Northwest **Power** and **Conservation** Council

October 2017
Minutes
Columbia Falls, Montana

Council Chair Henry Lorenzen brought the meeting to order at 1:30 p.m. Members Jennifer Anders, Tim Baker, Bill Booth, Tom Karier and Guy Norman attended. Members Bill Bradbury and Jim Yost joined by phone.

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

Fish and Wildlife Committee

Committee Chair Jennifer Anders reported on five items:

There was a request from staff to consider some questions we should submit to the ISAB for a review of the 2014 program. The Committee agreed to the questions and decided that the best process is to present them informally. It will be considered by the full Council tomorrow. There was an update on emerging priorities — the first we've heard them all in quite a while. They discussed the future of the cost savings workgroup. There will be some changes and we'll keep you posted. The O&M subgroup has made progress in long-term maintenance on hatcheries and screens, and asset management of lands also will be included. They heard from the remaining emerging priorities and there has been progress on each except for the development of subbasin plans. No managers have requested money to update them, so there has been no movement on that priority.

There was an update on the Montana settlement agreement. The settlement was negotiated in 1988, between Montana and BPA. The state has leveraged $12 million into a successful wildlife mitigation program. They discussed a framework to test operational impacts. The framework has been tested and is successful, and it could be used elsewhere in the basin. There was a presentation on Hungry Horse mitigation work from the Salish and Kootenai tribes. They talked about their lake trout suppression efforts at Flathead, which consists of fishing contests and gill netting. The tribe sells harvested lake trout to offset program expenses. There was a presentation on the South Fork Flathead Westslope Cutthroat

Conservation Project from Matt Boyer, of Montana Fish, Wildlife and Parks. Largest conservation program in the country aimed at preserving West Slope native cutthroat trout. Governor Steve Bullock presented the award for excellence for this project.

Power Committee

Committee Chair Tom Karier reported on five topics. The Committee reviewed staff's update on the gas forecast. Gas prices are expected to be low and stable. Every forecast has been lower than the previous one. The reasons are due to fracking and technological contributions. Fewer wells are producing more gas, which makes everything cheaper.

There was a presentation from Mike Starrett on PURPA contracts that are driving solar in the region. We now see 330 MW of utility-scale solar — most in Idaho due to PURPA rules as they were implemented over time. It's the details of how PURPA is enacted and implemented that make a difference. If it covers a large range of sizes, there's more PURPA activity. Solar developers can use those contracts to get the funding to develop those contracts. Each state has different rules. The rules seem to be changing over time. They seem to be moving from longer-term to shorter-term. Shorter-term contracts are less useful for solar developers.

GENESYS is being updated on schedule. The first phase is completed. It should be complete by next summer. BPA is working to integrate its demand side management into all aspects of the agency's planning. Two examples of how energy efficiency and demand response are being incorporated are BPA's development of nonwires solutions. BPA also is one of the key promoters to develop end-use studies to better understand the capacity savings of energy efficiency.

The Committee talked with staff about a white paper on conservation. It would be a detailed look at conservation benefits in the past and looking forward. A key part will look at the effects of conservation on all types of utilities, both growing and flat. It will look at the effect of conservation in an environment of low gas prices and low load growth. Staff will begin working on that paper.

Public Affairs Committee

Committee Chair and Council Member Jim Yost had no report. He said that during their last meeting, they discussed the results of the Congressional tour.

1. Council Decision on the Regional Technical Forum 2018 Work Plan and Budget

The Council has authority for approving the RTF's work plan, budget and business plan, with input from the RTF Policy Advisory Committee and any interested parties. Jennifer Light, RTF manager, appeared before the Council seeking approval of the 2018 work plan, budget and business plan to allow sufficient time for contracting in advance of the 2018 calendar year. Light put together a work plan, which was presented in July and was opened for comments.

She said the Energy Trust of Oregon and AEG (one of the contractors they work with) had comments, which have been incorporated.

RTFs big themes for 2018:

Continued focus on measure development:

- More unit energy savings measures sunset in 2018.
- The RTF is keeping a placeholder for new measures development.

Increased emphasis on supporting cross-cutting questions that impact all measures:

- Addressing capacity benefits of energy efficiency.
- Connecting and leveraging regional research. RTF doesn't have research funds, but rely on it to do the work.
- Supporting Council analysis (Eighth Power Plan input development). Especially around commercial models and industrial applications.
- Thinking through questions about statistical methods.

Light said they budgeted $1.8 million. That's divided into a contract RFP and an RTF contract analyst team and manager. The manager is supported by the RTF budget and then they'll do an RFP to identify up to six contract analysts. They will be dedicated to the technical analysis presented to the RTF.

The Council provides in-kind contributions. The Power Division provides a lot of technical assistance.

Light recommended that the Council approve the RTF's:

- 2018 Work Plan and Budget
- 2018 Business Plan and 2015-2019 Funding Period

Member Bradbury said he is very impressed with the work of the RTF in looking at the value of energy efficiency and conservation. Member Lorenzen also expressed appreciation for Light's work.

Northwest Power and Conservation Council Motion to Approve the Regional Technical Forum 2018 Work Plan, Budget and Business Plan in an Amount Not to Exceed $1.83 Million

Member Booth moved that the Council approve the Regional Technical Forum's 2018 work plan, business plan and budget in the amount of $1.83 million, as presented by staff and recommended by the Regional Technical Forum Policy Advisory Committee.

Member Karier second.

Motion carries without objection.

2. 2016 Regional Conservation Progress Survey Results

This is the time of year when Jennifer Light presents the annual regional conservation survey, conducted by the RTF. It tracks the region's progress toward the Council's Power Plan goals. What are the energy savings and expenditures? For savings, they want detail. They tried to get down to the end use level and some case measures.

On the expenditure level, what is everything spent on this resource? This is our first look at how the region is doing against Seventh Power Plan milestones.
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We can get the savings from Bonneville. It reflects the EEI savings and payments. They do a data check to make sure they're not missing anything. It helps capture savings that do not get reported to BPA. RTF didn't get the market data this year.

First, some caveats:

1. Baselines – not everything is reported from the same starting place.

2. Short-Term versus Long-Term Savings

   Short-term savings do not always align with the Plan
   - Seventh Plan analysis assumes
     - All lost opportunity measures are replaced on burnout
     - EISA 2020 baseline for residential lighting savings
   - Programs often report "first year" savings
     - Some measures are replaced "early" and the short-term savings are generally greater than the long-term savings in the Plan
     - For residential lighting, this includes savings between now and 2020
   - Many non-residential lighting projects are done before the existing system requires replacement
   - Savings are calculated for two periods

They start off with what the utilities claim and then true it up with market data. This process helps us make sure we avoid double counting, Light said. The other market momentum could be negative. When they go out a number of years, they get through what was the overall change from those market studies.

Other caveats:

- While Bonneville reports savings for the fiscal year, many others report on a calendar year.

- This might result in some mismatch in Year 1, but it gets smoothed out over multiple years.
- Some types of savings, in particular industrial, are blocky and can vary significantly year by year.

The results are based on savings and expenditures data from 127 reporting utilities (essentially the whole region).

The first goal was 370 MW for the first two-year period. Because the plan included two-year milestones, we are comparing 2016 savings against one half of the FY 2016-2017 milestone (185 aMW).

Utility funded programs surpassed the Plan's first year milestone with 275 aMW. Utility programs accounted for 222 aMW and NEEA 53 aMW.

Where are the savings coming from? Mostly the residential sector. One-third is from commercial and about 20 percent from industrial. There was 3 percent from agricultural.

Member Tim Baker asked if low-income was zero. It's less than 1 percent, said Charlie Grist, manager of conservation resources.

Lighting is making up the vast majority of the savings this year, at 65 percent. It's more than double what we've seen in the past. There is a lot of lighting activity before the 2020 standard comes in. There's a big drop in electronics. NEEA stopped reporting on televisions. Commercial looks similar, but there isn't quite as much for lighting. But it's bigger than in past years.

Member Karier asked if every television sold is energy efficient. Grist said it's partly baseline. Another evolution is coming in televisions, the ultra-high-def, with additional conservation potential, but probably won't jump as much as it did in the first wave of flat screens. Light said NEEA spends a lot of time trying to keep comparisons apples to apples.

Member Baker said when you say lighting is 65 percent, how does the lighting cut across both the segments? Bulb programs? Standards?

Light said this doesn't come from standards work. Comes from the utilities and specific program areas. NEEA gets some in some of their specific program areas.

Grist said the attribution between NEEA and the utilities is arbitrary. They overlap a lot, so look at the total. When we go out to do this survey, we ask utilities to report things without NEEA.

Member Booth had a question about lighting. It's really improved, just in the past few years. How do you account for the additional building that's ongoing? We have this explosion of apartment building. They're installing LED lighting, but how do you account for the power going into that unit? Is it a conservation gain or a net net?

Light said in the supply curves, we look at how many units are coming online. We look at what they would have put in there. We don't' assume the most efficient. We're looking at what the market is doing on average. We're building additional load into the supply curves.

Member Booth said in new construction, you take the delta of what they might have put in with old technology and what they're saving with the new technology. Correct, replied Light.

The delta is based on what the market average would have been installed in new buildings, Grist said.

Member Norman asked if the 2016 information reflects short-term with utilities reporting the first year, and that it may not be representative of a long-term as modeled by the staff?

Light replied that some reflects short term savings before the ESA 2020 standard.
Member Norman asked if staff is working on a compensatory model included in projections.

Light said we handled short-term savings a little differently in how it was picked up by the RPM. As far as talking about these as real savings, they're just happening through utility programs rather than through standards picking them up.

Grist said the ESA 2020 standard assumes load forecasts. We believe that loads will be lower. We measure conservation potential above that assumption.

Member Norman said so there's some expectation that this will occur. Grist said yes, we do expect it. What's striking from all of this is the uptake in lighting has been stunning. The last time we had a big light measure was CFLs and that took a long time to get off the ground because the light just wasn't that good.

Light said they were curious about how measures were coming in compared to supply curve. As the region goes forward, we're doing a lot of lighting now, but HVACs may take longer to pick up and hopefully we'll see some savings in electronics.

Capacity benefits: Utility funded efficiency provides 524 MW of winter capacity. As we get deeper savings in HVAC, it will have a greater impact on capacity savings.

Savings from IOUs and ETO account for half of the region's energy savings.

Expenditures:

Total utility-funded expenditures were $475 Million in 2016. NEEA achieves 19 percent of the savings in the region, with only 7 percent of the expenditures. That's a huge value. It's important to point out as we look at the goals in the Seventh Power Plan.

Expenditures have increased over the last couple of years. A handful of BPA utilities provide most of the self-funded conservation. Fifteen of the 85 utilities report some form of self-funded conservation. The bulk of that is from the larger utilities.

Light said energy efficiency provides a steady, low-cost resource relative to market prices

The region has saved 6,300 aMW of energy since 1980.

The equivalent generation is approximately two and a half Grand Coulee Dams, or approximately 26 combined cycle gas plants. It's a significant resource the region has built and continues to invest in.

In terms of consumption, it's the equivalent to approximately 2700 large sawmills, represents two times the Northwest industrial sector, and is approximately the consumption of 75 percent of the households in the Northwest. It represents enough energy savings to save the region's electricity consumers $5 billion in 2016. That's a savings of $1,000 per household.

On the CO2 side, it's also the equivalent of taking about half the region's cars off the road for about a year.

Member Anders expressed interested in a pie chart on residential use. I assume that represents their contribution to energy efficiency. Did you analyze what lost opportunity that represents? Light replied that they didn't break out the low income from the potential for efficiency. She said they're probably not capturing all the savings for low-income, and they we could dig into that more. Our hard-to-reach market effort might give us some light on where we see gaps, Light said. One other note on some low-income is that they're able to do efficiency that isn't very cost effective.

Member Karier said the target was 175 aMW and actual accomplishment was 275 aMW. This is great. We're getting used to these successes. Maybe it's a larger one. Referring to Light's caveats, he asked if we will see adjustments in the numbers. Light replied, no, we won't adjust utility claims, the adjustment isn't what's in the other markets. As we get more into the action plan, we'll be able to make adjustments.

Member Karier said, so they'll be more precise and some caveats will be taken care of.
He recalled when they were doing the plan, they were told that some conservation can't come on quickly. They calculated what they could get with each measure and the 185 aMW was the most we could get in 2016, and we exceeded it. What happened there?

Light said that it goes to how quickly we could do the lighting that we didn't expect. On lighting, we were off. The quality's good and people want it. Member Karier asked, "Do we think people responded faster to these programs, or do they were buying more LEDs because people liked them?"

Grist said it's some of both. Utilities are doing things like midstream buys and big promotions at stores. They're also applying quality standards to the market. It's a wild-west market. But utilities are on the energy start spec on these. We underestimated ramp rates in residential and commercial. I encourage you to look at the six-year targets. A few big, giant industrial projects can add 20 MW.

Light said there's an approach where you can double down now, or back off and look at other areas. I think a lot of utilities are getting all the lighting they can right now.

Member Baker said this is good news. I like the slides that show all the public responders by size. We've talked to them about their conservation programs. They're all facing similar circumstances. The idea that if there was more flex for them, I think we'd see more conservation from them. I wonder if it's worth looking at the experience of those "superachievers" to find out why those numbers turned out the way they did.

Grist said he looked at a couple of them. It's usually a big industrial project or transmission upgrade in a small utility.

Baker said in Spokane, they heard about the bilateral trading in the BPA program. I think it would be a good use of our time to see how that works, and look at how we could give it more flexibility. One thing we've heard from small rural coops. They have things they want to do, but don't have a enough incentive to do a larger project to reach their residential customers. We could explore ways to add more flexibility.

Light said a couple of the spikes are utilities that have taken advantage of some transfers, and one of those is a utility pressing hard on a couple of different conservation program.

Member Lorenzen asked that with the end of your report, you went systemwide. You had 19 percent for EEI, 6 percent self-funded … we often have that number 42 percent floating around. The region achieved more than the goal for this period. If you take 42 percent of the goal, where does BPA fall in that achievement rate?

I don't have that number broken out, Light said. For the NEEA pie, we put all of NEEA in one place.

Grist commented that the overall acquisition was more than that piece.

3. Briefing on Solid-State Lighting

Charlie Grist introduced Marc Ledbetter, a native son of Montana who used to manage Pacific Northwest National Laboratory's program on behalf of the U.S. Department of Energy. It's the second time Ledbetter has spoken to the Council. The last time was 1982.

Ledbetter said there's a large potential for energy savings. "There's lots of room for improving the efficacy of lighting," he said. "It's good — it's gotten great — but it's going to get a whole lot better." Prices are down sharply and there's room for them to continue dropping. Solid-state lighting is now competitive almost across the board for almost every lighting application there is.

Ledbetter said:

- The remaining potential energy savings are huge (~75%).
- Product efficacy (lm/W) is still rising with room to increase.
- Prices are down sharply and will go down more.
- They are competitive in almost every application.
- They are being widely adopted; market penetration is rapidly increasing.
- Research is still underway to improve technology. It will do more than light a space.
- SSL is not just a replacement for existing lighting; it will add a wide range of important, new functionality.

DOE projects national energy savings by the year 2035 relative to a no-LED base case scenario. If LEDs never came into the marketplace, we'd see rising lighting energy use. With LEDs, there's about a 75 percent reduction in energy for lighting. It's about 170 average gigawatts. It's a huge potential energy savings.

How much additional energy savings can nation get in improving solid-state lighting technology? DOE estimates that with the current path, it would save 42 quads by 2035. It could jump up to 62 quads if DOE meets its goals.

He discussed how performance has improved over time. He defined what makes up color-mixed LEDs. Has potential for more energy savings in the long run. Global shipments are growing rapidly. These products last so much longer than prior products.

Discussed the market for LEDs. Still only 13 percent have been converted to LED in the U.S. as of 2016.

A lot of research is underway at DOE to improve solid-state lighting. For example:

- Spectral engineering and tunability

    - Circadian effects – how lighting can disrupt our sleeping patterns. It could help if we use it at the right times in the right ways, at the right wavelengths.
    - Color science and human visual performance.
    - Horticulture applications.
- Connected Lighting – it's easier to collect data from luminares than from previous generations of products.
    - Interoperability
    - Energy reporting
    - Configuration complexity
- Potential problems
    - Temporal light artifacts (flicker)
    - Glare, visibility
    - Sky glow, light pollution
    - Health concerns

Solid-state lighting will be capable of doing much more for us, he said. He mentioned a prototype product for the retail sector to light specific sections of the store.

Some thoughts on utility industry role in solid-state lighting:

- Solid-state lighting is going to be widely adopted, with or without help from the utility industry.
    - Its increasing rate of adoption makes this clear

- It's not a matter of whether customers will adopt solid-state lighting, it's a matter of:
    - How efficient those devices will be; and
    - How well those devices are applied in the built environment (which also affects energy use).

- It's important to not think of solid-state lighting as a static technology.
    - As with commercial air conditioners, the utility industry isn't trying to get customers to adopt them; they are trying to get customers to buy the most efficient units.
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- The utility industry can help realize the high potential energy savings from solid-state lighting by:
    - Focusing its efforts on leading edge energy performance products.
    - Help connected lighting technology (outgrowth of solid-state lighting) maximize energy savings.

- Work collaboratively with DOE and other utilities to guide industry

The “wild west” is a good way to describe connected lighting, which could create big problems with people trying to program their products.

Member Lorenzen asked about harmonics. Does it create a problem for the electric system? It can, replied Ledbetter. With the first products that came out, it was more common. They occasionally run into products from small manufacturers that could cause problems. With larger manufacturers, it’s not as likely. Even though you’ll see more harmonics coming from devices, the load is so much lower, so the relative effects are so much lower.

Member Karier said it’s interesting technology, but he didn’t see the range of efficiency between good and bad products. Utilities are trying to have quality control. Is there a known range? Given the long life of the products, would we be saddled with those?

Yes, there’s a huge range, answered Ledbetter. There are huge spreads in energy performance with every lighting application. I’ve come across some utility programs promoting products that are not anywhere near leading the pack, he said. As for the long-term impact, absolutely. Twenty five years is probably on the outside of product life. With the new functionality in lighting products, we’ll see good lighting products replaced to get new functionality. We’re likely to see that happen with lighting products in the future, he said.

Member Lorenzen said that cheap bulbs tend to be lower quality. Look to Energy Star products, Ledbetter said. You need to turn to a national standard like that to help separate the wheat from the chaff. Member Lorenzen asked if lumens per watt helps. Grist said utilities typically intervene to dictate what products qualify for their program. Not everyone does that at the same level.

One of the most important things that can be done, Ledbetter added, is not to have utilities not go out on their own to make own specifications with connected lighting. It’s best to bunch into groups, work with DOE and NEEA to identify what steps need to be taken to improve that marketplace.

3. Recap of the Northwest Demand Response and Energy Storage Summit

Michael Starrett, energy policy analyst, said that the Council was a sponsor of the Northwest Demand Response and Energy Storage Summit. He acknowledged the contribution of Tina Jayaweera, senior analyst. She put together the demand response tracks. There also was a policy track. About 300 people attended. It was the second year for the conference, which was held in Seattle its first year.

John Ollis, power system analyst, said there was a great keynote from BPA Administrator Elliot Mainzer. He talked about demand response as an integrated DER strategy. He pointed to the overlap between demand response and distributed energy resources. It’s something that’s come up in the Council’s Demand Response Advisory Committee conversations.

Topics discussed included how does demand response appear to regulators and how does it appear to utilities? How do you overcome regulatory hurdles? These topics were discussed more directly. In the first year, these issues were talked about in terms of hurdles. Now efforts are underway to overcome those hurdles, such as the demand response test bed being promoted by the Oregon Public Utility Commission. The capital versus expense issue for IOUs came up. Also discussed was how demand response potential doesn't always match to the utilities that might need the demand response. There was a lot of good discussion about that, Ollis said. Some utilities discussed demand response efforts in their IRPs.

Puget was on the panel and discussed what they're going through. Moving from the IRP to RFP has some challenges. Idaho had some simple versions of demand response.

Starrett said the takeaways from Puget were interesting. They found that contractors weren't able to provide them with the amount of demand response they were looking for. One panelist was from the largest non-utility owner of energy storage in the country. They are financing energy storage.

Following, a commission staff member from Washington spoke. It will be innovative on how distributed energy resources and storage are planned for IRPs. The WUTC is encouraging it. Now utilities have to look at these kinds of options.

In California, it seems inevitable they'll build storage, if for no other reason than they have oversupply during the day and, in order to capture RECs, they will need to move the energy to the evening hours. It could be that if solar continues to have price declines, and storage doesn't decline, California may only build solar to meet their RPS, even with negative pricing.

Our region's a little unique. What are some of the barriers? There's an inherent risk and fear in spending that much money on a project that takes that long to build when so many things could change. What if they're on the hook for no recovery?

Member Karier attended conference. He said the commission staff is looking to the Council to calculate the cost of storage. We're looked to as an objective, technical expert, he said. We should help the region from a utility basis on how to do this. Washington required that calculating cost efficiency should be consistent with the Council's program.

5. Council Decision on Wildlife Projects and Programmatic Issues

Lynn Palensky, program development, reviewed the wildlife category. She said it's been a team effort and thanked sponsors for their time. The Council appreciates the efforts of BPA and staff. There are 29 projects. They last reviewed 35 projects in 2009–2010. There are a lot of projects in settlement agreements that are not in this review, Palensky said. The projects receiving funding totals about $12.2 million. This set of recommendations goes through six

years, and many of these projects have gone through multiple reviews. Many are in the mode of operations and maintenance. Palensky said they thought about how they could streamline and skip site visits. The project sponsors came in for two days and talked about accomplishments, results and challenges. They started this review in 2016. It represents about 10 months of work. They have received one comment from Idaho Fish and Game.

There are two parts:

Part One looks at ISRP programmatic issues – Real value has been added in this category to reach management goals, Palensky said. So much rides on the management plan. A lot of these issues are interrelated. Monitoring, biologic objectives and adaptive management were the most important.

a. **The need for time-specific, quantifiable objectives.** They need to have measureable objectives. If it's not already in your management plan, put them in. Recommendations to host a meeting/webinar are deemed optional.
b. **Research, monitoring, evaluation (RME) a-e**
c. **Proposal for a workshop and pilot project**
d. **The ecological consequences of fragmented acquisitions.** How to make those more contiguous. Palensky said that BPA is amenable to considering land exchanges.
e. **Treating wildlife mitigation as an integrated program. The Council supports developing a wildlife advisory group or similar venue for information sharing between Bonneville-funded projects so long as the wildlife managers see the value in this and want to participate.** Palensky said that another way to keep it more integrated is the mapping process. This would include mapping the parcels in the program.
f. **Outreach activities.** The ISRP encourages sponsors to engage in more outreach activities directed at the public. They suggested a register, but we also want to encourage owners of land to educate public on those parcels.
g. **Weed management.** It's not a new issue. ISRP said sponsors made a lot of progress in using integrated pest management techniques. They listed recommended actions. Palensky said it was agreed that the property managers should consider them.
h. **The need for a broader and readily available supply of native seed and locally adapted nursery stock.**
i. **Lead shot use on wildlife mitigation properties.** Palensky said they hope sponsors will take a conservative approach in the use of lead shot.
j. **Improving the review process.** Palensky said she thinks they've streamlined and improved the review process. "We have a lot of experience in this area," she said. "Our managers can come together and learn from one another. ISRP wants to go on site visits again, as it gives a sense of context."

There would be a check-in to evaluate performance in six years.

Part Two: Palensky reviewed spreadsheets that look at projects, budgets and ISRP criterion. She talked about two projects:

1. Southern Idaho Wildlife Mitigation. Albany Falls in Southern Idaho did not meet ISRP criteria. They requested another response loop, there was a fast turnaround and ISRP was satisfied.

2. Kootenai River Operational Loss Assessment. They developed a framework for assessing operational losses from the dam. It has been tested on the Kootenai and Flathead. Its applicability to other hydro projects has not been tested. The recommendation was to transition this project from pilot phase to implementation.

Member Karier said, “I think about wildlife differently than you do and what this describes. The Power Act asks us to protect, enhance and mitigate for the effects on fish and wildlife from the power system. I don’t see this doing that. I see a lot of this as inserting ourselves in the process of managing these lands that we empowered managers to take care of into perpetuity.

“At no point did we determine that managers were not capable of doing that. I don’t see that as a problem. The science panel that plays a critical role in analyzing the impact on salmon and the recovery of salmon. There are major scientific questions that we have to address on salmon. I don’t see the science problems in wildlife in the Pacific Northwest. If we have a problem with wildlife in the Northwest, it’s probably one that’s across the country if not the world. Our managers are as good or better than in any other place. Our obligation is the mitigation for the effects of the hydrosystem. That phase has been very successful and is largely coming to an end. There are some areas in North Idaho and in Washington … but for the large part, a lot of it has occurred, a lot of it has been done very well, there are a lot of lands that are being well managed by states, tribes and others. I don’t see these as a lot of things the Council can solve or needs to insert itself into doing.

“If I had to pass a motion, I was thinking about what I would support. It was thinking of two sentences:

> *“The Council recommends that wildlife managers address key issues in their management plans including (a list of these things in the framework). In the management plan, they could address quantifiable objectives, monitoring, action effectiveness, fragmented acquisitions, information sharing, outreach activities, weed management, native seeds and the use of lead shot.*

“So, I don’t support these recommendations. I can’t vote for it. If the Council thinks that we need those recommendations, I’ll just abstain from that vote.

“I can see six years from now the Council going through this list and I don’t know if they would care. Native seeds: that’s in the weeds, literally.”

Member Anders said, “Tom, we talked about many of those issues in committee. We recognize we’re on transition on this issue. There was some policy confusion in our own program. We’re trying to clean those up with some of these recommendations. In the amendment process we’re going to meet some of those issues head on. We’re kind of treading water right now until we have that opportunity.”

Member Karier said, “I’m not sure what that means. It didn’t sound like a ringing endorsement. Do we have to do it now?”

Member Guy Norman said, “I agree we have capable managers to manage these wildlife lands, perhaps they are the best in the world at doing this. There’s some value coordination between these managers. Look at fragmented lands and value. Perhaps this is deeper in the weeds than necessary, but I see value in the conversations.”

Member Karier asked, “Can we compromise by supporting an annual conference? My suspicion is they already have an organization.”

Member Lorenzen asked, “What’s the downside to supporting this as presented? What’s the cost? What’s the problem?”

Mark Fritch, manager program implementation, replied to Member Karier that he didn’t think it was that directive. “We use you could, and should encourage,” he said. “We are between the 2014 program and we do need to address the issues raised by ISRB. By no means did we mean to be disrespectful of the managers. The managers do find value in the workshops and gatherings. We have the amendment process coming up. We do have the O&M Strategic Plan. Wildlife lands are a part of that. As our 2014 program outlines, want to encourage settlements. How do we ensure these lands continue into the future and benefit from the things we intended to do?”

Member Karier asked how many workshops there are. Fritch said there are about seven.

Palensky said this is the lightest set of recommendations given to a set of projects in some time. We committed ourselves to saying we can offer conferences and workshops, she said. Managers come to talk about problems with seed stock, problems with public access and use. Others are recommendations around weed and seeding. We want managers to have measurable objectives in their management plans. This whole review is intended to make projects better and more efficient in their land management activities. Most of the direction for how to do that resides in the management plan.

Member Karier said, “I think you just endorsed my alternative motion.”

Member Lorenzen asked what the Fish Committee has done with the issue.

Member Anders replied, “We’ve looked at it twice, made some edits and passed it through the committee as is. I don’t know what the palate is for making changes at this point.”

Member Lorenzen said he’s reluctant to come up with a motion if there’s going to be substantial changes made to it. “I still haven’t heard the downside to doing it as presented,” he said. “Will it cause additional work or additional cost? Does it create confusion about what we’re attempting to do? If not, what’s the big deal?”

Member Booth said he agreed with Tom and Guy, and that it’s good to have review of these projects every six years. BPA does have a fiduciary duty to the ratepayers. I see nothing in the motion mandating any regulatory prohibitions or mandates on the managers. The ISRP, when asked, provide a lot of advice. I think if we got into some long, specific motion, it might make it harder on the managers. If managers want a workshop, we should consider providing one. The goal is to hand this off. Where settlements are in place, we should hand those off.

I don’t see a downside to the motion, Member Booth said. He said we can work with the concerns Member has.

In that case, I’ll just abstain,” Member Karier said.

Northwest Power and Conservation Council Motion to Recommend to Bonneville Continued Implementation of Wildlife Projects

Member Booth moved that the Council approve the recommendations to Bonneville for continued implementation of the wildlife project with associated project-specific conditions and programmatic recommendations, as presented by staff and recommended by the Fish and Wildlife Committee.

Member Anders second
Motion carries with an abstention by Member Karier.

The meeting recessed at 4:30 p.m.

Wednesday, October 11

Chair Lorenzen brought the meeting to order at 9:02 a.m. Members Jennifer Anders, Tim Baker, Bill Booth, Tom Karier and Guy Norman were in attendance. Members Bill Bradbury and Jim Yost joined by phone.

6. Update on Libby Biological Opinion

Jason Flory, U.S. Fish and Wildlife Service, briefed the Council by phone. Flory read from his PowerPoint presentation.

Flory provided a background on opinions for Libby. The Kootenai River white sturgeon was listed as endangered in 1994. In 1995, the first USFWS Biological Opinion on the effects of Federal Columbia River Power System (FCRPS) operations on Kootenai sturgeon (and 4 snail populations) concluded that Libby Dam operations were likely to jeopardize Kootenai sturgeon. A Reasonable and Prudent Alternative (RPA) focused on flow management (peak flows for 42 days).

Bull trout was listed as threatened in 1999. That required a re-initiation of ESA consultation to address effects to bull trout from FCRPS operations. In December 2000, a new USFWS Biological Opinion was written, which is the main one still in effect today. It was issued on the effects to bull trout and Kootenai sturgeon from FCRPS operations. There was a non-jeopardy conclusion for bull trout, and a jeopardy conclusion for Kootenai sturgeon. The RPA focuses on flow management, two additional turbines at Libby Dam, VARQ flood management, and conservation aquaculture.

In 2001, The USFWS designated critical habitat for Kootenai sturgeon. It required a re-initiation of ESA consultation on Libby Dam to address effects to Kootenai sturgeon critical habitat. In 2006, USFWS issued new Biological Opinion on the effects to bull trout, Kootenai sturgeon, and sturgeon designated critical habitat from Libby Dam operations. Separate from the 2000 FCRPS Opinion, it reached a non-jeopardy conclusion for bull trout, reached a jeopardy conclusion for Kootenai sturgeon, and an RPA focused on in-river attributes during sturgeon spawning. It required three years of spill tests, flow planning, VARQ, conservation aquaculture and habitat restoration.

In 2006, the Center for Biological Diversity filed suit, and the Kootenai Tribe of Idaho and State of Montana joined as interveners. In 2008, a settlement agreement was reached. The terms that there would be three years of spill tests, the Corps and BPA would fund and support the KTOI habitat restoration project, the USFWS would “clarify” the 2006 RPA, the USFWS would add critical habitat for Kootenai sturgeon, and make improvements to Libby Dam temperature control system.

In 2010, the USFWS finalized critical habitat for bull trout. It required re-initiation of ESA consultation to address effects to bull trout from FCRPS operations.

Current status

The USFWS is in the process of reinitiating ESA consultation on the effects of FCRPS operations on Kootenai sturgeon, bull trout, and their designated critical habitat. The USFWS extended 2006 Libby Opinion Incidental Take Statement to December 31, 2018. The current schedule indicated that we should receive a final Biological Assessment from action agencies in October 2017, and the USFWS Opinion should be completed in December 2018.

Member Norman asked if the flow requirement of 42 days was still in effect. Flory said that was from the 1995 opinion and only applied until the 2000 opinion. It wasn't very specific.

Member Norman asked what are the requirements in the 2006 opinion. Flory said that they went into that process in coordination with the Corps and BPA. Rather than get too specific about releasing water on a certain day, we came up with in-river attributes in terms of depth, duration of flows, etc. It was less prescriptive. It was about how we wanted the river to look during spawning season. We get together with sturgeon managers early in the season (February and March) to discuss how sturgeon responded to different flow regimes and come up with a flow plan.

Member Karier said it seems like a positive development that USDFW came up with things to test flows to improve reproduction and spawning. But my understanding is that none of it has helped young sturgeon survive the spawning process. What do you think is going on?, he asked.

Flory said flow management isn't the only approach, it's just the most visible action. The last opinion focused heavily on flow management and the hatchery program. The habitat restoration project is a big deal for the Kootenai tribe. They performed spill tests in 2010–2012, and found no change in behavior. The recovery team got together, brainstormed and focused on the timing of releases and temperature. The intent of the flow is to get sturgeon further up the river to spawn. Another way is to construct deeper pools in a key stretch of the river around Bonners Ferry. Next year is the final completion. Last year is the first year some of the pools' ladder reached down to where the sturgeon are. Preliminary data shows we got a 20 percent increase in tagged sturgeon than in previous years. It's encouraging. Whether it's the habitat project or flow management it's hard to say. It's an ecosystem-based project, involving a number of ecosystem functions. All require a spring freshet.

Member Anders asked, "What's your consultation process going to look like in terms of engagement with interested parties?"

Flory said we consult with the action agencies. They also coordinate with their tribal partners, specifically the Kootenai. We bring in the states for a briefing and solicit input. It's a consultation between federal agencies. We'll also do press releases.

Member Booth said it seems like the VarQ model has been working. We've come close to flood issues, don't believe we've had flooding downstream. Essentially aren't you still running the spill test? Flory said no, they're not doing spill tests. The idea was to add two additional turbines. It's a very large expense. So the spill test was to leave the same amount of water to see if it has an effect. It turns out that they did three years of testing, and didn't seem to have an effect on sturgeon behavior, so that's off the table. Regarding flood control, I'm a biologist, so not wanting to step outside my area.

Member Booth said some are confusing the freshet with the spill test. Flory replied, no, that's just increasing the flow through Libby Dam, but that's been about flood control rather than any request from us.

7. Update on O&M Subcommittee Actions on the Use of Cost Saving Funds for FY2018

Mark Fritsch told Council members that last year, it addressed mission-critical elements of the habitat program. Now they're looking at essential maintenance items. An engineering firm identified major assets at the hatcheries. Last year they dealt with mission-critical issues. Past summer requested managers of hatcheries to prioritize the essential items. In early June, they sent a letter to manager with items needing attention. In August, the O&M subcommittee and cost savings workgroup took action.

Fritsch showed a spreadsheet of what was accomplished for five of the facilities. They are continuing to make progress in getting their arms around the 1,100 screens in their program. They've been working with FSOC for the last three years. They received prioritization for their screen program. The committee took actions on five screens this past August. BPA project managers and engineering firms are confirming initiating actions for the hatcheries and screens.

We requested $324,000 for actions at the hatcheries, Fritsch said. To initiate actions on the screens, we allocated $150,000. This was the highest priority in our 2014 program.

Member Lorenzen pointed out an apparent inconsistency in the table. Mark Fritch explained that the table is accurate. Westland Irrigation District is the project sponsor.

Member Karier said it looks like a lot of good work. To recap, we've asked the manager to identify the costs. Now there's a process of confirmation of costs, is that it?

Fritsch said that for hatcheries, they hired two engineering firms to verify. For screens, the experts are the managers. Bonneville is confirming that.

Member Karier asked if there is going to be a final step where the Council recommends that Bonneville fund these O&M costs.

Fritsch said that this was work through the O&M committee, then presented to the cost savings workgroup. It was then confirmed by the Fish and Wildlife Committee in August.

Member Karier said, so all we've done is confirm the costs, but we haven't recommended that Bonneville fund those yet.

Tony Grover, Fish and Wildlife Division director said, "We approached this by seeking FW committee support for these decisions. They are tentative decisions to spend $150,000 on screens and to fund $324,000 for hatcheries. That's a tentative decision. I floated that to the full Council. Barring objection from any Council Member, they would have gone forward. But you have raised the issue, so we're talking about it in full Council."

Member Karier asked, "So are we talking about a decision? Did we make a decision?"

Grover said the decision is made unless the Council decides to unmake it.

Member Karier said, "I don't understand this process. I'd much rather have a motion and we vote on it. This is an easy thing to do. But I don't understand this process and I'm not sure the public would either."

Member Lorenzen said "This will require further exploration. I don't believe there's any action before the Council right now. We'll defer this for the next meeting when we have an opportunity to determine what the historic procedure has been. We'll review our bylaws and our procedures, and determine whether or not this is the way we've done it historically, and whether it's appropriate. So we will meet your concern, Tom."

Member Karier said, "Good."

Grover said he's happy to bring it back to the Council as a decision.

"If that's appropriate," Member Lorenzen said.

Member Booth said that however the Council decides to approve this is fine with him. "I view our role as creating this list and doing due diligence, which we've done. We're aiming to get quite a bit of work done in 2018. He said staff is preparing a detailed timeline. We will finalize that timeline with staff and get it out to the subcommittee and full Council so they can review that timeline. We held off meeting for a couple of months. We'll be quite active in 2018 on the subcommittee. We will involve the IEAB. Bonneville instituted a new process with a new executive. Our goal is to wrap up the framework by the end of the year for the strategic plan. We need to set the screen templates in other states so by next year we can set priorities around the screens. By the end of 2018, I am planning to bring a comprehensive framework with a longer planning horizon. We need to put that on a five-year schedule."

8. Council Decision on Questions for an Independent Scientific Advisory Board Review of the 2014 Program

Grover told the Council that at the last meeting, staff was asked to bring some questions to the Council for the Council's consideration for elaboration on what the ISAB may focus upon. Staff has done that under Patty O'Toole's efforts. There are seven of them. One change made in committee is in question 6 – an edited sentence. He said that he and Patty will meet with ISAB on October 27, and they can bring these and additional questions.

Member Lorenzen asked what action is before the Council. Is it a motion to approve, edit or write a letter? Staff is suggesting you tell us to take these questions to our Oct 27 discussion.

Member Booth says the motion says approve these questions.
Baker: as amended by the committee.

Member Karier said he saw these questions earlier and they could have used some editing. It's good to ask science questions to begin with. There are run-on sentences. Maybe they should go through Carol Winkel for editing.

Grover said they are highly negotiated questions. We'll walk ISAB through the intent of these questions.

Northwest Power and Conservation Council Motion to Approve the Staff-Suggested Questions to Propose to the Independent Scientific Advisory Board for its Review of the Council's 2014 Fish and Wildlife Program

Member Booth moved that the Council approve the questions to propose to the Independent Scientific Advisory Board for its review of the Council's 2014 Fish and Wildlife Program, as presented by staff and recommended by the Fish and Wildlife Committee, and amended today.

Member Anders second.
Motion carries without objection.

9. Council Business

Northwest Power and Conservation Council Motion to Approve the Minutes of the September 12-13, 2017, Council Meeting

Member Booth moved that the Council approve for the signature of the Vice-Chair the minutes of the September 12-13, 2017, Council Meeting held in Spokane, Washington.

Member Karier second
Motion carries without objection

Northwest Power and Conservation Council Motion to Approve Release of White Paper on the Value of Energy Storage to the Future Power System

Ben Kujala, Power Division director, said the paper incorporates comments received, and that it has received a positive reception.

Member Booth moved that the Council approve for release the white paper on the Value of Energy Storage to the Future Power System, as presented by staff.

Member Karier second
Motion carries without objection

Public comment

Bruce Jim
Mr. Jim represents the Warm Springs Tribes and CRITFC.

Thank you for giving me time. An independent science review team has looked at our projects. There has been some concern about what's there and the benefits brought to that place. I'm glad that Mark was there to stand beside us. There was a concern of why I came to the last meeting in Spokane. All is calm now. You probably won't see the other person here for a while. I wanted to thank the Council for their time, and I'll see you next meeting.

Greg Sieglitz
He works for the Northwest Fisheries Center and NOAA in Portland and represents the West Coast region. He wanted to mention a recent ISAB review of the lifecycle model they operate. He thanked NOAA's West Coast regional office and regional fisheries center for enabling ISAB to look at lifecycle model for the Columbia Basin. He said NOAA values the efforts of scientists. Last May, it requested a set of questions for the ISAB to take a look at in its

ongoing effort to add and augment new analysis over time. Scientists have taken real-world data to train and test deployment of these models. Lifecycle models are part of the critical work they do. He thanked the Council and staff for engaging in this process with ISAB.

Chair Lorenzen adjourned the meeting at 9:53 a.m.

Approved November ____, 2017

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Vice Chair