

Basin Environmental Improvement Project Commission

Meeting Summary Minutes

May 18, 2022, 9:30 AM – 3:30 PM

Kellogg Panhandle District Office

35 Wildcat Way, Kellogg, ID

These minutes are summary notes of the reports and presentations and are intended to capture key topics and issues, conclusions, and next steps and not every detail of discussion or individual quotes

Attendees in person and on Zoom included the following:

Terry Harwood (BEIPC Executive Director)

Commissioners and Alternates present:

Mike Fitzgerald (Shoshone County), Brook Beeler (Washington State), Jess Byrne (IDEQ), Michael McCurdy (IDEQ), Bill Brooks (Kootenai County), Kira Lynch (EPA), Peter Mahoney (CDA Tribe), Phil Lampert (Benewah County)

Staff present:

Gail Yost (BEIPC, Assistant to E.D., Note taker), Ed Moreen (EPA), Dan McCracken (IDEQ), Sandra Treccani (Washington State), Rebecca Stevens (CDA Tribe), Dana Swift (IDEQ), Jamie Sturgess (Kootenai County), Jerry Boyd (CCC), Jamie Brunner (IDEQ)

Call to Order – Introduction of new BEIPC Members

The meeting was called to order by BEIPC Chair Mike Fitzgerald at 9:35 a.m. Introduction of new BEIPC members were followed by introductions around the room.

Nomination and election to fill the Vice-Chairman position (Action Item)

Jess Byrne nominated Brook Beeler to fill the vice chair position that is currently open. Phil Lampert second, all approved M/S/C

Approve the minutes from the November 10, 2021, virtual meeting (Action Item)

There were no comments or edits to the minutes from November 10, 2021. A motion was made by Brook to approve the minutes, second by Jess, all approved M/S/C

Review and Discussion of Draft 2021 Annual Report - Terry Harwood

Terry presented the annual report of accomplishments made in 2021. This process includes putting together reports submitted from various agencies and how well they have done during the calendar year on projects that were outlined in the approved work plans.

In the first section, Terry summarized work performed through Superfund and other cleanup programs. This included public outreach and citizen involvement thru the CCC, BEIPC, EPA, IDEQ and PHD. During 2021, all BEIPC meetings were held virtually due to the COVID situation, but outreach and education continued thru our website and other public outlets. The Citizen Coordinating Council (CCC) serves as an information conduit to and from the BEIPC on citizen, community, and special interest issues, and on environmental cleanup and restoration concerns. Thru the CCC and Technical Leadership Group (TLG) work plans were reviewed and approved at the November BEIPC meeting. The BEIPC continued its efforts to maintain public involvement concerning activities and communication between the Basin community and all agencies involved in the cleanup. EPA also coordinated with local communities for the opportunity to be involved in and

informed about the cleanup. Many of these activities are also done in partnership with other agencies. Kellogg Panhandle Health District (PHD) is the primary partner for health messaging and outreach through the Lead Health Intervention Program (LHIP). There were many community involvement activities conducted in 2021 as highlighted in the annual report. Rebecca asked if there were plans to have a BEIPC representative present at the North Idaho Fair this year. Terry stated that he will work with Mary at PHD to put together a schedule to cover the fair.

The Lead Health Intervention Program (LHIP)

The Centers for Disease Control & Prevention (CDC) has lowered their blood lead “reference value” associated with childhood lead poisoning from a value of 5 µg/dL to 3.5 µg/dL effective October 28, 2021. For future screenings the new lower value means that more children will be identified as having lead exposure. PHD will continue to offer free blood lead screening for residents living within the Bunker Hill Superfund Site with an incentive of \$50 for children between the ages of 6 months to 6 years of age.

Basin Property Remediation Program (BPRP)

At the conclusion of 2021 field season, properties remaining to be sampled and/or remediated in the Upper and Lower Basin are those whose owners have refused access or have not responded to repeated contact attempts. The CDA Trust BPRP program completed remediation of one residential property and one ROW, IDEQ did not complete any remediation in the Box this year. Property remediation totals to-date for the Basin are 3,928 and the Box 3,236.

Contaminated Waste Disposal and Management

A short overview was given on the repositories and Waste Consolidation Areas (WCA's) located in the Box and Basin. These include Big Creek Repository (BCR) and BCR Annex (BCRA), Lower Burke Canyon Repository (LBCR), East Mission Flats Repository (EMFR), Page Repository, East Fork Ninemile Creek WCA, and the Canyon Creek Complex Repository and WCA (CCR).

Contaminated waste disposal and management will be an ongoing process as we meet the demand for the disposal of historic mining related contamination for the entire Basin environmental and human health related remediation programs.

Upper Basin Remedies

Terry quickly covered Upper Basin remedies which included cleanup actions in the East Fork NineMile Creek and Canyon Creek. Operation and maintenance (O&M) will continue at the Interstate Callahan Mine Rock Dumps, the Success Mine Complex, Interstate Millsite and Rex Mine No.2, and the EFNW WCA. Contaminated waste rock and mine tailings were hauled from the upper portion of the EFNW Riparian Site and approximately 1185 feet of Stream Channel was re-constructed. Characterization and sampling activities in the Canyon Creek Drainage were conducted at the Gem Complex, Standard Mammoth Reach, Black Bear/Flynn Mines, and at several other RODA sites located in the upper reaches. The third of four years remedial action and WCA development for moving and disposing of the waste material in the existing SVNRT repository continued as well.

Central Treatment Plant (CTP) and Groundwater Collection System (GCS)

After four and a half years of design, construction and testing, the upgrading of the CTP was finished and handed over to IDEQ for O&M using funds provided from the Hecla settlement. EPA and IDEQ continue to monitor the performance of the GCS for historic seeps that had been observed prior to construction and visible sediment plumes. The CTP upgrades have been necessary for some

time to provide dependable and more efficient water treatment of the Bunker Hill Mine water, and the groundwater collected from the GCS near the CIA. The upgraded plant when operating in HDS mode will result in much less sludge production and more efficient operating conditions.

Lower Basin Remedies

Lower Basin remedies include Gray's Meadow, which is a combination of remedy and natural resource restoration. It is a collaborative effort between EPA, CDA Trust and the Restoration Partnership. At Lane Marsh, EPA continued two pilot projects – Incremental Thin Layer Capping (ITLC) and a bench-scale treatability phase to explore the efficacy of biochar amendments. Progress was also made on the design and construction of the Cave Lake wetland discharge improvement project, pilot study to evaluate the tilling methods in Cave Lake wetlands, and the Lamb Peak wetland discharge and access road improvement project.

To address source control in the river channel, The Dudley Reach pilot riverbed remediation project planning continued in 2021. A Draft Riverbed Management Plan was completed that describes an approach for the entire Lower Basin riverbed – it divides the riverbed into sediment management areas (SMAs) as a starting place to conceptualize addressing the riverbed source areas throughout the channel and help facilitate remediation planning.

State of Washington Projects

The State of Washington completed a periodic review for the Spokane River remediated beach sites. It was observed that the beach sites closest to the Washington-Idaho border have accumulated sediment from upstream sources that contain heavy metal. Current concentrations have not reached the action levels that were used when conducting the cleanups and overall, the beach sites are in good condition.

Recreational Sites

Work continues in recreation areas including sampling, remediation, and public education/outreach activities for areas in both the Box and Basin. New health information signs were developed and installed at several locations, and over 300 information packets were mailed to residents along the CDA River and Chain Lakes area. Cleanups at Theater Bridge River access and the Airport River Walk were completed to provide clean access points along with new signage. EPA continued to evaluate Lower Basin sites that had initial actions completed – at Medimont boat launch, Rainy Hill boat launch, Anderson Lake boat launch, Thompson Lake boat launch and East of Rose Lake boat launch – all these locations willows and/or alders were planted in 2020.

Basin Environmental Monitoring

The BEMP Workgroup was restarted in Spring 2021 as an annual forum to share basin-wide monitoring results and planning amongst partner agencies. This workgroup includes IDEQ, US Geological Survey (USGS), US Fish and Wildlife Service (USFWS), the Coeur d'Alene Tribe, CDA Trust, and EPA. An updated BEMP plan was finalized in 2021 with the goal to design efficient data collection plans to support site-wide management decisions. It incorporates adaptive management principles and is anticipated to evolve during the remedy implementation timeframe.

Lake Management Activities

In the second section of the Accomplishment Report, Terry started with the Lake Management Plan which was finalized in 2009. In 2019, the Tribe withdrew their support as they determined the LMP was inadequate as an effective tool to protect water quality in the Lake. In November 2020, the

State of Idaho, Kootenai County and EPA sponsored the contract with the NAS to conduct a neutral third-party review of the Lake data and the Tribe supported this action. Discussions among the Tribe, IDEQ and EPA have continued to determine what additional mechanisms/actions are needed to manage the hazardous materials in the lakebed sediments. Additional approaches to augment work conducted under the auspices of the LMP will be evaluated once the NAS report is finalized.

An illustration was provided by the Tribe showing the percentage of change of concern about threats to CDA Lake – Rebecca added this survey was conducted in 2021 with the Our Gem Collaborative. The collaborative continues to work with the public and this information helps them recraft their messaging to inform the public about their concerns with the Lake.

Flood Control and Infrastructure

The BEIPC and the Silver Valley Flood Control Group continued to work with the US Army Corps of Engineers (COE), BEIPC Consultant and FEMA to complete Flood Map Revisions for the River from Elizabeth Park to Pinehurst. The City of Pinehurst received their Flood Risk Assessment from COE in anticipation of a similar flood mapping change request to FEMA for the Pinehurst area for the Pine Creek drainage.

Restoration Partnership

The Restoration Partnership is a collaborative effort comprising the Coeur d’Alene Basin Natural Resource Trustees which are the US Department of the Interior, represented by the US Fish and Wildlife Service (USFWS) and Bureau of Land Management (BLM); the CDA Tribe; the US Department of Agriculture, represented by the US Forest Service (USFS); and the State of Idaho, represented by the Idaho Department of Fish and Game (IDFG) and Idaho Department of Environmental Quality (IDEQ). Their primary mission is to develop and implement a restoration plan to help restore the health, productivity, and diversity of injured natural resources from releases of mine waste contamination and the services they provide in the CDA Basin. The annual report lists the projects they continue to implement, and a full report can be found on the website at www.restorationpartnership.org.

Challenges Ahead

A great deal of work was accomplished across the Upper and Lower Basin in 2021, in spite of the effects of the COVID-19 situation. The cleanup and restoration efforts focused on a mix of items; remediation of human health risks resulting from contaminated residential and commercial properties; extensive work by the CDA Trust in EFNM Creek, Canyon Creek and Pine Creek drainages and the Lower Basin ecological remedies and related human health issues; and EPA directed work to address the contaminated groundwater problems and mine discharges in OU-2 noted in the Upper Basin RODA. Human health related projects continue to be a priority. Other challenges include management of the ICP by PHD; development of any needed additional waste repositories and consolidation areas for disposal of remedial action and ICP wastes; continued implementation of the RODA for the Upper Basin and OU-3 ROD for the Lower Basin; development of a solution to major flooding issues in Lower Pine Creek, SFCDR and Main Stem of the CDA River; and continued coordination with the CDA Tribe and State’s efforts to address CDA Lake management issues and Restoration Partnership to implement natural resource restoration actions throughout the Basin.

There were no questions from those in the room, but Mike pointed out that the agenda is posted for public comments on the Annual Report at 11:00. He postponed approval until such time to allow any comments to be made. Mary from PHD will give her report on the 2021 Blood Lead results.

2021 Blood Lead Report – Mary Rehnberg PHD

Mary presented on the 2021 Blood Lead Report. She will cover the health effects of lead, LHIP program background, 2021 LHIP approach and results. Children and pregnant women are the most susceptible to lead exposure with incidental ingestion being the most common exposure route. Lead in children can affect the brain causing behavior problems, lower IQ, hearing loss and learning disabilities. It also attacks the soft organs and tissues causing kidney damage, decreased bone and muscle growth, anemia, and nervous system damage. In adults, cardiovascular damage is common along with reproductive system problems in both male and females. The most at risk populations are going to be those who recreate in contaminated areas that have yet to be remediated. Back when the cleanup was started, the CDC's recommendation lead levels were 25 µg/dL or under and have now dropped to a current level of 3.5 µg/dL. The LHIP is a public health service here to serve the community. This service has been conducted in the Box since 1974 and in the Basin since 1996, and is available to anyone who lives or recreates within the Bunker Hill Superfund Site. In 2021, the cash incentive for participants 6 months to 6 years of age received \$40. A blood test is done by fingerstick, and follow-ups are conducted for those with elevated levels. This year due to COVID restrictions, the screening was by appointment only and not a walk-in as in previous years. The test care kits they normally used received a recall notice, but they were able to secure substitute analyzers. Dave Leptich asked if this gave them a quantitative result and Mary stated it gave them the same result as the other machines used. Testing started on August 9th and their quality controls were run each morning to make sure the machines were running appropriately. On the 12th the target range controls were coming in lower than they were supposed to be, so the program switched to venous draws only. A few weeks after the screenings, another recall was issued for all the test kits. Their decision to go to venous draws only proved to be the correct solution. A total of 101 children participated which included both capillary and venous draws. Mary will report on the venous results only as they are rated on a detection level of 1 as opposed to the machine level of 3.3. This year's reporting will not be compared to other years data because the results are so different. The real goal was to identify children with elevated levels not to worry about numbers.

As cleanup objectives are completed, you can see the blood lead averages by year drop significantly. In the Box, there was a spike in 2017 due to hot dry weather and more people recreating. In 2018 there was one family in Wardner with higher levels due to lead based paint in the home. Ed Moreen added that 2017 was a big water year with fresh sediments on the floodplain then followed by an extended dry period where people were recreating on these sediments. In the Basin, averages by year are also dropping – the Lower Basin is trending higher than the Upper Basin as more people are recreating than ever before. There were two in-home follow ups and three phone consultations (Box & Basin) which identified these sources: disturbed barriers (work with ICP to re-establish); recreating in un-remediated areas (additional outreach & safety tips to reduce exposure); occupational related (attempt to work with industries to provide education); and lead based paint (conduct assessment and address if needed).

Jeff Philip asked about the change in time of the year that this program runs, and Mary said this change happened a couple of years ago from July to August for a better exposure rate and data. Jeff also asked how long it will take before they can come up with a statistical difference between the early summer testing to later testing. Mary answered that the later summer testing has only been

going on for five years now and she would need to get with Alta or someone for that comparison. The exposure risk has changed and there are so many factors to compare. Dan McCracken added that the main purpose of LHIP is to identify kids with elevated blood levels. The statistics are helpful to us, but it is not what's driving the program. There are times we make decisions in the interest of providing the health service and getting the kids screened.

Jamie Sturgess asked if the compensation from the current amount to say \$100, would bring in more children to be tested for better statistics – Mary doesn't believe money was the biggest driver for this year as much as COVID and the appointment only which wasn't as convenient as past years. This year the incentive will be bumped up to \$50 and depending on COVID will be an open event again to hopefully get the numbers back up. It is a reality that the more money provided seems to bring in higher numbers – so the incentives are constantly being looked at.

Felicia from Alta wanted to know if testing at other events like Silver Hoops or other community events where children are present has been considered – Mary said they have talked about different options but there needs to be a sterile environment along with medical controls which makes it tricky at some events, but they are open to new ideas and suggestions.

Bill Rust asked why the manufacturer recalled the testing instruments, had they always been bad – Mary said they recently changed who was manufacturing them and the new company had a failure in their system and errors in their production line. Bill also wanted to know if they have been able to identify any recreation sites with commonalities between the tests – and Mary answered yes. There are spots on the South Fork that are gaining popularity like Theater Bridge area in Smeltonville, and in the Lower Basin beach spots. Terry commented that the Recreation Project Focus Team is trying to deal with all these issues and recreation problems. Mary added that additional signage and outreach has been done but it's a continual battle dealing with vandalism and destruction.

Jerry Boyd wanted to know where they are at with the test kits for this year – Mary said they have yet to come up with new test kits to replace the recalled ones. There is an international shortage, so we are most likely going to be doing a venous draw only screenings this year.

Rebecca asked about some of the questions on the future of PHD and the ICP was she feeling confident that the LHIP will remain in the Silver Valley and Mary said yes. She feels it is such an important service and brings a benefit to the area. Rebecca said if someone wanted to get tested today could they – Mary states that the program runs all year long and anyone that lives or recreates here can get tested. There is no incentive dollars but they will make an appointment for them with Shoshone Medical Center to get checked.

Public Comment on Draft Annual Report

Mike complemented everyone on a well written report and opened it up for public comments. Jerry Boyd asked if there was any information on the monitoring in streams and improvement on metals. The report talks about monitoring but does not give any results – Kim Prestbo commented on the South Fork saying it has taken a couple years to get a good data set, but they are trending down in both the ground water and the stretch of the SFCDA between Kellogg and Smeltonville. Kim didn't have any data with her on the EF Ninemile, but as they work their way down, they are seeing improvement.

Dave Fortier is frustrated on getting any monitoring data or plans – he doesn't know what monitoring is being done particularly for Ninemile. The five-year review stated that there were some evaluations done and improvements made but he can't get ahold of this data. He thought that EPA used to put this information on their database and said that the CCC meetings used to talk about these issues. He thinks future accomplishment reports should include more of this type of information.

Bill Rust referenced the annual report page 31 regarding the gaging station stream discharge and water-quality records for 2021 and would like to get a copy of this annual data summary. Kim stated that BEMP reports are available on the US EPA website. She agrees that it has been a challenge to pull all data collected by EPA together into one report and summarize specific trends every year. In terms of placing it in the annual report, they have talked about it and there is too much information to place in this annual report. USGS is the primary source of surface water data under the BEMP. The 2020 USGS Long-Term Trend Analysis is a full comprehensive report and review of their data (<https://pubs.er.usgs.gov/publication/sir20205096>). Their annual reports are posted to the EPA website and USGS data can be accessed through the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>). There were some additional discussions on the 5-year review and Dave Fortier would like the details on the completed Interstate Callahan project for the years 2014-2016. Kim will go back and check for these reports. Mike suggested in respect to our websites, that we make that contact or process to obtain those documents, plans or data clearer. It sounds like the information is available but the process to acquire is not. Dan McCracken said both EPA and IDEQ have had website changes which has made it more difficult to find documents that used to be routinely posted. It is difficult to post entire libraries of documents and suggested using the BEIPC webpage for certain documents. Kim agreed and Terry said the BEIPC would provide assistance.

Phil Lampert wondered if there could be a page dedicated to the progress made and successes on what's been accomplished. Mike said it comes down to what is the intent purpose of the annual report – those are to provide a broad informational component of what we are working on. With respect to providing conclusions in the report, we decided in the past to keep those to a minimum. In this annual report it makes sense to provide links and locations where more conclusive and finalized data information can be found. More discussions talked about how to provide these links and other information for progress on projects.

Approve Draft BEIPC 2021 Annual Report (Action Item)

A motion to approve the 2021 Annual Report was made by Brook, second by Jess, all approved
M/S/C

CDA Lake Management Update - Jamie Brunner, IDEQ

Jamie gave a quick update on Lake Management activities. The National Academies of Science (NAS) has been conducting a 3rd party review of CDA Lake data. They have been asked to evaluate current water quality standards; impacts of anoxia on the fate of nutrients and metals; what impacts of reduced zinc levels on algal growth from the CTP; will metals be released if current trends continue, if inconclusive, what data do we need; and what is the relevance of metals release to human/ecological health risks. Their final committee meeting was held in April and they are drafting a report, with a final due by the end of 2022. The NAS usually visits the sites they are working on but due to COVID they were unable to do this. So, a video was put together from

around the Basin along with a story map so they could get a feel of what's going on. A link to this video is attached: <https://storymaps.arcgis.com/stories/ebdc32388b29492f838eb345df33dd7e>.

The Leading Idaho Initiative that Governor Little presented last year allocated \$2 million for phosphorus-reducing projects in the State Fiscal Year 2022 budget. A good variety of projects were submitted for stormwater, wastewater, and nonpoint source projects. The City of Coeur d'Alene, Kellogg, and Plummer along with Kootenai-Shoshone Soil and Water Conservation District and East Side Highway District were among those awarded agreements. More information is available on the IDEQ website explaining each project and will be updated as they progress. For the State FY 2023, ARPA funding in the amount of \$20 million will be available for more phosphorus-reducing projects. These funds need to be allocated by the end of the calendar year 2024 and spent by the end of the calendar year 2026. There has been a lot of interest from the community and good ideas for improvements. The Coeur d'Alene Lake Advisory Committee (CLAC), appointed by the Governor to help prioritize project applications, will continue to help with this additional funding. These applications are forwarded to the Panhandle Basin Advisory Group who will be reconvening the end of May. Dave Leptich asked if they had a window for solicitation of projects identified yet and Jamie answered not yet. She stated they still have the prior list of applications, just not sure how they will handle that yet.

Jamie shared a few science updates – they are continuing to work on nutrient inventory data gaps and are in their final year of tributary monitoring. Preliminary results were presented at the State Water Quality conference this Spring and updated data loads will take place in the next few months. The updated lake trend reports should be available by the end of 2022 and will include 2019-2021 data as well as previous reports. These can be found at: <https://www.deq.idaho.gov/water-quality/surface-water/coeur-dalene-lake-management/>. IDEQ is also piggybacking on EPA's flood study for phosphorus data in the Lower Basin.

Outreach updates – Our Gem Collaborative continues to publish articles in the CDA Press and the speaker series once or twice a year. Information can be found at: www.Uidaho.edu/OurGem. The high school Confluence Project Youth Water Summit will be held May 25th with a public session held from 1:30 – 2:00. Rebecca confirmed they are good on judges for this event, and they thanked everyone who volunteered.

Update on Silver Valley Flood Group work w/FEMA on Flood Mapping

Terry updated us on the flood mapping for the SFCDA – Through great community effort between the BEIPC, City of Kellogg, Silver Mountain, and local officials, COE's flood analysis of the SFCDA between Elizabeth Park and Smelerville discovered significant decrease in flood flows based on older data. About 4 weeks ago, all data required was sent to FEMA to update the flood inundation maps. A small section of the levy by the Kellogg Junior High would need to be worked on to prevent damage from a 100-year flood. This process of updating maps would also help with homeowner's flood insurance and to protect any damage to the Remedy Protection projects. The City of Pinehurst requested the same and their analysis also came back with decreases for Pine Creek, but some of their levies would need to be upgraded. Rebecca asked doesn't the Idaho statute that created the BEIPC allow the BEIPC to be a taxing district for flood control – Terry answered yes, they have the authority but have never exercised that. Mike said they feel this is very important to the community as the County, City of Kellogg, Silver Mountain, and others have stepped up to fund the studies and work that has been done. A large portion has also been undertaken by the COE and their help in the modeling and horsepower to get FEMA's attention. Three phases – from

Elizabeth Park to just west of Smeltonville, from Smeltonville to Pinehurst, then Elizabeth Park up to Wallace – instead of making individual projects they have created one project with three phases. This is very promising if we can get the first phase through. Mike also asked Derek from Alta how many properties will come out of the flood hazard area if FEMA approves the maps – Derek answered about 500. Rebecca asked if climate change and projections been put into these models for future flooding – Derek said no because 17 years of additional gauge data on the SFCDA and the geometry of the stream channel. Dave Leptich added the change in vegetation since the 1910 fire and the change in vegetation on the hillsides in the Silver Valley since removal of the Bunker Hill Smelter besides what climate change may or may not have done.

Lunch and Executive Session with Commissioners, Alternates and Executive Director under Idaho Code 74-206(1)(b) - A motion was made by Phil Lambert to move into Executive Session and seconded by Brook, all approved M/S/C

Brook made a motion to come out of Executive Session, second by Phil, all approved M/S/C

Kira Lynch from EPA announced that Jeff Philip will be retiring in July...congratulations!

Update on planned CDA Trust Work for 2022, CDA Trust financials, Miles of Stream Bank Stabilization on CDA River, and Contribution of contamination from various reaches of the CDA River - Ed Moreen, EPA

Ed's first presentation was on the BH Superfund Site 2022 Focus Areas, which is mostly the CDA Trust work. He started in the Upper Basin in Ninemile. The Interstate-Callahan Mine and I-C Lower Rock Dumps as well as the I-C Millsite have all been cleaned up. Success Mine has been cleaned up so this year's work will focus on Tamarack Complex and the Dayrock Mine & Mill, along with the upstream and adjacent Riparian area. All wastes from these sites will be transported to the WCA in the upper reaches of Ninemile Creek. The WCA is progressively getting filled and capped while producing more material to create space for the next projects. At the Tamarack Complex, a large pile of mine waste and rock will be removed (approximately 160,000 cu yd) and will take three to four years to complete. The Dayrock Complex and Riparian Creek Channel will begin construction at the end of May.

In the Canyon Creek Basin – there are approximately 30 sites that need to be addressed. Most of the sites are in the investigation phase, but the Canyon Creek Tailings Repository (SVNRT) remediation is nearing construction completion. Crews this year will expand and construct a foundation and drainage system into the area near the old SVNRT Repository to create more space if it can be done without causing water quality problems. The next two big sites will be Frisco/Black Bear and the Gem sites.

The BPRP program is substantially complete, over 7,000 properties have been remediated. Drinking water filtration systems will continue in 6 homes throughout the Basin. Possible cleanups could be conducted but not all residents have given access yet for sampling and cleanup. The sale of unsampled and un-remediated properties could also lead to possible cleanups.

In addition to WCA's, there are also disposal facilities throughout the Basin – Lower Burke Canyon, Big Creek & Big Creek Annex, Page Repository, and East Mission Flats. Each of these have ICP access so citizens can deposit waste from their own improvements or redevelopment. The Page

Repository expects a large volume of material this year due to the road embankment and bridge reconstruction that is occurring.

Recreational Sites – there are many challenges with citizens playing and recreating in the Lower Basin with high contamination present. A number of informational signs have been placed in several locations to help educate people on how to protect their health.

CDA Work Trust – as of last week, there remains \$584m in the trust account, even though the stock market has been up and down. This account initially started at \$437m; the Trust has been doing work for 10 years and has spent \$187m. So, it has accumulated and increased on the principle significantly. The annual workplan amounts have increased and are now budgeted at \$25-30m (upper and lower basin) and depends on labor and material costs. CDA Work Trust funds can only be used to fund ROD selected Basin cleanup actions; cannot be used to fund Box cleanup actions; cannot be used to fund oversight of the CDA Trust; and cannot be used to fund State, Tribe, local governments, or other Federal agencies work in the Box or Basin.

Patrick Hickey gave an update on the Page Repository, cu.yd. number will be closer to 30,000 not 90,000 of material this year. Rebecca restated from Ed's presentation, 'that unless the work in the Basin is associated with the Box the Work Trust funds cannot be utilized in the Box' was that a desire from the community – Ed replied that it was a limit on how the money can be spent. Asarco had already settled for work in the Box in previous Settlements with the government, so they did not do a repeat settlement for the Box - the money in the Trust is limited to Basin work.

Ed continued with a presentation of a Lower Basin summary as requested in a previous BEIPC meeting on the lead and contaminate loading in the lower CDA River. The North Fork contributes about 4 tons lead/year – the South Fork about 34 tons yearly. The lead load is ten times greater in from the South Fork even though the flows are about 25% of the North Fork. The lead going out of the Lower Basin into Lake Coeur d'Alene is on average approximately 357 tons/year, a significant increase from the NF and SF combined. This primarily is coming from the riverbed itself – about 70%. The other 30% is split between the SF contribution and the riverbanks.

The riverbed pilot project selection considered multiple lines of environmental evidence: 2017 flood sampling; borehole data; and bathymetric surveying which gives you elevations of the riverbed. In the flood sampling there was a large-scale increase in suspended sediments and bulk lead just downstream of river mile 160 at the Cataldo Boat Launch. The borehole data shows a high density around the Dudley scour hole which is the area of focus. When they look at the metal concentration here with respect to the vertical profile, they are looking at the top 2 feet in most cases. The upstream concentrations are high, but much higher downstream in this scour hole – high concentrations at the surface continue to contribute lead to the system that is transported downstream. Comparisons between the 2017 flood samples and borehole data are consistent in showing a similar pattern with higher concentrations in this area. The bathymetric differencing method also shows we have ongoing erosion – highest levels at Dudley Reach. All this evidence suggests that the Upper Dudley Reach is a good area for our Pilot Project. Ongoing pilot project planning continues with the HEC-RAS design model setup; developing hydraulic design criteria; WCA planning; and all civil design work and grading plans, etc. Preliminary design is under way, hoping to have a 30% design for review by August 2022. After several iterations in the design process, they hope to have a final by December 2023. The contractor process will follow in late

2023 with selection in 2024, and construction planned for late 2024 – current target date of September 2024.

Ed showed the difference on the HEC-RAS 2D hydraulic modeling compared to the MIKE 21C basin-scale model. The resolution is finer and takes less time to run the model – hours instead of days.

Ed shifted his presentation back to the riverbed and bank work that has been done. In 2019, 10 riverbed erosion pins arrays were installed in Dudley Reach and monitored in 2020 and 2021. In 2020, riverbank types were classified from the confluence of the South and North Forks of the CDA Rivers to Harrison. Also in 2020, 25 riverbank erosion pins were installed from the confluence to Lake CDA. These were monitored in addition to 11 existing pins that were installed by KSSWCD. The riverbanks have been classified into seven different types – type 7 indicates a stabilized riverbank either by the anthropogenic means or naturally - about 36% have been classified as stabilized. Each different reach has varying quantities of those riverbanks that are classified as stable. Ed displayed some of the other types of banks and showed how some of the erosion pins installed in 2020 did not survive into 2021. The first bank stabilization project will take place in the Cataldo Reach. They will be in the predesign investigation phase this year and will go into the remedial design by next summer/fall 2023; remedial action design 2024-2025; with construction on those banks selected in 2026-2027. Key contributors to completing this work depends on when you can get to the location, property owner access, and minimizing impact on those recreating. This spring, they were able to conduct a high flow event at the Mission Boat Launch on the CDA River and hope to have sampling results back soon.

Felicia from Alta asked if they were going to dredge and remove materials from the Dudley Reach – Ed stated that some dredging and disposing of material would happen with the purpose of allowing a cap to be placed. If you only capped, you could possibly create flooding and other problems. Peter Mahoney asked if the cap would be contaminated by sediments coming downstream, why would you choose Dudley over Cataldo Reach for dredging. Ed said it could possibly be re-contaminated, but as pointed out earlier many lines of evidence point to the source area with the most significant contribution to the system. We expect re-contamination will occur for many years into the future, but they do not have good lines of evidence in the Cataldo Reach area that would lend themselves to a good pilot project. Peter said it seems like we would have to do the work twice with re-contamination. He doesn't want the public to think work in the Basin is unsuccessful due to re-contamination and doing the work twice. Ed said re-contamination is a reality and always going to be a risk, but at the same point one of their primary objectives is to stop the migration and transport of high concentration materials, and why Dudley Reach is a significant candidate for this project. Dave Leptich followed up saying Ed showed very little deposition happening in Dudley Reach, it is mostly a scour, so if the river behavior continues it seems there would be minimal deposition there – self cleaning to some extent. Ed said that area is highly erosional and not highly depositional, we can't say it won't get re-contaminated, but the risk is probably lower if that holds true.

Rebecca wanted to know who would be responsible for the O&M on Dudley Reach after the dredge and cap -Ed stated the CDA Trust would be the implementor and the O&M entity. Jamie Sturgess is pleased with the progress, but on the scour zone, as gravity separation is common in the mining industry, have they looked at the grain size of the high lead concentration to know that's being scoured out and not left behind because it's either particle size or density is concentrating there. Ed stated the borings were not just the loose material, but some went down 2.5 to 5 feet - some

contaminant levels go down to 25ft below the mud line. The material they are seeing in the scour hole showed multiple intervals all very high concentrations. They have looked at grain size as well, and even the mobilized sediments are courser and not all fines, the fines travel further.

Bill Rust's perspective that the sediment concentrations near the Cataldo Boat Launch are nearing 1,000ppm and that we may be seeing concentrations reduce over time which would reduce the risk of re-contamination. Eventually with the cleanup of the SF and the NF clean material flowing in, it should dilute it down below the cleanup level. Bill also asked if they will be moving the Dayrock tailings pond – in which Ed answered no – we are not going to address that at this point, focusing on the mill complex and the channel.

Dave Fortier asked if they collected cores in the old dredge pool near the boat launch and Ed said yes, they have several dredge holes in that area. Dave's point was you can look at those and get a history back to the 1960's when they stopped dredging.

Felecia asked what the average scour depth was on an annual cycle in the pilot area, and Ed answered they saw significant scouring in that area for the three-year period 2016-2019. She wanted to know with the amount of cap are we going to lose that in 3 years or 6 years, then our project doesn't look successful because we lost it all to scour, all our clean material back down to dirty material. Ed said a lot of the design work going on now will size the cap appropriately so it doesn't get scoured out. This is a pilot project and we are going to learn from it, go forward with the information we have, then determine if you are losing to scour - then we may need to change material size going forward.

Jamie Sturgess wanted to know how many acres they were planning to cap with rock and Ed replied they do not have that information yet as they are still in the design and investigation phase.

Announcement of EPA Decision on Location of Lower Basin Waste Consolidation Area – Patrick Hickey, EPA – Patrick began by saying how important it was to the local community on the location of the Lower Basin WCA. EPA has reached out to the CDA Tribe with an offer of formal consultation for the remedial activities associated with the new WCA. While EPA will be making the decision where to place the location, the consultation is an important process. When a decision has been made, the location will be sent out via email and blast out on their website and project page. Jerry Boyd also asked that the CCC get this information to send out to their email list, all agreed.

Update of Gray's Meadows Wetland Project – Kim Prestbo, EPA

Grays Meadow is a 700-acre wetland site owned by IDFG that was previously drained for agriculture and is contaminated with heavy metals. EPA, IDFG and RP are collaborating to remediate and restore the site toward a healthy and historic wetland. There are three goals – reduce metal contamination, return agricultural land to productive wetland habitat, and provide clean recreational, educational, and cultural opportunities for public use. This property is formerly known as Black Lake Ranch and located in the lower reach of the CDA River. It consists of two fields – Lamp Peak and Cave Lake. It runs along the CDA River and is separated from the river by the Trail of the CDA's. It was seasonally dewatered at these two locations and pumped into Black Lake. After communications with the community, the Tribe, and the State, we heard how much concern there was about the pumping of nutrient laden water into Black Lake. The water still needs to be transferred out of the wetland to the river, but in our overall project this will happen less frequently

and at times that makes more sense. The first project was the Cave Lake Wetland Pump Improvement Project – construction began in March 2021 and was completed May 13. The pump discharge was moved from Black Lake to the CDA River; installed 695 linear feet of 24-inch HDPE pipe and installed a new outlet structure along the river. The Lamb Peak Wetland Pump Improvement Project – construction began October 2021. Work includes moving the pump outlet to CDA River; installing gravity discharge to Black Lake tie-channel; moving pumphouse closer to outlet locations within the wetland; replaced the bridge over top Black Lake tie-channel and widened Lamp Peak Access Road for construction equipment. Construction is close to being completed – should be done at the end of this month.

Kim stressed the importance on these two big projects being able to integrate remediation along with restoration. Soils will be remediated above 530 mg/kg lead in a combination of ways – either by tilling the soil to reduce the concentration or removing and consolidating it elsewhere on the site and capping it with 1-foot clean soil to isolate it from foraging waterfowl and to prevent erosion. They will maintain water levels in some areas to minimum depth of 6 feet year-round to help keep this condition. Key point is to keep everything on site so that it doesn't have to be transferred to a repository off site. Restoration design moving forward – six wetland cells throughout the Cave Lake and Lamb Peak wetlands (3 cells in each); allow for water surface elevations to flux +/- 3 feet of the typical management pool elevation; provide infrastructure for water management and maintenance (inlet and outlet controls within each cell and within each wetland); develop habitat grading plan to represent the IDFG wetland depth-area targets; and incorporate variable and diverse topography with varying edge habitat into the grading to provide hydrological variability in depth and duration of water. We are almost at 100% design, which took a lot of teamwork from the design team, and how they balanced the need for remediation with the restoration goals for the site. To run this as a wetland, they wanted to minimize the amount of water transferred in and out and at times with the least impact on surface water. The upcoming schedule – Lamb Peak construction complete by May 2022; 100% basis of Design Report/Remedial Action and Restoration Work Plan in May 2022; contractor procurement in June/July 2022; and start Remediation and Restoration construction in August 2022 through 2024.

Jamie asked if it was open to the public at this time to see what's going on – Dave Leptich answered that it was open to the public with the caveat that you may be excluded from active construction areas due to public safety. Some areas will be open for like duck hunting, and the Trail of the CDA remains open.

Dave Fortier asked if the work on this project being done by the CDA Trust or by EPA and IDFG contractors – Kim said work was being done by both, this was the beauty of the collaborative effort. The CDA Trust is working on behalf of the EPA for the remediation work; IDFG, Restoration Partnership and others are handling the restoration and water management side. Dave Leptich added the beauty of this collaboration is that there will be one design that will go out to contract with one general contractor, with cost sharing between agencies. Dave Fortier asked again if it was the Trust or someone else overseeing this contract - Dave Leptich answered that Pioneer Technical is on contract with the Trust to be the construction managers and design engineers, but both Restoration Partnership and EPA have been involved in the design since the beginning.

Phil Lampert asked what's the cost of the project – Kim said they are estimating it to be \$14M on work that remains, \$2.5M has already been spent on the water transfer work already completed.

CCC and Public Input Session and Discussion - Jerry Boyd, CCC Chair

Jerry updated on the CCC – said they had one virtual meeting in March in conjunction with the WCA site project on the Lower Basin. It was a successful call with the results forthcoming. It has been suggested that we have an in-person meeting as they have been on hold due to COVID. These meetings were usually held when issues came up that needed discussion. As of now, anytime information needs to be shared it is sent out thru mail/emails. He anticipates when work begins in the Lower Basin, they will have informational meetings. Terry suggested a CCC meeting between the August and November BEIPC meetings as an update to work completed and overall projects.

Update on Restoration Partnership activities – Rebecca Stevens, CDA Tribe

Rebecca gave quick updates from the last meeting in November.

Prichard Creek – in the North Fork CDA River District, RP easement project, they are finalizing some land transactions and title cleanup to complete the conservation easement. Once this is complete the restoration design will continue from 60% to 90%.

Gene Day Pond Project – sponsored by IDFG is close to completion as they are just finishing up with rest room facilities. This will be a nice fishing facility for the Silver Valley community.

Conservation Easements at Gleason's Marsh & Canyon Marsh – the easements are secured at these two locations. The Canyon Marsh culvert is having some issues, working with Fish and Wildlife Service to secure funding for fixing as this will be important for remediation and restoration in the future.

Cougar Bay in CDA – Water level management thru floodplain and pond excavation which was completed last fall. The stream diversion ditch was kept in place for flood control on Hwy 95. In March, they installed a partial diversion into the new Cougar Creek channel underneath the bridge to allow for control flows to help establish bank and floodplain stabilization and revegetation.

Lake Creek – Active stream restoration is underway with large woody debris placement in Balder Creek.

We are finishing up the standard operations plan for the willow nursery near Hepton on the St. Joe River to plan growing willows for future restoration projects.

Hepton Breach Repair Project – We are having conversations with NRCS for the wetland reserve program on the schedule for construction, as they are having trouble securing laborers and supplies.

Put and Take Fishery on Hangman Creek – Very exciting for the CDA Tribal community to have a managed put and take red-band trout fishery for community events. They are hoping to have another one in a couple of months.

Red Ives Phase I Dam Removal – This project is complete and moving into Phase II which will include some large woody debris installation to the stream.

Coeur d'Alene Lake Monitoring and Modeling continues to occur – we are on the 4th year of this 5-year project.

Culturally Significant Plants in Hangman Creek – They were having trouble getting viable camas seed but secured some over the winter so this project will be ramping up.

Terry announced his retirement which will occur in April of 2023.

Mike adjourned the meeting at 2:20 pm