers

- Type of activity
- Nature and persistence of pollutants
- Potential or risk
- Potential changes in ambient concentrations at critical conditions
- Potential changes in loading
- Potential reduction in assimilative capacity
- Potential for cumulative effects

Examples of activity-based triggers

- New individual NPDES permits
- Modified or reissued individual permits with an expanded discharge beyond that presently allowed in an existing permit
- General NPDES permit at time of issuance
- § 401 Water Quality Certifications
- § 404 permits (dredge and fill permits)

Examples of Exemptions

- Groundwater clean-up actions
- Projects designed to improve the quality of surface waters
- Reissued individual NPDES permits with no change in discharge
- Modified individual NPDES permits with permitted discharges at or below that presently allowed in an existing permit
- Projects that do not otherwise lower the quality of the receiving water

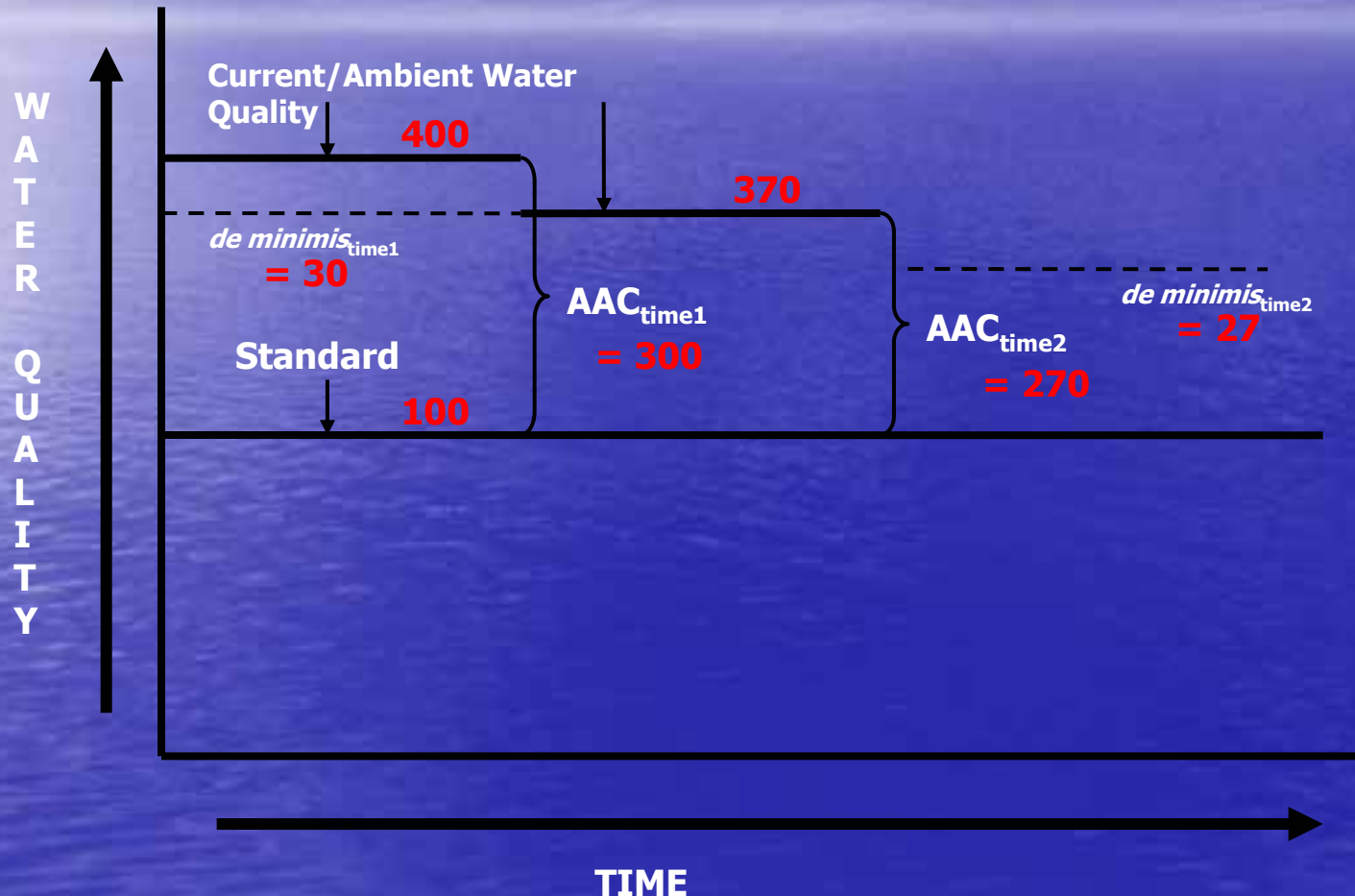
Should there be a *de minimis* or minimal threshold?

- Considerations

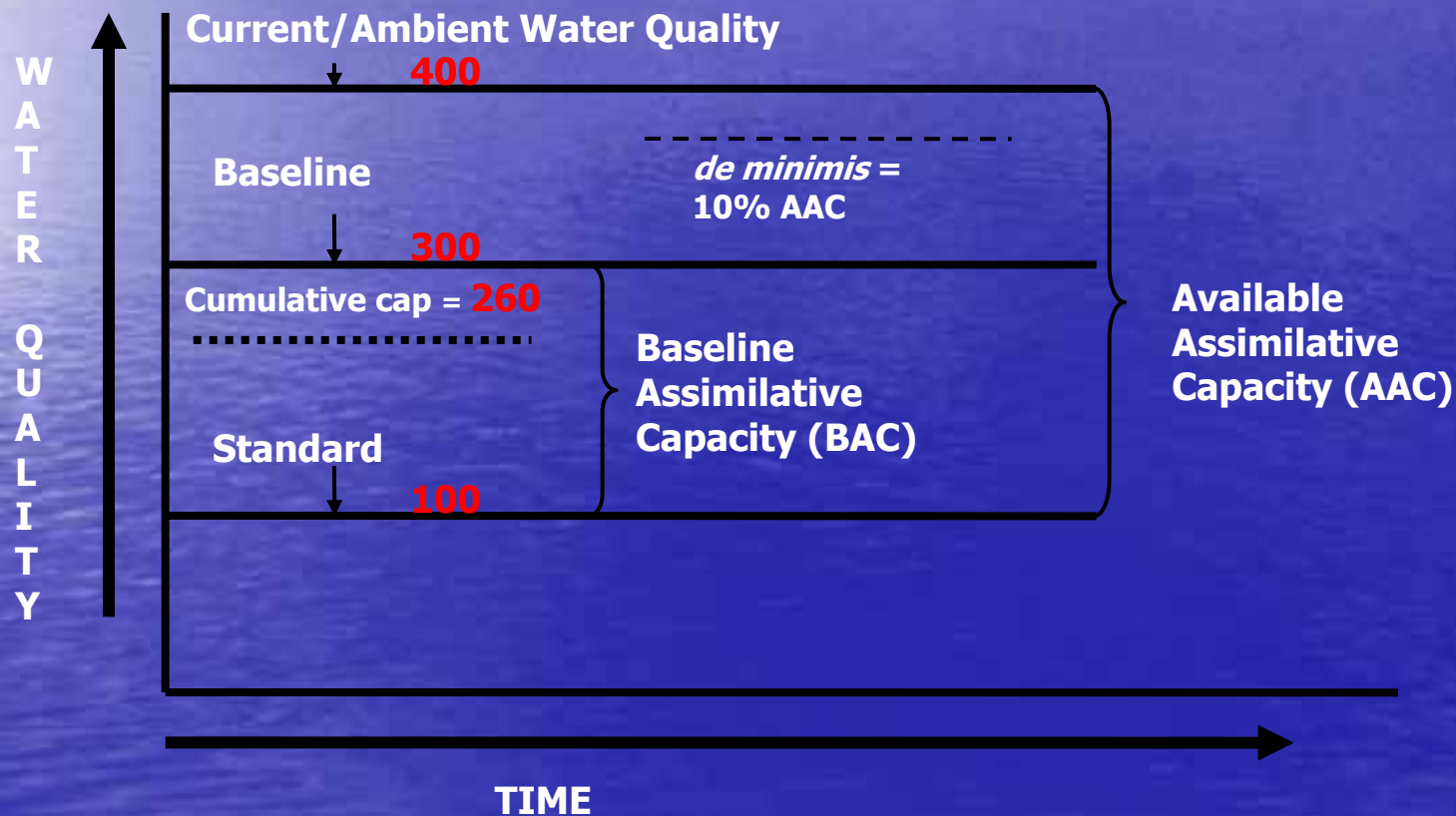
- Threshold based on assimilative capacity

- How well are ambient conditions understood?
 - EPA guidance (2005 “King memo”) – suggested 10% of available assimilative capacity with a cumulative cap
 - Cumulative cap is tied to a baseline
 - Is administrative burden really reduced?

De minimis set at 10% of AAC, no cap – AAC may diminish over time



De minimis set at 10% of AAC, with cumulative cap at 20 % of BAC



Minimal thresholds based on type or level of activities

- Considerations

- Activity-based *de minimis* may be easier to define.
- How to tie an activity-based *de minimis* with impacts to water quality?
- How are cumulative impacts determined?

Scaled Approach: Should there be different levels or types of nondegradation review?

- Level or type of review may be based on:
 - Potential risk for degradation
 - Activity
 - Understanding of ambient conditions
 - Understanding of projected impacts
- All reviews must consider the protection of existing and designated uses

Issue Paper 4 – Discussion Points

- Review Triggers

1) In the absence of adequate, readily-available ambient water quality data, and the inability to calculate assimilative capacity, should antidegradation review of high quality waters be triggered by specific activities (inferring that those activities will lower water quality)?

2) If so, in addition to those listed on page 2, what specific activities should trigger a nondegradation review?

3) Should any of the specific activities listed on page 2 not be included as those that would trigger nondegradation review?

Issue Paper 4 – Discussion Points

- Review Exemptions

4) Should there be specific activities that are exempt from antidegradation review (such as those listed on page 2)?

5) If so, in addition to those listed on page 2, what specific activities should be exempt from nondegradation review?

6) Should any of the specific activities listed on page 2 not be included as those that should be exempt from nondegradation review?

Issue Paper 4 – Discussion Points

- Minimum Thresholds

7) Should there be a minimum threshold or *de minimis* below which nondegradation review should not be triggered? If not, why?

8) If so, should it be based on assimilative capacity, on the type of activity or other criteria?

9) At what level should the threshold(s) be set (whether based on assimilative capacity, activity or other criteria)?

Issue Paper 4 – Discussion Points

- Scaled Approach

10) Should there be different levels (scaled approach) of nondegradation review? (For example: Different types/levels of activity, the amount of assimilative capacity used, other changes in water quality or probability of degradation)

11) What would be the advantages and disadvantages of a scaled approach?

Issue Paper 5 – Nondegradation Review

- Parts of the nondegradation review
- Alternatives Analysis
- Economic and Social Justification
- Intergovernmental Cooperation and Public Participation
- Examples from other states

Parts of a Nondegradation Review

- Nondegradation demonstration
 - Applicant submits information regarding type and level of activity, receiving water, projected impacts of activity to receiving water, alternatives considered, social and economic benefits of activity
- Nondegradation review
 - Agency reviews proposed activity; considers information through the nondegradation demonstration, intergovernmental cooperation and public participation, other sources
- Nondegradation decision
 - Agency makes final decision on whether and to what extent water quality is lowered

Alternatives Analysis - Considerations

- Determination of “feasible and reasonable” alternatives
 - Requires both:
 - flexibility (not being too prescriptive)
 - consistency
- List alternatives for specific types of activities
 - Provides a starting point
- Use of best professional judgment and determination on a case-by-case basis

Alternatives Analysis - Examples

- Examples of general alternatives to consider
 - Pollution prevention
 - Reduction in project scale
 - Water recycling
 - Process changes, including controlled discharges and improved operation and maintenance of existing systems
 - Innovative or advanced treatment technologies
 - Alternative discharge locations
 - Trading

Economic and Social Justification

- Considerations

- Changes in local economy:
 - tax base, number and types of jobs created, etc.
- Changes in population
- Changes in social conditions or services
- Impacts to human health and the environment
- Benefits associated with maintaining high water quality
- Information provided through intergovernmental cooperation and public participation

Economic and Social Justification

- Guidance
 - EPA Interim Guidance for Water Quality Standards
 - Includes tools for calculating economic impacts for both publicly- and privately-financed projects
- Determining “important” economic and social development
 - Boiling down criteria to simple quantitative measures may be inappropriate
 - Best professional judgment and review on a case-by-case basis

Intergovernmental Cooperation and Public Participation

- Intergovernmental cooperation
 - CWA section 303 (e)(1) – Continuing Planning Process
 - Interagency efficiencies for protecting water resources
- Public participation
 - How (Minn. R. Chapter 7001)
 - Written comment on draft permits, petitions for public meetings and contested case hearings
 - When

Examples from other states

- **Pennsylvania**

- Pre-permit analysis
 - Does a **non-discharge** alternative exist?
- ABACT (Antidegradation Best Available Combination of Technologies)
 - Does a **non-degrading** alternative exist?
 - Applicant considers best combination of: cost-effective treatment technologies, land disposal, pollution prevention and wastewater reuse.
- Social or Economic Justification (SEJ)
 - SEJ must demonstrate important social or economic needs

Examples from other states (continued)

- Oregon

- Triggers based on:

- Any measurable change in water quality
 - Nature and persistence of pollutant(s)
 - Potential impacts on aquatic biota
 - Degree of confidence in modeling used

- Alternatives analysis

- Applicant must pursue an alternative that eliminates lowering of water quality
 - If no alternative exists, socioeconomic benefits are weighed against environmental costs

Examples from other states (continued)

- **Wyoming**

- Social and economic justification is done first
 - Based on information submitted by applicant
 - Project is assumed to be “important” unless proven contrary through the public review process
 - Substantial weight given to local governments and land use planning authorities
- Determination of necessity
- Alternatives analysis
 - Considers: significant increases in costs, comparisons of user charges and alternative treatment costs to similar activities or standard industry practices

Examples from other states (continued)

- **West Virginia**

- Considers non-discharge, non-degrading and less degrading alternatives listed in guidance
- Applicant proposes a list of alternatives based on environmental impacts and cost-effectiveness
- Reasonable costs defines as those less than 110% of originally-proposed option
- State identifies which alternatives should be review in detail (may require additional alternatives)

Examples from other states (continued)

- West Virginia (continued)
 - State identifies least degrading alternative
 - Social and economic importance analysis is done if least degrading alternative results in “significant degradation”
 - State makes preliminary antidegradation decision
 - State then considers views and concerns expressed by the public and selected government agencies
 - State makes final decision

Issue Paper 5 – Discussion Points

- 1) Some general categories of alternatives are listed on pages 1 and 2. What are some specific alternatives should be considered in the alternatives analysis? (For example: tertiary treatment for wastewater; infiltration for stormwater)
- 2) Should trading be considered as an alternative? Why or why not? If so, under what circumstances?
- 3) Regarding alternatives, how should “economically-reasonable” be defined?

Issue Paper 5 – Discussion Points

4) Should the process of how “economically-reasonable” is determined be included in rule or guidance? Why?

5) What factors, other than those listed on page 2, should be considered in the economic or social justification?

6) What agencies and agency programs (local, state and federal) should be included in the intergovernmental coordination requirement for nondegradation review?

7) When and by what means should public participation occur in the review process?

Next Steps

- Next meeting scheduled for mid-September
- Additional comments received up to one week after meeting
- Additional opportunities for discussion
- Nondegradation Rulemaking Web Page:
 - <http://www.pca.state.mn.us/water/nondegradation-rule.html>