



**NORTHWEST POWER AND CONSERVATION
 COUNCIL
 August 12-14, 2008**

In Spokane, the Council decided one more conference call August 28 would induce the birth of a draft fish and wildlife program by early September. Chelan PUD explained how it became the first approved provider of hydropower offsets in the Chicago Climate Exchange. And the Independent Scientific Advisory Board warned the next big threat to salmon may come from shad, bass, and walleye. Next Meeting: September 16-18 in Astoria, Oregon.

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FOR OPENERS

Before the Spokane meeting, the Council met twice by phone to review staff-written mainstem and implementation sections of the draft fish and wildlife (F&W) program. Oregon proposed significant changes to spill and water management operations on the mainstem, but did not garner enough support to get them into the draft. Council members reviewed sections on water quality, lamprey passage, and toxics, and after considerable discussion, decided not to remove specific

references to the Fish Passage Center in the draft.

In considering implementation provisions, the Council declined to get too specific about how it will conduct project review and selection, and stuck with the 70-15-15 formula for allocating funds across program areas. The Council also removed references to a "salmon stronghold fund" in the draft.

THE AGENDA



**Chelan's Hydro Ready to
 Fight Climate Change**

"We are here to talk about the intersection between our Endangered Species Act (ESA) obligations and our power activities, and how they relate to the new climate change debate," said Tracy Yount of Chelan County PUD. He described the PUD's Habitat Conservation

Plans (HCPs), which established goals for meeting the utility's ESA obligations.

Hydro has a unique capability to firm wind and solar power, and that's an important attribute, Yount said. We are investing a lot in increasing our power production, and the climate change debate is spurring the demand for more carbon-free power, he noted. So if we produce one additional megawatt of hydropower, that's a megawatt that does not have to come from coal or natural gas, Yount stated.

Our HCPs allow us flexibility in how we reach our ESA goals, and that flexibility is what created the opportunity for our participation in the Chicago Climate Exchange (CCX), he said. The CCX is an exchange, like the New York Stock Exchange, which trades in emissions allowances, noted staffer Terry Morlan.

We were the first utility to approach the CCX and propose to be an offset provider, said Suzanne Grassell of Chelan PUD. We developed three principles to guide our activities, she explained. The first principle is: hydropower is renewable and should be included as an eligible renewable resource under a national renewable portfolio standard.

Grassell said the second principle is: demonstrable increases in incremental hydropower, including equipment and operational efficiency improvements, should be encouraged as "offsetting" greenhouse gases. We define incremental hydropower as any additional amount of power achieved with the same amount of water, Yount noted.

Give Hydropower Credit

Our third principle, according to Grassell, is: emissions legislation should credit utilities for their past accomplishments in renewables, energy efficiency, and customer conservation and support the development of new technologies. Getting such credits would

prompt more utilities to do more of these kinds of activities in the future, she said.

The CCX is North America's only, and the world's first, global marketplace for integrating voluntary legally binding emissions reductions with emissions trading and offsets for all six greenhouse gases, Grassell stated. Chelan PUD is an "offset provider" member of the CCX, which defines, verifies, and tracks offsets provided by its members to make sure they actually occur, she said.

Offsets from renewable energy displace greenhouse gas emissions from fossil-fuel plants, and the CCX approves offset providers and projects, Grassell explained. Eligible renewable projects include wind, solar, hydro, and biofuel, she noted. Since we were the first hydro provider approved, the CCX had to develop a way to verify our hydro offsets, Yount pointed out.

If CCX members sign contracts to reduce emissions over time, what's the enforcement mechanism? Melinda Eden asked. Yount said they were not sure, and he suggested the Council invite a representative from the CCX to give a presentation.

Do you sell environmental credits for a year, forever, or over what time period? Tom Karier asked. You don't have to sell a whole year at once – you can sell bundles of megawatt-hours, Yount replied.

The environmental attributes for renewable energy offset projects must be surrendered to the CCX, and once that is done, we can't use those renewable energy credits to meet the state renewable portfolio standard because that would be double-counting, Grassell noted. CCX Carbon Financial Instrument contracts are issued on the basis of displaced electricity at a rate of 0.40 metric tons of CO₂ per megawatt-hour, she said.

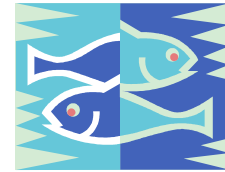
We are the first hydropower offset provider to be approved in the United States, according to Grassell. The CCX board approved a portion of Rocky Reach's hydro as a tradable offset in 2007, and we made our first trades this January, she reported.

Chelan's investments in energy efficiency and operational efficiency programs have incrementally increased hydropower energy production, stated Yount. The incremental power comes from equipment efficiency improvements, such as modernization, and operational efficiency improvements, such as reduced spill, he said. For example, we chose not to spill at Rocky Reach Dam and instead invested in a surface collector, Yount explained. Our bypass system at the dam includes a pipe that is nearly a mile long and up to nine feet in diameter, which takes millions of young salmon and steelhead around the dam, he noted.

Our view is, why not optimize the system we have, as long as we meet our ESA obligations, Yount summed up. We plan to invest all the revenue we make from sales through the CCX into system efficiency improvements, conservation, and creating more green power, he noted.

The HCPs are very innovative, and they enabled you to internalize the goal of maximizing fish survival, said Karier. And the CCX is another innovative initiative, and through it, you are internalizing a financial goal to reduce CO₂, he stated. We'll see more of this type of effort, Karier predicted.

More Shad, Fewer Salmon?



Tom Poe of the Independent Scientific Advisory Board (ISAB) presented findings from the ISAB's report on "Non-native Species Impacts on Native Salmonids in the Columbia River Basin." The purpose of the report was to document biological impacts and risks to salmonids from non-native species and recommend strategies for controlling non-natives, which include carp, American shad, bass, channel catfish, and walleye, he said.

The study found the potential impacts and risks to salmonids and other native fishes are significant, and that most subbasins in the Columbia River Basin are already dominated by non-native fish species, according to Poe. In some habitats, non-native fishes can consume significant numbers of emigrating juvenile salmon, he reported.

When fish passage was provided at the dams, the number of shad really jumped up, Poe said. Hydroelectric development changed river and stream habitats, and the reservoirs have "created hotspots of non-native species," he explained. In many parts of the basin, non-native species are starting to dominate resident fish communities, Poe stated.

Besides predation on salmonids, non-native species compete with salmonids for food and habitat, he said. At times, fish ladders can be so dense with shad it impedes passage by salmonids, Poe noted. Other impacts include food web alterations, interbreeding, and disease transmission, and studies show shad carry a parasite that is lethal to adult salmonids in Alaska, he reported.

Salmonids are also affected by non-native invertebrates, such as quagga or zebra mussels, and non-native plants, such as Eurasian milfoil, Poe explained. And climate change may favor

non-native species, which have more tolerance for higher temperatures than native species, he added.

What's to be Done?

The ISAB recommends that the Council and F&W agencies elevate the issue of non-native species effects to a priority equivalent to that of habitat loss and degradation, climate change, and human population growth and development, Poe said. The ISAB recommends more exploratory surveillance and monitoring and better enforcement of federal and state policies regarding non-native species, he continued.

Poe pointed out that fisheries agencies in Washington, Oregon, and Idaho have adopted management policies that in some cases seem aimed at perpetuating or even enhancing populations of these introduced predator species. The ISAB recommends the Council urge these agencies to relax or eliminate fishing regulations that may be enhancing non-native species populations, he stated. Other ISAB recommendations include increased research, raising public awareness of the problem, more habitat restoration for native species to equip them to compete with non-native species, and revising the subbasin plans to be sure they address non-native species threats, Poe said.

The Council also asked the ISAB to make recommendations on the use of non-native fish in resident fish substitution projects, he stated. The ISAB recommends that all project proposals that have selected a non-native species for substitution include an environmental risk assessment of the potential negative impacts on native fish species, Poe said. A template for such assessments will need to be developed, he added.

Have you estimated the effects of non-native species predation up and down the system? Dick Wallace asked. About 25 years ago, we

did a study and came up with the northern pikeminnow as the dominant predator, and that led to BPA's bounty program for the pikeminnow, Poe replied. Those fish populations have been reduced, but a lot of time has passed since then, and bass and walleye populations are increasing in some areas, he noted.

We have a lot bigger problem than we had 25 years ago, and we need to take another look, Poe advised. One paper I've seen said that cumulatively, there is 22 percent predation by non-native species throughout the system, he added.

CBFWA's Perspective

Brian Lipscomb of the Columbia Basin Fish and Wildlife Authority (CBFWA) said CBFWA applauds the ISAB for its work to help with this "complex and difficult issue." The report raises significant issues, he said, pointing out that some non-native species have "very popular fisheries." In some cases, these fisheries are getting "a national following," Lipscomb noted, adding that he has seen publications that ask: "within the next one or two years, will the record walleye come out of the Columbia?"

You need to hold up some scientific evidence before these fishermen and fisherwomen, he said. Lipscomb pointed out there will be a workshop with BPA September 24 to look at the issue as a limiting factor in the recovery of salmonids in the basin.

Environmental risk assessments for resident fish substitution projects need to be done, he said. But there are unique situations across the basin, and trying to come up with "a cookie-cutter risk assessment tool" won't be easy, Lipscomb stated. CBFWA will try to help, he added.

Staffer Jim Ruff agreed that walleye and bass from the Columbia Basin are gaining national

attention. If more fishermen start coming out here from the Midwest and other areas, where there are zebra and quagga mussels, it will hard to keep those mussels out of our waters, he noted.



Draft F&W Program Is About to Pop

Council chair Bill Booth kicked off a work session on the draft F&W program by noting the goal is to get the document released to the public in early September. He said a final review of the draft, including the executive summary and introduction, would take place in a teleconference on August 28.

The Council agreed to request an "updated recommendation" from the Affiliated Tribes of Northwest Indians (ATNI) for tribal representatives to serve on the ISAB Oversight Panel. There has been underrepresentation of tribes for years, said Rhonda Whiting. I want to create equity and parity in tribal representation, she added.

As for the Independent Economic Advisory Board (IEAB), staff noted there is no language in the program about it now, and the Council needs to decide whether to address the IEAB in the program. It would be good to have a group of economists we could draw on when we need them, but I'm not in favor of keeping the IEAB as it is now, Joan Dukes said.

The IEAB has been underutilized, said Karier. The Council decided not to put any language about the IEAB into the program, but to make an effort over the coming year to determine the needs an economic advisory panel could meet and make a decision after that.

Bruce Measure suggested the program say that the Council's two science panels should include scientists who represent a balance "from all geographic areas in the basin." There are

geographic differences within the region, and this recommendation would reflect that, he stated. Dukes said she didn't think such a change was necessary. Booth asked staff to redraft the section dealing with science panels for further review.

The 5 Million Fish Objective

Staffer Patty O'Toole pointed out the biological objectives section of the draft says the Council accepts the goal of increasing adult salmon and steelhead runs above Bonneville Dam by 2025 to 5 million annually. This goal was the subject of some discussion at the last meeting, she noted.

It is unclear whether the 5 million means wild fish or harvested fish or what – it raises a lot of questions, said Karier. He suggested striking the language saying the Council accepts that goal, and recommended the program call for the Council to work with F&W agencies and tribes to see if a set of biological objectives should be developed for the program. Eden said Karier's recommendation would be "slighting the basis for how these numbers in the program were arrived at." I suggest we leave the numbers in, acknowledge they are not defined well, and say that we will conduct a process to better define them, she stated.

The program can still say what the numbers are and indicate that the F&W managers recommended them to the Council, said Karier. So they would stay in, but would be removed as interim goals for the program? Eden asked. Yes, replied Karier. Then I object, said Eden.

I don't agree with the numbers, and they probably can't be achieved, but it's okay to have a goal, said Jim Yost. "I also support finding water on Mars," he quipped. I hope the managers will be able to come up with some realistic numbers, Yost added.

To throw out the goals isn't realistic, Dukes said. These numbers aren't a good measure of

the success of the program, stated Karier. My concern is that these numbers "have been used as a stick to beat people with," rather than something to be used to move forward and "do good things," said staffer Tony Grover. Our science panels have judged them to have no scientific basis, he noted.

I oppose removing these numbers before we have other numbers – they haven't been "pulled from the air," said Eden. And I disagree they've been used "to beat people up," she added. The fish managers in all the states say leave in the numbers, and those are the people we give deference to, said Dukes.

Booth called for a vote on Karier's suggestion to delete the language in the program that says the Council accepts the 5 million goal on an interim basis. The motion passed, with the Oregon members voting no.

Wildlife Crediting Controversy Continues

The Council took up whether the program should endorse the 2 to 1 crediting ratio for wildlife mitigation habitat units. Dukes said it should, as did Eden. My feeling is that the issue will get resolved in negotiations with BPA anyway, said Booth.

Karier said he favors language that says the Council recognizes the controversy over the crediting ratio and will conduct a process to resolve the deadlock over the ratio. Measure said the 2 to 1 ratio should be maintained for the present, and Whiting agreed.

Having a regional process would better inform the Council of the complexities in trying to land on the right ratio, said Wallace. Maybe we could ask people what incentives would allow them to complete agreements that fit local areas and what would be disincentives – that's better than locking into any ratio, he stated.

We have often put out a cover letter with the draft program highlighting "hot-button issues" that we specifically want comment on, noted staffer John Shurts. This issue would be a good candidate for that list, he said.

Karier argued against including the 2 to 1 ratio, noting that estimates of wildlife losses related to the ratio are sometimes wrong. He suggested, if the program retains the 2 to 1 ratio until a regional process resolves the issue, it should say: "the ratio only applies when loss estimates are not inaccurate due to stacking." Stacking refers to using multiple target species as indicators for the same habitat type, according to a staff document.

We've had a crediting ratio for years that has been completely ignored by the agency responsible for its implementation, said Eden. BPA could have redone the loss assessments, but they declined to do so and said it was too expensive, she stated. As a result, 10 to 15 years later, here we are with wrong loss assessments, Eden said. I think we have to admit this whole program is a mess, she added.

There's plenty of blame to go around, and BPA has to take some, Karier said. But rather than dwelling on the past, we should look forward to the resolution of some of these issues, he added.

I agree "stacked" crediting is a mistake and prevents us from moving forward, said Measure. We should push the region to resolve the stacked crediting issue, he stated.

Wallace suggested new language that says the Council will work with BPA and the managers to address loss assessments and crediting to develop a comprehensive agreement on the crediting ratio and strategies that will allow parties to reach long-term settlement agreements. Eden suggested that process be given a one-year deadline. The Council accepted Wallace's language and added the one-year deadline.

Booth asked if the Council wanted to include the sentence proposed by Karier that said "the 2 to 1 crediting ratio only applies when loss estimates are not inaccurate due to stacking." Oregon opposes that, Eden said. This language could limit folks who haven't been mitigated, added Dukes. The Council voted to include the sentence from Karier. Oregon's members voted no.

Booth asked if Council members favored keeping the 2 to 1 ratio in the draft program. I don't support that, but we can include it in the draft sent out for comments, said Karier. The Council decided to do that.

In the section on operational losses and wildlife mitigation, staff proposed language that says: "revised subbasin plans will serve as the vehicles to provide mitigation for any identified direct operational losses, and for secondary losses to wildlife due to declines in fish populations resulting from hydropower development."

For the record, I don't support all mitigation for all secondary losses, said Karier. Secondary losses are a not a legitimate responsibility of the hydro system – for example, if you argue that cheap hydropower brought more development to the region and that harms wildlife, he stated.

Honey, I Shrunk the Subbasin Plans

O'Toole said the Council needs to decide how to handle subbasin plan summary tables, which CBFWA prepared and recommended be adopted into the program. What did it cost to develop the subbasin plans? Yost asked. \$15 million, replied O'Toole.

Is the Council or BPA paying to have those plans updated now? Yost asked. No, replied O'Toole, noting the draft program says the Council will accept recommendations to update existing plans until 2010, but that it will be

voluntary and not have "specific, dedicated funding." What scientific rigor will be applied to the updated plans? Eden asked. They would go through ISRP review before the Council adopts them, replied Grover.

Wallace suggested a public process to "tweak" the summary tables to make them more useful could begin during the comment period on the draft program, so the tables could be finished by December. Dukes said she liked the template for the summaries CBFWA provided. Why not just use the CBFWA template? she asked. Some recovery boards have told us they want to edit the template, but what the Council sends out for review will be based on what CBFWA supplied, replied Grover. Staff agreed to rework the section to clarify the Council's intent with respect to the summary tables.

Vision and Nexus

The Council approved new language in its "vision" statement saying that "the development and operation of the hydro system is not the only human cause of adverse effects to F&W" in the basin. In the planning assumptions, the program now says "the hydroelectric power system is only one factor in the loss of F&W in the Columbia River Basin." And it also says: "the 'nexus' to the hydro system that allows a measure to be an appropriate part of the program is whether the measure will provide protection or mitigation benefits for F&W adversely affected by the hydro system, benefits that can be said to compensate for effects not already mitigated." The new language also notes "the extent of BPA's funding obligations in any particular rate period will be determined through the F&W program's implementation provisions."

The Council also approved, in a planning assumption involving the hydro system, a statement saying that efforts to optimize the survival of focal fish species should "include re-establishing natural river processes to the

extent feasible and consistent with the Council's responsibility for maintaining an adequate, efficient, economical, and reliable power supply."

On climate change, the Council agreed to language that says "the Council acknowledges that global climate change is not directly caused by the Federal Columbia River Power System." A lot of activities, such as industry and energy production, do affect climate change, said Eden who suggested the inclusion of the word "directly" in the sentence. The hydro system contributes to reductions in climate change – that's the real point, observed Karier.

In a new section dealing with non-native species, the Council agreed that its resident fish substitution strategy should require an environmental risk assessment for all projects that could introduce or enhance non-native species.

Whack-A-Bass?

Staff proposed language that says the Council urges state agencies to "relax or eliminate" fishing regulations that may be enhancing populations of non-native species, especially those that directly or indirectly interact with juvenile and adult salmonids. So the Council will encourage state fish and game folks to limit the harvest of non-native species like bass and walleye, but we allow the harvest of endangered species like salmon, said Yost. That doesn't make sense, he stated.

The idea is to relax or eliminate the limits on how many of the non-native fish "you can whack," said Wallace. After a discussion of what could be recommended to state agencies about fishing regulations, Booth asked staff to rewrite the section "to clearly send the message" we are concerned about the expansion of non-native species that could have a harmful effect on salmonids.

In a new section on ecological provinces, the Council agreed to delete language about province-level biological objectives. We need to decide if we are going to do province-level objectives – we've put it off for eight years, said Eden. If we aren't going to do them, why should the program discuss their relation to subbasin plans? she stated.

At the end of the work session, staff had a long list of sections to be reworked, as well as an executive summary and introduction to write. Booth said the Council would review what's left at the conference call August 28, which would be followed by a vote to release the draft program. Then there will be a 60-day comment period, he noted. "I think we are on track and making good progress," Booth summed up.

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Council 2008 Calendar

September 16-18	Astoria, OR
October 15-16	Missoula, MT
November 18-20	Coeur d'Alene, ID
December 9-11	Portland, OR