

Lamprey River Technical Review Committee

February 27, 2009

Members:

James MacCartney
Chair
Conservation
Interests

Carl Paulsen
Vice Chair
Conservation
Interests

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US Environmental
Protection Agency

Douglas Bechtel
Conservation Interests

Coleen Dreher Fuerst
Business Interests

Robert Flynn
US Geological Survey

Brian Gallagher
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James Hewitt
Business Interests

Kenneth D. Kimball
Conservation
Interests

Vernon B. Lang
US Fish and Wildlife
Service

Ronald G. Rayner
Business Interests

Thomas Burack, Commissioner
Department of Environmental Services
PO Box 95
Concord, NH 03302-0095

Dear Commissioner Burack,

At the November 13, 2008 meeting of the Lamprey River Technical Review Committee (TRC), DES staff requested a vote affirming the Department's desire to proceed with the public hearings for the Lamprey River Protected Instream Flows (PISF). The TRC applauds the effort and dedication of DES staff for bringing the instream flow initiative to this point, and it is grateful to have been invited to assist the Department in this undertaking. A majority of the TRC voted to recommend the proposed PISF to proceed to public hearing in the interest of meeting statutory deadlines. However, some committee members expressed concerns about the technical methodologies and results. The TRC wishes to share these concerns with the Department.

First, the method (MesoHabSim) used to determine the instream flow needs for fish is very complicated for even instream flow experts to conduct their own review. Additionally, it appears that some of the MesoHabSim results indicate that higher flows provide no increased benefit to stream-dwelling fish which is contrary to general expectations about the ecology and habitat requirements for certain fish species. These results may be correct, but the apparent discrepancy between the results and our working understanding of fish habitat does raise questions about the methodology. Absent a statistical analysis of the results of habitat-based assessments, it is difficult to gauge the accuracy of the protected flows.

Second, the datasets used to determine the instream flows contain variability, and an analysis of this variability has not been conducted. Specifically, the dataset used to construct the "Target Fish Community", the fish community that one would expect in the Designated Sections of the Lamprey River, contained data from several reference streams, some of which had large proportions of certain species, while others did not contain those same fish species. This was not explained in the analysis of these datasets. Furthermore, there was no statistical procedure used to determine if a fish species was truly over- or underrepresented in the existing Lamprey River fish community. A value that may be considered arbitrary was used to determine if a fish species was over- or underrepresented. This value may not reflect the variability within the datasets. The TRC would like to see an analysis of the variability of the "Target Fish Community" and a narrative of conclusions drawn from this analysis. This should be a simple task, and will provide important information to TRC in our review of the results of the entire study.

Staff:

Wayne Ives
Instream Flow
Specialist
NH Department of
Environmental Services

Lamprey River Technical Review Committee

It is our understanding that the Instream Flow Council (IFC), made up of dozens of members of instream flow experts throughout the United States and Canada, has agreed to conduct an independent third party review of this method and of the proposed Lamprey River protected instream flows. Goal II of the IFC is to “Promote sound instream flow science”. We look forward to this review, and realize that to meet statutory deadlines it must be conducted after the Lamprey instream flow study has been completed. The TRC wants to recognize that the third party review was a concept developed and initiated by DES, which speaks to the Department’s commitment to validating the science applied to the instream flow pilot projects.

Once again, a majority of the TRC recommended that DES present the study results for public hearing, but remains concerned about certain technical aspects of the pilot project. These concerns may have implications for how future flow protection initiatives proceed.

Sincerely,

James MacCartney,
Chair

On behalf of the Lamprey River Technical Review Committee