

MEETING NOTES

TRIENNIAL REVIEW Technical Advisory Committee Meeting

June 29, 2011, 1:00 – 4:30 PM

3rd Floor Conference Room Wallace Building, 502 East 9th St., Des Moines

TAC members present:

Jay Brady, IAWEA
Michael Delaney, Raccoon River Watershed
Christina Gruenhagen, Iowa Farm Bureau Federation
Susan Heathcote, Iowa Environmental Council
Brett Lorenzen, Trout Unlimited
Jeff May, City of Knoxville
Grant Menke, Iowa Renewable Fuels Association
Greg Sindt, IAWEA
John Veach, Iowa Rural Water Association
Roger Wolfe, Iowa Soybean Association

Absent:

Steve Hershner, City of Cedar Rapids
William Skalitzsky, Alliant Energy

PURPOSE AND OBJECTIVES:

Numerous comments were received from internal DNR stakeholders; external agricultural, environmental, and industrial stakeholders; as well as the public as part of the meeting phase of the Triennial Review Process. The Triennial Review Technical Advisory Committee (TAC) was formed to provide DNR with information to assist them in development of a Work Plan of possible changes to the Water Quality Standards based on the comments and feedback received from the multidisciplinary groups. People with technical experience to different aspects of the Water Quality Standards were asked to participate on the Triennial Review TAC and give their perspectives on the different suggestions. This feedback will help the DNR as it works on prioritizing goals for the next three years. These notes include the discussion that stemmed from this process.

Prior to the meeting, the DNR had deselected topics that were not related to the three key components of the Water Quality Standards: designated uses, criteria, and protection of water quality. The items that remained were divided into these three categories or as overarching issues that might encompass several areas. Sheets of paper were posted with these different categories and the items that were felt to belong in those areas. The group discussed placement and grouping of different topics and ideas. After this discussion, people selected their top three topics. The group then walked through the different areas and discussed factors including: what do you like about this idea; what don't you like about this idea; what might it take to accomplish this; what items might need to be factored in; and what could be done reasonably quickly.

The following notes describe the compilation of those discussions, and provide a look at what the issues might be surrounding those subject areas:

ANTIDegradation

POLLUTANTS OF CONCERN - DEFINITION

- Pollutants of concern (POC) – concern is that it seems definition doesn't match how it is being implemented, pollutants that are not of concern (distinction)
 - How is it being implemented?
 - Wording makes implementation inconsistent

NOMINATE TIER 3 STREAMS - ENCOURAGE NOMINATIONS

- Encourage nominations for populating Tier 3. Some felt that Tier 2.5 happened because there were no Tier 3 streams designated.
- Open up this process for the public. Triennial Review is a good time to do this.

INSTEAD OF REQUIRING UPGRADING OF THE TREATMENT SYSTEM, CONSIDER OTHER ALTERNATIVES

- There should be an option to use money to improve stream other than a system upgrade
- Clarify that cost-effective options may be acceptable
- If a use is biologically-driven – make sure that is taken into consideration and treated as such
- Ammonia and *E. coli* are driving costs without adding in nutrients
- Big impact
- Nutrients are a big issue coming up
- Has to be proven as an alternative, not just an unknown trial. Show results before you can avoid a standard requirement.
- Develop mechanism to allow trading
- Develop options for buffer strips, etc.

LOOK AT *DE MINIMUS* AGAIN

- Look at *de minimus* again - some areas where it makes sense
- *De minimus* indicates that if you are below a certain amount, you can increase the amount of a pollutant that is being discharged without an alternatives analysis.

ANTIDegradation IMPLEMENTATION

- Antidegradation has only been in place for a year; more time is needed to see how it is working before changes are made.

METALS

- Chromium-VI and arsenic are becoming more of an issue on a nationwide level. No active chromium-VI standards. Some felt this area needs more research; others feel that may not be necessary. With some metals, it's more a matter of how low do you go on detection levels. DNR started looking at arsenic, but withdrew it because other regions were working on it.
- In-ground inputs to chemicals
- Get in front of the issue
- Science moving toward bioavailability. Use parameters in water to determine how much bioavailability.
- Does EPA have info on chromium-VI?
- DNR has an iron white paper - need to decide to make it a criterion or not. Aluminum - If we address bioavailability, this will cover aluminum.
- Are the labs using the right technique → Method Detection Limits (MDLs)? Questions as to if detection is below an MDL, how is that/will that be handled?
- Some exceedances are occurring because of naturally-occurring background levels. How that plays into the standard - depends on size, site-specific location. Some feel our water quality standards allow this on a site-specific basis now.

NUTRIENTS FOR LAKES AND STREAMS

- We need to get this done → critical, not just for Iowa but for downstream (Gulf Hypoxia Zone)
- Coming anyway - better to deal with on state level
- Is the science there to set a numeric criteria - might be other ways
- Concern that the (stream nutrient TAC) isn't going to find cause + effect relationship
- More practical approach needed similar to Kansas, concern that it could end up more like Florida
- Do something now to reduce nutrients rather than wait for numeric standards → while TAC continues
- Science is all over the board
- Rely on best management practices (BMP), technology-based requirements
- Total maximum daily load (TMDL)-based situation
- Important to identify key contributors
- Purpose of numeric standard is to prevent impairments
 - Need way to evaluate nutrients trends, trend toward impairment
- Two nutrient issues: one on macro scale of loads to the Gulf, other is protection of water quality in local streams. Some feel it has to be stream specific.
- Sacrifice local stream quality for gulf improvement
- Stepped, target goals
 - get data to address standards
 - fill holes in the numbers
- Use impaired waters to set priorities
 - ↳ System of setting targets
- Trading program - bang for buck

FLOW CRITERIA

- Tighter pollutant limits make it necessary to have the ability to use various flow regimes to minimize economic impact while having good water quality
- Important to point sources + how we develop standards for those discharges
- Is this a standard or an implementation issue – Waste Load Allocation Procedure (WLAP)
- Flow variable for specific pollutants → More than one way to address this
- Could look at influent limits for specific pollutants
- Flow needs to be taken into account with ammonia + protection of aquatic life
- EPA has info coming out - Ammonia
- Keep in mind we are losing diversity of mussels, we are losing mussels in Iowa. There are studies to see if they are being impacted by a wastewater treatment facility (WWTF). One downstream of Cedar Rapids.

TEMPERATURE

- Being addressed in Waste Load Allocation Procedure (WLAP) may mean it doesn't need to be addressed as a standard
- Seems like this is being addressed in the WLAP with the 3°C rise.

2007 CHEMICAL CRITERIA - 304(a)

- Policy review - Same criteria for B(WW-1, -2, and -3) Why have B(WW-1, -2, and -3)?
- Would seem that there needs to be different levels of aquatic life protection with the different uses.
- Feel like it didn't get the review that it needed
- Set an important precedent
- We have option to adopt EPA recommendations.
- Recalculation methods - deleting species - time-intensive process to delete the species
- Are there particular criteria that are causing problems + address those - shorter list
- 304(a) meant as guidance - need to justify why less stringent

BIOLOGICAL CRITERIA FOR WETLANDS

- Some wetlands are high quality but are threatened by high nutrients
- Lack of criteria for assessing wetlands
- Iowa Plan could impact existing wetlands + new wetlands created need to be functional
- Might combine w/clean up of lakes designations. Wetlands are different than lakes, with different systems.
- Dissolved oxygen (DO) is one example
- Need to do a wetland designation + then populate criteria

- Find reference conditions + biologic indicators, assessment protocol
- No definition of functioning wetland
 - Help to get funding
- Keep in mind migratory water fowl, they use these wetlands
 - Look at indicators
- Lots of different types of wetlands, would they be handled site-specifically?
- List of plants, macroinvertebrates, that we could use to rank wetlands
- See how it is working for treatment

COLD WATER CRITERIA + DESIGNATING

- We have Cold Water Protocol that we haven't implemented, because we don't have criteria.
- Need criteria before we can populate the designated use
- Run into 304(a) criteria issues
- When less stringent, need to justify
- Review fisheries work. They had some candidates for B(CW-2).

CLEAN UP LAKE + WETLAND DESIGNATED USES

- Too broad - Flood control reservoirs, wetlands, lakes
- How assessed for health is different. Requires biodata to be developed.
- Critical when we look at lakes vs. wetlands
- Split off wetlands → would need criteria → how close are we?
- Most river lakes designated as streams.
- Dammed up lakes - would not be able to act as a natural lake
- Depth, natural vs. manmade
- Not many designated wetlands. Most are general use.

CLASS C DESIGNATIONS

- Area of interest to be explored
- Narrow application, limited to water intake structures
- Might need to be added to standards
- Keep scope focused

REMOVE REBUTTABLE PRESUMPTION

- Once UAAs completed for listed National Pollutant Discharge Elimination System (NPDES) facilities, the need for the rebuttable presumption is reduced
- Creates a lot of uncertainty. Some feel most of these are not arguable.
- No funding for assessing streams that do not receive a discharge

- As assessed, then designate the use as opposed to the rebuttable presumption and then removing
- Not mandated in the Clean Water Act (CWA) to have rebuttable presumption [DISAGREEMENT on impact of this change]
- If went back to general use, then less protection → that would create problem

HUMAN HEALTH DESIGNATIONS

- Want to be able to recreate without being concerned about getting sick
- Want to know if there is a specific problem at a particular time
- Need monitoring and warning for when the stream is clean and when it is not
- We have good warning system for beaches, but not for everything.
- Where do you measure and how do you notify?

REVISE STANDARDS TO HAVE DIFFERENT LEVELS OF IMPAIRMENT

- Indication of severity of impairment
 1. Don't cause hysteria
 2. What is the level of concern?
- Give high priority to impairments to some water bodies but not others.
- Priorities are addressed in impaired waters list internally → for purposes of targeting
- Need to improve communication
- Look into what we are already doing + communicate that more
- Priorities differ. Example, clean up Lake Rathbun for bating versus clean up of Pine Lake for sensitive brook trout.

NEXT STEPS:

The department will take this information and consider the comments as it considers priorities it should work on for Water Quality Standards for the next three years. The department will prepare a Draft Work Plan, which will summarize the selected priorities, explain why items were selected or deselected, and provide estimated timeframes for completion. The department estimates this will be completed by August 31, 2011.