Board Members in Attendance:

Carl Petrick, US Forest Service Chuck Roady, Landowner/Industry Ed Atkins, Corp. Ag/Landowner Eric Olson, Soil/ Conservation Gary Aitken, Jr., KVRI Co-Chair Kennon Mclintok, Conservation/Environmentalist Tim Bertling, Boundary County, KVRI Co-Chair Tim Dougherty, Business & Industry Sandy Ashworth, Social, Cultural, Historical Wally Cossairt, Boundary County, KVRI Alt Co-Chair

Agency/Others in Attendance:

Aaron Gagnon, USFS Anthony South, Head Waters Program, Yaak Valley Forest Austin Terrell, Office of Species Conservation Ben Robertson, Boundary County Bill Lillibridge Idaho Soil and Water Conservation Commission Brittany Morlin, USFWS Caleb Davis, Office of Rep. Fulcher Chris Bachman, Conservation Director, Yaak Valley Forest Christy Johnson-Hughes, U.S. Fish & Wildlife Dave Wattenbarger, Private Citizen Emily Barnes, IDWR Emily Bonsant, Bonners Ferry Herald Frank Edelman, Idaho Forest Group Kierstin Cox, KTOI Administrative Assistant Kyle Cooper, Stimson Lumber Leon Basdekas, U.S. Army Corp. Engineers Marc Kilmer, Office of Senator Risch Michelle Richman, Department of Water Resources Robert Smathers, FarmBureau Sean Wilson, IDFG Shelby Therian, Ecologist, KTOI, Fish & Wildlife Department Shannon Ehlers, USFWS Shawn Young PhD, Director, KTOI, Fish & Wildlife Dept. Theresa Wheat, KTOI, KVRI Facilitator Xavier Boychief, KTOI Tribal Council

Wally Cossairt, called the meeting to order at 7:02 p.m. and facilitated introductions in the room and Theresa Wheat facilitated Zoom attendees in their introductions. Following introductions, Wally asked if there were any corrections or comments for the March 20 Draft minutes. None were had and the minutes passed by consensus.

Shawn Young opened his presentation by giving a brief overview of the history of restoring fish population and the ecosystem in Kootenai Idaho. He highlighted the need to address the issue of contaminants in the area and to showcase the progress made so far. He emphasized that most people are not up to date with the seriousness of the issue.

Hatchery Program: Shawn presented a picture of the first structure and emphasized the importance of starting small and adapting as the work progresses. He also mentioned the renovations and upgrades made to the facility over the years and the funding received for a new facility in 2015 to improve sturgeon capabilities and a full-scale Burbot program. Shawn showcased some pictures of the staff working at the Hatchery and collecting wild females. He also presented pictures of the fish being prepped for release into the river in May, which is the 28th year class since the late 80's.

Burbot Spawning Behavior: Shawn talked about the unique spawning behavior of Burbot, which happens in winter under the ice when other fish are dormant. He presented videos of the adults spawning in various tributaries and highlighted the success of the Hatchery program in rebuilding the Burbot and Sturgeon population structures.

Habitat Restoration: Shawn discussed the importance of Habitat Restoration in supporting the fish population and highlighted the (PBT) Parental Base Tagging program to keep track of the progeny of the fish released in different habitats. He emphasized the power of the environmental data collected by the Kootenai Tribe to support the Habitat Restoration program. Shawn discussed various habitat restoration projects in the region, including the nutrient dosing station in the canyon and the braided reach restoration from Cross Fork to Bonners Ferry.

Division of Wildlife Mitigation Program: Shawn showed pictures of the Tribal property with high water levels and Deep Creek on the Idaho Department of Lands property, highlighting the success of a previous restoration project. He explained that the area is now cycling nutrients better, supporting fish spawning and contributing to the overall life history of the fish population. Young emphasized the importance of habitat restoration in the Division of Wildlife Mitigation program, which includes acquiring properties, restoring floodplains, and promoting the recovery of species like Grizzly bears, caribou, and wolves.

Q&A:

A question was asked about the male Sturgeon and reproductive viability and if females were on the same timeline as well. Shawn answered they were not and discussed the maturity timeline of Hatchery Sturgeon, stating that males mature before females. Currently, they haven't captured a mature female Hatchery fish yet, but they are not concerned as females usually mature a few years after males. Sturgeon have low natural recruitment, with almost zero survival at any life stage. However, if they intervene and raise them to a larvae, they have a chance of less than 1% survival, which is better than zero. Raising them to a one-year-old juvenile increases survival to about 10% in the first year, and 70% in the second year. As they get bigger, their survival rate increases to over 90% annually.

General Dynamics:

Young shared that the area has changed over time due to agriculture, forestry, and the expansion of coal mines. He presented data showing how nitrogen levels have increased drastically over the years, which has caused concern for the declining fish population.

Tech's wastewater treatment facilities:

Young discussed Tech's wastewater treatment facilities, their variable success, and the plan to bring more online. However, less than 1% of the Elk River Basin is being treated. He expressed concern over the proposed new mines and their lack of a proven technology or dedicated plan to mitigate contamination.

Waste Rock:

Young emphasized the importance of having a strategy in place before expanding and adding new mines. He mentioned waste rock as a concern and how it creates more surface area when exposed to the atmosphere and precipitation. Finally, he stated that the conversation about contaminants needs to move beyond the reservoir and focus on the entire ecosystem.

Selenium Contamination:

Shawn emphasized the urgency of the situation, stating that the contaminated water from the Elk River mines is going to continue flowing downstream, making it inevitable that it will affect the lower ecosystem. He then presented data on the concentration of selenium, highlighting the importance of the number 15.1 which was determined by the EPA after studying the effects of selenium on a range of fish species. Once fish have 15.1 or more in their eggs, population effects begin to appear, affecting their physiology, reproduction, survival, and growth.

Source of Selenium:

Shawn addressed the controversy surrounding the source of the selenium, reaffirming that their own data showed that selenium levels were low in the tributaries upriver, but peaked in the Elk River and continued downstream to the reservoir and beyond, leading to a constant and uniform dosing of selenium in the ecosystem. The more productive the ecosystem, the more bioavailable the selenium becomes, causing it to accumulate in organisms.

Food Chain:

Shawn provided examples of how selenium was moving through the food chain, including the uptake of selenium by algae and freshwater mussels. The levels of selenium in the mussels were higher than expected, leading researchers to conclude that the mussels were filtering selenium directly or taking it up from the algae that recycle selenium out of the water. The accumulation of selenium in the mussels could potentially affect other animals further up the food chain, such as otters or Sturgeon that feed on the mussel beds. He also discussed the accumulation of selenium in Rainbow Trout, Pike Minnows, Red Side Shiners, and Sculpins. He talked about how selenium file accumulation is typical in salmonids and is a concern for fish consumption advisories.

Fish Population Effects:

Shawn Young presented on various aspects related to the impact of contaminants on fish in the ecosystem. He discussed the concern about the female White Fish from Libby Dam down to Bonners Ferry having exceedances of the egg ovary criteria, with almost 100% being above 15.1. This is alarming

as these fish are important to the fish assemblage and also for recreational fishing. He also spoke about the analysis of female egg selenium in adult White Sturgeon, and how the number of selenium is increasing each year. The younger Sturgeon in the higher selenium system are yet to be studied, but funding has been acquired for this purpose. Additionally, a preliminary analysis of female egg selenium in Burbot showed that it is worse than anticipated, and the younger fish are accumulating faster than the older ones.

Studying Contaminants and the Importance of Engineering and Implementing Projects:

During the meeting, Shawn highlighted the significance of studying contaminants and their impact on the environment. He emphasized that contaminants have become an integral part of KTOI and other environmental departments' work. However, the transport of contaminants when putting water back into the landscape and moving it around poses a dilemma. Therefore, engineering and implementing projects to organisms are crucial.

Lack of Accountability by the Canadian Government Concerning Mining Technology:

Shawn then discussed the lack of accountability by the Canadian government concerning mining technology in the mining industry. He explained that despite spending millions of dollars on fines, it is still minimal compared to the significant profits made by the industry. Furthermore, the Canadian government has not contributed a single penny to support KTOI, making it challenging to protect the investment made for decades and into the future. However, he acknowledged that the federal government has recently made a commitment, and he hopes to see follow-through on that commitment.

Challenges Facing Restoration Efforts:

Shawn explained that the Bonneville Power Administration (BPA) has been contributing to mitigate the damage caused by mining waste for several decades. However, there is still a lot of work to be done since there are large concentrations of selenium in the river that require dealing with. He then discussed the challenges facing restoration efforts. The Canadian government has not taken significant steps to protect the mining industry or hold them accountable for their business practices that led to the contamination of the river. Mining disrupts geological features that take thousands of years to break down and exposes minerals to oxidation, causing high magnitude pulses of contamination during snow melt, posing significant environmental concerns.

Investment and Solutions:

Despite the challenges, the Kootenai Tribe and other agencies have invested half a billion dollars over the years to restore the ecosystem. However, this investment is now in jeopardy due to the scale of the contamination. Shawn also mentioned that the solution lies in the dilution of contaminants and the use of vegetative communities such as riparian buffers and wetlands to slow down and remediate the contamination. He emphasized the importance of holding the mining industry accountable and the need for long-term solutions to protect the ecosystem. The US government has recently made commitments to addressing the issue, but it remains to be seen if they will follow through.

Continued Funding and Support:

Shawn stressed that the restoration efforts are ongoing and require continued funding and support. The Kootenai Tribe and other agencies are working hard to find solutions, but there is still a long way to go in protecting the Kootenai River ecosystem.

Gary Aiken Jr. mentioned that in 2011, he went to DC with the Department of State and other members to convince the International Joint Commission to fix the issues related to contamination in the ecosystem. However, the Commission seems reluctant to address the problem. The plan is to continue convincing them to issue a joint statement, which is the Commission's exact purpose for issues like this.

He acknowledged that it is a challenging process with a lot of bureaucracy, but they are trying to find the best way to apply pressure and hold those responsible accountable. They are attending bilateral meetings with American and Canadian officials to make their case and convince them to take action. However, BC, in particular, has shown no interest in doing anything about the issue despite having a good reputation. Gary and his colleagues are committed to finding a way to address the problem and protect the ecosystem.

Q&A:

During the meeting, Brad asked if there was anything they could do to help with the restoration efforts. Shawn suggested that they could be advocates and let their elected representatives know about the importance of keeping the restoration efforts going. He recommended that they ask their representatives to take a different approach and try to find a solution that would protect the ecosystem while still allowing for necessary resource extraction. Shawn emphasized the importance of speaking up and letting their voices be heard in order to keep the restoration efforts on track.

Congressional Updates:

Marc Kilmer discussed the 2014 Good Neighbor Authority Act, is a law that encourages collaboration between the Forest Service and other groups, like states, counties, and tribes, to work together on Forest Management projects. These projects aim to improve the health and sustainability of forests.

Before 2018, only states could work with the Forest Service on these projects and keep the money made from them. This money could then be reinvested into conservation efforts, which motivated states to participate in the projects.

In 2018, the law changed to allow counties and tribes to work on projects as well. However, they were not given the same benefit of keeping the money made from the projects. This made it less attractive for counties and tribes to participate.

The new legislation aims to fix this by allowing counties and tribes to also keep the money from the projects, just like states. This would encourage them to participate in Forest Management projects more actively.

Additionally, the legislation would fix an issue that stopped projects from happening across different boundaries. By restoring this feature, it would allow for more comprehensive projects to improve forest landscapes. The legislation would also ensure that tribes are treated as sovereign governments, recognizing their unique status.

Caleb Davis discussed the Port Hill border hours, which used to be 7:00 a.m. to 11:00 p.m. before the pandemic. Due to the pandemic, the hours were reduced to 7:00 a.m. to 5:00 p.m. After working with their office, they managed to extend the hours to 7:00 a.m. to 7:00 p.m. for a temporary period of 120 days. He encouraged everyone to utilize the border during the additional hours to provide the statistics needed to justify extending the hours further. The reduction in hours had negatively impacted local small and large businesses, hospitals, and tribes.

Davis mentioned that it took a call from Senator Risch and Congressman Fulcher to get the extension to 7:00 p.m. If the numbers don't justify the extended hours, the border will return to closing at 5:00 p.m. He said their office is committed to working towards getting the border open until 11:00 p.m. but emphasized the importance of community involvement to achieve this goal.

During the process, Canada re-opened its border to pre-pandemic hours, until 11:00 p.m., creating a situation where people could enter Canada but not return to the U.S. after 7:00 p.m.

Agency Updates:

Christy Johnson Hughes announced that after a long wait, funding has finally been secured for a conservation officer from the Customs and Border Control Program. This funding will go towards the Idaho Department of Fish and Game, specifically for their Conservation program. The program's main goal is to monitor the area around Bog Creek Road and work on preventing human-bear conflicts. The good news is that the funding covers a 10-year period, ensuring the continuation of this important conservation program.

Christy also mentioned that Washington State University (WSU) plans to reach out, if they haven't already, to give a presentation at KVRI about their Bear Avoidance techniques. The technique they are researching involves using a specific smell to deter bears from human-populated areas.

Sub-Committee Updates:

TMDL Subcommittee has a meeting scheduled on May 3, 2023.

Forestry Subcommittee has a meeting scheduled May 10, 2023.

No further updates and the meeting was called at 8:46 p.m.

Minutes prepared by Kierstin Cox