Northwest Power and Conservation Council

Council Meeting
Portland, Oregon

October 11-12, 2011

Minutes

Council chairman Bruce Measure called the meeting to order. He began by asking for committee reports.

Reports from Fish and Wildlife, Power and Public Affairs committee chairs:

Bruce Measure, Council chair, report on U.S. Fish and Wildlife Service; Bill Booth, chair, fish and wildlife committee; Tom Karier, chair, power committee; and Rhonda Whiting, chair, public affairs committee.

Fish and Wildlife Committee chair Bill Booth reported that the committee took up two project review items, a Tucannon River habitat project and an information-only presentation on Yakima/Klickitat hatchery construction. We also had an update on the resident fish categorical review, he said. Staff has been touring around the region in preparation for the review and are on track to get it under way, Booth reported.

Lorri Bodi gave us an update on CHaMP, a large-scale monitoring and data collection project, and the committee felt the agencies are making progress with considering how they will use it, he continued. They implemented the pilot phase of the project in 2011, which we recommended, and they are focusing on the Independent Scientific Review Panel's (ISRP) concerns, Booth reported. There will be a final report on the pilot studies in January 2012, he said.

We are still working on projects related to the Research Monitoring and Evaluation (RM&E) categorical review, Booth reported. We had an update on an ocean-related project, and the committee wants to have a recommendation on it by June 2012 in time for BPA's next funding cycle, he said. We still have questions about NOAA Fisheries' CRHEET project, Booth added. He said the committee is getting organized for the next round of F&W program amendments and will hold a special meeting November 2 to narrow down the focus and set priorities.

Tom Karier, Power Committee chair, reported on a presentation on energy imbalance markets, which aim to provide intra-hour reserves that can be traded in an established market. The Western Electricity Coordinating Council (WECC) has done a study, which is now being reviewed by BPA and others, he said. The Committee had representatives present to discuss the merits of the EIM proposal, including the potential benefits, as well as the costs and risks, Karier

said, adding that the next step is for BPA and others to decide whether to fund the development of an EIM. Karier noted that other initiatives, such as the Joint Initiative, could potentially address the same reserve issues that are being studied by WECC.

The committee also had a report on the Regional Technical Forum's Policy Advisory Committee (PAC), which has met twice. The PAC is formalizing its recommendation to the Council on a three-year budget for the RTF, he said. We also talked about the fuel choice policy study, which is a joint effort between the Council and the gas industry to study whether it makes sense for customers to switch between electricity and natural gas, Karier said. Staff completed the analytical work, and we are developing recommendations, he said.

Karier said natural gas industry representatives were reviewing the fuel choice study again before it is released. A Council briefing scheduled for today was taken off the agenda, he stated.

Karier also reported that the Power Committee met with Iberdrola Renewables at its national headquarters in Portland. The company operates 3,000 megawatts of electricity production in the United States, including "a huge amount of wind power," from a control center in Portland, he said.

Measure reported on a meeting he had with U.S. Fish and Wildlife Service officials in the Whitefish, Montana area to discuss white sturgeon. He said Robyn Thorson, director of the USFWS Pacific Northwest Division, wanted background on sturgeon issues, and Measure arranged for a tour starting at Libby Dam and ending downriver at a Kootenai Tribe of Idaho channel modification project funded as part of the Council's program. Measure said he and Thorson had a very interesting tour of the project. He noted that several times, Thorson pointed out that in the current economic environment, USFWS doesn't have the resources to do everything it is called on to do.

Joan Dukes made a motion that the Council meet in Executive Session at the close of business on Wednesday, October 12, 2011, to discuss matters relating to civil litigation. Karier seconded the motion, which passed unanimously on a roll call vote of all eight Council members.

Measure confirmed that the fuel choice study item was removed from the agenda.

1. Council decision on Project Reviews:

Mark Fritsch, manager, project implementation.

– BiOp: Project #2010-077-00, Tucannon River Programmatic Habitat

Dukes made a motion that the Council recommend to Bonneville that it implement Project #2010-077-00, Tucannon River Programmatic Habitat, with the condition that the Snake River Salmon Recovery Board provide a report addressing two issues raised by the Independent Scientific Review Panel prior to Spring 2013, as presented by staff and recommended by the Fish and Wildlife Committee. Phil Rockefeller seconded the motion, which passed unanimously.

– BOG management decision

Staffer Mark Fritsch reported on a Budget Oversight Group (BOG) review and decision on a Tucannon River Programmatic Habitat project directed at meeting certain specific Snake River

Chinook population targets in the subbasin. He described the project review process, pointing out that the ISRP requested additional information from the project sponsor. The sponsor responded, and we received the ISRP review July 5, which gave the project a qualified recommendation, Fritsch said. The ISRP wants additional detail in some areas, and the sponsor said it will respond to the ISRP sooner rather than later, he said. The F&W Committee recommended moving the project to the Council for a decision, Fritsch stated.

- **Project #1988-115-25, Yakima River Design and Construction - Yakima/Klickitat Fisheries Project (YKFP)**

Fritsch presented an information-only item on the Yakima River Design and Construction project. He described mitigation actions for the site related to operation of a groundwater well. The mitigation cost was $425,000, Fritsch said. The Washington Department of Ecology and BPA have reached agreement that the proposed mitigation is adequate, he said. The F&W Committee wanted to present this information to the full Council, Fritsch concluded.

2. Briefing on Fuel Choice Policy:

Tom Eckman, manager, conservation resources.

Removed from the agenda and postponed to a later date.

3. Presentation on ISAB report: Using a Comprehensive Landscape Approach for More Effective Conservation and Restoration:

Nancy Huntly, Bruce Rieman, Bob Naiman and Courtland Smith, Independent Scientific Advisory Board.

Measure recognized Nancy Huntly for her service, citing her many accomplishments and her contribution to both the ISRP, where she was an original member, and the Independent Scientific Advisory Board (ISAB) on which she has served since 2004.

Staffer Eric Merrill introduced the ISAB panel. The panelists presented an overview of a report released September 30, 2011 entitled *Using a Comprehensive Landscape Approach for More Effective Conservation and Restoration.*

Bruce Reiman began the presentation with an overview of the ecological science, explaining that landscapes are the context for ecosystems, which is a perspective that is extremely important for planning and carrying out restoration and recovery project. He explained how scientists' perspectives on landscape have changed over time. These are dynamic systems, and our approach to conservation and recovery has not always been consistent because working within the systems is a challenge, according to Reiman.

In the context of conservation and restoration, diversity is the key to resilience and productivity, he said. It is critical to resilience, productivity, and stability of the system and provides a "portfolio effect," much like diversifying a financial portfolio, Reiman said. He went on to explain how the ideas associated with the portfolio effect have been embraced and put to work in ecosystem restoration and recovery.

In our report, we suggest ways to get science, public policy, and management actions working together better for recovering ecosystems, Reiman continued. He said the ISAB report explores a number of issues: the need for gaining broad engagement and public support; creating a vision of abundance and diversity; working across boundaries; and linking science and management. There are good examples of where all of these things are happening, but they are not consistent across restoration programs, Reiman concluded.

Huntly gave a summary of the report's recommendations. She said the ISAB came to understand that for restoration of large areas, all of the attributes Reiman listed are important, including broad socioeconomic engagement; a program built from the landscape ecology; an effort that includes integration and collaboration; and the use of adaptive management. Huntly listed four themes to be used in evaluation criteria for how well a plan engages the public and diverse social groups; incorporates the concepts of comprehensive landscape ecology; develops organizations that support collaboration and effective governance and leadership; and promotes adaptive management based on active learning.

Bill Bradbury asked how one would go about developing organizations to support collaboration. Huntly gave the example of watershed councils, which now exist around the region. She went on to give additional examples of the evaluation criteria the ISAB proposed and more specific recommendations for how to achieve them.

Courtland Smith, an ad hoc member of the ISAB, provided a social science perspective on the recommendations. He focused on a couple of the recommendations and provided ideas about how they could be achieved.

Smith said there is criticism of adaptive management in academia because it has not fulfilled its promise. Yet it can be used to test "what we think we know already" and it is a way to engage the public, he said. Smith went on to say that often we bring the public in too late, at the point of reviewing an already developed plan. He explained a number of social science concepts, such as citizen science and using social networks to disseminate information and lessons learned, and how to incorporate them productively in conservation and restoration programs.

Booth pointed out that the Council is preparing for another round of F&W program amendments. The challenge is how to integrate these recommendations into our program, he commented. Do you see a particular lack in our F&W program? How specifically could we incorporate these recommendations into our program and are there areas where we need to concentrate? he asked.

Huntly said the ISAB is suggesting that if there is a way, look at the four criteria when the Council considers changing the program. We recommend really using adaptive management as an engagement and learning tool, she said.

Rieman pointed out that with Columbia River salmon, we have a good sense of abundance, but not of diversity. Those are things we can do to increase this information, but developing the measures will take work, he said.

The reason we don't have diversity measures is that no one has come up with one, Karier responded. That is the impediment, he said. We have lots of data, but we don't know how to summarize it into high-level indicator on diversity, Karier stated. He said the Council is trying to

do all of the things that the ISAB has recommended. "You won't get an argument from us on the theory," but are we haven't seen a tough assessment of where the recommendations have worked and where they haven't, Karier said.

Rhonda Whiting said that in preparing the subbasin plans, the Council saw a lot of diverse groups of people coming together. Now there is concern in some places about updating the plans, she said. We had a lot of public participation, but we are lacking in a process to institutionalize the knowledge, Whiting said. There was a tremendous amount of effort and money put into them, and we should not "let good work sit on the shelf," she stated.

One of the recommendations is to have a whole variety of groups work together, Smith responded. In some cases, "you might work better as a partner than a leader," he said, advising the Council to consider carefully how many levels of planning it wants to have.

Huntly described a Science for Citizens website and suggested using social media to solicit involvement.

4. Update on proposed revision for the Resource Adequacy Standards:

John Fazio, senior power systems analyst.

Tom Karier introduced a presentation on the Northwest resource adequacy standard, pointing out that when the standard was adopted in 2008, it represented the first official metric for measuring adequacy in the region. In practice, there was some confusion around the standard, he said, and staff has been working on a new approach. The latest work was vetted with the Resource Adequacy Forum earlier this month and got lots of support, Karier stated.

Staffer John Fazio said the current standard assesses the adequacy of the power supply three and five years into the future. The standard is "an early warning system" if resource development isn't keeping pace with load growth, he explained. The standard uses a loss-of-load probability (LOLP) as the metric, and it assesses LOLP for winter and summer capacity and energy, Fazio stated. It translates the energy LOLP into a minimum annual load/resource balance threshold and the capacity LOLP into minimum sustained-peak planning margins for winter and summer, he explained. The standard sets the maximum threshold for the LOLP at 5 percent, Fazio said.

He described problems that arose with the original standard, which didn't match up with BPA's White Book or PNUCC's Northwest Regional Forecast. We spent a lot of time explaining the results and why they differed from other sources, Fazio said. As a result, we decided to have a peer review of the standard, and the reviewers made suggestions that led to development of a new one, he added.

The new standard maintains the current methodology and simulates the hourly dispatch of resources over a five-year period, Fazio said. The calculation takes into account water supply, wind generation, temperature, and thermal outages, he noted. In addition, the revised calculation includes only standby resources contractually available to serve loads, Fazio said. The original standard included an estimate of available resources, but the new approach assures they would be contractually available, he pointed out.

Fazio said the proposed methodology runs 1,000 combinations of the variables to get to the LOLP. It simulates operations and calculates how often the region would miss meeting load, he explained. We then "screen the results" using the standby resources, according to Fazio.

The revised "state of the system" report provides more than just a statement of adequacy, he said. It tells when LOLP events would happen and by what magnitude, Fazio explained. He added that the state of the system report also includes other commonly used adequacy measures: the extent of reliance on non-firm and standby resources; monthly assessment of potential shortfalls; frequency, duration, and magnitude of events; and the conditions under which the events occur.

Fazio said staff is proposing to release a summary of the standard, background papers, and a sample state of the system report for public comment. The Council approved the release and comment period, which will end November 11.

Fazio described the next steps for the Resource Adequacy Forum technical committee, which will refine the assumptions regarding non-firm resources, continue to fine-tune the hourly hydro simulation, and improve wind resource assumptions. He said the forum's steering committee would review that work. In June 2012, a three-year adequacy assessment that goes through 2015, and a five-year assessment that goes through 2017, will be published, Fazio noted.

Phil Rockefeller asked whether the methodology assesses "real-life circumstances," like the Columbia Generating Station's extended outage. Fazio responded that the model includes thermal outages and can be rerun if there is a big change. But he said doing a "backcast" of real circumstances with the model is very difficult because of the data required. We have vetted the model and compared the results with others to see if things are operating as we expect, Fazio stated. "We feel confident it is producing realistic results," he added.

Bill Booth asked how the model results are used in the region. BPA has used them to support decisions on acquiring new resources, Fazio replied. Utilities use the same methodology for making their resource decisions, but our model is regional so it is different from the ones they use, he explained.

Utilities that participated in developing the adequacy standard view it as "very important," staffer Terry Morlan pointed out. Utilities regularly rely on the market to one extent or another for power supply, and this tells them the state of the market, he said.

5. Report on 2010 Efficiency Acquisitions:

Gillian Charles, energy policy analyst, Tom Eckman, manager, conservation resources and Charlie Grist, senior analyst.

The region achieved more conservation in 2010 than in any year since the Council's program began, according to staffer Gillian Charles. Charles reported that the region captured 254 average megawatts (aMW) of conservation last year. The results are double those in 2005, and exceed the Sixth Power Plan's 2010 target of 200 aMW. Overall, the region has saved over 4,500 aMW since 1980, enough power to serve the states of Montana and Idaho, with some left over, she stated. Charles listed the Sixth Power Plan targets for the next four years, which range from 220 aMW in 2011 to 280 aMW in 2014.

In a breakdown by sector, residential conservation topped the chart with 42 percent of the savings followed by commercial at 33 percent, she explained. Big gains in the commercial and industrial sectors were due in part to American Recovery and Reinvestment Act (ARRA) funds, Charles continued. There was "stimulus" money available for things like energy retrofits in schools, she said. With regard to future savings, there is "great potential" with televisions, and the Sixth Power Plan targets them aggressively, Charles noted. As CFL savings decline, new measures are coming in, she added.

The total utility investment in conservation increased by 25 percent from 2009 to 2010, with $360 million (2006 dollars) spent last year, Charles reported. But the cost per unit of savings went up by only 7 percent, she said. The utility conservation investments are now just over 3 percent of regional electricity sales revenues, Charles wrapped up.

Rockefeller asked what factors will affect conservation achievement going forward. Staffer Charlie Grist acknowledged that the ARRA funding had a positive effect on the achievement. In Oregon, the business energy tax credit that has existed for 20 years has been cut substantially, he said. The Energy Trust of Oregon is looking for ways to compensate for that loss, Grist added. But many utility power managers are looking at the $20 per MW price tag for conservation "with enthusiasm," he stated.

Morlan commented that the 2010 savings came about with the economy in a recession. If we get some recovery in the economy, it will help, as will new technologies, he said. BPA has put a lot of money into conservation at levels the agency can't sustain, so public utilities will have to step up with more investments on their own, Morlan added.

Bill Bradbury asked what residential measures are available beyond CFLs. Staff responded that specialty CFLs have good potential, along with heat pump water heaters and ductless heat pumps. Those are "the big ones," but none are easy to get into the supply chain, Grist said.

Measure asked if there were questions from the media on the conservation report. A reporter asked how the efficiency gains compare with other states and areas of the country. Grist said the savings "are in line" with other states on an annual basis, but the Northwest has a 25-year history of working at conservation persistently. Karier said three regions of the country are the leaders in conservation: California, the Northwest and New England

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6. Report on the *Third Annual Symposium on Transboundary River Governance in the Face of Uncertainty: The Columbia River Treaty, 2014,* Kimberley, British Columbia, Oct 3-5:

John Shurts, general counsel, and Dr. Aaron Wolf, Oregon State University.

Dr. Aaron Wolf, a geography professor at Oregon State University, briefed the Council on a "transboundary" symposium in early October that addressed the Columbia River TreatyWolf said participants are beginning to coalesce around three alternatives: status quo, termination, and "something in between." The consensus in the room was that termination would not be desirable, he reported. There was also a consensus that "called-upon" flood control would be detrimental and would even harm Canadian river management, Wolf said. The symposium participants coalesced around the idea that ecosystem conditions should be brought into the Columbia River Treaty, he stated.

Karier asked for more explanation about the consensus that called-upon flood control would be detrimental. Staffer John Shurts explained that in the area where the symposium was held, lots of people live near the Kootenay River. Called-upon flood control operations could mean more drafting of reservoirs, and people in the area are affected by the operations at Libby Dam and Lake Koocanusa, he said. If the lake is drafted deeper, it will affect them. Shurts added.

7. Update on the Columbia River Treaty 2014/2024 Reviews:

Nancy Stephan, Bonneville Power Administration and Matt Rea, U.S. Army Corps of Engineers

Matt Rea of the Corps of Engineers and Nancy Stephan of BPA gave an update on the 2014/2024 Review of the Columbia River Treaty. Rea said the purpose of reviewing the 1964 Treaty is to answer whether it is in the best interest of the United States to continue the power provisions of the agreement. The key Treaty provisions were for construction of three dams in Canada and one in the United States, and the operations addressed relate to power and flood control, he explained.

While the Treaty has no specified end date, either nation can terminate most of its provisions as early as September 2024 with a 10-year notice, Rea continued. The current flood control procedures end in 2024 independent of the power decision, he said, noting that the changes to flood control are significant.

"It's a very valuable Treaty, but it's very expensive so the due diligence is important," Rea said.

He described the process set up for the review, which includes a Sovereign Review Team (SRT) that will work collaboratively to come up with regionally vetted and supported recommendations. The Corps is conducting flood risk management studies that will provide information for the recommendation that goes to the U.S. Department of State, Rea said. The reviewers are also scoping additional technical analyses needed to evaluate Treaty alternatives, he added.

The SRT came up with a series of "framework questions" to focus its work, Rea explained. They include: the benefits and costs to the United States of continuing the Treaty and whether those are significantly better than termination; whether the scenarios are acceptable from the perspective of ecological function, flood risk management, and power production; and if the United States proposes modification to the Treaty, what the objectives would be and what justification would be needed.

He said the primary "driving purpose" objectives are hydropower, flood control, and ecosystem function. The latter aims to provide conditions that promote productive populations of native fish and wildlife and protect and enhance cultural resources, according to Rea. Hydropower objectives include an adequate, efficient, economical, and reliable power supply, as well as a system for integrating renewable resources, and the flood control objective is to provide an acceptable level of flood risk, he said.

Stephan described the alternatives that came from the SRT and how they will be analyzed in three "iterations." We don't have the details for the third stage of the process yet, which is when combination alternatives will be analyzed, but we will do an impact assessment, with the outcome to be a Treaty recommendation, she said.

8. Briefing and discussion on Habitat Effectiveness:

Dr. Phil Roni, NOAA Science Center; and Jennifer O'Neal, Tetra Tech EC.

Measure acknowledged John Ferguson of NOAA Fisheries, who is retiring November 3, and thanked Ferguson for his help to the Council on fish and wildlife issues.

Staffer Stacy Horton introduced a panel of speakers on watershed restoration and reach-scale effectiveness monitoring. The first presenter was Dr. Phil Roni, a researcher at NOAA's Northwest Fisheries Science Center who addressed restoration effectiveness. There is a huge amount of restoration going on in the region, and many efforts "are stumbling" for the same reasons, he said. Roni addressed the challenges in determining whether projects or techniques work in restoration and how that can be addressed. He suggested ways to improve M&E and answer questions about how well projects are working. Roni pointed out that intensively monitored watersheds are a way to get the types of results needed with M&E.

He said a big question in effectiveness is how much restoration is needed. Do you need to restore a couple of kilometers or an overall watershed? Roni described modeling that was done to simulate how many more fish are returning under a couple of different restoration scenarios. The modeling gave us estimates of what would happen with the scenarios, he said.

Roni wrapped up with a summary of key points, including the need to consider several steps for a successful restoration process, prioritize restoration activities carefully, apply M&E, and consider the amount of restoration needed "if we are trying" to recover salmon.

Bradbury asked how to translate the restoration science to watershed councils. Roni said one of the best ways is to conduct focused workshops.

Jennifer O'Neal of Tetra Tech presented an overview of the results from a reach-scale effectiveness monitoring program funded jointly by the Oregon Watershed Enhancement Board, Upper Columbia Salmon Recovery Board, and the Washington Salmon Recovery Funding Board. She said Tetra Tech has been coordinating the program, which was started in 2004.

O'Neal described the benefits of a programmatic monitoring approach, including the use of consistent methods and metrics, and the ability to get results in the short term. She outlined monitoring categories in the current program, including fish passage, instream structures, riparian plantings, floodplain reconnection, spawning gravel, instream diversions, and habitat protection. O'Neal gave an example of each category and results that have accrued from the monitoring.

She concluded with a recap of the benefits of reach-scale monitoring. Coordination among entities conserves limited funding; data can be shared seamlessly across the region; data analysis is stronger with a larger sample size; and there is a single report for regional monitoring data with quantified results, O'Neal said.

Greg Sieglitz of OWEB said his organization delivers restoration funding and has parallel interests with the Council. He described policy considerations in monitoring restoration activities, including gathering information that can be used in the future, and weighing the investment in ongoing programs versus making new investments.

9. Council Business:

– Approval of Minutes

Dukes made a motion that the Council approve for the signature of the Vice-Chair the minutes of the September 13-14, 2011, Council meeting held in Astoria, Oregon. Booth seconded the motion, which passed unanimously.

– Recommendation for Fish Tagging Forum Facilitator

Bill Booth made a motion that the Council approve the recommendation of the Fish and Wildlife Committee and Council staff to contract with Sapere Consulting Limited of Walla Walla, Washington as the Fish Tagging Forum Facilitator. Rockefeller seconded the motion, which passed unanimously.

– Approval of contract with Jeff King

Staffer Terry Morlan presented a proposal to secure more contracting services from Jeff King. He said staff had not had time to accomplish some of the work King used to do when he was on staff. Ken Dragoon has been absorbed into wind integration issues, and Gillian Charles has been absorbed into RTF activities, Morlan said.

Dukes made a motion that the Council approve a contract with Jeff King for research and analytical support services for the period October 1, 2011 through September 30, 2012 for the amount of $60,000. Bradbury seconded the motion, which passed unanimously.

Measure offered the opportunity for public comment.

The meeting adjourned at 11:42 a.m.

Approved November ___, 2011.

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Vice-chair