



Antidegradation & Minimal Impact Design Standards

MIDS Work Group Meeting
June 18th, 2010

Bill Cole,
Water Quality Standards Unit,
Minnesota Pollution Control Agency

What We'll Cover...

- Antidegradation background
- Proposed changes to current rule and implementation
- How antidegradation, storm water and MIDS intersect
- Questions/discussion

Clean Water Act

- Objective:
 - “...restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”
- Authorizes states to establish water quality standards including:
 - Designated uses
 - Water quality criteria necessary to support designated uses
 - Antidegradation provisions

Antidegradation Levels of Protection

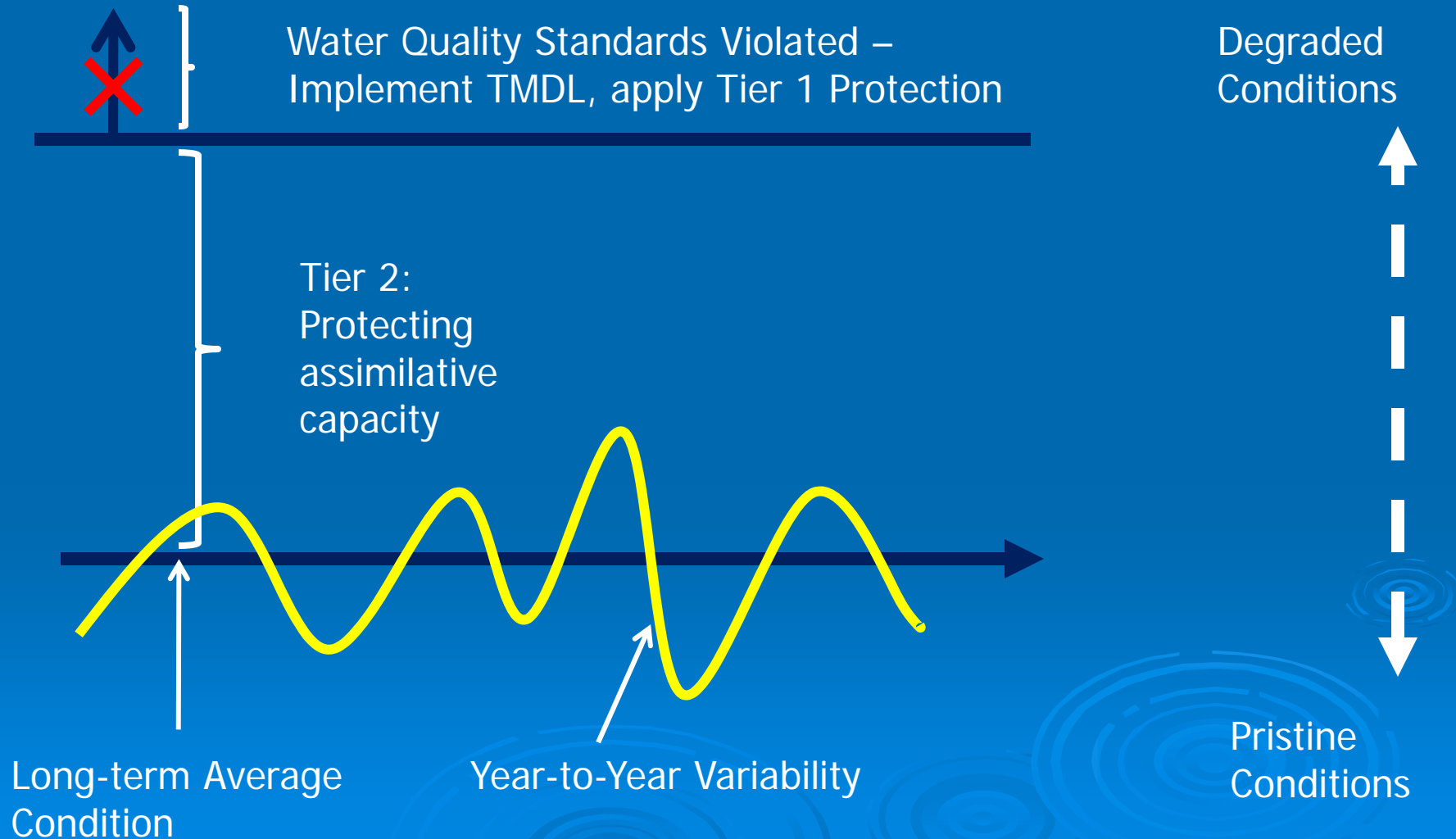


Existing Uses

High Water Quality

Outstanding Resources

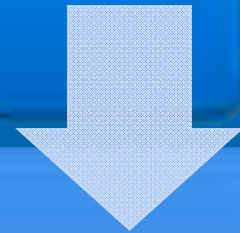
Tier 2 Protection Goal: Prevent Degradation of High Water Quality



Review Process

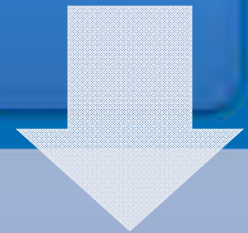
Review Trigger

Is there a net increase in permitted loading?



Alternatives Analysis

Is increased loading necessary? What are the options?



Social or Economic Justification

Is increased loading important for social or economic development?

Rule & Implementation Changes

- Nondegradation becomes antidegradation
- Broaden scope beyond wastewater treatment
- Eliminate significance test used to trigger review (no authorized *de minimis* discharges)
- Greater emphasis on alternatives analysis
 - Include non-degrading alternatives analysis
 - Identify Parameters of Concern

Rule & Implementation Changes

- More assessment requirements before allowing lowering of water quality
- Develop procedures for applying antidegradation through general permits
- Improve public participation

Milestones for Rule Adoption

- Stakeholder input, Jun. 2008 – Jun. 2009
- Respond to stakeholder questions, Oct. 2009
- Water Quality Forum input, Nov. – Dec. 2009
- Initiate internal review of positions, Jan. 2010
- Initiate external review of positions, July 2010
- Request Board adoption, Sept. 2011
- Rule submitted to EPA for approval, Dec. 2011

Review Trigger

- Issuance of a control document where there is potential for a net increase in permitted loading to waters of the state
- Net increase = increase beyond baseline
- Baseline =
 - Condition as of rule adoption date (1988 for All Waters, Tier 2)
 - Condition “allowed” through review
 - Condition where improvements are made through loading reductions

Review Process

➤ Alternatives Analysis

- Identify parameters of concern
- Evaluate options that avoid, minimize or mitigate increased loading

➤ Social or Economic Justification

- Required when increased loading cannot be avoided to high water quality
- Compare benefits of development with loss of water quality

➤ Public Participation

Applying Antidegradation to Regulated Storm Water

- Changes in land use triggers review
- General permits – Agency conducts alternatives analysis at time of permit development
- MS4s
 - Jurisdictional responsibility for protecting individual receiving waters
 - Ability to mitigate, e.g., offsets that are “upstream and prior to”
- Pollution control regulated through BMPs
 - Adaptive management

MIDS and Antidegradation

- MIDS considered in the alternatives analysis
- Where MIDS avoids increased loading on a project scale, no further review (i.e., demonstration of importance) will be required
- MIDS works in concert with antidegradation for water quality protection

Some Challenges...

- Timing of MIDS development, Phase II MS4 permit reissuance and rule adoption
- For each type of activity we need to define “avoid”
- Developing reasonable alternatives to meet a wide range of conditions
- Insuring individual water bodies are protected



Questions & Discussion

**Nondegradation Rulemaking Web Page:
[http://www.pca.state.mn.us/water/
nondegradation-rule.html](http://www.pca.state.mn.us/water/nondegradation-rule.html)**