MEETING MINUTES
WATER POLLUTION CONTROL ADVISORY COUNCIL
Friday, August 29, 2014
10:00 AM – 1:00 PM
Metcalf Building
1520 E. Sixth Ave, Helena, MT 59620

PRESENT

Council Members Present:
Barbara Chillcott (by phone)
Mitchell Leu (by phone)
Earl Salley
Karen Bucklin Sanchez (by phone)
Trevor Selch
Keith Smith
Michael Wendland
Kathleen Williams (by phone)

Council Members Absent:
Mack Cole
Stevie Neuman
Dude Tyler

Montana Department of Environmental Quality Staff Members:
Jenny Chambers
John DeArment
Jon Kenning
George Mathieus
Sarah Norman
Daryl Reed
Paul Skubinna
Kari Smith
Amy Steinmetz
Eric Urban
Dean Yashan

Guests/Public Present:
Tim Davis
Greg Dorrington
Kevin Hart

CALL TO ORDER

Mr. Trevor Selch called the meeting to order at 10:03 a.m.

APPROVAL OF AGENDA

Mr. Earl Salley moved to approve the agenda as written; Mr. Michael Wendland seconded the motion. There was no opposition; the motion carried.

APPROVAL OF MINUTES

Mr. Wendland moved to approve the June 30, 2014 meeting minutes as written; Mr. Salley seconded the motion. There was no opposition; the motion carried.

BRIEFING ITEMS

State Water Plan –

Mr. Tim Davis, Water Resources Division Administrator at the Department of Natural Resources and Conservation (DNRC), gave a brief overview of the Draft Montana State Water Plan and then took questions from Water Pollution Control Advisory Council (WPCAC) members. Mr. Davis said that, in 2009, the legislature directed DNRC to develop a 20-year state water plan and to deliver it to the 2015 legislature. They asked that DNRC establish basin advisory councils for each of the major basins across the state. Each of these councils has 20 members. Technical advisors from federal, state, and local agencies provided data to these council members. They also had a contracted facilitator help with these meetings. From these meetings, detailed draft basin plans were developed. DNRC took these basin plans and created the high-level Draft State Water Plan that was forwarded to the Water Policy Interim Committee and the Environmental Quality Council on August 21, 2014.

Mr. Davis said that he will be going in front of both of these groups during their September 8-11 meetings. Following this, there will be 13 public hearings held across the state, prior to the plan being submitted to the 2015 legislature. The legislature does not need to adopt the plan; they can amend it by resolution.

Mr. Davis said that the basin specific plans will continue to serve as living documents that can help guide water development and management within each of the basins. Only the State Water Plan, which has a statewide perspective, is going to be officially adopted by DNRC.

According to Mr. Davis, a number of the basin plans did have specific references to water quality, but the Draft State Water Plan does not contain any recommendations that are specifically targeted at water quality. DNRC does not have authority over water quality. Unless the agencies that have authority over water quality are engaged in developing recommendations with the basin advisory councils, and the councils support these recommendations involving water quality being put into the State Water Plan, no water quality recommendations will be added. Mr. Davis said that water supply and demand, and references to the link between water quantity and water quality, are the closest topics to water quality addressed in the Draft State Water Plan.

Ms. Kathleen Williams asked where water availability is addressed in the plan. Mr. Davis responded that there is an inventory of existing and non-existing uses. The plan also talks about the effect of frequent drought on availability. In each section, the document addresses future supplies and demands. In the State Water Plan, this is covered at a very high level. Each of the basin plans address water availability in more specifics, but these also address the topic broadly as well.

Ms. Williams then asked if the public meeting schedule is listed on DNRC's website. Mr. Davis answered that not all dates are set. These will all be publically noticed in newspapers, and they will be made available on the ListServe and DNRC website as well.

Chairperson Trevor Selch asked Mr. Davis to discuss stream gage funding. Mr. Davis said that most of the stream gaging in Montana is done by U.S. Geological Survey (USGS). Some of these gages are

entirely self-funded and others are funded via cost share. One of the goals of the State Water Plan is to increase the gaging network in Montana by 100 gages. Most of the existing gages are on the mainstem streams, rather than tributaries. This would provide real-time data to folks across the state. Additionally, the state is also finishing up the Water Rights Adjudication. Mr. Davis said that within the next 20 years, they will reach a point where they can enforce and distribute water by water right. To achieve this, a more thorough gaging network needs to be set up. DNRC has made the request for additional funds to build on a gaging network. They are adding four new real-time gages this year with existing funds, and they hope to add ten additional gages afterward. They hope to build on that number over the next ten years to reach the goal of an additional 100 gages. This effort will require getting others engaged in order to achieve the needed funding. Mr. Davis added that having more gage data from tributaries, in addition to the mainstem streams, will help generate a better understanding of water availability.

Chairperson Selch asked if the funds being sought will be solely from the state or if they will come from both state and federal sources. Mr. Davis replied that one of the few funding increases in the federal budget was for gaging, but the ten gages that DNRC is looking at funding will require state funds. The state will be managing those gages. Mr. Davis explained that this is cost effective. He said that the cost of the state managing a gage is 1/5 the cost of USGS gage management.

Mr. Davis said that in some of the basin plans there was support to add water quality to a number of gages. This was not pulled into the State Water Plan. Mr. Davis explained that this should be determined collaboratively with other agencies and stakeholders. Adding water quality to gages increases the cost, so the location of these gages will need to be targeted. To maximize the benefit of the ten initial quantity gages, location determination will also be a collaborative effort with other agencies and stakeholders.

Mr. Davis said that DNRC is currently just getting their four new gages out. These should be on DNRC's website soon. The location of one of these quantity gages will be on Nevada Creek, tributary to the Blackfoot River.

Mr. Keith Smith asked if anyone is investigating for deeper aquifers that could be drilled to help recharge the surface waters and the upper groundwater systems. Mr. Davis said that a number of the State Water Plan recommendations deal with developing a better understanding of which aquifers are connected to surface water. He explained that there is a legal presumption in Montana that groundwater is connected to surface water. In a closed basin, new surface water appropriations are prohibited, but new groundwater appropriations are not. One must prove, however, that they can mitigate the adverse effect of the depletion of groundwater on surface water.

Mr. Davis said that one of the recommendations that he recently made to the National Aeronautics and Space Administration (NASA) was use of their new Gravity Recovery and Climate Experiment satellites. These satellites are designed to look at groundwater, and to discover its depletions and sources. DNRC requested that NASA use the satellites to explore groundwater in such detail that the information can be used by DNRC for water right decisions, or at least to help inform the Montana Bureau of Mines and Geology (MBMG) where they should focus their research.

Mr. Smith said that he brought up the topic of drilling aquifers because one of the recommendations was to move single-well users to municipal systems or community wells. He stated that this is not going to happen in the western half of the state where water rights is a major expense due to mitigation. He said that the options are either changing the water right laws or coming up with new water sources, and

these solutions are problematic. Mr. Davis replied that one of the recommendations is the use of mitigation banks. DNRC has one application in for a mitigation bank. In 2009, the legislature produced House Bill 24, which was for creating a proactive mitigation bank. That means that folks do not have to find a water right to use for mitigation, as they have already discovered water that will mitigate new depletions. So they are now looking at how to expand upon that concept to create an easier process. Mr. Smith said that in the Missoula/Bitterroot area the municipal wells only go down 80-90 feet and individual wells only extend down 30-40 feet, and yet there are six billion gallons of water available down to 1,000 feet. He is aware that drilling further down for water is occurring in Nevada and California, and he suggested that perhaps it could be an option on a smaller scale for parts of Montana.

Mr. Davis said that if WPCAC members have additional comments or questions they can let him know either in person or via email at TimDavis@mt.gov.

EPA and US Corps of Engineers Waters of the US Proposed Rule –
Mr. George Mathieus, Division Administrator for the Department of Environmental Quality's (DEQ) Planning, Prevention and Assistance Division, said that he and DNRC Director, John Tubbs, are members of the Western States Water Council, which is attached to the Western Governors' Association. The annual conference for the council was held in Helena in mid-July. Both Mr. Mathieus and Mr. Tubbs attended. Waters of the US was a topic discussed at that conference. The group put together a few resolutions, and Montana remained neutral. Mr. Mathieus said that, in his opinion, there are some contrasting views between the western states. On the Environmental Protection Agency (EPA) side of the rule, Mr. Mathieus said that he does not anticipate issues. The Montana Water Quality Act already clearly defines waters of the state. Mr. Mathieus acknowledged that this may not be the same situation for other states. On the Army Corps of Engineers side, Mr. Mathieus said that they do not see the rule changing the current 401 program.

Mr. Mathieus said that the EPA has recognized the angst that the rule has created. They have tried to alleviate some of this by getting states and stakeholders more involved in asking and answering questions.

Mr. Wendland asked who is responsible for the waters of the US. He gave the example of Petroleum County having eight roads washed out by stormwater. He said that the county must fix the roads but the EPA has claimed the water, so it seems that the EPA could be held responsible. Mr. Mathieus said that his interpretation of the main source of concern is all the unknowns. He added that from his perspective, the EPA has given assurance that there will not be any changes. He said that the actual change that may come out, which should be beneficial, is that administrative red tape may be removed. This does not alleviate the fear of potential changes, but the EPA has welcomed dialogue.

Ms. Williams asked whether the Waters of the US Proposed Rule is less about responsibility and more about defining the point at which pollutant discharges or dredge and fill need permits. Mr. Eric Urban responded that Montana has primacy over its discharge program and water quality standards. From this perspective, Montana will continue to deal with discharge programs via the legislative process. Regarding the dredge and fill program, Mr. Urban said that only two states in the country have primacy over a 404 program. Most states, including Montana, have left this to federal governance. If the new jurisdictional wetland process created an impact, it would be seen in the 404 program. In dredge and fill, if you want to place dredge material in a jurisdictional wetland or water of the US, you would need a 404 permit to place the fill. That may impact the state because the state can then apply the 401 certification.

Ms. Williams then mentioned that Montana statue prohibits having a state rule that is more stringent than federal rule. She asked if the state would have to adopt less stringent rules than are currently in place if less stringent federal rules were adopted. Mr. Urban replied that, as described, the rulemaking is supposed to come to the same environmental regulation. For example, current jurisdictional wetlands should be the same as those existing after the rulemaking. They do not anticipate change in what is regulated. Mr. Urban said that he is not prepared to answer Ms. Williams question directly at this time due to its legal complexity. Mr. Mathieus suggested that this may be a question for Mr. John North.

Ms. Williams said that she posed that question to the Council of State Governments West Water and Environment Committee. That committee proposed to work with the Western States Water Council to investigate this. She is hoping that the committee will be contacting Mr. North. She said that she will be keeping WPCAC posted on what information comes from this effort. Mr. Mathieus added that he would follow up with Mr. North and would report to the group via email.

Mr. Urban said that there is another parallel rulemaking worth mentioning. The EPA and Corps jointly proposing the administrative change to the definition of a wetland has received most of the attention. At the same time, EPA and the U.S. Department of Agriculture initiated a process, which has now been approved, to define exemptions to what needs a 404 permit. The exemptions have been created to avoid an undue burden on agricultural practices. Mr. Mathieus added that the preexisting exemptions were clarified and stayed the same. Ms. Williams said that this is correct. She explained that the interpretive rule is related to soil and water conservation activities. The idea is that if folks follow Natural Resources Conservation Service approved practices they will be exempt, but this has been imperfect. Overall, the agricultural and silvicultural practices in the Clean Water Act (CWA) exemptions all stay intact according to EPA in the jurisdictional rule.

Berkeley Pit Presentation –
Mr. Daryl Reed opened his presentation on Butte mine flooding by mentioning that there is contamination from Butte to Milltown in three different EPA Superfund National Priority List sites: Silver Bow Creek/Butte, Anaconda, and Milltown/Clark Fork River. The Butte mine flooding does not include the town of Butte, which is a Butte Priority Soils Operable Unit (BPSOU). The alluvial aquifer draining to the pit is part of the mine flooding, but the other aquifer is part of BPSOU.

EPA is the lead agency at this site, and DEQ serves as a support agency. Mr. Reed said that this is not a taxpayer funded superfund location. The responsible parties are paying for the site. These responsible parties include Atlantic-Richfield, British Petroleum, and Montana Resources.

Mr. Reed acknowledged that Ted Duaime, of MBMG, who has been working on the site since the mid-1980s, took a lot of the photos used in Mr. Reed's presentation.

Underground mining began in Butte in the 1880s. Silver is what started the mines, but in the 1980s the emphasis changed to copper mining. The Anaconda Copper Mining Company consolidated all the workings through the 1910s-1920s, and all the mining was connected under one company from that point forward.

The bottom of the Berkeley Pit is 4,260 feet in elevation. In comparison with the neighboring underground veins that were mined, it does not go down very deep. Most of the quarry pit is blasted into quartz bedrock, which is important in regard to potential landslides.

Mr. Reed mentioned that, when discussing the interconnection of the underground mine workings in Butte, it is important to note that the West Camp is no longer connected to the workings. It was blocked off by bulkheads in the 1950s and 1960s. The West Camp has its own separate pumping system to accommodate the higher water level in the area.

Mr. Reed showed an image outlining the mine flooding operable unit boundary. He noted that it does not include the town of Butte on the surface. Only the underground mines that are connected to the pit are part of this unit. BPSOU is dealing with contaminated soils, alluvial groundwater coming down the metro storm drain channel, and stormwater. Joe Griffin is the project manager dealing with BPSOU.

Mining is still actively occurring in Butte. Montana Resources is extracting ore from the Continental Pit. The tailings are pumped to the Yankee Doodle Tailings Pond where solids settle out. The water is then pumped back to the mine circuit. This is essentially a closed-loop system.

In 1955, the Berkeley Mine was begun. It was more economical to mine via open pit. Mr. Reed described the layout of the mine. He said that there is a copper precipitation plant that is still located at the Horseshoe Bend area of the mine. This copper cementation plant is used to run pumped water over scrap metal to cause the copper in the water to exchange places with the iron, allowing for recovery of the copper. This plant was still in use as of last year.

Mr. Reed then discussed the process by which the active mine became a superfund site. He described how the mine filled with water after the mining created a cone of depression. Water moves by differential head pressure. The Berkeley Pit is the low point in this system, so all surrounding water is flowing toward it due to pressure from behind. There is a difference of 23 feet between the water in the wells/shafts farthest from the pit and the critical water level (CWL). This CWL applies to the entire system, not just to the Berkeley Pit.

Mr. Reed said that decomposed granite rests at the top of the bedrock. This granite, which decomposes into clay soil, serves as an aquatard and essentially creates two separate aquifers. Ms. Williams asked for a definition of an aquatard. Mr. Reed described it as a clay soil type that significantly slows down the flow of water. Mr. Reed noted that that the water level in the alluvial aquifer is 50 feet higher than where it enters the Berkeley pit. Groundwater from both the alluvial and bedrock aquifers is flowing down toward the pit. So when the pumps were shut off in 1982, the water levels rebounded quickly and within two years they had reached the bottom of the Berkeley Pit. Today half of the water in the pit has come from groundwater and other half has come in as surface water.

Looking at an image of Montana Resources active mining operation next to the Berkeley Pit, Mr. Reed explained that their haul road is dangerously close to the edge of the pit. The company is very concerned with slope failures on that edge. This corner of the pit contains sand and gravel alluvium, which makes this the most likely place for a slope failure to occur. In 1998 and 2013, slope failures did occur here.

Looking at the water chemistry, Mr. Reed mentioned that the superfund standards are frozen unless they are proven to not to be protective in the five-year review process. After 2004, the Cadmium standard for the Berkeley Pit was lowered. The Horseshoe Bend surface water is much less contaminated than the water in the Berkeley Pit, although it is still contaminated. The surface water going into the pit created a stratified lake. The top of the water had less contamination than below. In 2004, Montana Resources began pumping Berkeley Pit water and running it through the Horseshoe

Bend precipitation plant for copper. This changed the chemistry of the lake. The lake is no longer stratified and it now has far less copper and acidity. Montana Resources recovered 36.8 million pounds of copper in a ten year period. The company was still pumping water up until 2013.

Mr. Reed then discussed the 1994 record of decision (ROD), which said that it was technically impracticable to clean up the groundwater. To maintain the contaminated water in the system, and to prevent it from reversing direction and flowing out to Silver Creek, the water must be maintained below the CWL. Mr. Reed noted that the CWL has a factor of safety built into it. Mr. Reed mentioned that part of the ROD was implementing an institutional control program, which established a controlled groundwater area and continued public education. In 1995, 342 snow geese died after landing in the Berkeley Pit and ingesting the water. As a result, the Waterfowl Mitigation Program was instituted. In 2002, a consent decree negotiated settlement with the responsible parties for payment of past oversight costs by agencies and for future monitoring costs and remedial actions.

As a ROD requirement, in 1996, the surface water in the Horseshoe Bend began being diverted. Montana Resources used it in their mine circuit. In June of 2000, due to the cost of electricity, Montana Resources stopped their mining. This triggered the construction of a water treatment plant. The plant was built large enough to treat water from the Horseshoe Bend, Berkeley Pit, and the Continental Pit. The technology of the treatment plant has been criticized as being old, but it is simple, cheap, and effective, according to Mr. Reed. Mr. Reed then described the water treatment process occurring at the plant.

Mr. Reed showed a list of the nine points of compliance, explaining that if any of these points hit the CWL it will trigger the pumping of the Berkeley Pit. Based on the water levels of the Anselmo Mine, it has been predicted that the CWL will be reached in 2023. Four years prior to reaching the CWL, the Horseshoe Bend Water Treatment Plant must be reviewed for adequacy. Any necessary treatment plant upgrades must be completed two years prior to reaching the CWL. There is a 70 foot safety factor between the CWL and the water level at which the groundwater would reverse its flow, and there is a 100 foot safety factor between the CWL and where the water would breach the rim of the pit.

Montana Resources have been doing a lot of work on evaluating slope stability to keep their haul road safe. DEQ has asked them to do additional evaluation to determine how much, if any, water would be displaced if all of the slopes of the Berkeley Pit experienced failure. Part of the slope stability evaluation that Montana Resources has done has been modeling to predict potential slope instability and where the material would go.

One area about which folks have expressed concern is the Yankee Doodle Tailings Impoundment. Here the 200 foot high impoundment has received significant precautionary action to maintain stability. Buttressing is being used, and the slope of material is being carefully monitored. DNRC and DEQ's permitting section are working on this site.

To answer Mr. Salley's original question of whether the water in the Berkeley Pit will influence water quality in the surrounding aquifers, Mr. Reed said that, in short, it will not.

The controlled groundwater area is an institutional control requirement in three records of decision. It concluded that the aquifer is not suitable as a domestic water source. It prohibits new wells and requires abandonment of existing wells that may contaminate other waters. It also requires annual sampling of

drinking water wells by MBMG. The controlled groundwater area is functioning well to prevent folks from exposure to contaminated groundwater.

Mr. Smith asked if he is correct in understanding that the treatment plant, after possible upgrades, has the capacity for handling all waters needing treatment. Mr. Reed answered that this is what it was supposed to be designed for, but they have found gypsum scaling on all the equipment. This has reduced pipe size. All mechanical equipment will need to be examined. They are starting the plant examination now, and they may end up determining that the plant will need significant upgrades or that they need a new treatment plant. Mr. Reed said that is room to grow around the corner if the treatment plant needs to be expanded.

Mr. Smith asked whether most of the scaling is occurring in the first or second stage of the treatment process. Mr. Reed answered that the scaling is occurring everywhere in the plant.

MPDES MS-4 General Discharge Permit –
Mr. Paul Skubinna explained that the Montana Pollutant Discharge Elimination System (MPDES) permits are good for five years. The Municipal Separate Storm Sewer System (MS-4) General Discharge Permit is due to expire on December 31, 2014. They are looking to get a new permit issued. Starting in November of 2013, the permitting program decided that it would be best to work on the permit through contracted services. After finding a contractor, they began strategizing. One focus is on an improved level of integration between the Total Maximum Daily Load (TMDL) program and the discharge permitting program. Another focus, requested by stakeholders, is on improving specificity and definitions in the permit to aid in compliance.

This permit regulates the stormwater discharges from Montana's seven major municipalities and some other permittees in the developed area around the municipalities. The overall number of permittees is small, including perhaps 20 permittees under 12 authorizations. Mr. Skubinna said that the permit is very important because of the impact that it has on the major municipalities and associated counties of the state.

Due to the importance of the permit, they have focused on creating a strong stakeholder process. One portion of the contract was creating a stakeholder engagement and communication plan. In February of 2014, they began holding preliminary meetings with the contractor. In April, at the annual Stormwater Conference, they began the stakeholder process. They have continued this stakeholder dialogue since then, and held several events. In May/June, they put out a permit cross-walk, which compared the ideas behind the old permit and new permit. In July, having received ample stakeholder feedback, the permitting program began forming a concept draft. They released this for stakeholder input and have received lots of feedback.

This is the third generation of this five-year permit. The feedback that the permitting program has received has been varied. One of the realizations made is that there are core issues to address with the permit. They also received feedback that the process was moving too quickly. The proposed solution is to reissue the existing permit for 18-28 months. The idea behind this is to allow continued stakeholder involvement in addressing the foundational issues at a pace that is more comfortable to all involved. Once the revision is complete, they will move forward with the permit approval.

Mr. Skubinna explained why he came to WPCAC. He said that the rules require WPCAC to be notified whenever a general permit is put out for public notice. This will likely occur in September. This will allow

for an opportunity to comment on the existing permit that they plan to reissue for a short duration while the new permit is drafted. They will also hold a public hearing, which will be announced in the public notice. Following this, they hope to take final action on the permit. Additionally, they are doing some minor updates on the general permitting rules. One of these updates, in order to bring the program more into line with the federal requirements for administrative process, is that the effective date of the permit cannot be any shorter than 90 days after final action is taken on permit. This allows time for objections to be raised, and it also allows time for the regulated community to submit their updated applications.

They are hoping to sign a memorandum of understanding with stakeholders to solidify an agreement that they will continue to work collaboratively on the revised permit during the time that the existing permit is extended.

Ms. Williams asked if this applies to jurisdictions that have stormwater separate from wastewater discharge. Mr. Skubinna said that this is correct. He explained that he is not aware of any situations where there are municipalities with combined sewers in Montana.

Ms. Williams asked what jurisdictions have these permits. Mr. Skubinna responded that it is the seven larger cities of Montana, and the urbanized areas surrounding these cities, where permit coverage is required. There are also others within municipalities that require permits, such as universities and Malmstrom Air Force Base. At the start of the program in the late 1990s/early 2000s, the Board of Environmental Review designated by rule the Phase 2 MS-4s in Montana.

TMDL 101 and Status Update –
Mr. Dean Yashan explained that, since 2000, DEQ has been under a court order to complete certain TMDLs within an allotted timeframe. The end of 2014 is the deadline for DEQ to complete the lawsuit requirements.

Mr. Yashan began his presentation by covering some of the basics of TMDLs. He explained that a TMDL is the amount of pollutant that a waterbody can receive from all sources and still meet water quality standards. It is required for each waterbody segment. A single waterbody may have multiple TMDLs. A TMDL document may contain from one to more than a hundred individual TMDLs. Documents are sometimes simply referred to as a TMDL, which can be misleading as a TMDL document may contain numerous TMDLs. TMDLs are required by the CWA and Montana law. Each individual TMDL requires EPA approval. In Montana, most of the sources of impairment are linked to nonpoint sources. TMDLs do not create any rules, regulations, or nonpoint source requirements, but they can necessitate modifications to an existing MPDES permit.

Mr. Yashan described the major components of TMDLs. He said that the targets define when a waterbody is no longer impaired. This can be based on a numeric standard or a quantitative translation of a narrative standard. According to Mr. Yashan, narrative standards are a little more challenging to determine. Other components include source assessment, TMDL expression, and TMDL allocations.

Turning to the topic of TMDL development status, Mr. Yashan explained that there are 1,314 EPA approved TMDLs in Montana, and there are 128 more that need to be completed by the end of the year. The number of TMDLs in the four basins reflects the density of waterbody pollutant combination impairments as well as prioritization based on agreements with the plaintiffs on how to finish up the

lawsuit. This has kept the majority of focus on the Columbia Basin. TMDL project information can be found on the DEQ website.

Mr. Yashan said that following completion of the lawsuit in 2014, there will still be 928 impairment causes remaining on the 303(d) list in need of TMDLs. He explained that this number is a moving target, however, as additions and removals constantly occur. They are focused on incorporating an improved watershed approach that will go beyond TMDLs and incorporate monitoring and assessment and other water quality planning activities as well. Of the remaining 928 impairment causes, 593 are linked to cold water streams and 335 are linked to warm water streams. Assessment and TMDL processes tend to be more developed for pollutant types for cold water streams than for warm water streams, with the exception of larger rivers and lakes.

Mr. Yashan then showed a breakdown of 2014 TMDLs by pollutant type. He added that although they are in pretty good shape for nutrients, there are still some large rivers and lakes that have a few complications. He also said that metals can present complications because there are locations where the natural background levels of metals are uncertain. Salinity can also become complex when natural conditions are close to state numeric standards.

Mr. Yashan discussed the considerations for post-2014 Montana TMDL priority setting. This is a two part process based on watershed scale and waterbody scale prioritization. He then gave an overview of the factors influencing the setting of priorities. He said that they are looking at the Yellowstone River as there has been nutrient development specific to that river. They are also interested in the Clark Fork River as there has been discussion about updating the existing nutrient TMDLs on that river. They are still looking at resolution to the Flathead Lake Nutrient Phase 2 TMDLs on the Flathead. Mr. Yashan mentioned that they have not done work in the Red Rock watershed yet, which is an area where they hope to start working. He also said that the Tongue and Rosebud watersheds are priorities. Additionally, the Musselshell is a priority area in which there is a lot of interest in implementation.

In addition to creating potential priority areas, Mr. Yashan said that they have been working with the Statewide TMDL Advisory Group (STAG) to come up with a five-year plan on where they are heading. EPA guidance, at the national scale, is looking for plans that extend out until 2022. So, the actions being taken are consistent with what EPA is looking for. Mr. Yashan said that while they have been doing a lot of future planning, the primary focus right now is still on completing TMDLs required to meet the 2014 deadline.

Discussing scheduling, Mr. Yashan explained that in an area that assessment work has not begun, sampling and monitoring will typically take one to two years. Following this, it will take one to three years for TMDL development. In an area like the Red Rock, they are looking at two to three years out to accomplish perhaps 40 TMDLs in the area. In a place like the Musselshell and Tongue, where they are still refining assessment methods, they are looking at longer time frames for TMDL completion. In other areas, such as the Madison, where there are complications with certain natural conditions, they may choose to not write specific TMDLs and to leave those aspects behind to be addressed at a later time. Mr. Yashan said that he would be happy to return to WPCAC to give an update as they move forward with their post-2014 TMDL planning process.

Mr. Smith mentioned that having 928 impairment causes in need of TMDLs after 2014 does not mean that 928 watersheds, tributaries, or creeks are affected. Mr. Yashan confirmed this. He said that he

estimates that this will probably include 300 waterbody segments, as there are many segments in each waterbody. He said that these may end up being encompassed in approximately 30 TMDL documents.

Mr. Salley asked what is happening on Montana's reservations. He asked if there are federal programs that assist with TMDL work on tribal lands. Mr. Yashan replied that the EPA works directly with the reservations, but he is unsure if there are any TMDLs that have been developed for tribal lands. Ms. Amy Steinmetz said that the tribes can get treatment as a state for water quality standards. Mr. Yashan added that for shared waters, such as Flathead Lake, there are great opportunities for collaboration.

Ms. Williams asked for a high-level description of where and how TMDLs are helping improve water quality. She also asked how effective the TMDLs are in improving water quality. Mr. Yashan said that TMDLs work well in areas where there are watershed groups and interested parties involved. He believes that TMDLs present a good starting point for generating awareness and getting folks involved. One post-2014 goal is making TMDLs more meaningful to the public as they create tools and sources of information for those who want to get involved in water quality protection. The overall effectiveness of the TMDLs, however, is tough to measure directly.

Ms. Steinmetz added that they have been talking about reclassifying the I Class streams. Muddy Creek is one of those streams. She said that the Sun River Watershed Group has been very proactive in implementing a TMDL here. Now Muddy Creek is at the point where it can be considered for improved reclassification. Ms. Steinmetz mentioned that it would be possible to bring in Mr. Robert Ray, supervisor of DEQ's Watershed Protection Section, to discuss some of the success stories in TMDL implementation that they have seen.

Mr. Yashan said that the U.S. Forest Service looks at TMDL documents to help justify and pursue improvements. The Bureau of Land Management also uses these TMDLs for justification, including things such as improved range practices.

Ms. Williams mentioned that Deep Creek has been a long established TMDL. She said that it is interesting to look back and assess the progress in areas where TMDLs have been in place for significant lengths of time. Mr. Yashan agreed that Deep Creek has a lot of work going on, and the landowners there are interested in continuing efforts.

Mr. Salley asked who brought the existing lawsuit against DEQ. Mr. Yashan explained that the lawsuit is against EPA. It was brought by five plaintiffs. Over the years, DEQ has worked primarily with three of these plaintiffs. Mr. Yashan said that he believes the plaintiffs are happy with what DEQ is doing, and they want DEQ to continue with a similar process in the future.

Chairperson Selch mentioned that Mr. Yashan had spoken about prioritizing Sheep Creek. He asked if Mr. Yashan would speak about the agency's plan for monitoring and gathering baseline data, and how TMDLs overlap with permitting. Mr. Yashan responded that they do not have a detailed plan laid out yet. They have talked with mining interests who are willing to collect metals data around the vicinity to update some of the impairment listings for Sheep Creek. He said that this is reflected in the Draft 2014 Integrated Report. They have not spent too much time on this other than discussing the potential for future collaboration. This is an area that STAG thinks is prudent to look into. Mr. Yashan said that there is more than just a mine here. The area has a pathogen listing, and there are a variety of activities occurring along Sheep Creek.

Public Comment –
There was no public comment.

Agenda Items for Next Meeting –
The next meeting is scheduled for November 7, 2014. Ms. Steinmetz said that she will be bringing to WPCAC a small rule package dealing with DEQ-7 updates.

Ms. Williams suggested discussing landfill closure procedures with regard to water at the next meeting. She mentioned that this is a current issue in Bozeman, and she asked if others would be interested in the topic. WPCAC members expressed interest in the subject. Ms. Williams asked if DEQ is involved with this at all. Mr. Urban said that DEQ's the solid waste program is involved with this general topic.

ADJOURN
Chairperson Selch moved to adjourn the meeting and Mr. Salley seconded the motion. All were in favor; the meeting adjourned at 12:38 p.m.

REFERENCED LINKS FOR MEETING MATERIALS
(Sites last updated 8/29/2014)

August 29, 2014 Agenda -
http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2014/August29/AGENDA_8-29-14.pdf

Agenda Links:
Approved Minutes from June 30, 2014 -
http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2014/August29/6-30-2014ApprovedMinutes.pdf

TMDL 101 & Status Update -
http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2014/August29/8-29-14_TMDL_WPCAC.pdf

MPDES MS-4 General Discharge Permit -
http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2014/August29/MS-4GenPemit.pdf

Berkeley Pit Presentation -
http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2014/August29/Butte_Mine_Flooding_Superfund_Site_8-14.pdf

Submitted by,
Sarah Norman 9/5/2014