



**HYDROPOWER
REFORM
COALITION**

*Putting water, wildlife,
and people back in rivers.*

Testimony of Rich Bowers
On behalf of the Hydropower Reform Coalition
Before the House Technology, Energy and Communications Committee
On House Bill 1133
January 21, 2009

Chairman McCoy and members of the Committee, my name is Rich Bowers, and I am the Pacific Northwest Coordinator for the Hydropower Reform Coalition.

Founded in 1992, the Coalition is an association of more than 150 organizations representing more than one million conservationists, anglers, boaters, and homeowners that have effectively reduced the footprint of hydropower dams on rivers. We have more than fifteen years of on-the-ground transactional experience with river protection and restoration efforts at individual hydropower dams regulated by the Federal Energy Regulatory Commission (FERC), as well as a long history of developing diverse and long-lasting partnerships with industry, agencies, tribes, and nonprofit organizations. In Washington State, our members include Alpine Lakes Protection Society, American Rivers, American Whitewater, Conservation Northwest, Center for Environmental Law and Policy, Center for Justice, North Cascades Conservation Council, The Lands Council, Trout Unlimited, Washington Kayak Club, and others.

The Coalition is here to support House Bill 1133, an act relating to modifying the renewable energy and energy conservation requirements of the energy independence act. As written, this legislation would strengthen the requirement for Washington's large utilities to now "*obtain twenty percent of their electricity from new renewable resources such as solar and wind by 2025, and undertake cost-effective energy conservation.*" We support this legislation as written because our members believe that this language:

1. Follows the original intent of the constituent-based initiative (I-937) that sought to develop new renewable energy resources that will produce new and sustainable energy, jobs, industries, investment, and economy here in Washington State.
2. Draws the line at new hydropower dams that, due to marginal site availability and dramatic resource impacts, can produce only limited new energy, few sustainable jobs, negligible new technologies or investment, and that will result in

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unacceptable impacts on Washington's outstandingly beautiful natural resources, and additional strain on aquatic ecosystems that are already stressed by a changing climate.

3. Allows Washington to make the best use of the state's existing investment in infrastructure (including 93 existing hydropower projects¹ that provide approximately 80% of Washington's electricity²) by rewarding efficiency upgrades and improvements at existing sites (more power from the same water), developing hydropower at irrigation pipes and canals where that generation is incidental to existing uses and will not result in additional water diversion or withdrawal, and where suitable, at dams that currently do not generate power (including storage and flood control facilities), and to pursue new and innovative technologies.
4. Enhances many other important goals for Washington State, including creation of green power jobs, the protection and restoration of Puget Sound, and offsetting the impacts of climate change. The impacts of dams and climate change are disturbingly similar. In many areas, we expect that both will:
 - Destroy resiliency by disturbing habitats and altering the amount and timing of stream flows
 - Increase water temperature
 - Decrease water quality & quantity
 - Reduce fish migration
 - Cause species extinction

Finally, the Coalition supports House Bill 1133 because it not only provides the incentive to drive new energy, new technology and a new green economy, but also because this legislation recognizes today's analogous relationship between energy and natural resource issues, a relationship spurred by climate change. This legislation clearly recognizes that all energy development will result in environmental impacts, and limits renewable credits to those sources that will not exacerbate existing (or create additional) stress on Washington's river systems and watersheds.

A major issue in developing this legislation has been the sought after inclusion, by utilities and developers, of new hydropower projects. While this issue is not limited to Washington State, and while this will no doubt continue to be an issue as this legislation moves to the Senate, House Bill 1133 provides sufficient opportunities for the industry to generate new energy at existing dams and to develop new potentially renewable hydrokinetic projects that generate electricity from waves or directly from the flow of water in ocean currents and tides.³

¹ <http://www.ecy.wa.gov/pubs/0611023.pdf>

² <http://www.usbr.gov/power/edu/pamphlet.pdf>

³ Potentially renewable, recognizing that all energy development will cause impacts, and understanding that the impacts from hydrokinetic projects have yet to be fully identified.

While there is no firm estimate of how much hydropower can be generated from efficiency upgrades on dams in Washington State, the Federal Energy Regulatory Commission (in its April 14, 2008 FAQ on licensing hydrokinetic projects) and the Electric Power Research Institute (Assessment of Waterpower Potential and Development Needs) state that new hydrokinetic technologies, if fully developed, may potentially double the amount of hydropower production in the United States.

And the Department of Energy (1997 U.S. Hydropower Resource Assessment) reports that Washington State has 249 existing dams (over 4,000 potential MW) without current power generation, or where the total hydropower potential has not yet been fully developed..⁴

Over a century of data and experience has documented the significant adverse impacts that hydropower dams, large or small, have on river systems. Including new dam projects that would result in increased impacts to the environment and come at the expense of other new and innovative renewable technologies. Coalition members will not support modifications that would undermine or detract from the original purpose and scope of the law and degrade our water resources and harm the species that our rivers and streams support.

⁴ <http://hydropower.inel.gov/resourceassessment/pdfs/states/wa.pdf>