

Water Pollution Control Advisory Council (WPCAC) Meeting

November 1, 2007 ~ 10:00 a.m.—12:15 p.m.

Capitol Building, Room 317, Helena, Montana

Call to Order

Chairman Dude Tyler called the Water Pollution Control Advisory Council meeting to order on November 1, 2007, at 10:00 a.m.

Council Members Present

Dude Tyler had council members introduce themselves for the record.

Council Members Present: Dude Tyler (Chair), Matt Clifford, Terry McLaughlin, Earl Salley, Karen Sanchez, Michael Wendland, and Kathleen Williams.

Department of Environmental Quality (DEQ) Personnel Present: Bob Bukantis (Council Secretary) Water Quality Planning Bureau (WQPB), Planning, Prevention and Assistance Division (PPAD); Ann Harrie, WQPB, PPAD; Michael Suplee, WQPB, PPAD; Paul LaVigne, TFAB, PPAD; Terry Campbell, TFAB, PPAD; Summer Marston, (Administrative Support) WQPB, PPAD.

A quorum was present.

Audience members included Rick Mulder, Montana Department of Agriculture; Christopher Carruthers, Public; Mary Allen, WETA; Nathan Kutil, HDR; John P. Shevlin, City of Conrad—Mayor; Travis Meyer, Morrison-Maierle, Inc.; Gary Brown, City of Conrad—Council; Becky Beard, BETA; John Rundquist, City of Helena; Tim Burton, City of Helena.

Approval of Agenda

Dude Tyler asked for additions or changes to the [agenda](#) and inquired if any members wished to turn their agenda item into an action-required item. Dude noted that there was an item on the agenda for 12:20 public comment, and he encouraged audience members to participate.

Approval of Minutes

Dude Tyler asked for additions or changes to the [minutes from June 28, 2007](#). Kathleen Williams noted a typo which should have read “wastewater treatment plant.” A motion to approve the minutes as corrected and seconded. The motion carried.

Dry Fork of the Marias Classification Change

Bob Bukantis led into the [PowerPoint presentation by Ann Harrie on the Dry Fork of the Marias River Classification Change](#). This topic was presented at the [June 28, 2007, WPCAC meeting](#), and Ann gave a quick review of that prior presentation. The proposed change is now limited to a B-2 classification to B-3 classification change. Ann’s presentation focused on the fish found and the temperatures, as those are the most relevant differences between the B-2 and B-3 classifications.

Fish and aquatic life were found throughout the Dry Fork of the Marias River and the unnamed tributary. The fish found included fathead minnow, spottail shiner, brook stickleback, brassy minnow, longnose dace, lake chub, and white sucker. Most importantly, no salmonids were found. Temperature data was presented, and the temperature of the stream exceeded the lethal limit for brown trout at 27.2° C. Rainbow trout have a lethal temperature of 24.3° C. The tributary supports uses such as industry and agriculture, and it has potential uses of recreation or drinking water. Water rights for the Dry Fork of the Marias River and the unnamed tributary date back to the early 1900s. To address Matt Clifford's concerns from the [June 28 meeting](#), as well as to make a stronger case, a reference site was selected in the same ecoregion, the Northwestern Glaciated Plains, as the Dry Fork of the Marias River. Woody Island Coulee was chosen as the site based on information provided from the Department's reference site database and the National Heritage Program, which had information about natural fish assemblages. In addition, there were photos of this site for comparison, and it is also classified as a B-3 classified water.

Michael Wenland asked if it was known what river Woody Island Coulee was a tributary to. Ann did not have that information with her. Matt Clifford asked if salmonids were anywhere in the Woody Island Coulee system. Ann stated no information was found regarding salmonids in Woody Island Coulee; however, the adjoining tributaries or systems around it are all classified as B-3. Matt Clifford stated that it seemed more reasonable to be looking for trout in the area near the Rocky Mountain Front than to be looking out in the middle of the prairie near Woody Island Coulee.

Ann went on to say that the fish assemblage was very similar in the Dry Fork of the Marias River and Woody Island Coulee. The Department suggests reclassification of this portion of the Dry Fork of the Marias River to a B-3, specifically between Highway 91 and Interstate 15, which is approximately 0.67 river miles. The City of Conrad is supportive of this use classification change, as they would receive a little bit of relief in ammonia requirements.

According to 40 CFR 131.10(g), there are six reasons for removing designated uses. Three of these reasons were considered pertinent to this case:

- Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met.
- Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses.
- Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

This study is not widespread; however, for a small community like Conrad it would make a difference in the operation of the new wastewater treatment plant.

Michael Wendland asked if the unnamed tributary was perennial, and Ann stated it was. She pointed out on the map (page 10 in the [PowerPoint presentation](#)) a specific area where water rights dated back to the early 1900s and listed it as perennial.

Dude Tyler invited the audience members from Conrad to come forth and speak to the council. John Shevlin introduced himself as the mayor of Conrad. He stated that the City of Conrad is not trying to pollute the water or downgrade a condition of Montana headwaters. Their biggest concern is the upgrade for their wastewater treatment plant. When he took office 1 year and 10 months ago, the upgrades were priced at \$1.7 million. At that time, they had a \$500,000 grant. They had STAG grant earmarked for the city: however, that earmark fell through. Currently, their plant is priced at \$3.5 million and rising. They are looking for whatever relief they can get for this small community. Earl Salley asked how this reclassification would help the city financially. Mr. Shevlin stated initially they were looking to lower their costs through the reclassification. Matt Clifford asked how much money this could save the city. Mr. Shevlin stated he was not sure how much it will save them in building the plant, but it could help them in the future.

Terry McLaughlin asked if they have recently received a new discharge permit that has more restrictions which put the city under a compliance schedule, and Mr. Shevlin affirmed this. Terry then asked if the compliance schedule is requiring the upgrades for the permit, and Mr. Shevlin affirmed this as well. Terry asked if the discharge permit limitations have been lowered for some of the parameters. Mr. Shevlin said he did not think they went down. At this time, Travis Meyer of Morrison Maierle, Inc., stepped forward and stated the major motivation is that the ammonia standards would drop significantly under a B-3 classification, since ammonia standards are tied directly to the classification. Terry McLaughlin then asked if the reclassification would help them meet their permit limitations. Mr. Meyer stated this would help somewhat; however, they would still need the mechanical plant. He stated they are mostly concerned about possible future ramifications. Terry McLaughlin asked where the compliance point is, and Mr. Meyer stated it is at the outflow and there is no mixing zone granted.

Kathleen Williams asked why the classification criteria were not applied to this section when the river was first classified in the 80s. Bob Bukantis stated that, at that time, these processes were not scrutinized to the extent they are now. Kathleen then asked for clarification of salmonid use. Ann Harrie stated salmonids and their young have to be able to propagate and survive there. Kathleen asked if they had attempted to document conditions in 1955. Ann stated the Department had dug into this, listing numerous examples, but no information was found. Kathleen Williams stated it might be helpful to have the attempts at more research included in the documentation. Matt Clifford asked if anything other than fish assemblages, such as water temperature data, was considered in the reference site. Ann stated there was no information available on that. Mike Suplee stated that the types of data available on the reference site network are quite variable. He said there may be a minimal amount data available, but he was not sure at this time.

Dude Tyler asked if there was any discussion. Earl Salley asked if the flow from the wastewater treatment plant is zero at times and if they currently have a lagoon, and Mr. Meyer indicated yes to both. Earl Salley asked if the outflow would be constant with the mechanical plant or intermittent. Mr. Meyer stated there would be continuous flow.

Matt Clifford discussed his concerns about setting a precedent with this change, especially since it appears that this classification change will not really end up saving the City of Conrad much money. He stated he thinks there is a fairly good likelihood that many streams along the Rocky Mountain Front at one time may have supported cold-water fisheries before they were altered by human activity. His concern is not so much for this stream, but other streams around the state that might be in the same situation.

Ann Harrie stated that the Use Attainability Analysis for this particular water body was requested by the City of Conrad. Our data suggests that this portion of the Dry Fork of the Marias River was misclassified to begin with. For this portion to support salmonids now or in the future appears to be unrealistic. The Department feels that this is a good case study for the first UAA in recent years. Matt stated he was questioning whether it was not capable of supporting cold-water fisheries in 1955 after it had already been altered by human activity, things the Water Quality Act is supposed to fix, or could it have supported that use before it was altered? He also commented that the six criteria to reclassify do not really seem to apply to this case. Ann Harrie stated that the criteria “*Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses*” was the main rationale to go forward.

Karen Bucklin-Sanchez was wondering if the benefits of the E-2 classification, presented at the [June 28 WPCAC](#) meeting, would have been more helpful. Ann Harrie stated it would have basically removed the ammonia limits from the discharge. However, the presence of fish clear up to the discharge pipe eliminated that as an option. Karen remarked that if it were an E-2, it would have saved the city more money, but now it appears that is not even an issue and the focus is now on reclassification from B-2 to B-3.

Gary Brown, a member of the City Council from Conrad, came forward to comment. He stated that one motivating factor was their new discharge permit which has very stringent standards for the city to meet. This unnamed tributary is a 0 cfs stream, and there is no mixing zone. They are required to take their tests at the discharge point, even though it flows into the Dry Fork of the Marias River. The difference between B-2 and B-3 will not be as much help as they had hoped for, but it could be helpful in the future.

Dude Tyler asked for motions for a recommendation to proceed.

Terry McLaughlin made a motion that the Council endorse the recommendation of “the Department to bring the proposed action to the Board as proposed without additional comment.” Earl Salley seconded that motion. Dude Tyler asked for discussion. Kathleen Williams expressed concern that sending it forward with no comment would not reflect the depth of consideration that WPCAC has undertaken, and gave a potential substitute motion: “Given the information that the Council was provided, we do not oppose this moving forward, but urge the Board to carefully consider the precedential implications and whether any additional information would be helpful related to the potential of this stream to support salmonids. Matt Clifford seconded the proposed amendment to the motion. Terry McLaughlin rephrased the motion to approve the action with Kathleen’s amendment. Karen Bucklin-Sanchez stated that she wished to abstain from voting to

avoid a conflict of interest. She is employed by USDA who received an application for funding from the City of Conrad for this facility. Matt Clifford stated he felt there was not enough data to go forward because he was still questioning if this stream ever support salmonids and was concerned about the lack of data.

Dude Tyler asked for the Council to vote. Earl Salley voted for, Michael Wendland voted for, Kathleen Williams voted for “not opposing” rather than “to support,” Matt Clifford voted against, and Terry McLaughlin voted for. A quorum was present, and the motion carried.

DEQ-7 Changes

Ann Harrie then gave a [PowerPoint Presentation on proposed changes to DEQ-7](#). The proposed changes to DEQ-7 addresses eight pesticides (Azoxystrobin, fungicide; Acetochlor herbicide; Imazamox, herbicide; Imidacloprid insecticide; Triallate, herbicide which is a possible human carcinogen; Pinoxaden, herbicide; Triticonazole, fungicide; and Hydroxy Atrazine, herbicide) and metabolites (the breakdown product of the pesticide which usually are equally or less toxic than the pesticide, but can occasionally be more toxic) which were recently detected in Montana waters. The Montana Agricultural Chemical Ground Water Act states that, if pesticides are detected in Montana groundwater and there is not already a standard in place, Montana has to come up with a standard. The Department initiated assistance from the EPA, and the EPA toxicologist came up with health advisories for all the pesticides and metabolites.

In addition, the revised DEQ-7 adopts EPA’s 304(a) Criteria for Aquatic Life to provide for the protection and propagation of aquatic life and recreation for Diazinon (an insecticide which is banned) and Nonylphenol (a cleaning agent). Both chemicals are very toxic to aquatic life.

Another proposed amendment to the DEQ-7 is to update the reference in DEQ-7 specifying the method of Toxic Equivalency Factors (TEFs) used for dioxins and congeners to reflect those from the World Health Organization.

Finally, a proposed amendment to the DEQ-7 is to delete footnote 29 and specify in the columns next to arsenic that 10 µg/L is the numeric surface and ground water quality standard for that parameter.

Terry McLaughlin asked if the interim standards would be modified at a later point. Ann said they likely would not; they would be permanent standards. Terry questioned the use of the word “interim,” and Bob Bukantis clarified that “interim” implies that the EPA has not yet developed 304(a) criteria or specific standards for those pesticides. However, under the Montana Agriculture Chemical Groundwater Protection Act, the state is required to develop an “interim” standard once the chemicals are detected in the groundwater. Matt Clifford made a motion to recommend this go to rulemaking. Kathleen Williams seconded. All Council members voted in favor of the motion, and motion carried.

Set Date for Next WPCAC Meeting

Dude Tyler opened the floor for recommended dates for the next WPCAC Council meeting. Bob Bukantis stated that the BER would not be setting its 2008 calendar until November 30, 2007. The BER has meeting dates that will be proposed at that time. The proposed dates for their first

meeting are January 18, January 25, and February 1 of 2008. Given WPCAC statutory requirements, Bob proposed December 20, 2007, at as a tentative date. This date was approved by the Council. Michael Wenland asked if the WPCAC could meet at a later date if the BER chooses one of the later dates for their meeting. Bob stated agenda items for that meeting might include setting the calendar for 2008. This meeting could potentially be done with a conference call. Terry McLaughlin suggested a January 10, 2008, as a tentative meeting date if the December 20, 2007, meeting is cancelled. Terry requested clarification of the statutory requirement for the benefit of Council members. Bob stated that, if the Department is going take rulemaking to the BER, it has to come before WPCAC first.

Nutrient WQS Update

Mike Suplee (DEQ) gave a short presentation inviting the Council's questions or opinions regarding Numeric Nutrient Standards as the Department moves forward. Mike first reviewed events that have happened since his [March Presentation](#).

At the end of June, the Department received further analysis from a consultant on the cost/affordability of trying to meet the Numeric Nutrient Criteria. The Department had one [evaluation completed which was available with this meeting's agenda](#). The Department attempted to look at incremental cost increases that might correspond to incrementally smaller concentrations of nutrients. The data collection was finished for the Yellowstone Project that was presented at the [March meeting](#). This was a site-specific project to develop Numeric Nutrient Standards for the lower Yellowstone using a modeling approach. The modeling phase will commence this fall. In addition, the Department is also working on how to evaluate data relative to standards. If the Board were to adopt the Numeric Nutrient Standards, there must be some way to determine how much information is needed to compare to the standards to see if the criteria is being met. The Department is still working on the affordability issue. The Department is planning to put together a committee to assess what is affordable and to narrow the focus of the committee. There is no date set for rulemaking at this time.

Terry McLaughlin stated he will volunteer for the affordability committee. Matt Clifford also volunteered. Karen Bucklin-Sanchez would like to volunteer as well, and will follow up on that. Earl Salley also volunteered.

Terry asked about the locations the Department is developing the criteria for. Mike Suplee stated the criteria are for almost all regions, with the exception of large rivers. Level 3 and Level 4 ecoregions will have different sets of numbers applied because individual zones have unique nutrient characteristics. Most of the numbers for the western part of the state have virtually identical numbers to those now in place on the Clark's Fork. In 2006, a public opinion poll was carried out, and it was determined that the nuisance algae levels that are currently set on the Clark Fork River were the same as those identified by Montanans as well as visitors to Montana. In the eastern part of the state, the numbers are going to be higher due to intermittent flows, higher turbidity, etc.

There were no further questions or comments from the Council.

Wastewater Reuse

Terry Campbell (DEQ) gave a [PowerPoint presentation on Wastewater Reuse](#). Other states have taken steps to develop wastewater reuse standards. In 1996, reuse standards were adopted to allow agricultural land application across Montana. Many small communities in Montana have gone to land application of their effluent to utilize the nutrients for beneficial reuse. However, there are many other ways that wastewater can be reused.

Reuse is the beneficial recycling of treated wastewater where otherwise an alternate groundwater or surface water source would be used. Reuse is beneficial because it is an environmentally sound concept, may be the least cost alternative, and has been proven safe if performed prudently. It may also be beneficial in relation to TMDLs and permit compliance, or where there are limited resources and/or no water rights available. New technologies have ushered in very advanced levels of treatment. Some quality effluents exceed EPA drinking water standards. Reuse can be done by municipal governments, districts, homeowner associations directly or through contracts or sales of reuse water; private entities for private enterprise, or environmental enhancements; and individual homeowners with onsite systems (graywater reuse). While the primary users of water throughout the U.S. are the agriculture industry and the thermoelectric power industry, the Department is developing standards for reuse in all areas.

Different applications include agriculture irrigation for both non-food and food crops; landscape irrigation such as golf courses, parks, cemeteries, residential lawns; silviculture irrigation; snow making for skiing or winter storage; industrial process water; construction watering for dust control, compaction, washdown, concrete batching; groundwater recharge; surface water augmentation; aesthetic ponds and wetlands; and commercial toilet flushing. Michael Wendland asked if groundwater recharge was referring to injection. Terry stated it was typically injection, but could be Infiltration/Percolation (I/P) beds as well.

Montana currently has reuse sites. There are approximately 60 agricultural land application systems, six golf course irrigation systems, three approved silvicultural application systems, one approved snowmaking system (which has not been built), and one tree farm pilot project with hybrid poplars in Missoula.

There are acute risks, such as pathogen exposure including airborne and direct contact exposure and chronic risks such as pharmaceuticals, organic compounds, and metals. In addition there are environmental concerns, such as ammonia, nutrients, endocrine disruptors, organic compounds, and metals. Matt Clifford asked if most places disinfect the pathogens already. Terry stated they do, but maybe not to the standards the Department is looking at for reuse applications. Matt asked about setbacks, and Paul LaVigne stated the numbers vary. Karen Bucklin-Sanchez asked if, since graywater sometimes has higher coliform counts than sanitary wastewater, the disinfection standards for on-site use of graywater was being looked into. Terry stated that there is not really the ability to build in a disinfection requirement at the residential level, and that DEQ is concerned with that potential risk and is looking at graywater reuse standards which only allow for below ground surface dispersion.

Currently the standard has been drafted by DEQ and is being reviewed by different sections. At this time, the draft is quite large, and the Department plans to pare it down to make it more

usable. It is not decided yet if it will start out as a guidance document, or if it will be a rule. Dude Tyler asked about Terry's contact info, and Terry gave his number as 444-7343 and email is tcampbell@mt.gov. Kathleen Williams asked about DEQ nexus points in relation to this topic. Terry stated one of the internal DEQ challenges will be coordination with the permitting section at DEQ, so communities are given leeway if they are going in this direction. Kathleen Williams asked if the standards were all applied to design standards. Terry stated this was correct.

Agenda Change

An agenda change to move the Coal Bed Methane back (to allow Roger Muggli time to arrive since he was having travel delays) was suggested and approved.

Public Comment

Dude Tyler opened the floor to public comment. No audience members came forward.

Council Feedback on Electronic Delivery of Meeting Materials

Dude Tyler asked the Council for feedback on the online delivery of meeting materials. Kathleen Williams asked if the prior meeting minutes could be made available with the current meeting materials. Summer Marston stated this would be done. Council members commented favorably and were pleased by the online material delivery, and particularly complimented Summer Marston for the fine work she has been doing for the Council.

Agenda Items for Next Meeting

Dude Tyler opened discussion for agenda items for the next WPCAC meeting. Bob Bukantis suggested the calendar, as well as reviewing the WPCAC chair position. Bob also stated Bonnie Lovelace has a Fee Rule that is pending, but was unsure if it would be ready for the next WPCAC meeting.

CBM Update

Bob Bukantis gave some background on Coalbed Methane update. In 2003, the Board adopted standards for EC and SAR in the Powder River Basin in Montana. In the spring of 2006, the Board also acted to modify how those standards were handled for purposes of nondegradation. In July of 2006, Pennaco Energy, Inc., with Fidelity as interveners filed a lawsuit challenging both of those Board actions in Montana's 22nd Judicial Court in Bighorn County. The State filed for summary judgment in an attempt to bring about a fast conclusion. The parties met in court on July 2, 2007. On October 17, 2007, Judge Blair Jones issued his Order on Motions for Summary Judgment. The State with Northern Plains Resource Council and Tongue River Water Users as interveners won on all counts. The State was also challenged in Federal Court in Cheyenne, Wyoming, on the same standards by industry and the State of Wyoming. Judge Bremmer had issued a stay that expired in August to allow the parties to negotiate a border agreement. That is an ongoing process, and the stay has been extended. Matt Clifford asked if the plaintiffs have appealed, and to Bob's knowledge, they had not. Kathleen Williams asked if that ruling would have any effect on the federal case. Bob was not sure, but suggested that it sends a positive message from Montana's perspective.

Adjournment of the Meeting

Dude Tyler adjourned the meeting at 2:45 p.m.