Turning Our Vast Hydro Potential Into Environmentally-Sound Electricity



Vermont once ran on hydro power. In centuries past, hundreds of small mills dotted our rivers and streams powering our way of life. Now, global warming and

our over-reliance on non-sustainable and CO₂-producing energy sources require us to reconsider small hydro power and other renewable energy technologies. It is time to reclaim this power through development of locally-owned and operated small hydro-electric projects. Many of our waterways can generate sustainable energy again without harming our environment, but your energy is needed to make it happen.

Our Opportunity

- \approx Small hydro is **a proven technology**. No new research is needed for equipment production.
- \approx Hydro is reliable because water flows 24/7.
- ≈ Small hydro would use some of our existing dams and diversion techniques called "run-ofthe-river" to cleanly harness power.
- ≈ Studies have shown that environmentally sound, small hydro can produce a substantial portion of our peak demand needs.
- ≈ Even more potential exists using low-impact damless diversion and conduit techniques.
- ≈ Small hydro is a necessary part of Vermont's Energy Independence.

Our Challenge

- ≈ Licensing and permit processes for small hydro projects (less than 5MW) are costly, complicated and time-consuming. The cost of permitting prevents many small projects from moving forward.
- ≈ Federal regulations require sign-off from multiple state offices with often contradictory goals, leading to bureaucratic gridlock.
- ≈ Vermont legislators must immediately ask the Federal government for simplified process to permit environmentally-sound, small hydro projects.

Changes Needed Now

In Washington:

- ≈ Grant state jurisdiction over small hydro projects - Alaska has this, all states should.
- ≈ Simplify regulations by FERC (Federal Energy Regulatory Commission) on small hydro.
- ≈ Allow states to permit "net-metering" activity for small hydro without federal jurisdiction.

In Montpelier:

- ≈ Simplify the Agency of Natural Resources (ANR) permitting process for small hydro by allowing data from similar projects to substantiate the permit application.
- $\approx~$ Simplify the process for attaining a 401 Water Quality Certificate on small hydro projects.

Our Task Ahead

Speak Out: At annual Town Meetings Vermont

citizens must send a clear message to our Local, State and Federal leaders that <u>now</u> is the time for action on small hydro projects.



Get Involved: The Small Hydro Referendum must get

onto Town Meeting agendas via petition drives. Go to: www.revermont.org/technology/hydro to download the full text and help get the referendum onto <u>your</u> town meeting agenda. If you would like to help with the referendum, please contact Nancy Potak at (802) 533-9206 / <u>npotak@vtlink.net</u>.

Learn/Advocate: Visit websites, read books, ask experts about small hydro power - become an advocate in your community on the potential of this and other renewable sources of energy:

www.microhydropower.net www1.eere.energy.gov/windandhydro www.serg-info.org www.revermont.org www.stopglobalwarming.org www.vpirg.org www.communityhydro.biz www.canyonhydro.com (microhydro primer)

Alternative Energy Demystified by Stan Gibilisco

An Inconvenient Truth - film & book by Al Gore

Microhydro by Scott Davis

Highly illustrated and practical . Covers principles, design site considerations, and equipment options.



Proposed Referendum

Recognizing Vermont's huge potential for generating clean and sustainable electrical energy from our natural water resources;

And due to the upcoming expirations of the HydroQuebec and Vermont Yankee contracts;

And concerned about the welldocumented effects of global warming upon our planet;

We, the undersigned voters of the Town of ______, call upon the Selectboard, Governor and our State and Federal Legislators to:



Simplify state and federal permitting to allow for more rapid development of small-scale, environmentally sound hydro-electric projects.



Vote Energy Independence for Vermont



Go With the Flow!