

**MEETING NOTES**  
**JOINT MEETING OF COWLITZ FISHERIES TECHNICAL COMMITTEE**  
**AND AD-HOC GROUP**

November 4, 2016 from 10-3 PM  
Cowlitz Salmon Hatchery

**Attendees**

<i>Tony Crocco</i>	<i>Ad Hoc Group</i>
<i>Stan Bartle</i>	<i>Ad Hoc Group</i>
<i>Bob Reid</i>	<i>Ad Hoc Group, CPR – Fish</i>
<i>Hank Emond</i>	<i>Ad Hoc Group</i>
<i>Dan Tudor</i>	<i>Ad Hoc Group</i>
<i>Jim Shimm</i>	<i>Ad Hoc Group, CCA</i>
<i>Jack Tipping</i>	<i>Ad Hoc Group</i>
<i>Randy LeDuc</i>	<i>Ad Hoc Group, CCA</i>
<i>Lonnie Goble</i>	<i>Ad Hoc Group</i>
<i>Butch Smith</i>	<i>Ad Hoc Group</i>
<i>Greg King</i>	<i>Ad Hoc Group</i>
<i>Cindy LeFleur</i>	<i>WDFW, FTC</i>
<i>Sam Gibbons</i>	<i>WDFW</i>
<i>Paul Sparks</i>	<i>WA Chapter Trout Unlimited, FTC</i>
<i>Keith Underwood</i>	<i>Tacoma Power, FTC</i>
<i>Travis Nelson</i>	<i>Tacoma Power, FTC</i>
<i>Eric Shoblom</i>	<i>Tacoma Power, FTC</i>
<i>Buddy Rose</i>	<i>East County Journal</i>
<i>Lyn Wiltse</i>	<i>PDSA Consulting (facilitator and notes)</i>

**Next Joint FTC / Ad Hoc Group Meeting**

TBD

**Action Items**

- Cindy: Coordinate with all to set up next joint meeting of FTC with Ad Hoc Group.
- Cindy: Get numbers that indicate the ocean contribution of Cowlitz Stocks (coho and Chinook).
- Cindy: Distribute Jack's PowerPoint to all: *Effects of Hatchery Spawning Protocols on Coho Salmon Return Timeline, Cowlitz*
- Cindy: Find out who the Fish Enhancement Group is for the Cowlitz and send out carcass distribution plan to all.
- Cindy: Cindy will provide the group with information on PBT study being started for fall Chinook and spring Chinook.
- Buddy Rose: Bring copies of his new book: *Fire Mountains* to the next meeting for a book signing!

## **Welcome / Introductions / Ground Rules**

Cindy welcomed all to the meeting. We began the meeting by reviewing the ground rules to ensure we would be able to cover all of the topics on the agenda and also have time for additional topics that Ad Hoc Group members would like to discuss. Lyn emphasized the importance of limiting side-bar conversations and sticking to the agenda timelines.

## **2016 FHMP Update**

Keith explained the current Annual Project Review (APR) is based on the ISIT model. He announced that Tacoma is completely revamping the FHMP. It will include a more robust public process that measures progress against goals. There will be 6-year goals and annual milestones that measure progress toward those goals. In February, the FTC will distribute the goals, measurements, and management strategies chapter of the FHMP to the Ad Hoc Group for feedback.

Keith distributed a draft schedule for the plan. It will be fleshed out over time in part based on the interests and feedback from members of the Ad Hoc group. It was suggested there be a 30-day public comment period. TP plans to submit the plan to FERC by August 1, 2017. This includes a 6-month extension from the original due date.

## **Production Goals**

Cindy projected a table showing harvest goals as outlined in the FHMP for each species (except cutthroat). She added recent year information showing averages and maximums. She expressed being uncomfortable having goals that we cannot be achieved. She suggested having the lower end as a starting point for the goal. E.g., for spring Chinook, she asked folks to consider having 5-10K as a short-term (6-year) goal while keeping the ultimate goal as the long-term goal.

Discussion included suggestions to increase the lower end of the summer steelhead goal (max of 30.8K and goal is currently from 10-20K) and leave the other goals as they are.

It was suggested that it would be good to keep the fall Chinooks out of the Upper Cowlitz to determine the effectiveness of the new collector.

There are not any goals for outside of the Cowlitz. It's hard to put numeric goals for Cowlitz fish outside of the Cowlitz. Do we leave the exploitation rates as goals? Butch observed that fall fish are what drives the ocean in the summertime, so all fall production is important from the California border up through Canada. He suggested noting that harvest of Cowlitz fish occurs in the Columbia river and in the ocean fisheries and that it is important for other fisheries outside of the Cowlitz. This is very important to west coast fisheries and especially the Washington Coast. Cindy will refer to the FHMP numbers and research the ocean contribution of Cowlitz Stocks (coho and Chinook). It was noted that the Cramer study is informative here.

There was concern that if we put too many hatchery fish in the Tilton, we might exceed the carrying capacity. There is an EDT estimate for this. If the hatchery fish are impeding the wild fish, how is that helping us? Keith acknowledged that this is an important conversation that is now occurring at the FTC. They are looking at changing the structure of the plan to address these things. This is a shift away from being fixated on the ISIT model. Planned format:

1. Here's our plan
2. Here's what we are trying to achieve
3. Here are the steps we are going to take to try to get there (with milestones to measure progress along the way)

If we aren't getting hatchery fish off the spawning grounds, then there might be a need to reduce the size of the hatchery program. There is a need for a catch rate. The goal is to get the wild fish to the spawning grounds. Lonnie observed that there is no proof that the fish never get up to Packwood. It seems that only the hatchery fish go up there – up to the Blue Hole. Most fish don't make it to the first bridge up the Cowlitz. Sam explained that when the new collector comes online (assuming it is successful), it will trigger reintroduction in the upper watershed. Butch observed we need to keep production as high as possible within the confines of ESA, etc. Fishermen are what keep the fisheries going. Somewhere there has to be a happy medium between viewing fish in a natural setting and actually catching one and taking fish home to eat.

### **Harvest / Production Goals**

Cindy asked Ad Hoc Group members what they want to see in terms of production. She projected the current program size for each species along with the responses from those members who weighed in on whether they wanted the same/more/less for each species (in terms of fitting within the 650-lb. cap). There is a trade-off in order to stay within that limit. If you increase production for one species, you have to reduce it for another. Jack clarified that on his proposal with Carl and Bob for fall Chinook, the 1.1 million would be for wild broodstock.

There are a variety of opinions among Ad Hoc Group members regarding desired production numbers. It was suggested that perhaps a separate meeting be setup with the sole purpose of working through these differences and coming up with a consensus regarding the production numbers.

The discussion that followed included these suggestions:

- Increase the bag limit on all the species.
- Remove or relax the barbed hook rule.
- Encounters with wild fish may increase if you have a bigger limit.

- As summer run steelhead are a non-native species, they are not the highest priority species – when considering ESA and recovery.
- Summer run steelhead are not mixing with the native fish. There is little documentation to show that straying occurs in sufficient numbers to be an issue.
- There is pressure on Tacoma to do more and more for spring Chinook. They are a prized recovery species. If we can delist them on the Cowlitz, they may be delisted also on the Columbia. This species requires the most space and the most water in the hatchery.
- Might it make sense to explore offsite rearing facilities for spring Chinook?
- Keeping catch rates up helps to spread the fishermen out and also reduces snagging.
- We can control how many fish are put above the barrier dam.
- The problem is getting the fish off the spawning grounds in the lower Cowlitz.
- WDFW is looking at chum reintroduction strategies on the Cowlitz.
- When we cut production on fall Chinook, we will catch more and more wild fish. This doesn't make sense.
- Cindy reminded all that they are looking at different release areas – perhaps releasing the wild fish in one area and the hatchery fish in a different area.

### **Cowlitz Coho Broodstock Study**

Jack walked us through the highlights of this study: *Effects of Hatchery Spawning Protocols on Coho Salmon Return Timeline, Cowlitz* which was published in the North American Journal of Aquaculture in 2004. Cindy will distribute his PowerPoint to the group.

### **Trout Hatchery Announcement (Steelhead Releases)**

Keith, with a heavy heart, announced that at the Trout Hatchery lost roughly 70% of the fish associated with the 2016 fish release. TP and WDFW are working diligently to understand the root cause of this loss, which caught all by surprise. While the investigation of the loss is still underway, it has been noted that predatory birds were present in larger numbers than in the past. The birds put pressure on the fish in the 5-acre ponds by preying on the fish in un-netted portions of the ponds and entering the netted locations by swimming through an underwater fence. Buffleheads were observed swimming through the fence and eating the fish food, thereby competing with the fish for their food.

The method used to count the number of fish released from the 5 acre ponds were electronic counters that are believed to be inaccurate, so we have limited confidence in the release estimate. As a result, a greater number of fish may have been released, but not counted. We do know far fewer were released than the objective. TP and WDFW have been working together on identify the root-causes and came up with a number of potential reasons for the fish loss – predation from birds were at the top of the list, as well as ineffectual hazing efforts.

How could 65-70% of the run have been eaten by birds with no one noticing? Inventorying the 5-acre ponds has always been difficult as you can't see the full depth of the ponds. TP is looking at doing some mark-recapture studies in the pond to get a better idea of the count. Jack suggested that mark recapture doesn't work unless there is random mixing in the ponds.

Since the loss, TP has already replaced the old underwater fence with smaller mesh fence. They are now looking at a more aggressive hazing program. As of January 1, TP will be taking over the hatchery operations contract from WDFW and they (Tacoma) are investigating permits to allow for more aggressive hazing than WDFW. Randy and Stan volunteered to help.

All in all, the timing of this occurrence and the corresponding investigation can be used to inform the already-planned remodel of the hatchery. Keith explained the lining in each of the ponds is starting to fail and they are beginning to experience "piping." TP recognizes they need to replace the liners and are also considering what the ponds should look like, how they will be using the ponds (which species, etc.). They are trying to come up with plan by the end of the year which may include using some circular ponds that are above the ground. There is approximately \$5 million designated to put into the Trout hatchery improvements. The ozone filtration system is also failing badly. The true fix won't be quick. They estimate 180K fish (mostly summers) were released. This is broodstock that is scheduled to come back (mostly) in 2018.

On a positive note related to the loss: Bob suggested we might be able to triple the amount of recycling under those conditions.

Jack suggested investigating the purchase of floating netting as it is far less expensive than the suspended netting.

Are the ponds going low oxygen in the night time? There is a lot of sediment in the bottom of these ponds (fish excrement and food). They don't know if there are disease issues they are unaware of that may be contributing to this problem. They may end up dividing the ponds into discreet segments.

### **Attending FTC Meetings**

FTC has been discussing how best to support cross-pollination between the FTC and the Ad Hoc Group. Ideas to best accommodate this included:

- Having the FTC meetings become open and public meetings
- Allow one or two members to attend on a regular basis
- Have an Ad Hoc member be a regular observer to FTC meetings
- Have an integrated meeting of both groups every 4 or 6 months

- Make the FTC password-protected site be available to the Ad Hoc Group members or find some other way to share information in a timely manner
- Make agendas and notes available to Ad Hoc Group members

Lyn explained that many of the exact same suggestions came up at the FTC meeting. In the FTC discussions, there was concern about becoming less productive in the event of Ad Hoc visiting members possibly becoming disruptive. If that were the case, how should that be handled? Some FTC members also expressed concern about not being able to fully self-express and that might further impede the productivity of the group.

Next steps: Cindy will put together a proposal to the FTC based on these discussions and submit it for consideration at the next FTC meeting on December 6.

### **Wallace Access Site**

Cindy explained she received approval of her request to use Columbia River Endorsement Fee funds to help pay for the new parking lot at the Wallace site. Since the Board approved the use of these funds, Cindy hasn't received an update. They are waiting for a plan. The last Bob heard was there was a dispute over the parking area and that everything else was a go. February is the time to vote on proposals. Stay tuned...

### **Ian Courter Proposal**

This proposal called for a study on the Cowlitz to look at hooking mortality rates using different gears, all species. This will be considered by the Endorsement Board in December. Cindy reiterated that the Department will make the decision in February.

### **Jack Tipping Proposal**

Cindy reported WDFW staff have discussed this and will be meeting Jack on Nov. 15 to discuss.

### **Fall Chinook Work Plan**

Cindy distributed a draft work plan, including a task list, draft timeline and staffing requirements. They will be meeting this month to discuss next steps. The goal is to complete this before NMFS does their next 5-year review in 2021. The idea is to have the fall Chinook covered under the Fish Management Plan. If there aren't any wild fish in a year, then you wouldn't be allowed to keep any. In years where wild fish are more plentiful, you would get to keep more.

### **Fish**

Lonnie asked about how to divide up the fishery. Was there a meeting to discuss this year's Coho? Is the split 30-40-30? Many of the fish put in the Cispus fall back into the lake. Consider a different release location that isn't too close to the lake. Lonnie is concerned that he is getting the "dogs". When the run is coming in, consider giving every area the same early fish. Cindy

and Sam will follow up with John Serl about potentially doing an even split with the distribution (33/33/33).

### **Nutrient Enhancement**

The data show that the upper basin is lacking in nutrient enhancement. We are limited in the number of carcasses that can be put up there. Rules prevent us from using hatchery fish for nutrient enhancement there. We can only place fish that are wild (both parents). The current contract between American Canadian / Northwest Harvest and WDFW expired in June of 2017. There is concern that the good quality fish are being sorted and sold (for good money) by American Canadian, leaving poor quality fish for the food banks. This doesn't seem right. Why not put the fish above the dams and let them swim upstream and become the carcasses on their own?

The nutrients are very valuable to recovering stocks in the basin. Many of the fish on the Cowlitz go to the state-wide foodbank (the fish are picked up and processed and distributed by American Canadian). The upper watershed in the Cowlitz isn't getting the nutrient enhancement they need. The carcasses are taken to the Cispus instead of Packwood. The Fish Enhancement Group does the carcass distribution. Cindy will find out who the Fish Enhancement Group is for the Cowlitz. She will also send out the carcass distribution plan. With the new agreement, American Canadian currently gets 75% of the egg sales and now 25% goes to WDFW. There was confusion about where the money is allocated once it hits the State coffers. Does it go to support the hatcheries? To the LCFRB?

### **Tag Recovery of Recycled Fish**

There was a total run of 9,386 summers. They recycled the 3,300 they were supposed to do. They recaptured 57% back so far. This is considered a good return. Several suggested that with the drop-out rate, it may be that only about 12% of the fish are not recorded. They get a lot of fish that are punched with no tags at the separator so they are getting an idea of the loss.

Cindy said recycling is based on the winter run population size, the hatchery size, and the stray rate. Keith observed we are still on the conservative side on the stray rate. We are currently assuming a 2% stray rate, which may, in fact, be only 1%. We are missing data on the Toutle/Green and the Coweeman. What we know about the Cowlitz is that we are not finding strays in the tributaries that have weirs. We just don't know if they stray to the Toutle, Kalama, Coweeman, etc. Until we are certain of the origin of those fish, we won't ever have that answer. Why not tag those released from the trout hatchery so we can be sure if the fish is from the Cowlitz River? There is another stray rate that is tied to the 650 lb. We currently use the 2% stray rate on the maiden fish and 1% for the recycled fish.

A Parental Based Tagging (PBT) study is being started for fall Chinook and spring Chinook. The Skamania hatchery is doing this for steelhead. Cindy will provide the group with information on this.

Paul suggested doing a genetic study with steelhead. Keith suggested the cost of such a study would be prohibitive as it would be \$25-50 per fish.

### **Imprinting Water**

Bob suggested pipe attraction water go to the far-left bank of the barrier dam to enhance adult collection and improve fishery.