APPENDIX E

RESPONSE TO COMMENTS

Years 1999 and 2000

RESPONSE TO COMMENTS
PEND OREILLE/CLARK FORK SUB-BASIN ASSESSMENT AND
TOTAL MAXIMUM DAILY LOADS

December 27, 1999
Revised April 17, 2000

The public comment period for this TMDL was November 18 thru December 17, 1999. It was advertised two different times during the comment period in the Coeur d'Alene Press and the Bonner Dailey Bee. Copies of the document were distributed to the Bonner County Library and those groups and individuals who requested copies. The Panhandle Basin Advisory Group and the Tri-State Water Quality Council were kept informed of the progress of the TMDL and provided a preliminary draft of the document. Forty-nine written comments were received during the comment period.

Public comments concerning the Pend Oreille Sub-basin Assessment and TMDL focused on two topics, first commenters felt that the Pend Oreille Lake should not be de-listed, and secondly, that the Clark Fork River TMDL should not be delayed until the year 2004 for its completion. Response to these comments are as follows:

Pend Oreille Lake De-listing

The problem assessment for Pend Oreille Lake concluded that the lake does not qualify for a TMDL. EPA Region 10 requires that threatened waters must be expected to exceed water quality standards due to declining water quality within the next two years. Since DEQ could not foresee that the lake would violate water quality standards within this time frame, a TMDL was not written for the lake. It was noted in the problem assessment that the lake water quality was expected to degrade, however, over a much longer time period than two years. If EPA reverses this policy and allows a preventative TMDL to be written for waters that are not immediately threatened, DEQ will write a TMDL for the lake. DEQ supports the efforts of the Tri-State Council in establishing a voluntary nutrient target for the open water area of the lake.

Clark Fork River TMDL

The Clark Fork River problem assessment concluded that due to lack of data and conflicting data, further work on this assessment will be deferred until the year 2004. It is anticipated that more data will be available by that time to base the TMDL decision on. Commenters urged the DEQ to establish a TMDL now for the river to protect Pend Oreille Lake from further metals pollution. The urgency of establishing this TMDL is due to the proposed Rock Creek mine, which, if permitted, would discharge metal bearing water into the Clark Fork River near Noxon, Montana.

In response to the concerns over the Rock Creek mine, the Idaho DEQ has worked intensively with the Montana DEQ over the last six years in developing an EIS and discharge permit which would be protective of Idaho waters. Neither document has been finalized to date. Montana's draft discharge permit contains a reopener clause which specifically addresses any future TMDLs established by Idaho. The re-opener clause requires that Montana immediately revise the discharge permit to conform with the downstream TMDL requirements. Because of this stipulation, a metals TMDL established for the Clark Fork River in Idaho in year 2004 will have the same effect as a metals TMDL established in 1999. The added benefit is that there will be more data available in 2004 to base a TMDL decision upon.

Comments from the Rock Creek Alliance include reference to 1997 USGS metals data. DEQ is not aware of such data. The USGS stopped metals sampling in 1996 at the Cabinet Gorge station. Traditional sources of information from USGS were consulted during the preparation of the problem assessment and no metals data from 1997 was encountered. If more data are provided DEQ will include it in the problem assessment.

The Alliance also would like DEQ to pursue more frequent monitoring of the Clark Fork. DEQ has recently submitted a proposal for initiating an intensive metals monitoring study at Cabinet Gorge. If funded, DEQ would contract with USGS to do the sampling using ultra-clean methods and depth integrated, bank to bank sampling techniques. This monitoring could determine what flow regime and upstream activities cause peak metals loading at Cabinet Gorge and if this loading violates water quality standards. This study proposal is competing with other similar proposals for funding statewide. There is no assurance that it will be funded, however, DEQ will continue to seek other avenues of financial support for the study.

In another comment, the Rock Creek Alliance questions the validity of a statement presented in the problem assessment that quotes a letter from EPA Region 8. The statement made by EPA Region 8 was that the Rock Creek mine would not violate Idaho water quality standards. To read more about Idaho DEQ's remaining concerns and requests for more information concerning the Rock Creek proposal, contact our office in Coeur d'Alene for copies of the most recent correspondence.

Commenters expressed concern with the discharge of phosphorus and possibly nitrogen from the proposed Rock Creek mine and their effect on the biotic community of the lake. The draft discharge permit assumes that the Idaho state line is at the edge of the mixing zone rather than approximately 21 river miles downstream. Over this 21 miles the river's plant life will assimilate (use up) the biologically available phosphorus. Modeling this nutrient uptake in the river was one of the studies Idaho encouraged Montana to undertake for development of the EIS.

Idaho has also encouraged Montana to conduct an analysis of potential effects of increased nitrogen in the Clark Fork River and Pend Oreille Lake. In the past, it was thought that nitrogen would have no effect on the lake because it was believed to be phosphorus limited. Recently, this phosphorus limited theory was discussed at the Tri-State Council's Voluntary Nutrient Target Meeting held in December 1999. The scientists at that meeting, using all available data on the Lower Clark Fork River and Pend Oreille Lake, determined that there was a significant element of uncertainty concerning the effects of increased nitrogen discharge to the lake. The most conservative approach to protecting lake water quality would be to set a nitrogen-

phosphorus ratio action level. The State would then be required to act when the ratio approaches values that are indicative of a nitrogen limiting situation.

One potential consequence of not limiting nitrogen sources might occur in the near shore areas. As the near shore areas become increasingly phosphorus rich due to land use practices and development, phosphorus would no longer be the limiting nutrient for plant growth. Instead nitrogen becomes the limiting nutrient and if it has been allowed to increase in the water column, it will be utilized to create more aquatic plant biomass. The effect of increased nitrogen on plant diversity and composition is also unknown.

Metals may also be assimilated as the water flows towards the border. Metals bound to sediments may sink to the bottom or become neutralized due to the buffering capacity of the river water. The fate of the metals from the Rock Creek discharge is not discussed in the EIS or draft discharge permit. Idaho encourages Montana to investigate the expected fate of metals as they are discharged from the Rock Creek mine.

The concerns the public has with the proposed Rock Creek mine are valid and the outcomes of these remaining issues may have an effect on any future discharges permitted by Montana. However, Idaho DEQ feels that the protection afforded by the discharge permit re-opener clause and the expectations of future metals monitoring data are sufficiently strong reasons to allow the Clark Fork River TMDL to be finished in the year 2004.

General Comments

1. Comment: A reference was made to EPA's "Water Quality Criteria 1972" (blue book) in the Pend Oreille Lake problem assessment. EPA is developing numeric standards for nutrients and these values should be used rather those in the blue book.

2. Comment: DEQ should be monitoring more intensively in both the lake and river.

Response

At the time the problem assessment was written, the blue book offered the most conservative values of phosphorus concentrations for lakes and reservoirs, from 10 to 30 ug/l total P. Gold book value was not to exceed 25 ug/l total P. At that time, there were no other recommendations for nutrient concentrations available from EPA. Most guidance documents and policy statements from federal and state agencies are just now being developed. New funding sources are now being developed to collect data necessary for TMDL development. Future TMDLs will benefit from these changes. In the meantime, approved policies, existing guidance documents, traditional funding sources and water quality standards will guide TMDL development.

3. Comment: The Clark Fork River and Pend Oreille Lake should be listed for dissolved gas. The Clark Fork River problem assessment should address habitat alteration, flow alteration and dissolved gas rather than just metals.

Response

Idaho's draft 1998 303(d) list includes a listing for the Clark Fork River as impaired due to dissolved gas. Pollutants being addressed in this Sub-basin Assessment are in accordance with the Idaho TMDL Development Schedule. Pollutants added to this Schedule will be dealt with

at a later time.

4. Comment: The BURP/WBAG process has not been validated by EPA and it should not be used to de-list Clark Fork HUC tributaries.

Response
The BURP/WBAG process is currently being revised by DEQ. Once the revision is final, support status calls will be made using the new WBAG. Since action on the Clark Fork River and its tributaries are being deferred until 2003 and the WBAG process is being changed, it would be premature to delist any Clark Fork tributary at this time.

5. Comment: Caribou Creek, Grouse Creek, Granite Creek, Gold Creek and Fish Creek should not have been de-listed based upon the BURP/WBAG support status conclusions.

Response
The WBAG process is DEQ's method of assessing the support status of waterbodies. Until that process is changed, it remains the approved method of determining if a stream is impaired or fully supportive of its beneficial uses. Streams may be re-assessed using the new WBAG process to determine if their support status calls have changed as a result of the new process.

6. Comment: The Pend Oreille River should have sediment and nutrient TMDLs written for it.

Response
The Pend Oreille River problem assessment summary indicated that Idaho has no method to determine the support status of cold water biota in this river. Lacking an assessment method and any data that indicate that cold water biota is impaired, a TMDL for sediment will not be written. Once DEQ develops an assessment process the river's support status will be determined. Based on research from other areas, the presence of a dam on the river may be the overriding factor in governing water quality of the Pend Oreille.

Year 2000 Response to Comments for Gold Creek (tributary to Pend Oreille Lake), Caribou Creek (tributary to Pack River) and Grouse Creek (tributary to Pack River) and Fish Creek Total Maximum Daily Loads.

One comment was received during the December 13, 2000 – January 12, 2001 public comment period.

Response to Kootenai Environmental Alliance Comments

The KEA comments focused on concerns that clearcuts and other timber harvesting practices are increasing peak flows and thereby destabilizing the streambed and banks of Caribou, Grouse and Gold Creeks. In addition, specific questions were asked about the calculations and information provided in the TMDL documents. Our response is as follows:

1. The calculation for total sediment loading includes forest and county roads, road failures, fire, unstocked forest, pasture land, highways and mass wasting (both natural and man caused), not just roads. Refer to the spreadsheets at the end of each TMDL for this information. Acreages and sediment yield calculations for each TMDL are correct. Note that sediment yield for "Unstocked Forest", "Highway" and "Double Fires" land uses are added to the basic land use sediment yield to account for these special conditions. For example Gold Creek has 6,592 acres of forested land and all of that acreage has been either burned once or is unstocked forest. Since there is an increase in sediment from unstocked or burned sites an additional 0.017 tons/acre/year is added to the 0.038 tons/acre/year background value for forested land.

2. Problems associated with flow or habitat have not been addressed since Idaho maintains that these are not pollutants as defined by §502(6) of the Clean Water Act. As you suggest, it is possible that reducing the level of regulated pollutants in these streams may not completely restore beneficial uses without addressing flow or some other parameter such as the lack of large woody debris. As yet, there is no solution proposed for this situation. Temperature TMDLs will be written when Idaho revises its temperature rules. At that time canopy cover and runoff characteristics can be evaluated. Your ideas will be added to the problem assessment portion of the TMDLs under the heading "Data Gaps For Determination of Support Status".

3. In reference to your concerns about North Gold and West Gold Creeks, they are not on the 303(d) list and therefore not addressed in the problem assessment. West Gold does flow into the lower end of Gold Creek and could influence water quality in this short section. In response to situations such as this, DEQ staff met with the Panhandle National Forest staff January 9, 2001 to inform them of the water quality rules that apply to 303(d) listed waters and their tributaries. The Forest agreed to meet with their District staff to pass along this information to insure that work proposed in impaired watersheds meets the rules contained in the Idaho water quality standards.

4. The best available data and information concerning these watersheds were solicited from the land management agencies and other sources. It would have been useful to conduct our own surveys for data we felt were outdated or incomplete, however, due to time and funding restrictions it was not possible to do so. Recent timber sales may not be reflected in USFS data.

5. The WATSED modeling work was done by the Idaho Department of Lands. For information concerning the calibration of the model you can contact Tom Dechert at (208)799-4370.

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