



United States Department of the Interior

NATIONAL PARK SERVICE

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IN REPLY REFER TO:

June 17, 2011

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RE: Lamprey River Water Management Plan Report NHDES-R-WD-11-9

The National Park Service is pleased to offer the following comments regarding the proposed Lamprey River Water Management Plan. We have reviewed the Plan in the context of the state and federal protection of the Lamprey, and as a partner of the Lamprey River Advisory Committee on whose behalf I have participated as a member of the Lamprey WMPAAC.

Before commenting on the Plan, the NPS would like to express its overall support for the process employed by NH DES for conducting the Lamprey Protected Instream Flow pilot study. Specifically, we commend the DES for taking a science based, seasonally sensitive approach to determining the instream flow needs for identified ecological and recreational attributes of the protected Lamprey River. This process included technical review by a well qualified and diverse Technical Review Committee and an open bid process to evaluate and select the most appropriate and qualified scientific consultants to undertake the required evaluations and analysis. This establishes an important precedent critical to the value of this pilot effort.

Comments on Proposed Water Management Plan

1. The National Park Service supports the results of the Protected Instream Flow Study as it has established flow requirements and various seasonal "trigger" flows that would serve as indicators of ecological stress and triggers for contemplated corrective actions.
2. The National Park Service asks that the removal of the 4cfs minimum flow from the final PISF and from the Water Management Plan be reconsidered. As presented to the WMPAAC and the public as a key recommendation of the PISF in public meetings held in late 2008 and early 2009 (see attachments), the NPS, other WMPAAC and TRC members, and other interested parties were under the impression that this would be carried forward into the WMP. To date, no substantive rationale for not doing so has been provided. It clearly would do dramatic ecological harm to allow the Lamprey to drop to zero flow between relief pulses (as the current WMP would allow). It is very difficult to maintain or establish credibility of a pilot instream flow protection process that ignores the very real danger that the Lamprey could realistically (based on the evidence within the period of record and the documented human development related flow trends in the watershed) cease to flow.

3. The National Park Service supports the three tiered concept for managing flows presented in the Plan: 1) Conservation Plans for water users; 2) Water Use Plans to shift, spread and reduce water use; 3) Dam Management Plans for relief of catastrophic events.

4. The National Park Service asks for further consideration of a 4th element to long-term maintenance of Protected Stream Flows: long-term watershed strategies to maintain a healthy, natural ecosystem. Such strategies as long-term planning re impervious surfaces, aggressive BMP's for watershed-wide stormwater management; comprehensive basin-wide planning for water resources; etc. Over the long haul, these sorts of proactive investments will help reduce the need for "catastrophic Interventions" etc.

5. We support the statement in the Plan that communities with affected municipal water supplies need to adopt ordinances that allow for mandatory water conservation.

6. We support the notion that the Plan should clearly establish a maximum lake drawdown (Mendums & Pawtuckaway) for the June 20 through Oct 6 (GRAF Spawning; and Rearing & Growth) summer period. Data on this is confusing and poorly presented in the current Plan, and many have misconstrued and over-estimated the potential cumulative drawdown that might reasonably occur. A stated maximum (human induced) drawdown supported by a clearer analysis of the actual likely cumulative effects based on the period of record would be beneficial.

7. The NPS supports the immediate implementation of the first two phases of the Plan: Conservation Plans and Water Use Plans. This is the "bread and butter" of the Plan - - reduce as much as reasonable man's direct water use impact upon stream flow during times of extreme ecological stress (i.e. when the trigger thresholds are reached).

8. The NPS believes that there should be a scientific re-evaluation of the two day "relief pulse" concept. Two aspects of this seem particularly troublesome:

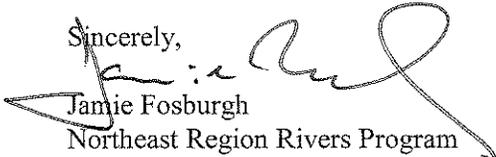
A. Overwintering Period. During this time of year, flows are relatively high, and man's combined influence on winter flows are extremely small (relative to the overall flow). The value of relief pulses during this time period seems particularly suspect. In addition, the 1.5 ft of less winter drawdown in Pawtuckaway is very controversial and particularly destructive to docks, etc. This deserves to be re-evaluated.

B. During a persistent summer drought (as in 2002, for example) two day relief pulses will become very controversial as Mendums and Pawtuckaway levels fall. At some point, it would be counterproductive to pulse high water flows through the Lamprey, when between pulses the River could approach zero flow. The wisdom of the relief pulse concept in the face of a long, persistent summer drought needs to be re-evaluated. No scientific references are provided in the Plan for the ecological benefit of the "relief pulse" concept. One completely different approach to potential dam releases would be to quantify the degree to which human-causes in the watershed are contributing to extreme low-flow scenarios (even after the conservation plans are in effect). Cumulative watershed development (impervious surfaces, lawns, individual wells, unregistered users, etc.) is having a quantifiable impact on summer stream flow. Dam releases could be made to offset this impact based on the PISF-established triggers. Such an approach should be evaluated as an alternative to the "relief pulse" concept.

9. The Management Plan appears to require the Town of Durham to manipulate Wiswall gates and install a new guage to ensure that relief pulses pass through Wiswall without delay or attenuation. NPS comments on Durham's draft Water Use Plan supported Durham's position that the Town should be allowed to simply take no action, i.e. not retain the pulse. The effect would be that the pulse would be slowed and peak pulse flow (cfs) would be reduced (attenuated) in the reservoir - - but ultimately (over an additional day or so) the whole pulse would pass. We continue to believe that the requirement of active gate manipulation and gauge installation and monitoring is overly complicated and onerous.

Thank you for this opportunity to comment. Please feel free to contact me or Jim MacCartney (603 226-3436) with questions on these comments or to discuss any related matters.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jamie Fosburgh', written over the typed name.

Jamie Fosburgh
Northeast Region Rivers Program
New England Team Leader
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Copy:

Sarah Callaghan, Chair LRAC
Richard Kelley, Chair Lamprey WMPAAC