



NUTRIENT CORE TEAM MEETING SUMMARY

WEDNESDAY, MAY 30, 2012

2:00 PM – 4:30 PM

DEQ BUILDING, 195 NORTH 1950 WEST

RED ROCKS CONFERENCE ROOM, 3RD FLOOR

2:00 PM WELCOME AND PURPOSE OF MEETING STEVE AVERY

2:05 PM REVIEW OF MARCH 21, 2012 MEETING SUMMARY & WALT BAKER

- Don Leonard noted changes to the minutes regarding his presentation that will be reflected when the minutes are posted.
- Today’s meeting is the last planned stakeholder’s perspectives presentations. If someone believes that a perspective has been missed or has a suggestion for speakers that the group would benefit from please contact the DWQ.

LATEST DEVELOPMENTS IN NUTRIENT CRITERIA

- Three States presented updates on their numeric nutrient criteria (NNC) development to ACWA (Association of Clean Water Administrators). These presentations are posted as pdfs at <http://www.nutrients.utah.gov/resources.htm> under the “Updates from States on Numeric Nutrient Criteria Development” header.

NEW EPA PERFORMANCE MEASURES

- Walt Baker gave a short presentation on EPA’s new performance measures for Nutrient Criteria development (WQ-26). His presentation and all presentations for this meeting will be posted at <http://www.nutrients.utah.gov/coreteam/index.htm>.
 - The EPA is determining performance based on 3 of the 8 elements in the “Stoner Memo”.
 1. Setting priorities on a watershed or State wide basis
 2. Establishing nutrient reduction targets
 3. Continuing progress on adoption of numeric nutrient criteria for at least one class of waters by 2016

3:05 PM STAKEHOLDER PERSPECTIVES:

UTAH LEAGUE OF CITIES AND TOWNS CAMERON DIEHL

- Cameron and Lincoln Schultz(?) gave a presentation on ULCT’s perspectives on NNC that will be posted on the Nutrients website along with all presentations from this meeting.
- ULCT has three primary concerns with the direction of the NNC process



- 1. Political leadership seems to be lacking among the stakeholders. Perhaps another political viewpoint needs to be present or the group should consider ways of reaching out to political leadership early and often in the process.
- 2. Scientific standards, beneficial use and human health must work together in any nutrient reduction strategy.
- 3. Cost, the cost of nutrient reductions are likely going to fall on the backs of local governments. This relates to points 1 & 2, where political leaders must be aware of the cost-benefits of nutrient reductions and the science must account for uses, health and potential for recovery.
- ULCT reviewed MT’s and CO’s processes for NNC from a political standpoint
- Reviewed the Colorado Nutrient Coalition (CNC, a consortium of municipalities, sanitation districts, water districts, and other water and wastewater associations from around CO) argument against the inclusion of Nitrogen criteria. The ULCT would like to see evidence that Nitrogen is a major cause of nutrient impairments in Utah.
- The ULCT does not want to see Utah follow in the FL litigation footsteps
- Appreciates that the EPA is viewing NNC as NOT a one-size fits all mandate
- Would like more local government experts at the stakeholder meetings (or some other involvement in the process)
- Any tax increase (even modest increases) need political buy-in to ensure success, reiterates need for cost-benefit analysis, and promotion of the benefits.
- Walt Baker agreed with much of the ULCT perspectives and had some comments to address the three main concerns listed above.
- Walt is speaking at the legislative interim committee on June 20th (date?) with numeric nutrient criteria as one of his topics, Stakeholders are asked to be present at these meetings if possible
- The DWQ has conducted a cost-benefit analysis and the results should be ready by mid, late summer. An introduction to this study was given at the first core team meeting and the presentation can be found on the Nutrient website <http://www.nutrients.utah.gov/studies.htm>
- A discussion followed about the best way to involve more political leadership into the stakeholder group.
- It is likely that high ranking officials (Senators) would not be able to regularly attend meetings but we could find other ways to engage them.
- The ULCT holds monthly meetings and welcomes the State and other stakeholders to attend or present any issues they have related to nutrients.
- The group discussed the idea of developing a “canned” message for stakeholders to present to their constituents or to political leadership in the near future.
- Add some form of education/outreach element from the stakeholder group.

2:25 PM

SUMMARY OF NUTRIENT CRITERIA DEVELOPMENT IN OTHER STATES

MIKE PAUL

TETRA-TECH

- Mike Paul works for Tetra-Tech and often contracts with State and EPA on nutrient and other water quality issues.
- Mike presented a map on EPA’s view of State’s progress towards NNC (entire presentation will be posted). This map does not adequately indicate State’s iterative progress towards NNC, just the end results.
- Mike Summarized the FL court decisions and emphasized some major points. To hear FL DEP director speak in more detail see the audio from meeting #4
- Major points from FL:



- 2012 U.S. District court upheld all but two parts of final rule. Remanded to EPA for further clarification.
- EPA needs to show how exceeding reference condition nutrient concentrations in streams above reference site level thresholds would cause a harmful change. Any change does not equal a harmful change.
- For lakes where there is NOT an impairment; streams that flow into these lakes the NNC will be set at current ambient condition. EPA failed to show that an increase in nutrients in these streams would cause, or likely cause, an impairment in the lake.
- Mike summarized NNC efforts by CO, MT, WI, ME and OH.
- ME and Ohio have focused on bioconfirmation (proposed methods that require demonstrated biological impacts in addition to exceeding numeric nutrient criteria as THE nutrient criteria).
- ME – the box. Uses seven biologic response measures along with nutrient concentrations as the criteria. NNC plus any one of the seven biologic responses confirms an impairment.
- OH – multimetric criteria. Uses a metric that incorporates benthic algae + dissolved oxygen + biologic survey + nutrients into a single value. See presentation for more details.
- Mike covered his views on the pros and cons of bioconfirmation.
- Pros: A way to deal with a complex/noisy relationship between nutrients and biologic response. Decreases risk of making a false impairment decision and costs associated with that.
- Cons: IF nutrient concentrations and biologic response don't have a clear relationship then it is impossible to confirm a biologic impairment is from high nutrient concentrations. Waiting until there is an impairment to respond to high nutrients may conflict with the Clean Water Act 131.11(a) - States must adopt water quality criteria that protect designated uses. Waiting until an impairment is ecologically risky, hard to reverse impaired conditions.
- Solutions to the bioconfirmation issue: Use ecology and classification schemes to reduce noise in stressor response relationships. If a relationship DOES exist between nutrients and biologic responses then front end load the biologic response and adopt numeric nutrient criteria protective of the use based on reducing risk, not being 100% correct. Incorporate variability in the criteria setting step (classification, ranges of nutrients) not the assessment step.
- Introduced CA's NNC framework that allows flexibility upfront.

- Questions
- How does EPA feel about ME's approach (the box)?
 - They appear to be considering it as an acceptable approach, Tina L. – EPA sent a letter of approval of methods to ME.
- How do you feel about biologic response measures such as macroinvertebrate O/E ratios that incorporate all sorts of stressors?
 - Mike supports using O/E ratios as water quality indicators and they are in the cutting edge of biologic indices. Although some work needs to be done to confirm that nutrients are a likely cause of a low O/E score.

3:05 PM STAKEHOLDER PERSPECTIVES:

MEMBERS WILL PRESENT THE PERSPECTIVE OF THEIR STAKEHOLDER GROUP ON THE FOLLOWING:

HOW DOES NUTRIENT POLLUTION AFFECT YOUR STAKEHOLDER GROUP?

WHAT STEPS ARE YOUR STAKEHOLDERS TAKING TO ADDRESS NUTRIENT POLLUTION?

WHAT IS THE APPROACH YOUR GROUP WOULD SUGGEST TO ADDRESS NUTRIENT POLLUTION?



3:05 – 3:25 PM STORMWATER ISSUES

CHRISTINE POMEROY

- NPS is a contributing factor to nutrient issues and stormwater may be a large portion of NPS pollution in urban environments.
- Urbanization impacts hydrology by changing transport paths and magnitudes of storm events.
- Historically stormwater has concentrated on controlling flooding, especially the large 10,25, or 50 year storm events. More recent evidence indicates that the majority of nutrient pollution from stormwater comes from the smaller storm events that occur multiple times a year. Majority of the loads occur during these events.
- Christine introduced the idea of low impact development (LID) where the goal is to reproduce natural hydrology
- LID can occur at the residential and commercial scale.
- Promotes biologic retention of storm water, which also takes up nutrients and stores it as plant biomass.
- Recommendations from the stormwater community:
 - Control the small high frequency storm events
 - Look at stormwater beyond just the benefits of flood control.
- Question about the costs of stormwater:
 - A: for new developments it is relatively inexpensive. To modify existing it is usually costly but depends on specific situation and needs. Need to think about retrofits while other modifications, construction or upgrades are being implemented
- Thinking about natural hydrologic pathways can help with water quality by using ideas of set-backs, riparian veg and minimize channelization and overland flow.
- Question: how does water rights feel about LID?
 - Increasing groundwater recharge still utilizes natural flow paths and keeps water in the watershed. Increase plant uptake loses water through transpiration, lost from the watershed. Christine noted that even though plants increase transpiration urban areas will never have more transpiration than pre-settlement times. The water available downstream will never be less than natural conditions.

3: 50 PM UPDATE FROM DIVISION OF WATER QUALITY

JEFF OSTERMILLER

GRANT APPLICATION TO EPA

- The Utah DWQ received a \$25,000 grant from the EPA to help develop nutrient reduction strategies. The DWQ will update the Nutrient Core Team on the workplan for the grant.

4:00 PM NEXT STEPS: PRIORITIZING IMPLEMENTATION ISSUES

STEVE AVERY

REVIEW DRAFT LIST OF ISSUES SUPPLIED BY DWQ

ADDITIONS? / DELETIONS?

WHAT DO WE WORK ON FIRST AS A GROUP?



- The DWQ created a 2 page bulleted outline for further implementation discussions. As the stakeholder perspectives portion of the meeting ends the focus will be more on the details of implementation.
- Members are asked to read the outline which includes major discussion points for an implementation scheme and comment on which discussion points and reply with:
 - Which points are most important to their stakeholder group
 - Which points are most important to statewide nutrient reduction strategies
 - Which points should the group work on first
 - Any major points missing or under represented?
- The DWQ will e-mail a more detailed nutrient reduction strategy to the Core Team before the next meeting. This document was prepared based on many of the comments we heard through the stakeholder presentations. Members are asked to read the more detailed document and be prepared to discuss aspects of it at the next meeting.

AND

TECH TEAM MEETING

- The tech team meeting will be scheduled before the next core team meeting, likely at the end of June. If any stakeholders would like a scientific expert representing their perspective they are welcome to contact the DWQ with contact information.
- The tech Team’s first goal is to determine if there is an ecologically based classification scheme for Utah’s waterbodies that would reduce natural variation among background nutrient concentrations and biologic response.

4:30 PM WRAP UP: NEXT STEPS

- Next Core Team meeting is scheduled for Thursday Aug 9th 2-4:30. Note the change from the usual Wednesday meeting to Thursday.

4:35 PM ADJOURN



NUTRIENT CORE TEAM MEMBERS

STAKEHOLDER GROUP	REPRESENTATIVE
CHAIR	WALTER BAKER, DIRECTOR, UTAH DIVISION OF WATER QUALITY
AGRICULTURE	RON DAVIDSON, ASSISTANT DIRECTOR RAY LOVELESS, STEWARDSHIP
DEQ PUBLIC INFORMATION	DONNA SPANGLER, PIO / CHRISTINE OSBORNE, ALTERNATE
DIVISION OF STATE PARKS	TIM SMITH, ACTING DEPUTY DIRECTOR
DIVISION OF WILDLIFE RESOURCES	ALAN CLARK, DEPUTY DIRECTOR ROGER WILSON, AQUATIC SECTION CHIEF CRAIG WALKER, AQUATIC HABITAT COORDINATOR
DRINKING WATER UTILITIES	FLORENCE REYNOLDS, SALT LAKE CITY
EPA	TINA LAIDLAW, USEPA MONTANA OFFICE
ENVIRONMENTAL INTERESTS	MERRITT FREY, NATIONAL RIVERS COUNCIL
NRCS	ELISE BOEKE, STATE RESOURCE CONSERVATIONIST NIELS HANSEN, STATE CONSERVATION AGRONOMIST
ULCT	CAMERON DIEHL, UTAH LEAGUE OF CITIES AND TOWNS
POTW MANAGERS	LELAND MYERS, CENTRAL DAVIS
STORMWATER	CHRISTINE POMEROY, U OF U



AGRICULTURE PRODUCERS

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