Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission Meeting MINUTES

## December 13, 2013 from 9 AM until 12 PM

## Bonner County Administrative Building Conference Room

1500 HWY 2 Sandpoint, Idaho 83864

Commissioner's present: Ford Elsaesser, Linda Mitchell, Brent Baker, Doug Conde, Ben Conard, Erin Mader (Coordinator)

30 in audience

9:05 am - Commence meeting

Ford Elsaesser welcomed everyone to the meeting.

Board voted to accept the 6/20/13 Minutes. Linda made the motion and Doug seconded it.

John Olson, U.S. Forest Service (USFS), notified the board about the aging equipment that is used to pump out the water accessible toilets at Priest Lake.

John explained that there are 26 USFS vault toilets that need to be pumped from a watercraft on Priest Lake. The toilets need to be pumped two to three times a year. They have been pumped using a barge and pumping equipment that was acquired in 1992 with no provisions for depreciation. The equipment is at the end of its lifespan and the USFS does not have funds to put towards match for a grant to get new equipment. They have tried for grants the last couple years using man hours as match, but that has not been successful. The cost of the barge and pump out equipment is estimated around \$250,000 which would equal about \$65,000 in match. John would also like to include \$2500-3000 per month for maintenance of equipment.

John explained that there are three USFS toilets on Pend Oreille that are more modern with bigger tanks. Kramer's marina has equipment and contracts with USFS to pump these facilities every other year. No vendors have arisen with capabilities to carry the pump out equipment at Priest Lake. The USFS is working with Satellite Industries to develop a more user friendly style of pump out system. If there is not a remedy reached by the 2015 camping season, there will toilets will be filled in and campers will be required to pack out their waste. This is currently the method used at some of the remote camping spots on Priest Lake. It would be up to the County Marine Deputies to enforce this practice.

The USFS is currently exploring numerous options of how to remedy the current situation and they will keep the board updated.

Andy Dux, Idaho Department of Fish and Game (IDFG), gave an update on the Pend Oreille fishery.

Andy started out with an update on the lake trout suppression efforts. There have been almost 164,000 lake trout removed from Lake Pend Oreille since 2006. Angler catch dropped significantly this year and netting numbers dropped a little as expected with the decreasing numbers.

The kokanee fry estimate for the coming year is very high. The 1 to 5 year class estimate is the highest since 1996. There are about 1.2 million kokanee spawners in the system (hatchery and wild combined).

In 2012 the Mysis shrimp population plummeted for unknown reasons. This year it bumped up a little bit. The impact that this factor is having on the kokanee numbers is not known. Both the Mysis population and lake trout numbers have large impacts on how many kokanee the Pend Oreille system can hold.

Bull trout are showing a slow, but positive response to lake trout suppression. It is predictable that bull trout would not respond as quickly as kokanee due to their longer life span and being higher on the food chain.

This year the bounty was removed from rainbow trout. The size of rainbow trout has been increasing dramatically as the kokanee population has increased.

Andy summarized that lake trout suppression efforts are working which is improving the kokanee fishery, as well as, helping bull trout and rainbow trout populations. Questions from the audience led to these points:

- IDFG is looking to reduce efforts to lake trout suppression, but not if it damages the success of the program.
- IDFG is currently looking at research on how to manage Mysis shrimp populations, but hasn't committed to a path.

## Andy Dux, IDFG, presented on the kokanee spawning ecology research that has been underway on Lake Pend Oreille (LPO).

In the 1990s IDFG formed the hypothesis that the low kokanee abundance on LPO was a result of recruitment failure possibly due to decreased spawning gravels around the lake on low water (2051') winters. An experiment was run to test this hypothesis and for a number of years it appeared that 2055' benefitted kokanee. Around 2009 the data started to show some oddities and kokanee were found spawning in unpredictable locations (about 100 feet deep and in very poor substrate).

IDFG teamed up with the Steve Whitlock and Mike Quist at the University of Idaho to look further into the benefit of lake level management. They set three major objectives for their study. The first objective was to describe the survival-habitat relationship using a laboratory experiment and an in-lake egg incubation study. This was studied by burying kokanee eggs in boxes at three sites at the southern end of the lake at high and low water levels. The substrates and the dissolved oxygen levels were analyzed at each site over the winter. Findings showed that the amount of oxygen reaching eggs was very important, but this was heavily impacted by downwelling (water being pulled down to the aquifer).

The second objective was to evaluate the water-level hypothesis using an in-lake egg incubation study. This study involved placing 360 boxes at 60 sites. At each site 3 boxes were placed above 2051' and 3 boxes below 2051'. Many habitat variables were evaluated. This study showed that water levels didn't impact kokanee survival, but downwelling and oxygen levels did play a large part in survival.

The third objective was to evaluate the water-level hypothesis using long term trawl survey data. This involved using the last 30 years of trawling data to determine if more recruits were produced following raised winter lake levels. The results showed that there is no evidence that winter water levels enhance kokanee recruitment.

Conclusions drawn from these studies include:

- There is no evidence that intragravel survival or recruitment is enhanced by higher water levels. This means that IDFG will no longer request 2055' for the benefit of kokanee spawning.
- Shoreline spawning habitat does not appear to be limiting factor.
- Substrate characteristics should not be taken at face value.
- Downwelling areas contribute significantly to recruitment. IDFG is investigating spawning habitat enhancement in areas with downwelling.

There was extensive discussion following this presentation. One of the major topics of discussion was how would future winter lake level decisions be made. The decision tree that has been used to help guide the winter lake levels decisions may be obsolete with these new IDFG findings. Andy said that he would be organizing a meeting in the near future with stakeholders to discuss how future lake level decisions would be made.

## Representatives from the U.S. Army Corps of Engineers (ACOE) presented on Pend Oreille River temperature modeling.

Beth Coffey gave a brief history of this project. She explained that in July of 2012 a Memorandum of Agreement (MOA) was signed between the Kalispel Tribe, Bonneville Power Administration (BPA), ACOE, and the Bureau of Reclamation. The MOA is in regards to the operations of Albeni Falls Dam's impacts to resources important to the Kalispel Tribe. The MOA includes exploring fish passage at Albeni Falls Dam and the temperature modeling on the Pend Oreille River.

Leah Wickstrom presented on the progress of the temperature modeling on the Pend Oreille River. To date the Kalispel Tribe and ACOE have agreed to use the CE-QUAL W2 model. They have modeled four sets of post Labor Day releases. They identified a number of draft Temperature Management Operations (TMO) including: decreasing river flows during cold temperatures; increasing river flows during hot weather to reduce exposure time; and increasing river flows when surface temperatures in Lake Pend Oreille are cooler then downstream.

The next steps in the modeling are to review the temperature data that was collected in 2013, update model to better predict surface temperatures, model optimal flow management scenarios based on TMOs identified, and to develop a monitoring plan for trial releases.

Joel Fenolio, ACOE, gave a brief overview of historical operations of Albeni Falls Dam in the fall. He pointed out that after 2000 levels were generally left higher (near 2062) until September 15. The levels were consequently higher by September 30 as well. Joel explained that in the past IDFG requested Nov. 15 as the date that the winter pool be reached to protect kokanee spawning. More recently that date was changed to Nov. 7 as it seems that kokanee tend to be spawning a little earlier. Joel explained that, depending on fall precipitation, it can be challenging to get the pool down to 2051' by Nov. 7 if it is left up to 2061' until September 30.

There was a much conversation throughout the presentations by ACOE. These points were addressed:

- If modeling shows that pre-Labor Day releases from Albeni Falls Dam could impact temperatures there will be a full blown NEPA (National Environmental Policy Act) process involved. This process will include public input and analysis of economic impacts.
- Fish passage is currently being actively worked on at Albeni Falls Dam by ACOE.
- ACOE has not received a request to fluctuate the lake at this time. There is little likelihood that they will request to fill if it stays cold. Currently marinas are frozen to the ground and this is taken into consideration when flexible operations are evaluated.

The Lakes Commission board had conversation about ways to format meetings better and to schedule the meetings for the future.

The Board discussed implementing a public comment period at the start of each meeting for a set amount of time during which people could bring their concerns to the board. Limiting meetings to one presenter and therefore allowing significant time for board discussion was suggested. Plans were made to attempt to set meeting dates for the entire year ahead.

Meeting closed at 12:00 pm.