

From: [Sandra Feusi Sam Payne](#)
To: mfischer@lowimpacthydro.org
Cc: ["Bob King \(bking31415@gmail.com\)"](mailto:bking31415@gmail.com)
Subject: FW: quick questions on Ashuelot application
Date: Tuesday, September 10, 2019 1:39:11 PM

Hi Maryalice,

I apologize for the delay. We have been racing against the clock at several sites to finish maintenance before the rivers fill up again, and I had to dig a little re. two of your questions.

1. The Lower Robertson site Obermeyer gate installation: We don't have a written record of notification to the SHPO. But we did have a phone conversation with them in 2014 in which we agreed that the Obermeyer gate system didn't have an impact on historical resources for the following reasons:
 - The Obermeyer crest gates are almost always underwater, and not visible. During low flows the visible inch or two of the crest gates which is above water is visually identical to the pipe and board system it replaced.
 - The downstream side of the crest gates can infrequently be seen, but only during low flows and only from one corner of the road. At 35 mph the view lasts about a second, and no one except a hydro professional would spot the difference. No residences are downstream of the dam.
 - The primary function of article 10 was to require Algonquin Power to consult with the town of Ashuelot **before** they completely rebuilt the Lower Robertson site in the mid 1980's. That consultation resulted in the site as it is today: a modern, utilitarian structure with no historic features.
 - Finally, the Obermeyer gates greatly improve pond level control, which yields substantial safety and environmental benefits without changing the aesthetics.
2. Fish passage flows: 40 cfs is the correct number.
3. Another NHB search: I filled out and paid for a search several months ago. The online search tool shows that results for our search have been available for some time, but I have not received them. I have a call into the NHB, and hope to have results soon.
4. Rack spacing: This wasn't one of your questions, but was raised by CRC and NMFS commenters. The rack spacing at both the Lower Robertson and Ashuelot sites, with seasonal fish bars installed, is slightly less than $\frac{3}{4}$ ". The NMFS and CRC commenters recommended $\frac{3}{4}$ " maximum spacing, so we should already meet their recommendation.

Many thanks, Sam Payne

ARH

From: mfischer@lowimpacthydro.org <mfischer@lowimpacthydro.org>
Sent: Wednesday, August 21, 2019 12:20 PM
To: 'Sandra Feusi Sam Payne' <bungeegull@hotmail.com>
Cc: 'Byrne, Stephen' <stephen.byrne@wsp.com>
Subject: RE: quick questions on Ashuelot application

Hi Sam – I'm just checking in to see if you've been able to find answers to the 3 questions I had below.

Thanks,
Maryalice

From: mfischer@lowimpacthydro.org <mfischer@lowimpacthydro.org>
Sent: Tuesday, August 6, 2019 5:12 PM
To: 'Sandra Feusi Sam Payne' <bungeegull@hotmail.com>
Subject: RE: quick questions on Ashuelot application

Sorry, Sam – one more question. The ROB 2011 environmental inspection required consultation with the SHPO prior to installation of the Obermeyer crest gates – do you know if that ever occurred? There is nothing on the FERC elibrary but you likely weren't required to file anything with FERC.

From: mfischer@lowimpacthydro.org <mfischer@lowimpacthydro.org>
Sent: Tuesday, August 6, 2019 4:45 PM
To: 'Sandra Feusi Sam Payne' <bungeegull@hotmail.com>
Subject: quick questions on Ashuelot application

Hi Sam,

A quick question here – for downstream passage your application says the projects use 25 cfs for passage flows, but the email trail below says 40 cfs. Can you please clarify for me? The comment period will end this coming Saturday so we hope to have a recommendation to our Executive Director sometime next week. I'll let you know if we get any comments.

Also, did you ever hear back from NH Natural Heritage about state-listed threatened or endangered species? The application says “**No other threatened or endangered species are known or suspected to be present in the project areas. We have submitted searches to the Natural Heritage Bureau of the NH DES, and are awaiting their response. Past searches have not caused concern.**”

Thanks!
Maryalice

From: Carpenter, Matthew <Matthew.Carpenter@wildlife.nh.gov>
Sent: Tuesday, April 2, 2019 9:21 AM
To: Sandra Feusi Sam Payne <bungeegull@hotmail.com>
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Hi Sam,
Sorry for the delay. Here is the fish info that you requested:

Diadromous Fish:

American Eel – Known to occur at low densities in the Ashuelot River.

American Shad – Stocked in the river. Currently the focus of restoration in the Ashuelot. The Fiske Mill lift will be monitored with video this spring.

Sea Lamprey – Known to spawn in the lower river. Expected to use fishways to access habitat upstream.

Blueback Herring – Not currently present (limited by low passage numbers at the Holyoke Dam), but could be the focus of future restoration efforts.

Atlantic Salmon – No longer under restoration or present in the watershed.

Resident Fish:

The following fish species have been captured during various fish surveys in the lower Ashuelot River.

American Eel

Common White Sucker

Longnose Dace

Smallmouth Bass

Tessellated Darter

Bluegill Sunfish

Common Sunfish (Pumpkinseed)

Redbreast Sunfish

Yellow Bullhead

Brown Trout (stocked)

Eastern Chain Pickerel

Fallfish

Yellow Perch

Let me know if you have any other questions.

Thanks,

Matt

From: Sandra Feusi Sam Payne [<mailto:bungeegull@hotmail.com>]
Sent: Sunday, March 24, 2019 2:55 AM
To: Carpenter, Matthew
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Many Thanks!

Sam

On Mar 21, 2019 3:08 PM, "Carpenter, Matthew" <Matthew.Carpenter@wildlife.nh.gov> wrote:

Hi Sam,

Yes, I can do that. I'm off until next Tuesday, but I will get back to you by the end of next week.

Matt

From: Sandra Feusi Sam Payne [<mailto:bungeegull@hotmail.com>]
Sent: Thursday, March 21, 2019 11:43 AM
To: Carpenter, Matthew
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Hi Matt,

Many thanks for reviewing our Lower Robertson and Ashuelot hydro project's current fish passage requirements for our LIHI recertification.

The LIHI application requires a list of all migratory and resident fish species in our part of the Ashuelot River (ie. the lower 5 miles or so). Could you help us develop this list, or point me to that info? Re. migratory species, we know Shad are being restocked. Are herring, alewives, lamprey or eels present? We'd also really appreciate a list of resident fish species—none of us are fishermen.

Many thanks, Sam Payne
Operations Manager
Ashuelot River Hydro

From: Carpenter, Matthew <Matthew.Carpenter@wildlife.nh.gov>
Sent: Monday, March 4, 2019 1:15 PM
To: Sandra Feusi Sam Payne <bungeegull@hotmail.com>
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Thanks Sam. Sounds like you have it covered.

Matt

From: Sandra Feusi Sam Payne [<mailto:bungeegull@hotmail.com>]
Sent: Tuesday, February 26, 2019 10:51 AM
To: Carpenter, Matthew
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Hi Matt,

Re. fish passage: passage is open at both sites (at 40 CFS minimum) from: April – June 15, and August 15 – October 15.

Re. fish bars: bars are installed from April – October 15. They seem to be working.

Many Thanks, Sam

From: Carpenter, Matthew <Matthew.Carpenter@wildlife.nh.gov>
Sent: Friday, February 22, 2019 9:43 AM
To: Sandra Feusi Sam Payne <bungeegull@hotmail.com>
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Thanks Sam,

It looks like the downstream passage was originally provided for Atlantic salmon smolts, which are no longer present in the watershed. When do you typically run the downstream passage bypass? I also noticed that you install ¾ inch bar racks to prevent fish from passing through the turbines. How has that been working? We are considering a similar approach at Fiske Mill.

Matt

From: Sandra Feusi Sam Payne [<mailto:bungeegull@hotmail.com>]
Sent: Friday, February 22, 2019 7:05 AM
To: Carpenter, Matthew
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Hi Matt,

Both sites do have downstream fish passage. The designs were FERC approved in 2001, and built then. We maintain and operate both downstream fish passages as specified. I have attached the 2001 FERC letter of design acceptance for the Ashuelot site. As mentioned in the letter, the Lower Robertson site is functionally identical.

Many Thanks, Sam

From: Carpenter, Matthew <Matthew.Carpenter@wildlife.nh.gov>
Sent: Thursday, February 21, 2019 2:57 PM
To: Sandra Feusi Sam Payne <bungeegull@hotmail.com>
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Hi Sam,

I do have one question. Do you provide downstream passage for adult and juvenile American Shad? Each year up to 750 adult shad are stocked above the project as part of an effort to restore shad populations in the Ashuelot River.

Matt

From: Sandra Feusi Sam Payne [<mailto:bungeegull@hotmail.com>]
Sent: Wednesday, February 20, 2019 10:19 PM
To: Carpenter, Matthew
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Matt,

Thanks very much. I noticed that Melissa Grader cc'd you on her email detailing US F&W's (16th Feb) response to the questions. Please let me know if there is any other information I can provide.

Many Thanks, Sam

From: Carpenter, Matthew <Matthew.Carpenter@wildlife.nh.gov>
Sent: Wednesday, February 20, 2019 3:58 PM
To: Sandra Feusi Sam Payne <bungeegull@hotmail.com>
Subject: RE: LIHI recertification questions for Ashuelot River Hydro

Hi Sam,
I will take a look and get back to you as soon as I can.
Thanks,
Matt

From: Sandra Feusi Sam Payne [<mailto:bungeegull@hotmail.com>]
Sent: Thursday, February 14, 2019 3:21 PM
To: Carpenter, Matthew
Subject: LIHI recertification questions for Ashuelot River Hydro

Dear Mr. Carpenter,

My name is Sam Payne and I'm the Operations Manager for Ashuelot River Hydro, which owns and operates two small hydroelectric projects on the Ashuelot River, near Winchester NH. The projects are: Lower Robertson (FERC P-8235) and Ashuelot (FERC P-7791).

The projects were certified by the Low Impact Hydropower Institute (LIHI) in 2009 and recertified in 2014. I am working on the various agency inputs we need for LIHI recertification this year.

I emailed Julianne Rosset of USF&W earlier today re. the threatened or endangered species at the sites, and am working with Ted Walsh of NHDES re. water quality testing needs.

We also need confirmation from NHF&G and USF&W (I have also emailed Julianne Rosset about this) that upstream and downstream fish passage and minimum flow requirements remain unchanged. Fish passage and flow requirements were thoroughly covered during the 2009 certification and the 2014 re-certification. We still own and operate both projects in conformance with the fish passage and minimum flow requirements, and are not aware of any changes to them from state or federal agencies. Finally, we have not seen any shad milling below the Ashuelot project, and do not believe that the Fiske Mill fish lift has passed significant numbers, if any. In 2014, Melissa Grader of USF&W confirmed that trigger numbers had not been passed at the Fiske Mill downstream. I have asked their office for the recent numbers.

I have attached the 2009 LIHI review and acceptance, and the 2014 LIHI re-certification. Both provide extensive details about the projects, fish passage, minimum flow, and agency input over the years. I think the 2014 re-certification document has more recent information, is better organized, and was produced by a third party. I would be happy to provide original documents if need be.

Many Thanks for your help!

Sincerely,

Sam Payne
Operations Manager
Ashuelot River Hydro
(603) 903-7663