Ashuelot River Local Advisory Committee Washington Lempster Marlow Gilsum Sullivan Surry Keene Swanzey Winchester Hinsdale

August 30, 2009

Low Impact Hydropower Institute 34 Providence Street Portland, ME 04103

# **RE: Lower Robertson & Ashuelot Hydroelectric Projects**

The Ashuelot River Local Advisory Committee (ARLAC) was established in 1994, one year after the Ashuelot River was enrolled into the State Rivers Management and Protection Program. Since then, members, nominated by local municipal officials and appointed by the Commissioner of New Hampshire Department of Environmental Services (NHDES), have been educated in a broad array of issues associated with the River and its watershed. It is the hope of the committee to be a resource that works well between the interests and concerns of the citizens in the watershed and local, state and federal authorities.

ARLAC is familiar with the two hydroelectric projects noted above and have had minimal concerns with the projects over the years. The projects appear to have been running within the parameters established at the time of their FERC exemptions in 1986. Our comments in relation to the LIHI criteria are as follows.

#### **River Flows**

With the current ownership being local, it appears the Ashuelot River Hydropower, Inc. (ARH) operation is more closely watched and managed than in the past. During the Oct. 2005 flood, abutters to the Lower Robinson project felt the dam operators were not responsive to the rising water levels resulting in the massive erosion and collapse of the river bank and flooding of the adjacent business. On other occasions downstream of these projects, there had been instances where poor dam management turned the upstream pool of one of the downstream dams into a mud flat. We anticipate that these problems will not be experienced with ARH and that flows will be maintained per USFWS recommendations. Also habitat problems associated with fluctuating pool levels and downstream runs should not be an issue if the facility is truly operated in run-of-the-river mode.

# Water quality

ARLAC is in its ninth year of Ashuelot River water quality monitoring. With 64 miles of river to cover, we have not had the opportunity to monitor the pools immediately upstream of the noted projects. We have reviewed the recommendations of NHDES to ARH and believe the required testing will adequately determine the temperatures and oxygen levels of the waters there.

Our monitoring of two sites a couple miles upstream and downstream of the projects does reveal some concern with phosphorus levels at or above the NHDES level of concern of 0.05mg/L. E.coli can run above NH standards after a storm event or in low flow situations. The Ashuelot River also exhibits pH readings below the NH surface water standard of 6.5-8.0. While the river is victim to acid deposition from rainfall, snowmelt, etc. and has limited natural buffering capacity, we are concerned what effect the pools behind the dams would have on phosphorus accumulation and E.coli levels.

Of note is a petroleum contamination site in the bank at the former American Paper Mills site adjacent and downstream of the Ashuelot dam. During the period between 2002 and 2006 a number of petroleum underground storage tanks were permanently closed here. Sheens were noted on the river here especially during periods of low water. Since January of 2002 oil containment and sorbent booms have been utilized to contain the outflow. We understand ARH is not responsible for this contamination, but feel they need to be aware of this situation in the management of the dam.

# Fish passage and protection

A significant impact of dams is the alteration of the fish community composition behind the dam to accommodate more stillwater species with a decrease in riverine species, and the inability for fish passage beyond the dam structure. Since these dams have been in place since the mid 1980's, those alterations have already occurred. Restoration efforts for American shad, Atlantic salmon, and blueback herring in the Ashuelot River have been underway since 1995. It has been estimated that an annual run of more than 11,500 shad and 47,000 herring on the Ashuelot River could occur based on the acres of spawning and nursery habitat identified downstream of the Surry Dam by NHF&G.

We understand ARH has agreed to create upstream passage either within 2 years after 750 American shad are passed at Fiske Mill or within 4 years after 150 shad pass Fiske Mill, whichever comes first. ARLAC has concerns that this fails to take into account the presence of resident fish species that also inhabit the river but are unable to pass freely due to the dams, and are being cut off from suitable habitat in the river and its tributaries. If ARH is truly interested in being "low impact" then provisions should be made immediately to accommodate all fish passage and should not wait until only shad or salmon appear.

While downstream passage had been installed at the Lower Robertson dam in the summer of 1999 and at the Ashuelot dam in late 2001, ARLAC has no documentation as to the effectiveness of these installations and asks if ARH could provide some data on this. Also of interest is the level of injury or mortality of fish using the downstream passage or from entrainment or impingement on screens or trash racks that may exist at the dam sites.

### Watershed protection

ARLAC commends ARH for their contribution to the important land conservation project in the headwaters of the Ashuelot River watershed. Conservation of these lands is significant for the protection and health of the river.

ARH notes that a formal buffer zone does not exist at either site due to the proximity of the public road, private property and railroad right-of-way. If any of the property adjacent to the pool at Lower Robertson especially on the southern edge is owned by ARH, we would ask for the planting of trees within the buffer to improve shading of the river as well as help retain the bank here. The NH Comprehensive Shoreland Protection program criteria could be used as a guideline for density. This is one of the banks that was so severely eroded during the Oct. 2005 flood.

### Threatened and Endangered species protection

ARH provides documentation from USFWS regarding the lack of presence of threatened or endangered species in the area of the two dams. ARLAC asks that ARH also request a review by the NH Natural Heritage Inventory for any state threatened or endangered species.

# **Cultural Resource protection**

To our knowledge there is no disturbance or destruction of archaeological or historic sites at either of the two dam locations.

#### Recreation

The run of river between the two noted dams is well known for its recreational use by whitewater enthusiasts who begin their run upstream of the dams at the Ashuelot Covered Bridge and continue downstream to Hinsdale. Portage at the two dams can be difficult and dangerous due to steepness and the rocky nature of the banks.

ARLAC sought the input of paddlers of this stretch of river who suggested improvements that could be made for safer use by the recreational user. Among them was installation of stairs with a railing, possibly constructed with a slide in the middle or to one side to allow canoes to be slid up and down. Also the reinstatement of a portage trail on river left (going downstream) at Ashuelot dam that existed prior to the bank washout in 2005.

We would appreciate better accommodation of recreational uses by the public, e.g. canoeing, kayaking, fishing, and suggest working with groups such as the NH Appalachian Mountain Club Paddlers or the Merrimack Valley Paddlers to create safer access at the two dam sites.

#### Recommended for removal

To our knowledge there have not been any recommendations for removal of either damby the state or federal governments, though conditional upstream fish passage has

been negotiated for these dam sites. Nonetheless, ARLAC is on record as being in favor of free-flowing rivers and would advocate for establishment of upstream passage for all fish species sooner rather than later.

Thank you for the opportunity to comment on this application by Ashuelot River Hydropower, Inc. for Low Impact Hydropower Institute certification at the Lower Robertson and the Ashuelot Dams.

Respectfully submitted,

Barbara Skuly Chairman Cc: Ashuelot River Hydropower, Inc. L. Weit, NHRMPP August 31, 2009