

Compiled Comments for Issue Paper #5
**Nondegradation Review: alternatives analysis, economic and social justification,
intergovernmental coordination and public participation.**

General Comments

- I'm thinking of the precautionary principle.
- Why doesn't the state do a cost-benefit analysis for each permit type to address the SEJ component, so all entities are treated equivalently and cumulative impact can be addressed.
- Need consistent assumptions for models across the board. Develop a template for non-deg review, maybe similar to EAW format?
- Difficult to apply this to non-point stormwater.
- Again supports the watershed approach to implementation.
- *Trading*—Trading should be allowed as a potential feasible and prudent alternative between POTWs where it will improve water quality in the waterbody/reach where the new/expanded source discharges, but not where reductions are only achieved on paper.

(Note: MN law widely uses the phrase “feasible and *prudent*” not “feasible and *reasonable*.” Probably the only distinction between these two ways of looking at cost is that “feasible and prudent” has been widely interpreted by RGUs, state agencies and courts for decades.)

Regarding municipal wastewater treatment proposals, it seems more appropriate to look at income of the community served than project upgrade costs in determining “reasonable” or “prudent” alternatives. This approach is already taken by USDA's Rural Development, Rural Communities Assistance program, which uses an “affordability index” of 1.5-2% of median household income. This approach, in combination with a solid look at alternative sites, methods of treatment and/or stringent control measures, is far preferable to a flat one-size-fits-all 10% guideline.

Regarding activities other than POTWs or other publicly-funded projects, a flat 10% guideline is wholly inappropriate, given the wide variety of activities being reviewed, issues of who is paying, who is benefiting, and the public ownership of the “good” (the measure of high water quality to be protected).

Either way, tying the “prudent” cost increase with “elimination of the significant lowering of water quality” seems unworkable, as it conflates the trigger into review with decisions made as a result of review.

Discussion of how “feasible and prudent” alternatives are determined should be in guidance, not rule. With a variety of activities subject to review, in addition to new and emerging technologies, there is simply too much detail to put into rule. Second, the more detail included in rule, the more frequently the rule will need to be revised.

1) Some general categories of alternatives are listed on pages 1 and 2. What are some specific alternatives that should be considered in the alternatives analysis? (For example: tertiary treatment for wastewater; infiltration for stormwater)

- The list seems pretty good, but should look at non-discharge and non-degradation alternatives as well. Services provided by the resource have a value and should be paid for, which would create an economic incentive to reduce or eliminate discharge.
- I think the rule should not specify specific alternatives, but keep it general as stated in the work paper. Concerned that being too specific will make the rule obsolete. put specific alternatives in guidance materials to be updated over time. The specific alternatives would branch from general categories.
- Maybe leave this for guidance so as not to limit innovation, but a “no action” alternative should be mandatory
- The Delaware list is a good one, as a starting point. I like the Pennsylvania approach.
- I don’t believe that there needs to be a list of musts. Some alternatives make sense for some proposals but not for all. A list for consideration is good. Your examples include for x. Thus, not all alternatives apply to all.
- Infiltration cannot always be used – i.e., Karst, DWSMA’s, type C or D soil – so it should not be listed as the alternative, but one of many.
- Achievement of outcome does not limit alternatives recycle reuse of water-use for navigation etc., be general in alternatives.
- Stormwater needs to be included, this wasn’t really covered in this issue paper.
- LID practices if measure effectiveness.
- I don’t have enough knowledge to give examples, but there could be quite a few for stormwater (industrial). We don’t want to limit innovations (yet we don’t want to open the door for non-compliance or misuse with us allowing unique ideas)
- No build alternative infiltration, alternatives must have maintenance programs attached.
- None are non-point source.
 - low impact development
 - perennial crops-cellulosic for non-point source
 - model farms
- Examples could be listed, but basically “everything” should be on the table.
- Seasonality is a must
- ZLD
- Ability to net out without the facility or company (this goes to trading).
- Unknown.
- I think tertiary treatment comes under advanced treatment and infiltration of SW is under innovative or alternative discharge., i.e., they are covered. Reduced exposure is under P2. Find a market for discharge i.e. selling gray water for cooling, supplementing make-up water w/stormwater (innovative or reuse).
- Should be guidance, not prescriptive.
- Conservation design, low impact development.
- Be more generic
- Retention

- Trading/offsets
- Pre-specified BMPs/approaches should eliminate nondeg review or at least lead to a streamlined review

2) Should trading be considered as an alternative? Why or why not? If so, under what circumstances?

- Trading would be really difficult unless we have a comprehensive monitoring and auditing program and how would such a system be funded? Trading is a “capitalist “wet-dream”
- Yes, but only within specific sub-watersheds and the trading rules need to be defined. Also, the ratio of trades should not be 1:1, but need to result in greater water quality protection.
- No. Too legally challenged, complex and not our job. “Trading” system could be codified later, similar to 404CWA Mitigation Banking “green book”, etc.
- No, it will be too hard to track and enforce.
- Possibly. This may be difficult on a watershed basin (dependent on the size). It may need to be handled on a local level.
- Trading seems to work in quantitative terms rather than qualitative teams – not all pollutants are equal, is a reduction in one equal to an increase in another.
- If trading is considered at a watershed level, the off-set should be upstream from the new impact – as opposed to increased impact at top of watershed and off-set doesn’t occur until the bottom of watershed while rest of watershed is impacted.
- Yes, how else will you address Ag?
- Should be one of many alternatives.
- Should, but analyzed on a case by case basis for merit and benefits to the resource waters.
- No, there are too many loopholes.
- Yes, for non-regulated entities, agriculture, basic BMP’s must be in place before selling of credits is allowed, whether or not there is a legal requirement for them to be in place.
- On a limited basis only. Should be between two parties in close proximity (same watershed district).
- Yes, it provides flexibility and encourages creative problem solving. Should not be allowed outside of the watershed or if an action will cause water quality violations.
- Yes, in accordance w/the currently being drafted trading rules.
- Yes, but needs to be hooked up with data that suggests it is working. Trading should be allowed when no other options exist.
- I really don’t like the idea of trading because it doesn’t allow the entity who’s making the impact responsible for their decisions. (I’m acknowledging that I’m not thinking about the end environmental benefit, I should). Success needs to be determined (analysis). Burden should be primarily on the traders.
- I don’t support the idea of “trading” as an alternative.
- Yes, within a watershed district/WMO.
- Can be appropriate, varied issues, up to RGU to set rules.

- As long as the result is not net increase of pollutant, either upstream or downstream of the project, depending on who the trading partner is.
- Only if a part of a TMDL implementation plan and/or watershed plan.
- Agree-keep stormwater on site.
- No. Primarily because not convinced that it can be implemented upon a non-regulated community (e.g., agriculture runoff).
- Yes, trading should be an alternative. Opportunities need to evolve for a permittee to address maintain WQ if technology and minimization opportunities are not efficient.
- Yes, assess how long traded impact and traded reduction will be in effect, is there a decline or increase of either over time?
- Yes, this works well under the PSD item/model mentioned previously or at least as an off ramp to prevent a dead stop situation.
- Hell yes!! Needs to be quantifiable and verifiable, like Rahr Malting and So. MN. Beet Sugar.
- Trading should be considered in cases where economics are referenced as reason to be exempt. Allows for WQ improvement while making it less expensive for credit buyer. Also, brings AG community to table.
- Yes, if adoption, yields desired outcomes.
- Cost and effectiveness.
- Durability.
- Should be allowed, but should not dictate that trading be required if appropriate BMPs are originally proposed

3) Regarding alternatives, how should “economically-reasonable” be defined?

- The 110% could be reasonable (restrict non-degrad by fully monitoring and enforcing existing permits, then do a statewide non-degrad review for unpermitted discharges.)
- Don't have enough knowledge on this to comment.
- First, the languages should be adopted from ESA that a significant “commitment of resources” should not be made by applicant until permit in hand. After, then economics should not be defined by agency. Let it be defined by applicant.
- Life cycle cost analysis of alternatives? Capital and operations and maintenance over the life of the treatment BMPs.
- This is likely to vary with location. BACT may/would be better than 110%.
- Not sure – consideration should be if it refers to local, regional, or state economy.
- At local level every job or dollar is important – whereas waters are a regional or state concern.
- Yes, use feasible and prudent language and maximum extent practicable language.
- Should include the affects of the resource waters not just for growth of tax-base. Included regional development.
- Economically defined might lower the quality of proposals submitted. Economic value of waters may be subjective.
- This will be variable based upon area's values. What's more important, \$ or resources? Needs to be defined in order to prevent abuse.

- Could be based upon the average household income of the area, so as not be unfairly burden out-state communities compared to metro areas, or low-income areas vs. high-income areas with the metro area.
- It should be defined differently depending upon the activity. Those activities not based on profit (municipal wastewater) should have a lower, or easier, economically reasonable levels. A profit based activity (for example on ethanol plant) should have higher levels to achieve to.
- Use the example in the issue paper but BACT may be better.
- Assigning a percentage of cost effectiveness criteria is good. What the percentage should be is what's difficult. Perhaps a better approach would be BACT (Best Available Control Technology).
- Any 110% thing is incentivising poor "initial proposals" (they'd be stripped of BMP's to establish a lower baseline, from which only 110% additional WQ costs could be added). Some kind of % \$ increase + BACT rule needs to be incorporated.
- Wyoming's looked good, you can pick anything apart. Why not start off that it is important?
- Limits must apply equally to other programs. If a nondeg review has a limit, the same limit should apply to TMDL, etc.. What if cumulative capacity decreases to a point where the water is impaired. How other projects can't be built, and who pays for the TMDL; the public?
- Calculate full environmental cost, more difficult than economic cost. Full cost accounting w/nonpoint source impacts. How we weigh economic benefit vs environment impacts?
- Use the BACT approach. Even though data does not necessarily exist for BMPs, etc.
- Use criteria to define the things that could be used to point in the direction of a definition.
- No comment.
- Based on some \$ of propose also taking into account total project cost where applicable.
- Use analog to BACT, set \$/lb or \$/ton thresholds.
- Use the input of the regional development agencies and state Dept. of Econ. Dev. University of Minnesota and other state colleges have expertise. % of cost. Nine-Mile Creek uses 125%.
- Needs discussion. How do we measure environmental benefit?

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

- I think it would be helpful because any alternative more costly than the initial proposal would automatically be rejected.
- General guidelines in rule and specifics in guidance.
- No,
- Rules – it needs to be equitable and enforceable between all permittees.
- Guidance – flexibility for site/location specific
- Yes – to serve as a benchmark and equal application.

- Guidance – more flexibility.
- Rule, needs to be standardized for specific systems, perhaps a matrix.
- Yes, so the process is “transparent” and people will feel they’re treated fairly.
- Rule if you really want it to happen. This makes it important though to be very comfortable with how to define it before put into rule.
- Guidance – to allow for flexibility, (an understanding that there are different answers for different projects/facilities/sites).
- I prefer guidance over rule. If given the teeth, guidance can work and accomplish its goal.
- Rule, it has to have teeth.
- Development is market driven, isn’t this enough “economically reasonable”
- Rule – must be enforceable.
- Guidance, because technology changes.
- A combination of the two. Criteria should be established in rule and guidance should provide examples.
- Yes. A clearly defined approach is critical to ensure consistency among projects and to provide predictability to permitting. Such a program will also avoid frivolous legal challenges pursued for the sole purpose of stalling the process.
- Some of both, defined broad context in rule and more specific alternatives in guidance.
- Guidance, rule would define cost ratios. It may be more feasible and economic to piecemeal technology or test a new technology. If in rule it may prescribe technology of process. Note: seasonal/controlled discharges could be used to benefit critical WQ periods.
- Guidance, like PSD will change over time, will vary based on size/type of industry, municipality or watershed.
- Yes, this needs transparency

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

- The value of the resource to society such as the assimilative capacity groundwater recharge, erosion control, etc.
- Natural disasters – SE Mn flood changes things for years to come – how does this type of event refocus what a project does for short term (5-10 years).
- First, a distinction should be drawn between the project footprint and the project area (see NEPA and ESA). Area can include biological and other factors outside footprint but influenced by action.
- This should be done at the state level.
- Local economic planning input.
- Economic – look to JOBZ program – certain #jobs and wage levels needed to get tax break – some type of rational that certain economic benchmarks must be met to justify different levels of impact on waters.
- Prudent and feasible language and MEP language needs to be in rule and guidance.
- Long term maintenance cost needs to be considered as well as up-front cost.

- Racial make-up or average education level of residents – so these groups aren't unfairly taken advantage of.
- Energy use, carbon balance
- Good list.
- Natural Resource analysis (who determines the value of natural resources)?
- What about calculating entire cost (Oregon)? How about the cost of undoing that pollution in a TMDL setting? That might express realistic costs!
- What does this have to do with stormwater?
- Potential of long term, cumulative degradation and who/how pays.
- Environmental justice.
- Community values (for example Corvallis OR chose "no-growth").
- respect local community
- Limit this to depressed areas or redevelopment. The social/economic has been an "easy-out" for nondeg determinations.
- Sustainability-find the balance between economics and environment alternatives can lead to it.
- Net benefit to the local economy.
- No comment.
- Ways to use the discharge to benefit environment. Trading or other incentives may cause additional "treatment" to improve WQ, maybe even use in remediation of contaminated sites. Other competitive status for MN business community.
- Use those and realize that increased jobs = social justification, not just economic.
- project need/public need
- Once a proposal has been determined to potentially lower water quality, and no feasible and prudent alternatives exist, the agency should evaluate whether the activity serves an important economic or social development objective. Factors to consider are:
 - (a) economic benefits such as creating or expanding employment, increasing median family income, or increasing the community tax base;
 - (b) providing or contributing to necessary social services;
 - (c) the use or demonstration of innovative pollution control or management systems;
 - (d) the prevention or remediation of environmental or public health threats;
 - (e) the benefits associated with high water quality for uses such as fishing, recreation, or tourism;
 - (f) the benefits of preserving assimilative capacity for future industry and development;
 - (g) the value of the water resource that would be degraded, including whether the waters are within national, state or local parks, preserves or wildlife areas, and the extent to which the resources or characteristics adversely impacted by the degradation are unique or rare within the locality, state, or nation.

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

- Both local and state agencies need to be unvalued.
- Wetland Conservative Act (WCA) as it relates to municipal stormwater issues.

- All, early
- Chamber of Commerce LCCMR.
- State agencies should request/notify local entities if antideg review is included.
- Specific notice to each level of gov't affected by proposal.
- MN/DOT, MDH, AG, BWSR, LRRB, counties, cities, watershed, interest groups, EPA.
- Who could you exclude? I don't think anyone.
- MPCA, DNR, County Environmental Services, city (especially MS4s). Watershed districts/organizations, EQB.
- Metropolitan council for projects affecting metro area.
- EAU/EO review and nondeg cover nondeg cover part of NPDES permit.
- MPCA, EPA, Metro Council, counties, cities.
- MPCA, watershed, city, county, SWCD, MNDOT, DNR, rural development agencies.
- All affected, particularly the local gov.unit and who/how pays.
- Basin planning "agree Regional Dev. Commissions.
- Watershed mgt. plans watershed plans should be one of the mainstays of the nondeg rules.
- MPCA, DNR, DEED.
- Will vary by activity and location.
- Local when discharge is in their jurisdiction i.e., construction/industrial to MS-4. Local gov. can participate in public comment when there is no specific jurisdiction. Use EIS/EAW process to address specifics.
- Affected WMO's, tribes, DNR.
- Agr: DNR; MDH: Reg'l development chgs.
- Should be limited to those with direct responsibility for nondegradation requirements
-

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

- It should be necessary, but how to inform the public and actually bring them out to provide an "informed" comment.
- General guidelines and baseline standards are put into the rule. What do we need to get a minimum for state, then let locals describe what they should do over and above. Important to get input from agencies and stakeholder organizations involved to get technical input. For general public, focus on education/outreach, as these won't provide technical comments
- As early as possible.
- The time of the permit.
- Since NPDES permits have a public process – is another process needed. Request for hearing is part.
- Hearing and public comment.
- Public notice period.
- Not usually.
- When weighing economic value vs. environmental costs.

- Early and often! Building consensus/buy-in from community helps process go smoothly. “Webinar” or online chat session or blog may engage more tech-savvy, busy people. Comment periods and open house meetings work well (like environment review process).
- Public notice at the end.
- Participation can occur “during the review process”. You should not wait too long to bring the public in the review process.
- Annual SWPPP public meetings exist. Public review of comp plans exist. Public hearings for development proposals exist, what else does one need?
- Early in the process and again before final decision, after all affected parties have had a chance to comment.
- Early and often.
- The Clean Water Council is working on civic engagement approaches to TMDL
- The EAW/EIS process should provide the background info for a nondeg review. Public input in the EAW/EIS to process and through the permitting public notice.
- In all cases, public participation should occur once preliminary review is complete, larger or more sensitive project stakeholder representation in initial review is needed.
- For EAS/EIW as now. New permit ditto. I think trading might at some level (above de minimus) would also likely require some public comment.
- Public notices and comment on permit. Have a formal anti-deg document to accompany permit.
- Local water plan advisory comments.
- Things need to be kept flexible. Not everything will fit for every situation.
- needs discussion
- For NPDES permitted projects, it would be useful to move public notice and comment on anti-degradation up into the pre-permit phase, when there is a better chance to shape the project, as Pennsylvania does.

For private projects that are subject to mandatory EAWs, anti-degradation analysis and public comment could happen simultaneously by adding elements unique to anti-degradation to existing EAW processes and documents.

The current anti-degradation content of public notices (for NPDES permits) is wholly inadequate and must be remedied. It is often impossible to tell from the public notice whether non-degradation review has or has not been conducted. Less frequently, the receiving water cannot even be determined, let alone its current status and impending impacts to it.