

Improving Recreational Paddling on the Lamprey River while Protecting Ecological Values: A Pilot Project 2018

Summary:

The 4.8 mile river segment between Route 87 in Epping and Wadleigh Falls in Lee has been impeded for canoe passage by many channel-spanning woody blockages for several years. With funding from the Lamprey Rivers Advisory Committee and a grant from the New Hampshire Charitable Foundation, each obstruction was evaluated by a team of trained professionals to assess ecological value of the instream wood and determine the best position and method to remove wood to allow canoe passage at typical summertime base flow of 100 cubic feet per second.



Following the evaluation, the team selectively trimmed, sawed, hoisted, and otherwise cleared enough wood to allow a passageway 6 feet wide with at least one foot of water through fifteen woody obstacles. The removed wood was then relocated back into the channel nearby to preserve the ecological values of instream wood. The result was safer and easier canoe passage through this section with no loss of instream wildlife habitat and no significant changes to natural hydrology.

Through the use of trail cameras, we were able to get an idea of how many people paddle this river segment. Cameras were strategically placed near Route 87 in Epping and near the downstream terminus of the obstructed area in Lee. The original goal was to see how many boats passed through the area and how many turned back, possibly due to the obstacles. Over time, we hoped to see if there were a difference between before- and after-treatment. Preliminary data obtained from June 3 to July 13 showed that 21 boats passed the Epping camera, and of those, 6 returned. The Lee camera recorded 12 boats from June 10 to December 6, none of which turned around. The two cameras did not record any boat on the same day, so we saw no evidence that any boats went the full distance. There are no public canoe access points between Route 87 and Wadleigh Falls; it appears that most paddlers started or stopped on private land somewhere in the middle.

Prior to commencement of field work for this project, the assessment team noted that someone or some group had cleared wood in a few locations. This clearing

accomplished the goal of improving canoe passage, but lack of awareness of river hydrology, ecology, and paddling safety resulted in river bank erosion and potentially hazardous conditions for inexperienced paddlers. Having trained sawyers, paddlers, hydrologists, and ecologists on hand made a huge difference for human safety (both during and after field work) and habitat preservation on this segment of the Wild and Scenic Lamprey River.

What We Learned:

Despite planning for “typical” conditions, the summer of 2018 was not typical. Heavy rains and subsequent high river flows postponed the commencement of field work originally scheduled for June to late August. When “typical” fall flows were expected for the guided public paddle, heavy rain again caused the river’s flow to increase. While the mixed-ability group successfully passed some treated areas, the rate of flow through an especially tangled obstruction created dangerous conditions and further onward movement had to be abandoned. The greatest lesson learned from this project was that “typical” conditions are hard to predict and that seemingly small deviations from “typical” can have a big impact. Future work of this nature might try to incorporate a broader definition of typical. For example, under low flows, some obstacles could be passed by ducking under limbs. At slightly higher flows, ducking might not be possible. Trimming higher up could result in paddler safety for a larger range of flows.

What Happens Next:

The long-term goal of this project was to enhance canoe passage for several years, short of extreme weather events that result in significantly more trees in the river. Now that the hard work of moving big pieces is done, we hope that light trimming each year will help to sustain passable conditions for most paddlers. We are fortunate that the Lamprey River has been selected by Rivers for Change for a big river awareness project in 2019. As part of their efforts, they seek projects from local river groups. They have agreed to accommodate our request for photo-documentation of the treated segment and to perform hand trimming of wood by their teenage river ambassadors when possible. In subsequent years, the LRAC and LRWA will monitor passage and perform hand trimming as safety considerations allow.