APPENDIX H – RESPONSE TO PUBLIC COMMENT

Two comment letters were received during the public comment period. Comments were received from the Montana Chapter of the American Fisheries Society (MCAFS) and the Clark Fork Coalition (CFC). Excerpts of the comments and DEQ's comment responses are presented below. The original comment letters are held on file at DEQ and may be viewed upon request.

Montana Chapter of the American Fisheries Society

Comment #1: Although the Little Blackfoot River watershed has been considered core or critical habitat for bull trout since the 1990s, a recent review removed the critical habitat designation in 2010 (W.A. Fredenberg US Fish and Wildlife Service, personal communication)…Nonetheless, in preparing this TMDL, EPA and DEQ were under the assumption that the watershed was designated critical habitat for bull trout, and as such should have considered the thermal requirements of this federal threatened species in developing a description of the impairment status and the restoration approach. Likewise, westslope cutthroat trout occur throughout the watershed and are highly vulnerable to thermal pollution…Although the Little Blackfoot River watershed is no longer designated critical bull trout habitat, we contend that previously occupied habitat in the basin should meet suitability criteria to allow for recolonization or restoration in the future.

> **DEQ Response to Comment #1:** The sentence in **Section 2.2.2** citing 50 CFR Part 17 from 2005 that noted the Little Blackfoot River is designated as critical habitat for bull trout has been removed from the document. The document still states that bull trout and westslope cutthroat are native to the watershed (among other species). Regardless of species status designations, both TMDLs and beneficial use support determinations (i.e. 303(d) listing decisions) are designed to be protective of all beneficial uses, including the most sensitive. Regarding thermal considerations, however, there are currently no waterbodies in the Little Blackfoot River watershed listed for temperature impairment and as stated on page 1-1, "Both Montana state law (Section 75-5-701 of the Montana Water Quality Act) and section 303(d) of the federal CWA require the development of total maximum daily loads for all impaired waterbodies when water quality is impaired by a pollutant." Therefore, no temperature TMDLs are currently necessary and considering the thermal requirements of fish within the watershed is outside the scope of this document.

Comment #2: The MCAFS's past comments on TMDLs and the TMDL process addressed the DEQ's (and now the EPA's) approach and apparent unwillingness to address key water-quality constraints that harm native and wild fish, particularly the federal threatened bull trout and westslope cutthroat trout. Specifically, we are concerned that despite having substantial information implicating thermal loading as a constraint on these temperature-sensitive species, the TMDL does not develop a plan to restore water quality with respect to this major constraint on sensitive native fish species. We are encouraged that the TMDL acknowledged the role dewatering plays in limiting water quality; however, we are disappointed that temperature and flow limitations were given such limited treatment in the document.

> **DEQ Response to Comment #2:** As mentioned in Response #1, addressing temperature is beyond the scope of the document. Temperature is acknowledged as an issue in **Section 8** that should be given additional consideration and all pollution listings, including low flow alterations, are also discussed in **Section 8**. Additionally, irrigation BMPs are discussed in the discussion of

restoration approaches (**Section 9.4.5**). However, using all available data to make impairment determinations is a responsibility of the Monitoring and Assessment Section at DEQ.

Regarding temperature values and the amount of available data, exceeding a temperature threshold alone does not constitute a violation of Montana's temperature standard, which identifies an allowable departure from naturally occurring temperature conditions. Naturally occurring temperatures within a water body may be above fish thresholds, so although thresholds are typically considered, they cannot be applied as standalone conditions that have to be met or as a solitary line of evidence for determining compliance with Montana's temperature standard. Evaluating temperature impairment typically necessitates modeling, which requires not only temperature data but also shade data, corresponding flow measurements, and information on human sources (e.g. alterations to channel form and irrigation management). The assessment process is currently being revised to more explicitly incorporate temperature thresholds but must still be structured to assess compliance with the state standard, which relates to the naturally occurring condition; the public will have an opportunity to provide comments.

Comment #3: We are greatly concerned that DEQ has removed references to "pollution" such as dewatering from its current versions of previous 303(d) lists despite the obvious causality and relevance to a host of pollutants. The DEQ was aware of the potential for water temperatures to impair beneficial uses of streams in the Little Blackfoot River watershed beginning with its 1996 303(d) list, and our archived version of the 1996 303(d) list shows dewatering among the causes of impairment for much of the Little Blackfoot River and several of its tributaries.

DEQ Response to Comment #3: As noted in the document and in **Appendix A** (List of Impaired Waters) of the 2010 Integrated 305(b)/303(d) Water Quality Report, several waterbodies in the Little Blackfoot River watershed are listed by DEQ as impaired by low flow alterations (i.e., Little Blackfoot River, Snowshoe Creek, and Threemile Creek). The reporting format has changed since the 1996 303(d) List, but Montana still evaluates waterbodies and makes impairment determinations for both pollutant and non-pollutant causes. Following EPA guidance, DEQ has included the biennial 303(d) list as part of the Integrated 305(b)/303(d) Water Quality Report since the 2002 reporting cycle. Starting in 2004, EPA required states to assign assessed waters to categories, which allows for better tracking of waters impaired by pollutants versus pollution (as well as other things).

Therefore, Montana DEQ now more strictly adheres to the definition of the 303(d) list and submits a list containing only pollutant-impaired waters to EPA as part of the 303(d) list portion of the Integrated Report. As mentioned above, DEQ has and will continue to evaluate impairment for pollution causes. Because of the common linkage between pollution and pollutant causes, both the assessment and the TMDL development processes identify those linkages when possible. Since 2008 and moving forward, the Integrated Report has an appendix for those waters requiring TMDLs (**Appendix B**) and an appendix containing the list of all impaired waters (**Appendix A**). Due to sufficient credible data requirements and/or new data, some listings have changed in the Little Blackfoot River watershed since the 1996 303(d) list, but as discussed within this document and listed in **Table A-1**, numerous pollution impairment listings remain. The 2010 Integrated Report, 303(d) listing information, and previous listing cycle information are available at the Clean Water Act Information Center website (http://cwaic.mt.gov).

Comment #4: A review of water quality standards attainment record indicates that DEQ ostensible reviewed several sources of information containing temperature data for the Little Blackfoot River, yet no mention of temperature was made in the data matrix. The absence of temperature data in the matrix stands in stark contrast to the abundance of temperature data recorded at the Little Blackfoot River U.S. Geological Survey gage station near Garrison as well as a substantial amount of temperature data in the STORET database collected by DEQ in the Little Blackfoot River watershed. Despite this, the DEQ refers only to a limited 2007 dataset (**Section 8.2.1**).

We contend that during the 2000 and subsequent reviews, reviewers should have analyzed data from the USGS to conform with state law requiring DEQ to use all available data. Data collected at the USGS gage near Garrison include monthly recordings of water temperature beginning in 1983 and extending through 2010.

DEQ Response to Comment #4: As mentioned in Responses #1 and #2, addressing temperature impairment is outside the scope of this document and review of all available data to make a temperature impairment determination would need to be performed by the Monitoring and Assessment Section at DEQ. The reference in **Section 8.2.1** was not meant to be an inclusive list of available temperature data and was mentioned because that dataset includes temperature measurements collected every 30 minutes as well as flow measurements and information regarding the irrigation network, all of which are typically necessary for making an impairment determination. DEQ is aware that there is quite a bit of additional temperature data for the Little Blackfoot River and several tributaries, and while the sentence in **Section 8.2.1** was not meant to be an inclusive list of available temperature data, the sentence has been edited to reference USGS and FWP data as well.

Due to the cyclical nature of water quality monitoring as well as staff, budget, and time constraints, all waterbodies are not fully assessed for beneficial use support during every 303(d) listing cycle. Most waterbodies in the Little Blackfoot River watershed, including the Little Blackfoot River, have not been formally assessed for beneficial use support since the 2000 303(d) listing cycle. Thus, data collected since that time is not reflected in the listing status unless assessment work was necessary for existing 303(d) listed pollutants covered within this TMDL document. Additionally, due to submission requirements for each 303(d) list, the cutoff date for incorporated data may not coincide with the listing year (e.g., 2011 for the 2012 listing cycle). Changes in both the listing process and to the assessment database resulted in an update to the file records after 2000, but this work did not constitute a formal reassessment. The available information is not incorporated into any impairment determinations because the type of formal assessment that could have resulted in an impairment determination has not occurred since 2000.

During each listing cycle, hundreds of stakeholders from all over Montana are solicited for recent data. In addition to data and information received during that solicitation, DEQ uses data collected from its own monitoring efforts and data collected by other organizations that operate monitoring programs and store their data in publicly accessible databases. In addition to the EPA STORET database, databases operated by the United States Geological Survey and the Montana Bureau of Mines and Geology contribute a significant amount of data to water quality assessments. The result of all these combined data sources is a collection of data and information of varying technical rigor that must be reviewed as an assemblage to determine

whether sufficient credible data exists to proceed with the assessment. Even if a water body is not reassessed during a listing cycle, all data received during this process are added to the assessment file to be incorporated into the next formal assessment. Queries of data from publicly accessible databases such as STORET and NWIS are typically not performed for every waterbody for each listing cycle but all of that information is compiled during the next formal reassessment.

Comment #5: Of course, dewatering is not the only factor influencing thermal loading in streams. Maintaining natural channel geometry and riparian function can minimize thermal loading potential, and this TMDL plan does address these critical components of a health stream in its sediment TMDL. Nonetheless, if the Little Blackfoot River watershed was core habitat for bull trout, this plan would insufficiently restore water quality to protect this threatened species. Likewise, thermal alterations likely limit westslope cutthroat trout, and by ignoring the proven relationship between dewatering and thermal loading, this plan does not protect this species of special concern.

DEQ Response to Comment #5: DEQ agrees that channel form and riparian health, which are both addressed in this document, are also important factors in minimizing thermal loading. TMDLs do not focus on protecting a certain species but are written to be protective of all beneficial uses and meet water quality standards as they apply to the pollutants for which each TMDL is developed. It is important to recognize that TMDL documents do not aim to be a cure-all for all problems within a watershed and are not self-implementing. The document addresses all identified pollutant water quality impairments, but this does not necessarily mean that no additional impairments remain. Furthermore, the restoration strategy in the document is only intended to apply to the known impairments and is a general strategy, not a detailed comprehensive restoration plan.

DEQ agrees that similarly to other pollutants like sediment and nutrients, dewatering can greatly affect thermal loading. As discussed in Response #2, low flow alteration impairments as well as irrigation BMPs are discussed within the document, and although temperature is outside the scope of this document, temperature impairment evaluations are complex, must consider the naturally occurring condition, and a single line of evidence such as low flow cannot be used as the listing basis.

Additionally, the integration of flow into a temperature TMDL or any TMDL within Montana has to take into consideration the "nonimpairment of water rights" section (75-5-705) of the Montana Water Quality Act, where it is stated that nothing within the water quality assessment and TMDL development part (Part 7) of the Montana Water Quality Act "may be construed to divest, impair, or diminish any water right recognized pursuant to Title 85." Nevertheless, during temperature TMDL development Montana DEQ does evaluate the potential for increased streamflows via improved water use practices, but only under conditions where the TMDL and associated targets to satisfy water quality standards cannot be construed to divest, impair, or diminish any of the water rights within the watershed. Therefore, DEQ cannot use dewatering as part of the justification for temperature impairment without first evaluating the potential for increased streamflow while concurrently assuring that no water right is divested, impaired or diminished.

Clark Fork Coalition

Comment #6: We commend DEQ on a thorough and well-organized treatment of the complex issues of sedimentation, nutrient enrichment, and metals contamination in the Little Blackfoot River and its principal tributaries. We believe the document provides a realistic diagnosis of the issues and causes, and useful guidance on general steps to address those issues.

DEQ Response to Comment #6: Thank you. We appreciate the comment.

Comment #7: The CFC is concerned that the scope of the TMDL document does not explicitly address low-flow and dewatering, and especially the associated problem of elevated water temperatures. The problems are well-known and well-documented in the mainstem Little Blackfoot River and a number of its tributaries. Montana Fish, Wildlife and Parks maintains a "Dewatered Concern Areas" list—the 2003 version of that list includes 75 stream miles in the Little Blackfoot drainage, including the lower 25 miles of the lower Little Blackfoot River itself.

The CFC is aware that "low flow" is not an impairment for which DEQ prepares TMDLs. However, we believe that the widespread dewatering problems in the Little Blackfoot drainage are a contributing factor to elevated water temperatures which are negatively affecting the health of cold-water fisheries….It is unclear whether DEQ was aware of the considerable data from Montana FWP fisheries biologists which further documents water temperatures in the Little Blackfoot River above 20 degrees C for prolonged periods, a temperature regime which is known to be detrimental to survival of westslope cutthroat trout, a Montana Species of Concern.

DEQ Response to Comment #7: This comment is addressed in Response # 1, 2, 4, and 5.

Comment #8: The Clark Fork Coalition requests that DEQ not delay an appropriate treatment of the elevated water temperature issue in the Little Blackfoot River. The 2012 revision of the 303(d) list should not only specifically evaluate temperature impairment data on the Little Blackfoot, but also similar data throughout the Upper Clark Fork. Meanwhile, the CFC requests that DEQ initiate, as soon as possible, a temperature TMDL on the Little Blackfoot with a temperature TMDL on tributary streams within the Upper Clark Fork TMDL planning area. This could be done in association with the upcoming nutrient TMDLs for the Upper Clark Fork. Similarly to the Little Blackfoot, numerous tributary streams in the UCF with documented dewatering and elevated water temperature problems were not included in the Upper Clark Fork Tributaries TMDLs document published in March, 2010. Since 2009, Montana FWP, the Watershed Restoration Coalition, and the Clark Fork Coalition have collected considerable additional data on low-flow and water temperature impairments in the Upper Clark Fork, which could be useful for TMDL development.

DEQ Response to Comment #8: As discussed in Response #2, temperature impairment evaluations are complex and require much more than just temperature data. While it is possible that impairment evaluations may be conducted based on the existing data, additional data collection may be necessary. Also, the assessment methodology is currently being revised, which may change the information need to meet the sufficient credible data requirement for assessment. Based on these factors and DEQ's timeline for submitting the 2012 303(d) List to EPA, it is very unlikely that temperature impairment evaluations can be conducted in the Little Blackfoot and Upper Clark Fork TMDL Planning Areas for the 2012 listing cycle.

Although in some instances TMDLs are developed where data collection during TMDL development presents significant or overwhelming evidence of impairment or presents a link between a non-pollutant impairment and pollutant-related impairment (e.g., habitat alterations and sedimentation/siltation), due to time and resource constraints and to maintain process consistency, data collected on listed and unlisted streams during TMDL development typically pertains to the pollutants associated with the 303(d) listed waterbodies and the preferred approach is not to proceed with TMDL development until has made a formal impairment determination. The timing of temperature TMDL development in the Little Blackfoot and Upper Clark Fork TMDL Planning Areas is dependent on the timing and outcome of impairment evaluations for those areas, as well as TMDL priorities and available resources at DEQ. No specific commitments can be made at this time but the Clark Fork Coalition is encouraged to contact the Monitoring and Assessment and TMDL sections at DEQ to ensure DEQ is aware of available temperature-related data in both watersheds and to discuss the timeline for temperature impairment assessments and additional TMDL development.

Comment #9: We note on p. D-40 that DEQ was unable to gather information regarding a water lease previously held by the Montana Water Trust which was transferred to CFC in 2010…The water lease protected 2.52 cubic feet per second instream over a 5-year term on the mainstem Little Blackfoot River. It expired in 2011 and CFC is in negotiations with the landowner for renewal…Also, please note that, as of March 2010, the Montana Water Trust was acquired by the CFC and is no longer a stand-alone entity. The CFC now provides the technical expertise on flow restoration that the Montana Water Trust previously provided in the Upper Clark Fork basin as the TMDL document indicates on p. 9-1.

DEQ Response to Comment #9: Thank for you for the additional information. The text in **Appendix D** has been edited to reflect this information.

Comment #10: The Clark Fork Coalition would like to suggest that the scoping process for future TMDLs include a broader and more effective interaction between agency scientists, biologists, and non-profits working on native fish restoration, so that the considerable DEQ effort in preparing TMDLs not omit priority fisheries issues like water temperature. ..Specifically, we would like to work with Montana DEQ and Montana FWP to encourage the more systematic use of temperature data collected by FWP fisheries biologists in the development of TMDLs by Montana DEQ. It would behoove all parties to improve the protocols for water temperature data collection and data management so that we can address this issue efficiently and effectively.

DEQ Response to Comment #10: Each DEQ TMDL project has one or more advisory groups to offer technical, modeling, and general process guidance and feedback. Membership is voluntary and representation is solicited from local watershed groups, agricultural interests, logging interests, mining interests, fishing and recreation interests, industrial interests, local government, federal and state land management agencies, among others. The advisory group(s) is encouraged to provide input and may influence the scope of the project, such as the addition of Trout Creek to the sediment/habitat data collection effort in the Little Blackfoot River watershed; however, because of resource demands and the fact that impairment determinations are made externally to the TMDL development process, scoping decisions and especially large-scale scoping decisions such as the addition of pollutant groups with no listings within a watershed (such as temperature in the Little Blackfoot River watershed) must ultimately be made by DEQ management. For future reference, although your scope comments

at this stage are valuable in assisting with future planning and prioritization they will be most effective in the earlier stages of the TMDL development.

Particularly given the changing temperature assessment methodology and the magnitude of waters that will need to be evaluated, DEQ agrees that working with other entities that collect temperature data such as FWP will be very important to improving the efficiency and effectiveness of data collection and waterbody impairment determinations. While it is crucial for DEQ to be aware of all available data to assist with TMDL development, it is even more important that this information be incorporated at the formal assessment phase so that waterbodies have been formally assessed before the TMDL process is initiated in a watershed.

Perhaps of most importance is the fact that since 2000, the scope of TMDLs to be developed has been predominately defined by an existing court order linked to Montana's 303(d) List. Per a recent amendment to this court order, the DEQ (and EPA) still have a given set of TMDLs, based on the 2010 303(d) list, to pursue through 2014. The DEQ is looking at ways to integrate a TMDL development scoping approach like suggested above into future TMDL projects. The current 303(d) list contains more than 1,500 waterbody - pollutant combinations yet requiring TMDL development, of which more than 640 specifically have to be addressed by 2014 via an existing court order. The flexibility to pursue TMDL development for a new pollutant category not on the 303(d) list, such as temperature in the Little Blackfoot, within a watershed where TMDL development is under way for other pollutant categories, such as sediment or metals, would stress existing resources to the point where the DEQ would not be able to satisfy the current court order requirements.