

Study Lauds Small Hydro Dams

By Howard Weiss-Tisman, Brattleboro Reformer Staff
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PUTNEY—The state wants to make it easier to build and upgrade small-scale hydroelectric projects.

The Agency of Natural Resources last week released a report that encourages the Legislature to fund an updated study of potential hydropower sites in Vermont and asks lawmakers to develop an updated guide to help hydro developers through the complicated permitting project.

Putney, at last year's Town Meeting, passed a resolution asking for state and federal authorities to encourage small hydro projects.

"Sacketts Brook has ample flow most of the time, but some state and federal regulations prevent us from using the water and, at this point, we are trying to clarify what to do," said Putney Energy Committee chairman Daniel Hoviss. "There are a lot of regulatory hurdles to overcome."

The report does not recommend any changes to the regulatory process, the report's principal author, Brian Fitzgerald, said.

But it does recognize that small hydro generators can contribute to Vermont's energy future.

An updated inspection of all of the potential sites along the state's waterways should be completed to identify the most viable sites for small hydroelectric development, said Fitzgerald, who is an ecologist with the ANR Dam Safety and Hydrology section.

And while state and federal permitting is needed to protect the rivers and streams, ANR staff did recognize that expanding the hydro capacity is being slowed by the complex, and costly, requirements.

"One thing we are hoping to do in the coming months and years is to work through the existing process and see if there are opportunities to scale the process down to the project themselves," Fitzgerald said. "The process is not rigid."

Last year, Vermont became the first state in New England to conduct prefeasibility assessments on small hydro projects.

There are currently 15 new small hydro projects under review.

The prefeasibility assessments give potential developers an idea of what it might take to bring a site online and Fitzgerald said the report released last week looks to increase the state's role in encouraging that process.

"We want to give people better information as they look at potential projects so they can determine if the project is feasible," Fitzgerald said. "It's a matter of pulling all the information together so they have one place to look."

The report is asking the Department of Public Service and the Public Service Board to work with ANR to develop an updated guide to help towns and individuals as they investigate drawing power from small hydroelectric projects.

There has been a renewed interest in small scale hydro, according to Fitzgerald.

The rising cost of energy, the state's looming challenge to replace the power of Hydro Quebec and Vermont Yankee, a focus on slowing global warming, and advancements in hydro technology are all driving more Vermonters to ask if it is possible to tap the waterways for energy.

Rep. David Deen, D-Westminster, who is chairman of the Committee on Fish, Wildlife and Water Resources, applauded the report and said that while small hydro will never be a very large contributor to Vermont's power output, there is potential to tap into some of the state's waterways.

"The agency respects the potential in small scale hydro development and there could be an increase in production through modernization and replacement of equipment," Deen said. "Upgrading equipment offers the largest potential increase in production and dam owners and agencies and power companies should focus on that to improve efficiency and capacity."

Deen is also river steward of the Connecticut River and is co-chairman of the Vermont Dams Task Force, which followed the publication of the ANR report.

The report recognizes that smaller projects should not have to face the same level of permitting that larger projects do, but it said that the current flow policies are scientifically based and should be followed.

Deen agreed that as small-scale hydro projects move forward, it will be important to protect habitat and ecosystems down stream.

"If dams can be redeveloped without negatively impacting life downstream, then more power to them," Deen said. "But you have to look at how the project impacts life down river, and you have to give real thought to strike that balance between environmental health and power production."

The natural resources agency told the Legislature last week that Vermont could build out up to an additional 25 megawatts of power at about 44 sites where there are existing dams.

Improving efficiency at the state's 78 existing facilities could also generate several megawatts.

The renewed focus on small-scale hydro could eventually power 25,000 homes, according to the report.

"We should be doing everything we can to re-use appropriate dam sites to generate renewable energy and reduce our carbon footprint," ANR secretary George Crombie said in a press release.