

Kootenai Valley Resource Initiative
June 19, 2017 – 7:00 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., Chair, Kootenai Tribe of Idaho (KTOI) & KVRI Co-chair
Sandy Ashworth, Social/Cultural/Historical Interests
Bob Blanford, Business/Industry
Ed Atkins Jr., Corporate Agriculture/Landowner
Kevin Knauth, (Alt.) US Forest Service (USFS), Bonners Ferry Ranger District
Brad Corkill, Idaho Fish & Game Commission
Dave Wattenbarger, Soil Conservation District/Ag Landowner
Patty Perry, KVRI Facilitator & KTOI
Sherrie Cossairt, KVRI Recording Secretary & KTOI

Agency/Others in Attendance:

Chip Corsi, Idaho Department of Fish & Game
Karen Roetter, Senator Mike Crapo's office
Mitch Silvers, Senator Mike Crapo's office
Judy Morbeck, Congressman Raul Labrador's office
Sid Smith, Senator Jim Risch's office
Marcel Huijser, Western Transportation Institute, Montana State University
Karen Cathey, US Fish & Wildlife Service, North Idaho Field Office (NIFO)
Sue Ireland, Kootenai Tribe of Idaho
Norm Merz, Kootenai Tribe of Idaho
Scott Soultz, Kootenai Tribe of Idaho
Don Davis, Contractor, Kootenai Tribe of Idaho
Kurt Pavlat, Bureau of Land Management
Jonathan Luhnnow, Idaho Department of Lands
Evan DeHamer, IDFG, McArthur WMA, Boundary/Smith
Dianna Ellis, USFWS, Kootenai National Wildlife Refuge
Dave Gray, (Alt.) Social/Cultural/Historical Interests
Ron Abraham, Kootenai Tribe of Idaho (KTOI) & (Alt.) KVRI Co-chair
Greg Becker, NRCS Boundary/Bonner County

Opening:

Co-Chair, David Sims opened and welcomed everyone to the meeting; introductions followed.

The May 15, 2017, KVRI meeting draft notes were approved by consensus.

Kootenai River Habitat Restoration Project (KRHRP) Update- Sue Ireland- KTOI

Sue began her multi-media presentation with a short video produced by Kyle and Rob Productions for the Kootenai Tribe. The documentary was made to describe the Kootenai River Habitat Restoration Program, some of its objectives and is used as an outreach tool to help the general public understand the project better. The Board and visitors enjoyed the condensed 10 minute version of the documentary and then Sue presented in more detail the next phase of the Kootenai River Habitat Restoration project called Lower Meander.

Sue explained the Lower Meander Project will be implemented over the next two years (2017-18) and is located in the Braided Reach of the Kootenai River upstream from the City of Bonners Ferry.

She reviewed the major types of treatments they have implemented so far (2011-2016). Those treatments included pool forming and pool enhancement structures; in-river and bank structures to create more diverse and complex habitat, side channel reconnection, floodplain creation and enhancement for the food web, and riparian enhancement and buffer fencing (to protect newly planted areas from wildlife predation).

Sue explained that the dead brush we see on the islands are actually surrounding the new plantings and are needed to protect them from wildlife predation. Now that the water has receded they will be performing plant survival surveys on the islands. She also explained the new river bank technique using a lot of brush to enclose the willow bundles to protect them from the beavers.

Using the map (KRHRP-Completed and Proposed Projects: 2011-2018), Sue explained the projects they have done and will be doing as they are moving downstream using different techniques.

Sue also shared pictures of the eroding banks of the river today and a historical aerial map of how the banks of the Kootenai River have changed since 1892 until today, including Pre-Libby Dam and Post-Libby Dam. There is a definite correlation between the removal of the trees on the river banks and erosion as seen in the maps from 1958 to 2011.

The work for this project has been divided into two years due to short construction windows and annual construction budgets. Phase 1 (FY 17) will be upstream implementing pool forming structures and pools, and enhancing the islands and Phase 2 will be next year (FY18) in the area of the banks with the car bodies.

Within the islands they will be creating connector channels using large wood structures to create habitat complexity; side channel enhancement; pool forming structures, and bank grading. In 2018 the work will include the removal of the car bodies from the banks of the river, treating the banks with brushy bank treatments, and building out the islands to create more flood plain.

Tim D. asked Sue how long will the pools will stay pools. Sue explained that they are building/excavating pools in two parts of the river, one is the area influenced by the backwater from Kootenay Lake, not as high of velocity in that reach when high water is coming through and then the pools upstream. The two different estimations of longevity for the pools are; if not in backwater reach and subjected to a lot of velocity during spring runoff, the estimation to last is 20-25 years. The pools in front of the Kootenai River Inn are estimated to last 4-10 years.

Discussion followed concerning the documentary video. Where does this video go now? They plan to debut the video in the local community to share the influences of the project on the community and

economy. Sue shared what great film makers Kyle and Rob are and Gary explained they have plans for them to do another video highlighting more of the Hatchery as well. Gary stated that they created the video because they wanted the story told.

David Sims stated that every time he sees a presentation or visits the Hatchery, he is amazed at the scope of the work the Tribe is doing for the community and environment and the success they are having. The community is very fortunate.

Sue's full presentation and handout are available online at Kootenai.org

Western Transportation Institute Presentation-Marcel Huijser

Patty explained that the WAC (Wildlife Auto Collision) Committee has been working with Marcel Huijser from Western Transportation Institute for over 5 years. He originally did a study that showed where the animal hotspots were, collated data from ITD and IDFG and found where we saw the most movements. We worked with Nature Conservancy, and others to put together the pilot system to detect animal movement. ITD (under Don's leadership) came up with a grant application to fund the opportunity for Marcel to do the third party validation, an outside entity looking at the detection system to see if it is working, is it worthwhile, should we continue, can we duplicate it or at least give us some answers so we can make those decisions. We are grateful because not everyone has the ability to get someone of Marcel's caliber to do something like this for them.

Marcel began his presentation by thanking the organizations and the people that made this project possible and the Nature Conservancy and the Kootenai Tribe for bringing him here this evening.

What he has done over the last year and half is investigate the reliability and effectiveness of the animal detection system. He didn't do it alone; he worked with Brice Sloan, the manufacturer of the system; he was very important to the project's success. He was also grateful for the data analysis help.

Why are we doing this? We have collisions with large mammals in the U. S. The data shows between 1990 to 2004 the total number of all vehicle collisions remained stable at over 6 million collisions a year, over that same time period there was an increase of 50% in wildlife-vehicle collisions which justifies the increased attention to this type of collision.

Human safety data are fed by two types of data, crash data and carcass removal data. The ecological impacts of roads and traffic on wildlife are; loss of wildlife habitat; road mortality; barrier to wildlife movement; decrease in habitat quality; and ecological function of verges. Mitigation, (reduction of the negative effects of roads and traffic) using animal detection systems, only addresses road mortality and reducing the barrier effect.

Mitigation is not the only thing or the first thing you should do. If you have the opportunity to avoid the most severe impacts on wildlife, it is better than trying to reduce these impacts. Rerouting a road away from the most sensitive locations is an avoidance strategy. You still may need to mitigate the road effect zone as a second step in the approach. A third step can include increasing the number and size of habitat patches or increasing the connectivity between them. It's really a three-step approach; avoid impacts, mitigate and compensate.

Standard wildlife warning signs are examples of mitigation efforts done to reduce vehicle/animal collisions. The actual benefit is zero. The signs work if it is to inform the public but if objective is to reduce collisions this method does not work. Research does not show that signs cause drivers to slow down or are less likely to hit wildlife.

Marcel explained that an interview was conducted of people who have passed a warning sign. After only a few hundred yards after seeing it, the number of those that could recall what was on the sign was in the single digits. There seems to be no greater awareness with signage. Also on average we do not benefit from gaining driving experience. For the population at large, it also does not help us much to know where the dangerous locations are.

The things that do reduce collisions substantially are wildlife fencing; keeping wildlife off the highway and guiding them to safe crossing opportunities. Fences alone increase the barrier effect; we don't want that alone without providing safe crossing opportunities. There is an average of 80-100% reduction of large mammal collisions using fences when they are designed and installed correctly.

Another measure that reduces collisions with large mammals, are Animal Detection Systems, but it is a more variable reduction rate of 33-100%.

Detection systems have low upfront costs, but the lifespan is shorter; they can be implemented quickly and do not require tearing up the road or effect traffic; they do not restrict where animals can cross. The disadvantage of the systems are that they do not address the barrier effect, there are technical and funding problems and most actually fail, although ours did not.

Fences/Crossing Structures have higher upfront costs, are put in place when upgrading the roads and are in place for 80 + years. It is a smaller area and safer for the animals to cross but they do restrict where wildlife can cross. Fences are far more predictable in collision reduction and they provide safe crossing opportunities for wildlife to cross the highway. The combination of mitigation measures can reduce collision and improve wildlife connectivity.

Animal detection systems consist of sensors placed in the right of way; they detect large animals as they approach the road and sometimes while they are still on the road. Drivers are warned to be more aware, reduce their reaction time or reduce their speed which can result in fewer collisions and less severe collisions

The system equipment consists of: Doppler radar (sensor to detect wildlife); thermal camera (not the sensor, only used for research purposes, evaluates how well the radar detects the large animals); cellular antenna (wireless access to the data); warning sign (amber flashing light activated when detection occurs); data processing and storage.

The data collected is used to evaluate the reliability of the system as well as to measure the effectiveness of the project. Some of the findings were: at least 3 out of every 4 detections relate to large mammals on or near the highway, more animal crossing activity occurs in the fall; it takes an animal an average of 10 seconds to cross the highway; drivers do recognize that the time of day and road conditions affect stopping time and reaction time.

The activated warning signs did result in lower vehicle speed, but this reduction was not substantial. The greatest reduction in vehicle speed occurred in winter at night, about 3 miles per hour. In summer drivers did not reduce vehicle speed in response to the activated warning signs.

Some conclusions based on this and other research is how we present the warning signs to the drivers has an effect on how they interpret it and how they respond to it. That partially explains the reductions of speed in different locations although local culture may play into it, and if a sign is associated with mandatory or advisory speed reductions.

At this time there is no knowledge about what is the most effective warning sign that allows people to avoid collisions. When it comes to traffic engineering and signage it is essential to have a standard. We need to only glance at a sign to understand what it is telling us and the signs need to be consistent. That is a role for the National Road Administration Agencies to figure out what is most effective warning sign, adopt it and standardize it. If we get more of these signs in this region and others, people will readily recognize what type of warning they are presented with.

Do drivers acclimate to seeing signs at the same spot every day for a period of time and not see an animal? Does the value of the warning wear off? We do know if we have permanently flashing signs, not connected to sensors, there is a temporary effect, people do habituate. If not associated with seeing wildlife do they trust the warning sign? We are not sure of that. They may not necessarily trust the signs but may trust the experiences of others and other reports.

The data shows that with the current sign configuration we are not getting the warning signs to the drivers in time. We need additional signs closer and inside the detection area. Of course traffic engineers are concerned about sign saturation. We also should think about combining warning signs with mandatory speed limit reductions, because currently the drivers do not reduce their speed sufficiently.

It may be worthwhile thinking about a different type of sign such as an LED panel, most of the time it is just a black sign until detection occurs and then you are warned with jumping deer symbol and an advisory or mandatory speed limit reduction. At that point I would argue it would be in the interest of everyone to do everything possible to get the warning signal to the drivers, even if you light up 5-10 signs, and after the detection has stopped the sign goes back to black. The sign saturation argument doesn't have to come in to play; you can choose to say nothing unless there is real danger right there at that time.

It is reasonable to assume that we now have a mechanism through which we can potentially reduce collisions because we can tell people about them. The idea is good. We need to think about the number and placement of signs, types of warning signs we present to drivers and a potential advisory/mandatory speed reduction (which is not a permanent speed reduction but only at the time of detection). About in-vehicle detection systems (as opposed to roadside animal detection systems) and current pedestrian/bicyclist detection systems for urban settings: Need to consider that on rural highways with higher speeds and a need to detect wildlife, the sensors will have to detect the danger at far greater distance to come to a complete stop or avoid collisions so the demands on the sensor and its' ranges are much greater for wildlife detection. The study shows there is a continuing need to do this type of work.

Marcel's complete presentation is available online at kootenai.org.

Committee Updates

Forestry Committee Update -Patty Perry

Patty reminded everyone about the Field Trip to the Robin Hood and Camp Dawson Project areas on Monday, June 26. We will meet at the Forest Service office at 8:45 a.m. and leave by 9:00 a.m. Bring a lunch and bee sting kit. Water and snacks will be provided. Please RSVP by Thursday, June 22.

CLFRP Program Review Visit - July 24 and July 25 - Patty Perry

Folks are coming from the Washington Office of the Forest Service, Regional Office, Supervisors Office and the District on July 24 and 25. We are invited to participate in a program review. They will arrive midday on July 24, go to Twenty Mile and have dinner at the Kootenai River Inn. On July 25, they will begin their day with a 1 hour meeting at the Kootenai Tribal Office and go to Brush Lake to have lunch. If time allows, a mill tour is being considered before they travel on to Kalispell.

According to Tim Dougherty they be will be actively harvesting on both sales, doing slash work and road maintenance.

Deer Creek Update-Kevin Knauth

The Deer Creek Decision notice was signed by Mary Farnsworth, USFS Supervisor. September is slated for the offering of the 1st sale (Stewardship Sale). And the 2nd sale will be offered 6 months later.

Kevin reported that they are starting to build the EA Document on the Boulder project and a Draft EA should go out for comments in August.

TMDL Committee Update- Patty Perry

The TMDL Committee was part of a Field Trip to Trail Creek on May 24 with Jonathan Luhnaw, IDL. Jonathan stated he received an email from the Technical Services Bureau in Coeur d'Alene and they will be putting an article in their internal IDL newsletter about the field trip. Patty reported it was a good field trip and a pilot project to show where Forest practices and water quality intersect.

Old/New Business/Correspondence

Grizzly Bear Report Update Handout-Patty Perry

A copy of the Cabinet-Yaak and Selkirk Mountains Grizzly Bear Ecosystems Update from Wayne Kasworm was included in the packets for the Board tonight to keep everyone up to date on that information.

CFLRP Project Questions and Review Visit Handout – Patty Perry

One handout consisted of a list of questions that the CFLRP Review team is going to want to talk about while they are here. The District and the KVRI Collaborative are to answer the questions together.

The 3 KVRI Co-chairs and staff from the District talked through the questions and Patty put together some bullet points from the Collaborative perspective. This is a rough draft to answer those questions. Please respond back to Patty with your comments, suggestions, edits, etc. The other handout is a very tentative schedule for the CFLRP Review visit in July.

Congressional Delegation Updates

Mitch Silvers-Senator Crapo's office

Mitch Silvers reported that Sen. Risch and Sen. Crapo introduced a bill to extend funding for Secure Rural Schools (SRS) for FY16, FY17 and FY18. The last year SRS received funding was 2015. Sid Smith added that they are working with Chairman Hatch, Finance, and Wyden to find an offset to fund that. That effort is ongoing. They do not yet know the funding level for those 3 years, as it may be determined by the offset amount they are able to find.

Judy reported that Doug Taylor, Deputy Chief of Staff in the office of Rep. Raul Labrador, had planned on being here tonight but had issues at the airport. He will be here tomorrow for the Commissioners meeting at 11:30, lunch with Gary and a tour of the hatchery after lunch.

Fish & Game Commission –Chip Corsi

Chip reminded everyone about the upcoming Fish & Game Commission Meeting on July 26 (public evening meeting at the Kootenai River Inn) and July 27 (Commission meeting at Bonners Ferry High School). It's the first time the meeting has been in Bonners Ferry in 5 years.

Next KVRI Meeting

The next KVRI meeting will be on July 17, 2017 at 7:00 p.m. Fair Booth ideas will be discussed. The theme this year is "What's Cooking at the Boundary County Fair".

Meeting was adjourned at 8:40 p.m.
Sherrie Cossairt,
KTOI/KVRI Admin. Assistant