



Focus on Hydropower Dams & Water Quality

from Washington Department of Ecology



Hydropower dams in Washington

Most of the dams in the state were built more than 50 years ago to provide electricity and flood control. Washington residents get more electricity from dams than any other state. Currently, 56 hydroelectric projects in Washington have licenses from the Federal Energy Regulatory Commission (FERC).

In accordance with state law, owners of all projects pay an annual hydropower fee. The state uses these fees to pay for its stream gauging program; however, the fees have not generated enough revenue since 2001 to fully fund the costs for stream gauging. The fees have not been updated since 1929. In addition, the hydropower fees do not generate enough revenue to fund state staff work on re-licensing.

Stream gauging program

Ecology's stream gauging program is run cooperatively with the U.S. Geological Survey (USGS), and is a critical water management tool. Ecology pays for half the cost to install and maintain these gauges. USGS owns and operates the gauges and provides the funding for the remaining half. The gauges collect important information on stream flows at 36 gauging stations located throughout the state. This information is then used for decision-making about water supplies, water rights, drought, climate change, flooding and the setting and achieving of "instream" river flows.

Ecology's hydropower work

Every 35 to 50 years, the Federal Power Act requires that owners of hydropower projects get a new FERC license. Many of the hydropower projects were first licensed before adoption of the Clean Water Act, and are now up for re-licensing. A major part of licensing involves addressing environmental concerns not considered before. The licensing process takes a minimum of five years, and FERC now further requires that hydropower owners respond to new information throughout the life of the license, and manage the project accordingly. This approach requires oversight of license conditions, not only by FERC, but by the Washington Departments of Ecology (Ecology) and Fish & Wildlife (WDFW).

As part of the FERC license, states must certify that hydropower projects meet state water quality standards. If the state cannot certify that water quality standards will be met, FERC cannot issue a license. Each FERC license contains conditions to meet state water quality standards. Since most dams in Washington were built before these laws existed, meeting these requirements can be difficult. Licensing efforts require an increased workload by Ecology staff in order to develop conditions that protect water quality. Then, throughout the life of the license, agency staff continue to oversee water quality conditions that have become part of the license.



Summary: Why a hydropower fee update is needed

The state has traditionally dedicated hydropower fees to fund its share of the cooperative stream gauging program, and the fees have not been increased since 1929. In the meantime, costs associated with maintaining the 36 existing stream gauges have continued to increase and since 2001 have exceeded the total hydropower fee revenue collected, requiring Ecology to seek one-time appropriations to cover the additional annual costs. Further, hydropower licensing projects have created an increased workload for agency staff working on FERC issues, and that workload is currently under-funded. Having increased staff dedicated to FERC licensing issues would allow the state to provide hydropower projects with better service and ensure that water quality standards are met. Increased hydropower fees would adequately fund the stream gauging program and would support additional staff working on FERC projects.

For more information

If you need further information, contact Department of Ecology's Joe Stohr at 360-407-7015 or e-mail jsto461@ecy.wa.gov.

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