Northwest Power and Conservation Council

WINTER 2010

STRIKING A BALANCE BETWEEN ENERGY AND THE ENVIRONMENT IN THE COLUMBIA RIVER BASIN

REGIONAL POWER PLAN TOUTS EFFICIENCY TO MEET DEMAND AND CREATE JOBS

he Northwest Power and Conservation Council approved its regional power plan at its February meeting, calling for efficiency, as much as 85 percent, to meet future demand.

The plan's target for the first five years, 1,200 average megawatts, is the energy equivalent of the power use of a city the size of Seattle. Over time, the energy-efficiency target in the plan — 5,900 average megawatts over 20 years — would be the most aggressive regional target in the nation.

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 benefits we already enjoy in the Northwest from our extensive hydropower system, which is low-cost and carbon-free," Council Chair Bruce Measure said.

Energy efficiency and carbon-emissions control are at the heart of the Sixth Northwest Power Plan, an energy blueprint to guide the region's largest electricity supplier, the federal Bonneville Power Administration. Under federal law, the Council



"With its emphasis on

the plan enhances the benefits we already enjoy

energy efficiency,

in the Northwest

from our extensive hydropower system,

which is low-cost

and carbon-free,"

Council Chair Bruce Measure

revises its 20-year plan every five years. The Council approved the latest revision of the plan following more than two years of work that included extensive public participation and comment. While Bonneville implements the plan, it also serves to help the region's electric utilities in their own planning.

In addition to energy efficiency, the plan recommends renewable energy — mainly wind — plus new natural gas-fired turbines in areas where demand grows rapidly and utilities need new generation in addition to 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 power plants over the 20-year planning horizon.

The plan addresses future risks with strategies that minimize the expected cost of the regional power system over the next 20 years to ensure that the power supply remains affordable and reliable. The plan also assesses the new risks associated with carbon emissions costs. (Continued on page 2)

Notes From the Chair 2 Council OKs 10-Year Funding For Seven Fish Accord Projects 3 N.W. Q & A: U.S. Representative Peter DeFazio 4 Montana and Washington Members Will Lead Council in 2010 7 Kootenai River Habitat Project Will Benefit White Sturgeon 8

9

Council Decisions

REGIONAL POWER PLAN TOUTS EFFICIENCY TO MEET DEMAND AND CREATE JOBS

(Continued from page one)

According to the plan, three things must happen in order to meet existing regional and state carbon-reduction targets for the year 2030: acquire 5,900 average megawatts of energy efficiency, which is key to reducing carbon emissions; meet renewable-energy portfolio standards

adopted in three of the four Northwest states, which will displace power plants that burn fossil fuel; and reduce the future use of existing coal-fired power plants by half. Another priority is to preserve 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. Failure to achieve the efficiency improvements in the plan will increase both the cost and risk of the power system.

Achieving all of the new efficiency could produce as many as 47,000 new jobs in the Northwest by 2030, according to calculations by the Council's staff. 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 in the energy and energy-services industries. With sustained investment in conservation over the next 20 years, the region can expect an additional net increase of 43,500 jobs throughout the economy due to the ongoing increased savings in energy bills. CQ





Notes From the Chair

At our February meeting, the Council approved its regional power plan, which identifies energy efficiency as the key resource to meet future demand. Its goal of 5,900 average megawatts over 20 years is the most aggressive conservation target in the nation; building on the Northwest's proven record of efficiency achievements and legacy of clean and affordable energy. The plan addresses the usual uncertainties inherent in energy planning, and it also evaluates the new risks associated with carbon emission costs. While the process to develop the plan has been lengthy, and at times challenging, I believe it offers the region sound guidance on how we can best ensure a reliable and economical power supply while meeting the challenge of reducing greenhouse gas emissions.

The Kootenai River Habitat project is a good example of how different entities can work together toward a common goal. In the case of this project, it's to improve river conditions for endangered white sturgeon. The project sponsors, the Kootenai Tribe of Idaho, approach their task with the whole river in mind, "from upstream to downstream," and have forged strong working relationships with their state and federal partners to preserve an ancient fish so important to the history of a people and region.

Also in this issue, Oregon Congressman Peter DeFazio discusses the energy landscape, where he sees energy policy heading and what he sees as priorities for the region. It's an informative and lively interview with a senior member of the Northwest's delegation in the thick of national energy policy trends. Don't miss it.

2

COUNCIL OKS 10-YEAR FUNDING FOR SEVEN FISH ACCORDS PROJECTS

even projects that will help implement the 2008 Columbia Basin Fish Accords were recommended by the Northwest Power and Conservation Council for funding in January. Funding, which will be provided by the Bonneville Power Administration, will total more than \$28

million over the next 10 years.

In the accords, Bonneville, the U.S. Army Corps of Engineers, and the U.S. Bureau of Reclamation agreed to provide more than \$900 million in

fish and wildlife project funding between 2008 and 2017, much of it for new projects and expansions of existing projects that are funded through the Council's Columbia River Basin Fish and Wildlife Program. Bonneville committed \$917 million over the 10-year period, the Corps of Engineers committed to actions funded from congressional appropriations including approximately \$50 million over 10 years for improvements for Pacific lamprey, and the Bureau of Reclamation committed to actions that also will be funded through congressional appropriations.

Parties to the accords include five Indian tribes, the Columbia River Inter-Tribal Fish Commission, and the states of Idaho, Washington, and Montana. All are involved in litigation over the effects of federal dams in the Columbia River Basin on threatened and endangered species of salmon and steelhead. Funding of accords projects is in addition to funding provided by Bonneville to implement the Council's fish and wildlife program.

Six of the seven projects received favorable reviews by the Council's Independent Scientific Review Panel (ISRP). The one that did not focuses on collecting steelhead after they spawn, called kelts, and "reconditioning" them in hatcheries before releasing them to return to the Pacific Ocean.

Steelhead, unlike salmon, are capable of spawning more than once.

The ISRP said that the project did not meet scientific review criteria because after 10 years of research the project sponsor, the Yakama Nation, had not demonstrated that kelts could spawn successfully in the

wild. But the Council decided that the research project should continue because so far it has focused on getting the kelt to survive, with no concerted effort at getting spawning success, which will be the emphasis of the next stage of research. If it is successful, it could help the recovery of endangered upper Columbia steelhead. As a condition of its approval, the Council asked that project success be evaluated in 2014.

Other projects approved by the Council include:

- A research project in which salmon and steelhead smolts are released from hatcheries to natural or semi-natural sites, including man-made acclimation ponds, in the Wenatchee and Methow river basins in north-central Washington. Dispersing the releases over a broader area could lead to higher survival rates as opposed to the current practice of releasing large numbers of fish in just a few areas. The sponsor is the Yakama Nation, and the 10-year budget is \$4.8 million.
- An evaluation of supplementation, which is the practice of raising fish in hatcheries and releasing them into the wild, throughout the Columbia River Basin. The sponsor is the Columbia River Inter-Tribal Fish Commission, and the 10-year budget is \$7.9 million. The goal of the project is to

evaluate the long-term effects of hatchery supplementation on the productivity of naturally spawning salmon and steelhead.

 A project sponsored by the Shoshone-Bannock Tribes of Idaho to enhance nutrients for salmon and steelhead in the Salmon River Basin. The 10-year budget is

\$2.7 million. The tribes plan to deposit pellets made up of carbon, nitrogen, and phosphorus in streams to partially replace those same nutrients that once were deposited in

the river by decaying salmon and steelhead carcasses. As the salmon and steelhead population rebuilds over time, the nutrient enhancement should provide a better environment for the fish to grow.

- A project to monitor progress of salmon and steelhead recovery in the Columbia Cascade ecological province, which includes Columbia River tributaries in north-central Washington. The project initially will focus on monitoring the success of habitat restoration in the Methow, Entiat, and Wenatchee river basins. The sponsor is the Yakama Nation, and the 10-year budget is \$2.6 million.
- A project to study what is limiting the production of Pacific lamprey in the Fifteenmile Creek and Hood River basins of Oregon. Both are Columbia River tributaries. The project sponsor is the Confederated Tribes of the Warm Springs Reservation, and the 10-year budget is \$2.5 million. The tribes hope to restore harvestable numbers of lamprey in the two tributaries.
- A project to improve summer habitat for redband trout in Twin Lakes on the reservation of the Colville Confederated Tribes in northeastern Washington. The 10-year funding is \$2 million. Currently, low levels of dissolved oxygen in the lakes limit trout production.

NORTHWEST Q&A: U.S. REPRESENTATIVE PETER DEFAZIO

Congressman Peter DeFazio was first elected to the U.S. Congress in 1986. He is the dean of the Oregon House delegation, represents southwest Oregon, and he has developed a reputation as an independent, passionate, and effective lawmaker.

DeFazio is a senior member of the House Transportation and Infrastructure Committee where he serves as chairman of the Highways and Transit Subcommittee. He also serves on the Aviation and Railroad Subcommittees. In 2005, DeFazio served as the ranking Democrat on the Highways Subcommittee where he helped negotiate a five-year federal highway and transit spending bill (SAFE-TEA-LU). Under the bill, he secured \$2.7 billion for Oregon's roads, bridges, highways, and transit systems. As chairman, DeFazio will be a key architect of the highway authorization, a six-year federal highway and transit spending bill, and he will work to bring needed infrastructure spending to Oregon to help create jobs and improve the state's long-term economic viability.

DeFazio also serves on the House Committee on Homeland Security and sits on the Transportation Security and Infrastructure Protection Subcommittee and the Management, Investigations and Oversight Subcommittee. He also serves on the House Natural Resources Committee where he sits on the National Parks, Forests and Public Lands Subcommittee and the Water and Power Subcommittee.



From a political perspective, Northwest energy issues usually have been dominated by one or two senior members of the congressional delegation. Henry Jackson, Mark Hatfield, Tom Foley, and Jim McClure are some of the former legislators who come to mind. As a senior member of the House, and one with in-depth knowledge of the Bonneville Power Administration and the region's energy system, how are you enjoying your role as one of the primary drivers of Northwest energy policy in Congress? What are your energy priorities for the Northwest in the coming years?

I am happy to be counted among such a distinguished group of leaders. Most hot button issues in Congress are entwined in partisan bickering, but the Northwest Energy Caucus has maintained its bipartisan tradition. Historically, the caucus has played a key role in defending the Pacific Northwest's energy resources from attacks by other parts of the nation. Our low-cost, low-carbon system provides our region a significant economic advantage, and the congressional delegations from Idaho, Montana, Oregon, and Washington have a proud tradition of cooperation in defense of the region.

One of the success stories in the Pacific Northwest is our leading role in energy efficiency, but we cannot rest on our laurels. Energy efficiency is the most cost-effective manner to meet our goals of energy independence and reduced carbon emissions, while keeping our energy rates low and our local economy competitive. Those who believe we have maximized our investments in energy efficiency do not have faith in American ingenuity. New technologies are always developing, progressing, and becoming more cost-effective. Therefore, we must continue to demand more efficiencies to retain our economic edge.

Since 1980, and as a direct result of the enactment of the Northwest Power Act of 1980, the region has acquired about 4,000 average megwatts of energy efficiency, which is enough saved energy to power about three cities the size of Seattle annually. As a result of these savings, the region didn't have to build 8 to 10 new coal- or- gas-fired generating plants. This means the region is avoiding emitting about 15 million tons of carbon dioxide each year. This level of energy efficiency, combined with the region's hydroelectric capability, has made the Northwest the cleanest energy-producing region in the country. With regard to climatechange legislation and the complex proposals to establish a cap-andtrade system for trading carbon credits, many Northwesterners feel that we have already invested heavily in carbon-reduction measures and technologies. How can these achievements be recognized by Congress so that the Northwest is not economically penalized in any future federal legislation designed to reduce carbon emissions?

Congress can take on carbon emissions without implementing a risky, speculative cap-and-trade system. I voted against the cap-and-trade legislation (H.R. 2454, the

American Clean Energy and Security Act) last year because, as I have consistently argued, a regulatory approach is a better way to cut harmful emissions. Regulating greenhouse gas emissions under the Clean Air Act would provide greater certainty and predictability to Northwest businesses and industries. Not only is a cap-and-trade system potentially ineffective and harmful to businesses, but the trade aspect of the scheme will lead to a massive new speculative trading market which will further degrade our already weak economy.

One of the other reasons I voted against H.R. 2454 is because the legislation unfairly punished our region's low carbon emissions footprint. The Pacific Northwest is blessed with low cost, zero-emission hydroelectric generation and has been a leader in energy efficiency and renewable energy. To my dismay, a provision was added just days before the vote that would have redirected the GHG allocations from the Pacific Northwest to major coal-fired generation in the Midwest states allowing them to exceed the caps and continue to emit pollution as usual.

Congress should establish strong caps on greenhouse-gas emissions based on historical emissions, incentivize energy efficiency, and increase investments in renewable energy development. Accomplishing these goals does not require a cap-and-trade system with potentially disastrous consequences for the Northwest. It simply requires political will.

Although the Northwest Power Act was enacted before your election to the House of Representatives, you were involved in Northwest energy issues at the time. Upon passage, the Power Act was deemed by many to be ahead of its time, especially regarding its treatment of energy conservation as a bona fide energy resource, the establishment of the Northwest Power and Conservation Council as a non-federal, interstate compact that gave a greater voice to the four Northwest states, and the Coun-

cil's charge to assure the region an adequate, efficient, economical, and reliable power supply while also protecting, mitigating, and enhancing fish and wildlife species affected by the hydroelectric system. Looking back over the last 30 years, do you think the implementation of the Act has lived up to expectations?

The Northwest Power Act has withstood the test of time. The balancing of regional interests, our progress in salmon recovery, and our national leadership in conservation and renewable energy can all be traced back to the planning and conservation provisions in the Power Act. We

"Congress should establish strong caps on greenhouse-gas emissions based on historical emissions, incentivize energy efficiency, and increase investments in renewable energy development."

Peter DeFazio U.S. Representative, Oregon

must recognize that many of the controversial energy challenges faced by the Pacific Northwest today were not envisioned in the Power Act.

For example, the failure of electricity deregulation is not a Power Act failure. I was one of 60 House members to vote against the passage of the 1992 Energy Policy Act that allowed the deregulation of the wholesale energy market, and gave states the option to deregulate their retail energy markets. Some laws stand the test of time, others don't.

For those who ask the Pacific Northwest delegation to modify the Power Act, I always ask them if the problem they are trying to solve is worth the risk of reopening the Power Act up to those who want cheap, low-carbon power. The answer has always been a resounding "No."

In the late 1970s and early 1980s you played a significant role in halting the construction of four nuclear power plants that were backed by the Washington Public Power Supply System and strongly subsidized and supported by the Bonneville Power Administration. As you know, Bonneville's ratepayers continue to pay hundreds of millions of dollars each year in debt service on two of those unfinished projects, as well as the debt service and operational costs of the one completed plant, the Columbia Generating Station. Given this history that you know so well, what is your reaction to President Obama's efforts to reinvigorate the nation's commercial nuclear industry with newly designed and inherently safer facilities? Have your views on nuclear energy changed over the years, especially in light of the heightened concerns over climate change and the desire to reduce the consumption of fossil fuel for electricity generation?

The only resurgence in nuclear power is a political one. Despite more than \$150 billion in federal subsidies over the past several decades (30 times more than solar, wind, and other renewable energy sources), nuclear power is still more expensive than other sources of energy and could not compete if only market forces were at work. If not for the massive nuclear loan guarantees passed in 2005, utility companies would not risk the investment in nuclear power. President Obama's expansion of these loan guarantees only digs us deeper in bad energy policy.

The WPPS fiasco taught the Northwest region the true value of nuclear power,

but other issues continue to plague this technology. Even in the unlikely event that the Yucca Mountain repository ever accepts nuclear waste, it will be full in a matter of a few years with just the radioactive waste from the currently operating nuclear power plants. And renewable sources of energy such as wind, geothermal, and solar do not result in a dangerous proliferation problem like nuclear power.

Finally, nuclear power is not a very cost-effective way to displace carbon.

According to the Rocky Mountain Institute, increasing energy efficiency is seven times more cost-effective than nuclear power when it comes to displacing carbon. For example, it costs approximately \$10 billion to build a nuclear power plant. If that \$10 billion were instead spent on energy efficient appliances, insulating older homes and buildings, or fuel-efficient cars, it would cut carbon emissions by seven times the amount that the nuclear power plant would.

The expansion of wind energy continues to occur throughout the Pacific Northwest, and the Bonneville Power Administration and other owners and operators of transmission lines are grappling with the many complex issues involved in transmitting and balancing large amounts of power generated by intermittent wind resources. A good share of the wind being developed in the region is intended to serve California's demand and meet its legal requirements for renewable energy as required by state law. There seems to be little question that the federal hydroelectric system is being pushed hard to support these new wind projects, and the Northwest's resources are being tapped for the benefit of our neighbors to the south. While there continues to be strong public support for new wind development, there is growing concern that the Northwest is becoming an energy farm for California. Do you agree with the assessment that the Northwest

"Despite more than
\$150 billion in federal
subsidies over the past
several decades
(30 times more than solar,
wind, and other renewable
energy sources),
nuclear power is still more
expensive than other
sources of energy and
could not compete if only
market forces were at work."

Peter DeFazio
U.S. Representative, Oregon

is bearing too many of the environmental and economic burdens associated with wind projects built primarily to benefit California?

The explosion of wind power in the Pacific Northwest is a success story, but it has brought forward many new challenges for the region to resolve. For example, wind integration has become contentious because the associated costs for integrating the influx of new wind projects are real and need to be assessed in a fair manner. I commend BPA, public power, the private utilities, and wind developers for their progress in resolving issues like integration.

On the other hand, I have long been opposed to the incursion of California power grabs. History has taught us that the Pacific Northwest will always be under attack for its inexpensive, low-carbon power. Power hungry California will always try to exploit nearby resources. I have long fought to defend the region, whether it be from Enron, California's deregulatory debacle, or California's unrealistic green market mandates.

For the last quarter-century, Congress has been providing appropriations to the U.S. Army Corps of Engineers for the construction of juvenile fish passage facilities on its mainstem dams on the Columbia and Snake rivers. Through Fiscal Year 2010, approximately \$1.4 billion has been expended for these activities. In the President's Fiscal Year 2011 budget, a sizable amount of funding is being requested for the Corps' Columbia River Fish Mitigation Program to implement its responsibilities under NOAA Fisheries' Willamette River Basin Biological Opinion. Therefore, the Corps is on the verge of initiating a large, multi-year effort to improve fish passage facilities at its projects in the Willamette River watershed, a portion of which is in your district. Is it possible that some of the controversy that has plaqued salmonrecovery progress on the Columbia and Snake rivers will soon shift to the Willamette? Do you anticipate that more of your time and attention will be focused on the Corps' construction program, and other issues associated with implementing the Willamette River Biological Opinion?

While very controversial, I do believe the current Columbia River Biological Opinion is based on science and represents a reasonable path forward. The progress the federal government, states, and other parties have made along the Columbia and Snake Rivers is a major leap forward. Bringing this success and all the lessons learned to the Willamette River watershed is good government practice, so long as we recognize early on that there are some key differences in the watershed. Will there be controversies? Absolutely. And the stakeholders will have to work through these complex issues together. Restoring fish passage along the Willamette River poses many new challenges, but it's a challenge I think Oregonians are up to.

(Continued on next page)

(Continued from previous page)

In his State of the Union address, President Obama called for the passage of energy and climate change legislation. What are the prospects for the consideration of major legislation in these areas during the remainder of this Congress?

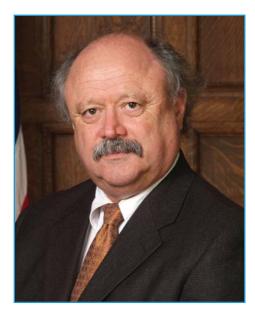
I do not believe there is any chance we will pass a substantive climate change bill this year. This is because, before we address this important issue, we must restore basic fiscal stability to the nation. Asking Americans who are unemployed, work part-time, or are fearful of losing their job to absorb the costs of climate change mitigation is unfair. These same hard working Americans have just borne the brunt of financial collapse. We must tackle climate change soon; but passing a complex bill that significantly alters our economy without first resolving the jobless recovery is something we cannot ask of Americans.

Passage of an energy bill that promotes job creation, energy independence, and renewable energy policies can and should pass this year.



If current trends continue, by 2015 over 90 percent of the televisions sold will have screen sizes exceeding 32 inches. Energy consumption increases with screen size.

MONTANA AND WASHINGTON MEMBERS WILL LEAD COUNCIL IN 2010



Bruce Measure, Chair

n January, Northwest Power and Conservation Council members elected
Bruce Measure, a Montana member,
Chair of the Council for 2010. Measure,
who lives in Kalispell, has been the Council vice chair for the last two years. The
Council also elected Washington member
Dick Wallace as vice chair.

"I am honored to be elected to chair the Council," Measure said. "It is an exciting time with the expected release of

a new power plan that contemplates meeting nearly all of the region's load growth with conservation, and a new spirit of collaboration in salmon recovery. I look forward to working with the Council members, states, tribes, ratepayers, and the public in general on the important matters of energy and fish and wildlife mitigation in the Columbia Basin."

Montana Governor Brian Schweitzer appointed Measure to the Council in January 2005. He has been a practicing attorney in Kalispell since 1988. Currently, he is counsel to the Kalispell law firm of Measure, Robbin, Samsel, and Wilson. Prior to 1988, he was employed



Dick Wallace, Vice Chair

in the forest industry. Measure was a member of the Montana House of Representatives from 1991 to 1993, where he served on the Natural Resources; Fish Wildlife and Parks; and Judiciary committees. He also served as president of the board of trustees of the Flathead Electric Cooperative until his resignation in December 2004 to join the Council. He holds an undergraduate degree in political science and a law degree, both from the University of Montana.

Dick Wallace was appointed to the Council in February 2008 by Washington Governor Christine Gregoire. Wallace, a former regional director with the Washington Department of Ecology, has more than 25 years of experience in natural resource issues, including water and watershed management, agriculture, forestry, storm water, and salmon recovery. A native of Montana, Wallace graduated from Whitman College with a bachelor of arts in biology and environmental studies.

CQ

KOOTENAI RIVER HABITAT PROJECT WILL BENEFIT WHITE STURGEON

he Kootenai Tribe of Idaho and its federal and state agency partners are moving toward phased implementation of a project that will address habitat conditions in a 55-mile stretch of the Kootenai River in northern Idaho. A master plan for the ecosystem-based Kootenai River Habitat Restoration Project was completed last year.

The purpose of the restoration project is to 1) restore and enhance Kootenai River habitat by addressing ecological limiting factors and constraints related to river form and structure, streamside vegetation, in-river habitat, and river stewardship; 2) restore and maintain Kootenai River habitat conditions that support all life stages of endangered Kootenai River white sturgeon and other aquatic focal species; and 3) restore the Kootenai River landscape in a way that sustains tribal and local culture and economy and contributes to the health of the Kootenai subbasin as both an ecological and socio-economic region.

The tribe's master plan provides a detailed analysis of the factors limiting ecosystem function and management and infrastructure constraints for different river reaches within the project area. Based on this analysis, the plan presents specific restoration strategies for each river reach that are designed to address those limiting factors and then identifies a suite of actions that could be combined to implement the restoration strategy for each reach. The project will be implemented in a three-phase approach generally working from upstream to downstream.

Phase 1 includes actions designed to address significant bank erosion in an area upstream from the city of Bonners Ferry known as the braided reach. Bank erosion is contributing to sediment loading and degradation of habitat down-

stream. Improving bank structures also will benefit the aquatic habitat by increasing or providing overhanging bank cover, shade, and channel margin complexity. Phase 1 also includes a substrate project in an area downstream of Bonners Ferry called the meander reach. The substrate project is intended to provide immediate benefits to the wild Kootenai River white sturgeon population by improving egg attachment and hiding/cover area for

cal opinion addresses Libby Dam operations in addition to habitat improvements. Along with the tribe, other parties to the settlement agreement include the U.S. Army Corps of Engineers, which operates Libby Dam; the Bonneville Power Administration, which sells electricity generated at the dam; the state of Montana (Libby Dam is in Montana); and the lawsuit plaintiffs, the Center for Biological Diversity. The settlement agreement requires that



Kootenai River

early life stages, while the more extensive ecosystem restoration activities are being designed and implemented elsewhere on the river as part of Phase 2. Construction of the Phase 1 actions is planned to begin in 2012.

The Kootenai River Habitat Restoration Project is identified in a settlement agreement negotiated among parties to a lawsuit over how to protect the sturgeon, which are listed as an endangered species. At the heart of the lawsuit is a biological opinion issued by the U.S. Fish and Wildlife Service to protect sturgeon and improve their survival. The biologi-

construction of the habitat project begin in 2012.

The [habitat] project is a critical part of the federal agencies' strategy to meet our obligations under the Kootenai River white sturgeon biological opinion," Greg Delwiche of the Bonneville Power Administration told the Northwest Power and Conservation Council at a meeting in January. Delwiche is the vice president of Environment, Fish, and Wildlife at Bonneville.

The Kootenai Tribe, which raises sturgeon at a conservation hatchery near

(Continued on next page)

(Continued from previous page)

Bonner's Ferry and releases them into the river, estimates that fewer than 1,000 wild adult sturgeon — those that spawned before Libby Dam was built — remain in the river. Sue Ireland, fish and wildlife director for the tribe, said juvenile fish raised in the hatchery are surviving when they are released into the river, but there is no natural recruitment of juvenile fish that are spawned in the wild.

"The eggs get fertilized, but they don't survive. The population has not experienced significant successful recruitment for many decades," Ireland said. "The eggs may be suffocating in the sandy, embedded substrate found in the meander reach; the hard substrates needed for spawning sturgeon are not present in this reach, but they are spawning there anyway."

River conditions, including water velocity, the availability of appropriate habitat, and temperature conditions appear to be among the primary problems. The habitat project will increase the depth of the channel in the braided reach, and therefore increase the velocity of the water and reduce its temperature. In the meander reach, rocks and gravel will be placed to provide a better place for fish to lay their eggs. High-quality substrate, plus appropriate water depth, temperature, and velocity are the key attributes identified in the biological opinion as necessary for successful spawning, Ireland said.

Phase 2 of the project will include actions to create more normative river conditions, including desirable depth and velocity. This will include work both in the river and along the shore. Phase 3 will include actions to enhance the interaction between the river and floodplain. Due to the large percentage of private land ownership on the floodplain, site-specific rather than reach-scale opportunities to improve aquatic habitat will be implemented in the meander reach in cooperation with willing landowners as specific opportunities are identified and prioritized.

Potential actions include adding instream structures to improve habitat conditions and reduce bank erosion, restore wetlands and riparian plant communities in low floodplain areas outside of levees, create off-channel habitat, remove fishpassage barriers, and restore riparian habitat along tributary streams.

"We want to be sure that the project encompasses the tribe's goals to be holistic, science-based, community-supported, collaborative, and adaptive," Ireland said. "As for sturgeon, we hope to set the stage so we address the needs of the existing population while making sure that everything is in place so that as the young fish mature, they will spawn successfully."



SAVE THE DATE: SALMON CONFERENCE IN MAY

State of the Salmon, a joint program of the Wild Salmon Center and Ecotrust, is hosting an international conference on the "Ecological Interactions between Wild and Hatchery Salmon."

Participants will include scientists, fishery and hatchery managers, conservation organizations, indigenous groups, industry representatives, and decisionmakers. The goal of the conference is to inspire collaboration among attendees across jurisdictions to influence the future course of hatchery programs and produce a guiding set of principles for managing hatcheries to conserve wild salmon across the Pacific Rim.

Where: Hilton Hotel

Portland, Oregon

When: May 4-7 www.stateofthesalmon.org

Council Decisions

November 2009

Council receives subbasin plans for Bitterroot and Blackfoot rivers

The Council accepted draft plans for the Bitterroot and Blackfoot river basins of Montana to protect fish and wildlife and direct funding to projects to improve their survival. The draft plans are posted on the Council's website, www.nwcouncil.org.

January 2010

Council approves 10-year funding for Fish Accords

Seven projects that will help implement the 2008 Columbia Basin Fish Accords were recommended by the Northwest Power and Conservation Council for funding in January. Funding, which will be provided by the Bonneville Power Administration, will total more than \$28 million over the next 10 years.

February 2010

Upper Columbia Habitat Project Approved

The Council approved a project proposed by the Yakama Nation to restore ecological functions and improve habitat in the Wenatchee, Entiat, and Methow rivers of north central Washington for salmon, steelhead, and bull trout. The project is included in the 2008 Columbia Basin Fish Accords signed by the Yakama Nation, Bonneville Power Administration and other parties. Funding for the project will range between \$5.7 million and \$7.3 million per year and total \$61.7 million over the 10-year period of the Accords, 2008-2017.

Northwest Power and Conservation Council Members

Central Office

Northwest Power and Conservation Council 851 S.W. Sixth Avenue, Suite 1100 Portland, Oregon 97204-1348 Telephone: 503-222-5161 Toll Free: 1-800-452-5161

Idaho

Boise 450 West State Boise, Idaho 83720-0062 Telephone: 208-334-6970 Council Member: James A. Yost

Hayden Lake
East 1677 Miles Ave., Suite 103
Hayden Lake, Idaho 83835-9154
(208) 334- 6970
Council Member:
W. Bill Booth

Montana

1301 Lockey Helena, Montana 59620-0805 Telephone: 406-444-3952 Council Members: Bruce Measure, Council Chair

Oregon

Rhonda Whiting

Astoria: 1642 Franklin Ave. Astoria, Oregon 97103 Telephone: 503-325-2006 Council Member: Joan M. Dukes

Milton-Freewater: P.O. Box 645 Milton-Freewater Oregon 97862-0645 Telephone: 541-938-5333 Council Member: Melinda S. Eden

Portland:

851 S.W. Sixth Avenue, Suite 1020 Portland, Oregon 97204-1347 Telephone: 503-229-5171

Washington

Spokane:

N. 501 Riverpoint Blvd, Suite 425 Spokane, Washington 99202 Telephone: 509-359-2438

Council Member: Tom Karier

Lacey:

510 Desmond Drive SE Suite 271 Lacey, Washington 98503-1273 Telephone: 360-534-9347

Council Member:

Dick Wallace, Council Vice Chair

Council Quarterly is produced four times a year by the Public Affairs Division of the Northwest Power and Conservation Council



Recycle content 50/25%
FSC © 1996 Forest Stewardship Council

This newsletter was printed on paper that features high recycled content compared to both foreign and domestic grades. (50% overall / 25% post-consumer)

Northwest Power and Conservation Council

851 S.W. Sixth Avenue Suite 1100 Portland, Oregon 97204

Telephone: 503-222-5161 Toll free: 800-452-5161

Web site: www.nwcouncil.org

Find us on Facebook

Converge (Converge)

PRSRT STD U.S. POSTAGE PAID PERMIT NO. 11 PORTLAND, OR