

Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

Council Meeting Minutes May 8–9, 2018 Boise, Idaho

Tuesday, May 8

Council Chair Jim Yost brought the meeting to order at 1:35 p.m. All Council Members were in attendance. Member Yost welcomed the audience to Boise.

Reports from Fish and Wildlife, Power and Public Affairs Committees

Fish and Wildlife Committee

Council Member and Fish and Wildlife Committee Chair Guy Norman reported on a robust agenda.

- Patty O'Toole, program implementation manager, spoke on the Fish and Wildlife Program amendment process. They discussed the latest draft of the call for recommendations. Committee members requested one minor edit to the draft and support sending it out in May. If approved by the Council, staff expects it will be mailed in 7–10 days, around May 18. It will ask for recommendations during a 120day period into mid-September. The Council can choose to extend the comment period for another 30-60 days. An outreach plan will be set up, including consultation with entities, tribes, and fish and wildlife managers as requested.
- 2. Tony Grover, Fish and Wildlife Division director, provided an update on the Columbia River Partnership process. Council Members Yost, Norman and Jennifer Anders are involved. The partnership is considering provisional goals for natural production for all the populations in the basin. Draft recommendations will be considered at the June Partnership meeting. They will be looking at hatchery and harvest goals as well. The NOAA Fisheries' Marine Fisheries Advisory Committee (MAFAC) Columbia River Partnership process is to be completed in October. The expectation is to adopt the recommendations to the MAFAC board. The partnership could consider phase two in 2019.

- 3. The Committee heard from the Colville and Spokane tribes on Northern Pike suppression in Lake Roosevelt. The information shows an increase in the numbers caught. This indicates a growth in Northern Pike numbers and their geographic spread. In 2017, they removed 4,800 pike, most by gill net, but also by the sport reward program. It has dual purposes: 1. Reduce impact on resident fish, and 2. focus on reducing the risk of pike migrating to the anadromous waters. For suppression, there is a proposed annual budget of \$1 million in 2018. The ISRP reviewed the project and said it meets scientific review criteria. The 2018 budget is being funded by reprogramming BPA funding for white sturgeon and redband trout. The Committee supports the effort and there will be a proposed action before the full Council in June.
- 4. Staff and Bonneville have undertaken a screw trap inventory. They discovered 41 projects and 104 screw traps with full or partial funding by BPA. They were looking for efficiencies, but the outcome showed no cost-savings efficiencies. What they found was a well-run, viable program, Member Norman said. Value was found in the coordination and the inventory itself. The Committee wants to add to the screw trap inventory to the screen and hatchery inventory. They want to revisit this in four or five years.
- 5. Lynn Palensky, program development manager, provided an update on the Research Project Inventory and Project Review. A total of 176 projects have been vetted by staff. Staff narrowed the projects to 30 that are part of the "big Rs," which have 60 percent or greater of the research funding. The purpose is to look at whether needs are being met, if there are redundancies and to guide future research investments. Staff will continue to coordinate with BPA and fish managers, and to have recommendations by July 20, to help inform the 2020 budget. The timing is being coordinated with the amendment process.
- 6. There was a report on the habitat monitoring strategy by staff, plus BPA's Jody Landow. There's an agreement that the current strategies of the habitat M&E program aren't answering the questions about effectiveness. A group of staff, BPA and NOAA are working to develop a new, regional strategy to help inform future investments. A first draft has been completed and a solicitation of comments is underway on the drafts. The idea is to develop and agree to a regional framework that will align with NEPA process and the BiOp. The timeframe is between now and August 2018–2019 to advance the strategy, then adoption in October 2020–2021.
- 7. Finally, there was a brief presentation on emerging priorities. The committee received a preview of the mapping tool associated with long-term maintenance of wildlife lands that have been purchased. The interactive map is an impressive effort. There was a request from members to include conservation easement properties, which staff will look at. They also received a copy of a report from the white sturgeon workshop in Coeur d'Alene.

Power Committee

Council Member and Power Committee Chair Tim Baker provided a report on the morning's session.

- 1. The committee heard a report on the Draft 2023 Resource Adequacy Assessment, which is an annual event. The Council's loss of load probability (LOLP) standard is five percent. Looking out over five years, due to retirements, the region is creeping into the seven percent range. However, critical assumptions include future load growth and imports from California. Utility IRPs in the region have firm capacity of about 800 MW in additional generation, plus the Council's planned 400 MW of demand response. This report will come before the full Council in June.
- 2. The midterm assessment is approaching, so there was a report on resource acquisitions and retirements since the adoption of the Seventh Power Plan. Some observations, such as energy efficiency and demand-side strategies, are keeping load growth low and are delaying the need for acquisitions. Things that are increasing acquisitions are changes in the Oregon renewable portfolio standards and expiring federal tax credits, which are driving renewable resources. Uncertainty over environmental regulations and the future of carbon legislation is dampening or increasing the number of coal retirements. Overall, what we're seeing in resource planning and developments is in line with the Council's Seventh Power Plan, Member Baker said.
- 3. Staff reported on generation costs. Looking at assumptions made in the Seventh Power Plan, wind capital costs have dropped between 24 and 30 percent. Solar costs have fallen from 19 to 37 percent. As we go into the midterm assessment and go into the Eighth Power Plan, we'll want to factor in those decreasing costs, Member Baker said.
- 4. Staff reported on demand forecasting in the transportation sector. Staff has acquired a new transportation module to include into its long-term load forecasting. It looks at forecasts of sales, electricity demand and light-duty electric vehicles in the Northwest. It's preliminary work. Demand for electricity from the transportation sector is relatively small, but over time, it could be important electric load.
- 5. BPA followed up on the analysis it provided last month on their needs assessment and conservation potential assessment. It looked at where they're going with their Aurora model. Loosely, it's BPA's IRP, Baker said. It focuses on what BPA's needs are, whereas the Council focuses on the region. BPA ran 400 futures, a least-cost portfolio analysis, and narrowed it down to a couple of portfolios. If they look at monthly market purchases for winter needs, and focus on energy efficiency and demand response to meet summer needs, they can satisfy their loads into the future without acquiring new resources. This model is a new process. Baker added that it's

it is in our interest that BPA's resource decisions are in synch with the Council's Plan.

Public Affairs Committee

Bill Booth, Public Affairs Committee Chair, said there was no Public Affairs Committee meeting in April, but they will have a meeting following adjournment today. They will go over the draft itinerary for the August Congressional staff tour in the Walla Walla region. Invites to 50 staff members will be sent in June with a goal of having 15–20 participants. Walla Walla is rich in energy and fish and wildlife projects. Stops will include PacifiCorp wind projects, a dam tour, Lyons Ferry Hatchery, a water transaction project involving the City of Walla Walla and the Umatilla tribes, and a water conservation project.

Another update is the new Council website. After working with an outside contractor, the new website will be up in about a week. Staff will give a briefing on the site this afternoon.

Mark Walker met with Congressional staff in Washington, D.C. They were receptive to the information in the *Value of the Columbia River Power System* publication. Public Affairs staff has produced blogs on the treaty negotiations, sturgeon, energy efficiency in hard-to-reach markets, and the recent ISAB review of the Council's Fish and Wildlife program.

Public Affairs staff is following BPA's public process to get its financial house in order by reducing debt load and increasing financial reserves. Staff is preparing emails and memos to Council Members as this process unfolds.

1. Briefing on Idaho Power Company implementation of membership in the Energy Imbalance Market

Shirley Lindstrom, policy analyst, introduced John Prescott, Northwest representative on the EIM board of directors. He retired as president and CEO of Pacific Northwest Generating Cooperative in 2016, and worked at Idaho Power for 14 years.

Prescott talked about Idaho Power's cutover to joining the EIM on April 4, 2018. It's something they had been working on for two years. Prescott said it reminded him of being at Idaho Power for Y2K: It was a nonevent. When some of Idaho Power hydro units switched over to being controlled by signals from the California ISO, it was a big step, he said. There was one little hiccup and since, the system has been running smoothly.

Prescott explained three points about the EIM: what it is, what it isn't and what's next.

The EIM is a voluntary, energy-only, five-minute optimization, transparent, balancing, electricity market. When someone joins it, if they choose not to participate, there is no exit fee. If they choose to take units out of control, it's all voluntary. Energy-only speaks for itself. It's not a capacity market. The EIM executes an optimization routine every five minutes

throughout the Western Interconnect using the CAISO supercomputer in Folsom, California. It's transparent. If you have app on phone, you can look at the price and the congestion costs, depending upon where you're located. Each participating utility goes into that balance assuming they have the ability to meet their system load. It's not a planning tool where you can count on it to meet your load. It works by expanding the footprint. If you have an unexpected spike in use, the computer will detect it and dispatch resources to meet that increase, anywhere within the footprint of the EIM — be it Arizona, Washington or Idaho.

There are eight entities in the EIM, including CAISO. Prescott is one of five members of the independent governance body. They were seated in July 2016. They can't have any financial interest in WECC. The assignments are for three years. He listed other members of the board and mentioned other oversight.

Starting in 2013, the EIM has realized \$330 million in net benefits, Prescott said. It has saved over 250,000 equivalent tons of carbon dioxide emissions and has facilitated the integration of renewable resources. For example, you have an excess, you have a market for it. If you have a shortfall, you have another source.

However, the EIM is still a small part of the overall market in the West. Less than 10 percent of the load served by interchanges is EIM.

Last, it is an electricity market operating under a tariff with FERC.

What the EIM is not: It's not a capacity market, it doesn't supply resource adequacy and it doesn't solve the duck curve.

One issue raised by Powerex, which also recently joined EIM, is how they calculate default energy bids for hydro. Prescott said he thinks CAISO didn't know how to do so, but he'll be watching to make sure they correct that problem so that the Northwest is properly credited for hydro in a default energy situation.

What's next: The Balancing Authority of Northern California and Sacramento Municipal Utility District will join in 2019. Salt River Project, Seattle City Light, and Los Angeles Water and Power will join in 2020. Prescott said he read that Bonneville is looking at it. Every entity has to do their own analysis and that those who have joined have had benefits that have exceeded their expectations, he said.

Prescott described it as an example of what a Westwide market could be. PacifiCorp was the first to try and it's worked out well for them. Should we be looking at going beyond the within-hour market? A day-ahead? It may sound like a small step, but it's huge. There are governance issues. They have to be as independent as we are and respect the policies of the states, he said. He believes it makes sense for the region and for ratepayers to do a day-ahead market. It's a more efficient way to run the power system.

After having lived through the energy crisis, there's still an overhang of that trust if we're going to expand to an RTO, he said. That really has implications. That probably wouldn't be voluntary. Participants would have to get in and stay in. But the success of EIM prompts the need to take a look at that.

Member Baker asked if Prescott could explain a day ahead market? Does it approach having the attributes of a capacity market? It could, Prescott said. CAISO is proposing one, but they don't have it all fleshed out, but it's not a capacity market. It would just be bidding into resources a day ahead, hour by hour, or 15 minutes by 15 minutes.

Member Ted Ferrioli asked Prescott to explain an energy-only market. Prescott said it implies that there's no capacity involved.

Member Ferrioli asked Prescott about the authority having to respect states' rights. How does this avoid dispatching coal electrons to a state that forbids it? Prescott said if you bid a coal unit in Wyoming, there's an economic adder put on it, and you wouldn't dispatch it as often. Member Ferrioli said he thinks people will have questions about that and he'll learn more about it offline.

Member Ferrioli asked who was in the EIM. The members are CAISO, PacifiCorp, NV Energy, Puget Sound Energy, Arizona Public Service, Portland General Electric, Idaho Power and Powerex.

Member Karier said it's a fascinating development and the benefits are impressive. One way to calculate the benefits is how much each entity is paying for those five-minute markets, compared to using their own resources. Is that how it's added up? Yes, Prescott said, it's the counterfactual dispatch. Member Karier asked if the assumption is that it's from your own resources? I don't know, Prescott said, I assume that's the case.

Member Baker asked about the nature of the market. It's not capacity, but it changes the way a member planner thinks. They still have to bring their own resources, but they would be allowed to bid in a day ahead . . .

Prescott replied it's a fundamental issue that comes with a day-ahead market. A big difference with EIM is you have to go into an hour balanced. You don't have to with day ahead. You can say, "I'm going to rely on your resource for five hours tomorrow to meet my load."

Member Baker observed, the way it's set up, if you have a coal plant, it faces an adder to its cost, and it would have to overcome that price to go into California. Yes, Prescott said, but you could sell it elsewhere. It's a voluntary market so as a seller, you can choose not to sell it into California.

Member Yost asked, "How is the relationship of your EIM board with the CAISO governing board? How do those two relate?" We don't report to them, we're independent, Prescott replied. They have the authority to make tariff changes with FERC. They have delegated the authority to us any issues primary to the EIM. They will put it on their consent agenda for approval at their board meetings. We get together with that board often to work through common issues. They're supportive of our independence. There's a misconception that joiners of the EIM are joining CAISO. They're not. CAISO has the computer and system model to make it work.

Member Yost asked, if you look at day-ahead market, wouldn't that provide more opportunity for hydro to enter the bids? Yes, Prescott said, hydro needs more of a timeframe to set up your bids to make your cascading system work, rather than short-term commitments. So a day ahead or multiple days ahead would be better for that market.

Member Karier asked Prescott to explain the inequitable treatment of hydropower. Prescott explained that the EIM algorithm looks at constraints. If your unit is in a constrained area where you can command a high price, there's a limit the system sets and puts you back down at your cost. So if you're a natural gas plant operator in a constrained environment, you can only get your cost. You have to run it, but you don't get market. The Department of Market Monitoring would say you have market power. You can't charge whatever you want. Prescott went into a detailed explanation of how that would impact hydro costs. He said CAISO is opening a public process on how to address that issue.

Member Booth asked, why the one-day constraint? Why not a longer period of time? It might bring more value to the participants. Prescott answered that it's probably the tradition of other RTOs. There's probably not a reason why you couldn't open it up to a weekly market, but others have designed it this way.

2. Briefing on 2018 snow and streamflow outlook – shortages, surplus, etc.

Shirley Lindstrom introduced Ron Abramovich, water supply specialist, with the Natural Resource Conservation Service Snow Survey in Boise, Idaho.

Abramovich reminded Council Members that when they met in Boise last year, the Boise River had 8,000+ cubic feet per second (cfs) flowing through town, compared to 4,200 cfs this year. He said this year, it's Montana's turn for an interesting runoff.

He talked about snowmelt in a variety of locations. He said we'll need freezing temperatures at night to slow down the melt, particularly in Montana. We don't want it to come off too early, he said.

Abramovich reviewed a timeline of water user needs in October through September. Looking back a couple of years, we have gone from a couple years of a strong El Niño to the La Niña in 2017. This year, we had a stronger La Niña with cooler-than-normal temperatures around the equator. Last year, 45 atmospheric rivers made landfall on the West Coast in 2016-17. In the years following strong El Niño years, the pattern shows well above-average stream flows and that's exactly what's happening. Looking at last year's snowpack, the April–July runoff was fairly normal.

He talked about the Idaho Resources Board's aquifer recharge project. It diverts water from the canals into recharge locations in Eastern Idaho. In 2017, they diverted 300,000 acre feet of water into the aquifer. Last year, it was over 500,000 acre feet because of the abundant runoff.

Looking at 2017 and 2018 steamflow conditions, the system was primed from last year's runoff for this year's winter. For example, Lewis Lake had record soil saturation last year. Abramovich said that a major cold spell decreased irrigation demand, brought snow to the mountains, and sealed in soil moisture through the winter. That's how we could get by with a below-normal snowpack, he said.

He discussed winter forecasts for this past winter and said they were largely based on La Niña years. February brought a return to winter with cold temps and cold smoke snow, with powder at four-to-six percent density — a very light skiing snow.

Looking at snowpack as of May 1, Abramovich said that spring precipitation can make or break the volume streamflow forecasts. Normal April to June precipitation is needed for runoff to reach the 50 percent chance of exceedance forecasts. If they get 75 percent of normal April to June precipitation, the runoff is more likely to be in the 70 percent chance of exceedance range Southern Idaho. If they get precipitation in the 125 percent range, the runoff will be closer to the 30 percent chance of exceedance forecasts.

Abramovich said that contractors are asking more questions and are accounting for the water they use. The field office in Twin Falls Soil and Water Conservation District tracks it and there are incentives for using less water.

He discussed seeding the clouds. Idaho Power is running a \$3 million cloud seeding budget, spending quite a bit to make more snow.

In Montana, the low valley snowpack has come down and there's plenty more to come. Deep snowpack will continue to feed rivers and streams. He said that while primary flood impacts look to be in the Missoula area, long-duration high water is anticipated all the way downstream to the Idaho border. He said that rivers are going big in Idaho's northern basins and in parts of Montana, primarily along the Continental Divide.

Member Booth mentioned that there's a flood warning on the Pend Oreille River, downstream of Albeni Falls Dam.

Abramovich talked about the day-of allocations predictions for Boise, Payette and Upper Snake. He described it as switching from your checking account to your savings account, switching from normal streamflow to storage water. He also mentioned staffing constraints.

He concluded saying that the key is to manage water as a natural resource in wet years to mitigate impacts in dry years.

Member Norman asked about the criteria for atmospheric rivers. Abramovich said it's a name change from referring to it as the pineapple express. It's an abundance of moisture coming in to the West Coast, usually from Hawaii. The average number of atmospheric rivers is much lower than 45.

Member Yost asked what will change with climate change? Our weather is always changing to produce our climate, Abramovich said. That's why I have been giving these talks for 25 years now. What we've seen more recently is the greater degree of climate variability. Historically, we could count on normal spring precipitation if we had a greater snowpack, but now we're living in extremes. That's what keeps it interesting.

Member Richard Devlin said, you indicated that has changed and you can't count on those two patterns occurring. Have there been any other long-term changes or would you say there was a time in that 25 years when you've been comfortable looking out more than a few years what the weather and conditions may have been?

We've noticed that the Pacific Decadal Oscillation (PDO) has changed, Abramovich said. It used to be 20-30 year oscillation of a cooler and warmer spot in the ocean flip-flopping since the early 1900s. More recently, it's been more unstable. That's why it's harder to use the El Niño and La Niña conditions. For shorter-term planning, it's important to know these relationships when your snowmelt has peaked for the coming year. My job is to look at last year, this year and next year, not as much 50 years from now.

Member Yost said, "So in summary, there's no reason to go to Montana for fly fishing early."

Abramovich said that if you're a rafter, you'd better be careful until we've seen the peaks, and we'll have a long rafting season afterwards.

Member Yost said, so we don't know when the peak runoff is going to be in Montana and Northern Idaho streams.

Correct, Abramovich replied. We have tools and an updated analysis from 1990s. Now we have 30 years of SNOTEL data and we could expand that to other basins, but we just don't have the resources.

3. Council decision to release draft "Under-served Energy Efficiency Markets Assessment — Summary of Results" for public comment

Kevin Smit, senior energy efficiency analyst, presented the Action Plan item under Model Conservation Standards to ensure that all cost-effective measures are acquired. It used to be called "hard-to-reach" customers, now it's "underserved." It's about looking at the gaps in the market, what housing types don't get the same conservation as everyone else, and what we're doing to fill those gaps.

Since it was hard to do one big study, the Council recruited individual utilities to do their own studies and share the results. Confidentiality was an issue in gathering data, Smits said.

The working group members are: Puget Sound Energy, BPA, Energy Trust of Oregon, Seattle City Light, Snohomish PUD, Ravalli Electric, Tacoma Power, Idaho Power, PacifiCorp, Northwestern Energy, and NEEA (which provided data support).

Utilities don't collect data on income, ethnicity, etc., but there are data sets that can be purchased. You can combine those and come up with the data we're seeking. NEEA has purchased 16–20 data sets. If a utility doesn't have them, they can get them from NEEA.

Looking at the participation rate, in 2016, 1.8 percent of homeowners participated in programs, while only 0.1 percent of renters participated in programs.

Member Anders remarked that it seems low and asked if the numbers are accurate. Smit said he believes they are reasonable.

Member Devlin added that this is for the year 2016, which doesn't mean ever. So participation could be higher. Member Ferrioli commented on the power of incentives for owners versus renters. Owners get tax rebates. If an economic benefit that can be identified, it works.

Member Devlin said they discussed it extensively in committee. There are certain reduced flow measures, replacement bulbs or covers on water heaters that renters could do. An owner doesn't care because it's not a reduced cost to the owner, it's to the renter.

Smit discussed BPA's energy-efficiency program participation by income. Participation rates are higher in the lower-income brackets than in the higher ones. On the higher-income end, customers participated at lower rates.

Member Ferrioli equated it to groceries. If you look at energy as a percentage of gross income, the savings are substantial on the lower half of the graph. In the higher income brackets, the potential for saving energy has to be measured as a percentage of gross income, which is negligible for a more wealthy family. Some are doing improvements, but

not applying for or expecting a subsidy. You're showing an economic anomaly, not programmatic measurement of what's going on in the conservation world.

Looking at Ravalli Electric's participation by income, the results look different, Smit said. The middle brackets don't participate very well, but higher incomes do.

Member Ferrioli asked if surveyors circled back with Ravalli and ask if there was any incentive or outreach to the higher-income brackets? No, replied Smit.

Looking at participation by house type, three entities were picked: Idaho Power, Snohomish and BPA. Smit said participation was strong among single family homes, multifamily was lower and manufactured housing the lowest.

Smit showed a graph with participation by homeowners versus renters, and urban versus rural customers. There was a good balance of participation between rural and urban customers.

In Tacoma, they looked at the potential for kilowatt-hour savings for office, retail and schools.

Smit shared the study's general findings:

- They developed and demonstrated a process for conducting this type of gap analysis. The data was already available.
- Utilities have been successfully using "targeted" programs. It's the reason why BPA has strong participation by low-income customers.
- Different purposes require different methods and data.
- There's value in continued monitoring because the focus changes over time and energy efficiency is more than a three-year effort.

Smit share the findings summary by category:

- Income
 - The "low income" segments showed a wide range of results, but in general, utilities have low-income programs that are effective. Better than expected, Kevin said.
 - The highest-income brackets participated at the lowest rates.
- Housing Type
 - Most utilities found the multifamily segment to be underserved consistently.
 - Manufactured housing residents typically participated in energy efficiency programs at higher rates than single family and multifamily housing residents
- Urban/Rural
 - Rural customers also appear to participate in programs at similar rates as urban customers.

- Home Ownership
 - As expected, residents who own their homes participated at higher rates than renters. Renters are not going to put money into a house they don't own.
- Commercial
 - Small business customers were found to be slightly to moderately underserved.
 - Schools tended to have relatively high participation rates.

Smit asked the Council for approval to release the draft report with requested edits.

Smit mentioned that when Idaho Power released a free energy savings kit, participation spiked. So program design can influence participation.

Member Booth said that when the small rural utilities talk to us, they complain about the method of BPA's payment. In order to balance the books, rural guys feel at a disadvantage in meeting the quotas larger utilities do. The larger entities get reimbursed if they meet a quota. Smaller utilities don't get the money. Doesn't this data say they're right? They're at the same level of participation, so maybe there's a problem with the formula.

Smit said one reason why participation rates look even is because rural utilities participate in lower-cost measures at higher rates and with that are lower savings. So there are lower incentives.

This data says they might have a valid point, Member Booth said.

Member Karier said there was a concern about EEI's energy incentive, but it turned out that almost no utilities are leaving money on the table. They're all using it. But there might be some trading going on, but it's probably rare.

Member Baker said he thinks it has to do with having the opportunity that larger utilities have to engage in similar measures. It may be just a one and done. If people participated once, they got picked up by this.

Northwest Power and Conservation Council to Approve Release of the Report "Northwest Under-Served Energy Efficiency Markets Assessment" for a Two-Month Public Comment Period Ending July 6, 2018

Member Anders moved that he Council approve the release of the staff report "Northwest Under-Served Energy Efficiency Markets Assessment" for a two-month public comment period ending July 6, 2018, as presented by staff and recommended by the Power Committee.

Member Baker second. Motion passes without objection Member Ferrioli commended the staff for the report. It's so coherent, even an English major can understand it.

Member Karier remarked that it's great work. We've heard for years about underserved populations. This is the first time we've been presented comprehensive data and analysis. A little data goes a long way. Now we know how to move forward.

Member Yost said they'll look forward to a report on July 6.

4. Briefing on the Lake Roosevelt Forum meeting

John Harrison, information officer, reported on a panel discussion on the future of the Columbia River Treaty, which was held in Spokane last April 25. It featured Jill Smail, U.S. State Department negotiator. About 125 people attended the public event. Harrison also reported on a salmon reintroduction presentation. He began his remarks alerting Members to a correction on page two of the memo, which referred to a contract with the Spokane Tribe for a phase one analysis. The contract is actually for a habitat analysis.

Also attending the Spokane meeting were Patty O'Toole, Stacy Horton, Member Anders and Member Karier. Harrison said the main takeaways on the Columbia River Treaty portion were:

- This was the first time that Smail had convened the negotiating group in public to talk about the Treaty. In addition to Smail, the negotiating team consists of representatives of the Bonneville Power Administration, Bureau of Reclamation, Army Corps of Engineers and NOAA Fisheries.
- Smail made it clear that this team will represent the December 2013 United States Entity Regional Recommendation and nothing else. There would be no reopening or renegotiating, that it's final and this is what they would be basing their recommendations upon.
- There was strong public support for the inclusion of an ecosystem function in the treaty and there was support for the addition of tribal representation to the U.S. negotiating team. Smail made it clear they're not going to do that. In the late 1950s and early 1960s, the tribes were not consulted when the Treaty was negotiated. This time in the Regional Recommendation they were consulted. In the process beginning this summer, there will be updates for the public from the negotiating teams, including consultations with the tribes. While they won't share the fine points of the negotiations, they will provide progress updates.

On the reintroduction of anadromous fish above Chief Joseph and Grand Coulee dams, there is a three phase approach. The presentation was a preview of phase one. The

message from the Colville and Spokane tribes is that there is habitat above the dams that could support thousands, if not millions, of salmon. They will present to the Council in July. Their work is about done. They heard from Bill Green of the Ktunaxa Tribe in British Columbia. They've been doing complimentary studies and have found good habitat available to support salmon. Also, the two new power plants — the Brilliant Dam on the Kootenai River and Waneta on the Pend Oreille River — have been designed to install fish passage if fish are ever present. So they're moving ahead with reintroduction studies in B.C. Canadian environmental agencies have created a new fund for repairing damage from historical losses. Reintroduction is the kind of project they would support, but he said they have not determined if reintroduction is feasible, they've only looked at habitat. The next meeting will be in Fall 2019.

Member Karier said the Corps did study on the effectiveness of transporting fish around high head dams. How well did they work? We didn't have that in ours. It was a good presentation that should be heard at a Council meeting.

Member Devlin said it's clear that tribal interests in areas where fish have been blocked view this as their opportunity to get some changes they believe should have been in the original process. Was there an indication by the chief negotiator that she listened to those and that they would be in the final agreement? The 2013 document makes come references to environmental impacts and issues, but doesn't indicate what's needed.

Harrison said he didn't think so, there was a distinct lack of specifics. Smail and her boss, Francisco Palmieri, recognized that the Columbia River begins in B.C. and that U.S. dams eliminated salmon into B.C. and for the Upper Columbia tribes. She didn't say no, but there are no details on how they would coordinate across the border.

Dr. Brent Nichols, fisheries manager of the Spokane Tribe of Indians, said that no details were provided at the meeting.

Member Devlin said it would be interesting to know how much the Canadian government has put into this fund. He said that he and Member Ferrioli are familiar with legislative bodies creating funds in name, but putting very little into them.

Harrison said that Environment and Climate Change Canada is the federal agency. He said he can get more information. He said Bill Green is excited about getting some funding, but whether it actually materializes is another question. The Province of British Columbia is keenly aware of these issues and has its own recommendations, on behalf of Canada, for the future of the Treaty. The Canadian recommendation says reintroduction, if considered feasible, is the responsibility of each country's federal government.

Member Karier said that Devlin's question reminded him of something came up at meeting. We're familiar with the spending BPA has put into the Columbia River. Some estimates are that now a quarter of the rates go into fish and wildlife. Apparently, there was no such increase in Canada. There're revenue from the dams in Canada, but the spending on fish and wildlife and mitigation seems to be very small. Asking people in Canada, nobody knew what the percentage is. He said his impression is that they didn't benefit from the same legislation as we did here. All of those years of operating the dams without mitigation have built up quite a bit of resentment.

BC Hydro does have a compensation program to address the impacts of the Treaty dams, but the amount of funding put into it is miniscule compared to funding south of the border, Harrison said.

Member Anders said the only Treaty dam in the U.S. is in Montana, so they pay attention to what's going on there. The Council has provisions in its Fish and Wildlife Program on operations at Libby Dam. How much does Council Members staff pay attention to the Treaty development as it relates to our U.S. Treaty dam?

Harrison doesn't recall hearing anything about Libby. But Libby isn't operated in coordination with the other three dams on the Columbia on this side. It's operated under a separate agreement.

Member Karier said it's not incorporated under the same long-term planning that the other dams are and is treated separately.

Member Anders asked Harrison what role he saw the Council playing in this. He replied that they will keep Members informed, but the Council isn't part of the negotiating team and won't be at the table. But if the Treaty changes river operations, flows or reservoir levels, it will affect how the system is operated.

Member Booth said his understanding is that reintroduction is a separate issue from the Treaty. You need to keep it separate as reintroduction would take a major Congressional decision, and appropriations of major funding to the Corps and the Bureau. That's what I'm hearing from the negotiator and other federal agencies, he said.

Harrison said that the only person who tied reintroduction to the future of the Treaty was Bill Green.

Member Karier said, "I think they are closer together. Because the recommendations are going to be the blueprint for the negotiator. There's a section in there that states that the 'U.S. should pursue a joint program with Canada with shared costs to investigate and if warranted implement restored fish passage and reintroduction of anadromous fish on the mainstem Columbia River to Canadian spawning grounds.' So, it's in there. Some people were surprised. It's important to go back and read the seven pages. It's a key part that was discussed in detail and everyone signed on to it — Bonneville, the states, the tribes. It's in there with some qualifications. But it's still a part of the blueprint for negotiating a treaty from the United States' perspective."

Nichols said the Roosevelt Forum was its most successful to date. They had nearly 300 people at the meeting, and they couldn't have done it without Council support. He thanked the Council and Bonneville.

5. Demonstration of updated Council website

Mark Walker, Public Affairs Division director; Ben Kujala, Power Division director, and Chad Madron, project analyst, introduced Council Members to the new website, which will go live in a week or so.

Kujala described its clean look with banners taking users to different programs. It's similar to the RTF website project, but more refined. The challenge is there are a lot of documents to bring over, so they'll keep the old site up for a time.

The Council calendar is improved, and the news and blog are popular, growing sections.

Walker said the site has been nine months of work. There was a false start with another contractor initially. The funding is out of the Public Affairs budget, but it has been a Councilwide effort.

Chair Yost recessed the meeting at 4:22 p.m.

Wednesday, May 9

Chair Yost brought the meeting to order at 8:33 a.m.

6. Update on Genetic Monitoring

Jeff Allen, office director and policy analyst, introduced Dr. Shawn Narum, lead geneticist, Columbia River Inter-Tribal Fish Commission; and Matt Campbell, fisheries genetics program, Idaho Department of Fish and Game.

Campbell said it's been nine years since the Council has had an update on using genetic tools to monitor distinct stocks of salmonids in the Columbia River Basin. He said these genetic projects were initiated for two reasons:

- 1. RPAs in the 2008 FCRPS BiOp RPAs (reasonable and prudent alternatives) are required mitigation actions to prevent jeopardy of these species.
- 2. The ISAB/ISRP "Tagging Report" endorsed proof-of-concept trials for these genetic methods.

He described the genetic technologies for hatchery fish and how they work. He talked about parentage-based genetic tagging (PBT) for hatchery fish, which he said is a genetic-based fish tagging method involve genotyping hatchery broodstock. By genetically sampling the parents, all offspring are genetically "tagged." A benefit is that tag recovery is nonlethal, and possible at all life stages.

Genetic stock identification (GSI) is used on wild fish. Genetic profiles from all contributing wild populations are used to identify the stock of origin of any unknown fish. They can take wild fish and assign it to their genetic stock.

Campbell said that PBT's accuracy was demonstrated during the proof-of-concept period and almost all hatchery fish leaving the basin are tagged using it. GSI's achievements include the ability to monitor these species at the ESU and MPG level. Stock abundance estimates using GSI baselines exhibit low bias and high precision, he said.

He described how these technologies are being used for fish status and trend monitoring. In a discussion about steelhead viable salmonid population (VSP) monitoring in the Snake River Basin, he said that abundance is one of the primary metrics NOAA uses to evaluate a population's viability. It helps them determine what populations are recovering.

Viability assessments for Snake River steelhead were impossible due to wide distribution and winter/spring spawners. Therefore, most Snake River major population groups had little or no abundance productivity. Fortunately, these viability parameters can be estimated annually for the entire Snake River Basin using a comprehensive sampling and genetic program at Lower Granite Dam (LGR), he said.

LGR has facilities and programs in place to representatively sample fish during adult and juvenile migrations: Between 3,500–4,500 adults are sampled annually, and 1,500–2,500 juveniles are sampled annually. Campbell described the LGR biosampling process. All the fish get a PIT tag. The goal of the work is to take entire wild run and parse it back into genetic stocks.

Member Karier asked, "What do you do then? Do you take a scale from every fish that crosses the dam?" Everyone we sample, Campbell replied. "How does that help you?" Karier asked. Campbell said they can separate them by age and sex, and that is put into status reviews to determine if those populations are meeting recovery goals.

Karier asked if the process would replace redd counts and weirs. Campbell answered it's very complementary. Some things such as redd counts will continue because they have a long history of data sets, but in many cases these technologies can replace those tools.

Campbell said their goal is to parse the returning wild run into those genetic stocks. First they have to separate wild and hatchery fish. Most hatchery fish have a clip, but a number

of hatchery fish are unclipped or unmarked. NOAA requires estimates of wild abundance. He described how they know the difference between hatchery and wild fish.

Member Norman said he assumes that some of the hatchery fish have some of the same backgrounds from wild stock. You can trace them to parentage? Yes, absolutely, Campbell replied.

Campbell said that removing unclipped hatchery fish is critical. Using PBT, there was a 20 percent difference in the numbers of steelhead and 36 percent difference in Chinook. Then we can look at wild escapement and we have high precision for these estimates, he said.

He said other programs throughout the Columbia River Basin use these technologies for status and recovery modeling:

- 1. Hatchery reform BPA funds many hatchery programs and it is committed to ensuring that these programs do not impede recovery. He said all hatchery programs must manage broodstocks to achieve proper genetic integration with, or segregation from, wild populations.
- 2. Predation monitoring Last year, Michele Rub gave a presentation on sea lion predation. For example, NOAA researchers showed a 24 percent mortality of spring/summer Chinook and concluded that "about 68 percent of the Chinook salmon tagged and sampled near Astoria were destined for the river and tributaries above Bonneville based on genetic testing." In 2014, NOAA researchers looked at terns and cormorants and concluded that, PBT analysis suggested that Snake River steelhead and Chinook salmon are a larger proportion of the birds' diets than other stocks.

Member Karier remarked that when they were tagging those fish, they didn't know whether they were destined for above or below Bonneville. Since they were releasing them and looking for them later, they had to know that. So 32 percent or so were never going to show up on the other side. They could only tell that from genetic testing? Yes, replied Campbell.

Narum talked about the Columbia River Basin. At CRITFC, they interact with Campbell's group. Narum talked about key monitoring points at Bonneville and LGR, and discussed the process of monitoring as the fish move upriver. They collect tissue samples nonlethally. They sample Chinook, steelhead, sockeye and a small amount of coho. They have scientists at Bonneville taking samples during the full sample period from the end of April to the end of October. With PBT, they can identify the parents of the fish and determine their origin. They also estimate proportions of different stocks for wild fish.

Member Norman asked if it is all wild Chinook, including Hanford Reach? It encapsulates spring, summer and fall Chinook; winter steelhead; all sockeye; and the potential to catch more coho during the fall.

Member Booth was intrigued by the lower data. But with the variability of the returns, the key to controlling a harvest is determining when the run is arriving, he said. How do you use your information to gauge that period?

Narum said there is some in-season analysis, and they just started to get samples of spring Chinook from Bonneville Dam. They'll turn around those results by Friday to fisheries managers, and will have that information for the current run period. They will repeat this exercise every two weeks or so. They also present this information to the Technical Advisory Committee, which adjusts harvest for some of these species.

They monitor harvest in the mainstem of the Columbia River. They can monitor different periods and the impacts of the different fisheries.

They use genetic monitoring to get stock-specific abundance at Bonneville Dam. They can estimate run timing of specific stocks within years, and see consistency across stocks. This requires high genotyping capacity. Only in last few years have they been able to meet these genotyping needs. They improved cost efficiency by changing to GT-seq (genotyping in thousands by sequencing). It used to cost \$16.50 per fish, now it's about \$4.00 per fish. Narum shared efforts to improve the accuracy of steelhead GSI.

Long-term monitoring of genetic diversity in the Columbia River Basin is a powerful approach to monitor distinct stocks and phonotypic traits in salmonids. These are broad-based tools and they are working to make them more cost efficient.

Member Devlin asked if there's an area where there hasn't been salmonids in 70 to 100 years, and if you introduced hatchery fish as juveniles with the intent of them returning to that same area. Is there a period of time, or number of generations, that those fish will be identified as from not from that hatchery but from that area?

Narum said the tribes are heavily involved in reintroduction and there are programs to look at some of those questions. An example is coho introduction into the Upper Columbia in the Methow and Wenatchee rivers. Sockeye is another example in the Cle Elum Lake in the Yakima system. A longer-term example is how the spring Chinook have been introduced into the Clearwater Basin in Idaho. It's an interesting question we're only beginning to address, he said.

Member Devlin asked if those fish in Idaho are able to be identified as being from that area. That's a Rapid River hatchery stock, Narum replied. Prior, we had difficulty establishing them. With PBT, we can look at any hatchery fish, whether they're marked or not. We do start to see some shift in the genetic makeup between fish that came from the Rapid River hatchery and those that returned to the Clearwater Basin. Member Norman said it's his understanding that when you're trying to evaluate populationspecific estimates in mixed stock areas, you're most accurate if the genetic baseline covers all the populations within that sample area. Can you give me the extent of the genetic baseline in the Columbia Basin and then the West Coast in general?

For the Columbia Basin, we covered all the major subbasins and tributaries with major population groups, Narum replied. For example, there are 119 distinct collections of steelhead throughout the Columbia River represented in that baseline. For Chinook, there are fewer of them that exist, around 70 to 80 for stock identification purposes. For PBT, the key is sampling all the broodstock at the hatcheries. One area where that is lacking is in state hatcheries below Bonneville Dam. Those areas could be improved.

Member Norman said if those samples and baseline occurred, then stock-specific estimates in lower river fish would be increased with this method. Narum agreed.

Member Norman again asked about the West Coast baseline. There are existing baselines that cover the coast for Chinook salmon using older technology, Narum said. There's an intent to move other regions up to speed so there's consistency to cover the entire West Coast. There is a lot of potential.

Member Anders said that her takeaway is that this is a comprehensive program in our region, although there are gaps. What is the relevance of other tagging methods at this juncture?

Campbell said in the Snake River Basin, there's a very large PIT-tagging program and he views these as complimentary technologies. The fish sampled can provide abundance estimates of that population and update baselines. Campbell said in the Snake River Basin, there's a very large PIT-tagging program and he views these as complimentary technologies. The fish sampled can provide abundance estimates of that population and update baselines. When NOAA uses the TRT (Technical Recovery Team) to define those populations, we can provide the genetic information that allows them to make those distinctions. It's difficult to describe ESA populations for recovery without genetic information, so I think they're complementary in the Snake River Basin.

Narum said that genetic tagging has allowed them to identify strays because they have tagged every hatchery-origin fish.

Member Karier said he had a number of questions and would email them. It's not the only way to count wild fish, he said, but it seems like this might be more accurate. Have you done studies to show the improvement in accuracy? For \$4 a fish, it's a costly process. It would be good to show how much more we're spending and how much more we're getting.

Yes, we make comparisons, Narum said. It's an important part of our project. He outlined some of the details for those measurements and improved accuracy using carcass recovery.

7. Update on Lake Pend Oreille Lake Trout Suppression Efforts

Jeff Allen introduced Dr. Dan Schill, fishery research supervisor, Idaho Department of Fish and Game; and Dr. Matt Corsi, principal fishery research biologist, Idaho Department of Fish and Game.

Schill said Lake Pend Oreille is the largest lake in Idaho and the fifth-deepest in the U.S. It's a diverse sports fishery with 13 different species having been caught. It pumps \$13 million into the economy, even without kokanee. Now that the kokanee fishery has been restored, the number will be higher. The lake has bull trout (native and ESA listed), westslope cutthroat trout (native), kokanee (established in 1930s) and Gerrard rainbow trout (introduced in 1941). There were trophy fisheries in the 1940s, which started to decline in the 1960s.

Mysis was introduced in the 1960s and was established by 1975. It turned out to be a competitor with the kokanee. Lake trout proliferated in the 1990s. Schill discussed the rise of lake trout and the tactics to suppress them. They collected data and the exploitation rates. They convened an expert panel to look at suppression tactics, which included Michael Hansen, UWSP; Mark Ebener, Chippewa Ottawa RA; and John Gunn, Laurentian University. They also evaluated the socio-political element of suppression. Schill said that a scientific foundation for management and bringing in external experts are key.

Schill said they weren't just out to kill fish. They aimed to restore the rainbow trout fishery, restore the kokanee population, and to maintain/enhance the bull trout population and westslope cutthroat trout population.

Corsi explained tactics. They looked at where lake trout spawn and sought to minimize bull trout bycatch. They discussed hiring a commercial fishing company and starting a \$15 angler incentive. Starting in 2006, between netting and anglers, they began hitting the fish at all angles. It wasn't cheap, but the strategies worked. Acoustic telemetry of spawning fish helped them target the populations. Adult gillnetting, adult trap netting, juvenile gillnetting and Judas fish were used. The cost share was \$278,000 for BPA and \$700,000 for Avista.

Corsi talked about netting results: Early in the program, it appeared that trap netting was best, but then using Judas fish and targeted gill netting proved to be more effective with a commercial fishing approach.

Early in the program, anglers were a driving force. As netting improved, angling decreased. More than 209,000 lake trout were removed. The predicted decline was 67 percent between 2006 and 2015, but the reality was 58 percent. There was a prediction that kokanee would collapse by 2015, but it is now a restored fishery with a robust population. It was helped by a collapse of Mysis. In addition, Lake Pend Oreille remains a bull trout stronghold.

Rainbow trout are the most difficult to monitor, but they can monitor growth. They went from 15 inches in 2011 to 25 inches in 2016.

Walleye are a new threat. They were illegally introduced into Montana's Noxon Reservoir in 1991. Corsi outlined the walleye netting effort. The population has quadrupled in the last few years. In Lake Pend Oreille, they're eating, growing machines. When walleye are caught in open water, kokanee is the only thing in their diet. So again, they brought in the experts and attacked them the same way as lake trout. They brought Mike Hansen back and Nigel Lester – the best walleye expert in the world. They also brought in Dr. Mike Quist, Dr. Eli Felts and Dave Lucchesi.

Avista funded targeted gill netting between April 2016 and May 2017. To date, 1,290 walleye have been removed. As with lake trout, they are collecting data from every fish they kill.

Corsi said the effort is an adaptive management model. You start by understanding. You model, you set goals, then go out and suppress, evaluate and optimize.

8. Council decision on Fish and Wildlife Program amendment announcement and call for recommendations

Patty O'Toole brought the Council a Fish and Wildlife Committee recommendation to release the announcement to the public to begin the Fish and Wildlife amendment process. The committee worked on this for several months and it was presented to the full Council last March.

They received input from the Regional Coordination Forum in February, and worked with central and state staff and committee members. The first two pages of the announcement memo are largely boilerplate on how to submit recommendations. At the end of page five, the second-to-last paragraph references attachment one. O'Toole said the last sentence is important: The Council suggests that the amendment process could be used to focus and make progress on a few key issues rather than revise all of the program elements.

The attachment lays out some issues the region may want to consider. The intent is not to limit recommendations, O'Toole said.

On page six is an attachment that lays out the issues the region may want to consider. It discusses the status of the program and the ground that has been covered. Next are

important regional developments and processes underway. These led us to a set of questions, starting on page seven. An edit was made to change "cross-cutting program questions" to "cross-program questions."

Member Norman said the Committee's consensus was to move this forward.

Northwest Power and Conservation Council to Approve Release an Announcement Calling for Recommendations to Amend the Council's 2014 Columbia River Basin Fish and Wildlife Program

Member Anders moved that the Council approve the release of the letter to the federal and state fish and wildlife agencies, the region's Indian tribes, and other interested parties calling for recommendations to amend the Council's 2014 Columbia River Basin Fish and Wildlife Program, with recommendations due by September 14, 2018, as presented by staff and as recommended by the Fish and Wildlife Committee, with the particular change identified by Patty O'Toole today

Member Norman second.

Member Baker said he wants to make sure that we're not constraining what people bring to the Council. He said that when he looks at the current plan, there's a good discussion about implementation, about what we do and how we do our job. It's a good time to spend some time on that and to look what our legal responsibilities are, he said.

John Shurts, general counsel, said that we're just setting expectations or tone, but we're not limiting comments or recommendations.

Member Karier said the letter is good, but he doesn't think highly of the attachment. Rather, he's more curious about what fish and wildlife managers think. He said it's unfortunate that we still have that attachment as part of it and hopes it's not distracting to fish and wildlife managers if they don't think those are the important questions. He said one question that he hasn't figured out is in regards to the Columbia River System NEPA review, which will continue throughout the Council's program development process and afterwards. "Are there ways in which the Council should amend the program's measures or implementation to better relate to or influence that review?" he asked. "Or, implementation of the program after the completion of the EIS? I don't know what that means. If we're trying to write something into the program that is going to change the EIS? It's an open process. Is this a strategy to use the program to change the EIS? I don't understand it and I hope it doesn't confuse people."

The second part is that it goes on about implementation of the program after the EIS, Member Karier added. There are too many layers of abstraction and he would prefer that we just listen to what the managers say. Member Norman said that question came up by Member Anders in the Fish and Wildlife Committee. We had a good response from staff that reiterated the relationship between the two processes, he said.

Shurts said that he was responsible for this language. If you think about the EIS, it's a look at what how the FCRPS can be operated and implemented to protect and mitigate fish affected by the hydrosystem, which is exactly what the Columbia River Basin Fish and Wildlife Program is as well under the Northwest Power Act. There has to be a way those relate to each other. They may be separate and parallel, or there may be things you're doing in your program that could influence that review. It asks people to think about two, comprehensive, basinwide looks at the FCRPS and Fish and Wildlife Program moving at the same moment, and how they relate. It may yield something or it may not, but it's a critical thing happening in the next five years, he said. You don't want them going off in different directions.

Member Karier said that they are going off in different directions and we're trailing. In the past, we adopted operations from the BiOp and other RPAs from the BiOp are embedded in the program, but we don't have that this time, he said. There are some important questions such as, what do we adopt for operations if we don't have a BiOp? There are questions of coordination. "To me it's confusing, I didn't quite get it," he said.

Shurts replied that they will be getting recommendations around the same time if there is a 2018 FCRPS BiOp. It will be an interesting coordination between those two efforts.

Member Devlin said he found the attachment helpful as it posed questions that are thought provoking. He didn't find it limiting, but those are some of the questions we'll be pondering during this process, and it will be good to have some input on some of these questions. He asked whether staff has been approached with comments already.

O'Toole replied that they've been hearing that there is plenty of free thinking going on, on a handful of topics.

Tony Grover said that a group of state and tribal members are working together on a joint document. It might be 50-60 pages. They'll highlight the sections they want to include.

Member Ferrioli said that the first time through this process, he is gratified by the discussion in committee regarding the open-ended nature of the questions. He found it comforting that staff will analyze every input submitted and will respond to every suggestion and question. It will be an iterative process. There isn't a checklist. We really are asking people to give us input.

The motion carried without objection.

9. Briefing on the administrative record for the Fish and Wildlife Program amendment process

Shurts told Council Members that there's a short memo in their packet about gathering the administrative record. The Act spells out what the administrative record is. Section 4(h)(5) specifies that the Council develop the fish and wildlife program "on the basis of [program amendment] recommendations, supporting documents, and views and information obtained through public comment and participation, and consultation with the agencies, tribes, and customers."

The memo specifies all the things that are gathered and put into the record. Kendra Coles in the Fish and Wildlife Division is the keeper of the process and she'll compile things.

Shurts said there's a formal part to the record, such as comments received at meetings and in written form. Those parts are easy. There's an ongoing drumbeat of conversation that Members will get, through email and conversations. If it's trivial, fine, but if there's an email or conversation about the program that's substantive, that needs to be captured. It doesn't have to be that detailed. It becomes a part of the record. It kicks into gear after the recommendations come in. It's important to capture communications about the amendment process or issues in the amendment process. We dealt with this last time. There are some issues going across different boundaries. If they are substantive conversations on operations, it still needs to go into this record. Last time, we had to go back and supplement the record because we found a bunch of other material that should have been captured before.

Member Norman asked when the official public administrative record clock starts. Shurts said it begins when we send out the letter.

O'Toole said they will get Members a form and instructions on how to capture the input. She said it takes us about a week to get everything polished and up on the website. Then a notice will go out to hundreds if not thousands of people. Some will get a paper copy. That starts the process. Things might trickle in over the next couple of months, but most will come in during the last month, weeks and day. In about a week, you'll see an email and hear more noise about this, she said.

Grover responded to Member Baker's notion about implementation. Sometimes a subgroup of Members will focus on an area of interest. We can turn that over to that group to work with staff to develop things, which will then go to the Committee and then the Council.

10. Council Business

Northwest Power and Conservation Council to Approve the Minutes of the April 10-11, 2018, Council Meeting

Member Anders moved that the Council approve for the signature of the Vice-Chair the minutes of the April 10-11, 2018, Council Meeting held in Portland, Oregon.

Member Booth second. The motion passed without objection.

Northwest Power and Conservation Council to Approve Release of its Draft Fiscal Year 2020 and Fiscal Year 2019 Revised Budget for Public Comment for a Period of Time between May 12, 2018, and June 29, 2018.

Sharon Ossman, Administrative Division director, talked about the upcoming budget and how the Council could be responsive the BPA's financial condition. Through that process, the Executive Committee identified \$163,000 in cost savings in the Fiscal Year 2019 budget, and an additional \$343,000 in cuts in the Fiscal Year 2020 budget from what was projected last year. Each May, Ossman comes to the Council with a draft document to put out for public comment for 30-to-45 days. There will be time for comments at the June Council Meeting with a goal of adopting this in July.

Member Anders moved that the Council approve the release of its draft Fiscal Year 2020 and Fiscal Year 2019 Revised Budget for public comment for a period of time between May 12, 2018, and June 29, 2018, as presented by the staff.

Booth second.

Member Devlin asked if the Council will still have opportunity to discuss the budget. Yes, there will be an opportunity at the June meeting and again at the July meeting, Ossman said.

Member Karier said they have been working in Washington to identify additional reductions and they identified five percent in savings for Fiscal Year 2020, some of which begins in 2019. He wants to incorporate those numbers into the document for public comment. Sharon said Member Norman identified \$43,000 in Fiscal Year 2019 and \$44,000 in the Fiscal Year 2020 budget. Those will be incorporated and posted for review.

Member Devlin asked for clarification that the savings were for one year, not cumulative. It's just one year, Ossman said.

Without objection, adjustments will be made to the motion.

The motion passed without objection.

Member Karier said that Ossman has been helpful in identifying reductions in Portland office, and that the Council should do more work in this area. The Bonneville situation is

more precarious. It would be prudent for the Council to do some long-term planning in this area.

Member Yost said that each state needs to look at their own budget, then the Executive Committee will look at what happens next. The Council has been prudent about staying under the rate of inflation. We can look at if we can do better, he said.

Northwest Power and Conservation Council Motion to Authorize the Staff to Enter into a Contract with OMBU to Support the Council Website on an As-Needed Basis through the End of Fiscal Year 2017, for an Amount Not-To-Exceed \$50,000

Ben Kujala, Power Division director, explained that retaining OMBU to support the new Council website will help address any unforeseen bumps in the road. The contract would only be for this fiscal year and there would be a different proposal next year.

Member Booth said that if this is an ongoing expense, we should train our own people to take this on.

Kujala replied that they could do maintenance on the site, but employees are not familiar with the code yet. It's more effective to have the option to use people who do this every day.

Member Booth said he understood, but \$50,000 is a sizable sum. He said if they could find someone on staff to take over this responsibility, he'll support it.

Member Anders moved that the Council approve the staff to enter into a contract with OMBU to support the Council website on an as-needed basis through the end of Fiscal Year 2018, for an amount not-to-exceed \$50,000.

Member Booth second.

Member Anders asked it would be coming out of the Public Affairs budget. It is.

Member Devlin said it's good to retain outside expertise from those who developed the project.

Member Baker said that it also gives the Council recourse. Oregon has a national reputation for this, he said. While \$50,000 sounds like a princely sum, it's an investment he supports.

Member Devlin said he wanted to state on the record that the State of Oregon has many IT projects that work well and a few that have given us a reputation that's hard to overcome.

The motion carries without objection.

Northwest Power and Conservation Council Motion to Release for Public Comment the "Draft Fiscal Year 2017 Report to the Governors on Bonneville's Fish and Wildlife Costs" for a Period of 45 Days

John Harrison thanked Sharon Grant, Peter Cogswell and Alex Lennox for making the report easy.

Member Anders moved that the Council approve the release for public comment until June 29 of the "Draft Fiscal Year 2017 Report to the Governors on Bonneville's Fish and Wildlife Costs," as presented by staff.

Member Karier second.

Member Devlin asked for a color revision on one of the graphs for consistency. Also, in future, we need a discussion on foregone revenues in Fish and Wildlife, he said.

Some of us have approached that topic before and we're happy to do that, Harrison replied.

The motion passes without objection.

Public Comment

Scott Levy, Bluefish.org, distributed handouts to the Council Members and said that the total cost of Lower Snake River Dams has increased. BPA is losing money on surplus sales. The talked about a cost-effective analysis of a range of possible actions.

Member Yost adjourned the meeting at 11:03 a.m.

Approved June ____, 2018.

Vice-Chair