Panhandle Basin Advisory Group
Department of Environmental Quality
2110 Ironwood Parkway
Coeur d'Alene, Idaho DEQ
October 28th, 2015
Draft Minutes

Members and Alternates Present	Guests Present
Melissa Driskell – Mining	Tom Herron - DEQ
Dan Dinning – Local Government	Kristie McEnroe - DEQ
Jack Filipowski - Agriculture	Kajsa Van de Riet - DEQ
Robert Rider - Livestock	Kristin Larson - DEQ
Patty Perry – Kootenai Tribe	Bob Steed - DEQ
Scott Fields – Coeur d'Alene Tribe	Bob Flagor
	Larry Mundt
	Steve Kolb
	Sue Ireland
	Bill Lilibridge
	David Fortier
	Rebecca Stevens

The Panhandle Basin Advisory Group (BAG) meeting was called to order at 9:07 a.m. by Dan Dinning at the Department of Environmental Quality in Coeur d'Alene, Idaho. Introductions were made around the room. The minutes from the August 5th meeting were reviewed. A motion to approve minutes was made by Patty Perry and seconded by Melissa Driskell. Motion passed.

BURP – Kristin Larson

Kristin passed a map of the B.U.R.P Season monitoring. This year the monitoring focused on the St. Joe area and also included Grouse Creek, North Fork Coeur d'Alene, Pack River, and a couple sites way up north. There were a total of 43 sites. They had a great season and great crew this year. The sites that were targeted in the North Fork Coeur d'Alene were tagged as potential de-listing for sediment so the WAG helped select the sites from areas that have had restoration so they are looking for the data that would support those de-listings. The crew also helped with Solar Pathfinder monitoring on the South Fork which was very beneficial. DEQ also kept one of the crew on to help with a TMDL and the 5yr Review on the Pack River and Sand Creek watersheds in the Sandpoint area.

319 Funded Projects Overview – Kristin Larson

Normally this meeting is set aside to vote on 319 proposals. This year there were several applicants to submit grant proposals but for one reason or another they all had to pull out. There were no projects this year, Kristin expects those projects will be submitted for this coming 319 grant season and it should be very competitive. The BAG has requested in the past to review past 319 funded projects to see what has been done with the grant money. Kristin asked a few of the applicants to come back today to present.

Fish Creek – Steve Kolb:

Steve Kolb with the Twin Lakes Improvement Association presented the BAG with an update on the Fish Creek 319 Grant funded project. The project area was at the far west end of Twin Lakes. The goal was to address the causes of the deterioration of the watershed, namely sediment and nutrient reduction that were identified in the TMDL. The area identified was Fish Creek that runs through a section of the Easterday Cattle Ranch and feeds upper Twin Lake. During the course of the project they worked with the Hancock Forest Group that put a presentation together that Steve played for the BAG.

The grant allowed for work to be completed on 1,200 linear feet. They estimate that between 200-300 tons per year of sediment was produced by the sloughing banks. The project has gone through several phases. The first phase was a demonstration project to see how that concept would work to address the erosion on the stream banks. The second phase they added an additional 400 feet making adjustments from what they learned with the first phase. Both were successful. Then they came to the third phase of the project and that is what they submitted the 319 grant application. The third phase was a 1,200 linear foot project with 3 stream banks and 2 cattle crossings. The grant they received was $140,000. The grant required $56,000 of match. They were able to obtain that through donations, supplies, materials and volunteers. Without community involvement they would never have been successful.

Steve showed the BAG several before and after photos of the success of the project. Barbs were installed, the bank was reinforced, over 4,000 natural plants were planted and hard cattle crossings and exclusion fences were installed. The plants that were planted were planted in a tier system depending upon how much water they needed to be successful. Great care was taken to ensure the stream and ecosystem were protected. They made sure to include watering in their plan. This summer was hotter than most and they felt watering was really important. That watering saved countless plants and really helped the overall success of the project.

Coeur d'Alene River at Medimont – Bob Flagor:

Bob Flagor with Kootenai Shoshone Soil and Water Conservation District presented the BAG with a follow-up from their 319 grant funded project. The original application addressed approximately 4,000 linear feet of riverbank stabilization directly across from the Medimont boat launch. The project's goal was to stabilize the eroding banks of the Coeur d'Alene River. Most of the erosion is result of boat wake action. By reinforcing the bank they hoped to cut down on around 5,200 cubic yards of sediment annually to the river and consequently to the lake. Bob showed the BAG photos of the work being done and sections of armored bank. He estimates that between the Conservation District and NRCS approximately 13 miles of bank armament has been completed since early 2000.

The original grant was $217,000. They were ahead of schedule and under budget for the project and turned $12,000 back from the project. In hindsight Bob said it would have been beneficial to use that extra money for irrigation. The 2 years of record heat and drought have taken a toll on the plantings. The plants near the waterline have done fairly well but some, half or more, of the planting higher on the bench have died off. The willows are in place and look good. He estimates

around 4,000 plants were planted and 10 pounds of grass seed. The grass didn't take off due to the dry conditions. Bob's presentation lacked after photos of the project. The BAG requested Bob come back to the BAG and present after pictures so they can go forward and have more information for future funding.

Mica Creek Restoration Project – Larry Mundt:

Larry Mundt presented a series of photos of his project to the BAG. First Larry mentioned all of the contributors to the success of the project: Kootenai Shoshone Soil and Water Conservation District, Idaho Conservation Commission, Idaho DEQ, Basin Environmental Improvement Commission, the BAG, NRCS, Idaho Department of Water Resources, Idaho Fish and Game, Army Corps of Engineers, The Coeur d'Alene Tribe, Mica Kidd Island Property Owners Association, Rattler Family LLC One, and Larry and Sherry Mundt.

Larry gave an overview of the history of the project starting with the Mica Creek TMDL listing for sediment and bacteria loading. They were first contacted in 2000 and asked to participate in restoration work - mainly harden stream crossings, riparian exclusion fencing, barbs, and off stream watering. In spite of 3 miles of newly installed fencing the stream bank continued to erode. The stream was encroaching on the fencing and starting to wash out under them. Rather than continue to move the fencing they decided to find the cause of the problem. What they found were alder upstream that had fallen into the stream due to undercutting of the bank and had caused a dam. That dam directed the water to the opposing bank causing the erosion. This pattern continued downstream. They removed the alder from the stream banks that would not affect the shading of the stream leaving the root wads for bank reinforcement, reinforced the banks and installed coffer dams.

Through 2014 over 24 worksites have been completed with over 3,000 ft. of stream channel protection and willow planting. Erosion from these sites has been estimated at 673 tons per year and included 1,000 lbs. of phosphorus and 2,000 lbs. of nitrogen. The work partially funded by the BAG consists of 11 work sites and 989 feet of channel protection. The annual erosion run off from these sites was estimated at 164 tons including 254 lbs. of phosphorus and 500 lbs. of nitrogen. It was all completed in 2011.

Larry showed a sequence of pictures for each site with a before, at the completion of the work, and what the sites look like today and successful uses of the coffer dams with fish passing through. Over time all the worksites have remained structurally sound. The willow plantings have a very high survival rate and the worksites themselves have disappeared with plant growth. In closing he thanked the BAG for their cooperation. The total 319 Grant funds were estimated at $100 per running foot for the 3,000 feet of restoration and there were 4,000 feet of vegetation management that ran about $25 a foot to clean it up.

Larry brought up the fact that the 319 was flexible in what needed to be done but it takes a very long time, sometimes up to a year, to get paid. That isn't explained upfront. From the landowner perspective, that knowledge would have been beneficial in getting bids and communicating with the contractors. Even with the grant money, as the landowner, they were still on the hook for 20-25% of the total cost. It is burdensome but worth it. The BAG would like to understand why it

takes so long for the money to come from the 319 grant into the hands of the people doing the project. Kristin said she would take those concerns back to Dave Pisarski.

Kootenai River Habitat Restoration – Sue Ireland

Sue Ireland presented the BAG with an overview of the restoration work funded by cost sharing from the 319 program. There are a lot of complexities when working on a river of this size. Because of historic changes to the river, it has different flows, thermal regime, sediment transport and deposition. Because of this there has been loss of flood plains, bank erosion, land loss, changes in morphology, depth, and velocity.

The Kootenai River white sturgeon is really culturally significant to the Kootenai Tribe, the local community as well as the settlers that moved in. This is a unique population that has adapted to the local headwaters and was separated from the rest of the Columbia River Basin white sturgeon about 10,000 years ago. Along with sturgeon there are other important species in the watershed like the burbot. It was petitioned for listing. Through community collaboration and a conservation strategy, a plan was produced to restore the burbot, sturgeon, and other native fish populations in the river.

The Kootenai River Habitat Restoration Program is implemented in the Idaho portion of the watershed to restore fish populations and their habitat. Rather than just addressing one issue in the river, they collected all available data and researched to find out what was going on in the river. They set goals in each of the reaches of the river. The types of treatments that they have been implementing over the last four years are: pool forming structures or pool creation or enhancement, in-river bank structures to create more diverse habitat for the fish, side channel connection, flood plain creation to bring back the nutrients from that run off, riparian enhancement and buffer fencing.

Phase 1 was the project that was funded by the 319 grant. In 2010 they applied and received $250,000 for a cost share for the Phase 1 project. Total project cost is $2.4 million. The restoration actions they are taking are very extensive because the area is so large. They were very appreciative for the cost share funding that came from the 319 program. Sue showed maps of the area, photos of the pre-project area, and what it looks like today. They have installed about 12,000 large pieces of wood with root wads attached for bank stabilization and fish habitat. A lot of local folks working on the project contributed wood, rock and land. They isolated sections of the river side channels to begin work, all the fish were moved out, there was a lot of grading, and the installation of the wood structures. The willow planting has been challenging with the beavers. But with some cage enclosures, livestock fencing and watering, the vegetation has been successful. Phase 1was completed in 2011. The first year there was a really high water flow event and the project performed well and there was flood plain interaction. There is physical and biologic monitoring going on. There is a lot of money going into the projects and they want to maintain a lot of monitoring to make sure the projects are performing and meeting the objectives.

Lake Assist Bank Stabilization Demonstration Projects – Kristin Larson

Molly McCann from Lake Assist couldn't make it so Kristin presented the project to the BAG. The project was funded for education activities and on ground improvements. There was outreach, land owner visitation, there were land use consultations, riparian buffer designs, outreach events, presentations and 2 public demonstrations.

One of the demonstration projects was a BMP riparian buffer, Dover Public Park. It encompassed 250 linear feet of shoreline with a total of 2,500 sq. ft. of riparian buffer. There were over 100 native plants installed and she had quite a bit of volunteer work to install it. There was also signage so there was an interpretive piece that explained to people what exactly a riparian buffer was and how it helps with water quality. They had quite a bit of a weed problem in the beginning; they came back with 3 different weed control methods. Cardboard being the best option, rather than the black plastic and hand pulling methods that were used. Kristin showed before, during, and after photos of the project. Initially there wasn't any kind of maintenance commitment from the City of Dover so it ended up the Lake Assist coordinator was in charge of the maintenance of the project. During the project there was a shift in membership on the Dover City Council. One of the new city council members wrote a grant for 400 native plants and with the new council there is now a commitment from the city to maintain it.

The other demonstrative project is at the Waterlife Discovery Center located on the shores of Lake Pend Oreille. The center is managed by Fish and Game and includes a self-guided tour. In 2010 they did 50 linear feet of shoreline buffer; plants were selected for drought tolerance. In 2012 they did another 50 linear feet. Kristin showed photos of the project and the plants looked really well. There were also signs and the interpretive aspect to this project as well. The lessons learned from the first project were used on the success of the second project. The chair suggested making a list of lesson learned list to add items such as watering, maintenance agreements, and funding timelines to help future projects.

North Fork Coeur d'Alene 319 Implementation Projects – Kajsa Van De Riet

Kajsa Van De Riet presented the BAG with an update on 2 projects in the North Fork Coeur d'Alene that were funded through 319. Those were the Short Riley Quarter Memorial that went to the North Idaho Fly Casters in 2009 that's in the head water of Teepee Creek. They came back to the BAG with a follow-up presentation in 2012. The other 319 project was the Idora Mill site project. That was a mine clean-up and stream restoration in Beaver Creek. The grant for that went to Geoff Harvey and the work was done in 2012. Each project was successful and restored riparian habitat.

Next Meeting Agenda Items and Adjourn

The next BAG meeting will be held on January 27th, 2016. Agenda items for the next meeting to include Bob Flagor's after photos of his 319 project. Meeting was adjourned by the chairman at 12:38 PM.