

Windham County Natural Resource Conservation District Minutes

Wednesday, April 14, 2021, 6:30 pm

Zoom Meeting

Present: Linda Corse, Meg Kluge, Pieter van Loon, Geof Dolman: board supervisors,
Cory Ross: district manager, Kathy Urffer: Connecticut River Conservancy

Connecticut River Hydro Dams Relicensing Process:

Kathy is river steward for CRC in Vermont and New Hampshire.

CRC does a variety of work to protect the Connecticut River Watershed, which includes all of its tributaries.

CRC is involved in the relicensing process for three dams on the Connecticut River.

Dams change the ecology of rivers by altering the patterns of sediment deposition and altering chemical parameters, such as dissolved oxygen.

Most hydroelectric facilities are regulated by the Federal Energy Regulatory Commission (FERC).

Licenses are issued for 30-50 years.

Wilder, Bellows Falls and Vernon dams were last re-licensed in 1979.

Process is supposed to give equal consideration to a number of factors (energy conservation, electricity generation, recreation, conservation of fish species, preservation of other aspects of water and history). Several federal laws have to be equally considered in the licensing process.

States play a role in this licensing process. Endangered Species Act has to be considered. The National Historic Preservation Act is a part as well. Also involves cultural consideration, including indigenous considerations.

Recreation is also a consideration.

These three facilities affect about 150 miles of CT river.

All three are owned by Great River Hydro, LLC.

Turners Falls dam and the Northfield Pump Facility are also involved in this re-licensing, owned by First Light.

Northfield Mountain affects up to Vernon and Hinsdale.

Great River Hydro is owned by an equity investment firm in Boston.

Facilities were previously owned by TransCanada Hydro Northeast, Inc.

These facilities are part of an investment line and are expected to turn a profit. Should that profit stay in our communities or return to support the investors?

These facilities have been hydro peaking facilities. They allow the water to accumulate throughout the day and then open the turbines in the evening when electricity usage and prices are highest. As a result, the river fluctuates about 2-3 feet every day in the impoundment.

Below the dam there is a huge flood of water released each day.

This process is hammering the banks along the river, much of which is farmland.

The relicensing process started in 2012 with identification of the various studies the companies would need to conduct to evaluate the impacts of the dams.

The process was delayed several times, one time because Vermont Yankee closed, others because of government shut-downs.

Studies were finished by 2019.

Great River Hydro had to submit a statutory application in 2019, even though the studies were not all completed yet.

Aquatic resources stakeholders group approached GRH looking for ways to have the river be healthier. GRH wants flexibility in how they operate. A number of discussions happened between May and November of 2020 resulting in an agreement about operational changes for the dams.

GRH submitted the amended proposal for dam operation recently.

Daily fluctuations in flow through the dams are dramatic changes each day.

Large storm events show up in the hydrograph, like TS Irene.

Ideal scenario for critters in the river would include more gradual rise and fall in river flow before and after storms. This is not realistic for the company and power generation.

Stakeholders proposed a change that would result in:

base operations of inflow=outflow each day.

Target WSE with 1-foot bandwidth.

Flexible Hours of operation set for key seasons. This would allow the company to generate additional power at a peak rate during times that have less impact on wildlife needs.

Ramping: Up: gradual in most cases

Down: gradual in all cases

Refill impoundment within 48 hours after flex.

Surface water level in the impoundment would be much more stable under this scenario than under current operation.

These changes would be great for critters: fresh-water mussels, dragonflies, others.

Overall, CRC thinks these changes are great and will improve wildlife habitat and reduce bank erosion and still allow the company to maintain their economic value. They indicate a 1% change in their revenue as a result of these changes.

Initial discussions between GRH and stakeholders only included aquatic habitat and did not address fish passage, recreation, erosion and cultural/historical resources.

Stakeholders were not privy to other mitigations proposed by the company in application beforehand.

Company proposed maintaining three primitive campsites and they already do that. CRC expected a lot more.

GRH proposed adding one month to fish ladder operation. Expanded from May 1st to April 1st to allow resident fish species to migrate within the river to spawn.

GRH agreed to continue to discuss additional fish passage changes with agencies.

GRH agreed to sign a programmatic agreement for managing cultural resources.

CRC and AMC worked on surveying all of the town on the river to assess the public's wishes for recreation interest from GRH. CRC wants details about the recreation plan in the license to ensure they are held accountable.

Migratory passage remains an issue in the plan – American Eel and Shad, short nose sturgeon, others.

These changes will not eliminate the erosion concerns at the top of the Wilder Impoundment because this is dictated by the upstream dam that is not currently being re-licensed.

The Northfield Mountain Pump Facility will continue to heavily impact water levels in Vernon and Hinsdale. Bank stabilization projects have not succeeded in addressing this issue.

CRC would also like to see monitoring of river changes as part of this license. These changes will have drastic impacts on the river and its tributaries. GRH should partner with UVM and UNH to set up ongoing monitoring. There are many unknowns about how the river will change.

Public input to the process is important. Public comment period is expected sometime after July, but the exact time period is unknown. CRC has an email sign up where they can notify you about the comment period. They are also willing to provide templates for comment letters to the public.

State relicensing process for VT and NH will happen after the public comment period. This will be another opportunity for input into the process.

Questions from the board:

Q: What impacts are you expecting this plan to have on the cultural and historical resources? Do you have a buy-in comment from the local native American groups?

A: A lot of this information is not public info and CRC is not necessarily the advocate for that and does not have access. CRC does work with the local Native American groups and is working to build these relationships. Companies will reach out to the federally recognized tribes instead of the local tribes. Kathy passes these issues

onto the appropriate person with the local tribe. CRC had a hydropower coffee hour on cultural issues this morning. GRH chose a respected person to do the research for identifying cultural resources related to the river. They did not follow up on the recommendations made by that individual and indicated in their application that they did not find any cultural issues.

Q: Is there anything taken into consideration to do with climate change in this process?

A: CRC requested a study to look at the effect of climate change and FERC did not require this. The company was not required to consider it in their application.

Q: Is inflation factored into the licensing process (as it is a 50-year license).

A: FERC does require them to do it a certain way, but it is based on a 2020 value.

GRH's proposal has a transportation system at Bellows Falls for moving boaters past the dam.

When the 15-mile dam was re-licensed, the company had to put ~15 million dollars into a mitigation fund that partners and towns could apply to for restoration work.

Q: Is there any money in there for invasive plant control to try to stabilize the banks?

A: this was included in CRC's recommendation to FERC. Kathy would encourage other people to ask for this as well. Water Chestnut and Hydrilla are particularly important right now.

Q: why is the time period for the fish ladder operation so limited? What does it cost them?

A: any water that is not going through the turbines is not making money.

Q: Do fish ladders help with downstream movement of fish?

A; no. The ladders in place were based on Atlantic Salmon in 1979, which are now largely extirpated. The ladders are not designed for other fish species that need them now.

Q: Are there any other specific things for us as a Conservation District that we should focus on for comment?

A: Monitoring of the stream banks for erosion issues might be a good priority for the district because we work with farmers. Both the GRH and the First Light facilities would be appropriate to comment on.

It is important for FERC to hear from communities and regional groups to express that the public is involved and paying attention.

Even short comments on specific items relevant to the district are valuable.

Conservation districts could also combine to write one letter and have other districts co-sign it.

Cory will sign up for the updates from CRC and communicate with the board about the public comment process.

The district will plan to comment on various aspects of GRH's proposal once the public comment period is opened. These comments may include invasives, farmland concerns, aquatic passage and other topics.

Q1 Financial Report:

No questions from the board.

Plant Sale:

Cory spoke with Andrea and she is very flexible with our plans for prep and sale day.

We went over the list of times we will need for sale day – folks should bring any bags and boxes they have available for packaging orders.

Meg will bring plastic tubs, pruning shears, twine, grain bags and a craft knife.

Cory will send out a Google Sheet for signing up for helping with the plant sale.

Cory will investigate getting a credit card processing unit for the day of the sale.

Cory will check with Nourse to see if they think our order will fit in his truck. Meg and Geof both volunteered to help with pick up if needed.

Cory will reach out to Gail, Jolene, Drew, and Lyn and Lois Pancake about helping with the sale.

We discussed the need for signs and a reminder email to customers about masks and social distancing.

If any attendees are unwilling to wear a mask we will ask them to remain in their vehicles and place their orders into their trunks.

Somara will have a table set up to provide advice about planting for customers.

District Manager Report:

Cory plans to begin working more aggressively on workshops as part of our Ag-CWIP agreement after sale, as in person workshops may be possible in the near future. Linda suggested that a hemp workshop should include discussion of the environmental impacts of hemp farming and ways to mitigate these impacts.

Minutes:

Meg made a motion that the minutes be approved as amended.

Motion passed.

Next Meeting:

-May 12 at 6:30 PM at Meg's place.

Future Business:

-Plant Sale Final Report