



**For the Energy and Technology Committee  
Testimony of Alicea Charamut, Executive Director  
March 2, 2023**

*Rivers Alliance was formed to fight for sound water policies at the state and federal levels, to provide education on water resources, and to advocate for any person or group striving to protect water. If you want clean, free-flowing and healthy rivers, and high-quality drinking water, Rivers Alliance is here to help.*

Thank you for the opportunity to provide testimony on the following raised bill before you today.

**HB 5628 AA ESTABLISHING A TASK FORCE TO STUDY THE STATE'S  
HYDROPOWER ASSETS – Support with modifications**

Recently, there has been a renewed interest in hydropower as carbon-free renewable energy source. We are glad that Governor Lamont, DEEP, and this committee are prioritizing renewable energy while also considering the cost to consumers. It's not an easy line to walk.

Rivers Alliance supports establishing a task force to study the state's hydropower assets. Only hydropower projects that can demonstrate superior environmental performance and a willingness to invest in measures to improve environmental performance should be considered for pricing incentives. On the other hand, there are projects that should never be considered for incentives, be taken out of service, and removed.

We read with interest the study provided by the Connecticut Small Power Producer's Association. The information about the economics of hydropower under the current pricing system is very valuable but **purchase pricing is not the only factor in evaluating hydropower.**

The issue of hydropower in Connecticut and which facilities should and could be utilized and incentivized is much more complex. The task force should be specific about the expertise needed in order to weigh pricing, environmental, ecological, regulatory, and feasibility factors.

**Clean and green?**

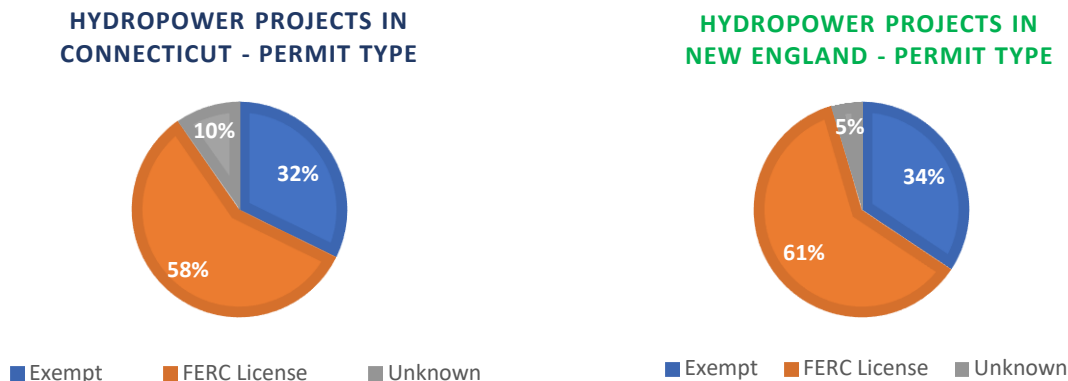
Hydropower can be devastating to river ecosystems. **The assertion that hydropower produces no pollution whatsoever is false.** Hydropower dams cause pollution by altering the temperature and chemical makeup of water. There are some facilities that have more impact than others and

mitigation measures to minimize the impact on downstream recreation and ecosystems are far from evenly regulated.

### Hydropower regulation in reality

Not all hydropower has a FERC license. Small hydropower projects, which are 10 megawatts or less, that will be built at an existing dam are eligible for an exemption from FERC licensing. Projects granted an exemption are exempt from the requirements of Part I of the Federal Power Act. Exemptions have no expiration date.

Out of all the hydropower projects in Connecticut, 58% are licensed by FERC, 32% are exempt from licensing, and 10% do not fall under FERC jurisdiction. Looking at hydropower projects in New England which is a much larger dataset, 61% are licensed by FERC, 34% are exempt from licensing, and 5% do not fall under FERC jurisdiction.<sup>1</sup>



While the majority of hydropower projects in Connecticut and New England fall under FERC jurisdiction, a good percentage are exempt from FERC licensing. What does this mean for river health? Since an exemption does not expire, there is little opportunity or teeth for stakeholders to engage with FERC and a dam owner in order to negotiate a change in operations to address documented harm to the environment and recreation. Keven Zak, founder of the Naugatuck River Revival Group, spent decades documenting serious environmental issues below Kinneytown Dam, which has an active exemption from FERC. It took a lawsuit brought by Save the Sound and the Naugatuck Valley Council of Governments to even get the dam operator's attention.

### FERC license ≠ effective environmental mitigation measures

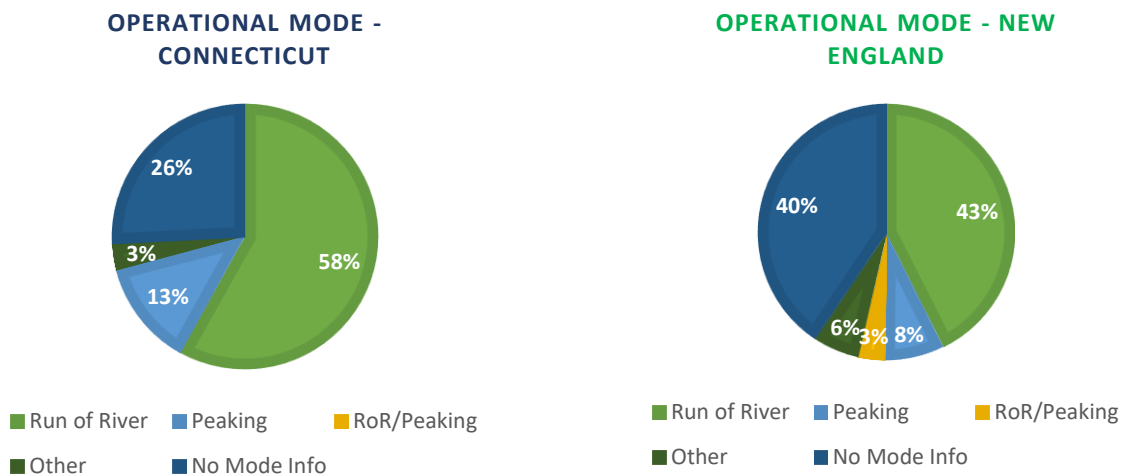
FERC jurisdiction does not automatically mean that environmental mitigation measures are in place to minimize the impact on our rivers. Environmental flow releases, effective fish passage, and

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<sup>1</sup> M.M. Johnson, S.-C. Kao, N.M. Samu, and R. Uria-Martinez, Existing Hydropower Assets, 2021. HydroSource. Oak Ridge National Laboratory, Oak Ridge, TN.

addressing temperature alteration and the decrease in dissolved oxygen concentrations are all necessary to minimize the impact that hydroelectric dams have on our rivers.

Run of river most closely mimics natural, environmental flows and minimizes downstream flow fluctuations that cause erosion and decrease aquatic biodiversity. It is a base-line for minimizing environmental impacts - yet only 58% of hydropower projects in Connecticut and 43% of projects in New England are run of river. An alarmingly large percentage of projects have no information on mode of operation. The fact that this information is not publically available indicates a lack of transparency or a disinterest in collecting critical data on hydropower or both.



Effective environmental mitigation measures are not automatically incorporated in the FERC licensing and relicensing process. Organizations like the Connecticut River Conservancy, Save the Sound, The Nature Conservancy, and Trout Unlimited have put a significant amount of resources into intervening in the FERC process. Engaging in the process is not trivial. Without legal and expert representation, it is almost impossible for the average person to take part in behalf of their rivers. Even federal and state water quality certificates don't guarantee effective environmental protections for downstream flow and aquatic habitat.

### **An example of where our current policy has failed**

There are some hydropower projects that could and should be incentivized. A good example of this was the Metropolitan District Commission's (MDC) 3 MW hydropower facility on Colebrook Dam. The facility did not make economic sense for the MDC so it has removed the turbines and is in the process of surrendering its FERC license.

Colebrook Dam is an Army Corps of Engineers flood control dam on the West Branch of the Farmington River. The flows on the West Branch are already regulated by a somewhat complicated combination of agreements and Colebrook Dam was constructed in the middle of an existing reservoir. Essentially, this is where we should be siting hydropower and offering incentives so that hydropower can be maintained and feasible.

**In summary, if the goal is ensure that hydropower remains a feasible and sustainable part of Connecticut's Clean Energy Portfolio, maintain and improve the health of our rivers, and the quality and quantity of our recreation opportunities on our waterways, we have to take all the factors into consideration. Current regulation does not guarantee river health. If we rely solely on economic factors when it comes to hydropower, we will lose many of the rivers we love. Please consider passing a task force bill with specifics on credentials and expertise in hydropower, the environment, clean energy incentives, and regulation.**

Thank you for the opportunity to weigh in on this issue and Rivers Alliance would be happy to work with the committee to provide the river health perspective on hydropower.