



**Connecticut River Valley Chapter  
5607 Westminster West Road  
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*dedicated to conserving, protecting, and restoring  
North America's coldwater fisheries*

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September 2, 2022

Honorable Kimberly D. Bose Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Room 1A  
Washington, DC 20426

**Re: Comments on Great River Hydro Offer of Settlement and Revisions to Exhibit D Documents dated August 2, 2022 regarding (Wilder) P-1892-030; (Bellows Falls) P-1855-050, and (Vernon) P-1904-078.**

Dear Secretary Bose,

The Connecticut River Trout Unlimited Chapter (#450) is a nonprofit citizen group whose focus is on conservation of natural resources with particular interest in improving cold water fisheries. Our TU chapter has participated in funded fishery improvement grant projects with Great River Hydro (GRH) conducted during the past several years.

Our TU Chapter 450 has reviewed the Great River Hydro Offer of Settlement and Revisions to Exhibit D Documents dated August 2, 2022 and is pleased to learn about the positive progress in this effort. In response we submit the following comments.

### **1.14 Withdrawal Rights**

GRH indicates that, "a Party may unilaterally withdraw from this Agreement if...  
(ii) NHDES or VDEC issues a Water Quality Certification that contains fish passage conditions that are materially additive to, or materially inconsistent with, the

terms of this Agreement and the Water Quality Certification is not thereafter satisfactorily modified after administrative and judicial appeals are pursued by the Licensee.

We agree with the stance of the Connecticut River Conservancy that neither VT DEC, nor NH DES are signatories to this agreement. VT Fish and Wildlife and NH Department of Fish and Game are both sister agencies to the agencies that actually hold authority over the 401-certification process.

We do not understand how can VT DEC or NH DES be held to this part of the agreement when neither have signed on to this agreement and they are both required to conduct a public process and consider public input when the 401 certification is drafted?

## **2.5 Support for Removal of Salmon Dam**

We appreciate that the GRH licensee's agreement to support removal of the Salmon Dam, but disagrees with the language of this section, specifically that the "The Licensee... in no event shall be responsible for financing removal efforts. The installation of this dam was to limit false attraction as part of providing effective fish passage under the last license. Similarly, removal of this dam would mitigate the hydro project's impacts to the fishery, which can only occur because of the presence of the project and the diversion of flow in the river. Because the focus of fishery restoration efforts have justifiably changed from Atlantic Salmon to American eel and Sea lamprey at the Bellows Falls facility, it follows that mitigation be provided to support the restoration of those species.

Our TU chapter is open to other funding sources that would fund or partially fund removal. That said, we believe that GRH should finance removal if third-party funding does not fully finance removal or if other funding sources are not available. With the recently passed Infrastructure Investment and Jobs Act provides \$553,600,000 in incentive payments to cover up to 30% of the cost of upgrades, this is an unprecedented moment in terms of securing Federal funding directed to hydro-electric facilities to support efficiencies and upgrades for "adding or improving safe and effective fish passage, including new or upgraded turbine technology, fish ladders, fishways, and all other associated technology, equipment, or other fish passage technology to a qualified hydroelectric facility

Currently, third party funding for the removal of unused dams is primarily derived from public sources. It is unconscionable that public restoration money be required to remove this dam that is located in the project area, was installed there as a result of project impacts, and now is a needed mitigation measure for passage of protected fish species that have been impacted by the presence of the dam. There is no valid reason why Great River Hydro should not bear some or all of the cost of this mitigation effort.

### **3.1 General fish passage obligations of Licensee**

TU Chapter 450 supports the extended period in spring that the fish ladders will be operated to support the spawning needs of resident early spring spawners such as walleye and white suckers. This example acknowledges that mitigation for impacts from hydro facilities should not be limited only to migratory species.

### **3.4 Fish Passage and Protection Measures at the Vernon Project**

The GRH's timeline for implementation is too long. The relicensing process has been going on for 10 years and the licensee has long understood capital improvements would be required for improvements to fish passage. A schedule that allows a full 16 years after license issuance to upgrade fish passage means that safe and effective passage has been delayed for 26 years plus the time between now and when the new license actually issues. We note that the criteria for evaluating fish passage is that it should be safe, effective, and timely. As it now exists this proposal is neither timely nor defensible. Delays of this duration are totally unacceptable.

#### **3.4.1 Downstream Passage and Protection in Vernon**

With respect to the Vernon downstream passage, the licensee indicates that they, "shall undertake a hydraulic study or a suitable alternative, designed to inform downstream passage/design options... no later than January 1 of License Year 2; the study initiated, completed and reported on no later than December 31 of License Year 3.

Assuring safe effective and timely fish passage is a routine aspect of relicensing. After-the-fact studies and improvements are conditions subsequent that effectively remove fish passage from the public relicensing process. This hydraulic study should have been done as part of the overall licensing studies that took

place between 2013 and 2018]. Delaying it another four or five years (when we consider the length of the 401 process and timeline for issuance of license) is unreasonable and should not be permitted. We strongly argue that the hydraulic study begin immediately so that upgrades to the fish ladder can begin in the first year when the license is issued.

Great River Hydro establishes the following timeline for implementation, “The Licensee shall initiate design consultation with the Agencies no later than July 1 of License Year 3, and final design plans (sufficient for construction bid purposes) shall be completed no later than December 31 of License Year 4. Construction shall be initiated during License Year 5 and completed no later than December 31 of License Year 6.

This implies it would take yet another 18 months to develop a design and 2 more years to complete construction for downstream passage at Vernon. While we understand that there may be difficulty in finding an effective way to move American shad downstream and keep them out of the turbines, this length of time is far too excessive. We reiterate that hydraulic studies should be done now. Taking 8 more years after license issuance to establish effective downstream passage at Vernon is too long and is not in the public interest.

#### 3.4.2.1 Within Ladder Measures for Eel and Lamprey Passage for the period April 7 through July 15

The licensee indicates that they, “shall undertake a hydraulic study within the existing Vernon fish ladder (this is the same hydraulic study and engineering assessment discussed under section 3.2.3). Because there is no section 3.2.3, it is impossible to know what the applicant is referring to.

Assuring safe and effective fish passage is a routine aspect of relicensing. As such, it is important to prioritize downstream passage at Vernon given the mortality to American shad and American eel at that project. Upstream passage improvements could logically be scheduled slightly later, but according to the settlement agreement, it will take 4 years to complete the hydraulic study and 5 years to complete a PIT tag study to understand upstream passage performance of American eel and Sea lamprey within the Vernon fish ladder. Most studies done during relicensing were completed within 1 or 2 years. Four or 5 years is an excessive period to establish baseline understanding, which should have been

done during the past decade as a part of relicensing studies. After-the-fact studies and improvements are conditions subsequent that effectively remove fish passage from the public relicensing process and is inconsistent with the relicensing procedure.

#### 3.4.2.2 Within Ladder Interim Measures for Eels for the period July 16 through November 15

Study 18 American Eel Upstream Passage Assessment, completed between 2015 and 2018, already established a temporary eel ramp for passing American eel upstream. Yet, the settlement document indicates that, “eel passage facilities shall be completed by July 15 of License Year 3 and shall be fully operational no later than July 16 of License Year 3.” Given that the licensee and the agencies were able to establish a temporary upstream passage process for Study 18, why would they require 3 years to design a new temporary passage? Study 18 Supplement #2 states, “The eel ramp design was based on the Haro (2013) generic temporary eel ramp trap design modified for the site. If a generic eel ramp has already been installed for the studies, this indicates that this could be re-installed immediately and then enhanced or modified as passage numbers are assessed over the coming immediate years, instead of waiting 5 years just to begin this effort again.

#### 3.4.3 Upstream Anadromous Fish Passage

Our TU Chapter is pleased to see that the settlement agreement includes “improvements to the public viewing window and counting room.” Unfortunately there are not more details as to what those improvements include. Currently the public viewing window is outside in the elements with little to no interpretation to help the public understand fish passage or species. It is a less than welcoming attraction and would benefit with a major reconstruction to provide a comprehensive visitors center with interpretation, which would bring added benefit to the Town of Vernon. Exhibit D indicates that the licensee anticipates this effort to cost \$180,000. We therefore request that additional detailed information be provided to explain exactly what the upgrades consist of, and that there be an opportunity for the public and for the Town of Vernon to comment on this.

### **3.5 Fish Passage and Protection Measures at the Bellows Falls Project**

### 3.5.1 Downstream Passage and Protection (Bellows Falls)

The applicant states, “In License Years 3 and 4, the Licensee shall undertake a hydraulic study... to inform downstream passage... for American eel. “Immediately after that, they state that they will consult on study design in year 6 and report on the study in year 7. The Appendix B chart indicates that the hydraulic studies for eel and lamprey would occur in years 5 and 6. From the perspective of the reader, it is very difficult to follow the sequence of events planned for fish passage improvement, but regardless, all of the potential scenarios for hydraulic study at Bellows Falls are too long. TU restates our comments regarding Vernon, this hydraulic study should more properly have been done as part of the overall licensing studies that took place between 2013 and 2018. Delaying it another five to nine years (when we consider the length of the 401 process and timeline for issuance of license) with the potential for effective passage to be installed in year 10-12 is unreasonable and not in the public’s interest. TU requests that the hydraulic study begin immediately so that upgrades to the ladder can begin in the first year when the license is issued. Assuring safe and effective fish passage is a routine aspect or relicensing. After-the-fact studies and improvements are conditions subsequent that effectively remove fish passage from the public relicensing process.

### 3.5.2 Upstream American Eel and Sea Lamprey Passage

#### 3.5.2.1 Within Ladder Measures for Eel and Lamprey Passage for the period April 1 through July 15

The settlement agreement proposes a two-stage process for assessing upstream passage efficiency at Bellows Falls for American eel and Sea lamprey. TU reiterates our concern here, that the timeline of all studies and implementation processes are too long. For Bellows Falls, the settlement contemplates a PIT tag study for upstream passage in years 3 and 4 with a hydraulic study of the fish ladder in years 5 and 6. There is no reason that the PIT tag study and hydraulic study cannot occur at the same time. In fact, wouldn’t it be more efficient and economical to conduct hydraulic studies at the same time for all three projects, thereby identifying issues in the fish ladders at the outset of the process? We already have evidence of American eel and Sea lamprey passing through the ladders at these projects, the hydraulic studies can and should be done immediately.

#### 3.5.2.4 Permanent Upstream Eel Passage Measures in the Bellows Falls Bypass

## Reach

The licensee here indicates a timeline for assessment of where American eel congregate once the Salmon dam is removed. If the licensee were to properly finance the removal of this dam, that action could be scheduled by them within a reasonable timeline. If the licensee is relying on third parties with public grant funds to remove the dam, the schedule of that depends on the pace of grant acquisition, engineering designs, and construction constraints.

Given this, TU suggests that the language be altered to strike the reference to a year and simply state that, “The Licensee shall initiate consultation with the Agencies on an eel survey study plan no later than July 1 of the year the Salmon Dam is removed. The first passage season after removal of the Salmon Dam the Licensee shall undertake the upstream eel survey...” to ensure that American eel that pass up the bypass reach are quickly protected and provided with an effective upstream passage pathway.

## **3.6 Fish Passage and Protection Measures at the Wilder Project**

### 3.6.1 Downstream Passage and Protection

We reiterate that downstream passage at Vernon and Bellows Falls, this hydraulic study should more properly have been done as part of the overall licensing studies that took place between 2013 and 2018. Delaying it, in this case, 16 years after license issuance is unreasonable time to wait and not in the public’s interest. Assuring safe and effective fish passage is a routine aspect of relicensing. After-the-fact studies and improvements are conditions subsequent that effectively remove fish passage from the public relicensing process.

### 3.6.2 Upstream American Eel and Sea Lamprey Passage

#### 3.6.2.1 Within Ladder Measures for Eel and Lamprey Passage for the period April 7 through July 15

Additionally, the settlement seems to contemplate improvements to upstream passage at Wilder before completing effective downstream passage. The timeline for downstream passage assumes fully operational downstream passage in year 16, while the upstream passage would be “fully operational no later than April 7 of License Year 14.” The improvements for downstream passage should occur before upstream passage improvements and simultaneously with downstream passage improvements at Bellows Falls and Vernon.

### **3.7. Fish Passage Facilities Operations and Maintenance Plan**

The settlement indicates that the “[annual fishway Operation and Maintenance] O&M report shall be submitted to the Agencies by January 31 annually.” TU contends that this annual report should be filed with FERC as well to provide transparency for the public.

### **3.8 Fish Passage Facilities Effectiveness Testing**

Our TU chapter is pleased to see that effectiveness testing has been included as a consideration for ongoing improvements and that upstream and downstream performance standards have been established for American shad at Vernon. We note that the agencies have a “goal of 95% through-project survival for American eels” for downstream passage, but it is not clear whether this also is formally included as a performance standard as it is not explicitly stated. Additionally, there are no performance standards for upstream passage for Sea lamprey or American eel. We would prefer to see a far more comprehensive chart that establishes performance standards for all three migratory species (American shad, American eel, and Sea lamprey) for upstream and downstream passage at all three facilities clearly outlined as part of this settlement.

*In summary*, we appreciate the many hours that both Great River Hydro staff and the agency’s staff contributed to coming to agreement on fish passage. There are many positive aspects to this settlement, but important additional improvements can also be made. For example, relicensing studies have shown injury and mortality impacts to American eels and American shad as they attempt to out migrate through the turbines. As such, effective downstream passage for American eels and American shad should be the priority action in this fish passage agreement, with swift improvements to upstream passage occurring first at Vernon, followed by Bellows Falls and Wilder.

All of the hydraulic studies to assess downstream passage should be done simultaneously to create efficiencies in the process. Great River Hydro states that the “Agreement is in the public interest. It is in fact only in the public interest if fish passage is improved in a timely manner. The overall timeline for all actions is too long.

We appreciate the opportunity to comment. I can be reached at [strictytrout@vermontel.net](mailto:strictytrout@vermontel.net) or 802-869-3116.



Sincerely,

A handwritten signature in black ink that reads "David L. Deen". The signature is fluid and cursive, with a small "e-signature" icon to the left of the first few letters.

David L Deen  
President, Connecticut River Trout Unlimited Chapter #450

CC:

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