

Water Quality Standards Advisory Committee

MEETING MINUTES

Thursday, October 11, 2012 1:30 pm – 3:30 pm
Department of Environmental Services
Rooms 112/113/114
29 Hazen Drive, Concord, NH

WQSAC Members Present

| Name | Representing | Present | Alternate Present |
|-------------------|---|---------|-------------------|
| Dan Blais | Home Builders and Remodelers' Association of NH | Y | |
| John Cooley | Lakes Management Advisory Committee | | |
| Sam Demeritt | NH Wildlife Federation | Y | |
| Steve Densberger | Water Council | | |
| Diane Hanley | NH Association of Conservation Commissions | | |
| Donna Hanscom | NH Water Pollution Control Association | Y | |
| John Hodsdon | NH Farm Bureau Federation | Y | |
| Melissa Hoffer | Conservation Law Foundation | | |
| Kenneth Kimball | Appalachian Mountain Club | | |
| Michael Licata | Business and Industry Association | | |
| John Magee | NH Fish & Game Department | Y | |
| William McDowell | University of New Hampshire | | |
| Mike Metcalf | NH Water Works Association | Y | |
| Eileen Miller | NH Association of Conservation Districts | Y | |
| Joanne Morin | Office of Energy and Planning | | |
| Larry Morse | NH Association of Natural Resource Scientists | | |
| Jennifer Osgood | American Council of Engineering Companies-NH | | |
| Allan Palmer | Rivers Management Advisory Committee | Y | |
| Kenneth Rhodes | Associated General Contractors of NH | Y | |
| Ron Rhodes | Connecticut River Watershed Council | Y | |
| Peter Rice | NH Municipal Association | | |
| William Schroeder | NH Lakes Association (Chairman) | Y | |
| Jasen Stock | NH Timberland Owners Association | Y | |
| Ken Toppin | US Geological Survey | | |
| Michele Tremblay | NH Rivers Council | | |
| John Warner | US Fish & Wildlife Service | | |
| Ellen Weitzler | EPA Region I | | |

Additional Meeting Attendees

Rep. Judith Spang
 Ted Diers (DES)
 Philip Trowbridge (DES)
 Shane Csiki (DES-NHGS)
 Ken Edwardson (DES)

Sandy Crystall (DES)
 Andy Chapman (DES)
 Jacquie Colburn (DES)
 Owen David (DES)

1) Introductions

The meeting began with a round of introductions.

2) Approval of the 4/12/2012 meeting minutes

The Chair asked for an approval of the minutes of the 4/12/12 meeting. The minutes were amended to show that John Magee was present. A motion to approve the minutes as amended was made by Sam Demeritt, seconded by Donna Hanscom, and approved without opposition.

There was discussion about the ‘next steps’ regarding Class A criteria listed on page 3 of the 4/12/12 minutes, which were:

“Next steps: Investigate possible re-wording of the “none unless naturally occurring” language for Class A criteria and catalog use of this phrase in Env-Wq 1700. Develop examples of tiered criteria for a few parameters. Review tiered aquatic life use definitions used by Maine and Connecticut. Discuss this topic again at the July WQSAC meeting.”

Following the 4/12/12 meeting, DES staff did some initial research for these next steps and then decided that the approach was not feasible. No further action on these next steps is planned.

3) Update from Subcommittee on Wetland Water Quality Standards

Sandy Crystall gave an update on subcommittee work on wetland water quality standards (WWQS). Copies of her slides are attached. Major points:

- The [Wetland WQS subcommittee web page](#) is online. Links to programs and guidance on wetlands monitoring and assessment and wetland water quality standards are provided.
- Access to the DES FTP server has been provided so copies of relevant documents may be obtained from there, as well.
- Survey to communities to inquire about additional wetlands mapping has been reviewed by subcommittee and will be sent out later this week.
- At the 10/18/12 meeting of the subcommittee (to be held in Portsmouth), Dave Neils (DES) will provide a presentation on the biomonitoring program, and Jeanne Di Franco (Maine DEP) will provide a presentation on Maine’s wetlands biomonitoring program, as Maine is one of a couple of states that have developed water quality criteria **and** made attainment decisions for a subset of wetlands.
- The WQSAC requested that they be sent a summary of the Maine DEP methodology for wetland assessments and Maine DEP’s schedule for assessing additional types of wetlands.

4) Connections between Lake Level Management and River Instream Flow Protection

Jacquie Colburn made a presentation on recent work to integrate lake level management and instream flow protection. Copies of her slides are attached. Topics discussed by the WQSAC were:

- The differences between summer pulse releases and winter draw-down releases.
- The potential for using water releases to manage phosphorus levels in lakes.
- The potential for releases to alter 7Q10 flows used for NPDES permits.

- In large watersheds, there will be more than one impoundment that could be used for releasing water. Important considerations for selecting an impoundment for the release would be its ability to refill quickly and its size.
- The question was raised about whether U.S. Army Corps dams were subject to the Water Management Plans developed for designated rivers.

5) Planning for Future WQSAC Topics/Meetings

Phil Trowbridge led a discussion about topics for future WQSAC meetings. The starting point for the discussion was the list of topics from the 2011 Triennial Review. The group agreed to continue quarterly meetings.

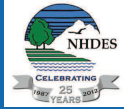
- It was agreed that no additional work was needed on turbidity criteria, chloride criteria, or antidegradation rules at this time.
- There was interest in researching the biotic ligand model for copper and other metals. Donna Hanscom agreed to provide background information to DES. It was also suggested that it might also be beneficial to learn if other states or EPA regions are applying additional tools when managing water quality criteria, particularly as applies to site specific determinations (for example, Alaska's substitution of the arsenic MCL for the human health water quality criteria).
- The WQSAC requested that UNH research on temperature criteria be presented to the committee. It was also suggested that the discussion around temperature criteria should include the issue of climate change.
- The Surface Water Quality Regulations (Env-Wq 1700) are due for readoption in 2016. National recommendations for water quality criteria from EPA should be reviewed to determine what NH criteria updates will be needed.
- The definition of surface waters should continue to be researched as it relates to application of surface water standards to wetlands.
- Work on a revised classification system should continue. The Wetlands Water Quality Standards Subcommittee will explore this issue as part of their work. DES will look into the cost/benefit of a major classification system overhaul and investigate ways to identify high quality waters.

6) Other Business

None

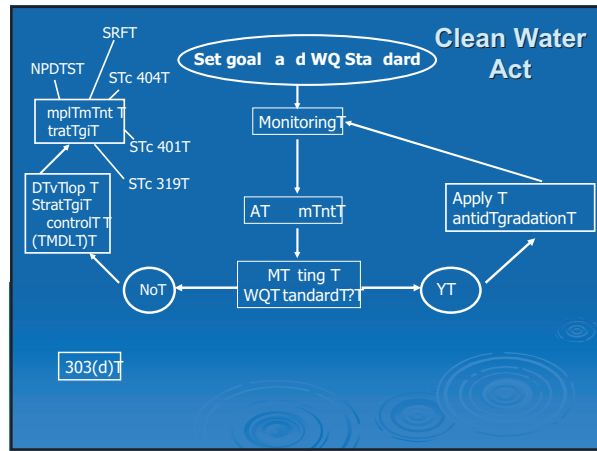
7) Adjourn

The meeting was adjourned at 3:45 pm.



Wetland WQS Subcommittee Update

Sandy Crystall, PWS
October 11, 2012



Subcommittee Tasks

- Research
 - EPA documents
 - Other states with WQ standards for wetlands
 - State 303d/305b reports
 - Assessment methodologies
 - Level 1 and Level 2
- Develop protocols for wetland GIS coverage
- Identify data needs to develop water quality standards for wetlands
- Develop recommended approach for wetland WQ standards (' the plan ')

Develop Protocols for State Wetland GIS Coverage

Objectives

- Improved base wetlands GIS coverage.
- More accurate wetland assessment.
- More defensible permitting decisions.
- Better land use planning (by DES and others).

2010 BaT map from NWIT
vTrTu
DTInTationT from a CTritifTd WTland SciTntiTt



Final Product: The Plan



- Working through the subcommittee, **develop a plan** that recommends an approach for water quality standards and **identifies next steps** and proposed timeline to:
 - (a) Collect additional assessment data, if needed,
 - (b) Work with the WQSAC to further define proposed standards,
 - (c) Identify or implement changes to NH Statutes and rules, and
 - (d) Revise the 305(b) water quality assessments for wetlands to reflect the new standards.

Since May Meeting...

- Set up web page
des.nh.gov/organization/divisions/water/wmb/wqs/wetlands-subcommittee.htm
- Set up FTP server with documents that can be downloaded on:
 - RAMs (rapid assessment methods)
 - States with water quality standards
- Association of State Wetland Managers issued *Wetland Water Quality Standards for States (Aug 2012)* (DES participated in effort.)

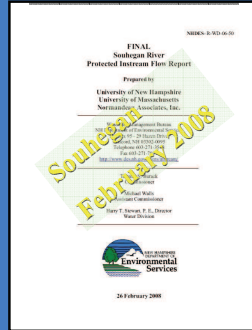
Connections - Lake Level Management and River Instream Flow Protection

An Update of the ISF Program

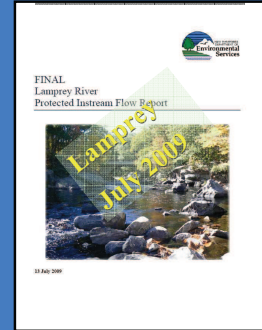


Water Quality Standards Advisory Committee
October 11, 2012

Protected Instream Flows: Pilot Projects



February 2008

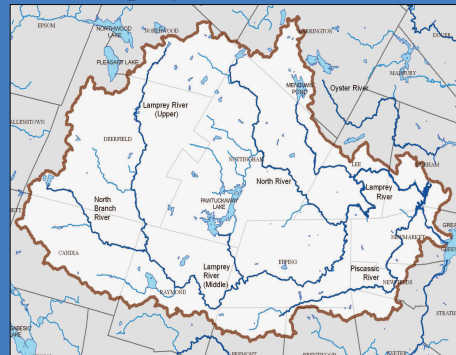


July 2009

Instream Flow Program

- Two major components of ISF:
 - 1) Determine protected instream flows, and
 - 2) Develop Water Management Plans
- Water Management Plans
 - Conservation Plan
 - Reduce waste and water losses
 - Water Use Management Plan
 - Spread, flatten and reduce withdrawal impacts
 - Dam Management Plan
 - Reset flow patterns using dam releases (to protect downstream ecosystems)
- No provision within the ISF Program regarding the protection of lakes or management of lake levels in the statute or rules (RSA 483)
- There is no acknowledgement of river flow needs in the lakes statute (RSA 483-A)

Instream Flow Program Lamprey River Watershed



**Pawtuckaway
Lake outflow
April 24, 2012
~0.002 cfsm
(essentially no
outflow to the
North River)**

Instream Flow Program Progress Recent Activities – Lamprey River

- Posted the Lamprey River Management Plan DRAFT Response to Comments
- Lake Level Investigation by Dam Bureau for winter drawdown (proposed 4.8' vs. existing ~ 7')
- Conducted a Pawtuckaway Lake pulse release of 0.6" of water - September 3-8, 2012
- Conducted a Pawtuckaway Lake Science Roundtable September 28, 2012

Lamprey River Water Management Plan (Some of the) Public Comments/Concerns

- 1) The perceived precedence of the Lamprey River over Pawtuckaway Lake and its use as a storage impoundment
- 2) The effects of the proposed management strategies on fall drawdown and winter water levels
- 3) The frequency and maximum amount of summer drawdowns and the effect of reduced water levels in Pawtuckaway lake on fish, wildlife, recreation, property values and the local economy
- 4) What effect will drawdowns have on water quality and cyanobacteria

ISF Water Management Plans Lake Issues (as a result of the 2 pilots)

- **Natural:**
 - Water depth and lake bathymetry
 - Hibernation/exposed benthic habitat
 - Loon nesting success
 - Fish: Alewife migration (specific to Pawtuckaway)
 - Temperature/D. O.
 - Cyanobacteria and water quality (phosphorus)
 - Native and Exotic Species
- **Human:**
 - Recreational uses
 - Docks
 - Property values (being questioned by lake residents)

LMAC and RMAC

- Management of lake storage and management of river flows may be in conflict
- Need to coordinate the management of lakes and rivers as they are shared and connected water resources
- Rivers and Lakes Programs work together to find a mechanism for ensuring balances between lake and river (instream) human and natural uses
 - LMAC and RMAC should work together over the next year to address this – develop some guidance
- Eventually, ISF will be applied to all designated rivers

- LMAC/RMAC ISF Subcommittee established

LMAC/RMAC Instream Flow Subcommittee

- Has met 3 times - May, June and July
- Issue: How do you manage for downstream water quality/quantity values and not negatively affect lake water quality/quantity values?
 - Procedure or approach to balance trade-offs
 - Hierarchy of uses and impairments
 - Avoid costly site specific evaluations
- Will present draft guidance document to LMAC and RMAC for concurrence at December meeting

Guidance for Integrated Water Resource Management

- **Priorities?**
 - Public health and safety (drinking water)
 - Aquatic life – lakes and rivers (CWA)
 - Recreation (CWA)
 - Agriculture
 - Other business uses

Underlying fundamental goal:
To meet water quality standards in all surface waters

Instream Flow Next Steps

- **Specific to Pawtuckaway:**
 - Fall release and winter phosphorus study
 - Another Pawtuckaway Roundtable (recreation and related issues) & Public Meeting – late October or early November
 - Completion of the Lake Level Investigation
- **Specific to LMAC and RMAC:**
 - Working with DES to developing comprehensive lakes and rivers guidance
 - Successful implementation of the guidance – education and compromise
 - LMAC/RMAC Subcommittee meeting – November
 - Present subcommittee proposal at JOINT RMAC/LMAC meeting - December

Instream Flow Next Steps

- Specific to the ISF Program:
- ISF needs to report to the Legislature in 2013.
 - Meet with SB 330 – Legislative ISF Study Committee
 - Revise legislation to extend the date of the legislative review of the implementation period
- Completion of the Water Management Plan(s)
 - presentation to Commissioner for adoption
 - implementation of the plan (pilot will be reviewed by DES, public and Legislature)

Questions?

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