

**Wetland Water Quality Standards Subcommittee  
(of the Water Quality Standards Advisory Committee)  
NHDES – Concord, NH  
12 April 2012                      10-11:30 a.m.**

<b>Members in attendance</b>	
	Cindy Balcius
	Don Kretchmer
	Eileen Miller
	Jasen Stock
	John Hodsdon
	John St. John
	Larry Morse
	Mark Hutchins
	Michael Simpson
	Mike Marchand
	Ron Rhodes
	Tracy Tarr
<b>DES staff:</b>	
	Chris Williams
	Christine Bowman
	Dave Neils
	Gregg Comstock
	Ken Edwardson
	Mary Ann Tilton
	Sandy Crystall
	Ted Walsh

Sandy Crystall welcomed everyone to the first meeting of the subcommittee and reviewed handouts provided (the 3 from the email – agenda, designated uses working proposal, and grant table -- plus the PowerPoint slides handout). She provided a brief overview of the agenda and then turned the meeting over to Ken Edwardson for discussion of locating and obtaining improved mapped wetlands data in GIS form.

Discussion brought suggestions forward including- contacting the Planning Boards, Conservation Commissions, Regional Planning Commissions (RPCs) and NHANRS, for information regarding the existence of higher resolution mapped wetlands data. (For bigger towns, check with Planning Boards, in smaller towns, check with Conservation Commissions.) Also mentioned was using the Office of Energy and Planning’s list serv to reach a broad audience of municipalities, Regional Planning Commissions (RPCs), Conservation Commissions, as a first round to determine what data exist. Check with the 3 or 4 aerial photo companies who do flyovers; Possibility of NHANRS members doing ground-truthing.

Sandy reviewed the tasks under the grant – research and develop Wetlands Water Quality Standards Plan.

**Tasks 2 & 5 – Research and develop a Plan to develop wetland WQs – Sandy Crystall**

Sandy provided an overview of the Water quality standards under the Clean Water Act.  
Designated use and adopting narrative and numeric criteria

Reviewed final work done by previous subcommittee on definitions for the various designated uses and how they relate to the CWA national goals. Discussed designated uses “aquatic life integrity” and “wildlife” definitions that the previous subcommittee drafted.

Questions were raised about what constitutes wildlife. Referred to the definition suggested in the working group proposal (a handout).

Reviewed the current approach to water quality assessments – use of core and non core parameters and how decisions are made regarding fully supporting a designated use and non-supporting a designated use.

Characteristics of a good indicator/core parameter. Described NHDES's Consolidated Assessment and Listing Methodology (CALM) and example of primary contact recreation designated use with bacteria as core parameter.

Discussed what several other states are doing regarding monitoring and assessment and listing of impaired wetlands (only Minnesota has made non-attainment decisions on wetlands).

Discussed different types of wetlands in NH (pie chart based on Cowardin-wetlands classification) – palustrine forested is largest portion at 49%. May be most challenging to address because they tend to be the drier wetlands. Palustrine emergent may be more in line with what has been done for assessment of other surface waters (and perhaps the "low hanging fruit" for undertaking this work).

Reviewed how different wetlands may need different core parameters or same parameters and different criteria (threshold levels).

After presenting the materials, the meeting was opened for greater discussion, questions, feedback, etc.

### **Brainstorm / initial thoughts/ feedback**

Opened out to group- how we should assess wetlands? Assemblages monitored and core parameters? Designated use(s) assessed?

Question on use of invasive species for making assessments. Responses – DES makes impairment decisions for lakes and rivers based on presence or absence of invasive species (milfoil) (change in structure / biological integrity). Not used as a CORE parameter. Could do same for wetlands or say there has to be X % coverage of invasives to be impaired for a certain designated use.

Question about NWCA Level 3 assessment – find out how the EPA is going use data to evaluate (assess) wetlands.

Sandy mentioned two major aspects of wetland assessment – evaluation of wetland function and values versus evaluation of wetland condition. The New Hampshire Method is primarily wetland functions and values, typically used for permitting. Sandy mentioned how EPA approaches wetland assessment with level 1-2-3 approach. Level 1 being desktop, GIS-based evaluation, Level 2 is a rapid assessment method in the field, and Level 3 is a detailed sampling evaluation of wetland. These are the increasingly resource intensive ways at approaching evaluation of wetland condition.

Ken Edwardson mentioned that we have done Level 1 assessments and they were published in the 2008 305b/303d report. DES is working on integrating into those assessment, the metrics used in a model developed to identify restoration sites in the Merrimack River watershed under the Aquatic Resources Mitigation program.

Larry Morse indicated that the framework presented agrees with previous discussions. "We're on the right track." He suggested that a possible approach was as a first cut, look at the hydrologically connected, transitional and isolated. May have different criteria for these.

Sandy suggested that it may be more straightforward to look at emergent wetlands first – those wetlands with standing water. After 10 years some states are still collecting biological data to develop Indices of

Biological Integrity (IBIs) for wetlands; only MN has used biological data to assess (*and make attainment decisions on*) a very small percentage of their wetlands.

Larry Morse noted that this is a very big project. Suggestions made included: Check with Hilary Snook at EPA (region 1 - Chelmsford office), and start with connected wetlands, overlay land use to narrow focus (Michael Simpson).

Discussion on why initially focus on Aquatic Life Integrity designated use?

Sandy noted that most states are focusing on macroinvertebrates, amphibians, birds, that are dependent on the aquatic environment. Dave Neils noted that wildlife tend to be transient, are larger and don't live directly in water. Aquatic Life tends to include resident species, they are smaller (more sensitive due to their size) and probably better representative of community condition. DES has not yet developed criteria for wildlife designated use for lakes and rivers, although we have for the aquatic life designated use. Start with a use for which DES has developed criteria and is familiar. If people have ideas on how to assess wildlife please let DES know.

Sandy asked the committee about their interest in learning more about other states' work? (Response, yes.)  
Would a website with links to the various documents be useful? (Response, yes.)

Sandy indicated that since many states are focusing on various approaches, she will develop matrix of who is doing what by habitat type.

Dave Neils indicated that we are doing this type of work now with streams and offered to give a presentation that would review the process for developing such indicators for assessment.

Gregg asked that perhaps the group would like to have a presentation on the NWCA (Yes).

Michael Request that any papers cited be made available as well.

Larry Morse noted that the presentation represented what was discussed by the WQSAC.

**Next meeting** - - due to people's schedules and interest in this effort, the next meeting of the subcommittee has been set for the end of May.

Presentations will include:

- NWCA & RAM
- Dave Neils – stream assessment
- State IBIs. and VHB approach

A website with links to various documents and website etc. will be established.

Next Steps:

Next meeting: 1<sup>st</sup> or 3<sup>rd</sup> Thurs in May – for 2 hours

DES to set up website for WWQSC info – (Mike Simpson requested we includes citations for references)

Task 3 – send comments on survey questions to Ken Edwardson within next 3 weeks

Task 5

Presentation on RAM and Level 3 NWCA work

Presentation by Dave Neils on how biological indices were developed for wadeable rivers.

Presentation on parameters in VHB study (as requested).