

Basin Environmental Improvement Project Commission
Meeting Summary Minutes

November 20, 2019, 9:30am– 3:45pm

Coeur d'Alene Inn, 560 Appleway Ave, Coeur d'Alene, Idaho

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 discussions or individual quotes.

Attendees included the following:

Terry Harwood (BEIPC Executive Director)

Commissioners and Alternates present:

Jack Buell (Benewah County), Brook Beeler (Washington State), Michele Pirzadeh (EPA), Rebecca Stevens (CDA Tribe), John Tippetts (IDEQ), Michael McCurdy (IDEQ), Leslie Duncan (Kootenai County), Mike Fitzgerald (Shoshone County), Phil Lampert (Benewah County)

Staff present:

Gail Yost (BEIPC, Assistant to E.D., Note taker), Dan McCracken (IDEQ), Jerry Boyd (CCC Chair), Dana Swift (IDEQ), Sandra Treccani (Washington State), Bonnie Arthur (EPA)

Call to Order and Pledge of Allegiance

The meeting was called to order by Commissioner Chair Jack Buell at 9:30 a.m. followed by the Pledge of Allegiance.

Approve Minutes from the August 21, 2019 Meeting. (Action Item)

Mike Fitzgerald moved to approve the August 21, 2019 meeting minutes; Rebecca second, all approved M/S/C

Review and Discuss Draft 2020 Annual Work Plan

Terry Harwood shared the process of creating the annual and 5-year work plans. The work plans are divided into two sections – Part 1 covers environmental cleanup work performed through CERCLA (Comprehensive Environmental Response, Compensation and Liability Act). It includes work to implement the Record of Decision (ROD) for Operable Unit 3 (OU-3) and the Upper Basin ROD Amendment (RODA) for OU-2 and 3. Part 2 includes Other Activities and Responsibilities – Lake Management Plan, Natural Resource Trustees, work on recommendations from the National Academy of Sciences (NAS) and requests from the communities and citizens of the Basin.

He continued with the first section going over human health activities including property remediation and drinking water supply remediation (as it pertains strictly to private wells and not public water systems), paved roads program, lead health intervention and recreational sites. He did not include Remedy Protection as they just completed the last project up Burke Canyon.

Other cleanup work: Repository Development and Management, remedial actions in the Upper & Lower basin (including related human health activities) and the Basin Environmental Monitoring Program (BEMP).

Terry gave an update on the Basin Property Remediation Program (BPRP), after this year there will be 216 properties in the Upper and Lower Basin requiring sampling and 43 properties that require remediation; in the Box there are eight properties remaining. A total of 3,918 properties in the Basin and 3,235 in the Box have been remediated at the conclusion of 2019.

On the paved roads program - Wardner, Smeltonville, Eastside Highway District, Pinehurst, Osburn, Wallace, Mullan and Shoshone County Box have completed all their eligible segments. In 2020, Kellogg will finish their last 2 roadways; there will be 50 remaining road segments in Shoshone County Basin that will be addressed with remaining funding.

Terry stated that Andy Helkey will be giving an update on the Lead Health Intervention Program so he will let him cover this section. He also gave a brief summary on the Recreation Sites Program as they continue to sample high usage areas in the upper and lower basin. This and other work will continue in 2020.

Repository Development & Management - There are currently three operational repositories within the OU-3 area; Big Creek Repository (BCR), Big Creek Repository Annex (BCRA), East Mission Flats Repository (EMFR) and Lower Burke Canyon Repository (LBCR). The Page Repository provides for disposal of remedial and ICP wastes in the Box (OU1 and OU2). Development of the Canyon Creek Repository (CCR) and rebuilding of the Silver Valley Natural Resource Trustee (SVNRT) Repository are also taking place. The Waste Consolidation Area (WCA) located up Nine Mile is handling waste from the East Fork Nine Mile projects. Bonnie Arthur clarified the differences in repositories – the WCA designation is just for mine and mill cleanup waste versus ICP and remedial waste repositories.

Upper Basin Remedies – The Upper Basin RODA identified \$635 million for work in the Upper Basin including work at 125 mine and mill sites. It is expected to provide improvement to surface water quality and reduce the contribution of contaminated groundwater to surface water. The ROD will also address treating the water coming out of the Bunker Hill mine. The EPA Superfund Cleanup Implementation Plan (SCIP) identifies the priority setting process and outlook for sequencing work over the next ten years. As another five year review happens in 2020, it will report on the work completed for the whole site. Other Upper Basin projects include: Interstate Mill Site, Tamarack Complex, East Fork Ninemile Waste Consolidation Area, Dayrock Mine and Lower East Fork Ninemile Creek riparian area, Canyon Creek Complex (Repository/Waste Consolidation Area) in Canyon Creek and Douglas Mine and Mill in the Pine Creek Basin.

Central Treatment Plant/Central Impoundment Area – the upgrades are coming along on schedule. These upgrades have been necessary for some time – treating the Bunker Hill Mine discharge water and the groundwater collected from the Groundwater Collection System (GCS) near the CIA. The 1-year O&M period will begin in May 2020, with the State taking over in May 2021.

Lower Basin Remedies – include actions for wetlands and lateral lakes, river banks, splay areas and river bed dredging. Maintenance and monitoring will continue at the Incremental Thin-Layer Capping site at Lane Marsh and soil amendments will be bench tested. Additional disposal capacity will be evaluated to serve potential, future lower basin remediation and pilot project implementation. To address the contaminated sediment transport in the CDA River, EPA will continue working to finalize the approach for pilot project selection in the Dudley Reach area, which is considered the most significant upstream lead loading segment into the river.

Basin Environmental Monitoring Program (BEMP) – EPA continues to optimize and restructure the BEMP, updating data quality objectives to better meet both remedial action effectiveness and long term monitoring needs of the cleanup. The updated BEMP Plan will be finalized in the first quarter of 2020. It is intended to guide the collection, analysis, and interpretation of environmental data while providing flexibility for adaptive management as remediation work is completed and information regarding site conditions evolves. This updated plan will also incorporate the site-wide Program Quality Management Plan and a site-wide Data Management Plan.

Lake Management Activities – The OU-3 Interim ROD anticipates the State, Tribe, federal agencies, and local governments would implement a Lake Management Plan (LMP). Terry worked on and incorporated changes into this 2020 Work Plan that were agreed upon by all parties - Rebecca commented that the objectives as shown on the screen came right out of the LMP and the comments/tasks are additions that they worked on with EPA.

Flood Control and Infrastructure Revitalization – Terry gave a brief discussion on the NAS (National Academy of Science) recommendations on flood controls for storm water runoff and side drainage flooding to protect the remedies in place. In the ROD Amendment for the Upper Basin, the Remedy Protection projects were created to help with these drainage issues. A local flood group was formed during 2018 to address potential flooding issues on the SFCDA River. This group and the BEIPC worked under an MOA with the Army Corps of Engineers to perform flood analysis on the river. Work to determine the best approach to coordinate with FEMA to develop new flood inundation maps will be implemented in 2020, at least the section between Elizabeth Park and Pinehurst. The BEIPC will continue to assist Upper Basin communities and

utilities in pursuing funding to implement the remaining needs noted in the Drainage Control Infrastructure Revitalization Plan (DCIRP).

Communications and Public Involvement – Multi agency coordination worked together to carry out public involvement, communication, and education related to BEIPC and agency activities. They will continue to facilitate the public involvement process in the Basin.

State of Washington Activities – the Washington State Department of Ecology continues to monitor the status of previous cleanups along the Spokane River. Site visits are performed along with visual documentation of performance and sediment accumulation.

Restoration Partnership – The Partnership is still reviewing full applications and making funding decisions for restoration projects. A full update will be included in an amendment to the 2020 Work Plan introduced at the March 2020 meeting.

Public Comment and Input on Work Plan

Brook asked for a summary on how the Recreation Sites Plan was put together. Dan McCracken answered that the recreation sites strategy was developed in 2016 after several public outreach events and open houses. This allowed people to come in and indicate which basin recreation sites they frequented the most. The conclusion was that recreation happens everywhere. Through PHD and the lead intervention program, and when crews are out on site, they were able to prioritize sites known to have contamination and concentrate on those specific areas. Rebecca added that they also look at land ownership in making this decision.

John asked if our approval of this work plan was necessary for the Trust to perform work on behalf of EPA – could they still move forward. Terry said the Trust also puts out a work plan, as Bonnie had incorporated some of these ideas into our plan. EPA coordinates with the Trust to get the work approved. John wondered if it was a nicety or legal requirement for the work the Trust does. EPA still has the authority, but we all try to work together to get projects completed. Michele from EPA said her understanding is they can authorize the Trust to complete work outside the plan, but their desire is to have it consistent with the Basin Commission which has been the practice over the years, so there is coordination and consistency between both plans. Bonnie agreed but added there is a lot of internal planning that takes place with all of the stakeholders, this is the input into the decisions that EPA and the Trust make for what's going to take place that year and the years to come. Terry stated that funds have to follow CERCLA law and the Consent Decrees in the settlement agreements. Dan also stated if they are using CERCLA appropriated funds, the State has to match those dollars. The BEIPC work plan is the form the State has established to provide concurrence to what the appropriated funds will be spent on.

Rebecca asked if EPA has a status update on the Lower Basin programmatic approach to ARARs compliance document. Bonnie said they had a recent meeting and hoping to get a draft out in December for review. Rebecca then asked what the game plan was for the next five-year review on how to address the Lake and LMP. The last two reviews it has been an appendix, especially now with the Tribe withdrawing from the LMP. Jeff Philip answered they will address the fact the Tribe has withdrawn out of the LMP; there will be an optimization review team to look at the data and what they currently know about the Lake conditions and processes. This will inform how they address the five-year review; they will be working with everyone to figure out how to address the Lake. John wanted Jeff to explain more about the optimization program; what exactly will they do and how comprehensive their review will be. Jeff explained that they have had this optimization team review Bunker Hill basin work several times in the past, like the CTP and a lot of the remedies, to optimize engineering and effectiveness. As far as the Lake, this will be a more general optimization review of the data and processes; an independent look at the Tribe and States data to better inform and figure out the next steps. EPA is working directly with the Tribe and the State to determine the scope which they are finalizing now. John followed up that IDEQ has been looking at additional resources to do a comprehensive assessment from this data to see if we are at risk for releasing metals back in the water column. IDEQ has made some inquiry's with several agencies, was EPA's optimization team review a result of this request or independent – Jeff said yes a result, but not to fulfill this request; it's to help inform EPAs next steps. Michele added that their internal agencies short assessment of what an outside view might tell them and what more comprehensive study may need to be done. John stated they have asked the National Academy of Science to compile a draft project scoping document that will be reviewed and shared for input.

Mike Fitzgerald asked Terry for an update on the roads program and how they are looking budget wise. Terry explained the roads program from the beginning and their selection for which roads to complete and a budget. A competitive bidding process has allowed for all of the program with all but 2 Box roads and approximately 50 road segments in the Basin for Shoshone County remaining with money left from the \$54M budget. Approximately \$3.6M is left in the Basin allocation, but Terry figures they will be short \$1.5M to complete all the segments. If we could figure out a way to finish the work in the Basin, we would still be under the original allocation coming in about \$52M. Mike said the understanding from the locals is that the whole program underspent the budget, so they want to ask the Commission to come up with a plan or strategy for those excess monies that are within the context and framework of what those dollars were allocated for. Terry wants to get the entire list of approved projects done first then see where we are funding wise.

Approve 2020 Annual Work Plan (Action Item)

John made a motion to approve the 2020 Annual Work Plan, Michele second, all approved
M/S/C

Terri Seymour was introduced. She is filling the position left by Tim Kastning in Russ Fulcher's office.

Review and Discuss 2020-2024 Five Year Work Plan

Terry reviewed and reported on the five year work plan. This includes human health directed activities; lead health intervention program; repository development and management; remedial actions in the Upper Basin; remedial actions and/or pilot projects in the Lower Basin; and Basin Environmental Monitoring.

He highlighted the operations will be completed at Big Creek Repository (BCR) but will be using the Big Creek Annex (BCRA) which is across the creek. Other highlights will move the old Silver Valley Natural Resource Trustee (SVNRT) Repository in Canyon Creek to the site of the Canyon Creek Repository and development of that repository. The need will still be there to develop additional repositories or waste consolidation sites.

The Superfund Cleanup Implementation Plan (SCIP) implements the source control and water treatment remedies, along with ecological cleanup projects and related human health activities; Bonnie stated they anticipate updating this plan in 2020 along with the five year review.

Terry briefly talked about the Lower Basin remedies – working with the Restoration Partnership and Lower Basin Project Focus Team (PFT) to address the proposed actions that were previously selected; and continue to educate people about recreational activities. Actions that are not identified by the ROD may require an Explanation of Significant Differences (ESD) – Brook asked if the ESD has a public involvement component and Terry answered yes. Michele explained it is not required, but the ESDs do go thru a public comment period, then they are sent to headquarters for signature at the administrator level. Similar actions are taken at the State level for approval. Rebecca added the ESDs also go to the concurring parties that signed the ROD.

Terry touched on the contamination in the Dudley Reach area, which is in the area of the Mission and downstream from Cataldo. Most of the sediments are coming from the Lower Basin river channel and not the Upper Basin. The five year plan hopes to produce and implement a management plan to address this highly contaminated area.

Craig Cooper from IDEQ Lake Management Plan spoke on the nutrient reduction inventory work. IDEQ and the Tribe have worked together for a number of years to compose a basin wide nutrient inventory so we know where the phosphorus is coming from and its sources. We'll use this as a basis to inform our actions in developing an implementation plan. We are in the final version, a draft report has been provided to the TLG with input due by mid-December. A report should be out by early next year.

Rebecca asked if Kootenai County would like to be listed under the ‘Lead Agencies or Partners’ especially as it pertains to the Aquatic Invasive Species section, to be more inclusive to those working on it. Leslie answered that they could be – Hayden Lake Watershed Association has actually taken point on issues for Hayden Lake, but they could always be consulted. She has not heard anything yet for Coeur d’Alene.

Terry briefly covered on the multi-agency outreach that has been and is ongoing with education and several other outreach efforts. These agencies will continue to address issues and facilitate public involvement in BEIPC activities. He also mentioned the Restoration Partnership Trustees coordination of efforts to restore natural resources through remedies in the Restoration Planning Area.

Public Comment and Input on Five Year Plan

Dan Redline from IDEQ, also alternate trustee for the Restoration Partnership for the State, asked if the website address could appear on the five year plan, as it appears on the annual work plan. He also stated since the work plans outline all the work that is happening, shouldn’t it also include a section to address long term O&M? Terry said there are various parties responsible for O&M. Michele added that it was a good point and important part of the overall project. Maybe not every single aspect of the O&M, but a general acknowledgment that there is ongoing O&M across all of the projects for public awareness, and documented in both work plans. Terry said he would write up something for both plans and distribute for approval. Bonnie clarified some of the O&M responsibility as far as the Trust work, and said she would help Terry.

Dave Fortier referenced that on page 10 under ‘Bank erosion inventory’ in the participant column, Soil & Water Conservation Districts (SWCDs) should be added, as they completed the inventory with water quality funds – Terry added to the plan. Dave also agreed on adding the O&M sections to the plans, and identifying groups responsible for long term maintenance.

Kevin Yrjana introduced himself from Northwind and a Silver Valley native, looking at all the work coming up in the next five years and wants to know when he would be able to bid on some of the projects for the Lower Basin. Bonnie answered that from starting the project to beginning the work is sometimes a couple year process – the bid process for Dudley earliest would probably be 2022. She wasn’t sure on some of the other project for certain. Dan Redline said where it shows Avista as a partner, they also develop a one year and five year work plans for erosion control in the CDA Lake Basin, and those could be provided to Kevin. Jamie Brunner from IDEQ further elaborated, they often have a good partnership with Soil & Water Conservation Districts as they do a lot of the hiring of contractors for bank stabilization projects. He could contact the Kootenai/Shoshone district and Benewah district for work.

Approve 2020-2024 5 Year Work Plan (Action Item)

Brook made a motion to adopt the five year work plan with changes as captured; Rebecca second, all approved M/S/C

Outreach Activities during the last quarter – Terry Harwood

Terry quickly reviewed his activities over the last quarter which included the following:

- Working with FEMA and locals for further flood map revisions.
- Addressed concerns from the public about CDA Lake.
- Continued to work with Silver Valley Transportation Team.
- Took Kootenai County representatives on tour of the site with the help from the Trust.
- Discussed August tour and if one is still wanted for this year 2020.
- Involved in the NACEPT, but group disbanded in October by the Administration, no further work anticipated.

Val from PHD spoke on the activities she worked on for outreach. She did acknowledge the help from several agencies who help PHD and include IDEQ, EPA, BEIPC and the Tribe. Other activities include:

- Hosted a booth at the North Idaho Fair.
- Also hosted a booth at Coeur Fest in Coeur d'Alene.
- Participated in the annual Shoshone Medical Center Kid's Wellness Fair.
- Field trips for students from Spokane Community College and Cd'A High School.
- Traveled to University of Idaho as guest speakers for Environmental Science Class.
- Handwashing techniques shared with elementary school students.
- EPA posts project activities and accomplishments on CDA Basin Cleanup Project Facebook page and produces the Basin Bulletin.
- Hosted booth at Trunk or Treat – and will also set up at Our Gem Symposium.
- She pointed out a banner set up in the back of the room that gives the public an overview of the Central Treatment Plant work.

She wanted to let everyone know that she is available for groups or interested parties for further outreach and education possibilities. Mike Fitzgerald recognized Val for all her hard work and effort which has gone over really well in the community.

LMP Update – Jamie Brunner, IDEQ

Jamie Brunner IDEQ and CDA Lake Management Coordinator – gave an update on the Our Gem Symposium held in November. There were about 200 people in attendance, good cross section of the community on different panels, keynote speakers, good discussions and feedback. They are going to get the planning committee back together and keep the momentum going for next year. They had great sponsors who helped keep the cost of attending down. She also restated that the Nutrient Inventory Draft has been distributed to the TLG for review. December 15th will be the deadline for comments; they should have a final version out after the first of the year.

Leslie Duncan moved and John Tippetts 2nd to go into executive session under Idaho Code 74-206(1)(b) during lunch. M/S/C

Lunch

Leslie moved and Rebecca 2nd to come out of Executive Session, with no decisions being made. M/S/C

Recreation PFT Update – Dan McCracken, IDEQ

Dan presented Recreation Sites Project Focus Team update. This presentation will cover the project focus team purpose; discuss completed projects in the basin; update on projects in the box; updating health information signage in the basin; and talk about ongoing and future work. The PFT was originally established in the early 2000's, much of the work focused on creating an inventory and identifying recreation sites for action as part of the 2002 ROD. Once these efforts were completed, the PFT discontinued work. In 2016, agencies worked together on the Recreation Sites Strategy which was prompted by nearing the completion of the other human health actions. The Lead Health Intervention Program was continuing to see kids with high blood lead levels, a lot of that being tied back to exposure in the recreational areas. The PFT was reformed and starting working on implementing actions in the Recreation Sites Strategy. These include: manage human health risk from exposure during recreational activities; identify priority sites; identify maintained sites to replace highly contaminated areas; identify actions to add to the risk management toolbox; and identify locations to apply certain actions or ideas for pilot projects.

Some of the completed projects in the Basin include:

- Seasonal hand washing stations located at Cataldo, Rainy Hill, Rose Lake & Medimont
- Continue to update health information signage – a lot more information added with maps, historic site information, and historic photos along with the health information.
- Ninemile fishing pond – completed by the Trust, areas around the pond remediated and stocked with fish.
- Larson Road fishing pond – in Mullan - small portion of the parking area and small surface areas remediated; Hecla stocks this pond with fish.
- Grays Bridge road – across from Canyonside apartments, by Lower Burke Canyon Repository – remediated highly contaminated area where kids were found playing.
- Coeur d'Alene River road parking pullout – capped popular parking area for people recreating on the river.

Box Sites status – all the projects are located along the South Fork between Kellogg and Pinehurst.

- Mountain View Park – across I-90 from the CIA, owned by the City of Kellogg; open space, good launching spot for dog walking and hiking. Some capping work done in the 1990's, cap still in place except for along the SF – additional signage will be put in place.
- Theater Bridge River Access – by the Smeltonville exit, owned by Idaho Transportation Dept.; old piles of tailings found and removed; working with ITD for future use. Also swimming hole found to have high levels, adding signage here as well.
- Airport River Walk – next to Shoshone County Airport, area remediated with Smeltonville Flats in the 1990's; high water events since remediation but results still show under 1,000/ppm. The pond that was left in place shows high levels, continuing with follow-up sampling. The trail along the river - cap is still good except down along the SF which is consistent with other areas. They will be working on health information signs all along the trail.
- Smeltonville Flats – on the western side of the flats, behind the gate at the airport, owned by Shoshone County. Remediated in the 1990's, similar effort to see if the remedy held up, isolated areas found to have elevated levels. The County has long-term plans with airport expansion and will eventually be capped.
- Pinehurst Trailhead – exposed soil after a water leak was found to have high levels, place where kids were accessing the river. Additional work completed to stabilize the bank and vegetation growth has helped cover exposed areas. Working on visible health signage and access controls to the banks of the river.

Rebecca mentioned that this location gets used heavily; she wanted to know who owns this parcel between the trail and the river. Dan answered the trail itself is owned by Idaho Parks & Recreation, the other part he believed is owned by the McKee family. Andy said Ed Short owns one parcel and the other parcel is the McKee family. Rebecca also stated that locals are utilizing the shoulder of the trail between Pinehurst and Smeltonville, so the Trail Commission, State, EPA and the Tribe have repaired that ROW in this last year. Andy added that the water district put a clean cap and revegetated the area they worked on until vegetation can grow back in the spring.

Dan updated what has been done on health information signage; they are systematically replacing old signage with new updated, high visibility signage that can be read without having to go up the banks to read. They are placing these in the Lower Basin along the river, and have approval by the Trail Commission for placement along the trail corridor. An annual inventory will be done to see how the river changes, and if signage is still effective keeping them up-to-date.

Ongoing and future work will include outreach and education, which is a huge component of the recreation site effort. They will continue to update and add signs; target outreach to river

property owners; and promote use of remediated and clean sites. Sediment management at public access sites will include curbing, pavers, and hard surfaces; revegetation and rock capping on beaches and banks where bare soil exists. They will also continue to develop youth fishing opportunities for Kellogg or Smeltonville areas, to compliment the ones completed in Mullan, Ninemile and Osburn.

Matt Nykiel from the ICL appreciated all the work they were doing, very strategic and effective, but sad that the river corridor will always have contamination. He wanted to know how they make the decisions on where the signs go and which ones get put in. Dan answered that through prior public input, the strong message is people will still recreate. The public, through their signage, should be able to make an informed decision; rock banks with vegetation compared to talcum powder sediment banks, and how safely they can recreate without taking mobile sediments home for exposure. Their messaging can show where people where to 'play safe' or 'caution - stay out'.

Rebecca announced that Dan McCracken had been chosen at the TLG Chair, and she is the Vice-Chair. She also wanted to recognize Anne McCauley for all her years working on the site, and thank her for all her hard work as she is retiring; also presented her with a card and custom lake water 😊

CCC and Public Input Session and Discussion

Jerry Boyd from the CCC spoke on their outreach and his concern in the Lower Basin. He is hoping to schedule a lower basin CCC meeting in the spring, probably in Medimont or Harrison. They do not meet on a regular basis unless there is an issue to address for public discussion and information.

Meetings scheduled for the BEIPC for next year are:

March 11th in Kellogg

May 20th in Coeur d'Alene

August 26th in Wallace, meeting/tour

November 18th in Spokane Valley

Blood Lead Report – Andy Helkey, PHD

Andy Helkey from PHD, presented results for 2019 Annual Blood Screening based on information taken in August; this gives a better idea of the exposure during the summer time period. The LHIP is a Public health service offered by the State to those that live within the Box (since 1974/1985) or the CDA River Basin (since 1996); offered to those between 6 months and 6 years of age with a cash incentive of \$30. It has been opened up to anyone who lives within the Superfund site boundaries to come in and be tested, even adults.

LHIP Procedures

Screening is done by skin puncture with results provided to participant or parent immediately after analysis. If the results are over 5 µg/dl a venous draw is collected and sent off for laboratory confirmation. For adults, results are over 10 µg/dl. This is usually a two day wait period for results followed up by phone and letter. Free home consultations are available to try to find the source as well.

Health effects

The health effects associated with lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body, especially the nervous system. No safe level of lead exposure has been identified. Once it enters the body and bloodstream it is available to every soft tissue organ in your body.

Andy reported that there is decreasing blood lead levels, they were as high as 60 in the 1950's, now the average is as low as 5 established in 2012. It is reanalyzed every 4 years, so in 2016 it was done and we could possibly see that level drop more.

Route of exposure

Ingestion is the most common exposure route as children absorb at a rate of 20-60%; for an adult that drops to 10%. Inhalation is another exposure route – almost all lead that is deposited in the lungs is absorbed into the body. Blood serves as the initial receptacle of absorbed lead and essentially distributes throughout the body making it available to all soft tissue organs.

At risk populations

Children are more affected by lead due to behavior & physiology.

Pregnant women – readily crosses the placenta adversely affecting the fetus.

Adults with cumulative exposure – generally occupational or hobby related.

Genetically - pre-disposed individuals like elderly people with osteoporosis.

Health Effects – Children vs. Adults

- Children suffer effects from lead exposure at much lower levels and absorb at higher rates.
- No safe blood lead threshold for the adverse effects of lead on infant or child neurodevelopment has been identified.
- The latent effects of lead exposure during childhood for adults; if you are chronically high as a child, you have a 40% chance of hypertension as an adult.
- Because lead exposure often occurs with no obvious symptoms, it frequently goes unrecognized.
- A blood lead test is the best tool for identifying lead exposure.

Box Remedial action objectives is to have no more that 5% of children in each community with blood lead levels ≥ 10 µg/dl , and less than 1% with levels ≥ 15 µg/dl . Back in the 1970's, average blood lead was 67.4, currently running between 2.4 to 3.2 consistently since the early

2000's. There were 169 participants (age 0-6); Andy noted one family who recreated in the Lower Basin extensively whose kids all tested high this year. Over 6 years, there were 63 participants; two tested over ≥ 10 $\mu\text{g}/\text{dl}$ – both over 18 and occupation related levels.

Basin Remedial action objectives are to reduce soils with concentration greater than risk-bases levels. Lead: ≥ 700 mg/kg ; Arsenic: ≥ 100 mg/kg . Reduce exposures to lead in house dust; cumulative exposures do not exceed USEPA's health risk goals lead: <5% chance that a typical child at an individual residence does not exceed 10 $\mu\text{g}/\text{dl}$. Upper and Lower Basin lead levels continue to drop every year. There were 84 participants (age 0-6); over 6 years, there were 22 participants.

Participation rates based on the estimated eligible population came in at 51% for the Box and 17% for the Basin. This was the first year the Box came in over 50%. Out of 161 households that participated, 17 had an elevated individual; follow-ups were conducted – 9 in home and 1 phone consultation. They identified sources as disturbed barriers; recreating in un-remediated areas; occupational related; and lead base paint.

Kevin Yrjana asked if the occupation related was due to mining and Andy answered yes. Due to miners working in higher lead stopes, they were able to determine exposure by washing/drying mine clothes with kids clothing, and also tested vacuums that came back with positive results. Kevin wanted to know if any of the sources stuck out more than the others, and Andy answered nothing stood out so they have to keep targeting everything.

Mike Fitzgerald asked Andy to brief the group on the situation with IDAPA and ICP. Andy said the legislature did not renew the IDAPA rules, so they have all been made temporary. Since the health districts are not a full state entity, we will need to go back and defend the ICP rule in both the House and Senate. They are working on that to present to the legislature; we need the ICP rule in the Silver Valley communities or economic development will stop. These are hazardous substances underneath everyone's barrier and the contaminant management rule allows keeping those in the site, dispose of them for free – without that, we would be hauling them to a RCRA approve facility in Oregon. Mike added that he sits on the health board and they did a wonderful go thru of the IDAPA, and got rid of a lot of redundancies and added points of clarity. There are components in there that make it a lot easier to implement, the original regulations were more restrictive. Terry said there were two ICP's for the Box and Basin – were they able to combine? Andy said they did not combine but there were duplications in both; they were able to shrink the pages considerably without losing any intent of the rule. Rebecca said the ICP must remain and it is a hot topic with the current federal administration and asked if there is anything we can do to help PHD. Andy said all the support they can get will help.

John made a motion to adjourn the meeting, all approved **M/S/C**