

Kootenai Valley Resource Initiative  
June 18, 2018 – 7:10 p.m.  
Board Meeting – University of Idaho Extension Office

**Board Members in Attendance:**

David Sims, Mayor, City of Bonners Ferry & KVRI Co-chair  
Dan Dinning, Boundary County Commissioner & KVRI Co-chair  
Gary Aitken Jr., Kootenai Tribe of Idaho Chairman & KVRI Co-chair  
Sandy Ashworth, Social/Cultural/Historical Interests  
Ed Atkins Jr., Corporate Agriculture/Landowner  
Dave Wattenbarger, Soil Conservation/Landowner  
Kevin Knauth, (Alt.) US Forest Service (USFS), Bonners Ferry Ranger District-District Ranger  
Jeanne Higgins, US Forest Service (USFS), Idaho Panhandle National Forest (IPNF), Forest Supervisor  
Chip Corsi, (Alt.) Idaho Fish & Game Commission  
Jim Cadnum, Industrial/Forest  
Tim Dougherty, (Alt.) Business/Industry, Idaho Forest Group  
Kennon McClintock, (Alt.) Conservationist/Environmentalist  
Dave Gray, (Alt.) Social/Cultural/Historical Interests  
Patty Perry, KVRI Facilitator & KTOI  
Rhonda Vogl, KVRI Facilitator & KTOI  
Sherrie Cossairt, KVRI Recording Secretary & KTOI

**Agency/Others in Attendance:**

Sue Ireland, Kootenai Tribe of Idaho  
Kurt Pavlat, Bureau of Land Management (BLM)  
Dianna Ellis, Kootenai National Wildlife Refuge  
Sid Smith, Senator Jim Risch's office  
Karen Roetter, Senator Mike Crapo's office  
Kim Pierson, US Forest Service (USFS), Idaho Panhandle National Forest (IPNF), Deputy Forest Supervisor  
Evan DeHamer, Idaho Fish & Game (IDFG)  
Eric Anderson, 9B Trails Association, President  
Katy Fitzgerald, US Fish & Wildlife Service  
Bob Steed, Idaho Department of Environmental Quality (IDEQ), Surface Water Ecologist  
Greg Hoffman, USACE  
Wally Cossairt, Citizen

**Opening:**

Co-Chair, Gary Aitken Jr opened and welcomed everyone to the meeting; introductions followed.

The May 21, 2018 KVRI Board Meeting Draft Notes were approved by consensus.

**Kootenai/Moyie Subbasin TMDL Update Presentation: Robert Steed, IDEQ, Surface Water Ecologist**

Patty reported that Bob Steed of IDEQ and the TMDL Subcommittee have been working together to develop and review the 2018 Addendum pertaining to the lower Kootenai River TMDL for Boundary

Creek and Deep Creek. Bob wanted to present this Addendum tonight to the Board and get the Board's approval before it goes out for public comment.

This KVRI Group is the official Watershed Advisory Group and the TMDL Subcommittee group advises us. KVRI is under the Panhandle Basin Advisory Group.

Bob began his presentation with a short review. In 2006, an assessment of water quality was developed for the Kootenai and Moyie Subbasin, a TMDL (Total Maximum Daily Load) document. They put together the prescriptions for streams listed for sediment and a couple for excess temperature. This 2006 report was done, submitted to EPA and approved in 2007.

In 2014 they worked on other streams (stream details listed on the slide) for temperature only with an addendum that was completed in 2014/15. In 2006, they were innovative in adopting a Potential Natural Vegetation (PNV) approach. It is the potential that the stream had for temperature based on its shade not just the numeric criteria outlined in the Idaho water quality standards.

In 2009, DEQ's PNV's manual provided shade targets based on Idaho plant communities not data borrowed from surrounding states. Boundary Creek and Deep Creek TMDL's were written originally in 2006 with the best available knowledge at the time. Data shows the targets are being met in Boundary Creek and in Deep Creek a load reduction of 4% is needed to meet the PNV targets.

#### 2018 TMDL Addendum (Boundary and Deep Creek)

- Currently undergoing technical edits
- Will open a 30 day public comment period
- TMDL Subcommittee meeting if needed; for any comments that need to be addressed before submission
- Submit to EPA for approval

Patty stated that if Bob had not explored the possibility of Potential Natural Vegetation we would not be where we are today. The PNV TMDL in 2006 was very much a pilot project across the state. Bob was the first one to try this and by 2009 the rest of Idaho followed; Kudos to Bob.

Bob also added we get a really good product out of this process. We get a map that shows shade deficit and areas that need improvement and get ideas where it would be good to implement projects where we can increase shade for the streams. Also with improved technology, the data is collected every 15 minutes and is used to find the warmest 7 day average of the year for the monitored streams.

Patty added that Dave W, Jerry Garten, Kevin Greenleaf and Brandon Glaza as well as Bob Steed are responsible for putting those monitors out; IDFG also has monitors in Deep Creek.

Patty asked the Board if there were any concerns or questions with Bob moving the Addendum ahead into Public comment; the Board agreed to move forward.

***Bob's complete slide presentation is available on the KVRI website at [www.kootenai.org](http://www.kootenai.org)***

## **Kootenai River Habitat Restoration Project Update- Sue Ireland, Kootenai Tribe of Idaho Fish & Wildlife**

“A Natural Balance – Kootenai River Habitat Restoration” by Kyle Flory and Rob Tenas (10 minute version) was viewed followed by Sue’s PowerPoint Presentation update on the Kootenai River Habitat Restoration Project.

As the video mentioned this is a multi-year restoration program. Treatments are designed to restore habitat and the food web; those natural processes that are missing with the modern day Libby dam flows, for not only sturgeon but also all native fish species that have been in decline. We can now design habitat to match that flow regime rather than what formed those channels back in the day of flooding and we can create floodplain with the banks and the islands and get some of those functions back.

### KRHRP Master Plan

- To restore fish and wildlife populations that looks at each reach of the river, identifies the limiting factors in each reach for all the different species and different ecosystems function
- Has a suite of restoration treatments that can be combined in each of those reaches
- Cost effectiveness
- How many of the limiting factors we can address when we design each years project
- Making sure we are addressing Fish and Wildlife Service ESA requirements under the biological opinion for the operation of the Libby Dam
- Action agencies have the responsibility to provide for things like depth, substrate, velocity to help benefit sturgeon
- Our policy team and technical team meet to make sure we are meeting each other’s objectives as well when we design these projects

### Braided Reach Restored 2011-2017

- In the Straight Reach, some projects added some substrate and a few different velocity deflectors
- Implemented projects in the Braided Reach area added pools, created floodplain, worked on the bank and flow redirection structures to help maintain those pools
- Working now on the Lower Meander Project, in the Braided Reach area

### Pool Ladder concept:

The Sturgeon are spawning downstream from Bonners Ferry in areas that have a lot of sediment and silt. One of the hypotheses was to see if fish would move upstream to better spawning substrate with the addition of the river restoration projects. The ladder of pools is one of the implementation actions to test that hypothesis. It’s also beneficial to other fish species and other parts of the projects help with the different species and life stages. The pool ladder’s last rung will be in this year and then all of the other pools have been created. We have data from Idaho Fish and Game that shows they have tracked fish upstream and more fish in numbers than past years.

### Lower Meander Project Overview

### Biological Objectives:

- Add the last large deep pool for holding and staging habitat for Sturgeon & Burbot
- Increase riparian vegetation in the floodplain to contribute to the food web
- Increase the habitat complexity and diversity

Actions:

- Construct pool forming structures
- Excavate/enhance two deep pools
- Using excavated materials add fill and plantings to existing instream islands
- Construct vegetated brush bank structures
- Build wood structures in channels between islands

Sue shared an illustration of a cross section of different actions; changes in river channel explained and an aerial photo of project area, pool excavation, and small wood structures photos.

Lower Meander Site 1 2018, (car body bank)

- Bank grading, wood structure, vegetated brush and bank and revegetation
- Remove car bodies
- One pool forming structure

Bank Restoration and Island Enhancement were explained with detailed photos.

With these projects there has been sediment released during construction. Idaho DEQ has been interested in this project because we have been able to implement the construction and meet the criteria for Idaho DEQ water quality standards using BMP's. We have extensive monitoring records that are kept throughout the process.

Construction schedule:

- Mobilizing in July
- August/September- will be car body removal, bank work and pool digging
- In September we make a request for low flow to USACE, established construction elevation so all the large equipment can be out in the river and know that river levels will be stable
- October /November- implementing the floodplain roughness, planting and fencing, re-establishing the access roads, removing materials
- December - demobilization

Questions:

Pools survival?

They have been monitoring those closely and some of the pools have actually deepened and moved a little bit....they will construct the pool depending on how far out they can get knowing that the river is dynamic and is going to move the river bed around but the pools have been maintained which is really exciting.

How do you know the fish are using the pools?

Chip C. reported that there is a number of the adult Sturgeon tagged with sonic tags that send signals to receivers in fixed locations but also have people go out with equipment and track the fish. Sue added that there are stations throughout the river that are monitoring stations for the sonic tagged fish that track from Kootenai Falls to Kootenay Lake. They get a good picture of what the fish are doing and their migratory pathways. She also reported that Idaho Fish & Game have been doing reference site monitoring and electrofishing for other species and rainbow trout have increased as well. Another exciting aspect that we've been seeing is Kokanee moving into the newly created/enhanced side channels. Most Burbot do not have sonic tags but the recapture information indicates that they are also using most of the habitat. Chip also added that the Kootenai River in the last ten years has really become a good trout fishery and the Habitat projects are a part of that as well as the nutrient restoration program.

What is the Nutrient Program?

Libby Dam holds back about 60 % of phosphorous and 25% nitrogen that used to come down the system naturally. So what's happened is that the Kootenai River below the dam has become very sterile. The Nitrogen and phosphorous are the building blocks of the food web. IDFG and the Tribe proposed an experiment in 2005 to add nutrients into the system on the Id/MT border and that experiment has turned out to be very successful. They have a nutrient pumping system that is hydrostatic that adjusts depending on the stage of the river. Nutrient addition occurs from June through September during the growing season. Growing season is important and fine tuning Libby Dam operation with temperatures, adding nutrients, and having habitat is lining up to help the situation as well. Gary A. described the details of monitoring the trophic levels and the positive effect he has observed on the algae and invertebrates.

Chip C. added one last thing worth mentioning. Idaho Fish & Game has collected the first Sturgeon egg upstream from town this spring. It is the first wild spawned Sturgeon egg they've collected above town since the project begun. It is nice to see and hopefully more to come.

***The KRHRP complete slide presentation is available on the KVRI website at [www.kootenai.org](http://www.kootenai.org)***

### **2018 Kootenai River White Sturgeon, Libby Dam Operations, Greg Hoffman, USACE**

Greg Hoffman, USACE, presented the Libby Dam Operations update for 2018.

In 2006, legal action led to a settlement agreement by which the Action Agencies (Corps and BPA) were to fully support in good faith all the efforts of the Kootenai Tribe concerning recovery of Kootenai River white sturgeon. The approach the Tribe has taken is holistic and encompassing, not just about one species or one life stage, as it was before. Now there is habitat, nutrients and riparian interface all working together and Libby Dam operations have been a part of that.

The USACE developed a Flow Plan Implementation Protocol (FPIP), and every spring the Tribe, Idaho, Montana, USFWS, BPA, USGS, and Canada work together to plan flow operations for sturgeon spawning and rearing.

Key items of the Flow Plan Implementation Protocol (FPIP)

- Provide peak augmentation flows during the spring
- Gradual reduction in flows to summer levels to enhance riparian plant recruitment
- Optimize temperature at Libby Dam

Success criteria for interim operation (2008-2009) at Libby Dam

- Migration of 40% of the tagged F4 Fish in the river to the Hwy 95 Bridge or above; and
- Presence of those fish in the reach of river at or above the Hwy 95 Bridge for 5 days or more; and
- Capture > 5 unmarked juveniles of the same cohort in 2009 from 2006 or 2007 year classes, when improved temperature control and a descending limb were integral components of sturgeon operation at Libby dam

The success criteria were not met in 2008 or 2009, which led to spill testing at Libby Dam in 2010, 2011 and 2012 (none of which produced “success”, either). The other part of that was the Tribe had to have habitat on the ground by 2012 and they did by 2011. Since that time they have been fine tuning what they do at Libby Dam. And all of these things are coming together now.

Each year the goal is to try to match up the altered hydrograph and thermograph because of Libby Dam (Lake Kootenai is a “heat sink”); trying to provide the optimum flow and temperature for the Sturgeon. The flood stage of the city of Bonners Ferry is always on their mind as the flows are adjusted. The intent is to get the fish to move from spawning downstream from town to upstream to the habitat project areas.

Spring 2018 operation

- The Corps produces a monthly inflow forecast for Lake Kootenai to determine storage space that prevents flooding in the spring months and to fill the pool up
- Water for salmon in the main stem of the Columbia comes from Libby Dam also
- The final May forecast is used to determine the sturgeon volume each year
- This year’s summer flow should begin in 2 weeks
- Inflow now is 20-30kcs

Sue I. added that this year’s peak inflow to Kootenai was over 70kcs. Below Libby Dam with all the tributaries the flow into the Kootenai River was over 25kcs. Without Libby Dam in place there would have been 90kcs coming down the river. In comparison to the flooding in 1948 and 1964, the flows were in excess of 90kcs. Greg stated that we would have taken a boat to our last KVRI meeting!

Temperature management uses selective withdrawal system (gates) and it is exciting to report that the temperature management is working. They are able to maximize temperature which will maximize growing season. The data show tagged fish are going up stream from town to where they want them to go. Also coordinated Libby Dam operations achieved overland flow through the newly created Nimz Ranch wetland as seen in shared photos from Norm Merz, KTOI.

***Greg’s complete slide presentation is available on the KVRI website at [www.kootenai.org](http://www.kootenai.org)***

### **WAC Committee Update-Patty Perry**

Patty reported that the Idaho Transportation Department will be taking down the animal detection system to store. She has been in touch with Bryce Sloan to see if there is anything valuable in the

system he could use. He says there is but is not in a position to look at it until fall. We were hoping he would buy back some of the system and then we could purchase one more of the wildlife reader boards. We are not sure if that will happen but will keep the Board posted on those developments.

### **TMDL Committee Update-Patty Perry**

Patty's update was to have Bob Steed visit and present the Addendum to the Board, making sure the group was comfortable with moving forward with the Addendum for Deep Creek and Boundary Creek and to also report that the stream monitors are going out again courtesy of the citizen monitoring team. Dave W. added that there could be one more trip to finish that project.

### **Forestry Committee Update-Patty Perry & Kevin Knauth**

***CFLRP update emailed out to the Board on Tuesday June 19 following the meeting  
Updated TAPS package information sent to the Board on Thursday June 21***

The Forestry Subcommittee met last week and Kevin K. had the following updates.

#### **Camp Robin**

- Draft EA stage
- Meeting with Jeanne Higgins, Forest Supervisor, July 9
- Release for Comment

#### **Boulder Project**

- Waiting for Biological Opinion from Fish & Wildlife Service; no later than 25<sup>th</sup> of June
- Issue draft decision and start of objection period

#### **Solomon Lake Campground Project**

- Ahead of schedule by almost 2 weeks
- Hauling gravel, new sites, picnic tables, & fire rings
- Should be ready for the 4<sup>th</sup> of July

#### **Grouse Bear BMU Project**

- Draft EA out May 21
- Comment period closing by June 22

#### **Bog Creek Road Project**

- Lots of meetings and discussion going on
- Open House June 21, Thursday 5:30 -7:30 at Bonners Ferry Ranger Station
- Will have stations set up to look at information, no presentation

Patty added that some of us have met with the Border Patrol and USFS although it is not a KVRI project and shared a brief summary of the alternatives:

- Alt 1- no action,
- Alt 2- reopens entire Bog Creek road, closes 26 miles of road to be stored in order to meet Grizzly Bear Access Amendment, and gives access to Border Patrol

- Alt 3- Very similar to Alt 2 (reopens Bog Creek road), but will store a slightly different set of roads to meet the Grizzly Bear Access Amendment and gives access to Border Patrol. Stores 26 miles of road.
- Alt 4- Stores the same roads as Alt 2, but allows public access across the road along with the Border Patrol. This access which hasn't been there in 30 + years.

Here is your opportunity to go look at what needs to happen, what the needs are for the Bear Management Unit and to say is there something in here that might benefit or be of interest to the community as well. The tribe and our staff have spent a good deal of time on it and plan to meet and discuss it more. We would like to see something that could have a little something for everybody in it.

Kevin K. stated that the purpose for doing it all was to get Bog Creek Road open for the Border Patrol so they can do their jobs better and to meet the Grizzly Bear Access Amendment by closing sufficient number of roads; all the alternative do both of those things except for the no action alternative.

Dan D. pointed out to the Board when viewing the map #2 in the packet Rhonda will be sharing via email, the roads *shown* are what is left to be stored or restricted all other roads in the project area have already been stored or restricted.

#### **Congressional Update-Sid Smith, Senator Risch office**

Sid Smith reported that Senate leadership is planning on cancelling the August Recess; plan on staying in DC to try to get a number of the appropriations (spending) bills passed before the Sept 30 deadlines.

#### **Next KVRI Meeting**

The next meeting is scheduled for July 16, 2018 at 7:00 p.m.

Meeting was adjourned at 8:45 p.m.  
Sherrie Cossairt,  
KTOI/KVRI Admin. Assistant