

NUTRIENT CORE ADVISORY TEAM MEETING

MONDAY, OCTOBER 26, 2015, 1:00 PM – 4:00 PM

NUTRIENT CORE ADVISORY TEAM:

<u>Representative</u>	<u>Stakeholder Group</u>	<u>Affiliation</u>
Walt Baker	Chairman	DEQ/Division of Water Quality
Jay Olsen	Agriculture	UDAF, Advisor
Thomas Bosteels	GSL Artemia	Great Salt Lake Brine Shrimp Cooperative, Inc
Theron Miller	POTWs	Jordan River Farmington Bay Water Quality Council
Darwin Sorensen	Surface/Groundwater	Utah State University
Tom Ward	Public Utilities	Salt Lake City
Tina Laidlaw	EPA	
Christine Pomeroy	Stormwater	University of Utah
Jesse Stewart	Public Utilities	Salt Lake Public Utilities
Ty Hunter	DNR	State Parks
Leland Myers	POTWs	Central Davis
Cameron Diehl	Municipalities	Utah League of Cities and Towns
Christine Osborne	DEQ	Environmental Planning Consultant
Rob Debuc	Environmental Interests	Western Resource Advocates

Christine Pomeroy	Stormwater	University of Utah
RJ Spencer	Agriculture	UDAF
Andy Pierucci		UDAF
David Richards		

DWQ Support Staff

Erica Gaddis	DWQ	Assistant Director
Jeff Ostermiller	DWQ	Water Quality Management Section
John Mackey	DWQ	Engineering Section Manager
Carl Adams	DWQ	Watershed Protection Section
Scott Dalv	DWQ	Watershed Protection Section
Rhonda Thiele	DWQ	UPDES Stormwater Section

Absent

Craig Walker	Aquatic Life	Utah Division of Wildlife
Paul Krauth	DWQ	Engineering Section
Cameron Diehl	Municipalities	Utah League of Cities and Towns
Nick von Stackelberg	DWQ	Water Quality Management Section
Jim Web	Agriculture	Circle 4 Farms
Neil Hanson	Agriculture	NRCS
David Whittekiend	Public Lands	US Forest Service
Jim Web	Agriculture	Circle 4 Farms



PURPOSE

Seek early engagement from high-level representatives of stakeholder groups as the Division of Water Quality (DWQ) develops a plan for establishing water quality standards and associated nutrient reduction programs and policies for nutrients.

MEETING GOALS

Get feedback from each member on how their stakeholders view nutrient criteria and actions they have undertaken and develop a path forward.

AUDIO RECORDING: NOT AVAILABLE

1:00 PM – WELCOME AND INTRODUCTION

(WALT BAKER)

1:10 PM UPDATES

NATIONAL UPDATE (WALT BAKER)

- Lawsuit vs. the upstream irrigation users not meeting nitrate drinking water criteria.
 - Des Moines water works suing 3 counties. Raccoon River high level of nitrates in it. 183 million from tile draining districts.
 - Interesting questions: Exempt as non-point source? Ultimate source of nutrients?
- Dead zone of Chesapeake Bay is shrinking. Maryland is developing trading policies.
- HAB Workgroup
 - A couple of HABs that we’re aware of this summer
 - Black Ridge reservoir in Herriman
 - Oxbow on the Jordan River
 - Water management likely the ultimate cause.
 - Isolated water near Jordan River water (golf course). Issue with nutrients.

COMMENTS/DISCUSSION:

- Darwin, water lab state funded, toxic algae.
 - TBPEL (technology based phosphorus effluent limit)
 - HAB (Harmful Algal blooms)

ACTION ITEMS

- Blackridge reservoir report sent to everyone in meeting requested.

UTAH DWQ UPCOMING ACTIVITIES: UTAH LAKE, FARMINGTON BAY, LOWER BEAR RIVER (ERICA GADDIS)

- Upcoming water quality study on Utah Lake
 - Scope of work internally (discussion on November 10th), the meeting is open to all. Anyone interested in participating should contact Hilary Arens (DWQ).
 - Ongoing impairment since 2004, preliminary results 2008.
- Willard Spur
 - Science Panel Meeting this week, looking to wrap this up over the next couple of months



- Farmington Bay
 - Literature review and next steps, stakeholder group is to be convened shortly.
 - Interested parties should contact Erica Brown Gaddis (DWQ).

COMMENTS/DISCUSSION:

Walt incorporating- initiative or rule to the water quality board would adopt; if above \$10 million it would have to go to legislation for approval.

ACTION ITEMS:

- None.

ACES (JAY OLSEN)

- One facility, Circle 4, is in the process of getting certified.

COMMENTS/DISCUSSION:

- Walt, welcome comments on Leland’s proposal.
- Leland is stating that it is not up for public comment as of now because of scientific review from Darwin’s question. Lack of adequate science, a lot of issues.
 - Darwin, asks who a peer is
 - Walt, expert in scientific, no conflict of interest.
 - (go back to this discussion and get details for discussion between Walt, Leland, and Darwin) (1:50)
 - Rob Dubuc brings up if it is just permittees and Walt and Leland say only for permittees.
 - Numeric criteria for head-waters would not permit at non-point source. Would not be a regulatory.
 - Jeff, nutrient load (broad based)
 - Tina, no other updates region update.
 - Working on new ammonia criteria, roughly around 2016, just recreation. Focus on primary contact
 - Pending recreation use number for cyanotoxins; already issued values for drinking water recommendations

ACTION ITEMS:

- Tina L. (EPA), will send along the numbers that have already been proposed and the underlying background and also what drinking water facilities should use.

OTHER UPDATES (ALL)

- Water Lab (USU)
 - Instigating funding and a program to allow them to process cyanotoxin data
 - Craig Adams is leading the effort to get things going.
- TBPEL
 - Monitoring reports are starting to come in and compliance has been good.
 - Only a handful are not submitting data at the early stages of the program.
- Ammonia
 - Looking into several avenues about the extent to which the proposed ammonia criteria maybe applicable to Utah

COMMENTS/DISCUSSION:

- None.

ACTION ITEMS:

- None.

1:45 PM

PENDING LEGISLATION

(LELAND MYERS AND WALT BAKER)

PEER-REVIEW PROCESS

- Proposing a Peer Review process to avoid getting into conflicts over the science that backs pending legislation.
- Several drafts have been completed, the final is not yet complete.
 - Proposing a circuit breaker to be established for peer review of science. In the process in the draft stage.
 - Walt, supportive of this process (in principal)
 - Adopt any strategy rule, standard, 3-person peer review to make a judgement.

COMMENTS/DISCUSSION:

- Essence of the proposal, any initiative can be challenged by a permitted entity, who would pay the bill?
- Select three peer review entities
- Three possible Outcomes
 - Scientific defensible
 - Scientifically defensible with comments
 - Not scientifically defensible
 - Either of the first two can move forward, the latter case requires that we go back to the retool the proposal.
- What do we want the Core Team to do?
 - Input is welcome.
 - Earlier is better.
- Why is the current public comment process not working?
 - Does not expressly include peer review process.
- Who are the peers?
 - Any technically qualified who are qualified and independent could qualify.
- Separation of policy and science aspects is an error.
 - To say that we don't want them to chime in on the policy necessarily incomplete.
 - People who are doing the review must know what the current policy is and what the potential outcomes of the review might be
 - Policy has multiple levels and considerations.
 - Policy is almost always made with an understanding that we have insufficient data.
 - On issue is that there is not necessarily an administrative appeal process for actions that are not permits
 - Only process that is available for other elements must go through the legislative process
 - Will any of this really improve things beyond what we've already been doing?
 - Is this just nutrients?
 - No, it would be applicable to any action that WQ takes
 - Can anyone issue a challenge?
 - Still being debated
 - The final legislation may specify that it is only permittees, but DWQ believes that anyone should be able to issue a challenge.
 - UDAF has concerns about whether the end result of the nutrient impairment in headwaters would be to functionally turn a NPS entity into a PS.
 - Could spread into grazing permits
 - Rob Dubuc
 - It is in the agency interest to make the process as open as possible.
 - \$10 million must go to legislature.
 - TBPEL in statue as opposed to rule.



ACTION ITEMS:

- None.

TECHNOLOGY-BASED LIMITS IN STATUTE

- Proposed document January 1, 2020. Under C.E. Trying to hit the extension to 2025.
 - Under recommendation by central valley
 - Peer review issue has not yet been established, no statute, try to avoid adding to proposal
- Several large facilities are ready to move, but the timeline isn't workable given the scope (time and money) of the required upgrades.

COMMENTS/DISCUSSION:

- None.

ACTION ITEMS:

- None.

LEGISLATIVE APPROVAL OF WQB DECISIONS

- DWQ is proposing a variance to allow additional time, provided that the facility has shown due diligence.
- Reviewed proposed changes to the current rule
 - Intent is to move forward with the rule changes ASAP (effective February 2016), which would mean that we'd initiate rulemaking the first week of December 2015.

COMMENTS/DISCUSSION:

- None.

ACTION ITEMS:

- None.

2:15 PM TECHNOLOGY BASED LIMITS

(WALT BAKER AND JOHN MACKEY)

PLANNED RULE REVISIONS FOR TECHNOLOGY BASED PHOSPHORUS EFFLUENT LIMIT RULE

- N only, currently part of the strategy. How can we keep this concept in play?
 - Proposal
 - Provide some planning certainty for facilities that opt in voluntarily.
 - We'll give 10 years and will not require more over this period.
 - How to reconcile with respect to TMDLs endpoints and requirements?

COMMENTS/DISCUSSION:

- Leland
 - Thinks that there might be some takers. Everyone is sort of self-evaluating currently.
 - One issue is that the bio-solid management was not included with the original cost study. After facilities started to work out these numbers and think about other required upgrades, they've started thinking more deeply about BNR (biologically nutrient removal), which is a much bigger upgrade that previously envisioned.
 - The rule should probably include that there is an improvement too. Do not grant sometime to do what they have already done.
 - The tradeoff between nitrification and denitrification also needs to be considered.
 - The real conundrum is what to shoot for in the future. Costs need to be accounted for. Aging needs to be considered. All leads to more delayed maintenance.

ACTION ITEMS:

- None.



FUTURE PLANS FOR NITROGEN LIMITS

- Walt, Optimization aspect, talked to POTW, could possibly do sooner than January 1, 2025. Good element of strategy, keep optimization compliment in rule. Work with EPA on this aspect.
- Leland, dilemma is original cost studies, upgrades with higher capital costs.
- Walt, 10 year period starts after process of optimization is done.
- Need some improvement aspects before given the 10 years.

COMMENTS/DISCUSSION:

- None.

ACTION ITEMS:

- None.

INCENTIVIZING OPTIMIZATION

- What to do about nitrogen.
 - Originally we'd plan to move forward with the TBNEL
 - Some people thought we'd be moving forward with the next TBL a littler later, after the some things were already in place
 - The main POTW concerns are:
 - The amount of work that is necessary to meet a 10 ppm of TIN.
 - Will it really help the environment? Certainty that it has merit is lower.
 - EPA would like to see tech-based limits that address both N & P
 - What is probably most important is what the final number (WQBEL) will ultimately be.
 - 303 (d) visioning exercise as it relates to this discussion:
 - Proactive elements
 - Prioritizing elements
 - People mostly agree that DW sources are most important (headwaters criteria).
 - EPA likes the idea of tie to ammonia, but was curious about what the incentive would be for the voluntary element.
 - Christine P: Are the plants allowed to implement anything beyond what is required? Especially a concern given the "no more strict than the federal standards rule."
 - Leland thinks we'd be okay because it would be via agreement as opposed to a regulatory requirement.

COMMENTS/DISCUSSION:

- Leland, problems with it aging at the Wasatch front, rehabilitation, rules, rules not being set.
 - Rule-making will start on December 7nd 2015 to go out for public comment (memorialized in the permit) granted before 2020.
 - (Tina, finish report on optimization in revision for phosphorus (logical) and supportive of proposal of getting the two together and updates at the same time.
305 b
 - Top priority was drinking water
- Leland, By agreement not regulatory requirement

ACTION ITEMS:

- None.

3:00 PM PROPOSED STORMWATER PERMIT REVISIONS

(RHONDA THIELE)

PROPOSED LANGUAGE AND UNDERLYING RATIONALE

- Language of the rule review.
- ID sources that contribute to, or have the potential to contribute to, nutrient release.
- Needs to include education and outreach elements.



- Some elements have already been done.
 - Especially education elements associated with pet waste, yard waste, street sweeping, etc.
- Recent APWA talk for outreach.
- CP
 - There is much that can be done at a reasonable price that would be too far beyond what is already done
 - Can we put together a suite of BMPs?
- JO (UDAF)
 - Concern about how agriculture outside of MS4s might be affected.
 - It is education and all entities would be affected in the context that they'd be part of the public.

COMMENTS/DISCUSSION:

- Educational not requirements.
- Ag- language was borrowed from Colorado ms4 permit, asking for comments on ag requirements

ACTION ITEMS:

- None.

3:15 PM HEADWATER NNC UPDATE

(JEFF OSTERMILLER)

SUMMER MONITORING ACTIVITIES

- Reduce both false positive and negative assessment.
- Focus Limited Resources
- Directly account for intrinsically confounded responses
- Avoid the fallacy of isolation

COMMENTS/DISCUSSION:

- Resolution from last meeting.

ACTION ITEMS:

- None.

TIMELINE FOR REVISED HEADWATER NNC PROPOSAL

- Data Analysis and Interpretation
 - Nutrient Data
 - Filamentous Algae Cover
 - Metabolism Models
- Technical Team
- Refine Materials
 - Headwater Criteria Proposal
 - Implantation Documentation
- Core Team/ WQS Workgroup
- Rulemaking (Fall 2016?).

COMMENTS/DISCUSSION:

- No plan to go back out next summer to collect more data (summer 2016).

ACTION ITEMS:

- None.



3:25 PM MEETING SUMMARY AND ACTION ITEMS

(ERICA GADDIS)

- Circulate data on Blackridge.
- Pending legislation to Leland, no time-frame.
- Utah Lake Technical work group, if want to be added
- Proposed rule will be given out a week before the board meeting on December 7th 2015.
- Storm water possibly needs to meet with ag
- Headwaters issues.

NEXT MEETING: MARCH 28, 2016