The State of the Columbia River Basin

FISCAL YEAR 2010 ANNUAL REPORT

To Congress and Citizens
of the Pacific Northwest
October 1, 2009 – September 30, 2010

Northwest Power and Conservation Council

Submitted to the

Committee on Energy and Natural Resources
United States Senate

Committee on Energy and Commerce
United States House of Representatives

and

Committee on Natural Resources
United States House of Representatives

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The Northwest Power and Conservation Council was established pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Public Law 96-501) by the states of Idaho, Montana, Oregon, and Washington. The Act authorized the Council to serve as a comprehensive planning agency for energy policy and fish and wildlife policy in the Columbia River Basin and to inform the public about energy and fish and wildlife issues and involve the public in decision-making.

This annual report has been developed pursuant to Section 4(h)(12)(A) of the Northwest Power Act. The Council's bylaws, which include its organizational structure, practices, and procedures, are available to the public at the Council's website as Document 2003-19.

Northwest Power and Conservation Council

February 2011

To Congress and the Citizens of the Pacific Northwest:

This document is the annual report of the Northwest Power and Conservation Council to Congress as required by the Northwest Power Act, the federal law that authorized the states of Idaho, Montana, Oregon, and Washington to create the Council. The report provides an overview of the Council's planning activities regarding electricity in the Northwest and fish and wildlife in the Columbia River Basin in Fiscal Year 2010, as well as information about salmon and steelhead returns in calendar year 2010. The report also includes information about the Council's budget and administration, and expenditures of the Bonneville Power Administration to implement the Council's Columbia River Basin Fish and Wildlife Program. Financial information was provided by Bonneville in response to requests from the Council and was not independently verified by the Council or its staff.

In Fiscal Year 2010, the Council completed a major revision of the Northwest Power Plan. The new power plan challenges the Northwest to meet most of the new demand for electricity over the next 20 years with energy efficiency, a bold prospect but one that is well within reach and will assure that the Northwest power supply remains efficient, clean, reliable, and a model of regional collaboration and environmental quality for the rest of the nation.

At the same time, the Council began work on improving the effectiveness of the Columbia River Basin Fish and Wildlife Program through an expanded, more focused and efficient approach to monitoring and evaluating projects that implement the program. This task responds to commitments in the program, which the Council revised last year. The program is the nation's largest regional effort to mitigate the impacts of hydroelectric dams on fish and wildlife. As it has throughout its history, in 2010 the Council also continued to encourage, and receive, broad public participation in its planning activities.

On behalf of the Council, I am pleased to submit this annual report.

Sincerely,

Bruce Measure, Chair

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The State of the Columbia River Basin in 2010

Viewed from the perspective of 2010, the energy future of the Pacific Northwest is increasingly renewable, efficient, and carbon-free, and the number of salmon and steelhead returning to the Columbia River Basin over the last three years gives reason to be optimistic about the future of the region's iconic signature fish.

In February, the Northwest Power and Conservation Council approved an ambitious revision of its 20-year power plan for the region that will serve as a roadmap to meet 85 percent or more of the new demand for electricity through investments in improved energy efficiency. The plan foresees meeting the remaining new demand with renewable energy, primarily wind power, plus a limited number of new power plants that burn a fossil fuel -- most likely natural gas because of its efficiency and low emissions compared to coal. In fact, the plan foresees no new coal-fired plants in the Northwest and reduced reliance on the region's existing coal-fired plants if all of the energy efficiency is acquired.

The 5,900 average megawatts of efficiency at the heart of the Sixth Northwest Power Plan would add to the region's impressive energy-efficiency accomplishments to date -- more than 4,000 average megawatts since 1981, when the Council adopted its first power plan. To give some perspective to the size of this potential resource, 9,900 average megawatts is the approximate present-day electricity use of the entire state of Washington.

Energy efficiency is the top-priority resource in the Northwest Power Act of 1980, the federal law that authorized the states of Idaho, Montana, Oregon, and Washington to create the Council. The region's energy-efficiency improvements in 2008 alone set an annual record: 235 average megawatts. In 2009, the total was 217 average megawatts. Expressed as energy rather than improved efficiency, that is enough power saved each year to meet the annual needs of more than 145,000 Northwest homes. The region's impressive, long-term efficiency achievements, which now total more than 4,200 average megawatts over the last 30 years, plus the efficiency targets for the next 20 years in the Council's Sixth Northwest Power Plan (approved in 2010), caught the attention of the American Council for an Energy-Efficient Economy, which named the Council one of its Champions of Energy Efficiency for 2010.

According to the Sixth Power Plan, investments in energy-conserving equipment and products will cost less than half that of electricity from new power plants,

saving consumers millions of dollars. Additionally, investments in energy efficiency will reduce greenhouse gas emissions from the region's power supply and by 2030 create as many as 47,000 new jobs in the energy-services industry. This is because investment in energy efficiency creates jobs, both through direct installation of efficiency measures and indirectly over time through lower energy bills. The Council's staff estimates that, on average, the annual investment in energy efficiency envisioned in the power plan will create about 3,500 new jobs per year. With sustained investment in conservation over the next 20 years, the region can expect an additional net increase of 43,500 jobs due to the ongoing increased savings in energy bills.

The Sixth Power Plan -- the sixth in the Council's nearly 30-year history -- is timely in that the Northwest electricity system faces huge uncertainties about the future direction and form of climate-change policy, natural gas and coal prices, salmon-recovery actions, economic growth, and integration of rapidly growing amounts of intermittent wind power -- much of it mandated by state laws requiring investments in renewable energy. The populations of the Northwest is expected to grow from 12.7 million (2007) to 16.7 million by 2030. Electricity use – before accounting for new energy efficiency – is expected to grow by about 7,000 average megawatts between 2009 and 2030, or about 335 average megawatts –1.4 percent – per

Left: Adult fish ladder at Rocky Reach Dam (Wenatchee, Washington)

Below: Astoria bridge over the Columbia River near the mouth of the Pacific Ocean (Astoria, Oregon)

year. Residential- and commercial-sector electricity use account for much of the growth in demand.

Importantly, the Sixth Plan assesses the risks and costs associated with carbon emissions from the regional power supply. According to the plan, three things must happen in order to meet existing regional and state carbon-reduction targets for the year 2030: 1) acquire 5,900 average megawatts of energy efficiency, which is key to reducing carbon emissions; 2) meet renewable-energy portfolio standards adopted in three of the four Northwest states, which will displace power plants that burn fossil fuels; and 3) reduce the future use of power plants that burn coal by half compared to present-day use. As well, hydropower generation must be preserved as much as possible within the limits of legal requirements to protect fish and wildlife. Failure to achieve the efficiency improvements in the plan will increase both the cost and risk of the power system.

In other key areas of energy policy, the plan recognizes the value of using the interconnected transmission grid to better manage the flow and storage of electricity and enhance the flexibility of the system to back up wind power and protect fish and wildlife. The plan also recognizes the value of the regional high-voltage transmission infrastructure to provide access to new renewable energy, particularly wind power, and integrate it into the power system.

In the plan, the Council acknowledges that it will be necessary to build new power plants in some areas to provide flexibility to integrate the growing amount of wind power and to provide reliable electricity service as demand grows. Thus, while legally the plan guides only the Bonneville Power Administration, the plan provides guidance to all of the region's electric utilities on the types of resources that should be considered and their priority of development.

Combined with investments in renewable energy required by law in Montana, Washington, and Oregon, the new efficiency envisioned in the power plan for the next 20 years holds the potential for delaying investments in new generating plants – which cost more than efficiency. This will buy time for the Northwest until the direction and form of future environmental legislation becomes clearer and availability of alternative low-carbon energy sources has matured in both technology and cost.

The new power plan, which the Council approved in February 2010, followed by precisely one year Council approval of the 2009 Columbia River Basin Fish and Wildlife Program. The Power Act considers the power plan and fish and wildlife program two parts of the same planning document and directs the Council to revise the plan and program at least every five years, beginning with the fish and wildlife program. In this way, hydropower system operations the Council recommends in the program are incorporated in the power plan.

In the revised program, the Council turned its focus from planning to implementation and performance, and in 2010 the Council began to carry through on commitments made in the program. For example, the program emphasized a more focused monitoring and evaluation framework to gather information about the projects that implement the program and then use it to make better decisions.

To this end, in 2010 the Council worked in collaboration with fish and wildlife managers, Bonneville, and others to clarify and improve program implementation. The starting point is subbasin planning. There are 57 subbasin plans in the program, one for each of the major tributaries and reaches of the Columbia River. The program is implemented through the subbasin plans, which identify limiting factors affecting fish and wildlife survival. These limiting factors are addressed through projects funded through the program.

To guide and keep track of program implementation, the Council is working to develop multi-year action plans for each subbasin plan. At the same time, the Council is working with fish and wildlife managers, tribes, Bonneville, and others to develop a basinwide monitoring and evaluation plan. Monitoring and evaluation of the projects provides data to assess

progress toward improving the limiting factors, and therefore assess the success of the program. To date, data have been collected through monitoring for the purpose of evaluation and assessment of projects, but the Council believes better coordination will improve project and program performance.

In response to policy direction in the 2009 Program, in 2010 the Council developed a draft Columbia basinwide Monitoring, Evaluation, Research, and Reporting (MERR) Plan. Following a public-comment period, the Council devised a schedule of reviewing, revising, and incorporating the plan into the program over the next five years – through the next revision of the program – beginning with the most important policy issues this year and in 2011. The Council envisions the two planning efforts working hand in hand – multiyear action plans guiding project implementation, and the monitoring and evaluation plan guiding the assessment of projects and informing future decisions about new and existing projects.

Meanwhile, in 2010 the Council and Bonneville began a review of all research, monitoring, and evaluation (RM&E), artificial production, and basinwide projects in the program. A goal of the review in these categories is to highlight issues common to similar projects such as relevancy, duplication, coordination, scope, and consistency with the broad basinwide objectives and provisions in the program and thus improve the program's accountability and efficiency. The draft basinwide monitoring and evaluation plan is helping to inform the review of research, monitoring, evaluation, and artificial-production projects.

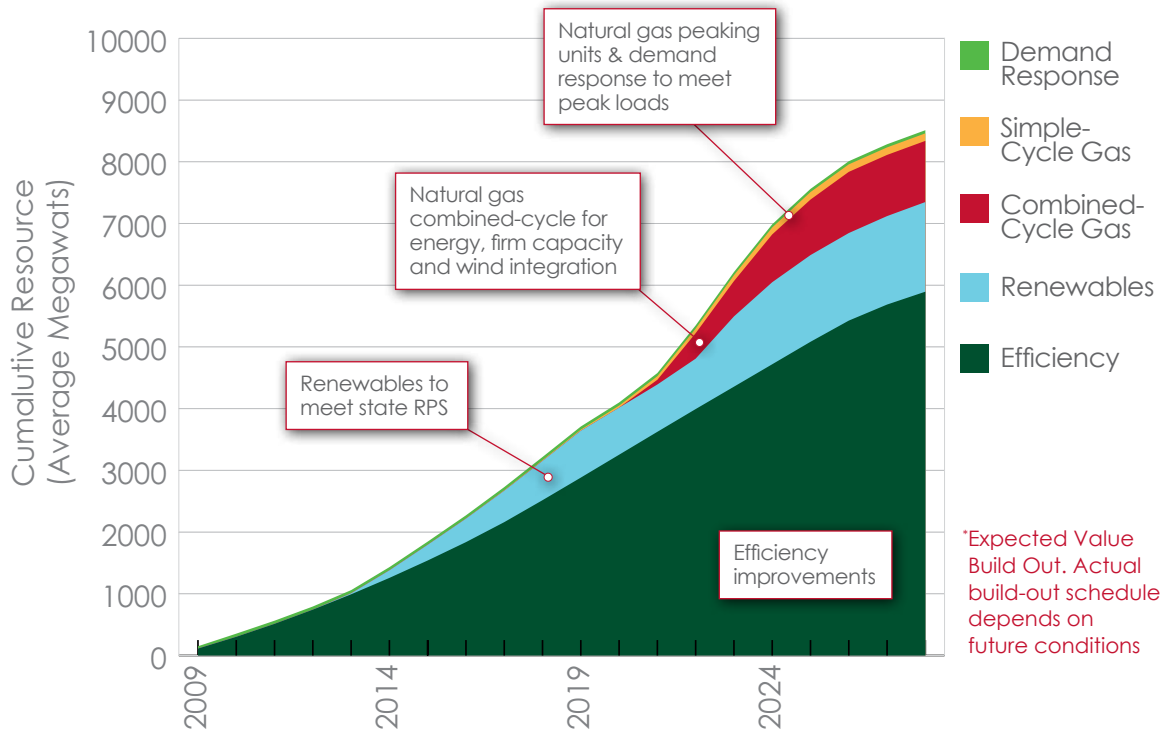
Turning to other activities in 2010, the Council continued its work with the federal Department of Energy, appliance manufacturers, and other interested parties to improve energy-efficiency standards for consumer products. A new standard for water heaters, which went into effect this year, will have a dramatic effect in the Northwest, saving about 200 average megawatts over the 20-year horizon of the Sixth Power Plan, or enough energy for about 134,000 Northwest homes.

The Council also addressed a potential threat to the hydropower system, our region's primary source of electricity, from invasive zebra and quagga mussels by asking its advisory panel of economists to study the effects and costs of an infestation at Columbia and Snake River dams. The sobering report has both good news and bad news. The bad news is that the mussels take hold quickly and grow rapidly, and the cost of clean-up and control could range from tens of millions to hundreds of millions of dollars per year in a worst-case scenario. The good news is that mussels use calcium in the water to form their shells, and calcium levels in the lower Columbia River are low enough that mussels might not thrive there. According to the report, the worst case is that an infestation begins in the upper Snake River in southeastern Idaho, an area with calcium concentrations that would support mussels, and spreads downstream into the Columbia. The best defense, according to the report, is public education and vigilant inspections of watercraft being transported into the Northwest from areas of known infestation.

Finally, there is good news about the state of salmon and steelhead returns to the Columbia River Basin. More than 1.9 million salmon and steelhead were counted crossing Bonneville Dam in 2010, the first dam inland from the Pacific Ocean. All species but coho returned in numbers above the run sizes of the last 10 years. The sockeye run was the largest since record-keeping began at Bonneville Dam in 1938, and the spring Chinook run was the third-highest on record.

Energy Overview

Sixth Plan Resource Portfolio*



*Expected Value Build Out. Actual build-out schedule depends on future conditions

Sixth Northwest Power Plan boosts energy efficiency, renewable energy

In February 2010 the Council adopted the Sixth Northwest Power Plan, the sixth iteration of the plan developed by the Council and revised at least every five years consistent with requirements in the Northwest Power Act. The Sixth Plan addresses future risks, uncertainties, and growth in demand for electricity with strategies and an action plan that minimize the expected cost of the regional power system over the 20-year planning period, 2010-2029, and ensure that the power supply remains affordable and reliable.

According to the plan, demand for electricity will grow by about 7,000 average megawatts during that time period, and about 85 percent of that amount -- 5,900 average megawatts -- can be met with cost-effective energy efficiency. The plan's efficiency target for the first five years, 1,200 average megawatts, is roughly equal to the power use of Seattle. Over time, the energy-efficiency target in the plan would be the most aggressive regional target in the nation. The remaining new power would come from renewable resources, particularly wind power, and new generating plants that burn natural gas.

Importantly, the plan assesses the risks and costs associated with climate-change policies. According to the plan, three things must happen in order to meet existing regional and state carbon-reduction targets for the year 2030: 1) acquire all of the energy efficiency in the plan; 2) meet renewable-energy portfolio standards adopted in three of the four Northwest states; and 3) reduce the future use of existing coal-fired power plants by half compared to present-day use. As well, hydropower generation must be preserved as much as possible within the limits of legal requirements to protect fish and wildlife. The Sixth Plan is posted on the Council's website, www.nwcouncil.org.

In July, the Northwest Resource Information Center petitioned the U.S. Ninth Circuit Court of Appeals to review the power plan, raising issues of "due consideration" for fish and wildlife and the "methodology for quantifying environmental costs and benefits" as that concept might relate to fish and wildlife cost considerations in the power plan. The court scheduled briefings and arguments for the fall of 2010.

Energy efficiency achievement tops 200 average megawatts in 2009

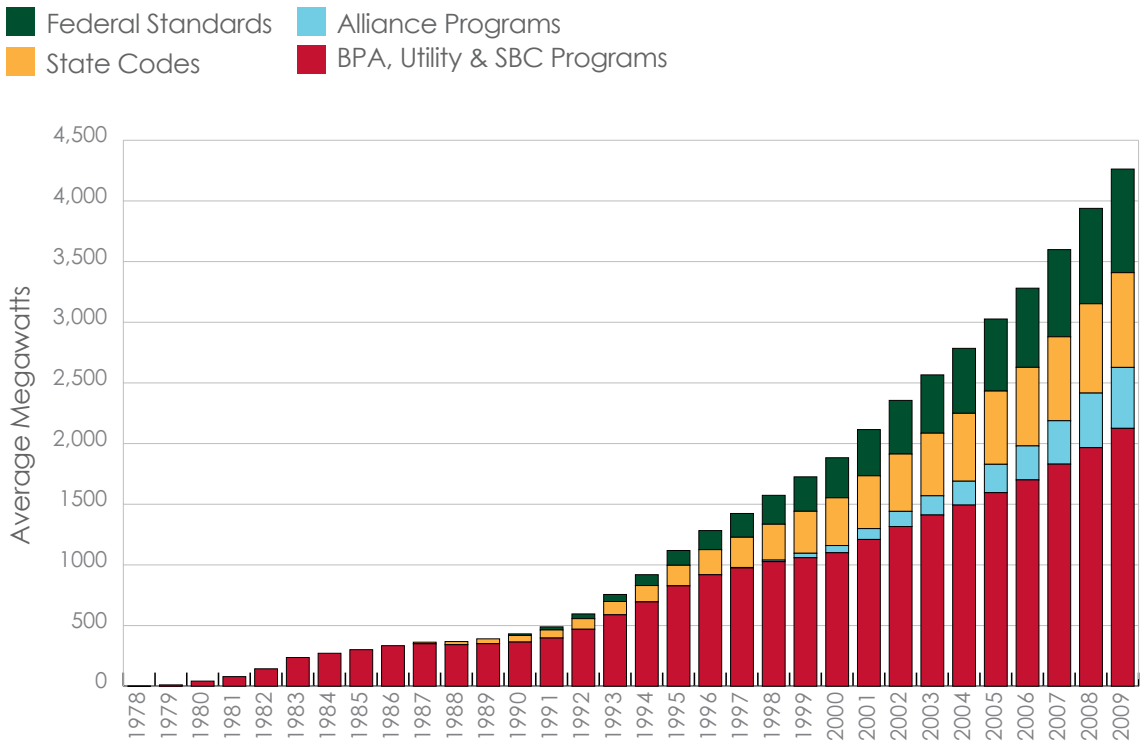
Improved efficiency reduced demand for electricity in the Northwest in 2009 by an amount equal to the power use of about 145,000 Northwest homes. The 2009 efficiency improvements totaled 217 average megawatts, following on a record annual accomplishment in 2008 of 235 average-megawatts.

Each year, the Regional Technical Forum, an advisory committee to the Council, reports on the previous year's efficiency accomplishments based on reporting by the region's utilities, Bonneville, and the Northwest Energy Efficiency Alliance. The Alliance is a non-profit organization funded by Northwest utilities, the Bonneville Power Administration and the Energy Trust of Oregon. NEEA works to accelerate the market adoption of energy-efficient products, technologies and practices in homes, businesses, and industries.

According to the Forum, since 2005 the region has improved energy-use efficiency by 938 average megawatts. This is more than 30 percent above the five-year target of 700 average megawatts for this period in the Council's Fifth Northwest Power Plan (2004). The 2009 total brings the region's energy-efficiency accomplishments since 1978, when Bonneville began its efficiency programs, to 4,258 average megawatts. Expressed as electricity, that is four times the average annual present-day power use of Seattle. Put another way, it is equal to the present-day power use of all of Idaho plus western Montana.

Reports from individual utilities for 2009 are posted on the Forum website, www.nwcouncil.org/rtf/.

Northwest Energy Efficiency Achievements, 1978-2009



ACEE honors the Sixth Power Plan for commitment to energy efficiency

The American Council for an Energy-Efficient Economy (ACEEE) named the Council one of its Champions of Energy Efficiency in 2010 for the Sixth Power Plan, which ACEEE called one of the nation's best energy-efficiency programs. The plan was developed in 2009 and adopted by the Council in early 2010.

The awards recognize leadership and accomplishment in the energy-efficiency field. Winners are selected based on demonstrated excellence in program implementation; research and development; energy policy; or private-sector initiatives. According to an ACEEE press release, the Council was recognized for its *nation-leading power planning efforts that have already resulted in 4,000 average megawatts of energy savings and that will, over the next 20 years, provide 85 percent of the Northwest's needs for new electric resources.*

The three award winners for 2010 -- the others were Wal Mart and a Washington, DC, attorney for his work on energy efficiency -- were nominated by their peers and selected for the awards by a committee of ACEEE's Board of Directors from more than 40 nominations. Selection criteria included each nominee's impact, innovation, and leadership in the energy-efficiency field.

Northwest Energy Efficiency Task Force recommends actions to boost savings

In June, the Northwest Energy Efficiency Taskforce met for the final time after two years of work, issuing a set of action items to increase energy savings in the region and deliver energy more efficiently. The 30-member taskforce comprised of energy experts from utilities, businesses, and academic institutions addressed the future of energy efficiency in six areas: 1) Data/research needs; 2) research and development of new technologies; 3) utility-funded initiatives to acquire energy efficiency; 4) marketing and public awareness; 5) education and workforce recruitment for energy-efficiency jobs; and 6) energy efficiency policy options. The taskforce had three co-chairs: Steve Wright, Administrator of the Bonneville Power Administration; Pat Reiten, President of Pacific Power; and Tom Karier, a Washington member and former chair of the Northwest Power and Conservation Council.

Using six technical workgroups comprising more than 300 industry experts, the taskforce developed the action items to increase energy savings in the region and deliver it more efficiently. Here is a summary of the recommended actions:

- Enhance the region's ability to collect and analyze energy efficiency data
- Implement a regional plan to test emerging energy efficiency technologies
- Create a way for the region's energy efficiency community to share information and best practices
- Conduct market research on how changing consumers' behavior can increase energy efficiency
- Increase regional coordination of energy-efficiency training, educational programs, and skill standards
- Collaborate on development of the smart grid
- Create new tools to bring about efficiency measures in utility distribution systems
- Improve the design and delivery of existing programs and develop new, regionally coordinated programs

The Northwest Energy Efficiency Taskforce disbanded because the actions will be implemented by a number of regional entities. The intent of the taskforce was not to create another ongoing organization, but to draft an action blueprint to increase the region's acquisition of cost-effective efficiency and identify the entities to carry the work forward.

Regional Technical Forum management, funding will be reviewed

The Regional Technical Forum is an advisory committee established in 1999 to develop standards to verify and evaluate energy-efficiency savings. Members are appointed by the Council and include individuals experienced in energy-efficiency program planning, implementation and evaluation. The Forum also is responsible for assessing actions that qualify for the Bonneville Power Administration's conservation and renewable resources rate discount. Bonneville customers receive the discount when they implement effective energy-efficiency measures.

In light of the Forum's role in collecting and analyzing energy efficiency data, the Northwest Energy Efficiency Taskforce (see above) commissioned a review. The review of the Forum found that while there was wide recognition among Northwest utilities that the Forum has provided value to the region, there also were concerns, particularly regarding its rapid growth compared to its management and funding and concerns about the visibility of the Forum operations to its funding utilities and others. Specific concerns included the objectivity of the Forum members, composition of the membership, how the Forum prioritizes its work, how to manage additional demands placed on the Forum, the adequacy of funding and staffing, information management systems, and transparency of procedures.

Above: Libby Dam on The Kootenai River (Libby, Montana)

In response, at its last meeting (in June 2010) the Taskforce established a committee to address the recommendations in the review, which was conducted by a consulting firm, and make recommendations to the Council. That report is anticipated in the fall of 2010.

Resources are adequate; forecasting technique will be refined

Every year since 2005, the Council's Resource Adequacy Forum has assessed the adequacy of the Northwest power supply three and five years into the future in order to provide an early warning should resource development fall short. In 2009, the Forum's assessment indicated that by 2015 the power supply might not be able to adequately provide summer peaking capacity.

The Forum added, however, that the 2009 assessment was made by counting existing resources only and went on to say that if expected resource development were added to the assessment, the power supply would remain adequate. The 2009 result triggered a series of actions that included a re-assessment of the data and methods used to assess resource adequacy. The first phase, which includes a review of the modeling used to analyze the power supply, should be completed in the fall of 2010. A second phase will follow, which will include an assessment of conditions that contribute to power system adequacy or inadequacy such as transmission bottlenecks, integrating variable resources such as wind power into the power supply, developing a temperature-correlated wind data set, and reconsidering what constitutes an adequate power supply.

Short-term demand forecast shows modest growth

The Council's Power Planning Division regularly monitors regional electricity loads, power sales, and employment data in order to update its computer models of the regional power system and the assumptions that are included in the Northwest Power Plan. A review of the 2009 hourly regional loads showed some interesting trends, including:

- The economic recovery was slower than previously forecasted;
- Regional electricity annual load declined significantly in 2009, but winter and summer peaks grew significantly due to weather impacts. In 2009, annual energy in the region declined by about 730 average megawatts while the regional peak grew by about 1,000 megawatts in the summer and 1,350 megawatts in the winter.
- The first three months of calendar year 2010 show a decline in commercial- and residential-

sector electricity sales, mostly due to warm winter temperatures. The average temperature was about 21 percent above the 30-year normal temperature. While the electricity demand from residential and commercial sectors declined by about 1,150 average megawatts, industrial sales actually grew by about 220 average megawatts, most noticeably in Washington and Idaho.

The Council staff also projected the power outlook for 2010-2015. During those six years, with normal weather conditions loads (not including direct-service industries) are expected to grow by about 450 average megawatts and peaks are expected to grow by about 1,000 megawatts in the summer and 1,100 in the winter. These forecasts account for energy efficiency improvements envisioned in the Sixth Northwest Power Plan (see above). Otherwise, the increases would be significantly higher.

Transmission development responds to renewable-energy requirements

Eleven major high-voltage transmission projects were being planned in 2010 to either serve load in the Northwest and Intermountain West or pass through the areas to distant load centers. There are two major drivers for these projects: load service and, perhaps more importantly, state requirements to increase the supply of renewable resources in Northwest states and California. Transmission projects to help meet state renewable-portfolio standards are planned both by utilities for their own purposes and by merchant transmission developers.

California continues to work on important details of its aggressive renewable energy standard (33 percent by 2020), such as allowable locations for generating plants — for example, how much renewable energy must be located in the state and how much can be imported from other states. This has caused considerable uncertainty about the future of some transmission projects. Some planned projects are encountering siting difficulties, such as the Bonneville Power Administration's planned new line through southwest Washington.

Ironically, the major impediment to construction of new transmission lines, given that the development is driven by requests for transmission service or anticipation of expanding markets for new renewable power, may be finding customers to purchase the power that would be transmitted by the projects. State laws are driving renewable resource development, but the amount of new power being developed to meet those requirements may create a glut in the wholesale market. The Council is studying the potential effects of generating "null power" — power generated to meet state-law requirements — and will issue a report late in Fiscal Year 2010.

New water heater standards boost efficiency

A new federal energy-efficiency standard adopted in 2010 has the potential to dramatically boost the number of efficient water heaters and, therefore, reduce electricity use by those appliances across the region and the nation. The Council participated in developing the standard.

Even though the standard does not become effective until 2015, manufacturers will begin building and selling the more-efficient water heaters in anticipation of the new standard, and that will yield savings almost immediately, according to an analysis by the Council staff. The Council anticipates that the attainable savings over just the next five years amount to 70 average megawatts, or enough power for 47,000 Northwest homes That is more than three times the amount of savings estimated from water heaters in the Council's Sixth Power Plan for that period. The Council issued the Sixth Plan before the new standard went into effect.

The standards apply to gas and electric water heaters beginning in 2015. Annual sales of new water heaters in the Northwest total between 200,000 and 230,000. The new standard will not result in additional costs to electric utilities. Over the 20-year period of the Sixth Power Plan, the Council estimates that the attainable electricity savings from the new standard amount to about 200 average megawatts, or enough power for 134,000 Northwest homes.

Fish & Wildlife Overview

Research, Monitoring and Evaluation, and Artificial Production under review

In June 2010, the Council and the Bonneville Power Administration began a review of all research, monitoring, and evaluation (RM&E), artificial production, and basinwide projects in the Council's Columbia River Basin Fish and Wildlife Program. The review is scheduled to be completed in February 2011 with project-funding recommendations by the Council to Bonneville, following reviews of the projects by the Independent Scientific Review Panel (ISRP).

More than 190 projects are included in the current review, encompassing the largest percentage of program projects in terms of both funding and diversity. Funding for hatcheries and hatchery-related activities alone accounts for approximately 25 percent of program expenditures. The Council seeks to improve the effectiveness of program-funded hatcheries and reduce their negative effects on wild populations. This work will be informed by ongoing reviews of hatchery operations and effectiveness such as Hatchery and Genetic Management Plans (HGMPs) and the Hatchery Science Review Group's (HSRG) 2009 report on all Columbia River Basin artificial production programs. While the Council has not yet considered the HSRG report for possible adoption into the program, the Council supports the general principles and scientific analysis of the HSRG report to the extent it is consistent with the program. In the current project review, the Council wants to learn whether projects meet these principles or contain adequate alternative strategies for achieving them.

The Council chose to initiate categorical reviews like this one because they will enable the Council, ISRP, and Bonneville to review simultaneously all similar projects (such as fish tagging projects or lamprey projects) funded or proposed for funding through the Program. The advantage of such a broad review is that it can highlight issues common to similar projects such as relevancy, duplication, coordination, scope, and consistency with the broad basinwide objectives and provisions in the Fish and Wildlife Program. The Council expects to complete the review in early 2011.

Council develops draft monitoring, evaluation, research and reporting plan

The Council's 2009 Columbia River Basin Fish and Wildlife Program focused on project performance and committed to developing a monitoring and evaluation

framework to improve reporting of program progress and to inform Council decisions. In response, in 2010 the Council developed a draft Monitoring, Evaluation, Research, and Reporting (MERR) Plan.

The Council is responsible for adopting and overseeing implementation of the program. In order to assure the region that the program is implemented in a cost-effective and efficient manner, the Council needs to: 1) assess its progress toward meeting its responsibilities under the Power Act; and, 2) report on program progress. The draft Monitoring, Evaluation, Research, and Reporting (MERR) Plan consists of three parts:

1. A strategic plan that provides broad policy guidance to assist in allocating resources during implementation of research, monitoring and evaluation, and reporting actions.
2. An implementation framework that provides direction for focusing and conducting research, monitoring, evaluation, and reporting.
3. Implementation strategies that provide specific guidance on what and how this work will be conducted for anadromous fish, resident fish, wildlife, and habitat (these strategies will be developed collaboratively with the region's experts and managers and are to be appended to the MERR Plan).

The Council released the draft MERR Plan for public comment in the spring of 2010 and also requested input from the Independent Scientific Advisory Board and Independent Scientific Review Panel. Comments were received from 21 entities, including the two scientific advisory panels. In general, the comments were supportive and included technical, editorial, and policy recommendations to improve the draft plan. In response, the Council approved a phased approach to revising the plan that will occur in three distinct periods over the next five years: 1) short-term policy changes that will help the MERR Plan inform the Council's decisions during the 2010/2011 categorical review of research, monitoring, evaluation, and artificial production (RM&E/AP) projects; 2) policy changes that can be addressed in the interim between the RM&E/AP projects review and the beginning of the next amendment of the program (the Council amends the program every five years; the next amendment must be completed by 2014); and 3) policy changes that will be addressed during the next program amendment.

Multi-year action plans will guide fish and wildlife program implementation

The 2009 Fish and Wildlife Program calls for the development of multi-year action plans to implement the fish and wildlife program similar to the plans that implement the 2008 Biological Opinion and the Columbia Basin Fish Accords. In 2010 the Council began organizing the effort to estimate multiyear implementation budgets.

The objective is to develop long-term (10-year) plans for each subbasin. The plans would include actions recommended to the Council during the program-amendment process that culminated in the 2009 Program. The program describes the elements of actions plans, such as 1) ongoing and new proposed actions; 2) expected benefits; 3) sequence of work; 4) priority of work; 5) monitoring and evaluation as appropriate; and 6) estimated budgets.

The action plans will provide for long-term program planning in describing a road map for work to be implemented in subbasins and in developing fiscal estimates for what funding would be necessary to complete that work. In general, action plans will represent the best estimate of future work that should be done and could be done within a subbasin. Action plans will provide transparency in long-term planning and assist in keeping expectations for program investment consistent with available funds. There is no current timeline for developing the action plans, which the Council envisions as an ongoing effort.

Fish and Wildlife Program costs totaled $239.5 million in 2010

The Council reports annually to the Northwest governors on Bonneville's fish and wildlife expenditures. Financial information for these reports is provided by Bonneville in response to requests from the Council staff and is not independently verified by the Council or its staff.

These expenditures occur in three broad areas: 1) those related to the Council's direct program (capital plus expense); 2) those related to forgone revenue and power purchases attributable to fish operations at Columbia and Snake river dams; and 3) reimbursements to federal agencies for expenditures related to Columbia River Basin fish and wildlife.

The Council's reports always are for the prior fiscal year because the current-year expenditures have not been calculated at the time the report is prepared. In Fiscal Year 2011, the Council will report on Bonneville's expenditures in Fiscal Year 2010, which totaled $802.3 million. The total included:

- Direct program expenditures ($199.5 million expense)
- Reimbursements to the federal Treasury for Corps of Engineers and Bureau of Reclamation investments in fish passage and fish production, including direct funding of operations and maintenance expenses of federal fish hatcheries ($69.7 million)
- Interest, amortization, and depreciation (these are called "fixed expenses") on capital investments in facilities such as hatcheries and fish-passage facilities at dams ($123.5 million)
- Forgone hydropower revenue from sales of surplus power that results from dam operations that benefit fish but reduce hydropower generation ($99.5 million), and
- Power purchases during periods when dam operations to protect migrating fish, such as spilling water over dams in the spring or storing it behind dams in winter months in anticipation of required spring spills, reduce hydropower generation ($310.1 million)[1].

The $802.3 million total does not include obligations to new capital investments in 2009 totaling $98.7 million (of this amount, $41.1 million was for program-related projects). The total also does not reflect a credit of $123.1 million from the federal Treasury related to fish and wildlife expenditures in 2009. Effectively, with the credit electricity ratepayers of Bonneville-customer utilities paid $679.2 million of the total.

In Fiscal Year 2010, Bonneville's direct spending on the Council's program ($199.5 million, not including reimbursable expenses, interest payments, and expenses for amortization and depreciation) accounted for 24.8 percent of the total expenditures Bonneville attributed to fish and wildlife ($802.3 million). These costs accounted for 30.5 percent of Bonneville's total 2010 power expenditures of $2.63 billion. The direct program ($199.5 million) accounted for 7.5 percent of the total power expenditures. Looking ahead, Bonneville's electricity rate analysts estimated the preference rate, the rate Bonneville charges its utility customers, for 2010 and 2011 with and without the fish and wildlife expenditures. The difference is about one-third, or about $10 per megawatt-hour. That is, $10 of the approximately $27-per-megawatt-hour preference rate can be attributed to fish and wildlife costs, according to Bonneville. The effect on the rate Bonneville charges its industrial customers is about $7 per megawatt-hour (the industrial rate is $34 per megawatt-hour). Bonneville also estimated that Residential Exchange Program benefits, primarily to the residential and small-farm customers of investor-owned utilities, will be $75 million per year lower in 2010 and 2011 than they would be without fish and wildlife costs.

[1]The Council's program and the biological opinions on Federal Columbia River Power System operations issued by NOAA Fisheries and the U.S. Fish and Wildlife Service specify hydropower dam operations for fish that also affect power generation. Compliance with these legal requirements, and others, limits the amount of revenue that would be possible from an unrestricted operation of the hydropower system. For reporting purposes, on an annual basis Bonneville calculates the value of both power purchases and forgone revenues attributable to fish operations and reports them as part of its expenditures to mitigate the impacts to fish and wildlife from operation of the hydropower system. Financial information was provided by Bonneville in response to requests from the Council and was not independently verified by the Council or its staff.

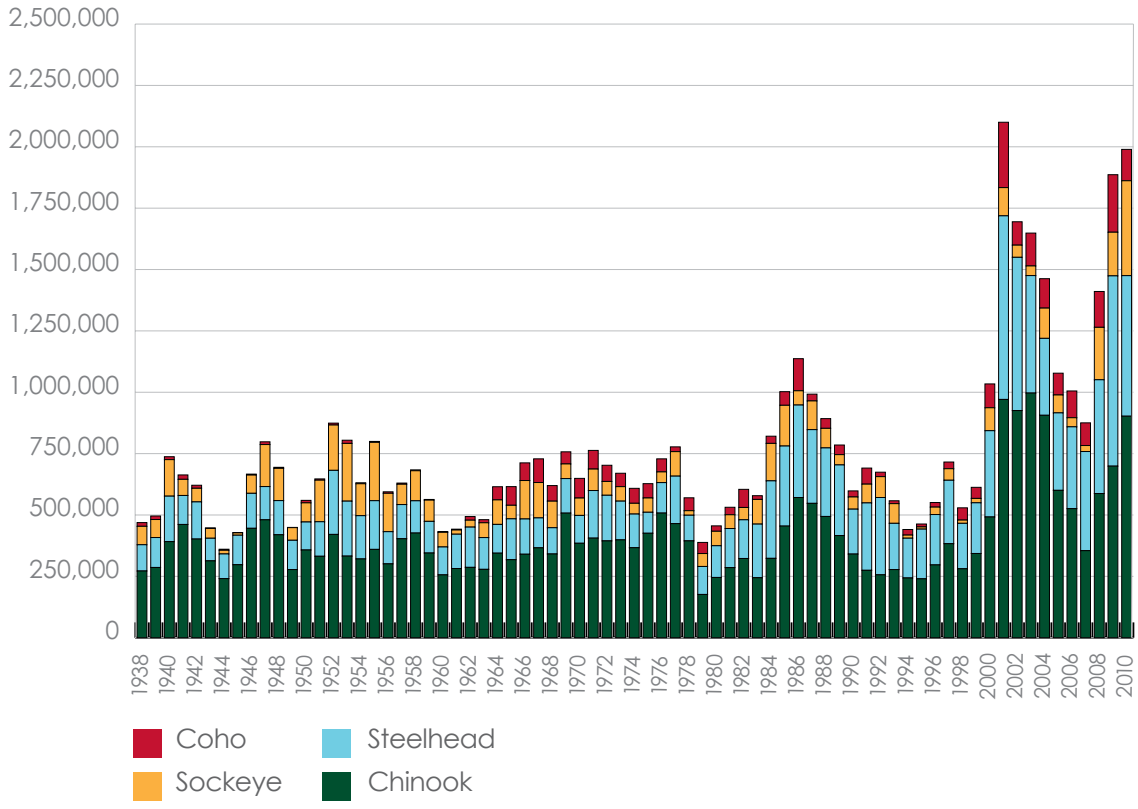
Salmon and steelhead returns were robust in 2010

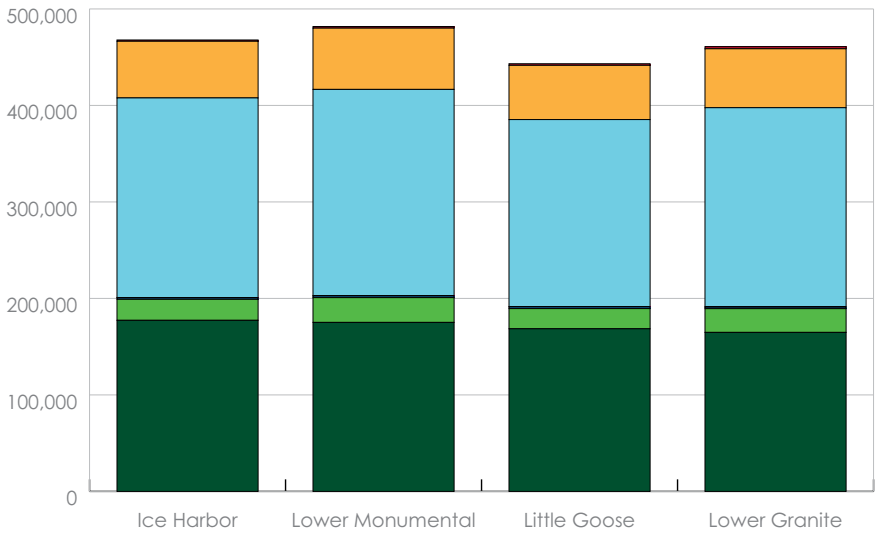
Nearly 2 million salmon and steelhead were counted passing Bonneville Dam on the Columbia River in 2010. Bonneville, 140 miles inland, is the first dam on the Columbia where fish can be counted, and so does not include fish returning to tributaries downriver such as the Willamette. Statistics are compiled by the Fish

Passage Center (www.fpc.org) for spring, summer, and fall Chinook; coho, sockeye, and steelhead crossing the mainstem Columbia and Snake River dams. At Bonneville in 2010, all runs but coho were above the run sizes of the last 10 years.

The big salmon news in 2010, as in 2009, was the sockeye count. In 2010, a total of 386,525 were counted crossing Bonneville Dam. This is four times the ten-year average and more than double the impressive 2009 return of 177,823 fish. In 2009 and again in 2010, the Snake River component of the sockeye run, an endangered species, was robust, as well, compared to historical counts. The counts at Lower Granite Dam on the Snake River, the last dam the fish cross on their way to spawn in the Stanley Basin of central Idaho, had not been seen since the 1950s: 1,219 fish in 2009 and 2,201 fish in 2010 (the 10-year average is 242 fish). While sockeye runs always are highly variable, the counts in recent years show a vast improvement. From 1975 through 2007, adult sockeye counts at Lower Granite Dam never were above 531 fish (in 1976), and in 1990 the count was zero. But since 2008 (909 fish), the numbers have been steadily increasing.

Salmon and Steelhead Passing Bonneville Dam, 1938-2010





Fish Counted at Snake River Mainstem Dams Below Hells Canyon, 2010

Report helps raise public awareness about invasive freshwater mussels

Dime-sized freshwater mussels pose a multimillion-dollar threat to dams, irrigation systems, and native fish species if they establish colonies in the Columbia River Basin, a panel of economists concluded in a report to the Council in 2010. While the mussels have not infested the Columbia River Basin yet, it may be just a matter of time. The best deterrent is a combination of watercraft inspections, public information about the potential threat, and continued scientific research to better understand zebra and quagga mussels, according to the paper by the Independent Economic Advisory Board (IEAB). The paper is posted on the Council's website.

In its report, the IEAB assesses, with the help of scientific experts, likely scenarios for an infestation in the Northwest. In the worst-case scenario envisioned by the IEAB, a mussel infestation in the Snake River, where calcium levels in the water are conducive to mussel growth, potential costs of an infestation include equipment-cleaning and mussel control, costs of redundant equipment such as fish-guidance screens, hydropower losses, and the costs of reduced survival of juvenile fish and other valuable species. Fish hatcheries also could be infested, increasing water treatment and cleaning costs, and hatchery operations might be modified to avoid introducing mussels to other water bodies. In total, costs could be in the hundreds of millions of dollars per year, according to the report.

The Council is interested in the potential biological and economic impacts of an infestation because of the potential damage to hydropower dams, which supply about half of the region's electricity, and impacts to fish, wildlife, and related ecosystems.

Bitterroot and Blackfoot subbasin plans proposed for fish and wildlife program

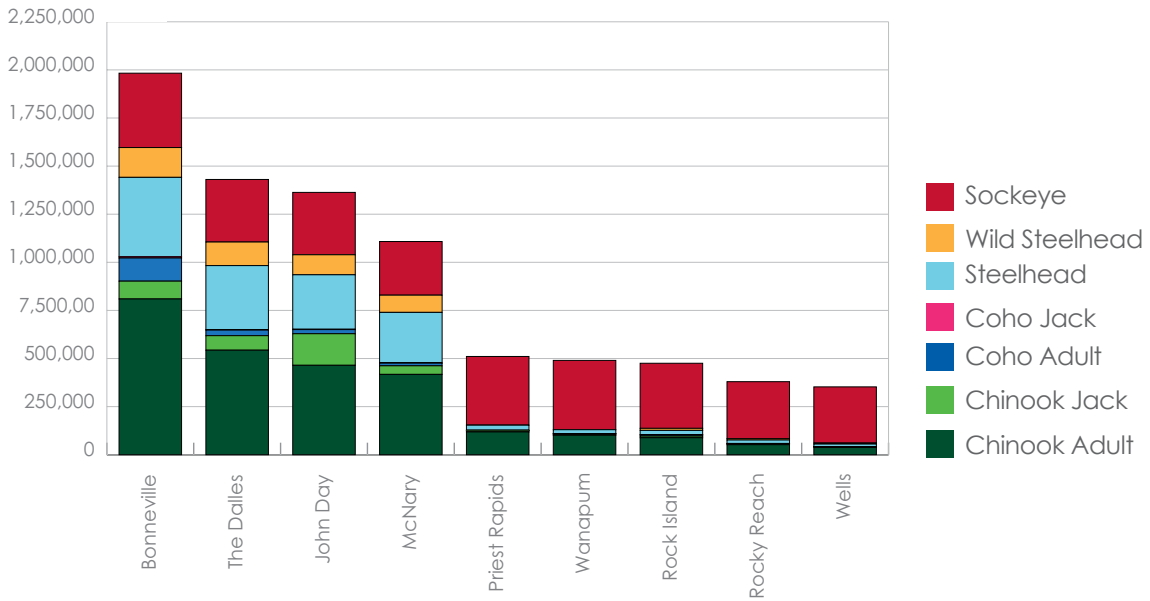
In September 2009, the Council received draft subbasin plans for two Montana rivers within the Columbia River Basin, the Bitterroot and Blackfoot. The plans were submitted by the Montana Water Trust (Bitterroot) and Trout Unlimited (Blackfoot). Subbasin plans provide the foundation of the Council's fish and wildlife program; projects that implement the program respond to needs identified in the subbasin plans. The program has 57 subbasin plans, which were approved by the Council in 2004 and 2005. Since then, the Council has supported the development of subbasin plans in areas that did not have them but where hydropower dam construction and operation affected fish and wildlife populations.

Following a public-comment period on the draft plans and reviews of the plans by the Council's Independent Scientific Review Panel, the proponents worked to update the plans for further consideration by the Council. The Blackfoot plan remains under development; the Council adopted the Bitterroot plan into the program in September 2010.

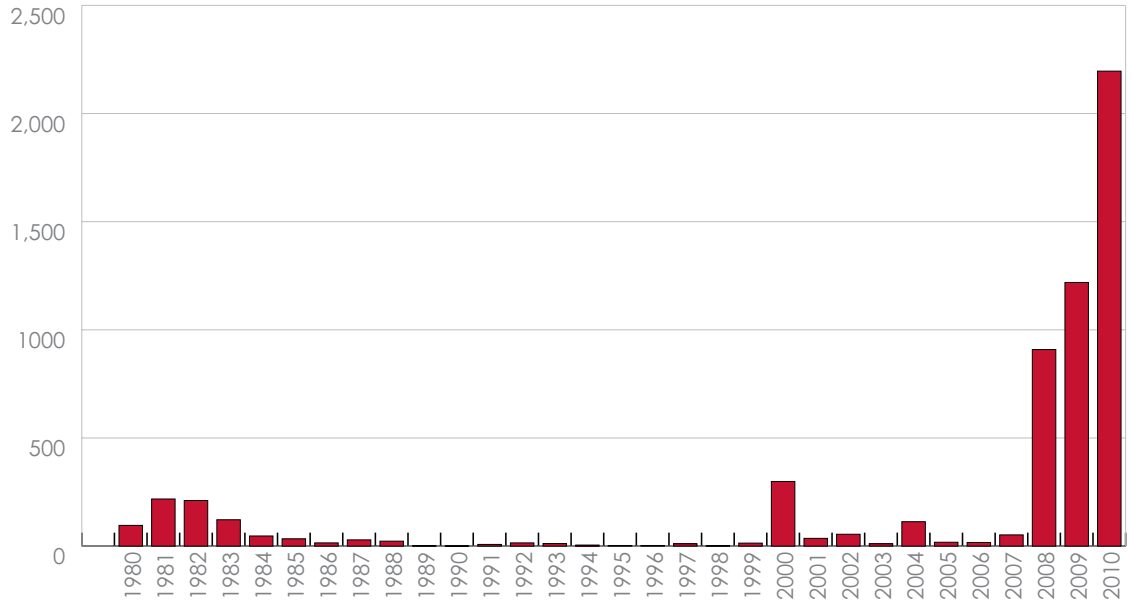
Wildlife Crediting Forum works to resolve crediting of habitat acquisitions

In the 2009 Fish and Wildlife Program, the Council called for the initiation of a Wildlife Mitigation Crediting Forum to: 1) recommend a commonly accepted ledger of habitat units acquired to mitigate losses caused by the hydropower system; 2) recommend to the Council ways to resolve issues about accounting for habitat units; and 3) develop a common database for tracking, assigning, and recording habitat units. A habitat unit is the amount of habitat required to

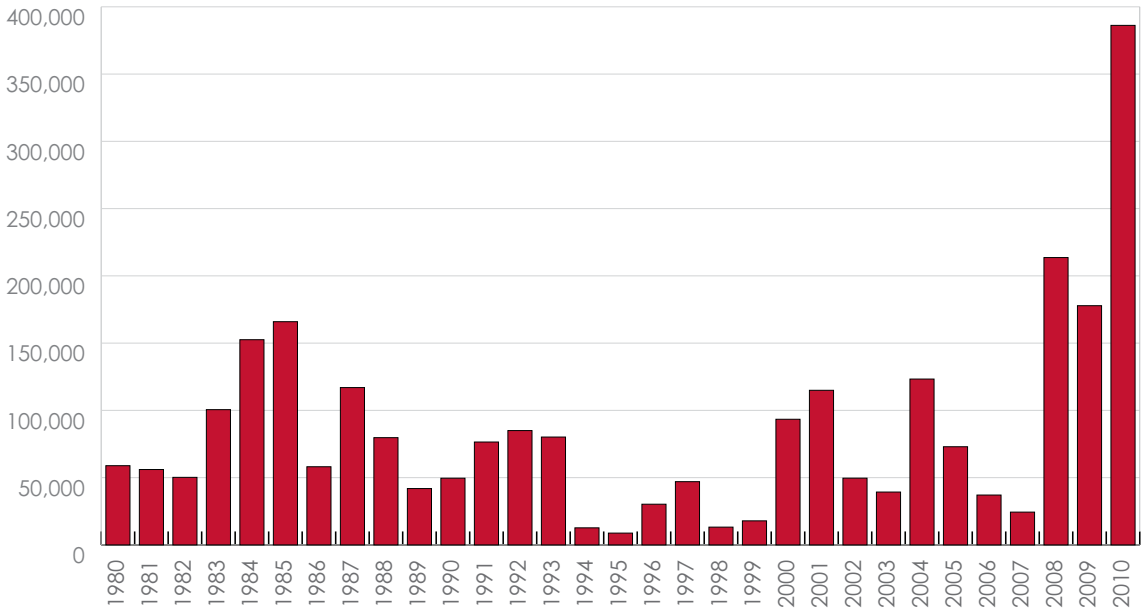
Fish Counted at Columbia River Mainstem Dams, 2010



Sockeye Counted at Lower Granite Dam 1980-2010



Sockeye Counted at Bonneville Dam, 1980-2010



Dam Location	Habitat Units Lost	Habitat Units Acquired
Albeni Falls	28,658	6,170
Anderson Ranch	9,619	1,063
Big Cliff	413	0
Black Canyon	2,170	57
Bonneville OR side	6,159	590
Bonneville WA side	6,159	2,225
Chief Joseph	8,833	4,801
Cougar	11,124	511
Detroit	11,298	0
Dexter	6,648	181
Foster	3,544	0
Grand Coulee	111,785	116,373
Green Peter	16,432	0
Hills Creek	19,489	1,070
John Day OR side	18,280	23,895
John Day WA side	18,280	12,995
Lookout Point	25,454	0
Lower Snake	26,775	26,494
McNary OR side	4,710	8,499
McNary WA side	18,834	34,897
Minidoka	10,503	4,910
Palisades	37,070	15,385
The Dalles OR side	1,165	0
The Dalles WA side	1,165	329
Grand Total	404,567	260,445

sustain one individual of a species and varies in size among species.

In addition, the Council committed to work with Bonneville and the region's fish and wildlife managers to develop a comprehensive agreement on the proper crediting method for construction and inundation losses or strategies that will allow parties to reach long-term settlement agreements. The Council will consider adopting the comprehensive agreement into the program.

The Wildlife Crediting Forum began meeting in January 2010 and, in its initial meetings, identified key objectives, issues, priorities, and schedules for future meetings and also formed two subgroups to address key issues affecting the accuracy and acceptability of the wildlife-crediting ledger. By the summer of 2010, the forum had met five times and appeared to have reached agreement that the preferred course of future action is to develop a framework for negotiated wildlife mitigation settlement agreements. It is important to note that the discussions have occurred among technical representatives and not policy-level representatives of the agencies and tribes involved. The forum is continuing to meet and will not make final recommendations without policy-level agreement.

Through Fiscal Year 2010, the number of wildlife habitat units lost as the result of dam construction and operation and the number of habitat units acquired as mitigation for the losses had been tabulated by Bonneville as shown in the table at left. The Wildlife Crediting Forum is discussing whether mitigation should be based on habitat units or whether another measurement or format would be better.

Above:
Yakama tribal member getting genetic and tagging information for adult salmon at Lyle Falls.
(Klickitat River, Washington)

Right:
Salmon migrating upstream in the Bonneville Dam fish ladder.

ISRP Fiscal Year 2010 retrospective report

The Northwest Power Act directs the Council's Independent Scientific Review Panel (ISRP) to report annually on the results of prior-year fish and wildlife expenditures.

The Council's 2009 Fish and Wildlife Program directs that this retrospective review focus on measurable benefits to fish and wildlife made through projects funded by Bonneville, reviewed by the ISRP, and implemented through the program. The program also directs the ISRP to include in its review a summary of major basinwide programmatic issues identified during project reviews.

The ISRP is working on a retrospective report on Fiscal Year 2010 activities, which will include an assessment of the results of research, monitoring and evaluation, and artificial production projects that are being reviewed this year. The retrospective report, which will not be completed until 2011, also will include:

- A review of the extent that Ad Hoc Supplementation Work Group recommendations, Hatchery Scientific Review Group findings, and the anticipated NOAA consultation on artificial production programs are reflected in artificial production project proposals
- A review of how anadromous salmon research, monitoring, and evaluation projects address biological opinion and Council program monitoring needs
- A program-level review of the results of estuary restoration and research projects in the context of key points identified during the 2009 Estuary Science-Policy Exchange and the 2007 Science-Policy Exchange
- A review of the results of fish-tagging projects in the context of key points identified in the tagging report prepared by the ISRP and the Independent Scientific Advisory Board
- A focused review of a small subset of research or hatchery projects' results.

Public Affairs Overview

In 2010, the Public Affairs Division accelerated and expanded the Council's presence in electronic media, updating and expanding the amount of content on the Council's website, www.nwcouncil.org., and creating a Council presence in social media.

The Division posted six new short videos on energy issues on the website, along with video of presentations at Council meetings, and also began an aggressive outreach through social media with homepages on Twitter (www.twitter.com/nwcouncil) and Facebook (www.facebook.com/nwcouncil), and video postings on YouTube (www.youtube.com/nwcouncil). Also new in 2010 is a weekly blog that appears on the Council's website (www.nwcouncil.org/blog).

Meanwhile, the Division edited and compiled the Sixth Power Plan and posted it on the Council's website for public access. The Council issued a press release when the Council approved the plan, and worked with Council members to schedule meetings with news reporters and editorial boards to discuss the plan. The Council also published a five-page brochure about the plan for public distribution and worked with the Power Planning Division to produce a PowerPoint presentation for use by Council members.

Another brochure produced in 2010 celebrates 25 years of accomplishments in acquiring energy efficiency in the Northwest. The Division produced the Council's annual reports to Congress and the Northwest governors regarding Council activities and Bonneville's spending to implement the fish and wildlife program, respectively, and also issued updated versions of several of its popular publications including the electricity generation brochure, the "pocket guide" of regional energy-system statistics, the "Field Guide" brochure about the fish and wildlife program, and the "Briefing Book" of Northwest and Council-specific energy and fish-and-wildlife information. The Council issued its regular publications, the Council Quarterly newsletter and the monthly Spotlight, which focuses on key issues addressed by the Council at its meetings.

The Council also continued its government-affairs outreach with periodic trips to Washington, D.C., to visit members of the Northwest delegation and the annual tour for Congressional staff during the August recess. In 2010, the Congressional staff trip focused on fish, wildlife, and energy issues in the lower Columbia River Basin and the estuary.

Canadian Relations

The Columbia River and several of its major tributaries begin in Canada and flow across the international border. Consistent with direction in the Northwest Power Act to treat the entire Columbia River as one system for planning purposes, the Council maintains regular contact with planning entities in British Columbia. The Columbia Basin Trust, a Crown corporation of the province, is the Council's closest counterpart agency in the Canadian portion of the Columbia River Basin. Since 1996, Council members and staff have met at least annually with the Trust. In 2000, the two agencies formalized their relationship and designated the vice-chairs as official liaisons. The Trust and Council exchange visits once or twice a year to discuss Columbia River issues of mutual interest.

The Council and Trust are collaborating on a website to share information about the Columbia River system in Canada and the United States. The International Columbia River Basin Center of Information portal has information about the Columbia River, including water uses, water resources, history, and water and energy issues and policies. The center is hosted on the website of the Northwest Environmental Data Network. The Trust and Council also are working on other projects, including revision of a whole-basin map and a conference on international transboundary fish, wildlife, and water-management issues.

Columbia River Treaty

In the Sixth Power Plan, the Council states that it will work with Bonneville and others to examine the effects of possible changes to the Columbia River Treaty between the United States and Canada. The treaty has no expiration date. It will continue indefinitely, unless the U.S. and/or Canada requests termination, which is allowed anytime after September 2024, 60 years after its ratification, given at least 10 years' advance notice. These dates fall within the study horizon of the power plan. Modifications of the treaty, if there were any, could affect both power and fish and wildlife. Modifications or revisions would be negotiated between the U.S. State Department and Canada's Department of Foreign Affairs and approved by both countries. In the power plan, the Council commits to proactively address the future of the treaty within the limits of its power-planning responsibilities in the Northwest Power Act.

The U.S. Entity under the treaty, assisted by the staff of Bonneville and the Corps of Engineers representing the United States, and B.C. Hydro (corporately, the Canadian entity), have begun a review process called the 2014/2024 Columbia River Treaty Review. In April 2009, Bonneville issued a report describing technical studies that will provide fundamental information about post-2024 conditions, both with and without the current treaty, from the limited perspective of power and flood control as required by the treaty. These initial studies are not designed to establish future operating strategies, alternatives to the treaty, or government policies, but simply to begin the learning process.

The results are presented in a joint report issued in August 2010 that: 1) describes the methodologies and assumptions employed to complete the studies; 2) describes the risks, issues, and limitations encountered; and 3) discusses results, including findings for each of the three studies.

The Council and the Columbia Basin Trust plan to participate in public information forums to educate interested stakeholders on the report and the treaty. This included a symposium that was conducted in Corvallis, Oregon, in November 2010 by the Universities Consortium on Columbia Basin Governance. The Consortium includes the University of British Columbia, the University of Idaho, the University of Montana, Oregon State University, and the University of Washington.

Selected news articles that mention the Council

Articles on the following pages show the range of news coverage of the Council in print and electronic media in Fiscal Year 2010.

February 11, 2010

Energy panels says efficiency is key

Megawatts | The council says the Northwest needs better conservation, not more power plants, for the future

By Matthew Preusch
The Oregonian

The Northwest should meet most of its electricity needs over the next two decades through extensive energy conservation efforts, and it's going to take more than just changing light bulbs.

That's the conclusion of a regional power blueprint the Northwest Power and Conservation Council unanimously approved Wednesday at council headquarters in downtown Portland. It focuses on the benefits of efficiency over building new power plants.

"For customers, it's a good thing that it's very clearly saying that the direction the region should go in terms of power supply is first and foremost energy efficiency," said Bob Jenks, director of the Citizens' Utility Board of Oregon.

The plan estimates about 85 percent of Oregon, Washington, Idaho and Montana's new power demand over the next 20 years – about 5,000 megawatts – could be met through conservation, with the rest coming from renewable power sources such as wind, as well as natural gas power plants.

The council says finding additional power through efficiency will be far cheaper than developing new power generation, whether from renewable resources such as wind or traditional fossil fuel power plants.

"That's good for the climate and it's good for pocket books." Jenks said.

Significantly, the council says the region does not need to build any new coal-fired plants.

But while efficiency is cost effective, it's not free. The council estimates spending would need to step up from a quarter of a billion to $1 billion a year by 2018 to accomplish its efficiency goal. Those expenditures would show up as part of customers' electricity bills.

That and the ambitious scope of the plan led to some pushback from the region's electric utilities.

"That money is going to come from ratepayers, and that puts upward pressure on rates," said Michael Early, executive director of Industrial Customers of Northwest Utilities. "And that's not something utilities want to do in this economic environment," when demand for power is not growing.

Council members praised the plan Wednesday for taking into account a future that includes strict regulation on carbon dioxide emissions from coal and traditional power sources.

"Because carbon penalties loom in one form or another and uncertainty about those penalties abounds, the region can see the day when carbon emissions must be reduced," Melinda Eden, one of the two council members from Oregon, said following the vote.

The plan's estimated 5,900 megawatts of conservation – the rough equivalent of the power-producing capacity of 10 coal plants like Portland General Electric's Boardman facility – would come through things such as homeowners increasing insulation in their homes and businesses refitting their building with power-saving lights, as well as more complex improvements to the grid that distributes power around the region.

Utilities will take the plane into account when setting their own strategies for meeting the future demand of their customers. More directly, council policy guides the Bonneville Power Administration, the federal agency that sells electricity from the region's dams.

The council and Bonneville are charged with balancing power needs with protecting imperiled salmon, and critics of the power agency the council's analysis shows the regions can do away with four of its 31 dams to help fish without jeopardizing its energy future.

N.W. power plan: Wind, gas, efficiency

Energy proposal meets demand for 20 years without adding coal

By William McCall Associated Press Writer

Portland – Regional energy planners say improved efficiency, conservation, wind power and gas will help the Pacific Northwest meet electricity demand over the next 20 years without adding an extra lump of coal.

The Northwest Power and Conservation Council unanimously adopted a regional energy plan Wednesday that avoids any new coal-fired plants for Oregon, Washington, Idaho and Montana through 2010.

Instead, the council says that region can save 5,900 average megawatts of electricity over the next two decade – enough power for about five cities the size of Seattle – by investing in energy-efficient equipment, buildings and products.

"It sets a clear path for the region," said Melinda Eden, one of the Oregon member of the four-state council and chairmen of its power committee.

The council revises its 20-year plan every five years to guide the Bonneville Power Administration on managing and developing the energy supply for the region while balancing fish and wildlife conservation programs.

Utilities also use the plan as a reference for deciding how to manage their services and resources while meeting regional goals.

The plan said that 85 percent of the new demand for electricity during the next 20 years can be met through efficiency and conservation, while additional wind power development and natural gas plants can make up the rest.

In addition to reducing greenhouse gas emissions by about 17 million tons per year by 2030, the council estimates that energy efficiency investments outlined in the plan could create as many as 47,000 new jobs in the Northwest.

"Whether it's to reduce carbon dioxide or create more jobs and reduce costs, the greatest source of opportunities is conservation," said Michael Carrier, natural resource policy director for Oregon Gov. Ted Kulongoski.

Tom Karier, a Washington state council member, said that conservation, combined with the existing hydropower system and new wind power, will help the Northwest Maintain "one of the cleanest power systems in the country."

The plan was welcomed by a number of environmental and industry groups. "It's a significant step toward a coal-free region," said Cesia Kearns, an Oregon spokeswoman from the Sierra Club.

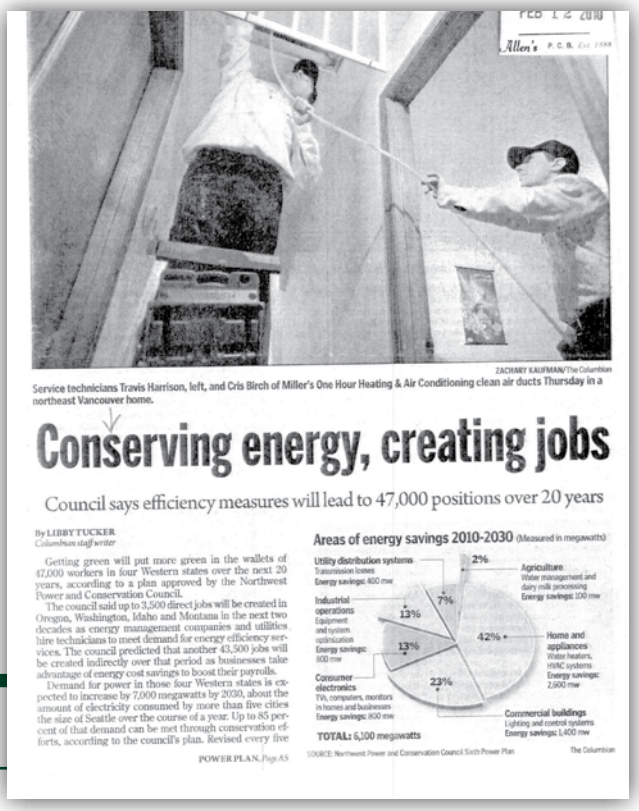
Coal provides more than a fifth of the energy in a region dominated by clean hydropower from a system made up of the 31 dams that produce electricity marketed by Bonneville, based in Portland.

But Kearns noted that small scattering of coal plants in the region produces more than four-fifths of the power system's greenhouse gas pollution.

She said the council's latest plan shows "that a future without coal is not prohibitively expensive, it is not difficult for utilities to achieve and it will not jeopardize that power reliability in the Northwest."

Dick Adams, executive director of the PNUCC, an association of private and public utilities, praised the council plan but said there are many separate players who must work together in the conservation effort – including consumers, builders, utilities and government agencies.

"That's a big challenge," Adams said. "But I think it's doable."



ZACHARY KAUFMAN/The Columbian

Service technicians Travis Harrison, left, and Cris Birch of Miller's One Hour Heating & Air Conditioning clean air ducts Thursday in a northeast Vancouver home.

Conserving energy, creating jobs

Council says efficiency measures will lead to 47,000 positions over 20 years

By LIBBY TUCKER
Columbian staff writer

Getting green will put more green in the wallets of 47,000 workers in four Western states over the next 20 years, according to a plan approved by the Northwest Power and Conservation Council.

The council said up to 3,500 direct jobs will be created in Oregon, Washington, Idaho and Montana in the next two decades as energy management companies and utilities hire technicians to meet demand for energy efficiency services. The council predicted that another 43,500 jobs will be created indirectly over that period as businesses take advantage of energy cost savings to boost their payrolls.

Demand for power in those four Western states is expected to increase by 7,000 megawatts by 2030, about the amount of electricity consumed by more than five cities the size of Seattle over the course of a year. Up to 85 percent of that demand can be met through conservation efforts, according to the council's plan. Revised every five years, the plan serves as a guide for utilities to meet future energy needs at the lowest possible cost.

POWER PLAN, Page A5

Areas of energy savings 2010-2030 (Measured in megawatts)

SOURCE: Northwest Power and Conservation Council Sixth Power Plan

The Columbian

February 12, 2010

Conserving Energy, creating jobs

Council says efficiency measures will lead to 47,000 positions over 20 years

By Libby Tucker
Columbian staff writer

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Energy-efficiency measures are the cheapest option by far, representing about half the cost of building new coal or natural-gas-fired power plants instead. Upgrades to homes and appliances have the most potential for savings at 2,600 megawatts, or 42 percent of the estimated total savings of 6,100 megawatts.

"A lot of this conservation doesn't come from your utility over the next 20 years, it comes from decisions consumers make," said John Harrison, a spokesman for the power council.

Harrison said that demand for energy efficiency services should increase as consumers replace outdated furnaces and remodel their homes with energy-efficient windows and insulation, possibly with added incentives from their utilities.

Additional savings will come from upgrades to lighting and control systems in commercial building, more

efficient consumer electronics, equipment and system optimization in industrial operations, upgrades to utility distribution systems and improved agricultural systems.

Not all of the potential energy-saving measures are cost effective, however. In all, the council estimates about 5,800 megawatts of savings can be met, out of the 6,100 megawatts of energy measures identified.

Local impact

Northwest Natural Gas and Clark Public Utilities have already started stepping up energy efficiency programs in anticipation of the council's new plan. The conservation budget is likely to increase at Clark utilizes so it can meet new goals set by the power council.

"State Initiative 937 mandates that we achieve all the practical conservation we can achieve as identified by the (power) council," said Mick Shutt, spokesman for Clark utilities. "We'll evaluate the final plan, and at some time it will go to our commission to get approval of what else we might do."

The new programs, in combination with stricter building codes related to saving energy increased business somewhat last year for Miller's One Hour Heating and Air-Conditioning in Vancouver.

"The state of Washington will start requiring duct sealing as part of the building code," said Sharon Brouillette, a spokeswoman for Miller's. "It's extra hours for the workers … and it does cost the customer upfront, but in the long run it saves them money because they're not heating under their house."

Clark College is also prepared to help meet work force needs in the growing energy efficiency industry with a host of new programs in the sector, including training in weatherization, smart-grid technology and control systems. The power council's plan reinforces the school's mission to prepare students for jobs of the future.

"There will be jobs for our graduates," said Rassoul Dastmozd, vice president of academic affairs at Clark College. But, he cautioned, "we have to be very careful (about predictions). When the tire hits the road, we don't know how many jobs will actually be created."

Energy Daily

Northwest Power Council Calls for Major Efficiency Push By Region

By Chris Holly

In the most aggressive regional push on energy efficiency in the nation, the electricity planning council for the four Pacific Northwest states unveiled a new five-year plan Thursday that calls for 85 percent of the expected increase in electricity demand over the next two decades to be supplied with conservation, with renewable energy generation and a limited amount of gas-fired generation meeting the rest.

The plan by the Northwest Power and Conservation Council (NWPCC) sets a 1,200 megawatt efficiency target for the first five years, equivalent to the power use of a city the size of Seattle. Overtime, the energy efficiency-target in the plan - 5,900 average MW over 20 years out of a total 7,00 MW of new demand - is the most aggressive regional target in the nation and twice the amount recommended in the council's last plan, issued five years ago. In the earlier version of the plan, proposed in September, the council called for some 5,800 MW of new efficiency.

The council's regional blueprint guides the region's largest electricity supplier, the federal Bonneville Power Administration. Under federal law, the council revises the 20-year plan every five years. While Bonneville implements the plan, it also serves as a reference document for the region's electric utilities in their own planning. Developed over two years, the plan concludes that investments in energy-efficient equipment and product will cost less than half as much as buying electricity from new power plants, saving consumers millions of dollars. Additionally, investments in energy-efficient equipment and products will cost less than half as much as buying electricity from new power plants, saving consumers millions of dollars. Additionally, investments in energy efficiency will reduce greenhouse gas emissions from the region's power supply by 17 million tons per year by 2030 and create as many as 47,000 new jobs in the

Northwest, according to calculations by the council staff.

"With its emphasis on energy efficiency, the plan enhances the benefit we already enjoy in the Northwest from our extensive hydropower system, which is low-cost and carbon-free," Council Chair Bruce Measure said.

The heavy emphasis on efficiency reflects the council's attempt to address hug challenges in meeting new demand, including uncertainty about future climate-change policy, fuel prices, salmon recovery actions, economic growth and least risky resource to meet these challenges, the council said.

The plan recommends that in addition to energy efficiency, future demand for power can be me with renewable energy – mainly wind – plus new natural gas-fired turbines in areas where demand grows rapidly and utilities need new generating plants on top of renewable power and efficiency improvements, Natural gas is preferred because it produces fewer greenhouse-gas emissions than coal. The plan anticipates no new coal-fired plants over the 20-year planning horizon.

Importantly, the plan also assesses the risks and costs associated with carbon emission from regional power supply.

To meet existing regional and state carbon-reduction targets for the year 2030, the plan calls for:

- Acquiring 5,900 average megawatts of energy efficiency
- Meeting renewable-energy portfolio standards adopted in three of the four Northwest states, which will displace power plants that burn fossil fuels; and
- Reducing the future use of existing hydropower generation as much as possible within the limits of legal requirements to protect fish and wildlife.

Energy efficiency in the plan is responsible for reducing carbon emissions from regional generating plants by a total of 17 million tons per year by 2030, and a failure to achieve the efficiency improvements in the plan will increase both the cost and the risk of the power system, the plan says.

Achieving all of the new efficiency could provide as many as 47,000 new jobs in the Northwest by 2030, both through direct installation of efficiency measures and indirectly over time through lower energy bills, according to council staff. The staff estimates that on average, the annual investment in energy efficiency envisioned in the industries. With sustained investment in conservation over the next 20 years, the region can expect increased savings in energy bills.

The Northwest has made impressive strides in improving energy efficiency. In 2008, the region's electric utilities set an all-time record for acquiring energy efficiency, squeezing out 235 average megawatts in one year — enough to power more than 14,200 Northwest homes for a year.

Since 1980, more than half of the growth in demand for electricity in the Northwest has been met with efficiency, obviating the need to build as many as 10 new fossil fuel power plants and avoiding some 15 million tons of carbon dioxide emissions in 2008 alone.

The average cost of these savings to utilities has been less than 2 cents per kilowatt-hour, which is less than the roughly 3 cents per kilowatt-hour the Bonneville Power Administration currently charges its electric-utility customers. Energy efficiency costs about 20 percent as much as wind power, which currently costs 8 to 12 cents per kilowatt-hour.

Because consumer didn't have to buy 4,000 average megawatts of electricity in 2008, they paid $1.8 billion less for electricity – even after accounting for the cost of energy-efficiency programs in their electric rates.

April 22, 2010

Power Council Predicts Adequate Power Supply Despite Low Columbia River Flows

The Northwest electricity supply will remain adequate throughout the spring and summer despite abnormally low runoff in the Columbia River basin, where hydroelectric dams provide more than half of the region's electricity, according to an analysis by the Northwest Power and Conservation council.

"Low flows will reduce hydropower generation below normal, but there is no danger of a serious curtailment to electricity service, according to our analysis," said Bruce Measure, council chair. "The power available from generating plants, including hydropower dams, wind turbines, and power plants that burn fossil fuels, is more than adequate to meet the anticipated demand for electricity this year."

Columbia River basin-wide precipitation since last October, which is the beginning of the water year for record keeping purposes, is 79 percent of normal, and snowpack is 73 percent of normal, according to the Northwest River Forecast Center of the National Oceanic and Atmospheric Administration. At this time in 2009, the snowpack was 91 percent of normal.

Based on precipitation to date, the forecast for runoff through the end of August also is much lower than normal - just 65 percent of average measured at The Dalles Dam. If that estimate proves accurate, 2010 would be the second-lowest runoff year since 1992. Only 2001 was lower.

While the council expects an adequate power supply, the dry year will have consequences, according to the analysis. Less surplus hydropower will be available for sale in the wholesale power market, and so the revenue from those power sales would be lower than in a normal year. As well, less hydropower will be available to back up wind power, which is highly variable.

Lower-than-normal flows also will make migration conditions more difficult for juvenile salmon and steelhead this spring and summer by slowing travel time and perhaps by increasing water temperature. The federal biological opinion on Columbia River hydropower dam operations, which is intended to protect threatened and endangered species of salmon and steelhead, calls for maximizing barge transportation of juvenile fish down the river in low-flow conditions.

However, the biological opinion is being challenged in federal court, and a judge will decide whether to follow the strategy in the biological opinion and maximize transportation - that is, no spill at the three dams that have smolt-collection facilities - this year or order additional spill in conjunction with barge transportation as the plaintiffs have requested.

The judge has ordered additional spring and summer spills since 2007.

According to the council's analysis, an additional spill, if it is ordered by the court, will not affect river flows or the elevation of reservoirs behind Columbia and Snake river dams. However, water that is spilled over dams cannot be used to generate electricity, and the additional spill, if it is the same amount as the court ordered for the spring and summer of 2009, would reduce power generation by about 350 average megawatts across the April through August 2010 period. One average megawatt, one million watts, is enough for about 670 Northwest homes, so the April through August loss would be approximately equal to the power use of 234,500 homes.

This reduction in hydropower generation would be in addition to the annual reduction due to the required spill in the biological opinion and would not affect the reliability of the power supply, according to the analysis, the press release said.

> "The Northwest electricity supply will remain adequate throughout the spring and summer despite abnormally low runoff in the Columbia River basin, where hydroelectric dams provide more than half of the region's electricity, according to an analysis by the Northwest Power and Conservation council."

May 13, 2010

$40 million Chief Joseph hatchery wins major approval

Army Corps of Engineers must give final go-ahead

MAY 13, 2010

BY K.C. MEHAFFEY
World staff writer

BRIDGEPORT — After years of planning — and decades after it was promised — the Colville tribes won approval and funding Wednesday to build a $40 million salmon hatchery just below Chief Joseph Dam on the Columbia River near Bridgeport.

The Northwest Power and Conservation Council voted unanimously to move forward on construction of the Chief Joseph Hatchery, said John Harrison, a spokesman for the Power Council. He said the hatchery will be financed by the Bonneville Power Administration through the council's Columbia River Basin Fish and Wildlife Program.

One last approval from the Army Corps of Engineers — which operates Chief Joseph Dam and owns the land where the hatchery will be built — is needed before the tribes break ground on the new facility, said Joe Peone, Fish and Wildlife director for the Confederated Tribes of the Colville Reservation.

If that go-ahead comes by the end of July, the tribes will begin building the hatchery and related facilities this year.

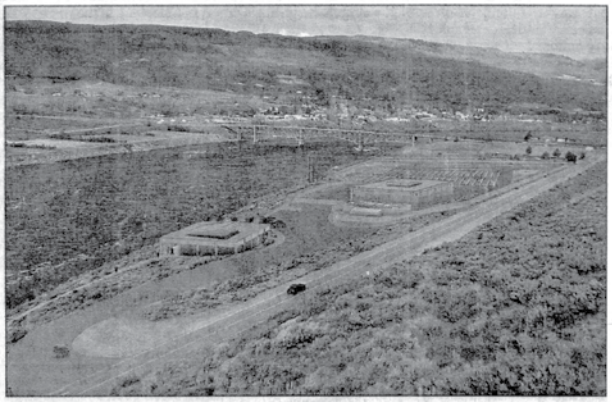

Illustration provided by Tetra Tech Inc.

The proposed design of the new hatchery facility. The Northwest Power and Conservation Council approved moving ahead with construction Wednesday and said the Bonneville Power Administration will fund it. The Army Corps of Engineers, which owns the dam and the land where the hatchery will be built, still needs to approve it.

After it's built, the hatchery will produce about 2.9 million young summer chinook salmon, and 900,000 spring chinook salmon. By comparison, the Leavenworth National Fish Hatchery — the largest mid-Columbia River hatchery — raises about 1.2 million fish each year.

For Peone, the approval is the culmination of eight years of effort to convince federal agencies that the Colville tribes should be allowed to raise summer and spring chinook in

He estimates that summer chinook salmon runs in the upper Columbia River will double after the hatchery is built and adults begin to return.

Ernie Williams, a member of the Colville Business Council who was there for the council's decision Wednesday, called it "historic."

Unlike some tribes, the Colvilles don't sell the salmon they catch, he said. "It's our food, and we share it with other tribes."

For some, building the hatchery is the fulfillment of a 70-year-old promise.

During construction of Grand Coulee Dam, American Indians and others who depended on fishing in the upper Columbia River were promised four federal hatcheries to mitigate the lost salmon and steelhead runs. Three were built — in Leavenworth, Entiat and Winthrop. "Then World War II came on and somehow, this one got left to the side," said Virgil Seymour, a member of the Colville Business Council and chairman of its natural resources committee.

He said news that the hatchery will be built is "huge" for Colville tribal members. "I'm very glad that Joe was able to pick it up and carry it this far," he said.

Harrison said the federal promise wasn't really part of the power council's decision to recommend building this hatchery.

But, he said, "I think you could conclude that this is one of the promised hatcheries. This is the one that was never built."

Seymour said some tribal elders still remember the huge salmon runs at Kettle Falls. "People used to come for hundreds of miles to trade for fish and everything else, but mostly to come and get their fair share of fish," he said. "Those days are gone since Coulee Dam got put in."

He added that the Bonneville Power Administration has only funded a few hatcheries. "This is the first new one for a long time," he said.

The council approved this hatchery because it adheres to the best scientific methods for preserving wild or naturally spawning runs, he said.

The proposal includes a plan to selectively fish for hatchery salmon, while releasing the naturally spawning fish.

"We believe it's a win-win for both the tribe and for recreational fishermen in our area," said JD Smith, public works director for the city of Brewster and an avid fisherman and organizer of an annual salmon derby.

Some work toward building the hatchery is already complete. Four acclimation ponds are built on the Okanogan River, and the Colville tribes anticipate building two more this summer, along with homes at the hatchery to house hatchery workers.

Once construction begins, the hatchery will take about 18 months to build. When it's complete, it will employ about 20 people, Peone said.

July 28, 2010

Invasive mussels pose threat to dams

The expected arrival of invasive mussels in the Columbia River Basin could cost $100 million a year to fight, according to a new report done for the Northwest Power and Conservation Council.

By Nicholas K. Geranios
The Associated Press

SPOKANE – The expected arrival of invasive mussels in the Columbia River Basin could cost $100 million a year to fight, according to a new report done for the Northwest Power and Conservation Council.

The dime-sized freshwater mussels pose a threat to dams, irrigation systems, and native fish species, said the report from a panel of economists.

"While the mussels have not infested the Columbia River Basin yet, it may just be a matter of time," the council said in a statement, adding that efforts should still be made to stop or at least delay an invasion.

Council Chairman Bruce Measure said that the report shows a rapid response and public education is critical to that effort.

Quagga mussels and their close cousin zebra mussels were introduced to the Great Lakes in the ballast of ships from Easter Europe and the Ukraine in the 1980s. They have spread and caused millions of dollars in cleanup and repair costs in the Northeast, Midwest and Southwest.

The best deterrent is a combination of watercraft inspections, public information and continued scientific research, the report said.

Eradicating the mussels is virtually impossible. They attach to almost anything and can clog drains and pipes, freeze up cooling systems, kill off native species and render power boats inoperable.

In the Columbia River Basin, the new report estimated costs of cleaning water intakes and related equipment at federal hydropower dams on the Columbia and Snake rivers at $16 million an year, plus $5 million a year from other dams.

Cleaning spillway gates, fish-bypass screens and related equipment would cost about $3 million to $10 million a year at the federal dams. Replacing filtration systems at 20 fish hatcheries would cost $1 million each.

Cleaning recreation facilities, including water supplies, docks and boats could run $50 million or more a year.

The mussels are transported between water bodies on boats and other watercraft that are being moved by trailer. They are capable of living out of water for days. Boat-inspection campaigns are already under way in each of the four Northwest states, and several infested boats have been stopped and cleaned entering Idaho and Washington from infested lakes in the Southwest.

Calcium concentrations in the water appear to be important in determining whether mussels can reproduce, as they absorb minerals to make shells.

In much of the Columbia River and its tributaries, calcium levels probably are too low for mussels to thrive, the report said.

An exception is the upper Snake River drainage in southeastern Idaho, where calcium levels are often ideal for mussels, the report said.

August 2, 2010

Northwest looks to Europe for ideas on wind

by Christina Williams
Sustainable Business Oregon

Denmark, with a population of 5 million, no coal power to speak of, and 3,625 megawatts of wind-energy capacity (enough to power almost 1 million U.S. homes), provides a good case study for Oregon as it looks to integrate more wind energy into its power mix.

It's no wonder then that Denmark — which has the audacious goal of shedding 100 percent of its fossil fuel use by 2050 — was on the meeting agenda last week of the Northwest Wind Integration Forum's Technical Work Group, which wanted to learn more about how Denmark is handling the growing numbers of wind turbines within their national energy systems. Representative from Germany and Spain were also on hand.

Denmark has the connectivity and the market structure in place to sell its excess wind energy to Sweden and Norway in a kind of real-time stock exchange for energy.

"Since we have to exchange with those markets, it's important to have good functioning wind markets," said Gitte Agersbaek, a senior engineer from state-owned transmission system operator Energinet in Denmark.

The export of wind power is of interest to energy leaders in the Northwest who are eying the region's bountiful wind resources as a potential export to a hungry renewable energy market in California.

"We're sitting on a very valuable resource," said Eliot Mainzer, vice president at Bonneville Power Adminstration. "If we want to be an exporter and extract the value of this resource, we need to make sure the local utilities have access to what they need, and we're going to have to be working very closely with California about whether or not we have to get new transmission down there and who's going to pay for it."

The Northwest Power and Conservation Council is working with the BPA and state energy departments on how to best manage wind power. Oregon has 1,920 megawatts of installed wind energy capacity, according to the mid-year report from the American Wind Energy Association. Washington has roughly the same amount.

The Northwest Wind Integration Technology Forum was formed in 2006, and gets together every six months to discuss wind-integration issues.

The council's Wind Integration Action Plan addresses issues such as load balancing, transmission and integration costs.

Spain and Germany, both countries comparable in size to the Northwest region, have impressive wind capacities — 19,000 megawatts for Spain and 25,000 megawatts for Germany.

"They have a very substantial penetration of wind energy on their grid. It hasn't been a piece of cake for them either," Mainzer said. "Both Germany and Spain are looking at substantial transmission line investments."

All three European countries make extensive use of wind-speed forecasting to set energy prices and plan for balancing needs. BPA is moving toward better forecasting with the installation of 14 new weather stations last year that provide data for a real-time display of wind capacity.

While the United States is looking for guidance in Europe, Michael Milstein, spokesman for BPA, says the rest of the country is watching how the Northwest handles its wind energy integration.

"The Northwest is really the first place in the U.S. to wrestle with some of these issues," Milstein said. "We're out there in the lead. That's both exciting and intimidating."

Administrative Overview

In 2010, 30 years after Congress passed the Power Act, it is clear that the law, while visionary with respect to future power supplies and mitigation of hydropower impacts on Columbia River Basin fish and wildlife, did not foresee, and could not have foreseen, changes that have occurred in the electric utility industry and with regard to fish and wildlife recovery in the Northwest.

These changes affected firm-power sales of the Bonneville Power Administration, and therefore calculation of the Council's budget, and also resulted in increased responsibilities for the Council. For example, the load growth envisioned for Bonneville has not materialized and the energy efficiency investments mandated by the Act have reduced Bonneville's firm-power sales.

Basing the Council's funding methodology only on the forecasted sales of firm power ignores the new responsibilities related to fish and wildlife recovery that the Council must now budget, such as the requirement in the 1996 amendment to the Power Act for independent scientific review of projects that implement the fish and wildlife program and the application of cost-effectiveness principles when recommending fish and wildlife projects for funding. Because of the funding limitation in the Act, the Council has absorbed nearly 36 percent in inflation costs from 1982 to 2010.

In 2006, the Council realized some relief when Bonneville agreed that Residential Exchange Program firm load should be included in the firm-power forecast used to calculate the Council's budget cap. Since 1997, the Council has responded to the circumstances that have flawed the funding methodology of the Act by negotiating annual budget ceilings with Bonneville that cover specific Bonneville rate periods. These negotiated agreements incorporate various budgetary constraints such as current-level service budgets from the preceding budget period, restrictive cost-of-living adjustments for personal services expenditures, cost-cutting actions to cushion the impact of inflation, and individual justification of program-improvement costs. With these measures, the Council has confined its budget growth to less than 3 percent per year since 1998.

Here is a summary of the draft budgets for the last four fiscal years, plus proposed amounts for 2011 and 2012 with the increases over the previous years indicated:

2007	2008	2009	2010	2011	2012
$9,085,000	$9,276,000 (2.1%)	$9,467,000 (2.1%)	$9,683,000 (2.3%)	$9,891,000 (2.1%)	$10,114,000 (2.3%)

The Council is aware of the current economic challenges facing the four-state region, and the need to maintain healthy financial conditions for the Bonneville Power Administration.

In an effort to be responsive, the Council in Fiscal Year 2011 and Fiscal Year 2012 will

1. continue to adhere to the budget constraints initiated in 1998;
2. identify efficiencies in operations and administration in order to limit inflationary increases to an annual average of 3 percent;
3. reallocate staffing where possible to absorb new workload without increasing the number of employees;
4. re-prioritize resources as necessary to respond to new requests for technical analysis; and
5. reschedule or postpone work anticipated during the budget-development process in order to respond to the most essential requests for studies and analyses.

To ensure the transparency of the Council's operations, annual audits are conducted and made available for public review. The U.S. Government Accountability Office (GAO) is the government entity authorized to audit the Council's fiscal and program operations. However, the Council, through an agreement with Bonneville, engages an independent accounting firm to conduct annual financial audits of the Council's operations. A copy of each audit is forwarded to the Seattle office of the General Accounting Office and to other interested parties and also posted on the Council's website.

The audit of Fiscal Year 2010 is posted on the Council's website, click on "About Us" and then "Public Policies" or visit: http://www.nwcouncil.org/about/policy/Audit2010.pdf.

Council and committee meetings, Fiscal Year 2010

Meeting agendas and minutes are posted on the Council's website, www.nwcouncil.org. Meetings of the Council's Public Affairs Committee occur during meetings of the full Council and are not listed separately below.

October 7-8, 2009, Council and committee meetings, Ketchum, Idaho
November 12-13, 2009, Council meeting by teleconference
December 8-9, 2009, Council and committee meetings, Portland
January 8, 2010, Power Committee meeting via web conference
January 12-13, 2010, Council and committee meetings, Portland
January 25, 2010, Power Committee meeting via web conference
February 1, 2010, Power Committee meeting via web conference
February 3, 2010, Power Committee meeting via web conference
February 9-10, 2010, Council and committee meetings, Portland
February 19, 2010, Power Committee meeting via web conference
March 2, 2010, Council meeting via web conference
March 9-10, 2010, Council and committee meetings, Portland
April 13-14, Council and committee meetings, Boise
May 11-12, 2010, Council and committee meetings, Portland
June 8-9, 2010, Council and committee meetings, Missoula
July 7-8, 2010, Fish and Wildlife and Power Committee meetings, Portland
July 14, 2010, Council and committee meetings, Portland
August 18-19, Council and committee meetings, Spokane
September 21-23, Council and committee meetings, Bend, Oregon

More Information

For additional information about the Northwest Power and Conservation Council's activities, budget, meetings, comment deadlines, policies or bylaws, call 1-800-452-5161 or visit our website, www.nwcouncil.org. Copies of Council publications are available at the website or by calling the Council. All Council publications are free.

Background of the Northwest Power and Conservation Council

The Council, known until 2003 as the Northwest Power Planning Council, is an agency of the states of Idaho, Montana, Oregon, and Washington and was created as an interstate compact agency by the legislatures of the four states consistent with the Pacific Northwest Electric Power Planning and Conservation Act of 1980. The Council's first meeting was in April 1981.

The Northwest Power Act gives the Council three distinct responsibilities:

1. to assure the region an adequate, efficient, economical, and reliable electric power supply;
2. to prepare a program to protect, mitigate, and enhance fish and wildlife, and related spawning grounds and habitat, of the Columbia River Basin affected by the development and operation of any hydroelectric project on the Columbia River and its tributaries; and
3. to inform the Pacific Northwest public regarding these issues and involve them in decisionmaking. This annual report is organized around the Council's three key responsibilities.

The Power Act created a special relationship between the Council and the federal agencies that regulate and operate dams in the Columbia River Basin and sell the electricity that is generated. The administrator of the Bonneville Power Administration, the federal power marketing agency that sells the output of the Federal Columbia River Power System (a system that includes 29 federal dams within the basin and two outside, and one non-federal nuclear power plant), is required to make decisions in a manner consistent with the Council's Northwest Power Plan and its Columbia River Basin Fish and Wildlife Program. Other federal agencies with responsibilities for dams (the U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, and Federal Energy Regulatory Commission) are required to take the Council's power plan and fish and wildlife program into account at every relevant stage of decisionmaking.

Despite its relationship to federal agencies, the Council is not a federal agency. The Council is an interstate compact. The eight-member Council consists of two members from each state, appointed by their respective governors. The Council headquarters are in Portland.

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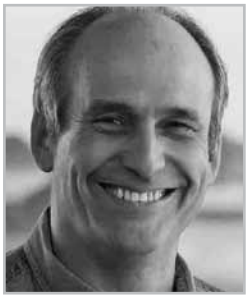

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Comments of the Bonneville Power Administration

Department of Energy

Bonneville Power Administration
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Portland, Oregon 97208-3621

EXECUTIVE OFFICE

JAN 10 2011

In reply refer to: DKR-7

Mr. Bruce Measure, Chairman
Northwest Power and Conservation Council
P.O. Box 200805, Capitol Station
Helena, MT 59620-0805

Dear Chairman Measure:

My congratulations to the Northwest Power and Conservation Council (Council) on another successful year, marked by the accomplishments described in the Council's 2010 Annual Report.

Early in 2010, the Council achieved a landmark accomplishment with the completion of its Sixth Northwest Power Plan. The Plan describes a vision for the region's energy future that is least-cost, sustainable and leads the nation in meeting our carbon reduction goals. In acknowledging that achievement with its Champion of Energy Efficiency Award this year, the American Council for an Energy Efficient Economy acknowledged not only the Plan, but the 25 years of regional achievements in energy efficiency that have gone before.

In the fish and wildlife program, the Council has undertaken program improvements that will help improve the effectiveness and efficiency of our efforts. Thank you also for the work the Council has put into scientific review of the many new and expanded projects that the Bonneville Power Administration (BPA) and our state and tribal partners have embarked on through the Columbia Basin Fish Accords. Projects are on the ground and benefitting fish everywhere in the Basin because of the Accords, and the Council has been an important part of ensuring that tangible biological goals are achieved.

Finally, I want to acknowledge the role the Council plays in conducting its business in a public forum. The Council is an organizing force for public dialogue on policy issues and decisions on regional energy and fish and wildlife issues. The Pacific Northwest Electric Power and Conservation Act created the Council with this important role in mind, and you have carried it out expertly over the years.

In the upcoming year, the Council and BPA will have more opportunities to make progress on key regional issues, including integrating renewables into the system and achieving the energy efficiency targets in the Sixth Power Plan. I look forward to working with you to achieve our mutual goals in 2011.

Sincerely,

Stephen J. Wright
Administrator and Chief Executive Officer

Appendix 1: Council By-laws

The Council by-laws, which describe the administrative functions of the Council, are posted for public review on the Council's website at this location: http://www.nwcouncil.org/library/2003/2003-19.htm.
The Council last updated the by-laws in October 2003.

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STEVE CROW, EXECUTIVE DIRECTOR | NORTHWEST POWER & CONSERVATION COUNCIL
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Northwest Power and Conservation Council