From: McDowell, Bill [Bill.McDowell@unh.edu]
Sent: Monday, March 02, 2009 5:38 AM
To: Ives, Wayne
Cc: Daley, Michelle
Subject: Lamprey River PISF rules

Dear Wayne,

DES is to be congratulated for conducting such a detailed study of flow conditions in the Lamprey. The study provides valuable information on the river and its aquatic habitats.

I have several concerns about the study, however.

My biggest concern is the treatment of impoundments in the modeling exercise. As I raised at the public meeting, it seems that the final runs of the MesoHABSIM model used to derive protected instream flows for fish were conducted as if the river did not have any dams. This is obviously untrue, and throws doubt on the validity of the entire exercise. If MesoHABSIM is used to describe habitat conditions upon which regulations will be based, then dams must be included. They have altered river flow for many decades, and are likely to continue to do so. The Macallam and Wiswall Dams certainly change the nature of low flows in the Lamprey River, and must be included in any plan to develop protected instream flow rules.

Another concern is that not all users of the river will be part of the allocated water use. Large water users upstream and large groundwater withdrawals that aren't within the water management planning are likely to have a hydrologic influence on the designated reach, but their effects are not likely to be accounted for. They must be for the plan to be meaningful and fully protective.

The consideration given to the effects of water regime on endangered plants is admirable. But some thought should also be given to the effects of water withdrawals on invasives such as zebra mussels and Didymo.

I strongly urge DES to make all the raw habitat data collected for this project available on the web. It is a valuable resource.

Thanks for giving me the opportunity to comment.

Bill McDowelll

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