



## LAMPREY TECHNICAL REVIEW COMMITTEE

NH Instream Flow Pilot Program  
New Hampshire Department of Environmental Services  
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### Lamprey TRC Meeting Minutes

**Monday, March 14, 2005**  
**9:30 am – 11:30am**  
**Room 112, NHDES, Concord, NH**

#### Members Present:

Ralph Abele	US EPA / Manager of NH State Program Unit
Colleen Dreher	Durham Boat Company
Robert Flynn	US Geological Survey
Brian Gallagher	NH Water Works Association
William Ingham	NH Fish and Game Department
Kenneth D. Kimball, PhD	Appalachian Mountain Club Research Department
Vernon Lang	US Fish and Wildlife Service
Jim MacCartney, Chair	Trout Unlimited/River Restoration Specialist
Carl Paulsen, Vice Chair	NH Rivers Council
Ronald Rayner	Business Industry Association of NH

#### Members Absent:

Douglas Bechtel	The Nature Conservancy
Richard Cooney	NH House of Representatives
James Hewitt	Wright-Pierce Engineers
Carl R. Johnson	NH Senate

#### Others Present:

John Magee	NH Fish & Game Department
Joseph Barnes, Jr.	NH Senate
Franklin C. Bishop	NH House
Brian Giles	LRAC
David Funk	NH Estuaries Project
Therese Thompson	LRAC
Jasen Stock	NH Timberland Owners Association
Robert Levesque	LRAC

#### DES Staff Present:

Wayne Ives, Instream Flow Specialist, Watershed Management Bureau  
Marie Loskamp, Executive Secretary, Watershed Management Bureau

#### Introductions

James MacCartney opened the meeting at 9:45 am. Introductions were made.

#### Approve Minutes of January 24, 2005

Put off until members have read the meeting minutes.

### **Update on Lamprey Consultant Hiring Process and Availability of Proposals**

Today, Ralph will talk about the methods proposed and not proposed, and then Wayne will tell you about the Souhegan status. Wayne Ives spoke relative to the qualifications packages and makeup of the Selection Committee to shortlist firms to four firms. There is a Selection Committee meeting next Monday on proposals to which the Lamprey Committees are invited where they can comment on the proposals. They are very laborious reading. You will be looking at these proposals from the perspective of who they have to do the work, and their criteria. We send a request to Governor and Council once the Commissioner approves the Committee decision and then G&C decides if we made the correct decision and approves the funding for it.

### **Presentation on Protected Flow Assessment Methods – EPA – Ralph Abele**

Ralph brought a notice of a new instream flow book. This is the second version put out by the Instream Flow Council; it is the one he passes out, and it has centuries of experience. It is an unbiased book.

The people sitting around the table know the fish, know the instream flow process. Ralph used this presentation to talk to groups like this one with interest in instream flow. Clean Water act slide was the first slide and part of the study protects elements of the NH Water Quality Act. Concept leads into the flow regime on the habitat side of things. When the studies are done by the consultants it is important that they look at all the flows and functions. The companies that were short listed are looking at all the 5 ecosystem components. There are a number of tools to access instream flow. The three proposals use biological methods. Souhegan UNH team is doing the incremental approach.

Standard setting cautions—standard setting should consider the need for intra and inter annual flow variability.

Instream Flow Incremental Methodology (IFIM) is a site-specific approach, developed by Fish and Wildlife Service back in mid seventies. It relates effects of changes in physical components of habitat to suitability. A hydraulic model and biological model is used create a habitat model.

Physical habitat simulation (P-HAB-SIM) results should be used to inform incremental approach (IFIM) but not be slavishly adhered to. It shows a range of habitat conditions occurring with changing flow. It is a physical model of stream hydraulics and habitat. Must make sure transects are located in the right spot to cover pools, riffles and runs. Investigators will survey transects to accurately describe what the bottom is like, then they will take depth measurements and measure velocity at intervals to show what this cross section looks like in terms of velocity and depth. Depth, velocity, and substrate are measured at several transects. Parameters are measured again at different flows to calibrate response to flows. It is important to look how many flows are used by the three companies. On the Souhegan they've looked at two so far using MesoHABSIM and need another low flow and possibly will do a fourth.

MesoHABSIM looks at hydromorphological units instead of transects, but still looks at how habitat changes at different flows. This approach was first used in US in CT in the late 90s. MesoHABSIM looks at depth and velocity, substrate, and cover (such as logs on bottom, etc.) Also, looks at criteria such as presence or absence of boulders and can be used to evaluate what happens when you remove dams. One way to create more habitat is to remove some dams. MesoHABSIM looks at more of a community of river fish instead of just one particular species. Hopefully enough

good info so you know what the tradeoffs are on fish or any other IPUOCR. Riffles are important modeling points as they are controlling factors in boating, barriers to fish and boats.

Funding is \$245,000 grant through Senator Gregg. On Lamprey we are looking at a 12 mile stretch. The designated river protected flows apply only to the 12 mile reach. Water users and affected dam owners are included upstream of the 12 mile reach, but the law only allows for the protection of flows in the 12 mile reach. The RFP is on our web site. Address comments at Monday's meeting.

### **Update on Souhegan Progress, Update on Lamprey Consultant Hiring Process and Availability of Proposals, Overview of the Scope of Work – Wayne Ives**

Update where we are on Souhegan context or information we learned on that process, i.e. hiring process, scope of work, schedule, progress and results on individual tasks.

Hiring process for the Souhegan took quite a while, took 7 months before the contract was signed. After that it took a couple weeks for contractor to get their paperwork to us so they were out in field in June, field season really starts earlier. Wayne went over the tasks, which items in the task must be included in the water management plan, and which ones have been completed on the Souhegan by the contractor.

Lamprey RFP has minor edits from the Souhegan RFP. The Souhegan Scope of Work is found on the web site. There are 12 tasks. Completed tasks included Task 1 - draft IPUOCR list, expanded upon and identified all IPUOCRs; Task 2 (Mostly done. We expect collected data to be completed in March.) - surface water and groundwater interactions study, how much water drawing out of the river and therefore what management capacity do we have by changing groundwater withdrawals; Task 3 – in-stream survey – completed last spring; and Task 4 - report on final IPUOCR list and proposed PISF assessment methods (report is also on the UNH web page). This presentation will be on the web site and proposed assessment methods.

Still in progress is Task 5 - assessment of IPUOCR flow needs. Did not get low flow measurements last year as there really wasn't any. This will extend into next year to collect field measurements and then they will do modeling within bio-periods to define protected flows. Next is a draft PISF report to DES and the TRC. Tasks 8 and 9 have been begun by contacting AWUs and ADOs with surveys and getting information from them. Task 8 - contacting and interviewing affected water users, their timing and availability. Task 9 – Sub Plans for the WMP. Process will include an assessment of the water users' preference multiple criteria decision analysis. November complete Task 5 assessments and by December plan to have the PISF hearing on protected instream flows and final report next January. Middle of next year we will be able to adopt plan.

### **Process for Reviewing Lamprey Consultant Proposals**

Come in to office to see proposals, or download or print off or read on-line. Next Monday (April 21) at 9:30 there will be a Selection Committee meeting here at DES to hear comments from the Lamprey TRC and WMPAAC members. Selection committee will meet the following Monday (April 28) for interviews and scoring. Then the Department will negotiate with the top ranked firm. A G&C request will be submitted to hire the consultant. If they can get signed early enough, they may end up being completed at the same time as the Souhegan.

Next Monday – Members of TRC and WMPAAC can be heard and present your comments to the Selection Committee, a decision will be made by the Monday following that, once Commissioner has approved, and made public, notice will be sent out to the committees. Had 7 firms, some made up of various consortiums, groups or people bringing in as consultants. Selection based on personnel, experience and approach. All the shortlisted firms have good people. Who do they have working on this, who may be better, what is their experience, lots of work experience, and third is their approach, one is going with MESOHABSIM and the other two with the PHABSIM. In this case, the lead companies have similar approaches as last time, and we need to decide which is the best candidate.

**Ken Kimball** had read through the proposals. All three have highly qualified individuals, big question between PHABSIM, designed for shorter river reaches, or do we go with MESOHABSIM, new method that is designed to look at total river reaches. Not only between companies but also between the methods they are competent in. Is the final answer something that can be simplified to a process that can be used? With incremental methods - how do you choose, decision that has to be made, make it before hand or made with cut curves.

Meeting next Monday – just for Selection Committee and the TRC and WMPAAC to give your input to the selection committee, it was appropriate to have both committees to look at the proposals submitted. Selection Committee is comprised of Ron Rayner, Ralph Abele, Bob Levesque, Kevin Webb, Wayne Ives and Paul Currier. The TRC expects that the selection committees scoring will reflect the comments committee members have given to you.

If you cannot make next Mondays meeting it is okay to send comments and questions to be asked during the interviews by email to Wayne and cc your members.

**Jim MacCartney** – Encourage everyone to read through these proposals and make your comments, incumbent on us to guide the department, as well as issue Ken is raising, and maybe a different approach than was used with the Souhegan.

#### **Other Business:**

**Next meeting** – Introduction of consultant selected and IPUOCR. Probably in May - date for getting someone hired. We will not know until G&C approval. Wayne will notify you of who the selected consultant is and have some general idea of what G&C period it will go through. Expect by May to have someone on and available to meet with us. End of March to get the interviews done, sometime in May is the earliest to have contract signed, mid May or June for IPUOCR preliminary list to be done and TRC could be meeting with contractor about IPUOCRs or assessment methodology.

**Jim MacCartney** - hold open Monday mornings during early June for the next meeting.

**12:05 Motion to adjourn made by Ralph Abele, seconded and vote was unanimous.**