AGENDA TABLE OF CONTENTS

ADMINISTRATIVE ITEMS

I.A.1. FEBRUARY 9, 2018 MEETING MINUTES

ACTION ITEMS

APPEAL, AMEND, OR ADOPT FINAL RULES

III.A.1. EXECUTIVE SUMMARY
III.A.1. NOTICE OF HEARING
III.A.1. HOUSE BILL 521/311 ANALYSIS
III.A.1. COMMENTS RECEIVED
III.A.1. NOTICE OF ADOPTION

OTHER ACTION ITEMS

III.B.1. RULE 4.112 WILDFIRE SMOKE EPISODES

NEW CONTESTED CASES

III.C.1. LITTLE BEAR CONSTRUCTION

III.C.2. MOTOR VEHICLE WRECKING FACILITY

III.C.3. FISCHER LAND DEVELOPMENT

ACTION ON CONTESTED CASES

III.D.1. MEMO
III.D.1. PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW
III.D.1. ORDER ON EXCEPTIONS

PETITION FOR RULEMAKING

III.E.1. OUTSTANDING RESOURCE WATER PETITION
III.E.1. GALLATIN FINAL EIS

BOARD OF ENVIRONMENTAL REVIEW
FRIDAY, APRIL 6, 2018
METCALF BUILDING, ROOM 111
1520 EAST 6th AVENUE, HELENA, MONTANA

NOTE: Interested persons, members of the public, and the media are welcome to attend at the location stated above. The Board will make reasonable accommodations for persons with disabilities who wish to participate in this meeting. Please contact the Board Secretary by telephone or by e-mail at Lindsay.Ford@mt.gov no later than 24 hours prior to the meeting to advise her of the nature of the accommodation needed.

9:00 AM

I. ADMINISTRATIVE ITEMS

A. REVIEW AND APPROVE MINUTES

1. The Board will vote on adopting the February 9, 2018, meeting minutes.

II. BRIEFING ITEMS

A. CONTESTED CASE UPDATE

1. Enforcement cases assigned to the Hearing Examiner

a. **In the matter of the Notice of Appeal and Request for Hearing by CMG Construction, Inc. Regarding Notice of Violations and Administrative Compliance and Penalty Order, Docket No. OC-17-12, BER 2017-08 OC**. On February 26, 2018, hearing examiner Clerget issued a First Prehearing Order directing the parties to file a stipulated scheduling order. On March 8, 2018, CMG file an Unopposed Motion to Extend Time requesting that the parties be given until April 6, 2018, to propose a schedule. CMG cited ongoing settlement discussions. On March 9, 2018, hearing examiner Clerget granted the motion.

b. **In the matter of Columbia Falls Aluminum Company's (CFAC) appeal of DEQ's modification of Montana Pollutant Discharge Elimination System Permit No. MT0030066, Columbia Falls, Flathead County, Montana, BER 2014-06 WQ.** At the January 5, 2018, special meeting, the parties waived the demeanor of witnesses and the BER appointed Sarah Clerget as hearing examiner to review the record and render a proposed decision. Ms. Clerget is in the process of reviewing the record.

c. **In the matter of violations of the Water Quality Act by Reflections at Copper Ridge, LLC, at Reflections at Copper Ridge Subdivision, Billings, Yellowstone County (MTR105376), BER 2015-01 WQ.** A three-day hearing was held on February 26-28, 2018. The parties have until April 12, 2018, to file post-hearing briefs and proposed Findings of Facts and Conclusions of Law. Ms. Clerget will then render her proposed decision to the Board.

d. **In the matter of violations of the Water Quality Act by Copper Ridge Development Corporation at Copper Ridge Subdivision, Billings, Yellowstone County (MTR105377), BER 2015-02 WQ.** This case is being handled in conjunction with the above-listed case, BER 2015-01 WQ, and its status is the same.

e. **In the matter of violations of the Opencut Mining Act by Wagoner Family Partnership, d/b/a Wagoner's Sand and Gravel, at River Gravel Pit, Flathead County, Montana (Opencut No. 1798; FID 2512), BER 2017-02 OC.** On February 23, 2018, the Board issued its final agency action finding Wagoner Family in violation of its permit for 42 days. The Board at its February meeting appointed Sarah Clerget as hearing examiner to conduct the penalty portion of this case. Ms. Clerget issued a Scheduling Order on March 28, 2018. The parties were directed to file a stipulated schedule by April 16, 2018.

2. Non-enforcement cases assigned to the Hearings Examiner

a. **In the matter of Westmoreland Resources, Inc.'s, appeal of final MPDES permit No. MT0021229 issued by DEQ for the Absaloka Mine in Hardin, Big Horn County, MT, BER 2015-06 WQ.** On February 21, 2018, the parties filed a Joint Status Report indicating the District Court case MEIC and Sierra Club v. DEQ and Western Energy has been appealed to the Montana Supreme Court. The parties requested a stay pending the issuance of a decision in that case. On March 28, 2018, hearing examiner Clerget issued an order granting the stay, and directed parties to file a status report within 30 days of the Supreme Court's decision.

b. **An appeal in the matter of amendment application AM3, Signal Peak Energy LLC's Bull Mountain Coal Mine #1 Permit No. C1993017, BER 2016-07 SM.** On March 1, 2018, a Scheduling Order was issued and the parties are proceeding under that Order.

c. **In the matter of Appeal Amendment AM4, Western Energy Company Rosebud Strip Mine Area B, Permit No. C1984003B, BER 2016-03 SM.** This matter was heard during a four-day hearing that concluded on March 22, 2018. The parties will have 60 days from the date the hearing transcript is completed to submit post-hearing briefing and proposed findings of fact and conclusions of law to Ms. Clerget, who will then render a proposed decision to the Board.

d. **In the matter of the notice of appeal and request for hearing by Montanore Minerals Corporation Regarding Issuance of MPDES Permit No. MT0030279, Libby, Montana, BER2017-03 WQ.** On October 18, 2017, Ms. Clerget issued a scheduling order and the parties are proceeding according to that order. Pretrial motions are due April 20, 2018.

e. **In the matter of the notice of appeal of final MPDES Permit No. MT0000264 issued by DEQ for the Laurel Refinery in Laurel, Yellowstone County, Montana, BER 2015-07 WQ.** On February 15, 2018, the parties filed a Joint Status Report and Motion for Continued Stay. The parties indicated settlement is a possibility in this matter. On March 14, 2018, Ms. Clerget issued an Order granting the stay until August 24, 2018.

f. **In the matter of Violations of the Water Quality Act by JR Civil, LLC , Bozeman, Gallatin County, Montana (FID 2552, PERMIT MTG70826).** On January 12, 2018, hearing examiner Clerget issued a Scheduling Order in this matter. On February 16, 2018, the parties filed a Joint Motion to Vacate the Remaining Scheduling Order Dates and to Stay Proceedings. The parties have

agreed in principle and are working on a proposed resolution to this case. Hearing examiner Clerget issued an Order vacating the pending deadlines and stayed the proceeding on March 14, 2018. The parties will be filling status updates every 30 days until resolution of this case.

3. Contested Cases not assigned to a Hearing Examiner

   a. **In the matter of the notice of appeal and request for hearing by Western Energy Company (WECO) regarding its MPDES Permit No. MT0023965 issued for WECO's Rosebud Mine in Colstrip, BER 2012-12 WQ.** On April 9, 2014, the hearings examiner issued Order Granting the Joint Unopposed Motion for Partial Remand of Permit to Department of Environmental Quality and for Suspension of Proceedings. This matter has been stayed while an informal judicial review action proceeded. On March 14, 2016, the Judge issued Order on Summary Judgment invalidating the permit modification and remanding the matter for consideration consistent with the opinion. On January 25, 2018, the Department of Environmental Quality entered a Stipulated Judgement resolving the issue of attorney's fee. The Department of Environmental Quality and Western Energy have appealed to the Montana Supreme Court.

B. OTHER BRIEFING ITEMS

1. The Department's Air Quality Bureau has two substantial rulemakings that will be before the Board in 2018; a fee increase and a new registration program. The Department would like to brief the Board about the process, content, and timelines for each of these proposed rulemakings.

III. ACTION ITEMS

A. APPEAL, AMEND, OR ADOPT FINAL RULES

1. DEQ will propose that the Board adopt New Rule 1 which implements MCA 75-5-222 Part 2, describing conditions under which variances from water quality standards may be issued.

B. OTHER ACTION ITEMS

1. Amend Rule 4.112 Wildfire Smoke Episodes of the Missoula County Air Stagnation and Emergency Episode Avoidance Plan. The rule change includes a new title for Rule 4.112 ("Wildfire Smoke Episodes"). The proposed rule change does not change the substance of the rule. It does, however, define "wildfire smoke episodes" and codify Health Department actions during wildfire smoke episodes. The rule change also clarifies that while the added control activities in Rules 4.104-4.111 (Air Alerts, Warnings, Emergencies and Crises) may not be put into effect during a wildfire, all other rules in the Missoula City-County Air Pollution Control Program remain in effect.

C. NEW CONTESTED CASES

1. **In the Matter of Violation of the Metal Mine Reclamation Act by Little Bear Construction, Inc. at Bob Weaver Pit, Granite County, Montana. (SMED NO. 46-117C; FID # 2567), BER 2018-02 MM**. On February 9, 2017, the Board received a

request for hearing. The Board can decide to assign a hearings examiner for procedural issues in the case, hear the case itself, or assign a hearing examiner for the totality of the case.

2. **In the Matter of the Denial of Motor Vehicle Wrecking Facility License MVWF-0376, BER 2018-01 SW**. On January 30, 2018, the Board received a request for a hearing. The Board can decide to assign a hearings examiner for procedural issues in the case, hear the case itself, or assign a hearing examiner for the totality of the case.

3. **In the Matter of Appeal Revocation of Cosa, Fischer Land Development Subdivision [ES# 42-78-S3-173] and Fischer Homes [ES# 42-80-T1-15], Roger Emery, Sidney, Richland County, Montana. [FID# 2214], BER 2018-03 SUB**. On March 9, 2018, the Board received a request for hearing. The Board can decide to assign a hearings examiner for procedural issues in the case, hear the case itself, or assign a hearing examiner for the totality of the case.

D. ACTION ON CONTESTED CASES

1. **In the matter of Appeal of Oil Field Rock and Logistics, Docket No. OC-16-12 (FID2506), Redstone, Montana, BER 2016-11 OC**. On February 20, 2018, a Proposed Findings of Fact and Conclusions of Law Granting DEQ's Motion for Summary Judgment was issued. A separate Order on Exceptions was issued on February 22, 2018. No party filed exceptions to the Order.

E. PETITION FOR RULEMAKING

1. On January 31, 2018 the Board received a petition from Cottonwood Environmental Law Center and The Gallatin Wildlife Association. Pursuant to MCA 75-5-316(3)(1), the petition requests that the Board classify the section of the Gallatin River from the boundary of Yellowstone National Park to the confluence with Spanish Creek in Gallatin Canyon as an Outstanding Resource Water.

IV. BOARD COUNSEL UPDATE

Counsel for the Board will report on general Board business, procedural matters, and questions from Board Members.

V. GENERAL PUBLIC COMMENT

Under this item, members of the public may comment on any public matter within the jurisdiction of the Board that is not otherwise on the agenda of the meeting. Individual contested case proceedings are not public matters on which the public may comment.

VI. ADJOURNMENT

BOARD OF ENVIRONMENTAL REVIEW
MINUTES

February 9, 2018

Call to Order

The Board of Environmental Review's meeting was called to order by Chairperson Deveny at 9:02 a.m., on Friday, February 9, 2018, in Room 111 of the Metcalf Building, 1520 East 6th Avenue, Helena, Montana.

Attendance

Board Members Present in person: Chairperson Christine Deveny, Dexter Busby, Hillary Hanson, John DeArment

Board Members Present by Phone: Tim Warner, Chris Tweeten

Board Members Absent: John Felton

Board Attorney Present: Sarah Clerget, Attorney General's Office (AGO)

Board Liaison Present: George Mathieus

Board Secretary Present: Lindsay Ford

Court Reporter Present: Laurie Crutcher, Crutcher Court Reporting

Department Personnel Present: Jon Kenning, Jason Garber, Jon Dilliard, Eric Sivers – WQD; Sandy Moisey-Scherer, Mark Lucas, Aaron Pettis, Ed Hayes, John North, Kurt Moser, Brad Jones, Norm Mullen – Legal; Susan Bawden, Dan Kenney, Chad Anderson, Leea Anderson – ENF; Liz Ulrich, Julie Ackerlund, Chris Cronin, Ed Coleman, Julie Merkel – AEMD

Interested & Other Persons Present: Jim Brown; Aleisha Solem – AGO Agency Legal Services Bureau

Interested Persons Present by Phone: none

Roll was called: four Board members were present in person and two Board members were present via teleconference, providing a quorum.

I.A. Administrative Items – Review and Approve Minutes

I.A.1. **December 8, 2017, Meeting Minutes**

Ms. Hanson MOVED to approve the meeting minutes. Mr. Busby SECONDED. The motion PASSED unanimously.

I.A.2. **January 5, 2018, Meeting Minutes**

Mr. Busby MOVED to approve the meeting minutes. Mr. DeArment SECONDED. The motion PASSED unanimously.

I.B. **Potential 2018 Board Rulemaking Schedule**

Mr. Mathieus noted a few small date changes to the 2018 schedule.

Several DEQ staffed briefed the Board on the individual proposed rulemakings.

II.A.1. Briefing Items – Enforcement Cases assigned to the Hearing Examiner

II.A.1.a. **In the matter of Columbia Falls Aluminum Company's (CFAC) appeal of DEQ's modification of Montana Pollutant Discharge Elimination System Permit No. MT0030066, Columbia Falls, Flathead County, Montana, BER 2014-06 WQ.**

Ms. Clerget is reviewing the hearing and will then do an order and exceptions. She said it will be a few meetings before that's done and brought before the Board.

II.A.1.b. **In the matter of violations of the Water Quality Act by Reflections at Copper Ridge, LLC, at Reflections at Copper Ridge Subdivision, Billings, Yellowstone County (MTR105376), BER 2015-01 WQ.**

Ms. Clerget said the case is scheduled for hearing at the end of this month.

II.A.1.c. **In the matter of violations of the Water Quality Act by Copper Ridge Development Corporation at Copper Ridge Subdivision, Billings, Yellowstone County (MTR105377), BER 2015-02 WQ.**

Ms. Clerget said the case is scheduled for hearing at the end of this month.

II.A.1.d. **In the matter of violation of the Opencut Mining Act by Goran, LLC, at the Goran gravel pit, Stillwater County, Montana (Opencut No. 2790; FID 2500), BER 2016-09 OC.**

Ms. Clerget said the case has been dismissed.

II.A.1.e. **In the matter of Appeal of Oil Field Rock and Logistics, Docket No. OC-16-12 (FID2506), Redstone, Montana, BER 2016-11 OC.**

Ms. Clerget said she will be issuing a scheduling order followed by exceptions. She is hopeful this will be before the Board at the next meeting.

II.A.1.f. **In the matter of Dennis and Sandra Dickenson's appeal of DEQ Subdivision Section Contract Reviewer's decision to deny the Dickenson's subdivision application, EQ#17-1398, Jefferson County, BER 2017-06 SUB.**

Ms. Clerget said the case has been dismissed.

II.A.2. Briefing Items – Non-Enforcement Cases Assigned to a Hearing Examiner

II.A.2.a. **In the matter of Westmoreland Resources, Inc.'s, appeal of final MPDES permit No. MT0021229 issued by DEQ for the Absaloka Mine in Hardin, Big Horn County, MT, BER 2015-06 WQ.**

Ms. Clerget is awaiting status update from the parties as there is a question about whether to put in a scheduling order or continue with a stay. She is monitoring the case.

II.A.2.b. **An appeal in the matter of amendment application AM3, Signal Peak Energy LLC's Bull Mountain Coal Mine #1 Permit No. C1993017, BER 2016-07 SM.**

Ms. Clerget asked for a status update, or a proposed prehearing order. It is in a stay, but she is monitoring the case closely.

II.A.2.c. **In the matter of Appeal Amendment AM4, Western Energy Company Rosebud Strip Mine Area B, Permit No. C1984003B, BER 2016-03 SM.**

The case is scheduled for a five-day hearing in March.

II.A.2.d. **In the matter of the notice of appeal and request for hearing by Montanore Minerals Corporation Regarding Issuance of MPDES Permit No. MT0030279, Libby, Montana, BER2017-03 WQ.**

Ms. Clerget said the scheduling order is in place and the parties are proceeding based on that order. They are currently in the beginning stages of discovery.

II.A.2.e. **In the matter of the notice of appeal of final MPDES Permit No. MT0000264 issued by DEQ for the Laurel Refinery in Laurel, Yellowstone County, Montana, BER 2015-07 WQ.**

Ms. Clerget and the case is stayed until February 16 at which time the parties are to file a status report. She is monitoring the case carefully.

II.A.2.f. **In the matter of violation of the water quality act by JR Civil, LLC, Bozeman, Gallatin County, Montana (FID 2552, Permit MTG070826) BER 2017-07 WQ.**

Ms. Clerget issued a scheduling order. She granted a two-week extension while the parties work on some settlement discussions which should not interfere with the overall schedule.

II.A.3. Briefing Items – Contested Cases Not Assigned to a Hearing Examiner

II.A.3.a. **In the matter of the notice of appeal and request for hearing by Western Energy Company (WECO) regarding its MPDES Permit No. MT0023965 issued for WECO's Rosebud Mine in Colstrip, BER 2012-12 WQ.**

Mr. North said the parties reached settlement on the attorney's fees and the court has entered judgement in accordance with the settlement.

III.A. Action Items – Rule Adoption; DEQ propose that the Board adopt rules to:

III.A.1. **Amend ARM 17.8.102, 17.8.103, 17.8.202, 17.8.302, 17.8.602, 17.8.767, 17.8.802, 17.8.901, 17.8.902, 17.8.904, 17.8.1002, 17.8.1102, 17.8.1202, 17.8.1302, 17.8.1402, and 17.8.1502 to:**

a. incorporate by reference updated federal and state statutes and regulations,
b. update the rules to reference the 2017 Montana Ambient Air Monitoring Program Quality Assurance Project Plan (QAPP),
c. update and consolidate reference citations into ARM 17.8.102, and update air quality rules.

Ms. Ackerlund briefed the Board on the proposed air quality rules.

Mr. DeArment MOVED on the rule adoption. Chairperson Deveny SECONDED. The Motion PASSED unanimously.

III.B. New Contested Cases

III.B.1. **In the matter of the Notice of Appeal and Request for Hearing by CMG Construction, Inc. Regarding Notice of Violation and Administrative Compliance and Penalty Order, Docket No. OC-17-12, BER 2017-8 OC.**

Ms. Clerget gave the Board Members their options, including assigning it to the Hearings Examiner.

Chairperson Deveny MOVED to assign the matter to the Hearings Examiner for both procedural and substantive purposes. Ms. Hanson SECONDED. The motion PASSED unanimously.

III.C. ACTION ON CONTESTED CASES

III.C.1. **In the matter of termination by DEQ of the application by Payne Logging, Inc. Requesting to move boundaries of the Payne Logging facility in Libby, Lincoln County, Montana, BER 2015-08 JV.**

The Board heard oral arguments from the parties.

Mr. Tweeten MOVED to accept the Hearing Examiner's findings of fact and conclusions of law with respect to the jurisdiction question over the County's proceeding on Resolution 947 as the Board's decision in this case, and to have the Hearing Examiner draft an order. Mr. DeArment SECONDED. The motion PASSED unanimously.

III.C.2. **In the matter of violations of the Opencut Mining Act by Wagoner Family Partnership, d/b/a Wagoner's Sand and Gravel, at River Gravel Pit, Flathead County, Montana (Opencut No. 1798; FID 2512), BER 2017-02 OC.**

The Board heard oral arguments from DEQ, Wagoner opted to file written comments in this matter.

Mr. Tweeten MOVED to adopt the Hearing Examiner's proposed order in its entirety and adopt it as the Board's final order. Chairperson Deveny SECONDED. The motion PASSED unanimously.

Mr. Tweeten MOVED to assign this case to the Hearing Examiner for purposes of conducting the penalty phase of the proceeding. Ms. Hanson SECONDED. The motion PASSED unanimously.

IV. Board Counsel Update

Ms. Clerget briefed the Board on the new draft policy. There was Board discussion.

Chairperson Deveny MOVED to adopt the draft as a policy until the October Board meeting where the Board would then decide to make it a formal rule. Mr. Busby SECONDED. Mr. Tweeten proposed an amendment that would remove the suggestion the Board adopt it as a policy today, as the policy would expire in October which would leave nothing in place during the rulemaking process. Chairperson Deveny accepted the amendment to her motion. Mr. Busby SECONDED the amended motion. The motion PASSED unanimously.

Ms. Clerget also updated the Board that a petition for rulemaking will be on the next agenda. Mr. Mathieus explained that it's for an outstanding resource water for the Gallatin River.

V. General Public Comment

None were offered.

VI. Adjournment

Ms. Hanson MOVED to adjourn. Mr. DeArment SECONDED. Chairperson Deveny adjourned the meeting at 11:32 a.m.

Board of Environmental Review February 9, 2018, minutes approved:

_____

CHRISTINE DEVENY
CHAIRPERSON
BOARD OF ENVIRONMENTAL REVIEW

_____

DATE

BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR PROPOSED NEW RULE

Agenda Item # III.A.1.

Agenda Item Summary – The Department requests that the Board adopt New Rule I in accordance with the Notice of Adoption showing the change to the proposed rule at (1) made in response to comments from the public. New Rule 1 implements MCA 75-5-222(2), describing conditions under which variances from water quality standards may be issued.

List of Affected Board Rules –New Rule I would not affect any current Board rules.

List of Affected Department Rules – New Rule I would not affect any Department rules.

Affected Parties Summary – These proposed changes may affect parties applying for discharge permits to state waters where chronic, human-caused pollution exists upstream of the proposed discharge.

Background – The 2015 Montana Legislature passed Senate Bill 325. The bill was codified as Montana Code Annotated (MCA) 75-5-222, and requires rulemaking to implement the statute. The Department, in collaboration with the SB 325 Stakeholder Workgroup, drafted New Rule I to implement MCA 75-5-222 in accordance with other state and federal regulations.

New Rule I sets forth the conditions under which an applicant may apply for a variance from water quality criteria and specifies that the applicant for the variance cannot materially contribute to the condition of the receiving water body. It also requires the highest attainable condition of the water body be met under the variance and outlines requirements for DEQ approval and periodic review of the variance.

In response to public comment, Section (1) of the New Rule was amended, replacing "the department determines in writing" with "the following conditions are met".

Hearing Information – The Board conducted a public hearing on January 26, 2018. The Board received testimony at the hearing, in favor and in opposition of New Rule I. The Board also received, and has responded to written comments and oral testimony from the public.

Board Options – The Board may:

1. Adopt New Rule I as set forth in the Notice of Adoption, and the HB 521/311 analysis;
2. Adopt New Rule I with modifications that the Board finds are appropriate and consistent with the scope of the Notice of Public Hearing and the record in this proceeding; or
3. Take no action on New Rule I.

DEQ Recommendation – The Department recommends that the Board adopt New Rule I as set forth in the Notice of Adoption, and the HB521/311 analysis.

Enclosures –

1. Notice of Public Hearing on Proposed New Rule I

2. Notice of Adoption on Proposed New Rule I
3. House Bill 521/311 analysis
4. Comments received

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the adoption of New Rule I under ARM Title 17, chapter 30, subchapter 6 pertaining to water quality standards	))))	NOTICE OF PUBLIC HEARING ON PROPOSED ADOPTION (WATER QUALITY)

TO: All Concerned Persons

1. On January 26, 2018, at 10:00 a.m., the Board of Environmental Review will hold a public hearing in Room 111, Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed adoption of the above-stated rule.

2. The board will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact Sandy Scherer, Legal Secretary, no later than 5:00 p.m., January 19, 2018, to advise us of the nature of the accommodation that you need. Please contact Sandy Scherer at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail sscherer@mt.gov.

3. The new rule proposed to be adopted provides as follows:

NEW RULE I VARIANCE FROM STANDARD FOR WATER BODY CONDITIONS (1) The department may grant to a permittee a variance from a water quality standard if the department determines in writing that:

(a) the standard is more stringent than the quality of the receiving water;

(b) the condition in (a) exists because of anthropogenic contributions of the pollutant to the water body;

(c) the condition in (a) cannot reasonably be expected to be remediated during the permit term for which the variance is sought;

(d) the discharge to which the variance would apply would not materially contribute to the condition in (a); and

(e) one of the demonstrations provided at 40 CFR 131.14(b)(2)(i)(A)(1), which is by this reference adopted and incorporated into this rule, applies.

(2) To obtain a variance, a permittee shall submit to the department an application that:

(a) identifies the pollutant for which the variance is sought;

(b) identifies the permittee by name, address, and telephone number;

(c) identifies the receiving water body;

(d) demonstrates to the department's satisfaction that the requirements of (1) are met; and

(e) proposes, with supporting documentation, a variance level that is:

(i) the highest attainable interim standard in the receiving stream;

(ii) the interim effluent condition that reflects the greatest pollutant reduction that is achievable; or

(iii) if no additional feasible pollutant control technology can be identified, the interim standard or effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the variance is submitted. For a variance under this paragraph (2)(e)(iii), the permittee shall prepare and implement a pollutant minimization plan that contains a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loading.

(3) The department shall review each application to determine whether a reasonable alternative is in place that would eliminate the need for the variance, including:

(a) a permit compliance schedule;

(b) reuse;

(c) a TMDL for the pollutant where the permittee is meeting the established waste load allocation; or

(d) other department actions.

(4) If the department makes a preliminary finding that a reasonable alternative to approving a variance is available, the department shall consult with the applicant prior to making a decision regarding the variance.

(5) If the department determines that no reasonable alternative to a variance exists, the department shall determine whether the information provided by the applicant meets the requirements of (1) and (2). If the department finds that the requirements of (1) and (2) are met, and that a variance is needed, the department shall approve the variance after conducting a hearing following no less than 45 days' notice to the public. All written or oral public comments related to the variance shall be presented to the department during this public comment period.

(6) Within 30 days after approval of the variance, the department shall submit the variance and any supporting documentation and analysis to EPA. The variance is not approved for federal Clean Water Act purposes until EPA notifies the department that the variance complies with the federal Clean Water Act, 33 USC 1251, et seq.

(7) The variance may be used to develop MPDES permit limits. A permit incorporating a variance issued by the department under this rule is subject to ARM Title 17, chapter 30, subchapter 13. The department shall review the variance five years from the date the department issues a final discharge permit incorporating the variance.

(8) The variance must be reviewed by the department every five years to reevaluate the conditions in (2)(e). Based on this review, the department may terminate, continue, or modify the variance. In order to continue or modify the variance, the permittee shall provide information demonstrating compliance with (1) and (2). In cases where water quality in the receiving stream has improved during the term of the variance, DEQ shall consider the ambient upstream condition of the waterbody, as characterized for the previous two years, in determining an appropriate variance level under (2)(e).

(9) Based on the review conducted under (8), the department may approve the variance, with any modifications after public comment and public hearing under (5). Within 30 days after department approval of the variance, the department shall submit the variance and any supporting analysis to EPA. The variance is not

approved for federal Clean Water Act purposes until EPA notifies the department that the variance complies with the federal Clean Water Act, 33 USC 1251, et seq.

(10) A copy of 40 CFR 131.14(b)(2)(i)(A)(1) may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59601-0901.

AUTH: 75-5-222, MCA
IMP: 75-5-222, MCA

REASON: The new rule is necessary to fulfill the requirements of 75-5-222(2), MCA. This statute provides that if pollution upstream of a discharger is due to anthropogenic sources, a variance from the applicable standards may be appropriate under certain conditions. It also requires rulemaking to implement the statute. The statute codifies Senate Bill 325, introduced in the 2015 Montana Legislature. This statute was directed at focusing water quality remediation efforts toward the primary pollution contributors, often historic mining, instead of less significant Montana Pollutant Discharge Elimination System dischargers, such as publicly owned treatment works, until the upstream source is remediated and water conditions improve.

The new rule sets forth the conditions under which a permittee may apply for a variance from water quality standards. The first and second sections of the rule highlight specific requirements of the statute and federal regulations, which provide criteria and procedures for the department to issue variances from water quality standards. The federal regulations for variances from water quality standards are at 40 CFR 131.14. Section 75-5-222(2), MCA, requires the board to adopt standards that are consistent with comparable federal regulations. It is necessary to include these details in the rule to provide transparency and clear direction to potential variance applicants.

Sections (3) and (4) of New Rule I direct the department to review applications for variances to ensure that other mechanisms (such as total maximum daily loads) are not already in place that would preclude the need for a variance. These alternative mechanisms would not limit the ability of a permittee to apply for a variance; however, due to the time and expense necessary to establish and implement a variance, the board wants to ensure applicants are aware of other available options that may more effectively and efficiently satisfy the need for the variance.

Section (5) of New Rule I is necessary to ensure consistency in the department's review and approval of variances issued under this rule. Because variances are exceptions to water quality standards, section (6) clarifies that each individual variance must be approved by the EPA before it may be implemented for Clean Water Act purposes. In order to be consistent with 75-5-222(2)(b), MCA, section (7) specifies that variances will be reviewed after five years.

Section (8) outlines requirements for periodic review of the variance. The five year review period aligns with requirements in 75-5-222(2)(b), MCA. The specific guidelines for renewal and modification are necessary to provide transparency to permittees and consistency in the department's review. Another important aspect of section (8) is that the permittee's variance must, through time, align with improving water quality. As water quality improves as a result of upstream remediation, the

treatment requirements under the variance become more stringent in consideration of the improved water quality upstream of the permittee. This is necessary to meet the requirements of the Water Quality Act to maintain and improve water quality.

Section (9) states that renewals and modifications of the variance are subject to the same review and approval as the initial variance. This requirement is included for consistency and transparency.

4. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Sandy Scherer, Legal Secretary, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to sscherer@mt.gov, no later than 5:00 p.m., February 9, 2018. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

5. Sarah Clerget, attorney for the board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the hearing.

6. The department maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supply; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wind energy bonding, wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Sandy Scherer, Legal Secretary, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to Sandy Scherer at sscherer@mt.gov, or may be made by completing a request form at any rules hearing held by the department.

7. The bill sponsor contact requirements of 2-4-302, MCA, apply and have been fulfilled. The primary bill sponsor was contacted by the department in person on March 7, 2017.

8. With regard to the requirements of 2-4-111, MCA, the board has determined that the adoption of the above-referenced rule will not significantly and directly impact small businesses.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

/s/ John F. North BY: */s/ Christine Deveny*
JOHN F. NORTH CHRISTINE DEVENY
Rule Reviewer Chairman

Certified to the Secretary of State, December 11, 2017.

DEQ
Montana Department of Environmental Quality

MEMORANDUM

To: Board of Environmental Review

From: KHB Kirsten H. Bowers
DEQ Attorney

Re: HB 521 Analysis (Stringency) and HB 311 Takings Checklist

MAR Notice No. 17-395

In the matter of the adoption of New Rule 1, implementing § 75-5-222(2), Montana Code Annotated (MCA) and pertaining to water quality standards.

Date: December 7, 2017

HB 521 Analysis

The Board's authority to adopt the proposed rules is found in the Montana Water Quality Act (MWQA) at § 75-5-222, MCA. Pursuant to House Bill 521, codified at § 75-5-203, MCA, the Board may not adopt a rule that is more stringent than comparable federal regulations or guidelines that address the same circumstances, unless the Board makes certain written findings.

Proposed New Rule 1 implements Senate Bill 325 (2015) codified at § 75-5-222(2), MCA. Section 75-5-222(2) provides that if the upstream condition of a water body is impaired due to anthropogenic sources, a variance from applicable water quality standards may be appropriate under certain conditions. A downstream permittee may apply for a variance subject to § 75-5-222(2), MCA and New Rule 1. The specific requirements for a variance are set forth in the rule and are consistent with, and not more stringent than, federal rules and guidelines for issuing variances from water quality standards.

Private Property Assessment Act

The Montana Private Property Assessment Act at §§ 2-10-101 – 2-10-112, MCA, requires that, prior to adopting a proposed rule that has taking or damaging implications for private real property, an agency must prepare a taking or damaging impact statement. An "action with taking or damaging implications" means:

> [A] proposed state agency administrative rule, policy, or permit condition or denial pertaining to land or water management or to some other environmental matter that if adopted and enforced would constitute a deprivation of private property in violation of the United States or Montana Constitution. (2-10-103(4), MCA).

Section 2-10-104, MCA, requires the Montana Attorney General to develop guidelines, including a checklist, to assist agencies in determining whether an agency action has taking or damaging implications. A completed Attorney General checklist for the proposed rule amendments is attached. Based on the guidelines provided by the Attorney General, the proposed rule amendments do not constitute an "action with taking or damaging implications" in violation of the United States or Montana Constitutions.

Attachment: Attorney General HB 311 Checklist

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST
MAR Notice No. 17-395

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES	NO		
X		1.	Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2.	Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3.	Does the action deprive the owner of all economically viable uses of the property?
	X	4.	Does the action deny a fundamental attribute of ownership?
	X	5.	Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is NO, skip questions 5a and 5b and continue with question 6.]
		5a.	Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b.	Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6.	Does the action have a severe impact on the value of the property?
	X	7.	Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is NO, do not answer questions 7a through 7c.]
		7a.	Is the impact of government action direct, peculiar, and significant?

_____ _____ 7b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?

_____ _____ 7c. Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implication exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

Kristin M Bowers
(Signature)

1-21-2018
(Date)

CLARK FORK COALITION

Mont. Board of Environmental Review
Department of Environmental Quality
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
sscherer@mt.gov
RE: New Rule 1 under ARM Title 17, chapter 30, subchapter 6

Members of the Board,

The following comments are offered on behalf of the Clark Fork Coalition (CFC), a non-profit organization dedicated to protecting and restoring the Clark Fork River Basin. We have over 3,000 members, who are equally dedicated to our mission of protecting and sustaining the Clark Fork River and its tributaries. The Coalition is actively involved in the ongoing restoration work throughout the basin and has a vested interest in protecting clean, cold and abundant water. In addition, the Coalition has a vested interest in water quality as the owner of senior water rights dedicated to instream flow purposes for the protection of the fishery resource.

The CFC previously submitted oral comment on the proposed New Rule 1 during the Board's December 8 meeting. To reiterate an earlier comment, CFC fully understands the Department of Environmental Quality's (DEQ) obligation to move forward in this rulemaking process as expeditiously and efficiently as possible. Nonetheless, CFC continues to have concerns about potential unanticipated implications of the proposed rule, with respect to the variance from standard for water bodies facing anthropogenic pollutants. The CFC's concerns can be broken down into two categories: 1) the scope of the proposed variance appears overly broad; and 2) certain language within the proposed rule is vague or undefined.

The Scope of the Proposed Variance Rule Appears Overly Broad

The Coalition's understanding of the genesis of the proposed rule is that was intended to remedy a specific problem, i.e. dischargers (namely municipalities) should not be asked to pay for or otherwise remedy anthropogenic pollution that they did not cause. However, instead of narrowly tailoring this potential variance to a specific type of discharge, source, or pollutant, the proposed rule instead allows *any* discharger to apply for a variance from water quality standards where the receiving water is otherwise impaired by anthropogenic pollution. This is impermissibly broad and could lead to results not anticipated by DEQ and beyond the intent of the legislature in enacting SB 325.

As previously noted in front of the Board, much of the Coalition's stream restoration and remediation efforts are focused on legacy pollution sources in the Upper Clark Fork Basin, which faces continuing water quality problems caused by hundreds of years of mining activity.

Our concern is that by creating new avenues for dischargers to get variances where these historic pollution sources are not able to be remediated within the next five-year permit term, the State risks losing one of the few tools it has to remedy this pollution -- without any guarantee of state or federal action to address the ultimate sources of pollution. This broad of a variance may serve to defeat the purpose of the federal Clean Water Act (CWA).

The Proposed Rule's Terms are Vague or Undefined

The Coalition also has concerns about the proposed language in subsection 1(d), which outlines one of the factors that would allow for a variance if the discharge would not "materially contribute" to the existing condition. This term is not found in the CWA or its federal regulations. The CWA regulates ***all*** pollution, whether it is material or immaterial. It is unclear from the language of the rule how exactly the Department will determine what constitutes a material contribution to an impaired waterway. This is especially important given that for pollutants such as dioxins and heavy metals, even small, trace dischargers can contribute to an overall exceedance of water quality standards.

Subsection 1(c) of the proposed rule contains similarly vague language, stating that a variance may be appropriate where the overall impaired condition of the receiving waterway "cannot reasonably be expected to be remediated" in the next five-year permit term. Aside from the subjective nature of the term "reasonable," the language of this subsection is problematic because there is no provision of the CWA that allows weaker standards and permit terms when man-made pollution cannot be fixed within a permit term.

Finally, the CFC encourages the Board to review the context and statutory framework of the CWA provided in the thorough comments submitted by Upper Missouri Water Waterkeeper. CFC shares in Waterkeeper's concerns about maintaining consistency between state policy and the federal Clean Water Act and hereby incorporates Waterkeeper's comments by reference.

Thank you for the opportunity to comment,

Sincerely,

/s/Andrew Gorder

Andrew Gorder
Legal Director
Clark Fork Coalition
140 S. 4th St. W #1
PO Box 7593
Missoula, MT 59807
andrew@clarkfork.org

Public Hearing Statement FOR PROPOSED NEW RULE

The purpose of this hearing is to take comments on the proposed new rule which implements MCA 75-5-222 Part 2, describing conditions under which variances from water quality standards may be issued.

The New Rule is necessary to fulfill the requirements of Montana Code Annotated (MCA) 75-5-222(2). This statute provides that if pollution upstream of a discharger is due to anthropogenic sources, a variance from the applicable standards may be appropriate under certain conditions. It also requires rulemaking to implement the statute. The statute codifies Senate Bill 325, introduced in the 2015 Montana Legislature. This statute was directed at focusing water quality remediation efforts toward the primary pollution contributors, often historic mining, instead of less significant, downstream, Montana Pollutant Discharge Elimination System dischargers, such as publicly owned treatment works, until the upstream source is remediated and water conditions improve. Furthermore, this statute will provide an opportunity to postpone, minimize, or even eliminate the need for major infrastructure upgrades for qualifying MPDES permit holders.

The New Rule sets forth the conditions under which a permittee may apply for a variance from water quality standards. The first and second sections of the rule include specific requirements of the statute and federal regulations, which provide criteria and procedures for the department to issue variances from water quality standards. The federal regulations for variances from water quality standards are at 40 CFR 131.14. Section 75-5-222(2), MCA, requires the board to adopt standards that are consistent with comparable federal regulations. It is necessary to include these requirements in the rule to comply with this requirement and to provide transparency and clear direction to potential variance applicants.

Sections (3) and (4) of New Rule I direct the department to review applications for variances to ensure that other mechanisms (such as total maximum daily loads) are not already in place that would preclude the need for a variance. These alternative mechanisms would not limit the ability of a permittee to apply for a variance; however, due to the time and expense necessary to establish and implement a variance, these subsections would ensure applicants are aware of other available options that may more effectively and efficiently satisfy the need for the variance.

Section (5) of New Rule I is necessary to ensure consistency in the department's review and approval of variances issued under this rule. Because variances are exceptions to water quality standards, section (6) clarifies that each individual variance must be approved by the

EPA before it may be implemented for Clean Water Act purposes. In order to be consistent with 75-5-222(2)(b), MCA, section (7) specifies that variances will be reviewed after five years.

Section (8) and (9) outline requirements for periodic review of the variance. The five-year review period aligns with requirements in 75-5-222(2)(b), MCA and the applicable federal requirement. They provide that the permittee's variance must, through time, align with improving water quality. As water quality improves as a result of upstream remediation, the treatment requirements under the variance become more stringent in consideration of the improved water quality upstream of the permittee. This ensures the permittee meets the highest attainable interim standard or the greatest pollutant reduction achievable that is necessary to meet the requirements of the Water Quality Act and of the federal regulations to maintain and improve water quality.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8

Ref: 8WP-CWQ

FEB 8 - 2018

Sandy Scherer, Legal Secretary
Department of Environmental Quality
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901

Re: EPA Comments on Proposed Variance Authorizing Provisions

Dear Ms. Scherer:

This letter provides comments of the U.S. Environmental Protection Agency for the public comment period ending February 9, 2018 on New Rule I Variance from Standard for Water Body Conditions as published in MAR Notice No. 17-395.

A water quality standards (WQS) variance is a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition (HAC) during the term of the WQS variance (40 CFR § 131.3(o)). WQS variances are explicitly authorized under 40 CFR § 131.14 as a tool that can be used prior to pursuing a permanent revision of the designated use and criteria in situations where the applicable designated uses are not attainable in the near-term, but may be attainable in the future. WQS variances allow time to make incremental progress toward the ultimate water quality objective for the water body.

The proposed New Rule I would authorize WQS variances for individual dischargers for any parameter that meets the specific requirements of the rule.[1] Although not required by the federal regulations, the EPA appreciates that Montana has chosen to adopt New Rule I to facilitate the adoption of variances. As Montana knows, in order for any specific discharger to obtain an individual variance, the state must adopt a WQS variance, including holding a public hearing, and submit the variance to the EPA for review and approval. The EPA notes that an individual WQS variance adopted pursuant to New Rule I must meet the federal requirements under 40 CFR § 131.14. Individual variances must be submitted to the EPA pursuant to the Clean Water Act and 40 CFR Part 131 for review and approval before it can be effective for CWA purposes and thus before the variance can be incorporated into any Montana Pollutant Discharge Elimination System permit.

The Reason section of MAR Notice No. 17-395 states that "The first and second sections of the rule highlight specific requirements of the statute and federal regulations, which provide criteria and procedures for the department to issue variances from water quality standards. The federal regulations for variances from water quality standards are at 40 CFR § 131.14. Section 75-5-222(2), MCA, requires

[1] The EPA notes that Montana has a separate variance provision for nutrients.

the board to adopt standards that are consistent with the comparable federal regulations." Sections 1 and 2 are specific to when the Department may grant a variance and the information needed from the permittee in order for the Department to determine whether such variance shall be granted.

Pursuant to Section 1 of proposed New Rule I, the state must determine that permittees satisfy five conditions before the Department may grant a WQS variance:

a) the standard is more stringent than the quality of the receiving water;
b) the condition in (a) exists because of anthropogenic contributions of the pollutant to the water body;
c) the condition in (a) cannot reasonably be expected to be remediated during the permit term for which the variance is sought;
d) the discharge to which the variance would apply would not materially contribute to the condition in (a); and
e) one of the demonstrations provided at 40 CFR § 131.14(b)(2)(i)(A)(1).

Provision 1(e) addresses a federal requirement, whereas the other four provisions in 1(a) – 1(d) are additional state requirements. The state has the discretion to identify additional requirements as long as those requirements remain consistent with 40 CFR § 131.14.

Regarding 1(c), the term must only be as long as necessary to achieve the HAC and must be based on the documentation submitted by the state to justify the term of the WQS variance as required by 40 CFR §§ 131.14(b)(1)(ii), (iv) and (b)(2)(ii). The EPA interprets New Rule I Section 1(c) to mean that the state is not authorizing variances shorter than 5 years (the normal permit term), which the state has the authority to do. The EPA expects that the term of any individual WQS variance adopted by the state will be consistent with 40 CFR § 131.14.

With respect to 1(d), none of the factors in 40 CFR § 131.14(b)(2)(i)(A) address consideration of *de minimis* contributions. The state has the authority and discretion to only allow variances to dischargers that "would not materially contribute" to the receiving waterbody conditions for the pollutant in question, however one of the seven factors in 40 CFR § 131.14(b)(2)(i)(A) must also be satisfied. The EPA notes that Montana has not authorized restoration variances that are allowed under the federal rule at 40 CFR § 131.14 (b)(2)(i)(A)(2), therefore, one of the remaining six factors must be satisfied. As long as one of the federal factors is met to justify the variance, it appears that (d) is not inconsistent with the federal regulations.

Pursuant to 40 CFR § 131.14(b)(1)(ii), the state must specify the HAC. However, nothing in the federal requirements prevents the state from considering information from a permittee. New Rule I Section 2(e) requires that permittees submit an application that includes a proposed HAC and supporting documentation. Under New Rule I Section 5, the state then determines whether the information provided by the applicant is sufficient and if so, proceeds with rulemaking and adoption and submission to the EPA. This process is similar to how many states have use attainability analyses submitted by outside parties, which the state then evaluates and may or may not proceed with state rulemaking to change a designated use accordingly. Therefore, the EPA has no concerns with the New Rule I asking permittees to provide information to the department regarding the HAC for consideration before the state determines the appropriate HAC to adopt. The EPA expects that the eventual HAC adopted by the state along with the variance is consistent with 40 CFR § 131.14.

A WQS variance may not result in any lowering of currently attained ambient water quality, unless the WQS variance will be used for restoration activities (40 CFR § 131.14(b)(1)(ii)). As discussed above, New Rule I does not authorize WQS variances for restoration activities. New Rule I Section 8 is interpreting "currently attained ambient water quality" to mean the previous two years of data in situations where the water quality in the receiving stream has improved during the term of the variance. This is appropriate for the limited scenarios addressed by New Rule I (historic mining is an example provided in the Reason section of MAR Notice No. 17-395) where using five years of data would result in a less stringent HAC and would not preserve the water quality improvements toward the ultimate water quality objective for the water body. Therefore, it appears that Section 8 is likely to be consistent with the EPA's requirement at 40 CFR § 131.14(b)(1)(ii) that the variance not result in any lowering of currently attained ambient water quality.

In conclusion, the EPA appreciates the changes the state made to the proposed rule in response to the EPA's comments during the workgroup process. 40 CFR § 131.14 provides some additional requirements for any WQS variance adopted by the state that are not reflected in New Rule I. Therefore, the EPA requests clarification from Montana that any subsequent variance adopted by the state must meet all the requirements of 40 CFR § 131.14. The EPA can assist the state in understanding any applicable federal requirements during the state adoption of specific individual variances. If you have any questions, please contact Tonya Fish on my staff at (303) 312-6832 or fish.tonya@epa.gov.

Sincerely,

Sandra D. Spence, Chief
Water Quality Unit

PO Box 1186
Helena, MT 59601
(406) 442-7582
mpa@montanapetroleum.org
www.montanapetroleum.org

P.O. Box 1026
Whitehall, MT 59759
(406) 287-3012
tjohnson@montanamining.org
www.montanamining.org

PO Box 1700
Helena, MT 59624
(406) 443-5541
ptrenk@tsria.net
www.treasurestateresources.net

TREASURE STATE
RESOURCES ASSOCIATION
OF MONTANA

January 26, 2018

Board of Environmental Review
1520 East Sixth Avenue
Helena, Montana

RE: Adoption of New Rule 1 under Title 7, chapter 30, subchapter 6 pertaining to water quality standards

The following industry signatories, whose member-companies account for a significant share of economic activity in Montana, generally support adoption of the proposed rule *with exceptions*.

Montana Petroleum Association
Montana Mining Association
Treasure State Resources Association

Our comments consider the legislative intent of Senate Bill 325 (2015), including amendments, to provide a practicable solution for preserving water quality conditions *and* economic activity. Furthermore, the language proposed in these comments provides clarification and omits redundancy.

It is of immense importance that the business climate of Montana be supported by clearly articulated rules and regulations, to promote greater certainty to permittees of various economic operations.

1) The signatories request that *may* be stricken and replaced with *shall* in part (1) under the New Rule 1; Variance from Standard Water Body Conditions, in accordance with legislative intent.

   During the 2015 legislative discussions on Senate Bill 325 (2015), amendment 032502 was presented, including verbiage that the permitting agency "has to allow a variance". The intent of legislative work on Senate Bill 325, including amendments, was to treat the variance process as an inevitability, if certain conditions could be met by the operator (permittee).

2) Under part (1) of the New Rule, language should clearly state those conditions which are required for a variance to be issued. We propose replacing *the department determines in writing*, with, *the following conditions are met*, to remove ambiguity and further align the rule with legislative intent.

   This language precedes subparts (a) through (e), which list the specific prerequisites for obtaining a variance.

3) Under part (8) on the terms of review; we request that where water quality in the receiving stream as improved during the term of the variance, that the agency (DEQ) shall consider the previous *five* years, not two years.

   Extending the time frame of the retroactive review of stream quality conditions will provide consistency with the permit conditions review period. A five-year period may provide a more accurate review, taking into greater account extreme changes to water levels from year to year.

4) Under part (9) on review conducted under part (8); we request that *may* be stricken and replaced with *shall* once again in accordance with legislative intent.

Please find attached a detailed list of the recommendations listed above.

We appreciate the opportunity to comment. It is of the utmost importance to our member-companies that there remains a workable alternative, such as the variance process, for continued and future revenue-generating operations in Montana.

Regards:

Alan Olson
Executive Director
Montana Petroleum Association

Tammy Johnson
Executive Director
Montana Mining Association

Peggy Trenk, CAE
Executive Director
Treasure State Resources Association

ATTACHMENT #1

Montana Petroleum Association

Montana Mining Association

Treasure State Resources Association

Comments

New Rule I under Title 17, chapter 30, subchapter 6 pertaining to water quality standards

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW

OF THE STATE OF MONTANA

In the matter of the adoption of New Rule I under Title 17, chapter 30, subchapter 6 pertaining to water quality standards	))))	NOTICE OF PUBLIC HEARING ON PROPOSED ADOPTION (WATER QUALITY)

TO: All Concerned Persons

1. On January 26, 2018, at 10:00 a.m., the Board of Environmental Review will hold a public hearing in Room 111, Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed adoption of the above-stated rule.

2. The board will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact Sandy Scherer, Legal Secretary, no later than 5:00 p.m., January 19, 2018, to advise us of the nature of the accommodation that you need. Please contact Sandy Scherer at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail sscherer@mt.gov.

3. The new rule proposed to be adopted provides as follows:

NEW RULE I Variance from Standard for Water Body Conditions (1) The department ~~may~~ shall grant to a permittee a variance from a water quality standard if the following conditions are met: ~~the department determines in writing that:~~

(a) the standard is more stringent than the quality of the receiving water;

(b) the condition in (a) exists because of anthropogenic contributions of the pollutant to the water body;

(c) the condition in (a) cannot reasonably be expected to be remediated during the permit term for which the variance is sought;

(d) the discharge to which the variance would apply would not materially contribute to the condition in (a); and

(e) one of the demonstrations provided at 40 CFR 131.14(b)(2)(i)(A)(1), which is by this reference adopted and incorporated into this rule, applies.

(2) To obtain a variance, a permittee shall submit to the department an application that:

(a) identifies the pollutant for which the variance is sought;

(b) identifies the permittee by name, address, and telephone number;

(c) identifies the receiving water body;

(d) demonstrates to the department's satisfaction that the requirements of (1) are met; and

(e) proposes, with supporting documentation, a variance level that is:

(i) the highest attainable interim standard in the receiving stream;

(ii) the interim effluent condition that reflects the greatest pollutant reduction that is achievable; or

(iii) if no additional feasible pollutant control technology can be identified, the interim standard or effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the variance is submitted. For a variance under this paragraph (2)(e)(iii), the permittee shall prepare and implement a pollutant minimization plan that contains a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loading.

(3) The department shall review each application to determine whether a reasonable alternative is in place that would eliminate the need for the variance, including:

(a) a permit compliance schedule;

(b) reuse;

(c) a TMDL for the pollutant where the permittee is meeting the established waste load allocation; or

(d) other department actions.

(4) If the department makes a preliminary finding that a reasonable alternative to approving a variance is available, the department shall consult with the applicant prior to making a decision regarding the variance.

(5) If the department determines that no reasonable alternative to a variance exists, the department shall determine whether the information provided by the applicant meets the requirements of (1) and (2). If the department finds that the requirements of (1) and (2) are met, and that a variance is needed, the department shall approve the variance after conducting a hearing following no less than 45 days' notice to the public. All written or oral public comments related to the variance shall be presented to the department during this public comment period.

(6) Within 30 days after approval of the variance, the department shall submit the variance and any supporting documentation and analysis to EPA. The variance is not approved for federal Clean Water Act purposes until EPA notifies the department that the variance complies with the federal Clean Water Act, 33 USC 1251, et seq.

(7) The variance may be used to develop MPDES permit limits. A permit incorporating a variance issued by the department under this rule is subject to ARM Title 17, chapter 30, subchapter 13. The department shall review the variance five years from the date the department issues a final discharge permit incorporating the variance.

(8) The variance must be reviewed by the department every five years to reevaluate the conditions in (2)(e). Based on this review, the department may terminate, continue, or modify the variance. In order to continue or modify the variance, the permittee shall provide information demonstrating compliance with (1) and (2). In cases where water quality in the receiving stream has improved during the term of the variance, DEQ shall consider the ambient upstream condition of the waterbody, as characterized for the previous ~~two~~ five years, in determining an appropriate variance level under (2)(e).

(9) Based on the review conducted under (8), the department ~~may~~ shall approve the variance, with any modifications after public comment and public hearing under (5). Within 30 days after department approval of the variance, the department shall submit the variance and any supporting analysis to EPA. The variance is not approved for federal Clean Water Act purposes until EPA notifies the department that the variance complies with the federal Clean Water Act, 33 USC 1251, et seq.

(10) A copy of 40 CFR 131.14(b)(2)(i)(A)(1) may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59601-0901.

AUTH: 75-5-222, MCA

IMP: 75-5-222, MCA

REASON: The New Rule is necessary to fulfill the requirements of Montana Code Annotated (MCA) 75-5-222(2). This statute provides that if pollution upstream of a discharger is due to anthropogenic sources, a variance from the applicable standards may be appropriate under certain conditions. It also requires rulemaking to implement the statute. The statute codifies Senate Bill 325, introduced in the 2015 Montana Legislature. This statute was directed at focusing water quality remediation efforts toward the primary pollution contributors, often historic mining, instead of less significant Montana Pollutant Discharge Elimination System dischargers, such as publicly owned treatment works, until the upstream source is remediated and water conditions improve.

The New Rule sets forth the conditions under which a permittee may apply for a variance from water quality standards. The first and second sections of the rule highlight specific requirements of the statute and federal regulations, which provide criteria and procedures for the department to issue variances from water quality standards. The federal regulations for variances from water quality standards are at 40 CFR 131.14. Section 75-5-222(2), MCA, requires the board to adopt standards that are consistent with comparable federal regulations. It is necessary to include these details in the rule to provide transparency and clear direction to potential variance applicants.

Sections (3) and (4) of New Rule I direct the department to review applications for variances to ensure that other mechanisms (such as total maximum daily loads) are not already in place that would preclude the need for a variance. These alternative mechanisms would not limit the ability of a permittee to apply for a variance; however, due to the time and expense necessary to establish and implement a variance, the board wants to ensure applicants are

aware of other available options that may more effectively and efficiently satisfy the need for the variance.

Section (5) of New Rule I is necessary to ensure consistency in the department's review and approval of variances issued under this rule. Because variances are exceptions to water quality standards, section (6) clarifies that each individual variance must be approved by the EPA before it may be implemented for Clean Water Act purposes. In order to be consistent with 75-5-222(2)(b), MCA, section (7) specifies that variances will be reviewed after five years.

Section (8) outlines requirements for periodic review of the variance. The five year review period aligns with requirements in 75-5-222(2)(b), MCA. The specific guidelines for renewal and modification are necessary to provide transparency to permittees and consistency in the department's review. Another important aspect of Section (8) is that the permittee's variance must, through time, align with improving water quality. As water quality improves as a result of upstream remediation, the treatment requirements under the variance become more stringent in consideration of the improved water quality upstream of the permittee. This is necessary to meet the requirements of the Water Quality Act to maintain and improve water quality.

Section (9) states that renewals and modifications of the variance are subject to the same review and approval as the initial variance. This requirement is included for consistency and transparency.

5. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Sandy Scherer, Legal Secretary, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to sscherer@mt.gov, no later than 5:00 p.m., February 9, 2018. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

6. Sarah Clerget, attorney for the board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the hearing.

7. The department maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supply; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wind energy bonding, wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Sandy Scherer, Legal Secretary, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to Sandy Scherer at

sscherer@mt.gov, or may be made by completing a request form at any rules hearing held by the department.

8. The bill sponsor contact requirements of 2-4-302, MCA, apply and have been fulfilled. The primary bill sponsor was contacted by the department in person on March 7, 2017.

9. With regard to the requirements of 2-4-111, MCA, the board has determined that the adoption of the above-referenced rule will not significantly and directly impact small businesses.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

/s/ John F. North BY: */s/ Christine Deveny*

JOHN F. NORTH CHRISTINE DEVENY

Rule Reviewer Chairman

Certified to the Secretary of State, December 11, 2017.

NORTHERN PLAINS
RESOURCE COUNCIL

January 26, 2018

Chairwoman Deveny and Members of the Board,

Thank you for the opportunity to provide public comment on DEQ's rulemaking for Part Two of Section One of Senate Bill 325 passed by the legislature in 2015. My name is Gayle Joslin, and I live in Helena. I am a member of Northern Plains Resource Council and am presenting these comments on behalf of its membership. These are only preliminary comments, and more detailed, technical comments will be submitted in writing by the February 9 deadline.

For those of you who aren't familiar with Northern Plains, our organization is a grassroots conservation and family agriculture group that organizes Montana citizens to protect our water quality, family farms and ranches, and unique quality of life. Northern Plains has members throughout the state and from all walks of life, but many are agricultural water users, particularly in southeastern Montana.

It is from that perspective that we have significant concerns about this proposed rule. We believe that the legislative purpose of SB 325 was focused on a narrow range of situations in which a variance from water quality standards is necessary because of significant long-term impairment from legacy human-caused pollutions. Many of our members, including water users from southeastern Montana, participated in the 2015 legislative hearings on the bill, and, in particular, we remember the discussion about Butte and its legacy mine pollution. It is clear that the reason for this legislation was the legacy mining wastes that plague some parts of the state and will take a very long time to remediate. Yet the proposed rule goes far beyond that limited purpose because the proposed rule's language could be applied to many other situations.

The general history and intent behind state and federal water policies, particularly as they relate to the Clean Water Act, have been around holistic management and protection of waterways and watersheds with the understanding that water is our most precious resource. Without clean water, we have very little. We therefore believe that protection of water quality is a high purpose and that variances should be limited in scope and generally tools of last resort. We worry that this rule may be too broadly applicable and case-by-case actions for a more limited scope of actors is more appropriate.

As we testified in December when you were considering initiating rulemaking, we are very concerned about the "wiggle room" that appears to be in the language around the idea of "material contributions" to water quality degradation and about DEQ's ability to interpret what constitutes a material contribution on a case-by-case basis. While a particular point-source discharge may not ultimately have a significant impact on the water quality of a river more broadly, we are concerned about the impacts to an irrigator or other water user immediately downstream of that discharge. These designated uses need to be protected. For example, we have members who live on Hanging Woman Creek, a tributary to the Tongue River, and that water is only suitable for irrigation at certain times of the year when it is at its best quality. These limited uses must be protected. If additional discharges were allowed under this proposed rule,

these small windows of irrigation timing could be closed. Granting a variance for a year-round discharge would not protect the beneficial uses to irrigation. In addition, the cumulative effect any variance has on downstream users might also be affected.

We particularly worry about this within the context of parameters like salinity. Salts can quickly become toxic to crops and soil. In DEQ's draft guidance document, the agency states that it may be more stringent with carcinogens vs. toxics vs. harmful parameters (this language is found under the material contributions section on page seven). While EC [electrical conductivity] and SAR [sodium absorption ratio] are not arsenic, their effects can be significant, harmful, and, in some cases, devastating. During the height of the coalbed methane boom, some Tongue River area ranchers saw their crop yields drop by as much as 40% due to salt accumulation. We therefore worry that if the agency views harmful parameters like salts in a less stringent manner, it may view their contributions as less "material" to the water quality and, therefore, permit variances that result in harm to farmers and ranchers.

We also worry to some degree about the piecemeal creation of rules under SB 325 and the uncertainty that this process creates.

A degraded baseline is not in and of itself an excuse to allow further degradation, and while some exceptions may indeed be needed, they should be limited in scope. Consequently, we believe that the proposed rule needs further work and clarification. We will be submitting more details on these issues in the comments we submit by February 9.

Thank you for your attention to our concerns and for the opportunity to testify here today.

Gayle Joslin

on behalf of the members of Northern Plains Resource Council

February 9th, 2018

Submitted via electronic mail to sscherer@mt.gov

MT Board of Environmental Review
Dept. of Envt'l Quality
1520 E. Sixth Avenue
PO Box 200901
Helena, MT 59620-0901

Re: Comments on New Rule 1 under ARM Title 17, chapter 30, subchapter 6, pertaining to water quality standards

Madam Chair & Members of the Board of Environmental Review:

Upper Missouri Waterkeeper (Waterkeeper) submits this comment letter to the Board of Environmental Review (Board) concerning the Department of Environmental Quality's (DEQ) draft Variance Rule 1 (hereinafter "the variance rule" or "Variance Rule 1") proposed for rulemaking by the Board in MAR Notice 17-395, December 2017.

Waterkeeper is a Montana non-profit membership organization dedicated to protecting and improving waterway health within the 25,000 sq. miles of Southwest and West-Central Montana's Upper Missouri River Basin. As part of its mission Waterkeeper engages in policy, science, and rulemaking related to Montana's implementation of its mandatory duties pursuant to the federal Clean Water Act and citizens' guarantee to a clean and healthful environment under our state constitution. We have participated in DEQ Work-Group meetings leading up to the release of the Variance Rule and consistently advised DEQ concerning how to craft a rule that conforms to the requirements of federal law and which protects local waterways from pollution.

We thank the BER and DEQ for the opportunity to comment on this proposal and participate in the lengthy public participation process leading up to this rulemaking.

Executive Summary

We oppose the draft Variance Rule 1 because it does not conform to the federal Clean Water Act or its implementing regulations, and because it fundamentally misconstrues – and threatens to undermine - the longstanding system of water pollution controls in the state of Montana to the detriment of local waterways and the many user groups who depend on healthy, clean flows.

Our comments emphasize the proper structure of water pollution control set forth under the Clean Water Act and implementing regulations – which Montana and this Board must follow - then discusses specific, unlawful departures from those directives created by the Variance Rule. We also agree with and expressly incorporate by reference the comments submitted by Northern Plains Resource Council.

We strongly encourage the Board to exercise its lawful discretion and remand this rulemaking to DEQ for reconsideration and amendments in light of conflicts with federal pollution control requirements.

I. Brief Summary of the Clean Water Act

Recognizing that previous attempts to regulate and control water pollution had been ineffective, Congress enacted the federal Clean Water Act (CWA) in 1972. The CWA's promise and goal was to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a)(1). En route to that goal and the goal of eliminating all discharges of pollution to waters by 1985, Congress directed as an interim goal that the highest uses of waters such as public health and welfare, fish, shellfish, and recreation, must be protected by 1983 wherever attainable. 33 U.S.C. § 1251(a)(2) (emphasis added). Furthermore, the CWA was intended as a starting point of pollution control that would operate expeditiously alongside state-based programs for control of nonpoint source pollution and in this way enable meaningful control of all sources of water pollution.

Sadly, over 45 years later and very few of these goals have been met, and almost half of assessed waterways – which are in turn a minority of mapped river miles - are still polluted and unable to fulfill their designated uses. This means, as DEQ well knows, that many waterways across Montana much less the nation cannot provide cool, clean flows necessary to support native fish, or are too contaminated by development or agricultural based pollution rendering them unsuitable for fishing, swimming, or irrigation. According to the EPA, there are >44,000 waters in the United States that do not comply with minimum water quality standards—i.e., that are impaired. *See* USEPA, National Summary of Impaired Waters and TMDL Information, 2016. According to recent EPA National Water Quality Inventory, of the representative streams and rivers assessed:

> 44% were reported as impaired or not clean enough to support their designated uses, such as fishing and swimming. . . . Pathogens, habitat alterations, and organic enrichment/oxygen depletion were cited as the leading causes of impairment in rivers and streams, and top sources of impairment included agricultural activities, hydrologic modifications (such as water diversions and channelization), and unknown/unspecified sources.

See USEPA, National Water Quality Inventory: Report to Congress, 2004 Reporting Cycle, EPA 841-R-08-001. For the assessed lakes and reservoirs, 64% were reported as impaired and 36% were fully supporting all assessed uses. Mercury, polychlorinated biphenyls (PCBs), and nutrients were cited as the leading causes of impairment in lakes. *Id.*

The State of Montana's recent Integrated Reports provides startling similar numbers on the scope of widespread waterway impairment, indicating our state has not met the CWA's interim goals of protecting local waterways' highest attainable uses, much less the penultimate goal of eliminating point source pollution set forth decades earlier. The years in which DEQ has administered the Montana Pollution Discharge Elimination System (MPDES) permit program presents a sad tale of too little, too late as regards pollution controls for point sources, while next to no accountability system exists in Montana for the control of nonpoint source pollution to our waterways. Put another way, too often our state has been reactive – as opposed to proactive – in addressing known sources of pollution and in preventing pollution from reaching waterways.

This abbreviated history of where waterway pollution controls should be is critical to contextualizing the problems inherent in the draft Variance Rule I – a new rule that threatens to circumvent and undermine our water pollution control system and further degrade what little progress has been made.

II. The Role of Water Quality Standards & TMDLs in "Restoring & Maintaining" the Integrity of Waterways

Despite Congress's change in focus from the health of the receiving water body to the control of effluent from point source discharges into those waters, the CWA contained significant provisions aimed at protecting the nation's waters, based on the quality and uses of those waters. The primary CWA provision focused on water bodies themselves is Section 303, entitled "Water Quality Standards and Implementation Plans." 33 U.S.C. § 1313. This section establishes water quality standards in cooperation with the states: states are required to set water quality standards for all waters within their boundaries regardless of the sources of pollution entering the waters.

Water quality standards establish, and must protect, the desired conditions of each waterway within the state's regulatory jurisdiction. Water quality standards are retained as a basis for effluent limitations so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.

Section 303 of the CWA mandates three specific components of a state's water quality program. First, a state establishes the "designated uses" of its waters. Second, a state promulgates "water quality criteria," both numeric and narrative, specifying the water quality conditions, such as maximum pollutant levels, that are necessary to protect designated uses. Third, a state adopts and implements an antidegradation policy to prevent any further degradation of water quality. These three components of a state water quality program are independent and separately enforceable requirements of federal law.

Water quality standards establish the water quality goals for a waterbody as a whole. They are the benchmarks by which the quality of a waterbody is measured: waterbodies that do not meet these benchmarks are deemed "water quality-limited" or "impaired" and placed on the list for such waters in each state prepared pursuant to CWA Section 303(d), known as the "303(d) list." Section 303(d) requires that:

> Each State shall identify those waters within its boundaries for which the effluent limitations required by section 1311(b) (1)(A) and section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

33 U.S.C. § 1313(d)(1)(A). For impaired waters identified on each state's 303(d) list, the states must develop total maximum daily loads (TMDLs) in order to bring these waterbodies back into compliance with applicable water quality standards. A TMDL defines the specified maximum amount of a pollutant which can be discharged or 'loaded' into the waters at issue from all combined sources.

Each state must submit its 303(d) list to EPA for approval. If EPA approves the state's list, the state then incorporates the list and any TMDLs done for these waters into the state's "continuing planning process" established pursuant to CWA Section 303(e). A state's continuing planning

process is aimed at achieving compliance with water quality standards if the point source effluent limitations are not sufficient. The continuing planning process incorporates a variety of water quality protection tools, such as individual point source permit effluent limitations, TMDLs, and area wide waste management plans for nonpoint sources.

The TMDL process includes identification of existing sources of pollution that have caused or contributed to the degraded water quality, then establishment of "wasteload allocations" (for point sources of pollution) and "load allocations" (for nonpoint sources of pollution) for those sources which have caused or contributed to the degraded water. A final TMDL thus represents a "ratcheting down" of pollution sources via their respective pollutant loading allocations.

If TMDLs are properly adhered to, then the result would be restoration of the impaired stream to water quality standards, which is to say all designated uses would be met. Thus a TMDL reflects an impaired waterbody's capacity to tolerate point source, nonpoint source, and natural background pollution, with a margin of error, while still meeting state water quality standards.

Thus, the load and wasteload allocations and loading reductions detailed in a TMDL serve a purpose—getting the impaired waterbody back to health. The basic purpose for which TMDLs are established is the attainment of water quality standards over time. A TMDL specifies the maximum amount of a particular pollutant that can pass through a waterbody each day without water quality standards being violated. Therefore, under the CWA a primary means of protecting water quality and achieving water quality standards is through the establishment of pollution limitations for point sources, implemented through NPDES permits, and through the promise of state-based nonpoint source pollution control plans under Section 303(e).

Variances Are Narrowly-Tailored Tools, Allowed In Extreme Cases of Water Pollution, On a Sparing Basis

Although variances to water quality standards are allowed under present federal regulations, Montana should use this rulemaking effort to further limit their application, not broaden it.[1] We are greatly concerned by the proposed "general variance" structure of the draft Variance Rule 1[2] and the unintended consequences that will likely flow from its implementation.

As set forth above, and provided a state is faithfully implementing the CWA's technology and water quality based pollution control elements, variances are in fact unnecessary as measurable progress will be made in identifying, qualifying, quantifying, and reducing sources of waterway pollution. The use of variances – which are temporary, weaker replacement water quality standards in their own right – entails the dumbing-down of science-based standards and thus a departure from the goals of water quality protection and improvement. Water quality standards under § 1313 are science-based, ambient standards for protection of water; variances are the opposite, which is to say a means of weakening protections for waterways.

Adopting science-based and protective water quality standards is foundational to proper implementation of the Clean Water Act affecting, in particular, the second primary method of restoring and protecting our waters, which are pollutant discharge elimination permits. Congress prohibited all pollutant discharges to water absent a permit, and water quality standards are a

---

[1] *See* 40 C.F.R. § 131.10, the sparing instances of extreme circumstances for variances under current regulations.

[2] DEQ's draft variance rule reflects a "general" structure whereby it would authorize future, individual variances. This generalized structure is precisely opposite the plain intent of variance rules, which reflect a narrowly-tailored focus; the concept of a general, broad variance rule is inapposite to the structure and intent of the CWA.

primary driver of those permit requirements. 33 U.S.C. §§ 1311(b)(1)(c) and 1342 (a)(1). *See also,* 40 C.F.R. § 122.44(d).

DEQ has articulated, in public and written statements, that this draft variance rule is meant to implement the state legislature's intent codified in 75-5-222(2), MCA. We submit that the draft variance rule does not reflect legislative intent, is overbroad, conflicts with the intent of the MWQA enshrined in the Montana Constitution's guarantee of a "clean and healthful environment," and also conflicts with binding federal law. Indeed, the draft variance rule is subordinate to the requirements of federal water pollution law; neither the Montana legislature or DEQ can mandate the imposition of new pollution control requirements that fail to satisfy – or conflict with – key tenants of the CWA. *See generally*, U.S. Constitution, Article VI, Clause 2, "Supremacy Clause."

III. Water Pollution Permitting Under the CWA

It is important to view the draft Variance Rule 1 through the lens of Montana's pollution permitting program, where the first and foremost goal is to reduce and eliminate pollutant discharges to waterways of the state.

No discharger has a vested right to pollute – the act of discharging pollution is in fact wholly prohibited except for point sources approved through the MPDES permitting program. Approval to discharge pollutants entails compliance with strict pollution control requirements, which are necessary for meaningful progress towards protecting clean water, and restoring polluted waters. Indeed, without strict adherence to science-based permits and water quality standards there will never be measurable progress towards the national goals of fishable, swimmable, drinkable water.

Specifically, the CWA requires regulators to include water quality based effluent limitations (WQBELs) in each revocable five-year permit, set at levels necessary to prevent permitted discharges from causing or contributing to violations of water quality standards. Expressed in 40 C.F.R. §§ 122.4(i) and 122.4(d) are twin requirements that give pollution-permitting meaning. New discharges cannot be allowed if they will contribute to an existing problem unless a WLA has been created for the receiving water and the WLA will not be exceeded by addition of the new discharge. The corollary requirement for existing discharges is likewise simple; a permit cannot cause or contribute to exceedences of a water quality standard. These synergistic requirements advance the CWA's "goal" of attaining and maintaining "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a)(3).

The 5-year permit cycle reflects the physical reality that many dynamic variables affect attainment of water quality standards; thus permit limits designed to achieve those standards must be regularly revisited. Under the NPDES permit program, polluters receive permission to pollute on a temporary basis only, subject to modification or revocation as water quality conditions may require. *See* CWA § 1342(b)(1)(B), (C). Accordingly, the CWA elevates attainment of minimum water quality standards over economic considerations. In re City of Moscow, Idaho, 10 E.A.D. 135, 168 (EPA Envtl App. Bd. 2001) ("[S]ection 301(b)(1)(C) of the CWA requires unequivocal compliance with applicable water quality standards, and does not recognize an exception for cost or technological infeasibility.").

Throughout these processes - of both identifying and qualifying impairment and ratcheting down sources of pollution – there are well-established regulatory tools that can provide point-source

dischargers reasonable amounts of time to come into compliance with necessary permit limits: these tools are called compliance plans. Compliance plans allow gradual improvement of pollution controls on the theory that Rome was not built in a day, and so too does meaningful pollution control require accountability over time.

Nothing in the CWA or EPA regulations indicates that any limited availability of variances was meant to short-circuit NPDES permitting or TMDL processes in the manner laid forth by the draft Variance Rule 1. Maximum WLAs within TMDLs inform and facilitate the development of WQBELs during the NPDES permitting process, and when a WLA does not exist for discharges to impaired waterways permits must ensure discharges do not cause or contribute to the receiving waterways' impairment. These requirements are a starting point in the WQBEL process, but not always an end point. And they are certainly not the vested rights to pollute that appears inherent in the logic behind Variance Rule 1.

IV. The Draft Variance Rule Conflicts With Baseline Requirements of the CWA & Cannot Be Lawfully Adopted As-Written

The draft rule's premise is contrary to the CWA's structure as a whole, and further violates CWA requirements determining when a variance is permissible. We analyze and respond to each of the five (5) factors that would determine applicability of the draft variance in turn, below, then provide further prudential discussion and rule analysis.

1. Variance Rule 1(a): "the standard is more stringent than the quality of the receiving water."

In layman's speech this factor says, "if you're discharging to an impaired waterway, you may be eligible for a variance." In CWA parlance, any receiving waterway that is not meeting its designated uses – which is to say its water quality standards – is de facto an impaired water and, as discussed above, must be listed on the state's 303d List and in most cases, a TMDL must be developed. The presumption set forth by this section of the draft rule – that any discharge to an impaired waterway may be eligible for a variance – is incredibly broad, and directly contrary to the regulatory program of the CWA.

A waterway impairment designation does not convey some sort of right on a discharger to obtain relief from its permit limitations. Indeed, quite the opposite. An impairment designation on a receiving water should actually incite the opposite effect, which is to say it will likely increase the stringency of a permit as necessary to ensure a discharge is not causing or contributing to the receiving waterway's impairment per 40 CFR 122.44(d).

To be clear, the fact that a water quality standard is more stringent than the quality of a discharger's receiving water is not a lawful rationale supporting the issuance of a variance under the CWA. The status of a receiving waterway as impaired, and thus its non-compliance with a water quality standard means, rather, that there is a need for the creation of a TMDL and appropriate WLAs for point source dischargers, <u>after which time MPDES permit reissuance must reflect the pollution reduction assumptions expressed in the WLAs</u>.

As the rulemaking authority bound to implement federal water pollution controls BER must recognize the incompatibility of this draft rule requirement with requirements of the CWA and remand it to DEQ for reconsideration. To do otherwise would be unlawful, arbitrary, capricious, and an abuse of discretion.

2. **Variance Rule 1(b) "the condition in (a) exists because of anthropogenic contributions of the pollutant to the water body."**

This draft rule criterion posits that man-made pollution causing waterway impairment is somehow eligible for special leniency as compared to natural-based pollution. Here again this criterion lacks any support under the federal CWA.

In point of fact, man-made pollution sources are precisely the types of pollution that the thorough system of pollution control articulated under the CWA was designed to address. If the man-made pollution causing impairment arises from a point source, the point source must reduce or stop its discharges as necessary to ensure designated uses are protected. If the impairment source is non-point source, or if the point source is Superfund or other legacy pollution clean-up, the CWA requires TMDLs to reflect a synthesis of LAs and WLAs, plus a Margin of Safety, necessary to provide a roadmap for long-term waterway recovery and restoration. Applicable WLAs will then direct creation of permits that reflect the relative contribution of a discharger to impairment.

To be clear, the CWA does not contemplate man-made pollution as an acceptable basis for reducing the level of control – or stopping potentially necessary increased stringency of controls - for a point source discharger's contributions to an impaired waterway.

Furthermore, even hypothetically presuming Waterkeeper agreed that variances could be used in certain circumstances, neither long-standing EPA guidance or agency practice concerning variances prior to 2015, nor new water quality standards regulations adopted by EPA after 2015, sanction an upstream man-made pollution criteria as a lawful rationale supporting issuance of variances to downstream dischargers contributing to the receiving waterway's impairment.[3] Waterkeeper presumes that, as discussed below in subsection #3, that DEQ staff have misinterpreted a narrow circumstance of variance applicability under 40 CFR 131.10(g)(3) and, instead of carrying forward this narrowly-tailored circumstance, have made a mountain out of a molehill in its draft variance rule.

As the rulemaking authority bound to implement federal water pollution controls BER must recognize the incompatibility of this draft rule requirement with requirements of the CWA and remand it to DEQ for reconsideration. To do otherwise would be unlawful, arbitrary, capricious and an abuse of discretion.

3. **Variance Rule 1(c): "the condition in (a) cannot reasonably be expected to be remediated during the permit term for which the variance is sought."**

This draft rule criterion misunderstands and misapplies one narrow regulatory basis for issuance of variances, specifically 40 CFR § 131.10(g)(3) and conflates it with the procedural time-frame under which MPDES permits must regularly be reviewed, justified, and if appropriate, renewed.

That EPA regulation provides that a variance may be permissible if "[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place." It is important to note the contextual gravamen; 131.10(g)(3) references a very narrow set of circumstances, specifically, *permanent man-made pollution*, that may give rise to the availability of a variance. Conversely, the rule at issue here arbitrarily sanctions a much broader set of circumstances for variance

[3] *See* criteria for variance issuance in 40 CFR §§ 131.10(g), 131.14.

approval: the draft variance states that any impairment which cannot be "reasonably" expected to be fixed within a permit term, which is to say a maximum of five years for a MPDES permit.

Not only is the draft rule's use of the phrase "reasonably expected" vague, ambiguous, undefined and therefore arbitrary, so too does the conflation inherent in the draft rule's creative combination of a man-made impairment criterion with a temporal component - a 5 year MPDES permit term to which a variance would apply - render this draft rule criteria contrary to requirements of the CWA and its implementing regulations. There is no CWA provision allowing weaker, replacement standards or weaker permit terms when man-made pollution cannot be fixed within a permit term: the CWA contemplates quite the opposite, embodied in the long-term planning and enforcement process of the TMDL and NPDES permit programs, respectively. If time is needed to remediate a pollution problem arising from or related to a MPDES permittee, then a compliance plan is appropriate, not a weakening of the standards judging health in the receiving waterway.

Furthermore, the purported tiering of a draft variance's duration to a MPDES permit's duration is impermissible (presuming a MPDES time frame of 5-years is contemplated). Even if variances are allowed under the CWA they represent substitute water quality standards that must be reviewed every three years under the express direction of Congress under the CWA. Furthermore, any variance's three-year review must fully articulate the basis for approval and basis supporting any continuation.

As the rulemaking authority bound to implement federal water pollution controls BER must recognize the incompatibility of this draft rule requirement with requirements of the CWA and remand it to DEQ for reconsideration. To do otherwise would be unlawful, arbitrary, capricious and an abuse of discretion.

4. Variance Rule 1(d): "the discharge to which the variance would apply would not materially contribute to the condition in (a)."

The concept of a discharge's "materiality" to receiving waterway impairment is not a lawful rationale supporting issuance of a variance. The CWA does not use the word "material" in describing any of its pollution control requirements, nor do EPA regulations provide for some sort of 'materiality' determination as part of some process authorizing lesser MPDES permit limits. Furthermore, setting aside for the moment the lack of support in federal law for DEQ's "materiality" criterion, DEQ's rule and guidance are silent on how it will determine materiality. The CWA provides zero support for the use of any materiality determination in authorizing use of variances; similarly, the lack of a definition and process for implementation renders this criterion vague, arbitrary, and incapable of enforcement as a matter of state law.

Conversely, the CWA's regulations at 40 CFR 144.44(d) prohibit the issuance of a permit that would cause or contribute to a violation of water quality standards. Available rule guidance suggests that DEQ may treat certain pollutants with more stringency than others in determining materiality, based on its agency expertise of whether a Pollutant of Concern is toxic, carcinogenic, or generally harmful. Doing so, however, is unscientific and arbitrary in that DEQ's legal duty is to ensure permit terms – and variances – will not cause or contribute to violations of water quality standards.

For example, although salinity is not considered carcinogenic or toxic, at certain concentrations in certain waterways it will cause or contribute to violations of water quality standards. Similarly, nutrient pollution is bioaccumulative and, while individual discharges of small

volumes may appear innocuous and "non-material" compared to a larger upstream pollution source, they can in fact cause or contribute to a waterway's impairment locally or farther downstream.

Further, Waterkeeper is aware that DEQ does not possess robust datasets capable of establishing baseline conditions, let alone tracking statistical trends in health – or impairment – of most waterways across Montana. Likewise, it does not – under this rule and often under MPDES permits – require monitoring sufficient of establishing baselines, impairment significance, or making a scientifically-defensible determination of what constitutes "material" pollutant discharges. These logistical complications further undermine the credibility of the draft variance rule and suggest that, at a minimum, BER remand the rule to DEQ for further explanation.

Waterkeeper does not presume to unravel the convoluted logic behind this criterion's unlawful tenants and, instead, respectfully reminds the Board that it may only approve DEQ rules that conform to requirements of the CWA and which are not arbitrary, capricious and an abuse of discretion.

5. Variance Rule 1(e): "one of the demonstrations provided at 40 CFR 131.14(b)(2)(A)(1) [i.e., one of the factors enunciated in 131.10(g)]… applies."

As discussed above variances are unnecessary if the state of Montana is faithfully implementing all components of the federal CWA. If Montana chooses to implement this rule it must support any variance with a showing of all requirements described in 40 CFR 131.14 and 131.10g, as well as other lawful requirements discussed *supra*.

Prudential and Other Concerns

The draft variance rule creates several arbitrary distinctions under New Rule 1, subsection (2).

- Subsection (2)(e) requires documentation that a variance level constitutes the "highest attainable interim standard" in the stream, the "interim effluent condition that reflects the greatest pollution reduction achievable, or if no additional feasible pollutant control technology can be identified, the interim standard or effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the variance is submitted."

  The three options provided appear to borrow language from EPA's new 40 CFR 131.14 regulations, but to do so in a discordant and inaccurate fashion. The phrase "interim effluent condition" is not a phrase or condition used or approved for use in issuance of variances under the CWA or implementing regulations. Similarly, the phrase "highest attainable interim standard" is not recognized anywhere in federal law. A water quality standard is defined as criterion necessary to protect designated uses. The CWA and implementing regulations do not recognize an "attainable standard " concept, nor do they recognize an "interim standard" concept.

  The same ambiguity and uncertainty applies to the phrase "feasible pollutant control technology." This term is undefined, with no sense of how "feasibility" is determined or quantified. It nearly goes without saying that "feasibility" is not a pollutant control concept recognize by the CWA because, i*f there is no feasible pollutant control treatment, a discharger may not obtain authorization to discharge pollutants.* Again, DEQ's draft rule appears to conflate the MPDES permit program and its draft variance rule as a vested right of

dischargers to pollute when, in fact, neither state nor federal law provides any guaranteed right to pollute waterways.

Rather, the CWA is quite specific in directing states to adopt, under statute, water quality standards that protect designated uses. A discharge to a receiving waterway can possess an enforceable compliance plan as a means to satisfying permit conditions and, in turn, meeting water quality standards. However, there is no such process as an "interim standard" or "attainable standard," both of which appear to presume a discharger's alleged inability or unwillingness to comply with applicable MPDES permit terms necessary to local waterway protection or restoration.

- Similarly, the draft rule lays out several instances where a variance may not be necessary, yet its logic is backwards and contrary to established CWA and MWQA policy. First, a variance is – based on it plain definition under federal law – presumed an exception, and not a rule. The draft variance rule, however, presents the variance as a status quo regulatory tool. Instead, a variance should always be presumed unnecessary and other tools be of first resort. Second, subsection 3(c) mistakes a requirement for an exception; as explained thoroughly, *supra*, where a TMDL exists and a permittee is in compliance with a WLA, they are not eligible for a variance. This is because the permittee is doing their part to reduce pollutant loading so that they are not causing or contributing to impairment. Again, it is important to recognize that doing so is a requirement of the CWA regulatory program, not an exception to a variance rule.

- Also of concern is the draft rule's mistaken construction of TMDL requirements in subsection 8. This section states that DEQ shall consider upstream ambient water quality in setting variance levels for downstream dischargers. This procedure, again, mistakes and wrongly confuses requirements of the CWA. If a waterway is impaired, the guiding metric for setting individual permit terms is any applicable WLA, or the need to develop a WLA. If a WLA hasn't been developed – but needs to be – the CWA and caselaw is clear that DEQ must ensure that the discharge is not contributing to violations of water quality standards. This stiff burden is a critical, and necessary, mechanism by which the CWA ensures that its provisions and requirements are actually being met in an accountable framework and that, by doing so, forward progress is made on clean-up efforts for impaired waterways. If not for this stringent NPDES permit framework there would be no certainty that necessary pollutant reductions were being made and, in turn, that indefensible permits are not being issued which inadvertently or negligently make pollutant impairments worse.

- As a policy matter it is deeply troubling that the draft rule goes to such lengths to weaken existing pollution controls on regulated sources yet, at the same time, expends zero effort and imposes zero new controls or incentives aimed at addressing the allegedly "primary" pollutant sources giving rise to waterway impairment, and thus the allegedly "equitable" issuance of variances to "immaterial" downstream dischargers. The cumulative effect of the draft variance rule will be to create a new regulatory framework representing a self-fulfilling prophecy of continual waterway pollution. I.e., the few regulatory controls we possess over point source polluters will be sacrificed and weakened, yet no new effort or monies will be allocated to addressing known, significant sources of pollution. Neither the MWQA, our state Constitution, nor the federal CWA sanction this type of remedial rulemaking.

Conclusion

For all the reasons discussed above, Upper Missour Waterkeeper respectfully requests that the Board of Environmental Review stay this rulemaking proceeding and remand the draft rule to DEQ for revision and response to these comments.

Sincerely,

Executive Director

CC:

Tim Davis, DEQ
Tonya Fish, EPA

Feb. 1, 2018

Board of Environmental Review
c/o Sandy Scherer, legal secretary
Department of Environmental Quality
1520 E. Sixth Ave.
P.O. Box 200901
Helena, MT 59620-0901

Dear Board Members,

The Water Policy Interim Committee wishes to go on record as unanimously supporting the proposed administrative rule in MAR Notice No. 17-395. The committee members believe that a variance from water quality standards for permittees facing legacy pollution reflects the intent of Montana Senate Bill 325 (2015).

The committee would like to relay the following comments heard at the committee's Jan. 9 hearing:

- The variance process is a fair and equitable standard.
- The variance process is necessary to promote growth in Montana's cities.
- The variance process relieves city taxpayers from expensive, perhaps unnecessary wastewater treatment plant upgrades.

The committee suggests that the administrative rule language be amended to:

- strengthen language requiring variance issuance if certain conditions are met, and
- lengthen the time period to consider upstream conditions during a variance renewal review.

The committee applauds the cooperative efforts of the Department of Environmental Quality and the various interest groups that worked on this rule. Finally, the committee encourages the department to start drafting additional rules, which are necessary to fully enact SB 325.

Sincerely,

Sen. Pat Connell, presiding officer
Water Policy Interim Committee
65th Montana Legislature
Cl0140 8032OMXB.docx

SUPPLEMENTARY AND AMENDATORY COMMENTS OF THE TONGUE RIVER WATER USERS' ASSOCIATION
In the Matter of the Adoption of New Rule I under Title 17, Chapter 30, Subchapter 6 Pertaining to Water Quality Standards
February 9, 2018

Dear Chair and Members of the Montana Board of Environmental Review:

Please accept these comments on behalf of the Tongue River Water Users' Association (TRWUA). TRWUA previously submitted comments on January 26, 2018, and commented at the initial hearing on that same date. These comments amend and supplement those previously submitted comments.

SUMMARY OF AMENDATORY AND SUPPLEMENTAL COMMENTS

TRWUA stated during the oral testimony portion of the January 26, 2018 hearing that it would be more comfortable with this rule if it were not so broad, and were limited to municipalities/publicly owned treatment works (POTWs). TRWUA was advised by DEQ on a number of occasions that SB 325 part II was intended to allow municipalities that were affected by legacy mining pollution to obtain variances in order to allow them to continue treating water and provide clean drinking water for their citizens. **We therefore think the Rule should be narrowed in scope to allow only municipalities to obtain variances in cases where water quality standards are exceeded due to legacy pollution**.

Additionally, TRWUA thinks the 5-year timeframe for variances under the proposed Rule is too long. The Clean Water Act (CWA) requires that water quality standards undergo review every three (3) years, under a process called the "Triennial Review." Section 303(c)(1) of the CWA and the EPA's implementing regulations at 40 CFR 131.20 require that states and authorized tribes hold public hearings to review applicable water quality standards (WQS) at least once every three (3) years. **TRWUA thinks any variance that DEQ grants should, at a minimum, be reviewed every three (3) years,** rather than the currently proposed five (5) years.

THE TONGUE RIVER WATER USERS' ASSOCIATION'S INTERESTS IN THIS RULEMAKING

TRWUA is an organization of farmers and ranchers who irrigate with the waters of the Tongue River in semi-arid southeastern Montana. They rely on clean, high quality water from the rain and snowmelt that feeds the Tongue River and its tributaries to raise their crops and livestock. They have worked diligently for many generations to protect the quality of the waters of the Tongue River and its tributaries for irrigation, domestic use, and to protect fish and wildlife. The Tongue River and its tributaries have been under assault from industrial pollution from coal mining and coalbed methane development in both Montana and Wyoming since the early 1970s. Those threats continue, including the specter of the Otter Creek Coal mine. Otter Creek is one of the major tributaries to the Tongue River.

The Federal Water Pollution Control Act of 1948 was the first major law to address water pollution problems in the U.S. With growing awareness and concern for preventing and controlling water pollution, significant amendments were enacted in 1972, and the law became known as the Clean Water Act (CWA).

The goal of the Clean Water Act is to *restore and maintain* the chemical, physical, and biological integrity of the Nation's waters. This translates into *eliminating* the discharge of pollutants into the nation's waters, and achieving water quality that protects beneficial uses, and that is fishable and swimmable and protects human health.

In other words, the CWA's goal is to ensure our rivers and streams are cleaned up and no longer used as sewers. TRWUA thinks allowing variances is except in very limited circumstances, and that the proposed Rule is too broad. As noted above, TRWUA thinks the proposed Rule should be narrowed in scope to apply only to municipalities and publicly owned treatment works (POTWs), as was repeatedly identified as the purpose of part II of Senate Bill 325.

TRWUA understands that the reason for this rulemaking is because the Legislature passed Senate Bill 325 in 2015. TRWUA opposed that legislation, because the bill simply provides a means to make an end run around the Clean Water Act, the Montana Water Quality Act, and the water quality standards established by the Montana Board of Environmental Review, through a lengthy rulemaking process, for the Tongue and Powder Rivers, Rosebud Creek and their tributaries. And while the present rulemaking is focused solely on variances to allow discharges into waterbodies that are impaired and not meeting water quality standards due to anthropogenic, or human-caused, pollution, TRWUA opposes it in its current form as being overbroad and not narrowly tailored to effectuate its intended purpose.

The Tongue River Water Users' Association remains firm in its opposition to SB 325, which is now codified as § 75-5-222, MCA. And opposes this variance rulemaking process for the reasons below:

First, the proposed Rule, and Senate Bill 325 on which it is predicated, encourages pollution rather than encouraging the clean up of problems causing pollution of our waters, such as legacy mining pollution—pollution from abandoned mines- and other sources of pollution.

Second, the proposed Rule is overbroad and should be narrowly tailored to effectuate the intended purpose of Senate Bill 325, which was to allow municipalities/POTWs to treat water and obtain discharge permits into waterbodies that are impaired due to legacy mining pollutants.

Third: The proposed 5-year time frame for variances before they would be reviewed is too long. Any variance granted should be limited to a maximum of three (3) years.

Fourth: In this time of budgetary shortfalls and constraints at both the state and national levels, we should be spending our limited resources on cleaning up our waters rather than devising ways to accommodate polluters and allowing them to continue polluting waters that are already suffering and not meeting water quality standards. DEQ has stated numerous times during discussions when SB 325 was

introduced at the legislature, as well as during the working group meetings, that this variance process will rarely be used. This further begs the question why we are spending time and resources on this rulemaking process. That said, TRWUA recognizes that municipalities that are dealing with legacy pollutants must be able to provide their citizens with clean drinking water. TRWUA would not oppose the proposed Rule if it were limited to municipalities/POTWs.

Although the EPA is required to review all variances and has guidelines in place for allowing variances, we nonetheless are gravely concerned that the broad scope of the proposed Rule only leads Montana down the very slippery slope of further polluting one of our state's most precious resources: water. Water is essential—the sine qua non of life itself, as well as Montana's economy. We rely on clean water for drinking, raising food crops, recreating and protecting ecosystems. Fish and wildlife require clean water for their survival. And Montana's many indigenous tribes rely on unfouled water for cultural and religious purposes.

Variances, like other water quality standards, are subject to EPA review and approval or disapproval pursuant to 40 C.F.R. §131.14.

By way of example, on December 8, 2015, the EPA approved Montana's numerical Water Quality Standards for Electrical conductivity (EC) and Sodium Adsorption Ratio (SAR) that were established for the Tongue River, the Powder River, Rosebud Creek and the tributaries to those rivers. That was the second time the EPA approved those water quality standards after protracted litigation filed by the oil and gas industry and the state of Wyoming in federal court. EPA initially approved those WQS on August 28, 2003.

And here, I must digress for a minute to explain that the original intent of the SB 325 and the nonanthropogenic standard language was devised by DEQ to circumvent the standard for the tributaries to the Tongue River in order to facilitate permitting a pollution discharge permit for the Otter Coal Mine. DEQ could not come up with a solution to permitting the Otter Creek Coal Mine discharges and keeping those discharges within the WQS for Otter Creek, a tributary to the Tongue River, without requiring significant treatment.

Senate Bill 325 was an end-run around the standards that the EPA had approved not just once, but twice, and that the Montana Supreme Court had approved in state court litigation filed by the oil and gas industry.

And although the first part of the Rulemaking for Senate Bill 325, now codified as §75-5-222, is not before you in this rulemaking proceeding, TRWUA is deeply concerned that the anthropogenic aspect of the statute and variance procedures in this proposed Rule will be convoluted, and attempts will be made by all polluters to obtain variances in order to circumvent having to meet water quality standards.

TRWUA's specific concern is that coal mines that would discharge into the Tongue River and its tributaries, including Otter Creek, would attempt to use the variance procedures in renewing and obtaining Montana Pollutant Discharge Elimination System (MPDES) permits.

The water quality standards for Otter Creek were openly under attack via SB 325, Part I, which allows DEQ to override the current numeric water quality standards promulgated by the BER in 2003 and 2006 via the "nonanthropogenic standard" language. And while that aspect of SB 325 is not at issue in the present rulemaking, TRWUA is greatly concerned that not only part I of the statute allowing DEQ to override the numeric water quality standards based on a contrived "nonanthropogenic standard" will be used to allow further pollution to the Tongue River and its tributaries, but that the variance process will be abused and become a vehicle to allow polluters to circumvent water quality standards whenever they feel burdened by having to meet water quality standards.

TRWUA previously emailed the Board Secretary the EPA's December 8, 2015 letter approving the water quality standards for the Tongue River, the Powder River and Rosebud Creek and their tributaries. That letter includes EPA's detailed reasoning and analysis, as well as a thorough scientific literature review regarding the necessity for the numerical water quality standards established by the Board of Environmental Review in 2003 and 2006, and approved by the EPA in August 2006 and again in December 2015. Based on EPA's detailed reasoning, TRWUA thinks those water quality standards should be upheld and that those

waterbodies should not ever be subject to variances or changes to those standards via the “nonanthropgenic” language in SB 325.

Thank you for this opportunity to comment.

Sincerely,

/s/ Brenda Lindlief-Hall,
Attorney for the Tongue River Water Users’ Association

February 9, 2018

Board of Environmental Review
c/o Montana Department of Environmental Quality
P.O. 200901
Helena Montana 59620-0901

Chairwoman Deveny and Members of the Board of Environmental Review:

Northern Plains Resource Council (Northern Plains) submits these additional comments to supplement our January 26, 2018, oral comments presented at the public hearing on the Department of Environmental Quality's (DEQ) Draft Rules for Part Two of Section One of Senate Bill 325 passed by the legislature in 2015.

Northern Plains is a grassroots conservation and family agriculture group that organizes Montana citizens to protect water quality, family farms and ranches, and our unique quality of life. Northern Plains has members throughout the state and from all walks of life. Many of our members historically and at present are agricultural water users, particularly in southeastern Montana. Our concerns about the proposed rule are set forth below. Northern Plains has a 40+ year history of working to protect Montana's water quality, both for agriculture and for the aquatic ecosystems that make Montana a special place.

Introduction

Northern Plains is disappointed that the Montana legislature saw fit to allow degradation of water quality, a special irony in a state that has finally begun to turn the corner on its legacy of water pollution and could be a national leader in water protection. Even though DEQ cannot undo SB 325, it can fulfill its mission by adopting the most restrictive feasible approach to the implementing regulations. The proposed regulations fall short of fulfilling DEQ's primary mission to protect water quality, the Clean Water Act's (CWA) promise of maintaining and restoring our nation's waters, and Montana's own statutory and constitutional protection for water.

A. <u>The Language, Structure, and Purpose of the CWA Allow Variances in the Most Limited of Circumstances.</u>

Congress enacted the CWA in 1972 with the goal of *eliminating* the discharge of pollutants in order to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. 1251(a) (§ 101). Congress developed the National Pollutant Discharge Elimination System (NPDES) permit system to achieve this goal. 33 U.S.C. §§ 1342 and 1311 (§§ 402 and 301). As the Ninth Circuit Court of Appeals explained in its ruling in

2003, "the goal of the CWA is to protect receiving waters, not to police the alteration of the discharged water." *See* 33 U.S.C. § 1251 (The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters.") *Northern Plains v. Fidelity*, 325 F. 3d 1155, 1162 (9th Cir 2003). Restoring water quality cannot be accomplished by granting variances that are at odds with water quality standards that are designed to protect designated uses. Variances are a step backwards. No other explanation can alter that basic fact. Therefore, variances must be used only in extremely limited circumstances.

The Clean Water Act requires states to enact water protection laws that (1) establish a designated use for each water body; (2) establish numeric or narrative water quality standards for each water body designed to prevent impairment of water quality for that designated use; and (3) adopt a nondegradation policy to maintain and protect a state's water resources. 40 C.F.R. §§ 131.10, 131.11, and 131.12. Montana has adopted water quality standards and has implemented a nondegradation policy.

Variances are at odds with the overall purpose of the CWA and the specific tools mandated by law to "maintain and restore" our nation's water quality. Northern Plains recognizes that the Environmental Protection Agency (EPA) has a variance policy and, for purposes of these comments, does not contend that any variance is *per se* a violation of the CWA. However, EPA's regulations and practices with variances demonstrate the limited circumstances where variances are appropriate. As discussed in Section B below, language in the proposed rule needs to be altered to ensure that variances are only used in limited circumstances in Montana.

B. <u>The Proposed Language Needs to be Revised to Limit the Overuse of Variances.</u>

Northern Plains requests that two changes be made to the proposed regulation in order to limit its reach. First, DEQ must eliminate the qualifying term "material" from the definition of when a variance might be acceptable. Second, DEQ must alter the five-year baseline requirement.

The proposed rule allows a variance to be granted if a number of conditions are met, including that "the discharge to which the variance would apply would not **materially contribute** to the condition in (a) [an anthropogenic source of pollution]" (emphasis added). DEQ cannot create a new class of pollution – non-material pollution -- and then use that new definition to impose arbitrary standards sanctioning a variance. Because the term "material" is not defined anywhere in the CWA and because the term could be implemented in a manner that is at odds with the purpose and structure of the CWA, DEQ needs to eliminate the term from the proposed rule. The term does not appear in the federal regulation that DEQ adopts and incorporates by reference, 40 CFR § 131.14 (b)(2)(i)(A)(1). The term "material" contradicts the other requirements of the federal regulation as well. The intent of the federal regulation is that variances not detract from the overall water quality of the receiving water, not "materially" detract from water quality. Adding this term without further clarification could lead to violations of EPA's anti-backsliding mandate because even minor, supposedly non-material, increases in pollution could lead to further degradation, especially given the length of time that these permits may be in place, as discussed below.

The second problem with DEQ's proposed variance is found in the draft rule's subsection c, as part of the requirement for granting a variance: "the condition in [subsection](a) cannot reasonably be expected to be remediated during the permit term for which the variance is sought." The term of an MPDES permit is five years. Thus, under this rule, variances to water quality standards are granted if the human-created condition causing the violation of water quality standards cannot be remediated within five years. However, few if any sources of legacy mining pollution can be remediated in five years. We ask DEQ to provide an example of where that has occurred. It takes decades to remediate mining pollution. So the polluter could continually qualify for a variance based on this provision with no incentive for the state to ensure the legacy pollution is addressed.

Furthermore, even though DEQ's rules impose a five-year review for variances, that requirement is a hollow promise. For whatever reasons (understaffing, lack of adequate funding, and/or bureaucratic intransigence), DEQ frequently misses the five-year renewal deadline for MPDES permits. Some permits are administratively extended for many years. It is cold comfort for DEQ to try to assure the public that it will review variances every five years when it frequently misses permit renewal deadlines of the same duration. DEQ must address why the variance rule will spark a new level of scrutiny and performance by the agency.

C. By Its Terms, Variances Could Not Be Granted to CBM Producers under SB 325

Northern Plains fully appreciates that there are smaller municipalities in Montana without the budgetary means to immediately deal with legacy mine pollution issues. Having participated in the 2015 legislative hearings on the bill, Northern Plains remembers the discussion about Butte and its legacy mine pollution, in particular. As DEQ notes in its comments on the Draft Rule:

> This statute was directed at focusing water quality remediation efforts toward the primary pollution contributors, often historic mining, instead of less significant Montana Pollutant Discharge Elimination System dischargers, such as publicly owned treatment works, until the upstream source is remediated and water conditions improve.

Thus the legislative history of SB 325 demonstrates that its focus is to address the problems that legacy mine pollution may create for smaller communities that need MPDES permits for the publicly owned treatment works (POTW). The rules implementing this legislation must be crafted to reflect this narrow purpose.

As stated at the outset of these comments, Northern Plains has a special concern for protecting water quality for irrigators in southeastern Montana. Those concerns have led to multiple lawsuits at the state and federal level, every single one of which was successful, to ensure that coal bed methane (CBM) discharges do not create a new legacy of pollution. For the reasons stated below, the proposed rules should eliminate the use of variances for CBM pollution. ***Northern Plains requests that DEQ go on the record in response to these comments and state that variances under these rules would not be appropriate for CBM pollution, and to assure irrigators that Best Available Technology (BAT) will continue to be required for CBM dischargers.***

As the Montana Supreme Court has explained,

> federal law defines the discharge water associated with CBM extraction as a "pollutant" under the Clean Water Act (CWA). *Northern Plains Resource Council v. Fidelity Exploration & Dev. Co., 325 F.3d 1155, 1160 (9th Cir. 2003).* This designation as a "pollutant" requires a CBM producer to obtain a National Pollutant Discharge Elimination System (NPDES) permit in order to release the water into receiving waters. *Northern Plains Resource Council, 325 F.3d at 1160*; *33 U.S.C. § 1342* (*§ 402*).

In *Northern Cheyenne Tribe et al v. Montana DEQ,* 2010 MT 111, ¶ 7, 356 Mont. 296, 234 P.3d 51, the Montana Supreme Court further explained that "Congress amended the CWA in 1972 to make pre-discharge treatment standards the centerpiece of the NPDES permit system . . . Pre-discharge treatment standards prevent degradation of water quality by requiring treatment before discharging wastewater into the receiving waterways." *Id.* ¶ 22.

Thus it is settled law that all CBM discharges require an MPDES permit, and that the centerpiece of the permit is treatment of wastes before discharge. Furthermore the Montana Supreme Court established that MPDES permits for CBM discharges must use the BAT. "The statutory framework of the CWA "requires" the Administrator to enforce pre-discharge treatment standards on individual discharges from point sources when granting NPDES permits. *Id.* ¶ 30 *citing PUD No. 1 of Jefferson Co. v. Wash. Dept. of Ecology,* 511 U.S. 700, 704.

For CBM discharges, BAT exists to reduce salinity levels to near zero. Again, as the Montana Supreme Court noted:

> The parties do not dispute that Fidelity had a pre-discharge treatment facility already in place that could reduce the CBM wastewater's SAR [sodium adsorption ratio] level to 0.1 or less. DEQ's claim that water quality standards would be more stringent than pre-discharge treatment rings hollow given these facts. We also cannot ignore the fact that EPA's regulations mandate that the Administrator or a state "must" impose pre-discharge treatment standards at a minimum. *40 C.F.R § 125.3(a).*

Id. ¶ 43.

We note that DEQ's proposed variance rule requires implementation of "the greatest pollution reduction that is achievable" (which we read as functionally BAT). A variance can be granted only "if no additional feasible pollutant control technology can be identified, the interim standard or effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the variance is submitted."

EPA has not adopted industry-wide BAT for CBM discharges. However, using Best Professional Judgment for Montana CBM discharges, DEQ, EPA, and the Montana Supreme Court established that reverse osmosis treatment is BAT and incorporated that technology into existing CBM permits. Thus, because the variances can be granted only if BAT cannot be applied to meet water quality standards, and because BAT already exists for CBM discharges with respect to salinity, no variance could be approved for a CBM discharger for salinity.

Conclusion

For all the reasons enumerated above, Northern Plains respectfully requests that the Board of Environmental Review NOT proceed with implementing the Draft Rule until DEQ makes the changes we request in these comments. The protection of Montana's water quality is of the highest priority. Until this draft rule conforms to the CWA, Montana's constitutional and statutory protections, and the various Court decisions enumerated, this rule should be put on hold. Thank you for consideration of our comments.

Sincerely,

Becky Mitchell
Chair, Northern Plains Resource Council

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the adoption of New Rule I under ARM Title 17, chapter 30, subchapter 6 pertaining to water quality standards	))))	NOTICE OF ADOPTION (WATER QUALITY)

TO: All Concerned Persons

1. On December 22, 2017, the Department of Environmental Quality published MAR Notice No. 17-395, pertaining to the public hearing on the proposed adoption of the above-stated rules at page 2383 of the 2017 Montana Administrative Register, Issue No. 24.

2. The department has adopted ARM 17.30.661 as proposed, but with the following changes, stricken matter interlined, new matter underlined:

NEW RULE I (17.30.661) VARIANCE FROM STANDARD FOR WATER BODY CONDITIONS (1) The department may grant to a permittee a variance from a water quality standard if the ~~department determines in writing that~~ following conditions are met:

(a) through (10) remain the same.

3. The following comments on the proposed rule were received and are summarized below with the board's responses:

COMMENT NO. 1: The proposed rule is too broadly applicable and a more limited scope is more appropriate. The original legislative purpose of SB 325 was focused on a narrow range of legacy mining wastes in which a variance from water quality standards is necessary because of significant long-term impairment from legacy human-caused pollutions. Therefore, the legislative history of SB 325 demonstrates that its focus is to address the problems that legacy mine pollution may create for smaller communities that need MPDES permits for the publicly owned treatment works (POTW). The rules implementing this legislation must be crafted to reflect this narrow purpose.

RESPONSE: Per 75-5-222(2), MCA, the rule will apply to water bodies where the standard is more stringent than the condition of the water body, the condition cannot reasonably be expected to be remediated during the permit term for which the application for variance has been received, and the discharge to which the variance applies would not materially contribute to the condition. These conditions in statute limit the circumstances that may justify application of the variance, but do not specify or limit the type of permittee to which a variance issued under 75-5-222(2), MCA will apply. The draft rule reflects these limitations, but cannot pre-emptively exclude certain types of permittees. Upstream legacy mine pollution that may impact MPDES permit limits imposed on a downstream POTW is an example of application of a variance issued under 75-5-222(2), MCA, but the language of the

DRAFT

statute is not limited to this situation.

COMMENT NO. 2: DEQ has stated numerous times during discussions when SB 325 was introduced at the legislature, as well as during the working group meetings, that this variance process will rarely be used. This begs the question why we are spending time and resources on this rulemaking process.

RESPONSE: Per 75-5-222(2), MCA, "the board shall adopt rules consistent with comparable federal rules and guidelines providing criteria and procedures for the department to issue variances from standards." The board and the department are complying with state law by developing New Rule I.

COMMENT NO. 3: This bill was never intended to just be a narrowly crafted thing for Butte or other communities.

RESPONSE: See response to Comment 1. The board agrees and the draft rules reflect the requirements of 75-5-222(2), MCA.

COMMENT NO. 4: The proposed language needs to be revised to limit the overuse of variances.

RESPONSE: Section 1(a) through (e) and Section 2(a) through (e) of proposed New Rule I limit the use of variances by specifying conditions and application requirements that a permittee must satisfy before the department may issue a variance. In addition, each variance application is subject to a public comment period, a public hearing, and submittal to EPA for approval. The proposed rule sets forth a process that will limit variances to situations where need for the variance is established, there is no reasonable alternative, and the applicant can meet the highest attainable condition. All applications that meet these requirements will be approved and the board does not believe further limitation is necessary.

COMMENT NO. 5: The commenter is concerned that a variance under SB 325 is not available to an applicant/permittee that is in compliance with its MDPES permit.

RESPONSE: See response to Comment 4. The department will issue a variance, after conducting a hearing, when no reasonable alternative to a variance exists, the department determines the requirements of New Rule I(1) and (2) are met, and the highest attainable condition will be met. In situations where the applicant for a variance is meeting its permit limits and conditions, the department may determine there are other alternatives that obviate the need for a variance including a permit compliance schedule or other permit action. This does not limit the ability of a discharger to apply for a variance, but due consideration should be given to other options available to meet water quality goals that may be more effective and efficient.

COMMENT NO. 6: It takes decades to remediate mining pollution. The polluter could continually qualify for a variance based on this provision with no incentive for the state to ensure the legacy pollution is addressed.

RESPONSE: The board understands and agrees that mining remediation most often takes longer than five years. However, the board does not believe that

DRAFT

MPDES permit conditions imposed on a downstream permittee, whether those conditions include limits implementing a variance or not, play a direct role in the pace at which upstream legacy pollution is addressed. The proposed rule allows an MPDES permit holder to qualify for a variance that may provide the basis for permit effluent limits and conditions, so long as the conditions in New Rule I are met. The variance is reviewed every five years and may be modified to reflect the highest attainable condition as progress is made toward meeting water quality standards. The proposed rule is not intended to regulate or impact remediation of legacy pollution.

COMMENT NO. 7: We ask DEQ to provide an example of where mining has been remediated within a five-year period.

RESPONSE: This comment is outside the scope of this rulemaking. The five-year review period pertains to review of a variance issued under New Rule I and not to remediation of upstream conditions impacting the receiving water. See response to Comment 6.

COMMENT NO. 8: The commenter requests that DEQ go on the record in response to these comments and state that variances under these rules would not be appropriate for CBM pollution.

RESPONSE: A variance is not appropriate under the proposed rules for any discharges that would materially contribute to a water body's degraded condition. It is a condition of the statute that the discharge "would not materially contribute to the condition." In addition, under (2)(e), the rule requires the permittee to meet a variance level that is the highest attainable interim standard based on condition of the receiving water or pollutant reduction achievable. In accordance with New Rule I(2)(e), the department will review each variance application to ensure that the permittee will 1) meet the highest attainable standard, 2) achieve the condition that reflects the greatest pollutant reduction achievable, or 3), if no additional feasible pollutant control technology can be identified, meet the condition that reflects the greatest pollutant reduction achievable with the technologies installed at the time the variance is submitted and subject to a pollutant minimization plan.

COMMENT NO. 9: The commenter requests that DEQ go on the record to assure irrigators that Best Available Technology (BAT) will continue to be required for CBM dischargers for variances under these rules.

RESPONSE: There are no state or federal Effluent Limit Guidelines (ELGs) for CBM dischargers. Permittees will be held to federal ELGs once available. DEQ will require CBM permittees be held to the highest attainable condition and any approved variance would reflect those limits.

COMMENT NO. 10: Of specific concern is that coal mines that would discharge into the Tongue River and its tributaries, including Otter Creek, would attempt to use the variance procedures in renewing and obtaining Montana Pollutant Discharge Elimination System (MPDES) permits.

RESPONSE: Section 1(a) through (e) of New Rule I limit the use of variances by specifying five conditions that a permittee must satisfy before the

DRAFT

department may issue a variance. Additionally, for a discharger to obtain a variance, a public hearing must be held and the variance must then be submitted to EPA for approval, which will include a determination of whether it is compliant with the CWA. A variance issued under New Rule I would require the permittee to achieve the highest attainable condition and not further degrade the existing water quality.

COMMENT NO. 11: Subsection 1(c) of the proposed rule contains vague language, stating that a variance may be appropriate where the overall impaired condition of the receiving waterway "cannot reasonably be expected to be remediated" in the next five-year permit term.

RESPONSE: Regarding "…cannot reasonably be expected to be remediated…", the rule reflects the language in 75-5-222(2)(a)(i), MCA, which sets forth conditions under which a variance may be appropriate. The board does not agree that the statutory or proposed rule language is unreasonably vague. The department will have to conclude for each application for variance whether the condition is likely to be remediated in the next five years. If the condition will be, or is expected to be, remediated in the next five years, the department would not grant the variance.

COMMENT NO. 12: There is no provision of the CWA that allows weaker standards and permit terms when man-made pollution cannot be fixed within a permit term.

RESPONSE: The board does not agree. Federal regulations specify six factors which may be used to demonstrate that a variance is appropriate. One of these factors is factor 3 at 40 CFR 131(10)(g), which specifically addresses situations where human-caused pollution prevents the attainment of water quality standards. So long as the permittee meets the conditions in New Rule I, which include meeting conditions in 40 CFR 131.14 "water quality standards variances," the permittee will comply with the CWA.

COMMENT NO. 13: Several commenters requested that "may" be stricken and replaced with "shall" in Section (1) under the New Rule I, this change would make the rule more definitive.

RESPONSE: The board expects the department to carry out its regulatory role and complete a thorough review of each variance application and decide whether it will be approved or not. The department will exercise its judgment and its technical expertise in determining that there is no reasonable alternative to a variance and the requirements in (1) and (2) are met. See (5) of New Rule I, if the department finds that the requirements of (1) and (2) are met and a variance is needed, the department shall approve the variance after conducting a hearing. No change is made in response to this comment.

COMMENT NO. 14: During the 2015 legislative discussions on SB 325 (2015), amendment 0325.02 was presented, including verbiage that the permitting agency "has to allow a variance." The intent of legislative work on SB 325, including amendments, was to treat the variance process as an inevitability, if certain conditions were met by the permittee.

DRAFT

RESPONSE: See response to Comment 13. Senate Bill 325 (2015) was adopted and codified as 75-5-222(2), MCA. The plain language of 75-5-222(2), MCA and SB 325, including version SB0325.02, requires the board to adopt rules consistent with comparable federal rules and guidelines providing criteria and procedures for the department to issue variances from standards if the conditions set forth in 75-2-222(2)(a)(i) through (ii) are met. The board believes it has met this obligation in the proposed rule, which sets forth criteria and a process whereby the department will review each variance application and determine whether a variance is appropriate. The department's decisions under the proposed rule will be subject to public comment, a hearing, and EPA review. No change is made in response to this comment.

COMMENT NO. 15: Several commenters suggested that under Section (9) on review conducted under Section (8) that "may" be stricken and replaced with "shall."

RESPONSE: See response to Comments 13 and 14. Under Section (8) of the proposed rule, the department must review a variance issued under the rule every five years and decide to terminate, continue, or modify the variance. Under Section (9) of the proposed rule, the department may approve continuation or modification of the variance after public comment and public hearing, consistent with the process set forth in (5) of the proposed rule. The department must continue, modify, or terminate the variance after taking any information received from the permittee, the public and EPA into consideration. The board believes it is necessary to leave Section (9) as "may" to indicate department discretion to review and consider all the information submitted and make a professional judgment regarding the renewal, modification, or termination of the variance. The board would generally expect that if the conditions pertaining to the original variance are unchanged, the department would continue or renew the variance to the next review period. No change is made in response to this comment.

COMMENT NO. 16: The department should address what happens on review conducted under Section (8) of the rule if the upstream conditions improve.

RESPONSE: See response to Comment 25. The department will review the variance level and water quality conditions every five years. If the permittee is meeting the variance level established under (2)(e) and all or most of the circumstances in (1) and (2) that justified the need for the variance no longer exist, the variance may be modified or terminated. On the other hand, if the department determines the circumstances in (1) and (2) still exist and justify the need for the variance, the variance may be continued and the permittee must continue to make progress toward meeting water quality limits.

COMMENT NO. 17: Montana must support any subsequent variance adopted with a demonstration that it meets all the requirements of 40 CFR 131.14 and a showing of one of the factors described in 40 CFR 131.10(g).

RESPONSE: The board agrees and believes the proposed rule is consistent with 40 CFR 131.14.

DRAFT

COMMENT NO. 18: The terminology of "materially contribute" in Subsection 3(1)(d) should be eliminated because it is unclear from the language of the rule how exactly the department will determine what constitutes a material contribution to an impaired waterway. Adding this term without further clarification could lead to violations of EPA's anti-backsliding mandate because even minor, supposedly non-material, increases in pollution could lead to further degradation, especially given the length of time that these permits may be in place.

RESPONSE: The term "materially contribute" reflects the language in 75-5-222(2)(a)(1)(ii), MCA, which sets forth conditions under which a variance may be appropriate. The board views the condition in 75-5-222(2)(a)(ii), MCA that the discharge not materially contribute to the condition of the water body as an additional state requirement beyond the minimum federal requirements for granting a variance. All variances issued under the proposed rule and the department's findings and analysis will be publicly noticed for 45 days, providing opportunity for those concerned to dispute the department's findings regarding material contribution. No change is made in response to this comment.

COMMENT NO. 19: DEQ is silent on how it will determine materiality.

RESPONSE: See response to Comment 18. The board recognizes materially contribute is not defined in the statute or the proposed rule. After review of the potential circumstances in which a variance could be applicable, it was determined that such a definition is not advisable as environmental conditions and interactions with discharges are too diverse and site specific. In order for a variance application to be complete the department will require the applicant to provide all information necessary to determine materiality. All findings and analysis will be publicly noticed for 45 days, providing opportunity for those concerned to dispute the department's findings on material contribution.

COMMENT NO. 20: If the department views harmful parameters like salts in a less stringent manner, it may view their contributions as less "material" to the water quality and therefore, permit variances that result in harm to farmers and ranchers.

RESPONSE: See responses to Comments 18 and 19. The board is concerned about salts and all other types of pollution that impact water quality and affect ranchers, farmers, and others who use the water.

COMMENT NO. 21: Granting a variance for a year-round discharge containing salts would not protect the beneficial uses to irrigation.

RESPONSE: The board understands the commenter's concern. The seasonality of a variance in which salts are the pollutant of concern would be given close scrutiny by the department.

COMMENT NO. 22: The cumulative effect any variance has on downstream users should be considered.

RESPONSE: Cumulative effects on downstream reaches that are meeting standards will be addressed through assessment of material contribution (New Rule I(1)(d)). If the department's material contribution analysis determines pollutant

DRAFT

contributions from the applicant point source will substantially extend the length of stream that is non-compliant with standards, the department will not grant a variance to the applicant under proposed New Rule I. Cumulative effects within a downstream reach that exceed standards will also be addressed in the department's review of material contribution (New Rule I(1)(d)) and through the requirement in New Rule I(2)(e). In Section 2(e), the applicant must propose a variance that reflects the highest attainable interim standard or greatest pollution reduction achievable.

COMMENT NO. 23: Any variance that DEQ grants should, at a minimum, be reviewed every three years, rather than the currently proposed five years.

RESPONSE: In 2015 the EPA updated its rules pertaining to variances, now found at 40 CFR 131.14. With the 2015 changes, the EPA made clear that the term of any water quality standards variance must be only as long as necessary to achieve the highest attainable condition (40 CFR 131.14(b)(1)(iv)). If the variance term is more than five years, it must be reviewed at least every five years (40 CFR 131.14(b)(1)(v)). The language in 75-5-222(2), MCA requires review of the variance every five years, consistent with the federal 5-year review requirement. No change is made in response to this comment.

COMMENT NO. 24: DEQ's rules impose a five-year review for variances. DEQ frequently misses the five-year renewal deadline for MPDES permits. Some permits are administratively extended for many years. DEQ must address why the variance rule will spark a new level of scrutiny and performance by the agency.

RESPONSE: Under 75-5-222(2), MCA and the new rule, the department is required to review the variance five years from its issuance in the permit and once every five years that the variance is in effect. The department's rules allow MPDES permits to be administratively extended beyond the five-year term when the permittee timely applies for permit renewal. There is no similar provision allowing extension of the 5-year review period.

COMMENT NO. 25: Several commenters requested that under Section (8), the time period should be lengthened to consider upstream conditions during a variance renewal review from two years to five years. A five-year period may provide a more accurate review, taking into greater account extreme changes to water levels from year-to-year.

RESPONSE: The board believes it is important for variance rules to work towards the improvement of water quality, and as such does not believe a five-year window is appropriate. The board finds New Rule I(8) reasonably interprets "currently attained ambient water quality" to be reflected by the previous two years of data in situations where the water quality in the receiving stream has improved during the variance term. If upstream improvements are occurring, presumably from remediation, the variance must be modified to reflect these improvements. As conditions change, data that is four or five years old may not accurately reflect current ambient upstream conditions. No change is made in response to this comment.

DRAFT

COMMENT NO. 26: The proposed rule is interpreting "currently attained ambient water quality" to mean the previous two years of data in situations where the water quality in the receiving stream has improved during the term of the variance. This is appropriate for the limited scenarios addressed by this rule (historic mining) where using five years of data would result in a less stringent HAC and would not preserve the water quality improvements toward the ultimate objective for the water body.

RESPONSE: The board agrees with the comment.

COMMENT NO. 27: The term feasible pollutant control technology is undefined, and there is no sense of how "feasibility" is determined or quantified.

RESPONSE: The board interprets feasible, as it is used in proposed New Rule 1(2)(e)(iii), similarly to the way that term is used in the Federal Register at 40 CFR 131.14 (b)(1)(ii)(A)(3); that is, as the "highest attainable condition using the greatest pollutant reduction achievable with optimization of currently installed pollutant control technologies and adoption and implementation of a Pollutant Minimization Program (PMP)."

COMMENT NO. 28: The cumulative effect of the draft variance rule will be to create a new regulatory framework representing a self-fulfilling prophecy of continual waterway pollution.

RESPONSE: New Rule I does not create a new regulatory framework; rather, it is consistent with federal and state water quality standards variance rules and guidelines. New Rule I provides a tool that allows limited relief from water quality standards when the applicant demonstrates to the department's satisfaction that a variance is appropriate and necessary and will meet the highest attainable condition. The variance is in effect for a limited term to allow continued progress toward meeting water quality standards.

COMMENT NO. 29: The draft rule posits that man-made pollution causing waterway impairment is somehow eligible for special leniency as compared to natural-based pollution.

RESPONSE: See response to Comment 28. Water quality standards variances are explicitly authorized under 40 CFR 131.14 as a tool that can be used prior to pursuing a permanent revision of the designated use and criteria in situations where the applicable designated uses are not attainable in the near-term, but may be attainable in the future. Some of the potential applications for these variances may be suited for more permanent use revisions. However, the board prefers to establish variances as an additional tool as opposed to revising designated uses which may limit potential remediation activities over the long term. WQS variances allow for incremental progress toward the ultimate water quality objective for the water body.

COMMENT NO. 30: Department staff has worked hard in coordination with the SB 325 workgroup to complete New Rule I.

RESPONSE: The board appreciates the comment.

DRAFT

COMMENT NO. 31: The variance process is a fair and equitable standard.
RESPONSE: The board appreciates the comment.

COMMENT NO. 32: The variance process is necessary to promote growth in Montana's cities.
RESPONSE: The rules do consider economics under one of the applicable variance justifications. How variances may or may not affect the economics of a municipality has not been directly assessed in this rulemaking.

COMMENT NO. 33: The variance process relieves city taxpayers from expensive, perhaps unnecessary wastewater treatment plant upgrades.
RESPONSE: See response to Comment 32.

COMMENT NO. 34: The EPA has no concerns with New Rule I asking permittees to provide information to the department regarding the highest attainable condition (HAC) for consideration before the state determines the appropriate HAC to adopt.
RESPONSE: The HAC adopted by the state along with the variance will be consistent with 40 CFR 131.14.

COMMENT NO. 35: We strongly encourage the board to exercise its lawful discretion and remand this rulemaking to DEQ for reconsideration and amendments in light of conflicts with federal pollution control requirements.
RESPONSE: The board believes New Rule I is consistent with applicable federal regulations.

COMMENT NO. 36: We oppose the draft variance Rule I because it does not conform to the federal Clean Water Act or its implementing regulations, and because it fundamentally misconstrues - and threatens to undermine - the longstanding system of water pollution control in the state of Montana.
RESPONSE: See response to Comment 35. Federal and state law specifically authorize variances from water quality standards in limited circumstances.

COMMENT NO. 37: The variance provides a broad set of circumstances for nearly every type of discharger, in nearly every type of polluted waterway, to receive relief and an off ramp from having to do their part to use technology-based standards to reduce and control pollution.
RESPONSE: A variance issued under 75-5-222(2), MCA and the proposed new rule is not a general variance, but would be issued to an individual applicant/discharger for a specific parameter associated with a specific water quality standard. The variance would only provide relief from the water quality based effluent limit associated with the parameter to which the variance applies and the discharger would have to comply with all other conditions and limitations in their permit including technology based effluent limits and water quality based effluent limits based on water quality standards that are not subject to the variance.

DRAFT

COMMENT NO. 38: The draft rule conflicts with the intent of the MWQA enshrined in and the Montana Constitution's guarantee of a "clean and healthful environment."

RESPONSE: New Rule I is adopted to implement MWQA 75-5-222(2), MCA, which authorizes a variance from water quality standards in limited circumstances where the condition of the receiving water cannot reasonably be expected to be remediated during the permit term and the discharge to which the variance applies would not materially contribute to the condition. A variance issued under 75-5-222(2), MCA and the proposed rule will be reviewed and may be adjusted every five years with the goal of meeting water quality standards and meeting the Montana Constitution's guarantee of a "clean and healthful environment."

COMMENT NO. 39: The draft rule misunderstands and misapplies one narrow regulatory basis for issuance of variances, specifically 40 CFR 131.10(g)(3) and conflates it with the procedural time frame under which MPDES permits must regularly be reviewed, justified, and if appropriate, renewed.

RESPONSE: Proposed New Rule I is consistent with the federal variance requirements at 40 CFR 131.14, including the requirement that one of the six factors at 40 CFR 131.14(b)(2)(i)(A)(1) must be met. This requires the department to determine the existence of one of the factors set forth in 40 CFR 131.10(g). These factors include 40 CFR 131.10(g)(3), human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct or leave in place. The five-year time frame is consistent with a permit term and with federal regulations at 40 CFR 131.14, which require the term of the variance to be no longer than necessary to achieve the highest attainable condition, but if the variance term is more than five years, it must be reviewed at least every five years (40 CFR 131.14(b)(1)(v)). See response to Comment 23.

COMMENT NO. 40: The concept of a discharger's "materiality" to receiving waterway impairments is not a lawful rationale supporting issuance of a variance.

RESPONSE: See response to Comment 18.

COMMENT NO. 41: The phrase "interim effluent condition" is not a phrase or condition used or approved for use in issuance of variances under the CWA or its implementing regulations.

RESPONSE: The term is found in 40 CFR 131.14 "water quality standards variances", specifically in 40 CFR 131.14(b)(1)(ii)(A)(2).

COMMENT NO. 42: The phrase "highest attainable interim standard" is not recognized anywhere in federal law.

RESPONSE: An analogous term is found in 40 CFR 131.14(b)(1)(ii)(A)(1), specifically "highest attainable interim criterion." In this context, "criterion" is equivalent to "standard."

DRAFT

COMMENT NO. 43: The CWA and implementing regulations do not recognize an "attainable standard" concept, nor do they recognize an "interim standard" concept.

RESPONSE: See response to Comment 42.

COMMENT NO. 44: The commenter requests clarification from Montana that any subsequent variance adopted by the state must meet all the requirement of 40 CFR 131.14.

RESPONSE: Any variance adopted by the state will be consistent with federal rules including 40 CFR 131.14.

COMMENT NO. 45: Under Section (1) of the New Rule we propose replacing "the department determines in writing" with "the following conditions are met" to remove ambiguity and further align the rule with legislative intent.

RESPONSE: See response to Comment 13. The board agrees with the commenter that the department may issue a variance if the conditions in (1) are met. Therefore, (1) is changed in response to this comment.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

/s/ Ed Hayes
EDWARD HAYES
Rule Reviewer

CHRISTINE DEVENY
Chairperson

Certified to the Secretary of State, April 17, 2018.

DRAFT

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

March 27, 2018

David Klemp, Bureau Chief
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mr. Klemp:

Over the last year the Missoula City-County Health Department has worked to revise the Missoula City-County Air Pollution Control Program rules. The proposed changes have been approved by the Missoula City-County Air Pollution Control Board, the Missoula Board of County Commissioners and the Missoula City Council. The Missoula City-County Health Department requests that the State Board of Environmental Review (BER) initiate proceedings pursuant to MCA 75-2-301 (3) to approve the proposed amendments which become effective upon BER approval.

Enclosed is a packet of information that includes: the proposed amendments; hearings public notices; response to comments; approval documents from the local air board, City and County; evidence of notification and documentation compliance with MCA 75-2-301 (4).

Let us know if you need any further information.

Sincerely,

Shannon Therriault

Shannon Therriault
Environmental Health Director

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

Executive Summary for Missoula City-County Air Pollution Control Program Rule Changes

2018

The Missoula City-County Health Department (Department) is requesting that the Montana State Board of Environmental Review approve proposed changes to Rule 4.112 of the Missoula City-County Air Pollution Control Program.

On July 20, 2017, the Missoula City-County Air Pollution Control Board (Air Board) approved changes to Rule 4.112 of the Missoula City-County Air Pollution Control Program. However, following that approval, the Department noticed the Air Board acted less than 30 days after the hearing was publicly noticed, which was in violation of state law.

To correct the conflict, the Department re-noticed the public hearing, and following a 30-day notice, the Air Board held a second hearing on September 21, 2017. The Air Board approved the changes to Rule 4.112 at the September hearing. The changes were then approved by the Missoula Board of County Commissioners on March 8, 2018 and the Missoula City Council on March 12, 2018.

The Department undertook this rule change in response to concerns the U.S. Environmental Protection Agency (EPA) identified when reviewing Missoula's PM_{10} Redesignation Request and Limited Maintenance Plan. EPA expressed concern that Rule 4.112 in its current state is too vague. Accordingly, the Department revised Rule 4.112 to clarify and codify Department actions during wildfire smoke episodes. The proposed revision does not alter the original intent or substance of the rule. After several consultations with EPA and the Montana Department of Environmental Quality, and subsequent to the Air Board's adoption of the rule, all parties agreed that the Department would ask the Governor to not submit the $PM_{2.5}$ provisions of Chapter 4, including the revised Rule 4.112, to EPA to be included as part of the State Implementation Plan. However, the Department is working to finalize the revised rule because it contains an improved description of the Department's role during wildfire smoke episodes.

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

Missoula City-County Air Pollution Control Program Proposed Changes

State Board of Environmental Review

Table of Contents

Section 1: Proposed Changes to the Missoula City-County Air Pollution Control Program

1. Rule Revision Cover Page
2. Summary and Explanation of Changes
3. Underline/Strikeout Version
4. Clean Version

Section 2: Missoula Air Quality Advisory Council (AQAC) Meeting

1. Interested Parties Email Notice for July AQAC Meeting
2. July 11, 2017 AQAC Agenda
3. July 11, 2017 AQAC Minutes

Section 3: Missoula City-County Air Pollution Control Board

1. Public Outreach Summary
    a. July 10, 2017 Interested Parties Email
    b. Public Notices for Hearing and Affidavit of Publication – July 9 and 16, 2017
    c. August 18, 2017 Interested Parties Email
    d. Public Notices for Hearing and Affidavit of Publication – September 10 and 17, 2017
2. July 20, 2017 Air Pollution Control Board Agenda
3. July 20, 2017 Air Pollution Control Board Hearing Minutes
4. September 21, 2017 Air Pollution Control Board Agenda
5. September 21, 2017 Air Pollution Control Board Hearing Minutes
6. Response to Public Comments
    a. Public Comments
    b. Missoula City-County Health Department Response to Public Comments

Section 4: Missoula Board of County Commissioners (BCC) Hearing

1. Request for Missoula BCC to Sign Resolution: Dated February 1, 2018
2. March 8, 2018 Missoula BCC Public Meeting and Hearing Agenda
3. March 8, 2018 Missoula BCC Public Hearing Minutes
4. Missoula BCC Resolution 2018-025

Section 5: Missoula City Council

1. Referral to the Public Health and Safety Committee of the Missoula City Council: Dated January 1, 2018
2. February 21, 2018 Public Health and Safety Committee Agenda
3. February 21, 2018 Public Health and Safety Committee Meeting Minutes
4. Public Notice for Missoula City Council Hearing and Affidavit of Publication - March 4 and 11, 2018
5. March 12, 2018 Missoula City Council Agenda
6. March 12, 2018 Missoula City Council Meeting Minutes
7. Missoula City Council Resolution 8253

Section 6: Findings for HB521

1. Applicability of 75-2-301 Findings – Dated September 14, 2017

Section 1

Proposed Changes to Missoula City-County Air Pollution Control Program Chapter 4

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

Missoula City-County Air Pollution Control Program

Revisions adopted by the:
Missoula City-County Air Pollution Control Board on September 21, 2017
Missoula Board of County Commissioners on March 8, 2018
Missoula City Council on March 12, 2018

To be forwarded to the Montana Board of Environmental Review for approval

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

Summary and Explanation for Changes to the
Missoula City-County Air Pollution Control Program
for the
Montana State Board of Environmental Review
March 2018

Chapter 4: Missoula County Air Stagnation and Emergency Episode Avoidance Plan

- **Rule 4.112 – Wildfire Smoke Emergency Episode Avoidance Plan**

The rule change includes a new title for Rule 4.112 ("Wildfire Smoke Episodes"). The proposed rule change does not change the substance of the rule. It does, however, define "wildfire smoke episodes" and codify Health Department actions during wildfire smoke episodes. The rule change also clarifies that while the added control activities in Rules 4.104-4.111 (Air Alerts, Warnings, Emergencies and Crises) may not be put into effect during a wildfire, all other rules in the Missoula City-County Air Pollution Control Program remain in effect.

CHAPTER 4
MISSOULA COUNTY AIR STAGNATION AND EMERGENCY EPISODE AVOIDANCE PLAN

Rule 4.101 - Purpose

This chapter serves a dual purpose. As Missoula County's Air Stagnation Plan it protects the community from significant harm during air stagnation periods and prevents violation of the particulate matter ambient standards. As Missoula County's Emergency Episode Avoidance Plan, its purpose is to prevent high ambient concentrations of regulated air pollutants that may endanger public health and welfare. To both these ends, the regulations of this chapter control emissions from sources within Missoula County when meteorological conditions are not adequate to prevent high ambient concentrations of air pollutants. Planning for air stagnation and emergency episodes assures that emissions reduction is conducted effectively with minimal inconvenience to the sources and the general public.

Rule 4.102 - Applicability

(1) The provisions regarding Stage 1 Air Alerts apply to all persons and sources of air pollution located within Impact Zone M as defined in Rule 2.101(23).

(2) All other provisions of this chapter apply to all persons and sources of air pollution in Missoula County.

(3) The department may call Alerts, Warnings, Emergencies and Crises to be in effect in all or any portion of the county, using available scientific and meteorological data to determine the areas affected by high ambient concentrations of pollutants.

(4) When Alerts are not required, the department may call for voluntary compliance in any or all portions of the county, using available scientific and meteorological data to determine the areas affected by high ambient concentrations of pollutants.

(5) As specified in the 1991 stipulation between the Control Board and the Department of Health and Environmental Sciences (predecessor to DEQ) and agreed upon by the Board of Health and Environmental Sciences (predecessor to the Board of Environmental Review), the provisions of this chapter apply, as described in this Rule, to sources in Missoula County that are permitted by DEQ.

Rule 4.103 - General Provisions

(1) The four air pollution control stages are Stage I Alert, Stage II Warning, Stage III Emergency and Stage IV Crisis. Each stage is associated with thresholds of specific air pollutants. When ambient concentrations of air pollutants as specified in Rule 4.104 exceed a threshold, or in the case of particulate matter, are expected to exceed a threshold, required control activities must be implemented except as allowed by Rule 4.112.

(2) Nothing in this chapter limits the authority of the Control Board or department to act in an emergency situation. The department may act to protect the public from imminent danger caused by any air pollutant. Such action may include but is not limited to verbal orders to cease emission release, or ordering the use of specified procedures in the management of actual or potential toxic air pollution releases resulting from accidents involving the transportation, use, or storage of toxic chemicals or mixtures of chemicals that could result in the release of toxic chemicals.

(3) When in effect, the requirements of this chapter supersede all other regulations under this Program that are less restrictive.

Rule 4.104 - Air Pollution Control Stages

(1) Stage I – ALERT for Particulate Matter

(a) The department may declare a Stage I Alert for particulate matter if it determines using available scientific and meteorological data that, any of the following conditions occurs. If the department determines that the primary air pollution source is crustal, an alert can be called for the air stagnation zone, rather than all of Impact Zone M:

(i) whenever the ambient concentration of $PM_{2.5}$ meets or exceeds 21 ug/m^3 averaged over an eight hour period; or

(ii) whenever the ambient concentration of PM_{10} exceeds 80 ug/m^3 averaged over an eight hour period.

(b) The department shall declare a Stage I Alert for particulate matter if it determines using available scientific and meterological data, that any of the following conditions occur unless dispersion conditions are expected to improve rapidly. If the department determines that the primary air pollution source is crustal, an alert can be called for the air stagnation zone, rather than all of Impact Zone M:

(i) whenever the ambient concentration of $PM_{2.5}$ meets or exceeds 28 ug/m^3 averaged over an eight hour average; or

(ii) whenever the ambient concentration of $PM_{2.5}$ can reasonably be expected to exceed 35 ug/m^3 averaged over the next 24 hours if a Stage I Alert is not called; or

(iii) whenever the ambient concentration of PM_{10} can reasonably be expected to exceed 150 ug/m^3 averaged over the next 24 hours if a Stage I Alert is not called.

(2) Stage II - WARNING

(a) The department shall declare a Stage II Warning for particulate matter if it determines using available scientific and meterological data, that any of the following conditions occurs unless dispersion conditions are expected to improve rapidly:

(i) whenever the ambient concentration of $PM_{2.5}$ meets or exceeds 35 ug/m^3 for an eight hour average; or

(ii) whenever scientific and meterological data indicate that the 24-hour average $PM_{2.5}$ concentrations will remain at or above 35 ug/m^3 if a Stage II Warning is not called; or

(iii) whenever the ambient concentration of PM_{10} exceeds 150 ug/m^3 averaged over an eight hour period and an Alert is already in effect; or

(iv) whenever the ambient concentration of PM_{10} exceeds 180 ug/m^3 average over an eight hour period and an Alert is not already in effect; or

(v) whenever scientific and meteorological data indicate that the 24 hour average PM_{10} concentrations will remain at or above 150 ug/m^3 if a Stage II Warning is not called.

(b) The department shall declare a Stage II WARNING whenever the ambient concentration of any of the following pollutants listed equals or exceeds the specified levels:

$S0_2$	800 ug/m^3	24-hour average
CO	17 mg/m^3	3-hour average
O_3	400 ug/m^3	1-hour average
NO_2	1130 ug/m^3	1-hour average
NO_2	282 ug/m^3	24-hour average

(3) Stage III – EMERGENCY

The department shall declare a Stage III Emergency whenever the ambient concentration of any of the following pollutants listed equals or exceeds the specified levels:

$PM_{2.5}$	80 ug/m^3	24-hour average
PM_{10}	420 ug/m^3	24-hour average
$S0_2$	1600 ug/m^3	24-hour average
CO	34 mg/m^3	3-hour average
O_3	800 ug/m^3	1-hour average
$N0_2$	2260 ug/m^3	1-hour average
NO_2	565 ug/m^3	24-hour average

(4) Stage IV – CRISIS

The department shall declare a Stage IV CRISIS whenever the ambient concentration of any of the following pollutants listed equals or exceeds the specified levels:

$PM_{2.5}$	135 ug/m^3	24-hour average
PM_{10}	500 ug/m^3	24-hour average
$S0_2$	2100 ug/m^3	24-hour average
CO	46 mg/m^3	8-hour average
O_3	1000 ug/m^3	1-hour average
$N0_2$	3000 ug/m^3	1-hour average
NO_2	750 ug/m^3	24-hour average

(5) Ambient concentrations of pollutants are determined by the department using a reference method, or a device that correlates to a reference method air quality monitor or sampler.

(6) The department shall reduce an air pollution control stage to the appropriate stage when the department determines measurements of the ambient air indicate a corresponding reduction in pollutant levels and available meteorological data indicates that the concentration of such pollutant will not immediately increase again.

Rule 4.105 - Emergency Operations

(1) The department shall prepare an emergency episode operations plan, which includes the following information:

(a) an explanation of ambient air quality surveillance procedures;

(b) a description of how meteorological information is obtained and used during episodes;

(c) provisions for increased monitoring during episodes;

(d) provisions for increased staffing during episodes; and

(e) a communications plan for use during episodes.

Rule 4.106 - Abatement Plan For Certain Sources

(1) Each governmental road department shall have an abatement plan that describes what actions they will take to minimize road dust during air stagnation and emergency episodes. The plans must demonstrate the use of all reasonable measures to reduce road dust along heavily traveled streets and are subject to review and approval by the department.

(2) Each stationary source within Missoula County emitting or capable of emitting twenty-five (25) tons or more of PM_{10}, SO_2, CO, O_3 or NO_2 per year shall have a plan of abatement for reducing emissions of each such pollutant when the ambient concentration of such pollutant equals or exceeds the concentrations set forth in Rule 4.104. The plan, which is subject to review and approval by the department, must sufficiently demonstrate the ability of the source to reduce emissions as required under each stage of the emergency episode avoidance plan.

(3) Within 60 days of notification by the department that new requirements are in effect, a source required by this rule to have an abatement plan shall submit an updated plan to the department for review and approval.

(4) The department may require sources to periodically review and update their abatement plans, and submit them to the department for review and approval.

Rule 4.107 - Enforcement Procedure

(1) If any of the provisions of this chapter are being violated, or if, based on scientific and meteorological data, the Control Board or department has reasonable grounds to believe that there exists in Missoula County a condition of air pollution that requires immediate action to protect the public health or safety, the department or the Control Board or any law enforcement officer acting

under the direction of the department or Control Board may order any person or persons causing or contributing to the air pollution to immediately reduce or completely discontinue the emission of pollutants.

(2) The order must specify the provision of the Program being violated and the manner of violation, and must direct the person or persons causing or contributing to the air pollution to reduce or completely discontinue the emission of air pollutants immediately. The order must notify the person to whom it is directed of the right to request a hearing. The order must be personally delivered to the person or persons in violation or their agent.

(3) If a hearing is requested by a person or persons allegedly in violation of the provisions of this chapter, within 24 hours the department shall fix a time and place for a hearing to be held before the Control Board or a hearings examiner appointed by the Control Board. Not more than 24 hours after the commencement of such hearing, and without adjournment, the Control Board or hearings examiner shall affirm, modify, or set aside the order. A request for a hearing does not stay or nullify an order.

(4) If a person fails to comply with an order issued under this chapter, the department or the Control Board may initiate action under Chapter 15 of this Program.

(5) The right to request a hearing before the Control Board under this chapter does not apply to violations of Chapter 9. Enforcement procedures for violations of Chapter 9 are described in Rule 15.104.

Rule 4.108 - Stage I Alert Control Activities

(1) During a Stage I Alert, the department shall:
(a) advise citizens via public media and the department's Air Pollution Hotline of the actions listed under an Alert, and of medical precautions.

(b) shall suspend outdoor burning.

(c) may require construction companies to take additional effective dust-control action for roads under construction or repair.

(2) During a Stage I Alert, the following general curtailment provisions take effect:
(a) Residential solid fuel burning devices shall comply with the applicable requirements of Chapter 9.

(b) Citizens should limit driving to necessary trips only and should avoid driving on unpaved surfaces such as dirt roads and unpaved shoulders and alleys.

(c) The City, County and State road departments shall take actions appropriate under the prevailing weather conditions to reduce road dust along heavily traveled streets, as described in their abatement plans required by Rule 4.106.

(3) During a Stage I Alert, the following curtailment provisions for stationary sources take effect:
(a) Air pollution control equipment must be used to its maximum efficiency;

(b) Incinerators, except pathological incinerators, air pollution control devices and crematoriums, shall cease operation during an Alert.

(c) Commercial boiler operators should limit manual boiler lancing and soot blowing to between the hours of 12 p.m. and 4 p.m.

(d) A stationary source may not switch to a higher sulfur or ash content fuel unless:
(i) the source has continuous emission reduction equipment for the control of emissions caused by the alternate fuel; or

(ii) the low sulfur or ash content fuel supply has been interrupted by the utility supplying the fuel.

(e) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during an Alert.

Rule 4.109 - Stage II Warning Control Activities

(1) During a Stage II Warning, the department shall:

(a) advise citizens via public media and the Air Pollution Hotline of the actions described under a Warning, and of medical precautions.

(b) advise the public to eliminate all nonessential driving, and urge citizens to carpool or use non-motorized or public transportation.

(c) inspect operating stationary sources required to implement an abatement plan by Rule 4.106 to ensure compliance with the plan.

(d) notify DEQ so it can initiate notification and communication procedures contained in the Montana Emergency Episode Avoidance Plan (Montana SIP, Chapter 9). However, the department is responsible for notifying state and county permitted sources and the public of requirements under this plan.

(2) During a Stage II Warning, the following general curtailment provisions take effect:

(a) All Alert conditions remain in effect except where Warning steps are more stringent.

(b) Solid fuel burning devices must comply with the applicable requirements of Chapter 9.

(c) For sources other than solid fuel burning devices, a person may not cause, allow or discharge visible emissions from any source unless such source has a State or County operating permit.

(3) During a Stage II Warning, the following curtailment provisions for stationary sources take effect:

(a) All Alert restrictions apply, except where Warning steps are more stringent;

(b) Pathological incinerators and crematoriums must limit operations to the hours between 12:00 p.m. and 4 p.m.;

(c) Commercial boiler operators shall limit manual boiler lancing and soot blowing to between the hours of 12 noon and 4 p.m.;

(d) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during a Warning using the maximum efficiency of abatement equipment in accordance with that plan.

(e) If so advised by the department, the source shall prepare to take action as advised under the Emergency conditions.

(4) The following additional provisions for stationary sources take effect if a Warning is in effect for any pollutant other than PM_{10} or when ambient PM_{10} levels reach 350 ug/m^3:

(a) The source must show substantial reductions in the emissions of air pollutants by using fuels with low ash and sulfur content;

(b) The source must show substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and all operations;

(c) The source must show maximum reduction of air pollutants by deferring trade waste disposal operations that emit solid particles, gas vapors or malodorous substances; and

(d) The source must show maximum reduction of heat load demands for processing.

Rule 4.110 - Stage III Emergency Control Activities

(1) During a Stage III Emergency, the department shall:

(a) advise citizens via public media and the department's Air Pollution Hotline of the actions described under an Emergency and of medical precautions.

(b) inspect stationary sources required to implement an abatement plan by Rule 4.106 to ensure compliance with the plan.

(c) if conditions continue to worsen, issue a specific advisement that total curtailment under a Crisis condition is possible.

(d) notify DEQ so it can initiate notification and communication procedures contained in the Montana Emergency Episode Avoidance Plan (Montana State Implementation Plan, Chapter 9). However, the department is responsible for notifying state and county permitted sources and the public of requirements under this plan.

(2) During a Stage III Emergency, the following general curtailment provisions take effect:

(a) All Alert and Warning conditions apply, except where Emergency steps are more stringent.

(b) All nonessential public gatherings should be voluntarily canceled.

(c) Persons driving motor vehicles must reduce operations by use of carpools, non-motorized transportation and public transportation and by eliminating unnecessary driving.

(d) Solid fuel burning devices may not be operated.

(3) During a Stage III Emergency, the following curtailment provisions for stationary sources take effect:

(a) All Warning restrictions remain in effect, except where Emergency steps are more stringent;

(b) Incinerators, except pollution control devices, must cease operation;

(c) For manufacturing industries that require a relatively short lead time for shut down, the source must show elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.

(d) For sources still allowed to operate, a minimum forty percent (40%) reduction in emissions below maximum permissible operating emissions is required, except this requirement does not apply to those sources where the department determines such reductions are not physically possible. For manufacturing operations, the source may have to assume reasonable economic hardship by postponing production and allied operation to meet this reduction;

(e) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during an Emergency.

Rule 4.111 - Stage IV Crisis Control Activities

(1) During a Stage IV Crisis, the department shall:

(a) inspect stationary sources required to implement an abatement plan by Rule 4.106 to ensure compliance with the plan.

(b) The department will notify DEQ so it can initiate notification and communication procedures contained in the Montana Emergency Episode Avoidance Plan (Montana State Implementation Plan, Chapter 9). However, the department is responsible for notifying state and county permitted sources and the public of requirements under this plan.

(2) During a Stage IV Crisis, the following general curtailment provisions take effect:
(a) All conditions from the Alert, Warning, and Emergency stages apply except where Crisis steps are more stringent.

(b) Only those establishments (e.g., places of employment or business) associated with essential services may remain open. Essential services are news media, medically associated services (hospitals, labs, pharmacies), direct food supply (grocery markets, restaurants), drinking water supply and wastewater treatment, police, fire and health officials and their associated establishments. It is expressly intended that any service not defined as essential cease all business. Depending on the duration and nature of the crisis, the department may add the operation of certain services and facilities to the list of essential services. Examples of businesses and establishments considered nonessential include, but are not limited to~~:~~ banks (except for supplying funds for essential services), all offices, bars and taverns, laundries, gas stations, barber shops, schools (all levels), repair shops, amusement and recreation facilities, libraries, and city, state and federal offices (except those identified as essential services).

(c) The use of motor vehicles is prohibited except in emergencies with the approval of law enforcement and the department.

(3) During a Stage IV Crisis, the following curtailment provisions for stationary sources take effect:
(a) Stationary sources shall cease all manufacturing functions, but they may maintain operations necessary to prevent injury to persons or damage to equipment.

(b) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during a Crisis.

~~**Rule 4.112 – Wildfire Smoke Emergency Episode Avoidance Plan**~~
~~During wildfire smoke episodes, the department may waive the requirements of 4.104 – 4.111 only when:~~

~~(1) wildfire smoke is the primary source of $PM_{2.5}$ in the airshed; and~~

~~(2) the effects on $PM_{2.5}$ levels are insignificant when the requirements are waived.~~

Rule 4.112 – Wildfire Smoke Episodes

(1) A Wildfire Smoke Episode is defined as a period of time in which the department determines, using available scientific and meteorological data, that wildfire smoke is the primary source of PM2.5 in the airshed.

(2) During a Wildfire Smoke Episode, the department may waive the PM2.5 requirements in 4.104 if the department determines, using available scientific and meteorological data, that instituting the Missoula County Air Stagnation and Emergency Episode Avoidance Plan would have negligible impacts on PM2.5 levels.

(3) During a Wildfire Smoke Episode, the department shall advise citizens via public media and the department's Air Pollution Hotline of current air pollution levels and health advisories.

(4) The department shall only waive the PM2.5 requirements in 4.104 for the duration of the Wildfire Smoke Episode. At any time, the department may reinstate all or parts of 4.104 as conditions change or as deemed necessary to protect human health.

(5) The department shall evaluate the impact of wildfire smoke on PM2.5 levels, using scientific and meteorological data, at a minimum of once a day during the Wildfire Smoke Episode.

(6) All other Missoula City-County Air Pollution Control Program Rules remain in effect during a Wildfire Smoke Episode.

Rule 4.113 - Contingency Measure~~:~~

Upon notification by the DEQ and EPA that a violation of the 24 hour NAAQS for PM_{10} has occurred, and with departmental determination that solid fuel burning devices are greater than 40% percent of the cause, the department shall conduct extensive nighttime enforcement of the wood burning regulations when a Stage I Alert is declared.

CHAPTER 4
MISSOULA COUNTY AIR STAGNATION AND EMERGENCY EPISODE AVOIDANCE PLAN

Rule 4.101 - Purpose

This chapter serves a dual purpose. As Missoula County's Air Stagnation Plan it protects the community from significant harm during air stagnation periods and prevents violation of the particulate matter ambient standards. As Missoula County's Emergency Episode Avoidance Plan, its purpose is to prevent high ambient concentrations of regulated air pollutants that may endanger public health and welfare. To both these ends, the regulations of this chapter control emissions from sources within Missoula County when meteorological conditions are not adequate to prevent high ambient concentrations of air pollutants. Planning for air stagnation and emergency episodes assures that emissions reduction is conducted effectively with minimal inconvenience to the sources and the general public.

Rule 4.102 - Applicability

(1) The provisions regarding Stage 1 Air Alerts apply to all persons and sources of air pollution located within Impact Zone M as defined in Rule 2.101(23).

(2) All other provisions of this chapter apply to all persons and sources of air pollution in Missoula County.

(3) The department may call Alerts, Warnings, Emergencies and Crises to be in effect in all or any portion of the county, using available scientific and meteorological data to determine the areas affected by high ambient concentrations of pollutants.

(4) When Alerts are not required, the department may call for voluntary compliance in any or all portions of the county, using available scientific and meteorological data to determine the areas affected by high ambient concentrations of pollutants.

(5) As specified in the 1991 stipulation between the Control Board and the Department of Health and Environmental Sciences (predecessor to DEQ) and agreed upon by the Board of Health and Environmental Sciences (predecessor to the Board of Environmental Review), the provisions of this chapter apply, as described in this Rule, to sources in Missoula County that are permitted by DEQ.

Rule 4.103 - General Provisions

(1) The four air pollution control stages are Stage I Alert, Stage II Warning, Stage III Emergency and Stage IV Crisis. Each stage is associated with thresholds of specific air pollutants. When ambient concentrations of air pollutants as specified in Rule 4.104 exceed a threshold, or in the case of particulate matter, are expected to exceed a threshold, required control activities must be implemented except as allowed by Rule 4.112.

(2) Nothing in this chapter limits the authority of the Control Board or department to act in an emergency situation. The department may act to protect the public from imminent danger caused by any air pollutant. Such action may include but is not limited to verbal orders to cease emission release, or ordering the use of specified procedures in the management of actual or potential toxic air pollution releases resulting from accidents involving the transportation, use, or storage of toxic chemicals or mixtures of chemicals that could result in the release of toxic chemicals.

(3) When in effect, the requirements of this chapter supersede all other regulations under this Program that are less restrictive.

Rule 4.104 - Air Pollution Control Stages

(1) Stage I – ALERT for Particulate Matter

(a) The department may declare a Stage I Alert for particulate matter if it determines using available scientific and meteorological data that, any of the following conditions occurs. If the department determines that the primary air pollution source is crustal, an alert can be called for the air stagnation zone, rather than all of Impact Zone M:

(i) whenever the ambient concentration of $PM_{2.5}$ meets or exceeds 21 ug/m^3 averaged over an eight hour period; or

(ii) whenever the ambient concentration of PM_{10} exceeds 80 ug/m^3 averaged over an eight hour period.

(b) The department shall declare a Stage I Alert for particulate matter if it determines using available scientific and meterological data, that any of the following conditions occur unless dispersion conditions are expected to improve rapidly. If the department determines that the primary air pollution source is crustal, an alert can be called for the air stagnation zone, rather than all of Impact Zone M:

(i) whenever the ambient concentration of $PM_{2.5}$ meets or exceeds 28 ug/m^3 averaged over an eight hour average; or

(ii) whenever the ambient concentration of $PM_{2.5}$ can reasonably be expected to exceed 35 ug/m^3 averaged over the next 24 hours if a Stage I Alert is not called; or

(iii) whenever the ambient concentration of PM_{10} can reasonably be expected to exceed 150 ug/m^3 averaged over the next 24 hours if a Stage I Alert is not called.

(2) Stage II - WARNING

(a) The department shall declare a Stage II Warning for particulate matter if it determines using available scientific and meterological data, that any of the following conditions occurs unless dispersion conditions are expected to improve rapidly:

(i) whenever the ambient concentration of $PM_{2.5}$ meets or exceeds 35 ug/m^3 for an eight hour average; or

(ii) whenever scientific and meterological data indicate that the 24-hour average $PM_{2.5}$ concentrations will remain at or above 35 ug/m^3 if a Stage II Warning is not called; or

(iii) whenever the ambient concentration of PM_{10} exceeds 150 ug/m^3 averaged over an eight hour period and an Alert is already in effect; or

(iv) whenever the ambient concentration of PM_{10} exceeds 180 ug/m^3 average over an eight hour period and an Alert is not already in effect; or

(v) whenever scientific and meteorological data indicate that the 24 hour average PM_{10} concentrations will remain at or above 150 ug/m^3 if a Stage II Warning is not called.

(b) The department shall declare a Stage II WARNING whenever the ambient concentration of any of the following pollutants listed equals or exceeds the specified levels:

$S0_2$	800 ug/m^3	24-hour average
CO	17 mg/m^3	3-hour average
O_3	400 ug/m^3	1-hour average
NO_2	1130 ug/m^3	1-hour average
NO_2	282 ug/m^3	24-hour average

(3) Stage III – EMERGENCY

The department shall declare a Stage III Emergency whenever the ambient concentration of any of the following pollutants listed equals or exceeds the specified levels:

$PM_{2.5}$	80 ug/m^3	24-hour average
PM_{10}	420 ug/m^3	24-hour average
$S0_2$	1600 ug/m^3	24-hour average
CO	34 mg/m^3	3-hour average
O_3	800 ug/m^3	1-hour average
$N0_2$	2260 ug/m^3	1-hour average
NO_2	565 ug/m^3	24-hour average

(4) Stage IV – CRISIS

The department shall declare a Stage IV CRISIS whenever the ambient concentration of any of the following pollutants listed equals or exceeds the specified levels:

$PM_{2.5}$	135 ug/m^3	24-hour average
PM_{10}	500 ug/m^3	24-hour average
$S0_2$	2100 ug/m^3	24-hour average
CO	46 mg/m^3	8-hour average
O_3	1000 ug/m^3	1-hour average
$N0_2$	3000 ug/m^3	1-hour average
NO_2	750 ug/m^3	24-hour average

(5) Ambient concentrations of pollutants are determined by the department using a reference method, or a device that correlates to a reference method air quality monitor or sampler.

(6) The department shall reduce an air pollution control stage to the appropriate stage when the department determines measurements of the ambient air indicate a corresponding reduction in pollutant levels and available meteorological data indicates that the concentration of such pollutant will not immediately increase again.

Rule 4.105 - Emergency Operations

(1) The department shall prepare an emergency episode operations plan, which includes the following information:

(a) an explanation of ambient air quality surveillance procedures;

(b) a description of how meteorological information is obtained and used during episodes;

(c) provisions for increased monitoring during episodes;

(d) provisions for increased staffing during episodes; and

(e) a communications plan for use during episodes.

Rule 4.106 - Abatement Plan For Certain Sources

(1) Each governmental road department shall have an abatement plan that describes what actions they will take to minimize road dust during air stagnation and emergency episodes. The plans must demonstrate the use of all reasonable measures to reduce road dust along heavily traveled streets and are subject to review and approval by the department.

(2) Each stationary source within Missoula County emitting or capable of emitting twenty-five (25) tons or more of PM_{10}, SO_2, CO, O_3 or NO_2 per year shall have a plan of abatement for reducing emissions of each such pollutant when the ambient concentration of such pollutant equals or exceeds the concentrations set forth in Rule 4.104. The plan, which is subject to review and approval by the department, must sufficiently demonstrate the ability of the source to reduce emissions as required under each stage of the emergency episode avoidance plan.

(3) Within 60 days of notification by the department that new requirements are in effect, a source required by this rule to have an abatement plan shall submit an updated plan to the department for review and approval.

(4) The department may require sources to periodically review and update their abatement plans, and submit them to the department for review and approval.

Rule 4.107 - Enforcement Procedure

(1) If any of the provisions of this chapter are being violated, or if, based on scientific and meteorological data, the Control Board or department has reasonable grounds to believe that there exists in Missoula County a condition of air pollution that requires immediate action to protect the public health or safety, the department or the Control Board or any law enforcement officer acting

under the direction of the department or Control Board may order any person or persons causing or contributing to the air pollution to immediately reduce or completely discontinue the emission of pollutants.

(2) The order must specify the provision of the Program being violated and the manner of violation, and must direct the person or persons causing or contributing to the air pollution to reduce or completely discontinue the emission of air pollutants immediately. The order must notify the person to whom it is directed of the right to request a hearing. The order must be personally delivered to the person or persons in violation or their agent.

(3) If a hearing is requested by a person or persons allegedly in violation of the provisions of this chapter, within 24 hours the department shall fix a time and place for a hearing to be held before the Control Board or a hearings examiner appointed by the Control Board. Not more than 24 hours after the commencement of such hearing, and without adjournment, the Control Board or hearings examiner shall affirm, modify, or set aside the order. A request for a hearing does not stay or nullify an order.

(4) If a person fails to comply with an order issued under this chapter, the department or the Control Board may initiate action under Chapter 15 of this Program.

(5) The right to request a hearing before the Control Board under this chapter does not apply to violations of Chapter 9. Enforcement procedures for violations of Chapter 9 are described in Rule 15.104.

Rule 4.108 - Stage I Alert Control Activities

(1) During a Stage I Alert, the department shall:
(a) advise citizens via public media and the department's Air Pollution Hotline of the actions listed under an Alert, and of medical precautions.

(b) shall suspend outdoor burning.

(c) may require construction companies to take additional effective dust-control action for roads under construction or repair.

(2) During a Stage I Alert, the following general curtailment provisions take effect:
(a) Residential solid fuel burning devices shall comply with the applicable requirements of Chapter 9.

(b) Citizens should limit driving to necessary trips only and should avoid driving on unpaved surfaces such as dirt roads and unpaved shoulders and alleys.

(c) The City, County and State road departments shall take actions appropriate under the prevailing weather conditions to reduce road dust along heavily traveled streets, as described in their abatement plans required by Rule 4.106.

(3) During a Stage I Alert, the following curtailment provisions for stationary sources take effect:
(a) Air pollution control equipment must be used to its maximum efficiency;

(b) Incinerators, except pathological incinerators, air pollution control devices and crematoriums, shall cease operation during an Alert.

(c) Commercial boiler operators should limit manual boiler lancing and soot blowing to between the hours of 12 p.m. and 4 p.m.

(d) A stationary source may not switch to a higher sulfur or ash content fuel unless:
(i) the source has continuous emission reduction equipment for the control of emissions caused by the alternate fuel; or

(ii) the low sulfur or ash content fuel supply has been interrupted by the utility supplying the fuel.

(e) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during an Alert.

Rule 4.109 - Stage II Warning Control Activities

(1) During a Stage II Warning, the department shall:

(a) advise citizens via public media and the Air Pollution Hotline of the actions described under a Warning, and of medical precautions.

(b) advise the public to eliminate all nonessential driving, and urge citizens to carpool or use non-motorized or public transportation.

(c) inspect operating stationary sources required to implement an abatement plan by Rule 4.106 to ensure compliance with the plan.

(d) notify DEQ so it can initiate notification and communication procedures contained in the Montana Emergency Episode Avoidance Plan (Montana SIP, Chapter 9). However, the department is responsible for notifying state and county permitted sources and the public of requirements under this plan.

(2) During a Stage II Warning, the following general curtailment provisions take effect:

(a) All Alert conditions remain in effect except where Warning steps are more stringent.

(b) Solid fuel burning devices must comply with the applicable requirements of Chapter 9.

(c) For sources other than solid fuel burning devices, a person may not cause, allow or discharge visible emissions from any source unless such source has a State or County operating permit.

(3) During a Stage II Warning, the following curtailment provisions for stationary sources take effect:

(a) All Alert restrictions apply, except where Warning steps are more stringent;

(b) Pathological incinerators and crematoriums must limit operations to the hours between 12:00 p.m. and 4 p.m.;

(c) Commercial boiler operators shall limit manual boiler lancing and soot blowing to between the hours of 12 noon and 4 p.m.;

(d) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during a Warning using the maximum efficiency of abatement equipment in accordance with that plan.

(e) If so advised by the department, the source shall prepare to take action as advised under the Emergency conditions.

(4) The following additional provisions for stationary sources take effect if a Warning is in effect for any pollutant other than PM_{10} or when ambient PM_{10} levels reach 350 ug/m^3:

(a) The source must show substantial reductions in the emissions of air pollutants by using fuels with low ash and sulfur content;

(b) The source must show substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and all operations;

(c) The source must show maximum reduction of air pollutants by deferring trade waste disposal operations that emit solid particles, gas vapors or malodorous substances; and

(d) The source must show maximum reduction of heat load demands for processing.

Rule 4.110 - Stage III Emergency Control Activities

(1) During a Stage III Emergency, the department shall:

(a) advise citizens via public media and the department's Air Pollution Hotline of the actions described under an Emergency and of medical precautions.

(b) inspect stationary sources required to implement an abatement plan by Rule 4.106 to ensure compliance with the plan.

(c) if conditions continue to worsen, issue a specific advisement that total curtailment under a Crisis condition is possible.

(d) notify DEQ so it can initiate notification and communication procedures contained in the Montana Emergency Episode Avoidance Plan (Montana State Implementation Plan, Chapter 9). However, the department is responsible for notifying state and county permitted sources and the public of requirements under this plan.

(2) During a Stage III Emergency, the following general curtailment provisions take effect:

(a) All Alert and Warning conditions apply, except where Emergency steps are more stringent.

(b) All nonessential public gatherings should be voluntarily canceled.

(c) Persons driving motor vehicles must reduce operations by use of carpools, non-motorized transportation and public transportation and by eliminating unnecessary driving.

(d) Solid fuel burning devices may not be operated.

(3) During a Stage III Emergency, the following curtailment provisions for stationary sources take effect:

(a) All Warning restrictions remain in effect, except where Emergency steps are more stringent;

(b) Incinerators, except pollution control devices, must cease operation;

(c) For manufacturing industries that require a relatively short lead time for shut down, the source must show elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.

(d) For sources still allowed to operate, a minimum forty percent (40%) reduction in emissions below maximum permissible operating emissions is required, except this requirement does not apply to those sources where the department determines such reductions are not physically possible. For manufacturing operations, the source may have to assume reasonable economic hardship by postponing production and allied operation to meet this reduction;

(e) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during an Emergency.

Rule 4.111 - Stage IV Crisis Control Activities

(1) During a Stage IV Crisis, the department shall:

(a) inspect stationary sources required to implement an abatement plan by Rule 4.106 to ensure compliance with the plan.

(b) The department will notify DEQ so it can initiate notification and communication procedures contained in the Montana Emergency Episode Avoidance Plan (Montana State Implementation Plan, Chapter 9). However, the department is responsible for notifying state and county permitted sources and the public of requirements under this plan.

(2) During a Stage IV Crisis, the following general curtailment provisions take effect:
(a) All conditions from the Alert, Warning, and Emergency stages apply except where Crisis steps are more stringent.

(b) Only those establishments (e.g., places of employment or business) associated with essential services may remain open. Essential services are news media, medically associated services (hospitals, labs, pharmacies), direct food supply (grocery markets, restaurants), drinking water supply and wastewater treatment, police, fire and health officials and their associated establishments. It is expressly intended that any service not defined as essential cease all business. Depending on the duration and nature of the crisis, the department may add the operation of certain services and facilities to the list of essential services. Examples of businesses and establishments considered nonessential include, but are not limited to~~:~~ banks (except for supplying funds for essential services), all offices, bars and taverns, laundries, gas stations, barber shops, schools (all levels), repair shops, amusement and recreation facilities, libraries, and city, state and federal offices (except those identified as essential services).

(c) The use of motor vehicles is prohibited except in emergencies with the approval of law enforcement and the department.

(3) During a Stage IV Crisis, the following curtailment provisions for stationary sources take effect:
(a) Stationary sources shall cease all manufacturing functions, but they may maintain operations necessary to prevent injury to persons or damage to equipment.

(b) Each stationary source emitting or capable of emitting twenty-five (25) tons or more per year of any pollutant shall implement its abatement plan to reduce emissions during a Crisis.

Rule 4.112 – Wildfire Smoke Episodes

(1) A Wildfire Smoke Episode is defined as a period of time in which the department determines, using available scientific and meteorological data, that wildfire smoke is the primary source of PM2.5 in the airshed.

(2) During a Wildfire Smoke Episode, the department may waive the PM2.5 requirements in 4.104 if the department determines, using available scientific and meteorological data, that instituting the Missoula County Air Stagnation and Emergency Episode Avoidance Plan would have negligible impacts on PM2.5 levels.

(3) During a Wildfire Smoke Episode, the department shall advise citizens via public media and the department's Air Pollution Hotline of current air pollution levels and health advisories.

(4) The department shall only waive the PM2.5 requirements in 4.104 for the duration of the Wildfire Smoke Episode. At any time, the department may reinstate all or parts of 4.104 as conditions change or as deemed necessary to protect human health.

(5) The department shall evaluate the impact of wildfire smoke on PM2.5 levels, using scientific and meteorological data, at a minimum of once a day during the Wildfire Smoke Episode.

(6) All other Missoula City-County Air Pollution Control Program Rules remain in effect during a Wildfire Smoke Episode.

Rule 4.113 - Contingency Measure~~:~~
Upon notification by the DEQ and EPA that a violation of the 24 hour NAAQS for PM_{10} has occurred, and with departmental determination that solid fuel burning devices are greater than 40% percent of the cause, the department shall conduct extensive nighttime enforcement of the wood burning regulations when a Stage I Alert is declared.

Section 2

Missoula Air Quality Advisory Council Meeting

From: Sarah Coefield
Sent: Monday, July 3, 2017 5:25 PM
Subject: July AQAC meeting
Attachments: AQAC Agenda 2017.07.11.pdf

Hello,

The next Air Quality Advisory Council meeting will be Tuesday, July 11. Please find the agenda attached to this e-mail.

What: AQAC
When: 6:30 p.m., July 11, 2017
Where: Health Board Conference Room #210 (Second Floor)
Missoula City-County Health Department
301 W. Alder.

Sarah Coefield, M.S., M.A.
Air Quality Specialist
Missoula City-County Health Department
301 W. Alder
Missoula, MT 59802
Phone (406) 258-3642

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
AIR QUALITY ADVISORY COUNCIL
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

AIR QUALITY ADVISORY COUNCIL
MEETING AGENDA
Tuesday July 11, 2017 at 6:30 pm
Health Board Conference Room #210 (Second Floor)
Missoula City-County Health Department—301 West Alder

1. Call to order

2. Recognize excused absences, establish voting membership

3. Approve agenda

4. Public comment on non-agenda items

5. **Discussion and Action Item:** Rule change to the Missoula County Air Stagnation and Emergency Episode Avoidance Plan in the Missoula City-County Air Pollution Control Program in order to clarify department activities during wildfire episodes (Rule 4.112)

6. Staff Report

7. Public Comment

8. Select AQAC representative for next Air Board meeting update

9. Announcements, other business

10. Adjourn – 7:30 p.m.

If you need special assistance to attend this meeting, please contact:
Sarah Coefield, Air Quality Specialist
Missoula City-County Health Department
301 W. Alder, Missoula, MT 59802
Phone: 258-4755 FAX: 258-4781
Email: scoefield@missoulacounty.us

AQAC MINUTES
July 11, 2017

Members/alternates present: Don Anderson, Bert Chessin, Bill Flanery, Ronni Flannery, Guy Hanson, Chic Fitts, John Ottman, Rachel Burmeister

Members/alternates absent: Dave Atkins, Beth Berlin, Kathy Tonnessen, Martin Twer, Sue Spanke, Jan Hoem, Garon Smith

Staff: Sarah Coefield

Public: Ellen Flanery

1. **Bert Chessin called the meeting to order**
2. **Excused absences recognized –** Dave Atkins, Beth Berlin, Kathy Tonnessen and Garon Smith were excused
3. **Agenda was approved**
4. **Public comment on non-agenda items**
   None
5. **Discussion and Action Item: Rule change to the Missoula County Air Stagnation and Emergency Episode Avoidance Plan in the Missoula City-County Air Pollution Control Program in order to clarify department activities during wildfire episodes (Rule 4.112)**
   Sarah Coefield presented proposed changes to Rule 4.112 (the Wildfire Smoke Episode Avoidance Plan). Sarah said the Environmental Protection Agency (EPA) had concerns with how the rule was written and it was holding up their review of the county's PM10 Redesignation Request. She said that after a lot of back and forth with EPA, staff was proposing a rule change they believe that addressed EPA's concerns.

   Rule 4.112 allows the Missoula City-County Health Department to waive the requirements of 4.104-4.111 if wildfire smoke is the primary source of PM2.5 in the airshed and the effects on PM2.5 levels are insignificant when the requirements are waived. The purpose behind this rule is to allow staff to focus on issuing wildfire smoke health advisories instead of enforcing unnecessary woodstove use restrictions in the summer months. The provisions in Rules 4.104-4.111 are targeted at human-caused winter pollution sources and are not helpful during a wildfire smoke event.

   EPA was concerned about waiving rules that are in the State Implementation Plan (SIP) and they said they would like to see the department's wildfire activities codified in the rule. The proposed edits to 4.112 no longer provide for the department to waive all of 4.104-4.111. Instead, they only allow the department to waive the PM2.5 control measures triggered by 4.104, which are not currently in the SIP. The edits also codify the department's activities during a wildfire smoke episode.

   Sarah said the Air Pollution Control Board would be looking at the rules later in July, but the Council is the first stop on the adoption process. The department is hoping to have the rule change adopted locally in time to make the September agenda for the Montana Board of Environmental Review, which is the last stop before submission to the EPA. The

quick timeline is necessary to speed EPA's review of the PM10 Redesignation Request.

Guy moved to recommend the Air Pollution Control Board adopt the proposed changes to Rule 4.112. Chic Fitts seconded the motion and it passed by unanimous voice vote.

6. **Staff report**
   Sarah Coefield gave the staff report. She said there was a break-in at the Seeley Lake air monitoring site. Someone cut the lock, entered the shelter and flipped all the breakers. They also stole the logbook and data stick. Fortunately, all of the data is backed up in multiple locations and no damage was done to the machinery. Ben Schmidt filed a report with the sheriff's office.

   Outdoor burning closed on July 1st due to increasing fire danger, and we're starting to see some haze from wildfire activity in the region. She said there have been a lot of fires started (and quickly extinguished) in the area due to Montana Rail Link track grinding activity.

   Sarah said the department is partnering with Climate Smart Missoula, Missoula Aging Services and the Food Bank to deliver HEPA room filters to homebound seniors to help them through the upcoming wildfire season.

   Sarah attended the governor's wildfire overview in June, and so far it doesn't seem very accurate. The presenters had predicted a cool, wet summer, but things are drying out fast.

   Ben has been working on industry stuff.

7. **Public comment**
   None

8. **Select AQAC representative for next Air Board meeting update**
   Bert Chessin will give the update at the next Air Board meeting.

9. **Announcements, other business**
   Ronni Flannery said she has received great feedback from the op-ed the Council submitted with the Air Board to the Missoulian about proposed EPA budget cuts.

10. **Adjourn**

Section 3

Missoula City-County Air Pollution Control Board

From: Sarah Coefield
Sent: Monday, July 10, 2017 11:10 AM
Subject: Missoula City-County Air Pollution Control Board Hearing
Attachments: Revised 4.112_2017.pdf

The Missoula City-County Air Pollution Control Board will hold a public hearing on proposed changes to the Missoula City-County Air Pollution Control Program on Thursday, July 20, 2017 at 1:00 p.m. or soon thereafter. The Board meets in the second floor conference room at the Health Department at 301 West Alder in Missoula. The Air Board will consider proposed changes to Chapter 4 "Missoula County Air Stagnation and Emergency Episode Avoidance Plan." The proposed rule changes clarify Rule 4.112, the wildfire smoke emergency episode avoidance plan in Chapter 4.

The Air Board will take public comments at the hearing before making a decision. Written comments may be submitted on or before noon on July 20, 2017 by mailing them to Air Comments, MCCHD, 301 W Alder St., Missoula, MT 59802; faxing them to (406) 258-4781 or emailing them to bschmidt@missoulacounty.us . For a copy of the proposed rules visit www.missoulacounty.us/airquality or call 258-4755.

Sarah Coefield, M.S., M.A.
Air Quality Specialist
Missoula City-County Health Department
301 W. Alder
Missoula, MT 59802
Phone (406) 258-3642

AFFIDAVIT OF PUBLICATION
THE MISSOULIAN

500 S. Higgins Ave.
Missoula, MT 59801
Phone: (406) 523-5236 Fax: (406) 523-5221

Ad Number: 20503013

Chris Arvish, being first duly sworn, deposes and says. That she is the principal clerk of The Missoulian, a newspaper of general circulation published daily in the City of Missoula, in the County of Missoula, State of Montana, and has charge of the Advertisements thereof.

That the legal regarding:

Air Quality

a true copy of which is hereto annexed, was published in said newspaper on the following dates: via:

July 9 + 16, 2017

Making all 2 publication(s)

On this day of Aug 3, 2017 before me, the undersigned, a Notary Public for the State of Montana, personally appeared Chris Arvish known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed same. IN WITNESS WHERFOF, I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Barbara L Garrison

Venue: Missoula, Montana, County of Missoula

BARBARA L GARRISON NOTARIA SEAL STATE OF MONTANA

BARBARA L GARRISON
NOTARY PUBLIC for the
State of Montana
Residing at Missoula, MT
My Commission Expires
November 2, 2020

Page	:	1 of 1 08/03/2017 09:07:11	**Ad Number**	:	11344257
			Ad Key	:	
Order Number	:	20503013	**Salesperson**	:	CA2 - CHRIS ARVISH
PO Number	:		**Publication**	:	Missoulian
Customer	:	60001021 MISSOULA CITY-COUNTY HE	**Section**	:	EPT (county) Classified
Contact	:		**Sub Section**	:	Legals
Address1	:	301 W ALDER	**Category**	:	399 Legals
Address2	:		**Dates Run**	:	07/09/2017-07/16/2017
City St Zip	:	MISSOULA MT 59802	**Days**	:	2
Phone	:	(406) 523-4770	**Size**	:	2 x 1.91, 21 lines
Fax	:		**Words**	:	177
	:		**Ad Rate**	:	Open
Printed By	:	misarvic	**Ad Price**	:	32.00
Entered By	:	misarvic	**Amount Paid**	:	0.00
			Amount Due	:	32.00
Keywords	:	Missoula City-County Air Pollution Control Board H			
Notes	:				
Zones	:				

Missoula City-County Air Pollution Control Board Hearing

The Missoula City-County Air Pollution Control Board will hold a public hearing on proposed changes to the Missoula City-County Air Pollution Control Program on Thursday, July 20, 2017 at 1:00 p.m. or soon thereafter. The Board meets in the second floor conference room at the Health Department at 301 West Alder in Missoula. The Air Board will consider proposed changes to Chapter 4 "Missoula County Air Stagnation and Emergency Episode Avoidance Plan." The proposed rule changes clarify Rule 4.112, the wildfire smoke emergency episode avoidance plan in Chapter 4.

The Air Board will take public comments at the hearing before making a decision. Written comments may be submitted on or before noon on July 20, 2017 by mailing them to Air Comments, MCCHD, 301 W Alder St., Missoula, MT 59802; faxing them to (406) 258-4781 or emailing them to bschmidt@missoulacounty.us. For more information, a copy of the proposed rules or to sign up for the Interested Parties mailing list, visit www.missoulacounty.us/airquality or call 258-4755.
#20503013 July 9 & 16, 2017

From: Sarah Coefield
Sent: Friday, August 18, 2017 4:32 PM
Subject: September 21, 2017, Air Pollution Control Board Hearing on Rule 4.112
Attachments: Revised 4.112 8.09.17.docx

Re: Air Pollution Control Board Hearing to update the Missoula City-County Air Pollution Control Program Wildfire Smoke Episodes Rule 4.112.
Hearing Date: September 21, 2017
Hearing Time: 12:15 pm or shortly thereafter
Location: Missoula City-County Health Department, 301 W. Alder Street, Room 210.
Attached: Proposed revisions to Missoula City-County Air Pollution Control Program Rule 4.112

The purpose of this hearing is to update and clarify the language in Rule 4.112. Rule 4.112 describes what actions and recommendations are given by the Missoula City-County Health Department when wildfire smoke is the primary source of PM-2.5 (particulate matter 2.5 microns in diameter or smaller) in the air. Rule 4.112 specifies that Stage I Air Alerts, Stage II Warnings and other regulatory responses may be waived by the Missoula City-County Health Department when wildfire smoke is the primary source of PM2.5 pollution, since health advisories and information updates are a more appropriate response to wildfire smoke episodes. The regulatory measures used for Air Alerts and Warnings are designed for winter time stagnant air episodes and are not necessarily an appropriate response to wildfire smoke.

You may give oral comments at the Air Pollution Control Board Hearing. Written comments will be accepted until September 20, 2017, at noon. Send written comments to Sarah Coefield via email or mail to:
Sarah Coefield – Rule 4.112
MCCHD,
301 W. Alder St.
Missoula, MT 59802.

If you wish to be included in future interested party emails, please contact Sarah Coefield at scoefield@missoulacounty.us or Benjamin Schmidt at bschmidt@missoulacounty.us.

Sarah Coefield, M.S., M.A.
Air Quality Specialist
Missoula City-County Health Department
301 W. Alder
Missoula, MT 59802
Phone (406) 258-3642

Sarah Coefield, M.S., M.A.
Air Quality Specialist
Missoula City-County Health Department
301 W. Alder
Missoula, MT 59802
Phone (406) 258-3642

AFFIDAVIT OF PUBLICATION
THE MISSOULIAN

500 S. Higgins Ave.
Missoula, MT 59801
Phone: (406) 523-5236 Fax: (406) 523-5221

Ad Number: 20509231

Chris Arvish, being first duly sworn, deposes and says. That she is the principal clerk of The Missoulian, a newspaper of general circulation published daily in the City of Missoula, in the County of Missoula, State of Montana, and has charge of the Advertisements thereof.

That the legal regarding:

Board Hearing

a true copy of which is hereto annexed, was published in said newspaper on the following dates: via:

September 10+17, 2017

Making all 2 publication(s)

On this day of Sept 19, 2017 before me, the undersigned, a Notary Public for the State of Montana, personally appeared Chris Arvish known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed same. IN WITNESS WHERFOF, I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Barbara L Garrison

Venue: Missoula, Montana, County of Missoula

BARBARA L GARRISON NOTARIA STATE OF MONTANA SEAL

BARBARA L GARRISON
NOTARY PUBLIC for the
State of Montana
Residing at Missoula, MT
My Commission Expires
November 2, 2020

Page	:	1 of 1 09/18/2017 10:05:24	**Ad Number**	:	11354223
			Ad Key	:	
Order Number	:	20509231	**Salesperson**	:	CA2 - CHRIS ARVISH
PO Number	:	8612	**Publication**	:	Missoulian
Customer	:	60001021 MISSOULA CITY-COUNTY HE	**Section**	:	EPT (county)
Contact	:		**Sub Section**	:	Legals
Address1	:	301 W ALDER	**Category**	:	399 Legals
Address2	:		**Dates Run**	:	09/10/2017-09/17/2017
City St Zip	:	MISSOULA MT 59802	**Days**	:	2
Phone	:	(406) 523-4770	**Size**	:	2 x 2.00, 22 lines
Fax	:		**Words**	:	178
	:		**Ad Rate**	:	County Liners
Printed By	:	misarvic	**Ad Price**	:	32.00
Entered By	:	misarvic	**Amount Paid**	:	0.00
			Amount Due	:	32.00
Keywords	:	Missoula City-County Air Pollution Control Board H			
Notes	:				
Zones	:				

Missoula City-County Air Pollution Control Board Hearing

The Missoula City-County Air Pollution Control Board will hold a public hearing on proposed changes to the Missoula City-County Air Pollution Control Program on Thursday, September 21, 2017 at 12:15 p.m. or soon thereafter. The Board meets in the second floor conference room at the Health Department at 301 West Alder in Missoula. The Air Board will consider proposed changes to Chapter 4 "Missoula County Air Stagnation and Emergency Episode Avoidance Plan." The proposed rule changes clarify Rule 4.112, the wildfire smoke emergency episode avoidance plan in Chapter 4.

The Air Board will take public comments at the hearing before making a decision. Written comments may be submitted on or before noon on September 20, 2017 by mailing them to Sarah Coefield-Air Comments, MCCHD, 301 W Alder St., Missoula, MT 59802; faxing them to (406) 258-4781 or emailing them to scoefield@missoulacounty.us. For more information, a copy of the proposed rules or to sign up for the Interested Parties mailing list, visit www.missoulacounty.us/airquality or call 258-4755.
#20509231 September 10 & 17, 2017

Missoula Public Health
City-County Health Department

REVISED AGENDA

MISSOULA CITY-COUNTY WATER QUALITY DISTRICT, HEALTH AND AIR POLLUTION CONTROL BOARDS	**July 20, 2017 – 12:15 p.m. to 3:00 p.m.** **Missoula City-County Health Department** **Room 210 - Board Conference Room** **301 West Alder, Missoula, MT 59802**

BOARD OF HEALTH (BOH)

1. **Election of Officers** ..... Debbie Johnston
2. **Hearing on proposed new Health Code Regulation 8 for trailer courts and campgrounds**
   [12:30 p.m. or shortly thereafter] ..... Jeanna Miller

   Temporarily adjourn the BOH meeting

AIR POLLUTION CONTROL BOARD (APCB)

Note: June 15, 2017 minutes will be submitted in August for approval.

1. **Hearing and possible action to revise Rule 4.112 of the Air Pollution Control Program**
   [1:00 p.m. or shortly thereafter] ..... Sarah Coefield
2. Air Quality Advisory Council update ..... Bert Chessin
3. Transportation Policy Coordinating Committee (TPCC) update ..... Dr. Garon Smith or Sarah Coefield
4. Public comments on items not on the agenda ..... Chair
5. Board and staff comments on items not on the agenda ..... Chair

WATER QUALITY DISTRICT BOARD (WQDB)

There are no June minutes to approve. The June meeting was canceled.

1. **Action on Missoula County Public Works Dept. request for $38,000 funding from the Water Quality District for a project to connect the Buena Vista Mobile Home Park sewage lagoon system to Public sewer** .....
   .....Greg Robertson (Missoula County Public Works) and Sindie Kennedy (Missoula County Grants Administrator)
2. Water Quality Advisory Council update ..... Peter Nielsen
3. Public comments on items not on the agenda ..... Chair
4. Board and staff comments on items not on the agenda ..... Chair

BOARD OF HEALTH (BOH) - Reconvene

Note: June 15, 2017 minutes will be submitted in August for approval. Also, there is no update for the Maternal Child Health Advisory Council, The July meeting was canceled.

3. Update on community decay complaint filed against M2Green ..... Anna Conley
4. Update on litigation regarding Fool's End Social Club violation of Montana Clean Indoor Air Act ..... Shannon Therriault
5. July journal report; identify volunteer for August report ..... Debbie Johnston; Chair
6. Director's report and accreditation update ..... Shannon Therriault
7. Public comments on items not on the agenda ..... Chair
8. Board and staff comments on items not on the agenda ..... Chair

ADDITIONAL INFORMATION

Agenda items and their order are subject to change. For the current agenda, call the Health Department at 258-3376 or go to the website for the three Boards as noted below. To receive the agenda monthly by e-mail, send an e-mail request to jmohr@missoulacounty.us and provide your e-mail address. Unless the meeting schedule is adjusted, the agenda is posted on the 2nd Thursday of the month via the Internet at http://www.missoulacounty.us/government/health-department/health-boards-councils/boards-agendas-minutes.

If you need special assistance to attend this meeting, please provide notice 48 hours in advance by calling the Health Department at 258-3376 or e-mail your request to jmohr@missoulacounty.us

Date Published: 0713./17; revised and republished 07/19/17

Missoula City-County Air Pollution Control Board
July 20, 2017

Board Members Present: Julie Armstrong, Teresa Henry, Debbie Johnston (Vice Chair), Ross Miller (Chair) via teleconference, Dr. Garon Smith and Dr. Robert Stenger

Board Members Excused: Jean Curtiss

Staff Present: Health Administration: Julie Mohr and Kathy Potwin; Environmental Health: Sara Coefield, Ben Schmidt and Shannon Therriault

Staff Excused: Ellen Leahy (Health Officer)

Legal Counsel Present: Anna Conley (Civil Deputy County Attorney, County Attorney's Office)

Others Present: Greg Robertson (Public Works Director, Missoula County Public Works), Sindie Kennedy (Grants Administrator & Environmental Certifying Officer, Missoula County Community & Planning Services), Derek Brouwer, Andy Yuhas and Ron Scholl (Camera Operator, Missoula Community Access TV)

Meeting Called to Order: Debbie Johnston served as Acting Chair since Ross Miller participated via telephone. She called the meeting to order at 12:59 p.m.

ITEM 1 HEARING AND POSSIBLE ACTION TO REVISE RULE 4.112 OF THE AIR POLLUTION CONTROL PROGRAM

- **Attachment A:** Coefield, Sarah (2017, July 20). *Proposed Rule 4.112* [PowerPoint presentation at the meeting of the Missoula City-County Air Pollution Control Board]
- **Attachment B:** Missoula City-County Environmental Health/Air Quality Division's *Proposed Changes to Rule 4.112*
- **Attachment C:** Letter to Shannon Therriault (Environmental Health Director) from Monica Morales (Director of Air Program for EPA) *EPA Region 8 Comments on Missoula City-County Health Department's Proposed Revisions to Rule 4.112 "Wildfire Smoke Episodes"*

Ms. Johnston convened the hearing. Sarah Coefield (Air Quality Specialist, Environmental Health) reminded the Board that the department has submitted a PM_{10} Redesignation Request to the Environmental Protection Agency (EPA). The request included a companion update to the State Implementation Plan (SIP), which included Rule 4.112.

With changes in wildfire seasons that began around 2000, staff realized that the alert and warning measures in place in Chapter 4 for curtailing pollution sources were targeted toward winter air pollution sources. They felt that it was inappropriate during wildfire events to instruct the public to stop using woodstoves. Instead, they started asking the Board every year for permission to waive those rules during wildfires. In 2010, the department's rules were revised so that, when there is a wildfire event, the alerts and warning measures found in 4.104 through 4.111 may be waived.

Following the inclusion of Rule 4.112 as part of the State Implementation Plan (SIP) update given to EPA as part of the department's request for PM_{10} Redesignation, EPA expressed concerns about the rule, saying: 1) it was overly broad and it waived a lot of rules; 2) it created a potential for backsliding for PM_{10}; and 3) it did not show what staff do during a wildfire event.

Staff Request for Board Action: The department has addressed these concerns with the proposed revisions to Rule 4.112 (**Attachment B**) and requests that the Air Pollution Control Board accept the proposed updated rule.

Ms. Coefield summarized the proposed changes:

- The rule codifies what the department does during a wildfire event. Staff let the public know what is going on, where the smoke is coming from, and identify relevant health concerns so that members of the public can protect themselves.
- The rule provides a waiver from $PM_{2.5}$ requirements to tell the public to stop using woodstoves, to shut down industry, or to shut down the town when doing so will not curtail the amount of wildfire pollution being produced, which it is the cause of health concerns. The rule enables the department to basically shut down the whole town when winter air pollution reaches certain levels of $PM_{2.5}$ but when the same levels of pollution are produced by wildfires, it would be costly and inappropriate to close businesses and shut down industry when doing so will not provide a noticeable health benefit.

The new proposal for Rule 4.112 addresses EPA's concerns while helping the department maintain credibility as a health protection agency. It recognizes that we are in a climate today where there is a lot of wildfire. The department wants to be responsible and to do the best it can to inform citizens when there is pollution, without taking actions that will not reduce or eliminate the problem. The most important change in the update to Rule 4.112 specifies that the focus is of the waiver is on the $PM_{2.5}$ provisions in the Air Stagnation and Emergency Episode Avoidance Plan. It does not include any other criteria pollutants that are in that plan. PM_{10} provisions are already part of the approved SIP and staff do not want to touch that or suggest that they are backsliding from those provisions in any way. In addition, the $PM_{2.5}$ provisions in Chapter 4 for the Air Stagnation and Emergency Episode Avoidance Plan have never been in the SIP before so the department is proposing to EPA a set of winter air pollution measures that would call alerts and warnings that tell the public to stop using woodstoves and to clean up their practices during months when the source of pollution is people but not when the source of pollution is a wildfire. Thus, we are presenting EPA with a net increase in control measures for $PM_{2.5}$ and we are not touching what already exists for PM_{10}. This is an important distinction.

EPA submitted comments (**Attachment C – Enclosure 1, page 2**), which the department received at approximately 10:30 a.m. this morning. Ms. Coefield noted that staff recognize they need to provide the Board with written copies of the department's unhurried response to EPA's comments, but she summarized the responses that will be given.

- **Comment 1:** Define the term "Episode". **Response:** Staff worked extensively with EPA on this rule change over the last several months. They believe this is a hold-over from the earlier version. "Episode" is now defined as a period of time in which the department determines, using available scientific and meteorological data, that wildfire smoke is the primary source of $PM_{2.5}$ in the airshed. The department has already addressed this comment.

- **Comment 1:** Define the term "Primary Source." EPA says that "the primary source" is in the vernacular. **Response:** The department does not know how to better phrase "the primary source" and is comfortable not changing this term.
- **Comment 2(a):** Consider if a waiver would be more appropriate for specific abatement activities in 4.108 – 4.111and identify specific parameters by which the department would consider implementing the waiver to ensure requirements address any substantial threat to health as contemplated in 40 CFR 51, Appendix L 1.1. The parameters could identify the specific emission controls required to be taken under each stage as required by 40 CFR 51.152(a)(3). **Response:** First off, staff are trying to consider if a waiver would be more appropriate for specific abatement activities. This would be the idea of going through our control activities in 4.108 – 4.111, saying "Okay, well if there is a wildfire we are not going to tell you to not use your woodstoves, but we will say industry needed this and just really kind of picking and choosing those control activities. It would make the rule pretty cumbersome if we were to do that—to go through and say "Well, we are going to only waive these specific control measures and keep these other ones" even though we've already determined that in the Air Stagnation and Episode Avoidance Plan those provisions would not actually significantly effect $PM_{2.5}$ levels."
- **Comment 2(a):** Identify parameters by which we would consider implementing the waiver. **Response:** These parameters are already identified in the earlier section of the rules where we have identified the parameters to be a period of time in which the scientific and meteorological data show that wildfire smoke is a primary source of $PM_{2.5}$ in the air shed and, using that scientific and meteorological data, we determined that instituting these control measures would have negligible impacts so those parameters are already defined in 1 and 2 of this rule.
- **Comment 2(a):** Ensure requirements address any substantial threats to health as contemplated in 40 CFR 51 Appendix L. **Response:** Appendix L is a set of suggested regulations and they are not anything required. They are proposals EPA has set forth for their versions of alerts, warnings and emergencies. EPA has their own version of alerts, warnings and emergencies and they are not triggered until much higher concentrations than anything the department ever triggers at. The department has had some complications because we are using the same words so there has been some confusion between our agencies of what we are trying to do and how we are trying to do it. The suggested regulations that they have for their alerts and warnings include things that curtail outdoor burning and impact incinerators, fuel burning equipment and really target coal fire generating plants and power facilities and major industry. A lot of these are very similar to the control measures that we already have in place for winter air pollution episodes, which we have granted ourselves the ability to go ahead and use if we need to implement any of those control measures. We have left ourselves that opening. Also, Appendix L does not have $PM_{2.5}$ breakpoints. Appendix L was written before $PM_{2.5}$ was really on the scene. There is a 2009 EPA memo that provides suggested $PM_{2.5}$ breakpoints. Remember, Appendix L is all suggestions. They have provided suggested breakpoints for $PM_{2.5}$ that are far less protective of human health than the breakpoints we already have in there for our winter activities, which staff believes is a salient point. **Debbie Johnston** asked whether we exceed the levels in Appendix L during wildfire episodes. **Ms. Coefield** responded that we have, but rarely. She thinks we hit their alert level or warning when we hit hazardous air quality in 2015. Their levels do not kick in until we are way up there.
- Another point that the department felt we needed to clarify with EPA is all our other rules remain intact during a wildfire episode. There was some concern that was voiced to us in the beginning of this process that it would be a pollution free-for-all because the department is waiving rules, but we are only waiving a specific set of rules that are aimed at curtailing excess winter air pollution.

The many other chapters of our rules do remain in place. Outdoor burning would, of course, be closed because I would close it. We already have excellent control measures in the whole control program for air quality, so it is not going to be a pollution free-for-all. As I said, we have left room to call for those added control measures in our Air Stagnation and Episode Avoidance Plan if we deem they are necessary to protect public health. We say, "we may waive"—not "we will waive". We may waive, if we think that there is no point in calling any of those rules. In addition, if the wildfire is the primary source of air pollution and our control measures would have a negligible impact on the air pollution, then wildfire is a substantial threat to human health and adding emission controls would not have a significant benefit.

- **Comment 2(a):** The parameters we use could identify the specific emission controls required to be taken under each stage as required by 40 CFR 51.152(a)(3). **Response:** This states that a contingency plan must specify adequate image control actions to be taken at each episode stage and those are the alerts, warnings, etc. These control measures are already in place for winter air pollution in our approved SIP. Our rule proposal does not touch those requirements for PM_{10}. Our SIP exists for PM_{10} and carbon monoxide and we are not touching anything in that already-approved SIP that meets these requirements that were set forth by the Clean Indoor Act and EPA. We are not proposing anything that would weaken any of those requirements.
- **Comment 2(b):** EPA notes that $PM_{2.5}$ concentrations associated with the 4.104 "Crisis" levels fall within the "Unhealthy" category of the EPA Air Quality Index (AQI) and PM_{10} concentrations for the "Crisis" level correlate with "Hazardous" category of the EPA AQI. EPA suggests that Missoula consider aligning the $PM_{2.5}$ values with EPA's AQI, as this would alleviate the need for the waiver under Rule 4. **Response:** Here we have conflicting words. We use our alerts and warnings to prevent a National Ambient Air Quality Standards (NAAQS) exceedance and they use their alerts and warnings to control human activity and prevent their exposure to pollution and shut down sources when it is "crazy bad" outside. We call an alert when $PM_{2.5}$ reaches 28 micrograms per cubic meter for a 24-hour average. EPA's alert does not kick in until it is 140. If we were to adopt their version, we would just say, "Go ahead and exceed the NAAQS" and we are unwilling to do that. The alerts and warnings that we have set forth for $PM_{2.5,}$ at the levels we have chosen, serve an important purpose. EPA would be upset with us if we exceed the NAAQS as a free-for-all. In addition, we feel that our levels and our interpretation of $PM_{2.5}$ are much more protective of human health than EPA's AQI. It does not meet the science. It does not meet with what we know about how particulate matter effects human health. Ms. Coefield does not feel that we should embrace or accept their breakpoints for $PM_{2.5}$. It is a political beast and she understands why they are set where they are set, the department does not need to adopt them when we can be more protective of human health and do what is right by our citizens. She thinks this is an example of confusion where people are using the same words but mean different things and are mixing up health categories with alert and control activities that are based on not exceeding the NAAQS. Those are two different beasts.
- **Comment 2(c):** EPA suggests clarifying what scientific and meteorological data will be used to evaluate the wildfire impacts. **Response:** We are uncomfortable with this because technology is constantly changing. In our opinion, it is not a great idea to codify which technologies the department will use. We prefer to use the phrase "available scientific and meteorological data." Also, this phrase already exists multiple times in Chapter 4 in the previously-approved SIP language. Ms. Coefield took it directly from the already-approved language, so we believe EPA should be okay with this language since they have approved it throughout the rest of this chapter.

- **Comment 3:** EPA suggests Missoula modify the notification requirements so that the same level of public notification is required as indicated for the various threat levels under 4.108 – 4.111 to meet the federal contingency plan requirements under 40 CFR 51.152(b)(3). **Response:** 40 CFR 51.152(b)(3) refers to emission control activities that kick in when pollution concentrations reach very high levels. In this case, those would kick in when $PM_{2.5}$ levels exceed 250 micrograms per cubic meter for a 24-hour average, and the communication procedures that they are speaking of are specifically for emission control activities—that is notifying emitters and saying, "You need to shut down or be cleaner." We are leaving ourselves room to call for emission controls as needed and, if we do, it means we will go back into the rest of 4.104 through 4.111, which already has language that EPA has approved for notifying people who need to be notified. If we feel that our air pollution is bad, and we need to kick in our emission control activities, we will go in and reactivate those rules and then we will be using the already-approved language from our SIP. Thus, we do not feel the need to add that language into 4.112 when the approved language is in place for the rest of Chapter 4. In addition, the phrase "advise citizens via public media and the department's Air Pollution Hotline" is language that, again, is picked up directly from the rest of Chapter 4 in the approved SIP.
- **Comment 4:** Clarify how often a "regular basis" would be by defining the evaluation frequency and what the department will do in response to the information gathered during the evaluation to ensure adequate protection against substantial threats of health in the future. **Response:** The department feels it is inappropriate to codify how frequently we will be checking because it is going to vary as to what time we can get to it and how often it needs to be checked. Sometimes we need to be sending updates every hour and sometimes conditions are more stable. If it is necessary, we believe there is room to say we will evaluate it at a minimum of once a day. To try to specifically codify that the frequency will be every 15 to 20 minutes or 2 hours, when Ms. Coefield may be out on a hill observing smoke and unable to get back to town to adhere to a codified frequency, puts us into a corner. We believe it is very important to constantly check the situation and give the public the best information that we have. We also need to be cognizant of the fact that this is a two-person program. We may not be able to meet specific timed deadlines. There may be room to say, "at a minimum of once or twice a day" but I would be uncomfortable putting in anything more specific than that because we do not know where we are going to be at any given time. Furthermore, Rule 4.112(3) explains what the department will do with the information gained from checking up on a wildfire. This meets the request that we tell them what we will after information is gathered. We will advise citizens via public media and the Air Pollution Hotline of current air pollution levels and the associated health advisories.

The department appreciates EPA's comments. We feel that one thing that they did not do is acknowledge that we are presenting them with an increase in winter air pollution rules and we have not decreased any rules at all. All we are doing is presenting them with a nice package of winter air pollution rules for $PM_{2.5}$ and what we are going to do for alerts and warnings that meet the department's criteria for alerts and warnings. We have not proposed any changes to PM_{10}. Ms. Coefield thinks that we are at a good place with this rule and encouraged the Board to look it over. Staff are prepared to write up a response to EPA's comments that is not hurried and will provide the Board a with a copy to review. This rule meets their first concern, which was that we had included PM_{10} as things that would be waived in our original version of this rule and now we have zeroed in on $PM_{2.5}$ and we have codified what we will do during a wildfire event, so we have strengthened Rule 4.112. It is good to include this in our rules because wildfires are a

part of life. We are only two-thirds of the way through July and we are already surrounded by fires. It is great that we are being responsible about this circumstance and responsible to the public with this rule.

Board and Staff Discussion:

- **Dr. Garon Smith** said it looks like the intent of Rule 4.112(5) (**Attachment B**) is to say that if you issue a waiver of 4.104 and things deteriorate, the waiver can be rescinded. He recommended stating, "If a waiver is issued and conditions deteriorate, we will reinstitute 4.104". There is nothing to address being able to remove a waiver once issued. Otherwise, the proposal is great.
- **Debbie Johnston** asked how this "back and forth" with EPA impacts the timeline [to take the rule change to the Board of Environmental Review] by September. **Ms. Coefield** said, considering EPA's comments, staff do not expect the Board to make a decision today. This will make it trickier to take it to the BER by September 29th. After the Air Pollution Control Board acts on the proposed changes, staff still need to take the proposed changes to the City Council and to the Board of County Commissioners before the proposal goes to the BER. It might be pushed back to December.
- **Dr. Smith** asked when the written comment period ends. **Ms. Coefield** indicated it ended today at noon. Only EPA submitted public comment.
- **Julie Armstrong** commented in favor of the Board approving the proposed changes today, saying it sounds like staff have very appropriate responses to EPA's comments. She asked whether staff must accept EPA's comments. **Ms. Coefield** said staff are not required to accept the comments, which are suggestions. Staff are required to respond to the EPA comments in writing, which they will do—and not in a hurried way. Given that comments were received this morning, she had one hour in which to prepare the department preliminary responses in time for this hearing.
- **Ms. Coefield** noted that two possible additional changes are:
    1. Add "at least once or twice a day."
    2. Incorporate Dr. Smith's recommendation to make it clearer that the department could revive 4.104 at any time. **Dr. Smith** added that the language might read, "A waiver of 4.104 can be rescinded if conditions change."—or something like that.
- **Dr. Stenger** asked whether 4.112(2) and 4.112(3) are contradictory. Are those provisions that are really involved in point sources for pollution, in notifying and shutting down and also serve the public health notification warning? Would it be clearer if 4.112(2) said the department may waive the point source control provisions and 4.112(3) said you are leaving place and you cannot waive all the other provisions in 4.104? **Ms.** Coefield explained that 4.104 triggers all the control activities between 4.104 through 4.111. These are targeted primarily at point sources, such as woodstoves, industry, and incinerators, but then include vehicles and operating businesses and expand on that. She understands what Dr. Stenger is getting at but said that staff reinserted advising citizens about current air pollution levels and health advisories in 4.112(3) because these are part of the activities that would be waived by waiving 4.104. This would bring that part, which staff believe is very important, of notifying the public of the health consequences of the air pollution. Taking that section and putting it right back here basically "un-waives" that section, if you will, by codifying it into 4.112. **Ms. Armstrong:** Basically, you are saying, "We cannot do anything about wildfire pollution, but—heads up—it is really bad out there." **Ms. Coefield:** Exactly, there is a lot of that.
- **Ms. Johnston** asked about the possible impact on the other process that this is depending on if the Board were to act today and if EPA has some more "back and forth." Will it affect the ability to get the other process moving? **Ms. Coefield** indicated that Anna Conley is free, as legal counsel, to respond to these questions. Based on her conversation with the Montana Department of Environmental Quality (DEQ), Ms. Coefield does not believe EPA has a basis to reject this rule.

They can reject a rule that weakens the SIP, but the department has not touched the SIP with this rule. If EPA has more "back and forth," it would be a further delay but, at this point, everything is going to be a further delay. The real concern about time is that Missoula has been in PM_{10} non-attainment forever. An emission inventory that was included as part of the Redesignation Request and EPA has not told the department yet whether they are going to make the department redo the inventory. We were hoping to hear back on this, but we have not. Ms. Coefield added that she does not want the Board to approve something that members may otherwise be uncomfortable with, based on the possibility that she may have to redo the emission control inventory. She can redo the inventory—the department has the data. It is doable, if necessary.

- **Shannon Therriault (Director, Environmental Health)** said that staff are comfortable following the typical process when the department receives public comment that they are not expecting: staff do not ask the Board to act right at that time. They will prepare the department's written response to the public comment, which will give them a chance pass the response by both EPA and (DEQ). She described the comments from EPA as "disappointing." They seem to have forgotten the last conversation the department had with them, at which time EPA communicated that they get it that the Air Stagnation Plan is meant to prevent violations of the air quality standards. She cannot predict how EPA will respond to the department's response to their comments. They may be more comfortable with how the department is proceeding or they still may not recognize that staff are not proposing to backslide anywhere.
- **Ms. Armstrong** said the EPA has given a very generic response, with comments that sound like they are written by somebody who has no idea what goes on in Missoula. **Ms. Therriault** said that, in some of the department's conversations with EPA, they did not realize the department is the primary responsible party. Staff thought they worked through a lot of that with EPA—with DEQ's help. DEQ has been very supportive of our program and how this is written. It feels like EPA put their response together too quickly, from comments that they had before their last conversation with staff.
- **Ms. Johnston** said that it does not sound like the Board would make additional changes other than those found in **Attachment C**, except Sarah is perhaps signaling that she might put in "once a day" for timing. **Ms. Coefield** said she does not know if doing so will be sufficient to get the rule through EPA's hurdle, given their difficulty with this. Staff check constantly. **Ms. Johnston** commented that once a day seems appropriate. **Ms. Coefield** said that her comment on that is her chance to say this is not a completely unreasonable request by EPA. We can meet them part way on this. She does not know if this will be enough.
- **Anna Conley (Civil Deputy County Attorney)** asked whether there is there a minimum that staff would be comfortable putting in. **Ben Schmidt (Air Quality Specialist, Environmental Health)** said he would highly discourage going forward with "once per day". He cited the example of there being very unstable episode, with either he or Sarah being out on vacation, and the difficulty the other staff member would have in trying to meet a specific timing requirement. **Ms. Therriault** and **Ms. Coefield** spoke in favor of not specifying a minimum. They proposed adding something like "The department may reinstitute the requirements in 4.104 anytime if conditions change, as necessary to protect public health."

Julie Armstrong made the motion for Board action.

Public Comments: No comments were given.

Board or Staff Comments: No comments were given.

Motion: The Air Pollution Control Board accepted proposed Rule 4.112 as submitted, with the amendments discussed regarding the waiver and the minimum once a day check. The motion carried as follows: Yes – 6 (Armstrong, Henry, Johnston, Miller, Dr. Smith and Dr. Stenger); Nays – 0; Excused – 1 (Curtiss).

Follow-Up: *Staff will provide the Board with the department's written response to EPA's comments.*

ITEM 2 AIR QUALITY ADVISORY COUNTY (AQAC) UPDATE

Ms. Coefield presented the proposed changes to Rule 4.112 and the AQAC voted to recommend that the Board approve the changes.

ITEM 3 TRANSPORTATION POLICY COORDINATING COMMITTEE (TPCC) UPDATE

The Committee reviewed the draft Unified Planning Work Program (UPWP), which addresses personnel resources. They also reviewed a draft of the Transportation Improvement Plan (TIP), to be adopted in August, which covers transportation projects that are in the works and calls for a 4-year renewal of the "zero-fare" program for Mountain Line buses. It also includes putting rumble strips between the directional lanes on county roads. Lastly, they provided comment on the draft plan for the scope of work for the Pedestrian Facilities Master Plan. Volunteers will go into the community to map the conditions of sidewalks and Americans with Disabilities Act (ADA) handicap ramps at the intersections of each block.

ITEM 4 PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

No comments were given.

ITEM 5 BOARD AND STAFF COMMENTS ON ITEMS NOT ON THE AGENDA

Ms. Coefield noted that our area is surrounded by wildfires, describing the Lolo Peak. Rock Creek, Hogsett fires, Sunrise and Burdette fires. There is smoke in the air, which is creating a haze, but most of it is staying above the breathing level at present. This is just the start of the wildfire season. We are having the third driest July on record, with lightening but no rain in the forecast. We can expect to see more fires. Firefighting resources are already strained: most firefighters have been sent to Nevada. She will continue to give wildfire updates to the public.

ADJOURNMENT: Ms. Johnston adjourned the meeting at 1:43 p.m.

Respectfully submitted,

_____

Shannon Therriault
Director, Environmental Health

Missoula Public Health
City-County Health Department

AGENDA

AIR POLLUTION CONTROL, WATER QUALITY DISTRICT & HEALTH BOARDS	**September 21, 2017 – 12:15 p.m. to 3:00 p.m.** **Missoula City-County Health Department** **Room 210 - Board Conference Room** **301 West Alder, Missoula, MT 59802**

AIR POLLUTION CONTROL BOARD (APCB)

1. **Hearing to adopt revised Air Pollution Control Program Rule 4.112 on actions during wildfire smoke episodes** [12:30 p.m. or shortly thereafter] ..... Sarah Coefield
2. **Approve August 17, 2017 minutes** ..... Ross Miller
3. Air Quality Advisory Council update ..... Sarah Coefield
4. Public comments on items not on the agenda ..... Ross Miller
5. Board and staff comments on items not on the agenda ..... Ross Miller

There is no update for the Transportation Policy Coordinating Committee. The meeting was canceled.

BOARD OF HEALTH (BOH)

1. **Approve August 17, 2017 minutes** ..... Ross Miller
2. September journal report; identify volunteer for October report ..... Julie Armstrong; Ross Miller
3. **Approve Lease Agreement and payment for 223 W. Alder** ..... Ross Miller
4. **Accept Strategic Plan Year Two (Fiscal Year 2017) End-of-Year Report** ..... Cindy Farr
5. Update on the Montana Public Health Improvement Task Force meeting ..... Jean Curtiss
6. Missoula Child Health (MCH) Advisory Council update ..... Teresa Henry
7. Director's report and accreditation update ..... Ellen Leahy
8. Public comments on items not on the agenda ..... Ross Miller
9. Board and staff comments on items not on the agenda ..... Ross Miller

Adjourn temporarily

WATER QUALITY DISTRICT BOARD (WQDB)

1. **Approve August 17, 2017 minutes** ..... Ross Miller
2. Water Quality Advisory Council update ..... Peter Nielsen
3. Public comments on items not on the agenda ..... Ross Miller
4. Board and staff comments on items not on the agenda ..... Ross Miller

BOARD OF HEALTH (BOH) - Reconvened

10. MC-CHD Board of Health vs. Calumet, LLC.- Discussion of litigation strategy [Closed session] ..... Matt Jennings, Erica Grinde
11. **Possible action regarding MC-CHD Board of Health v. Calumet, LLC. litigation strategy** [Open session] ..... Matt Jennings, Erica Grinde
12. Conduct Director Ellen Leahy's performance review for Fiscal Year 2017 and discuss salary and proposed goals for FY 2018 [Closed session] ..... Ross Miller
13. **Action on Director Leahy's performance review for Fiscal Year 2017, salary, and Fiscal Year 2018 goals** [Open session] ..... Ross Miller

ADDITIONAL INFORMATION

Agenda items and their order are subject to change. For the current agenda, call the Health Department at 258-3376 or go to the website for the three Boards as noted below. To receive the agenda monthly by e-mail, send an e-mail request to jmohr@missoulacounty.us and provide your e-mail address. Unless the meeting schedule is adjusted, the agenda is posted on the 2nd Thursday of the month via the Internet at http://www.missoulacounty.us/government/health-department/health-boards-councils/boards-agendas-minutes.

If you need special assistance to attend this meeting, please provide notice 48 hours in advance by calling the Health Department at 258-3376 or e-mail your request to jmohr@missoulacounty.us

Missoula City-County Air Pollution Control Board
September 21, 2017

Board Members Present: Julie Armstrong, Jean Curtiss, Teresa Henry, Debbie Johnston (Vice Chair), Ross Miller (Chair) and Dr. Robert Stenger

Board Members Excused: Dr. Garon Smith

Staff Present: Health Administration: Ellen Leahy, Julie Mohr and Kathy Potwin; Environmental Health: Sarah Coefield and Shannon Therriault; and Health Promotion: Lisa Beczkiewicz and Cindy Farr

Legal Counsel Excused: Anna Conley (Senior Civil Deputy Attorney, County Attorney's Office)

Others Present: MSU College of Nursing (Missoula Campus) – Faculty: Marcy Hanson; (MSU College of Nursing – Students: Cherisse Acosta, Taylor Caekaert, Tamara Davis, Sarah Del Rae, Whitney Denham (Bergum), Haley DeVries, Keith Efland, Rhonda Gold, Rachael Hamik, Megan Hassler-Seevers, Brittany Horner, Ashley Kirchhoff, Skye LaVeau, Katie McDonald, Shannon McLaughlin, Mikela McLeod, Alexander Meyer, Madelyn Schafer, Ryan Tierney, Jill Toews, Melissa VanDerveer, Elly Webster, Lauren Wepprecht, Nikia Whiteaker, and Ron Scholl (Camera Operator, Missoula Community Access TV)

Meeting Called to Order: Ross Miller (Chair) called the meeting to order at 12:16 p.m.

Item 1 was scheduled for the hearing to convene at 12:30 p.m. so Mr. Miller opened the meeting with Items 2 through 5.

ITEM 2 APPROVE JULY 20, 2017 MINUTES

Approval of minutes was deferred to a future meeting.

ITEM 3 AIR QUALITY UPDATE

Sarah Coefield (Air Quality Specialist, Environmental Health Division) reported that the Air Quality Advisory Council did not meet in August due to wildfire activities but did meet this month and discussed the wildfire season, providing air filters to schools and what has gone into the process to make that possible. Debbie Florence (Lewis and Clark Elementary) attended to ask what could be done at Lewis and Clark. Ms. Coefield and Amy Cilimburg (Executive Director, Climate Smart Missoula) reached out to the superintendent of Missoula County Public Schools to inquire about having that conversation but they have not received a response yet. One of Ms. Coefield's goals for this winter is to find a way to create an environment where the schools will be safe places for children to be during wildfire activity. Ms. Florence's inquiry helped to convey the universality of this issue since the department has been very focused on Seeley Lake and Lolo as the higher exposure areas. Missoula has seen plenty of smoke, as well, but the department did not have the resources and ability to address every single classroom in Missoula.

The council also talked about ongoing activity to gain compliance with woodstove removal inside Missoula's Air Stagnation Zone (ASZ) because realtors are listing woodstoves as features in houses listed for sale. They discussed ways to remind the realty community that, since 1994, woodstoves must be removed upon the sale of homes in the ASZ. There has also been fairly pervasive advertisement of recreational fire pits inside city limits so this will potentially come out when the department does the next rules package. There are loopholes within the Woodstove Removal Program that need to be tied up to improve compliance.

The council is concerned about the dusty roads this year, having fielded quite a few complaints, as has Public Works. They will discuss this and the Woodstove Removal Program next month.

ITEM 4 PUBLIC COMMENTS NOT ON THE AGENDA

No comments were given.

ITEM 5 BOARD AND STAFF COMMENTS ON ITEMS NOT ON THE AGENDA

Jean Curtiss proposed that Ms. Coefield share the fireplace and fire pit information with the associations for realtors and builders, which can provide education as to why these rules exist.

Missoula County Commissioners visited the Fire Lab in August. They viewed a demo and learned about the benefits of fires versus the negative impacts when there is a lot of fuel. When the fire season ends, they want to set another meeting and invite the Board, the Air Quality Advisory Council and the Forest Service to discuss ways to possibly have some days of "nuisance smoke" in the spring and the fall if there is an inversion but to prevent two months of wildfire smoke. She thanked the department for working with Climate Smart to get air filters into the schools.

Request for Follow-up: *Dr. Stenger requested that Ms. Coefield bring back to the Board information on the research, observations, and a postmortem of what happened and what the health effects prove to be of the long term impacts of exposure to the wildfire smoke this season.*

Ms. Coefield was at Seeley Lake yesterday, along with nursing students, to do an initial screening of the population. There was a great deal of interest in the community—about 100 people participated. They did some lung function and cardiac metrics, as well as surveys to look at how they protected themselves—or not, about mental health, and on public health messaging to see what worked or did not work and how the residents are doing as a group. The goal is to obtain funding to follow up to determine the long term ramifications. There were many severe health outcomes while the smoke was present. She plans to meet next week with Dr. Greg Holzman (State Medical Officer) to go over initial surveillance data from local hospitals. It will apparently take a couple of years to get the be-all and end-all data but they do have data as to why people went to the hospital, which is something that we are already looking at. Acquiring funding for the studies will be a challenge for the University. They are applying for grants. Ms. Coefield sent data off for the application process for some program funding. The department wants to answer the questions that Dr. Stenger is asking.

Teresa Henry recommended that Ms. Coefield includes the same types of information at the meeting in Helena that she is providing to the Air Pollution Control Board about the health effects of the wildfire, the efforts to establish a longer term plan to address health impacts and so forth.

She thanked and praised Ms. Coefield for her terrific communication, for the collection and reporting of data during this wildfire season, as well as for the "boots on the ground" response.

Mr. Miller congratulated Ms. Coefield having her article on the wildfire season published in the Washington Post and drawing national attention—and possibly funding—to the situation. (The article is available online: https://www.washingtonpost.com/outlook/amid-montanas-wildfires-its-my-job-to-help-people-breathe/2017/09/15/8233bd74-995e-11e7-82e4-f1076f6d6152_story.html?utm_term=.98a5fca256b9.) Director Leahy said it is already bringing in funds, which Ms. Coefield is directing to Climate Smart. Director Leahy added that Ms. Coefield and Ms. Cilimburg have been there since "Day 1" and continue to be. They have really punched through using what Director Leahy thinks of as a passive giving of information to this act of try to do something about it. One of the things she would like to see, in addition to all of the good things that everyone has seen, is that when we have an emergency like we've had with the wildfires that smoke filters and the types of things that the population needs are considered part of the response. She realizes that we have already emptied the state fund—probably a couple of times over—but the analogy we used when we were talking amongst ourselves is that if it was contaminated water that the citizens were facing, we would have trucked in water. We cannot truck in air, but we can truck in ways to clean the air. Getting over that barrier of thinking is the biggest part for her in terms of what happened here in terms of our policy and our practice.

ITEM 1 HEARING TO ADOPT REVISED AIR POLLUTION CONTROL PROGRAM RULE 4.112 ON ACTIONS DURING WILDFIRE SMOKE EPISODES

- **Attachment A: Therriault, S. (2017, September 13).** Hearing for Changes to Rule 4.112 [Memo to the Missoula City-County Air Pollution Control Board]. Missoula City-County Health Department, Missoula, Montana.
- **Attachment B:** Missoula City-County Health Department (2017, August 17). Proposed Revisions to Rule 4.112 – Wildfire Smoke Episodes, Chapter 4 - Air Stagnation and Emergency Episode Avoidance Plan, Missoula City-County Air Pollution Control Program **Attachment C:** Missoula City-County Health Department (2017, July 20). Air Pollution Control Program Responses to Environmental Protection Agency (EPA) Comments on Proposed Revisions To Rule 4.112
- **Attachment D:** Missoula City-County Health Department (2017, September 14). Applicability of 75-2-301 Findings for Rule Changes Proposed to the Missoula City-County Air Pollution Control Program

Mr. Miller opened the hearing to adopt revised Air Pollution Control Program Rule 4.112 on actions during wildfire smoke episodes at 12:30 p.m. Ms. Coefield explained that the Air Pollution Control Board previously conducted a hearing on this topic and took action. However, it was subsequently discovered that there is a state law on the books that says that if we are going to have a local air regulation passed, we have to give 30 days' notice to interested parties and to provide answers to written public comments to the Board before any decision making takes place. The department skipped a couple of those steps by having the truncated amount of time—in the state's view—for public comment from the interested parties and then we received our written comments to our different meetings and there was not time for her to submit them to the board as anything other than hastily-typed notes for herself before presenting them to the board. The department has now met those legal requirements. Ms. Coefield stressed that when staff previously brought the proposed change to the Air Pollution Control Board for action, they did meet all of the

requirements on the department's books. Marty Rehbein (City Clerk, City of Missoula) found the information on the state's 30-day requirement so we are reeling the process back in.

Rule 4.112 says that when there is a wildfire present we do not need to go into the alerts and warnings that tell people to shut off their woodstoves because it makes us look silly and would not help with the wildfire smoke. The Environmental Protection Agency (EPA) had some issues with the rule when we submitted as part of our PM_{10} Redesignation Request, in large part because they felt that it meant that it there would be a free-for-all for pollution when we called it, allowing people to do whatever they wanted. The department has repeatedly discussed this with them and explained that, "No, our entire air program will still exists." The intent of the revision (**Attachment B**) is to clarify this and make it more distinct as to what we actually will do and to confirm that this only refers to $PM_{2.5}$—and those rules are not yet part of the SIP (State Implementation Plan). EPA, thus, does not really have an angle to go after us because only PM_{10} rules are already in the SIP—hence, we are not weakening anything that is in the SIP. She believes that this wildfire season will really help underscore the inappropriateness of the control measures in Chapter 4 when it comes to a wildfire episode.

When air quality became as terrible as it did in Seeley Lake, Ms. Coefield was looking for ways to help the community and asked "What can we do?" The only thing that our Air Pollution Control Program rules really gave us was to shut everybody down. All that would have done was to wreck the economy even more than it was already being wrecked. It would have not helped with the pollution and would not have helped to give people clean air. Our rules just said to stay indoors because it is probably smoky. You cannot drive and you cannot go to work. You have to sit there in the smoke for the next six weeks until the smoke is gone. This would not have helped anyone. This wildfire season did help clarify that what we had in our rules previously—and what the proposed updated version has—is an appropriate response to wildfire smoke being present when we actually are protecting the community, rather than shutting down businesses. The latter has a time and a place, which is with winter pollution and those businesses are part of the winter pollution problem. When a pollution issue occurs because a mountain is on fire, Ms. Coefield believes the proposed revision of Rule 4.112 is a good solution.

Jean Curtiss and Ms. Coefield discussed whether businesses in Missoula would have had to shut down this summer if we did not have Rule 4.112. Ms. Coefield said that Missoula had a significant, but not its worst, wildfire season. The 24-hour averages were exceeded "a million times over" for Seeley Lake. The ambient concentration of $PM_{2.5}$ exceeded the threshold for the department to declare a Stage IV Crisis. Chapter 4 of the Air Stagnation and Emergency Episode Avoidance Plan of the Air Pollution Control Plan allows the department to call Alerts, Warnings, Emergencies or Crises to be in effect anywhere within the county. Doing so is not constrained to the impact zone and air stagnation zone.

Ms. Coefield is not a big fan of telling people to stop using their woodstoves in August. Potentially, if the wildfires had continued affecting air quality into October, we may have wanted stop the use of woodstoves. Our rules leave us the flexibility to stop the use of wood heat in an extremely socked-in, smoky community, but this is not something that we have to be concerned about this year. It got cold because there is snow on the fires so the smoke is going away. With this rewrite, we have left ourselves the ability to restrict the use of woodstoves.

At Teresa Henry's request, Ms. Coefield explained to the audience that a SIP is a State Implementation Plan—a lengthy policy document that contains our rules for pollutants for which we have been a non-attainment area. It is required by the Clean Air Act for communities that have been in non-attainment for an air pollutant. In the past, Missoula had serious air pollution issues and was declared a non-attainment area for PM_{10}—particulate matter which is 10 microns in diameter and smaller, which typically consists of road dust but also includes wood smoke and everything smaller than PM_{10}. We last violated the standard in 1989. She described the process required by EPA to submit a plan that shows how a non-attainment area will get back into compliance, including establishing rules that enable the community to do so. The SIP goes into the federal register so everything in a SIP is federally enforceable, which makes it difficult to change a SIP. If you include anything in an update to a SIP that EPA sees as weakening a provision, you have to justify it "upside down and sideways." The department's proposed revision to Rule 4.112 is only about $PM_{2.5}$ and not PM_{10}. We have been re-designated as in attainment in a maintenance period for carbon monoxide and we submitted the paperwork to be re-designated as in attainment for PM_{10}, which has not yet gone through the entire process.

The Board was given **Attachment C**—the public comments from EPA on the proposed changes to Rule 4.112 and the department's responses—at the July 20, 2017 meeting. Otherwise, EPA has given no other response, other than that they want a teleconference in a couple of weeks to discuss the PM_{10} Redesignation Request. Also, the department completed an evaluation (**Attachment D**) to determine whether revising the rule is subject to MCA 75-2-301(4) and found that the Board does not have to make a written finding for this rule adoption. We are not out of line with what the state currently has with their emergency response plan and, because this is not a new rule but a modification of an existing rule, a stringency analysis is not required.

Staff Recommendation: Ms. Coefield recommended that the Board make and approve the motion proposed in **Attachment A**. Ms. Curtiss made the motion.

Public Comments: No comments were made.

Board and Staff Comments: No comments were made.

Motion: The Air Pollution Control Board approved the motion to adopt the proposed changes to Rule 4.112 of the Missoula City-County Air Pollution Control Program and directed the Department to forward the new rule to the City Council and the County Commissioners for consideration. Once approved by the City Council and the County Commissioners, the Board directs the department to forward the rule to the Montana Board of Environmental Review for final approval. The motion carried as follows: Ayes - 6 (Armstrong, Curtiss, Henry, Johnston, Miller and Dr. Stenger; Nays - 0; Excused – 1 (Dr. Smith).

ADJOURNMENT: Mr. Miller adjourned the meeting at 12:44 p.m.
Respectfully submitted,

Ellen Leahy
Health Officer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8

Ref: 8P-AR

Shannon Therriault, Director
Missoula City-County Health Department
301 West Alder Street
Missoula, Montana 59802

Re: EPA Region 8 Comments on Missoula City-County Health Department's Proposed Revisions to Rule 4.112 "Wildfire Smoke Episodes"

Dear Ms. Therriault:

Thank you for the opportunity to provide comments on the Missoula City-County Health Department's (MCCHD) proposed rule revisions to Rule 4.112 Wildfire Smoke Episodes which was published by the MCCHD for public comments on July 6, 2017. We want to acknowledge the tremendous efforts of the Montana Department of Environmental Quality (MDEQ) and MCCHD, and all of the hard work that has been undertaken on the proposed revisions.

In the attached enclosure you will find the EPA's comments on the proposed rule revisions. We would appreciate the opportunity for further discussion with MDEQ and MCCHD and will provide any assistance needed by MDEQ or MCCHD to resolve the issues that we have identified and look forward to working with you and your staff. If you have any questions, please contact me at (303) 312-6416, or have your staff contact James Hou, of my staff at (303) 312-6210.

Sincerely,

for

Monica S. Morales
Director, Air Program
Office of Partnerships and Regulatory Assistance

Enclosure
EPA Region 8 General Comments on Montana proposed revisions to Rule 4.112.

ENCLOSURE 1

EPA Region 8 Comments for Montana proposed rule revisions to 4.112 Wildfire Smoke Episodes

1. Under Rule 4.1121(1), a "Wildfire Smoke Episode" is defined as an episode in which the department determines, using available scientific and meteorological data, that wildfire smoke is the primary source of $PM_{2.5}$. We suggest defining the terms "Episode" and "Primary Source" to make it clear under what circumstances this provision would apply.
2. Under 4.112(2), during a Wildfire Smoke Episode, the department may waive the requirements in 4.104 to declare alerts, warnings, emergencies or crises levels due to $PM_{2.5}$ if the department determines, using available scientific and meteorological data, that instituting the Missoula County Air Stagnation and Emergency Episode Avoidance Plan would have negligible impacts on $PM_{2.5}$ levels.
    a. General Comment: In effect this provision appears to waive the requirements of 4.105-4.111 since those requirements are triggered only when the department has declared one of the levels under 4.104. Rather than waiving the requirement under 4.104 to notify the public when there may be instances of heightened $PM_{2.5}$ levels that would trigger an emergency or crises level under other circumstances, we suggest that Missoula consider if a waiver would instead be more appropriate for specific abatement activities in 4.108-4.111 and to identify specific appropriate parameters by which the department would consider implementing the waiver to ensure requirements address any substantial threat to health as contemplated in 40 CFR 51, Appendix L 1.1. The parameters could identify the specific emission controls required to be taken under each stage as required by 40 CFR 51.152(a)(3)
    b. General Comment: The EPA also notes that the $PM_{2.5}$ concentrations associated with the 4.104 "Crisis" level falls within the "Unhealthy" category of the EPA Air Quality Index. Notably, the 4.104 "Crisis" level for PM_{10} correlates with the "Hazardous" category of the EPA AQI. A similar discrepancy exists for the $PM_{2.5}$ "Alert," "Warning" and "Emergency" levels. EPA suggests that Missoula consider whether a change to better align the $PM_{2.5}$ values in 4.104 with EPA's AQI, and the corresponding AQI category, would alleviate the need for the waiver under 4.112.
    c. Specific Comments: We suggest clarifying what scientific and meteorological data the department would be using to determine if the Missoula County Air Stagnation and Emergency Episode Avoidance Plan would not significantly affect $PM_{2.5}$ levels and under what circumstances would instituting an emergency episode avoidance plan have "negligible impacts" on $PM_{2.5}$ levels.
3. Under Rule 4.112(3), the department shall advise citizens via public media and the department's Air Pollution Hotline of current air pollution levels and health advisories. We suggest Missoula modify this requirement so that the same level of public notification is required as indicated for the various threat levels under 4.108 -4.111 to meet the federal contingency plan requirements under 40 CFR 51.152(b)(3).
4. Under Rule 4.112(5), the department shall evaluate the impact of wildfire smoke on $PM_{2.5}$ levels on a regular basis during the Wildfire Smoke Episode. We suggest clarifying how often a "regular basis" would be, by defining the evaluation frequency, and what the department would do in response to the information gathered during the evaluation to ensure adequate protection against substantial threats of health in the future.

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

EPA Comments and Air Program Responses
Sarah Coefield, R.S.
July 20, 2017

1. *Define the term "Episode"*
   This comment is a holdover from a previous draft of Rule 4.112. In the current proposed iteration of the rules, "episode" is defined as "as a period of time in which the department determines, using available scientific and meteorological data, that wildfire smoke is the primary source of $PM_{2.5}$ in the airshed."

2. *Define the term "primary source."*
   It is our position that "primary source" is in the vernacular and does not need further clarification at this time.

3. *Consider if a waiver would be more appropriate for specific abatement activities and identify specific parameters by which the department would consider implementing the waiver to ensure requirements address any substantial threat to health as contemplated in 40 CFR 51, Appendix L 1.1. The parameters could identify the specific emission controls required to be taken under each stage as required by 40 CFR 51.152(a)(3).*

   a) *Consider if a waiver would be more appropriate for specific abatement activities*
   We feel this would make the rule language overly cumbersome and complicated with limited benefit.

   b) *Identify parameters by which would consider implementing the waiver*
   The parameters by which the Missoula City-County Air Pollution Control Program would consider implementing a waiver of Rule 4.104 are included in the proposed Rule 4.112 language:

   1. A Wildfire Smoke Episode is defined as a period of time in which the department determines, using available scientific and meteorological data, that wildfire smoke is the primary source of $PM_{2.5}$ in the airshed.

   2. During a Wildfire Smoke Episode, the department may waive the $PM_{2.5}$ requirements in 4.104 if the department determines, using available scientific and meteorological data, that instituting the Missoula County Air Stagnation and Emergency Episode Avoidance Plan would have negligible impacts on $PM_{2.5}$ levels.

The first parameter is the presence of a wildfire smoke episode, as defined in the proposed rule. The second parameter is a determination by the department, using scientific and meteorological data, that instituting the Missoula County Air Stagnation and Emergency Episode Avoidance Plan would have negligible impacts on $PM_{2.5}$ levels.

c.) *Ensure requirements address any substantial threat to health as contemplated in 40 CFR 51, Appendix L.*

1. 40 CFR 51, Appendix L is a set of suggested regulations and they are not required to be implemented in the SIP. Appendix L describes the EPA's version of Alerts, Warnings and Emergencies that are not triggered until much higher concentrations are present than the concentrations that are used as triggers for Alerts, Warnings, Emergencies and Crises by the Missoula City-County Air Pollution Control Program. The suggested regulations in Appendix L curtail outdoor burning, incinerators, fuel-burning equipment, etc., and target power generating facilities and major industry. These are very similar to the control measures already in place for winter air pollution episodes in the Missoula City-County Air Pollution Control Program. Furthermore, Appendix L does not include $PM_{2.5}$ breakpoints. A 2009 EPA memo provides suggested $PM_{2.5}$ breakpoints for EPA's Alerts, Warning and Emergencies that, again, are less protective of human health than the breakpoints that are provided in the SIP update for winter $PM_{2.5}$ pollution.

2. With the exception of Rule 4.104 and the actions it triggers for $PM_{2.5}$, the entirety of the Missoula City-County Air Pollution Control Program remains intact during a wildfire pollution episode

3. We have left room to call for added emission controls from 4.104-4.111 as deemed necessary to protect human health

4. If a wildfire is the primary source of air pollution and the added control measures triggered by Rule 4.104 would have negligible impacts on the $PM_{2.5}$ pollution levels, then the wildfire is the substantial threat to human health and added emission controls suggested by EPA will not be a significant benefit.

d.) *The parameters could identify the specific emission controls required to be taken under each stage as required by 40 CFR 51.152(a)(3)*

40 CFR 51.152(a)(3) states that a contingency plan must specify adequate emission control actions to be taken at each episode stage. This is in place for winter air pollution sources. In addition, this rule proposal does not touch the already approved emergency episode avoidance plan for PM_{10}.

4. *The EPA notes the $PM_{2.5}$ concentrations associated with Crisis level falls within the EPA's Unhealthy category of the AQI and the PM_{10} concentration for Crisis correlates with Hazardous for the AQI. EPA*

suggests Missoula consider aligning $PM_{2.5}$ values with EPA's AQI, as this would alleviate the need for the waiver under 4.112

a.) The AQI is a system for describing air pollution health categories and is used to issue health advisories. In contrast, the Alerts, Warnings, Crisis and Emergency categories in the Missoula City-County Air Pollution Control Program are based on protecting the National Ambient Air Quality Standards for criteria pollutants. The concentrations that trigger additional control measures are not tied to specific health category breakpoints.

b.) Following EPA's suggestion would mean we the Missoula City-County Health Department would not call any Alert control activities until $PM_{2.5}$ levels exceed 140 $\mu g/m^3$ for a 24-hour average. Currently, the Missoula City-County Health Department calls an alert when $PM_{2.5}$ levels exceed 28 $\mu g/m^3$ for an 8-hour average. EPA's suggestion would weaken human health protections in the winter and lead to exceedances of the NAAQS.

5. *EPA suggests clarifying scientific and meteorological data that would be used*

We feel that would be inappropriate. Technology changes all the time and it is inadvisable to be tied to a method or tool that could become obsolete. In addition, the phrase "using available scientific and meteorological data" appears multiple times in Chapter 4 of the Missoula City-County Air Pollution Control Program as part of the already approved SIP.

6. *EPA suggests Missoula modify notification requirements so that the same level of public notification is required as indicated for the various threat levels under 4.108-4.111 to meet the federal contingency plan requirements under 40 CFR 51.152(b)(3)*

40 CFR 51.152(b)(3) refers to emission control activities that are triggered when pollution concentrations reach very high levels (in this case, it would be when $PM_{2.5}$ levels exceed 250 $\mu g/m^3$ for a 24-hour average). These communication procedures are specifically for emission control actions. The proposed language in Rule 4.112 leaves room to call for emission controls as needed, in which case the Missoula City-County Health Department will use the notification procedures that are already in place in 4.104-4.111 and are already part of the approved SIP.

In addition, the phrase "advise citizens via public media and the department's Air Pollution Hotline" is already part of Chapter 4 and has been approved as part of the SIP.

7. EPA suggests clarifying how often a "regular basis" would be, by defining evaluation frequency, and what the department would do in response to the information gathered during the evaluation to ensure adequate protection against substantial threats of health in the future.

We feel it is inappropriate to codify how frequently we check the $PM_{2.5}$ levels. However, we agree it would be beneficial to insert the language of "at a minimum, once per day" to the proposed language of Rule 4.112.

Rule 4.112(3) defines how the Missoula City-County Health Department will respond to the information gathered by evaluating the impacts of wildfire smoke on $PM_{2.5}$ levels. Specifically, "During a Wildfire Smoke Episode, the department shall advise citizens via public media and the department's Air Pollution Hotline of current air pollution levels and health advisories."

Conclusion

We appreciate EPA's comments. However, EPA has not acknowledged that our proposed updates to Chapter 4 represent a net increase in control measures that are targeted at winter $PM_{2.5}$ pollution. We are not proposing any changes that would impact the PM_{10} control measures that are already part of the approved PM_{10} SIP.

In addition, since we are not a nonattainment or maintenance area for $PM_{2.5}$, there are no specific requirements in the Clean Air Act for how we regulate $PM_{2.5}$ pollution in Missoula County.

Section 4

Missoula Board of County Commissioners Hearing

Request for Commission Action

Public Hearing

Meeting Date: March 8, 2018

Action Information

Date Required: 03/20/2018

Action/Motion Requested: Request Board approve a resolution supporting revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program.

Parties Involved: Missoula City-County Air Pollution Control Board
Missoula City-County Health Department
Missoula Commissioners

Fiscal Impact: No fiscal impact

Budget Action Required:

Requestor Information

Submitter: Shannon Therriault

Department: Health Department

Submitted: 02/01/2018

E-mail: stherriault@missoulacounty.us

Presenter: Sarah Coefield

Project Information

Project/Item: Resolution supporting a change to the Missoula City-County Air Pollution Control Program regarding wildfire smoke episodes.

Project Location: Missoula County

Project/Contract Begin Date:

Project/Contract End Date:

Action Request Summary

The Missoula City-County Air Pollution Control Board (Air Board) revised Rule 4.112, after a public hearing and public notice. State law and local rules require that the Commissioners either approve or veto the changes by resolution at a public meeting.

Based on input from the US EPA, the Air Board revised the rule to clarify what actions the Health Department will take during a wildfire smoke episode. The impact of the rule doesn't change: when wildfire smoke fills our skies, the Health Department does not have to implement the Air Stagnation and Emergency Episode Avoidance Plan, which is targeted at limiting winter air pollution sources such as local industry operations and woodstoves. During a wildfire smoke episode, curtailing industry would not reduce pollution levels to any discernable extent and residents are unlikely to be using woodstoves to heat their home.

Action Request Approvals

Health Department	Created/Initiated - 02/01/2018
Health Department	Approved - 02/01/2018
Attorney	Approved - 02/02/2018
HR	Approved - 02/02/2018
Risk & Benefits	Approved - 02/02/2018

To review the Commissioners' schedule, please go to http://bit.ly/BCCschedule

Commission Actions

Chair

Commissioner NOT AVAILABLE FOR SIGNATURE

Chair Authorized to Sign: No

Commissioner

Action Date 3-8-2018

Missoula Board of County Commissioners

PUBLIC MEETING AGENDA

Conference Room 151 - Courthouse Annex

If anyone attending the public meeting is in need of special assistance, please provide advance notice by calling (406) 258-4877. Missoula County is happy to provide auxiliary aids and services.

THURSDAY, MARCH 8, 2018 - 2:00 PM

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **PUBLIC ANNOUNCEMENTS**
   Proclamation: March for Meals Month
4. **PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA**
5. **CURRENT CLAIMS LIST**
   Claims received as of Feb. 16, 2018 to March 2, 2018 by the Commissioners' Office total $1,675,099.12.
6. **HEARINGS**
   a. **Missoula City-County Air Pollution Control Program Rule Revision**
      Sarah Coefield, Air Quality, Environmental Health Department
   b. **Missoula County Community Wildfire Protection Plan Open Public Comment**
      Adriane Beck, Director, Office of Emergency Management
7. **OTHER BUSINESS**
8. **RECESS**

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

Minutes of the Missoula Board of County Commissioners (BCC) Public Hearing can be found online at the BCC website. Minutes are in a video format.

See link below.

http://missoulacomt.civicclerk.com/Web/Player.aspx?id=4849&key=-1&mod=-1&mk=-1&nov=0

P0308201801A

RESOLUTION 2018- 025

A RESOLUTION RATIFYING AMENDMENTS TO THE MISSOULA CITY-COUNTY AIR POLLUTION CONTROL PROGRAM

WHEREAS, during wildfire events, wildfire smoke is the primary source of $PM_{2.5}$ (particulate matter with an aerodynamic diameter of 2.5 microns and smaller) in Missoula County in the summer months; and

WHEREAS, during a wildfire event, the PM2.5 concentrations that trigger control activities in the Missoula City-County Air Pollution Control Program's Chapter 4 Air Stagnation and Emergency Episode Avoidance Plan (Plan) may be met or exceeded by wildfire smoke; and

WHEREAS, the PM2.5 provisions of the Plan are geared toward reducing human-caused winter air pollution; and

WHEREAS, the control activities in the Plan would not have an impact on wildfire smoke pollution; and

WHEREAS, health advisories are an appropriate response to wildfire smoke and provide a public health benefit; and

WHEREAS, the Missoula City-County Air Pollution Control Board (Board) adopted revisions to the Missoula City-County Air Pollution Control Program Rule 4.112 (Rule 4.112) to address Missoula City-County Health Department (Department) activities during wildfire events and allow the Department to waive winter control activities during a wildfire event; and

WHEREAS, after due notice, the Board conducted a public hearing on Sept. 21, 2017 and approved and passed the revisions Rule 4.112 at that hearing; and

WHEREAS, the proposed revisions of the Missoula City-County Air Pollution Control Program have been submitted to the Missoula Board of County Commissioners by the Missoula City-County Air Pollution Control Board for the commissioner's approval; and

WHEREAS, the Missoula Board of County Commissioners held a public hearing on March 8, 2018 to consider the revisions of the Missoula City-County Air Pollution Control Program.

NOW THEREFORE BE IT RESOLVED that the Missoula Board of County Commissioners approves and adopts the revised Missoula Air Pollution Control Program Rule 4.112 Wildfire Smoke Episodes which is attached hereto and by this reference incorporated herein as part of this Resolution, to be effective upon approval by the Montana Board of Environmental Review.

SIGNED AND DATED THIS 8 DAY OF MARCH 2018.

ATTEST:

Clerk and Recorder

BOARD OF COUNTY COMMISSIONERS
MISSOULA COUNTY

David Strohmaier, Chair

NOT AVAILABLE FOR SIGNATURE

Jean Curtiss, Commissioner

Nicole Rowley, Commissioner

Section 5

Missoula City Council

City of Missoula, Montana
Item to be Referred to City Council Committee

Committee: Public Health and Safety

Item: Resolution to support changes to the Missoula City-County Air Pollution Control Program rules

Date: 1/24/2018

Sponsor: Michelle Cares and Shannon Therriault

Prepared by: Shannon Therriault, R.S., Environmental Health Director

Ward(s) affected: Applies county-wide

Action Required:
Consider the resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program.

Recommended Motion(s):
That the City Council pass the resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program.

Timeline:

Referral to committee:	1-24-2018
Committee discussion:	2-21-2018
Council acts to set hearing:	2-26-2018
Public Hearing:	3-12-2018
Deadline:	March 20, 2019

Background and Alternatives Explored:
The Health Board recently approved a change to one of the Missoula City-County air rules regarding wildfire smoke episodes. The need to revise the language came about through conversations with the US Environmental Protection Agency, who expressed concern that the existing wording was too vague and appears to waive all air pollution control measures during a smoke episode. While the Health Department disagreed with that conclusion, we decided that we could better describe what actions we take during a wildfire smoke episode. The impact of the rule doesn't change with this revision – either way, when wildfire smoke is filling our skies, we do not have to set in motion the Air Stagnation and Emergency Episode Avoidance Plan that is targeted at limiting winter air pollution sources such as local industry operations and wood stoves. During a wildfire smoke episode, curtailing industry would not reduce pollution levels to any discernable extent and residents are unlikely to be using wood stoves to heat their homes.

The Missoula City-County Air Pollution Control Board is responsible for approving changes to the Missoula City-County Air Pollution Control Program. And then, by Montana law, the City Council and County Commissioners have a chance to approve or veto the revisions by resolution at a

public meeting. Once the City Council and Commissioners approve the revisions, they are submitted to the Montana Board of Environmental Review (BER) for approval. Once approved by the BER, the rules go into effect. Some of the rules are then submitted to the US EPA for inclusion into the State Implementation Plan (SIP), which is the federally enforceable plan of how Missoula will maintain particulate matter (PM_{10}) levels below the federal ambient air standards. This rule will not be submitted for inclusion into the SIP because it does not address wintertime PM_{10} air pollution.

Financial Implications:
None

Links to external websites:
Hyperlink to external websites here

PUBLIC SAFETY AND HEALTH COMMITTEE AGENDA
CITY COUNCIL CHAMBERS
140 West Pine Street
Missoula, Montana
February 21, 2018, 10:10 AM - 10:30 AM

Members: Michelle Cares – Chair, Julie Armstrong, Stacie M. Anderson, Mirtha Becerra, John DiBari, Heather Harp, Jordan Hess, Gwen Jones, Julie Merritt, Jesse L. Ramos, Bryan von Lossberg, Heidi West

I. Administrative Business

A Roll Call-- History

1. Approve minutes from 2/14/18 meeting.-- History

II. Public Comment on Items not Listed

III. Regular Agenda

Note: The committee will discuss the following item(s) and take public comment on each of them during the meeting.

A Resolution to support changes to the Missoula City-County Air Pollution Control Program rules--Michelle Cares and Shannon Therriault History

IV. Adjournment

Note: The City makes reasonable accommodations for any known disability that may interfere with a person's ability to participate in this meeting. Persons needing accommodation must notify the City Clerk's Office to make needed arrangements. Please call 552-6080 or write to Martha Rehbein, 435 Ryman Street, Missoula, Montana 59802, to make your request known.

PUBLIC SAFETY AND HEALTH COMMITTEE MINUTES
City Council Chambers
140 West Pine Street
Missoula, Montana
February 21, 2018, 10:10 AM

I. Administrative Business

A Roll Call -- History

Members present: Julie Armstrong, Michelle Cares, Julie Merritt, Bryan von Lossberg, Heidi West,

Members absent: Stacie M. Anderson, John DiBari, Heather Harp, Jordan Hess, Gwen Jones, Jesse L. Ramos, Mirtha Becerra

Others present: Jim Nugent, Cathy Janney

1. Approve minutes from 2/14/18 meeting. History

No quorum.

II. Public Comment on Items not Listed

III. Regular Agenda

A Resolution to support changes to the Missoula City-County Air Pollution Control Program rules --Michelle Cares and Shannon Therriault History

Michelle Cares stated that there was one item that was published to the wrong meeting week. In order to take it up, two-thirds of those present need to vote to suspend the rules and hear the item now. Michelle is calling for a vote.

Bryon von Lossberg made a motion to suspend the rules to take the item up.

AYES: Julie Armstrong, Michelle Cares, Julie Merritt, Bryan von Lossberg, Heidi West.

The motion to suspend the rule passes.

Michelle stated there were two items on the agenda, but since there are so many people gone, they suspended the wildfire update and it will be good to get a wider audience. There is just one item today.

Sarah Cofield, Air Quality Specialist with the City County Health Department is here to do a small rule update. During the PM10 re-designation process when EPA was looking at the re-designation package, this particular rule caught their eye. This rule is not going to be part of the State implementation plan, but is still something that caught their eye, and they asked if they could fix it. This is the rule that states that during a wildfire smoke event, they do not need to call air pollution alerts and warnings, which are triggered when the air pollution hits a certain level, and then they put out information which sets up a regulatory cascade, and as the pollution gets higher, they had the ability to shut down more sources

of fine particulate. The thing is, those alerts and warnings are part of the emergency episode avoidance plan and are targeted at winter pollution sources, not pollution sources during a wildfire season. They have the rule .4.112 that says when it is a wildfire causing the smoke, they don't need to call the alerts and warnings because it would not actually help the air quality, so instead they issue health advisories and help folks protect themselves from the smoke. EPA felt this was a very vague writing of the rule and asked if they could codify what they do. She agrees that they do things during wildfire smoke event, and they just aren't calling the alerts and warnings that are winter protective measures.

They revised the rules to put into writing what they do and also to define what a wildfire episode is. It makes sense that when it is from wildfire smoke that they may waive the requirements of .4.104 which is what sets the triggers for alerts and warnings and emergencies and crises, and it says they will put out health advisories, which is what they already do, but it is codifying that. It puts some limits on how long they can waive the alert requirements, just to kind of codify the importance of understanding what the smoke episode is and the boundaries of it. It reemphasizes they will be using science and the understanding of wildfire smoke to confirm it is wildfire smoke that is causing the air pollution smoke and not, say, wood stoves, and that also even though they have waived the rules about warnings and alerts, that the remainder of the program remains in effect. It is not a complicated rule update, and it does not change anything they do, but it does put into writing what they are already doing, and really making them hold to it. They are here today to present this to the council and ask questions they may have and request that this go to a City Council hearing and that it may then be approved by the City Council if City Council chooses to do so. They will also be doing to county commissioners for their input, and after passing through the sectors of local governments, it will go to the State Board of Environmental; Review for final approval. The air pollution control program, the rules go through a multi-step process. It is started in the air quality advisory council and they forwarded it with recommendations which held a hearing on it in September 2017, and this is their next step, and then the County Commissioners, and then the State. This is a simple update, and she is happy to answer any questions. They should have in their packets a copy of the resolution they put forward that underscores that during a wildfire event, they know the source of pollution is wildfire smoke, and it makes sense to call health advisories and they would be adopting the new rule.

Michelle stated that because they do not have a quorum, if the motion is made and approved, it will go on committee reports on the February 26th city council meeting rather than the consent agenda.

Julie Armstrong made the motion. Thanks to Sarah for the expertise on this. She is one of the few people in the country that can push back against the EPA and the requirements and get them to change their minds, and she is rapidly becoming an expert smoke.

Michelle Cares had a question about the limit of how long an advisory could be in effect. Sarah said they will only be waiving the alerts and warnings wild wildfire smoke is present, so checking every day to make sure it is still wildfire smoke, and it can come into play when they have wildfire seasons that go into late October, like Mid October. In 2012 they dealt with wildfire smoke into mid-October. There are a possibility of other sources coming into play.

Mr. Nugent said he noticed in the resolution it talks about a public hearing in the final whereas. Is that what the motion is? Michelle said the motion is to set a public hearing on March 12th. At that time, they will entertain adopting the resolution.

Julie Armstrong made the recommendation for the City Council to set a public hearing on March 12th and preliminarily adopt a resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program.

AYES: Julie Armstrong, Michelle Cares, Julie Merritt, Bryan von Lossberg, Heidi West,

ABSENT: Stacie M. Anderson, John DiBari, Heather Harp, Jordan Hess, Gwen Jones, Jesse L. Ramos, Mirtha Becerra

IV. Adjournment

Respectfully submitted,

Cathy Janney
Administrative Assistant

AFFIDAVIT OF PUBLICATION
THE MISSOULIAN

500 S. Higgins Ave.
Missoula, MT 59801
Phone: (406) 523-5236 Fax: (406) 523-5221

Ad Number: 20529189

Chris Arvish, being first duly sworn, deposes and says that he is a Classified Advertising Representative of The Missoulian, a newspaper of general circulation published daily in the City of Missoula, in the County of Missoula, State of Montana, and has charge of the Advertisements thereof.

That the legal regarding:

Notice of Public Hearing

a true copy of which is hereto annexed, was published in said newspaper on the following dates: via:

March 4 & 11, 2018

Making all 2 publication(s)

Signed: _____
Chris Arvish

State of Montana
County of Missoula

Subscribed & sworn before me this 13th day of

March 2018 by Chris Arvish.

Barbara L Garrison

Notary Public for the State of Montana

BARBARA L GARRISON
NOTARY PUBLIC for the
State of Montana
Residing at Missoula, MT
My Commission Expires
November 2, 2020

SEAL

Page	:	1 of 1 03/12/2018 10:17:26	**Ad Number**	:	11382762
			Ad Key	:	
Order Number	:	20529189	**Salesperson**	:	CA2 - CHRIS ARVISH
PO Number	:		**Publication**	:	Missoulian
Customer	:	60015105 CITY CLERKS OFFICE	**Section**	:	Classified
Contact	:	Kirsten Hands	**Sub Section**	:	Legals
Address1	:	435 RYMAN	**Category**	:	399 Legals
Address2	:		**Dates Run**	:	03/04/2018-03/11/2018
City St Zip	:	Missoula MT 59801	**Days**	:	2
Phone	:	(406) 552-6077	**Size**	:	2 x 1.72, 19 lines
Fax	:		**Words**	:	103
	:		**Ad Rate**	:	City of Missoula
Printed By	:	misarvic	**Ad Price**	:	22.00
Entered By	:	misarvic	**Amount Paid**	:	0.00
			Amount Due	:	22.00
Keywords	:	NOTICE OF PUBLIC HEARING The Missoula City Council			
Notes	:				
Zones	:				

NOTICE OF PUBLIC HEARING

The Missoula City Council will hold a public hearing on March 12, 2018 at 7:00 p.m. in the City Council Chambers, 140 West Pine, Missoula, Montana to consider a resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program regarding wildfire smoke episodes.

A copy of the resolution is on file at the City Clerk office. For further information, contact Shannon Therriault, City/County Health Department at 258-4988.

If you have comments, please mail them to: City Clerk, 435 Ryman, Missoula, MT 59802.

Martha L. Rehbein, CMC,
City Clerk
#20529189 March 4 & 11, 2018

FORMAL AGENDA
MISSOULA CITY COUNCIL MEETING
CITY COUNCIL CHAMBERS
140 WEST PINE STREET, MISSOULA, MT
March 12, 2018, 7:00 PM

I. CALL TO ORDER AND ROLL CALL

II. APPROVAL OF THE MINUTES

1. Minutes for the February 26, 2018 meeting — History

2. Minutes for the March 5, 2018 meeting — History

III. SCHEDULE OF COMMITTEE MEETINGS

1. Committee Schedule for the week of March 12, 2018 — History

IV. PUBLIC COMMENT

(Public comment from citizens on items that are not on the agenda)

V. CONSENT AGENDA

(Items on the consent agenda were approved in City Council committees by a unanimous vote. We save time at Council meetings by voting on these items as a package. The City Clerk will read the list aloud, so citizens watching on MCAT will know what is on the consent agenda. We'll invite community comment on these items before we vote.)

1. Claims — History

Recommended motion
Approve claims in the amount of $924,389.95 for checks dated March 13, 2018.

2. Rezone 210 W. Beckwith, R5.4 to RT2.7, City — History

Land Use and Planning
Jenny Baker, Development Services

Recommended motion
[First reading and preliminary adoption] Set a public hearing on March 26, 2018, and preliminarily adopt an ordinance to rezone fractions of Lots 7-10 and the south half of Lots 11 and 12 of Block 16 in South Missoula Addition (13,564 square feet), in Section 28, Township 13 North, Range 19 West, from R5.4 Residential (single dwelling) to RT2.7 Residential (two-unit/townhouse), based on the findings of fact in the staff report; and refer the item to the Land Use and Planning Committee.

3. 44 Ranch Subdivision Phasing Plan Amendment — History

PAZ
Mary McCrea

Recommended motion
Approve the 44 Ranch Subdivision Phasing Plan Amendment subject to amended conditions and three new conditions of approval as shown in Exhibit #1, based on the findings of fact in the staff report.

4. Bid Award for Materials – Traffic Marking Paint For FY18 History

PW
Chad Pancake

Recommended motion
Award the bid for fiscal year 2018 Traffic Marking Paint to Ennis Flint Inc., including 2,000 gallons of yellow traffic marking paint at $10.85/gallon for a total of $21,700.00 and 1,500 gallons of white traffic marking paint at $10.85/gallon for a total of $16,275.00 for a total contract award of $37,975.00 and authorized the return of bid bonds.

5. Water Meter Purchase from Sole Source Vendor History

PW
Dennis Bowman

Recommended motion
Approve and authorize the Mayor to sign a sole source purchase agreement for water meters for the Missoula Water Division from Core & Main for a total cost of $76,126.00.

6. 1717 Montana Street Homeword Brownfields Subgrant Agreement History

A&F
Eran Pehan

Recommended motion
Approve and authorize the Mayor to sign a grant agreement with Homeword, Inc. and award up to $75,000 in City Brownfields funds to remediate soil contamination at 1717 Montana Street in the City of Missoula.

VI. COMMENTS FROM CITY STAFF, AGENCIES, BOARDS, COMMISSIONS, AUTHORITIES AND THE COMMUNITY FORUM

VII. PUBLIC HEARINGS

(State law and City Council rules set guidelines for inviting community comment in a formal way on certain issues. Following a staff report on each item, the City Council and the Mayor invite community comment. The City Council normally votes on the same night as the public hearing unless one Council member requests that it be returned to a City Council committee for further consideration.)

1. Petition to vacate 20’ alley right-of-way, Missoula Public Library, Block 6, McWhirk Addition History

PW
Drew Larson

Recommended motion
Adopt a resolution of the City Council of the City of Missoula, Montana, to close and vacate the 20' wide alley located in Block 6 of McWhirk Addition subject to conditions of approval.

2. Resolution to support changes to the Missoula City-County Air Pollution Control Program rules — History

PSH
Michelle Cares and Shannon Therriault

Recommended motion
Adopt a resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program regarding wildfire smoke episodes.

VIII. COMMUNICATIONS FROM THE MAYOR

IX. GENERAL COMMENTS OF CITY COUNCIL

X. COMMITTEE REPORTS

(Items listed under Committee Reports were not approved unanimously in City Council committees. The chairperson of the standing City Council committee will make a motion reflecting the committee's actions. We invite community comment on each item.)

1. Administration and Finance Committee Report — History

   a. March 7, 2018 Administration and Finance report — History

2. Land Use and Planning Committee Report — History

   a. March 7, 2018 Land Use and Planning report — History

3. Parks and Conservation Committee Report — History

   a. March 7, 2018 Parks and Conservation report — History

4. Public Safety and Health Committee Report — History

   a. March 7, 2018 Public Safety and Health report — History

5. Public Works Committee Report — History

   a. March 7, 2018 Public Works report — History

XI. NEW BUSINESS

XII. ITEMS TO BE REFERRED

(Items listed here have been proposed by Council members, staff, or the Mayor for consideration in City Council committees. Committee chairs are responsible for scheduling consideration of these items in their respective committee meetings. These items are listed on our agenda for information only. They will not be considered at this meeting. For further information about any item, contact the person listed in italics.)

1. Committee of the Whole — History

   a. First Amendment Recognition — History
      COW
      Bryan von Lossberg, Gwen Jones

2. Land Use and Planning Committee — History

   a. Conditional Use Request – 2115 S Johnson Street, Residential Storage Warehouse — History
      Land Use & Planning
      Jenny Baker, Development Services

3. Public Works Committee — History

   a. Award Street Maintenance and Construction Material Contracts — History
      PW
      Brian Hensel

   b. Bid Award for 4th, Howell, 2nd Street Water Main Replacement Projects — History
      PW
      John Wilson

XIII. MISCELLANEOUS COMMUNICATIONS, PETITIONS, REPORTS AND ANNOUNCEMENTS

1. Administratively approved agreement report — History

   a. Administrative report and chart of accounts — History

XIV. ADJOURNMENT

The City makes reasonable accommodations for any known disability that may interfere with a person's ability to participate in this meeting. Persons needing accommodation must notify the City Clerk's Office to make needed arrangements. Please call 552-6080 or write to Martha Rehbein, 435 Ryman Street, Missoula, Montana 59802, to make your request known.

JOURNAL OF PROCEEDINGS
MISSOULA CITY COUNCIL MEETING
March 12, 2018

I. CALL TO ORDER AND ROLL CALL

The meeting of the Missoula City Council was called to order by Acting Mayor von Lossberg at 7:00 PM in the City Council Chambers at 140 West Pine Street. The following members were present: Stacie M. Anderson, Julie Armstrong, Mirtha Becerra, Michelle Cares, John DiBari, Heather Harp, Jordan Hess, Gwen Jones, Jesse L. Ramos, Bryan von Lossberg, Heidi West. The following members were absent: Julie Merritt. The following staff members were also present: City Attorney Jim Nugent. The following staff members were absent: Mayor John Engen, City Clerk Marty Rehbein, Chief Administrative Officer Dale Bickell, Communications Director Ginny Merriam, Central Services Director Steve Johnson

II. APPROVAL OF THE MINUTES

1. Minutes for the February 26, 2018 meeting were approved

2. Minutes for the March 5, 2018 meeting were approved

III. SCHEDULE OF COMMITTEE MEETINGS

1. Committee Schedule for the week of March 12, 2018

   Parks & Conservation Committee, March 14, 9:05 – 9:30 a.m.
   Public Works Committee, March 14, 9:35 – 9:55 a.m.
   Committee of the Whole, March 14, 10:00 – 10:17 a.m.
   Land Use & Planning Committee, March 14, 10:25 – 10:55 a.m.
   Public Safety & Health Committee, March 14, 11:00 – 12:15 p.m.

IV. PUBLIC COMMENT

Andrea Davis, Executive Director of Homeword, expressed her appreciation and thanks to the leadership of the City, the Council for their dedication for creating a city housing policy. An article in the paper on Sunday was on continuous news coverage of the challenge of our housing market for people in all spectrums of incomes. She appreciates the dedication that this city has for coming up with a comprehensive housing policy. It's not going to be easy. She's happy to be participating on the Steering Committee of a group of citizens. While they are months out from providing anything to the Council to sink their teeth into, before bringing before the committees and then for the Council to consider, she just wanted to express her appreciation for the leadership she knows they will show when it comes time to make decisions around that.

Kandi Matthew-Jenkins, 1211 Cooper Street, continued to read from The Soviet Art ofBrainwashing: Psychopolitics – The Art of Mental Healing, written in 1936 and read into the record by 1939 on the House of American Activities. "The officials of the government, students, readers, partakers and providers of entertainment, must all be indoctrinated, by whatever means, into the complete belief that the restless, the ambitious, the natural leaders, are suffering from environmental maladjustments, which can be healed only by recourse to psychopolitical operatives in the guise of mental healers. By thus degrading the general belief in the status of Man it is relatively simple, with cooperation from the economic salient' being driven into the country, to drive citizens apart, one from another, to bring into question the wisdom of their own government, and to cause them to beg actively for a takeover." She responded to some remarks and said she's not a Democrat nor a Republican. She's a Christian Constitutionalist and she found the remarks from Nancy

Keenan were all but uplifting for the general public. She found that her synopsis of elephants and donkeys was appalling. She's sorry for the Democrats that you have leadership like that, that goes along with printing of okay with the party of president Satan. She finds that in the same category of what's going on in our community, our state and nation that a people keep saying they want free speech but they abuse their free speech to insult other people all of the time, and she's not doing that, and people she knows doesn't do that because they are Christians and don't think that way and don't talk that way. But, obviously, these people like to make it go forward and in a not so nice way in insulting.

Bob Moore said last Council meeting he had commented on the road that's going to close for the purpose of assisting the shopping center. Councilwoman Cares explained that she used that road to get from Brooks to Reserve, back and forth, every day of the week. So, Mr. Moore went out the next day and watched the cars as they were coming from the Reserve side. He couldn't see the other side too well. He sat there about 15 minutes and three cars came by, came across the tracks and instead of following the route to have some connectivity on Brooks, they immediately turned into the shopping center. He guesses the City's plan is working, spending millions and millions of dollars on roundabouts and slowing him down when he's trying to get over to the other street for his connectivity. The other section, from the railroad tracks to Reserve, was a couple million dollars. Of course, the City will have to borrow that money and pay it back over 25 years. Out of the test he made, three people went directly through the shopping center and probably saved a quarter of a mile by going through there so the City has done a good job.

Marcy Hammond said she and John are homeless, persecuted by the city newspaper, painted as a person that does not follow the rules. Far from that, they have taught their children to obey the laws, seatbelts, riding with helmets, lights. The *Missoulian* prints things the City wants the citizens to think are true. The article that posted two Sundays ago is total fabrication, slander and total B.S. They've had a meeting with Sgt. Patrick Erbacher informed her that he was there at the last Council meeting she was present. It was right before Christmas. Sgt. Erbacher was in uniform to provide protection for the Mayor. She suggested that Councilman Ramos possibly to check into, because where is all this money coming from to prosecute two Missoula citizens and also two that were beat to the ground by the City in two different courts. Last night Sgt. Erbacher felt compelled to show up at their mobile residence. Officer Hollis was able to keep the conversation level. About 3 to 5 minutes into the conversation it kept escalating because of something that Sgt. Erbacher felt he needed to inform them. She stepped outside with her camera phone and telling John to let them do their job and give them the tickets. And then she asked the officer when did the noise complaint go to 10:00 p.m. Her understanding was always that it was 11:00 p.m. at night. They had a little misunderstanding there. Because of this, what Officer Erbacher told John was if he was the officer that had to come back a second time in the two days, March 10 and March 11, John was getting a disorderly conduct. Because she stood her ground against Officer Erbacher, he gave her a ticket also. Sgt. Erbacher started telling them about rules and laws. She asked him when he went to law school and he took a step forward and asked her when she went to college. A city officer to enforce rights, regulations and help the people of Missoula so she stood up to an officer with a gun and also a bully who tries to belittle her. There is a video. She pled not guilty and is asking for the video. To anyone that wants to know it's 2018-10-4-7-7. Never been booked or fingerprinted ever. She explained to the Sgt. that she pays taxes. He told her he is paid by property taxes so this is not justice. No police protection for the houseless. She has friends checking this out. She said Sgt. Erbacher does not pay property taxes himself. She said Sgt. Erbacher needs to talk to people nicer and not like a drill sergeant. He said he was there so the officers were not harmed. They had spoken with Officer Hollis civilly with no angry tone. She asked people to read the February 25, article.

John Ulrigg said he's lived in this town since he was a month old in 1964. He's being painted as violent. In the park, many stood in the park listening to Ethan Smith say how scary Mr. Ulrigg was. That is very offensive. He had four houses and was making rental income before Susan Firth and her interference with his income making. She wrote a letter that Ethan Smith signed. Mr. Ulrigg said Mr. Smith perjured himself at a hearing the other day saying he didn't sign it and that she wrote it. Also, Mr. Smith perjured himself by saying that they were not entitled to the notice of who had complained about Mr. Ulrigg to protect them. This is all fabrication, liable, slander, negative framing.

V. CONSENT AGENDA

1. Claims

Recommended motion:

Approve claims in the amount of $924,389.95 for checks dated March 13, 2018.

2. Rezone 210 W. Beckwith, R5.4 to RT2.7, City

Recommended motion:

[First reading and preliminary adoption] Set a public hearing on March 26, 2018, and preliminarily adopt an ordinance to rezone fractions of Lots 7-10 and the south half of Lots 11 and 12 of Block 16 in South Missoula Addition (13,564 square feet), in Section 28, Township 13 North, Range 19 West, from R5.4 Residential (single dwelling) to RT2.7 Residential (two-unit/townhouse), based on the findings of fact in the staff report; and refer the item to the Land Use and Planning Committee.

3. 44 Ranch Subdivision Phasing Plan Amendment

Recommended motion:

Approve the 44 Ranch Subdivision Phasing Plan Amendment subject to amended conditions and three new conditions of approval as shown in Exhibit #1, based on the findings of fact in the staff report.

4. Bid Award for Materials – Traffic Marking Paint For FY18

Recommended motion:

Award the bid for fiscal year 2018 Traffic Marking Paint to Ennis Flint Inc., including 2,000 gallons of yellow traffic marking paint at $10.85/gallon for a total of $21,700.00 and 1,500 gallons of white traffic marking paint at $10.85/gallon for a total of $16,275.00 for a total contract award of $37,975.00 and authorized the return of bid bonds.

5. Water Meter Purchase from Sole Source Vendor

Recommended motion:

Approve and authorize the Mayor to sign a sole source purchase agreement for water meters for the Missoula Water Division from Core & Main for a total cost of $76,126.00.

6. 1717 Montana Street Homeword Brownfields Subgrant Agreement

Recommended motion:

Approve and authorize the Mayor to sign a grant agreement with Homeword, Inc. and award up to $75,000 in City Brownfields funds to remediate soil contamination at 1717 Montana Street in the City of Missoula.

Acting Mayor von Lossberg said, thank you. Is there any public comment on any of the consent agenda items? Are there any questions from Councilmembers or comments? Seeing none, we'll have a roll call vote.

Upon a roll call vote, the vote on the consent agenda was as follows:

AYES: Anderson, Armstrong, Becerra, Cares, DiBari, Harp, Hess, Jones, Ramos, von Lossberg, West

NAYS: None

ABSTAIN: None

ABSENT: Merritt

Motion carried: 11 Ayes, 0 Nays, 0 Abstain, 1 Absent

Acting Mayor von Lossberg said, thank you. We'll move onto the next section. Comments from City staff, agencies, boards, commissions, authorities and the Community Forum.

VI. COMMENTS FROM CITY STAFF, AGENCIES, BOARDS, COMMISSIONS, AUTHORITIES AND THE COMMUNITY FORUM

None

VII. PUBLIC HEARINGS

1. Petition to vacate 20' alley right-of-way, Missoula Public Library, Block 6, McWhirk Addition

Recommended motion:

Adopt a resolution of the City Council of the City of Missoula, Montana, to close and vacate the 20' wide alley located in Block 6 of McWhirk Addition subject to conditions of approval.

Acting Mayor von Lossberg said, we have two public hearings tonight and the first is a continuation of one that we opened last week. This is petition to vacate the 20-foot alley right-of-way, Missoula Public Library, Block 6, McWhirk Addition and I will reopen that public hearing. Is there any public comment? Going once. Seeing none, I will close the public hearing. Are there any questions from Committee members? Okay, this lives in Public Works. Oh, question. Ms. Cares?

Alderwoman Cares said, my apology. Can someone, I guess Mr. Larson, tell me what we're voting on essentially? Curbside or boulevard sidewalks?

Acting Mayor von Lossberg said, I'll actually intersect it. It will depend on the motion, I guess, put on the floor. Drew, do you want to clarify anything on that?

Drew Larson, Development Services said, certainly. Give me one second. So, the staff report regarding the right-of-way vacation recommended four conditions of approval

leaving the curbside versus boulevard sidewalk decision up to City Council essentially and so there's only four recommended conditions in the staff report. However, there's be a, you know, multiple conversations over the last few weeks and we were asked to provide two additional conditions for Council's considerations and that is 1) provide a 10-foot wide boulevard area with a minimum of 7-foot wide cleared sidewalks on Front Street and then prioritize boulevard landscapes on Adams and Jefferson. So, if Council chooses to go forward with the staff recommends, which is the four conditions, that recommendation is in the original referral but if you choose to go with these, there would be a revised motion.

Acting Mayor von Lossberg said, additional questions? Okay, Mr. Hess, this lives in Public Works.

Alderman Hess said, thank you, President von Lossberg. So, I will make the recommended motion to adopt a resolution of the City Council of the City of Missoula, Montana, to close and vacate the 20-foot wide alley located in Block 6 of the McWhirk Addition subject to the four conditions of approval in the staff report and the two additional conditions shown on the screen. I can read those into the record if you'd like. And I'd like to speak to the motion.

Acting Mayor von Lossberg said, yeah, why don't you read them in and you may speak to it.

Alderman Hess said, okay. Condition 5, the applicant site plan shall provide a minimum 10-foot wide boulevard landscape area and boulevard sidewalk with a minimum of seven feet of clearance along East Front Street prior to building permit submittal, subject to review and approval of Missoula Parks and Recreation and Development Services and #6, the applicant site plan shall prioritize boulevard landscape areas to the maximum extent possible and provide sidewalk for the minimum of seven feet clearance, south of the drop-off on Jefferson Street and along Adams Street prior to building permit submittal, subject to the review and approval of Missoula Parks and Recreation and Development Services, and if I may speak to it?

Acting Mayor von Lossberg said, you may.

Alderman Hess said, first of all, this is a right-of-way vacation which is a permanent decision. A right-of-way is deeded to the City through a deliberative process of subdivision review and it's to serve the public good. Any decision to vacate public right-of-way is a decision with some gravity. It's a loss of public space that has to be offset by some degree of public benefit. We've discussed several right-of-way vacations over the last number of years that I've been on City Council with varying levels of conditions but they all come with unique conditions that are subject to the specific demands of the project. So, by statute, the library is not required to follow municipal zoning and that's not a concern for me. The library is going to build a best-in-class facility, I trust that. I have strong faith in the library's management and I am always impressed with the programmatic offerings of the Missoula Public Library. I do think it's the role of this body to situate this project in the broader context of our downtown area. And the library is in a very interesting transition zone on one corner of it is squarely in downtown. It's got one foot in the downtown area and it's got another foot in this historic neighborhood which is a transitional area with long-time residences and transition to river area and parkways. So, I think it's appropriate for the Council to consider the broader context of this area in crafting these conditions. Like I said, I have strong faith in the library team and the library project and I have no desire, nor do I think it's appropriate for us to place any additional conditions inside the right-of-way boundaries. This is about the public right-of-way. We have a long culture of long-range planning in this community and we should continually refer to and uphold our long-range planning efforts. In this case, that includes our long-range Transportation Plan, our Growth Policy, our Downtown Master Plan and the Front and Main Two-Way Conversion Study, as

well as other relevant plans. We should also continually refer to Missoula Municipal Code, which is our guiding light in this case. So, within this context, I think it's important to continue the pattern of boulevard sidewalks that has been established along Front Street. And if you look at Missoula Municipal Code, Chapter 12.12.060 Sidewalks, this requires a boulevard sidewalk. So, to me, it's pretty clear that this is the pattern we need to continue unless there is a compelling reason. There are five exceptions listed in Title 12 for this criteria and I don't believe the criteria for the exemption have been met. So, again, I'm very excited about this project. I'm not thrilled with the position that we're in to adjudicate the merits of another public entity's projects and I stand in full support of the library and their work and I think that together we'll achieve a very nice project.

Acting Mayor von Lossberg said thanks. Mr. Hess's motion is in order and just for clarity includes the four staff recommendations as well as five and six. We've got Ms. Jones.

Alderwoman Jones said, I just want to say thank you to Jordan for your articulate comments and I appreciate drawing all of the analysis out based on the law that's in front of us and the long-range planning as well as what's currently in our code. I've thought a lot about this also and I think you're right, I think City Council's role is to sometimes take a broader view and this is a historic district residential neighborhood and I believe it's Adams is on the east and is it Jefferson's on the east and Front on the south bordered by residential areas which are going to remain residential areas. There are investments being made in some of these residential buildings. The Helena Street Apartments just had a huge investment made in them. There's affordable housing going in on a lot across the street from Front. So, it is a transition area and we have boulevard sidewalks whenever feasible in our residential neighborhoods because, frankly, for many reasons that are codified in our law but just as a basic statement, it's a much better walking experience and it's far more inviting than walking next to parked cars or whizzing traffic going by. So, we have boulevards whenever we can have them included, and that's a value. It's aesthetically beautiful to have a tree canopy with a boulevard as well as a much better walking experience. We want to encourage walking as well as give a nod to the residential section that is surrounding this section of the library because people will continue to live there for many, many decades and there should be a smooth transition into this area so thanks for making the motion, Jordan. I'm in favor of it and I am greatly looking forward to seeing a beautiful new library go in and I think it's going to be fabulous.

Acting Mayor von Lossberg said, Dr. DiBari.

Alderman DiBari said, thanks. Also, I want to reiterate what Mr. Hess said to regarding the right-of-way. It is something that the City holds in trust for all the residents of the community. It's done through a deliberative of process and so when we're asked to vacate right-of-way one of the tests that I think Council needs to assess is to the extent to which the community is going to benefit from the outcome of the applicant's proposal. And, I think, we're definitely moving in that direction with the motion that Mr. Hess made. I think it also reflects the fact that we are upholding Title 12 which, as Mr. Hess said, I mean, the applicant doesn't necessarily have to adhere to zoning because they are a governmental agency but they do have to adhere to Title 12. And I think it's a good pattern to continue to reflect our ordinances with regard to sidewalks and I think, in this particular case, we're going to get a better product as a result of the condition that we have, or we used to have up on the screen behind us. And I will say that I've had evolution of thought regarding this particular proposal and site plan because recently we decided to zone the library parcel in the Central Business District, I had strongly felt like it should reflect the Central Business District, which includes wide sidewalks that go to the curb, provides a lot of interaction space for people to be on the sidewalks, not just folks walking by but people stopping and additional kinds of street furniture, if you will, like parking and signage and other sorts of things. And I thought that that would be a good environment for around the library but on a field trip I and several others took, I think it really took walking around the library and trying

to get a sense for the feel of the different exposures, as it were, as Ms. Jones said, had mentioned. There's different characters on each side of that new library block. And I think it's wise of us to be sensitive to the different characters in the neighborhood while trying to provide for those different characters, we also try to provide the kind of infrastructure that would be best suited for them. So, I think, the design of the Main Street side really reflects that more kind of urban environment, Central Business District, but as we move around from north to south, I think it better reflects the ambience, if you will, of the existing neighborhood. So, as I said, I've had an evolution of thought on this and I think what we have before us is a good compromise. And I want to thank all the staff who have spent a lot of time on this. Folks like Drew in Development Services and Parks as well, and the Parking Commission, Rod Austin, it's taken a long time to get to this point and it probably shouldn't have, but I'm glad we're at a place where I think we're comfortable in moving forward, so I'm looking forward to supporting the motion.

Acting Mayor von Lossberg said, Ms. Cares.

Alderwoman Cares said, thanks. I will support the motion. I'm pleased that the additional conditions are part of the motion. I still have some concerns about the accessibility access on Front Street and questions, mostly curiosity based around accessible spots within the parking lot, but those are, you know, pretty administrative thoughts and I feel confident that people have heard the testimony we heard during public comment about these things and that those concerns will be heard, felt out and heeded. And so, you know, we are a policy-making guideline and I support this policy and will be voting yes. Thanks.

Acting Mayor von Lossberg said, Ms. West.

Alderwoman West said, so, one of the things that's pretty amazing about the library and its patrons is that there is a pretty, you know, a 50-50 split between modes of how people get there. So, only about half of people arrive there by car and the other half arrive there either by bike or walking or some form of public transportation. And, just so I won't repeat what other folks have said, I'll move to the purely anecdotal. Until I met pretty much everybody I know at the library when I moved here with a 14-month-old and went to Tiny Tales three times a week and then later on went to the library with two children three times a week and I really appreciate the addition of the boulevard sidewalks because when you're wrestling two children, one of which that can walk and the other one that can't, it's always nice to have a buffer between you and vehicles. And I think that there's, I also failed to say I walked every time. And so, as a pedestrian, I think it's nice to have a buffer and a safer walking experience and I appreciate also the way this will fit into the neighborhood that is residential and the parks and everything around it so I support it as is.

Acting Mayor von Lossberg said, Ms. Armstrong.

Alderwoman Armstrong said, some of my thoughts have already been articulated, we will not have another or we may have some input but we don't have any opportunities to really have input into the way the library is being designed or how it's going to function and that's fine. I would hope that the Board understands that we fully support this as an equalizing force. There are very few places where there are great equalizers or playgrounds and trails and public spaces and the library, and it will need to serve many functions. There has to be a realization that homeless people will be there and that people that don't have a ton of resources will be using the library heavily and anything that you can do going forward to make sure that it serves everybody as well as possible is my desire and I'm sure other people on Council. Like I said, we're not going to have a chance to have much input into it but things like accessibility and transportation and buffer zones and trees and, as Mr. DiBari said, street furniture. All those things are going to be very, very important as we're a small town. We don't have a lot of equalizers and every single one becomes more and more important every time we go down that road so those are my comments.

Acting Mayor von Lossberg said, Ms. Becerra.

Alderwoman Becerra said, I, too, support the motion and agree with everything that my colleagues have stated. And I would like to add that landscape boulevards are part of our green infrastructure and I think that, as we continue to grow, which is in part why we have this project in front of us to accommodate the growing needs of our community, it's important to think about the needs that we're going to have in terms of green infrastructure. So, I think it's important to also consider that not just this part of a sidewalk but as part of the green infrastructure that we have in our city.

Acting Mayor von Lossberg said, Ms. Harp.

Alderwoman Harp said, I want to thank all of my fellow Councilors for their comments. And I think going back to what you said, John, it has been an evolution of thinking. And so, to those of you on the Library Board, I want to say thank you so very much for coming forward and presenting this project to our community. I know you overcame a lot of odds to make this happen and so I want to congratulate you on that whole process. And I'm going to be supporting this motion. I just want all of you to celebrate that you get to break ground now and we get to move forward in this culture house that you have envisioned and I am very much looking forward to the next step. Thank you.

Acting Mayor von Lossberg said, Mr. Ramos.

Alderman Ramos said, I just wanted to talk to Mr. Nugent, I guess, that I heard a lot about the keeping of the character of the neighborhood and I think this is in violation of the Lowe Decision. I'm totally kidding, by the way. So, I didn't vote for this bond but I'm really, really excited about this project. I think the staff has done a phenomenal job and I just want to thank them for their work and I want to thank Mr. Hess for articulating everything so well and I'll be supporting this motion.

Acting Mayor von Lossberg said, well done, Mr. Councilman. Is there any further Council comment? I can't add anything substantive to the comments of my colleagues. I simply want to thank Neil Minor from Parks for doing a great job of laying out the code that governs here, and doing a good job at referencing the various documents where we have expressed in policy our community values that have made it easier for myself. With that, we've had a public hearing, we'll have a roll call vote.

RESOLUTION 8252

MOTION

Motion to adopt a resolution of the City Council of the City of Missoula, Montana, to close and vacate the 20' wide alley located in Block 6 of McWhirk Addition subject to six conditions of approval.

Upon a roll call vote, the vote on Resolution 8252 was as follows:

AYES: Anderson, Armstrong, Becerra, Cares, DiBari, Harp, Hess, Jones, Ramos, von Lossberg, West

NAYS: None

ABSTAIN: None

ABSENT: Merritt

Resolution 8252 carried: 11 Ayes, 0 Nays, 0 Abstain, 1 Absent

Acting Mayor von Lossberg said, thank you. Our second public hearing is a resolution to support changes to the Missoula City-County Air Pollution Control Program rules.

2. Resolution to support changes to the Missoula City-County Air Pollution Control Program rules

Recommended motion:

Adopt a resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program regarding wildfire smoke episodes.

Sara Coefield said, I'm the Air Quality Specialist for the Missoula City-County Health Department. I am here to present a rule change that is worth adding a verbiage that is anything of particular substance. Rule 4.112 of the Air Pollution Control Program is the rule that allows us during a wildfire smoke episode to put out health advisories instead of putting into motion regulatory actions that shut down winter air pollution sources such as woodstoves and industry. Our emergency episode and avoidance plan is held within Chapter 4, is typically supposed to be triggered during winter air pollution episodes and so everything that is in Chapter 4 is about reducing human caused pollution as best we can in order to protect public health. During a wild fire smoke episode, it's not going to do any good to really try to shut down sources that are not why we have pollution. We don't need to be telling folks to stop using their woodstoves in August because they probably aren't using their woodstoves in August and that is not our source of pollution and we won't be able to do anything to improve anybody's health by putting those sorts of rules into effect. So, our current rule of 4.112 was adopted back in 2010 and it has been what we've used for the past several years for issuing health advisories instead of calling air pollution alerts warnings. It was brought to our attention by the EPA while they were looking at our PM-10 designation request, but it's a little bit vague and they asked if we could take a look at this rule and put in there what we actually do, codify our current actions during a wild fire smoke event, and also define what we mean by wild fire smoke episodes. So, our changes to rule 4.112, there's a lot more words. The intent is still the same. The actions are still the same. What it does is it codifies our actions which are issuing health advisories, using science and scientific and meteorological data to determine that, yes, this is a wild fire smoke event, to understand what's going on with the smoke and issue our best advice based upon that. And it really clarifies that although we may be waiving the air pollution alerts and warnings, the entire rest of our program does remain in effect. The only thing that isn't happening is we aren't calling the air pollution alters warnings that set into motion the winter air pollution controls. So, it's more verbiage update than anything else. It doesn't change the substance of the rule and it doesn't affect what we do. I had a question at the Commissioners' hearing if…how this would have affected our last wild fire season and it wouldn't have affected anything. This is what we do. We issue health advisories, we let the public know what's going on and we keep an eye on the smoke. So, this has gone through several steps already. It went before the Air Quality Advisory Council in July and then it went through the Air Pollution Control Board hearing on September 21 and we went through the County Commissioners' public hearing last Thursday. So, this is our final local step for the option of an air rule. After this it will go to the Montana Board of Environmental Review for final approval and after that it will be an actual update to our Air Pollution Control Program. So, I believe you guys should have the motion. I have the first part of it there and then also. Keep going to the second one. But the main point is we need to put down what we're doing so that's what we've done.

Acting Mayor von Lossberg said, thank you Ms. Coefield. With that, I will open the public hearing. Is there any public comment on the resolution to support changes to the Missoula City-County Air Pollution Control Program rules? Seeing none, I will close the public hearing. Are there any questions from Councilmembers? Dr. DiBari.

Alderman DiBari said, Ms. Coefield, I was just curious, how long is the process after the Council takes action?

Sara Coefield, Air Quality Specialist for the Missoula City-County Health Department, said, the next Board of Environmental Review meeting is, I believe April 6, so our plan is to be on that agenda and present to them on that at the meeting and then we'll be done.

Acting Mayor von Lossberg said, alright, this is from Public Safety and Health. Ms. Cares?

Alderwoman Cares said, I move that we adopt a resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program regarding wildfire smoke episodes and may I speak to the motion?

Acting Mayor von Lossberg said, please do.

Alderwoman Cares said, as Ms. Coefield spoke to you, this is a pretty basic policy change and update but a good opportunity to thank the Health Department for their work. And I just really appreciate the fact that we do a process…the right words are not coming to me. Anyway, our process is a good one and it's good to codify the fact that we're doing the good work that we're doing. I'm going to eloquently stop talking.

Acting Mayor von Lossberg said, additional comments? Ms. Armstrong?

Alderwoman Armstrong said, once again our Air Quality Division has succeeded expectations and they've put into practice what was not in code and this is just a housekeeping item. We haven't been in an attainment area for a couple of years now and it's remarkable that the EPA even picked up on this so kudos to Sara.

Acting Mayor von Lossberg said, any further comments? Alright, we've had a public hearing, we'll have a roll call vote.

RESOLUTION 8253

MOTION

Motion to adopt a resolution to support revisions to Rule 4.112 of the Missoula City-County Air Pollution Control Program regarding wildfire smoke episodes.

Upon a roll call vote, the vote on Resolution 8253 was as follows:

AYES: Anderson, Armstrong, Becerra, Cares, DiBari, Harp, Hess, Jones, Ramos, von Lossberg, West

NAYS: None

ABSTAIN: None

ABSENT: Merritt

Resolution 8253 carried: 11 Ayes, 0 Nays, 0 Abstain, 1 Absent

Acting Mayor von Lossberg said, thank you.

VIII. COMMUNICATIONS FROM THE MAYOR

None

IX. GENERAL COMMENTS OF CITY COUNCIL

Alderman von Lossberg said hello to his mom who is either watching of, if she's not, he will have a question about various web browsers on email when he gets home.

Alderwoman Armstrong said next week is March for Meals of Missoula Aging Services and she encourages everyone to support Aging Services monetarily or with your time. If you can't do that, go to your elderly neighbors or folks that might need some help and form your own network. It's important in this community.

Alderman Ramos said a few weeks ago he talked about an organization called the Veterans Meat Locker and they provide wild venison, buffalo, deer, elk to veterans in need and they're making another trip next weekend and asked if someone in the press would be kind enough to cover that so that anyone that's a veteran or even a family member of a veteran, such as a widow, will qualify for free meat and free venison, so please get ahold of Alderman Ramos or anyone on the City Council and they'll be able to get them in touch with that.

Alderwoman Jones said that last fall, during campaign season, Mr. Ramos, when he was campaigning during public comment, had a creative idea which she appreciates regarding the City Cemetery that during the wintertime the employees, if they didn't have a lot to do could maybe plow streets, so she appreciates the creative approach but Mr. Ramos and Ms. Jones had a meeting with City Cemetery staff. She was concerned about statements like that floating out there that we pay City employees but they don't work that hard sometimes. When they sit down with City Cemetery staff, what becomes apparent is that during the summertime the entire 60-acre plus cemetery is hand-watered, mowed, full of trees and bushes, everything has to be trimmed and pruned, as well as burials and cremation that is going on so there's a ton of work but in the wintertime all of the work that doesn't get done in the summertime it gets kicked to the winter in terms of maintaining all of the facilities, not to mention plowing everything, but repairing everything and working on all of the machinery. She wanted to clarify that our City Cemetery employees work hard all summer and all winter long. She congratulated the Sentinel Basketball Girls Team, the Spartans who took second place at State in Billings last weekend, which was a great accomplishment. Finally, she wanted to congratulate the Griz Basketball Team who won the Big Sky Championship and they're going to be playing the University of Michigan this Thursday. Should be a good game and she knows we're going to get to the sweet 16 this year.

X. COMMITTEE REPORTS

1. Administration and Finance Committee Report

    a. March 7, 2018 Administration and Finance report

2. Land Use and Planning Committee Report

    a. March 7, 2018 Land Use and Planning report

3. Parks and Conservation Committee Report

    a. March 7, 2018 Parks and Conservation report

4. Public Safety and Health Committee Report

a. March 7, 2018 Public Safety and Health report

5. Public Works Committee Report

a. March 7, 2018 Public Works report

XI. NEW BUSINESS

None

XII. ITEMS TO BE REFERRED

1. Committee of the Whole

a. First Amendment Recognition

2. Land Use and Planning Committee

a. Conditional Use Request – 2115 S Johnson Street, Residential Storage Warehouse

3. Public Works Committee

a. Award Street Maintenance and Construction Material Contracts

b. Bid Award for 4th, Howell, 2nd Street Water Main Replacement Projects

XIII. MISCELLANEOUS COMMUNICATIONS, PETITIONS, REPORTS AND ANNOUNCEMENTS

1. Administratively approved agreement report

a. Administrative report and chart of accounts

XIV. ADJOURNMENT

Acting Mayor von Lossberg thanked the council members and the staff for their service.

The meeting adjourned at 7:55 p.m.

ATTEST:	APPROVED:
Martha L. Rehbein, CMC City Clerk	John Engen Mayor

Respectfully submitted by,

Kelly Elam
City Clerk Office

Resolution Number 8253

A resolution of the Missoula City Council to support new Missoula City-County Air Pollution Control Program Rule 4.112.

WHEREAS, during wildfire events, wildfire smoke is the primary source of $PM_{2.5}$ (particulate matter with an aerodynamic diameter of 2.5 microns and smaller) in Missoula County in the summer months; and

WHEREAS, during a wildfire event, the $PM_{2.5}$ concentrations that trigger control activities in the Missoula City-County Air Pollution Control Program's Chapter 4 Air Stagnation and Emergency Episode Avoidance Plan (Plan) may be met or exceeded by wildfire smoke; and

WHEREAS, the $PM_{2.5}$ provisions of the Plan are geared toward reducing human-caused winter air pollution; and

WHEREAS, the control activities in the Plan would not have an impact on wildfire smoke pollution; and

WHEREAS, health advisories are an appropriate response to wildfire smoke and provide a public health benefit; and

WHEREAS, the Missoula City-County Air Pollution Control Board (Board) adopted revisions to the Missoula City-County Air Pollution Control Program Rule 4.112 (Rule 4.112) to address Missoula City-County Health Department (Department) activities during wildfire events and allow the Department to waive winter control activities during a wildfire event; and

WHEREAS, after due notice, the Board conducted a public hearing on September 21, 2017 and approved and passed the revisions to Rule 4.112 at that hearing; and

WHEREAS, the proposed revision of the Missoula City-County Air Pollution Control Program has been submitted to the Missoula City Council by the Missoula City-County Air Pollution Control Board for this Council's approval; and

WHEREAS, the Missoula City Council held a public hearing on March 12, 2018 to consider the revision of the Missoula City-County Air Pollution Control Program;

NOW THEREFORE BE IT RESOLVED that the City Council approves and adopts the revised Missoula Air Pollution Control Program Rule 4.112 Wildfire Smoke Episodes which is attached hereto and by this reference incorporated herein as part of this Resolution, to be effective upon approval by the Montana Board of Environmental Review.

PASSED AND ADOPTED this 12th day of March, 2018.

ATTEST:

/s/ Martha L. Rehbein

Martha L. Rehbein, CMC
City Clerk

(SEAL)

APPROVED:

/s/ John Engen

John Engen
Mayor

Section 6

Findings for HB521

Missoula Public Health
City-County Health Department

Missoula City-County Health Department
ENVIRONMENTAL HEALTH
301 West Alder Street | Missoula MT 59802-4123
www.missoulacounty.us/HealthDept
Phone | 406.258.4755
Fax | 406.258.4781

Applicability of 75-2-301 Findings

For Rule Changes Proposed to the Missoula City-County Air Pollution Control Program

September 14, 2017

MCA 75-2-301(3)(b) requires the Air Pollution Control Board to fulfill the provisions of MCA 75-2-301(4) when adopting an ordinance or local law that is more stringent than the comparable state law.

MCA 75-2-301(4) allows the Board to adopt a rule more stringent than comparable state law if they make a written finding after a public hearing and public comment and based on evidence that the proposed local standard or requirement:

(A) protects public health or the environment of the area;
(B) can mitigate harm to the public health or the environment; and
(C) is achievable with current technology.

The written finding must reference information and peer-reviewed scientific studies contained in the record that form the basis for the board's or the local air pollution control program's conclusion. The written finding must also include information from the hearing record regarding costs to the regulated community that are directly attributable to the proposed local standard or requirement.

If Missoula's Program includes a rule that is currently more stringent than state rules, and the amendments do not make the rule even more strict, MCA 75-2-301(4) does not apply. In addition, if an amendment is purely clarifying an existing rule (and not making it more stringent), it is not subject to MCA 75-2-301(4).

Department staff evaluated whether 4.112, Wildfire Smoke Episodes, is subject to MCA 75-2-301(4). There are two reasons why the Board does not need to make a written finding for this rule adoption:

1. This change is a clarification and is not making an existing rule more strict; and
2. The comparable state guideline is the Montana Wildfire Event Action Plan. The proposed rule is not more stringent than that plan.

Therefore, MCA 75-2-301(4) does not apply and the Board does not need to make a written finding before adopting the proposed changes.

DEQ
Montana Department of Environmental Quality

Board of Environmental Review

Memo

TO: Sarah Clerget, Hearing Examiner
Board of Environmental Review

FROM: Lindsay Ford, Board Secretary
P.O. Box 200901
Helena, MT 59620-0901

DATE: February 13, 2018

SUBJECT: Board of Environmental Review Case No. BER 2018-02 MM

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA	
IN THE MATTER OF: VIOLATION OF THE METAL MINE RECLAMATION ACT BY LITTLE BEAR CONSTRUCTION, INC. AT BOB WEAVER PIT, GRANITE COUNTY, MONTANA. (SMES NO. 46-117C; FID #2567)	Case No. BER 2018-02 MM

The BER has received the attached request for hearing.

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Ed Hayes
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dan Kenney
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

CHRISTIAN, SAMSON & JONES, PLLC

Attorneys at Law

CALVIN T. CHRISTIAN
KIRBY S. CHRISTIAN
RICHARD J. SAMSON
PAUL E. FICKES, LL.M. in Tax

310 WEST SPRUCE
MISSOULA, MT 59802
TEL: 406-721-7772 FAX: 406-721-7776
EMAIL: cassie@csjlaw.com

LIANA MESSER
TIFFANY NUNNALLY
CASSIE R. DELLWO ~
*DAVID R. CHISHOLM- of Counsel

~ Also Licensed in North Dakota

February 7, 2018

FEB 9 2018

Board Secretary
Board of Environmental Review
PO Box 200901
Helena, MT 59620-0901

RE: Docket No. MM-17-01

Dear Board Secretary:

Please find enclosed the following document for the above-referenced docket number:

1. Notice of Appearance, Notice of Appeal, and Request for Hearing.

Thank you for your cooperation.

Sincerely,

CHRISTIAN, SAMSON & JONES, PLLC

Jasmine Icenhower
Paralegal to Cassie R. Dellwo

CRD/ji
Enclosures

Cassie R. Dellwo
Christian, Samson & Jones, PLLC
310 W. Spruce Street
Missoula, MT 59802
(406) 721-7772
cassie@csjlaw.com
Attorney for Little Bear Construction Co., Inc.

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the Matter of: VIOLATION OF THE METAL MINE RECLAMATION ACT BY LITTLE BEAR CONSTRUCTION, INC. AT BOB WEAVER PIT, GRANITE COUNTY, MONTANA. (SMES No. 46-117C; FID #2567)	)))))))	**NOTICE OF APPEARANCE, NOTICE OF APPEAL AND REQUEST FOR HEARING** Docket No. MM-17-01

Cassie R. Dellwo and the law firm of Christian, Samson & Jones, PLLC hereby notify the Department of Environmental Quality of the State of Montana, of their appearance as counsel in this matter on behalf of Little Bear Construction Co., Inc. (LBCI). LBCI further, provides notice that it is appealing the Notice of Violation and Administrative Compliance and Penalty Order dated January 9, 2018 and requests a hearing be set.

The hearing is being requested in order to allow LBCI the opportunity to be heard. The penalties being assessed are excessive given the circumstances in this matter. Further, LBCI did not actively mine on the premise all of the years being claimed by the Department.

LBCI intends to cooperate fully with the Department to come to an appropriate resolution of this matter which involves a full review of the facts concerning the Bob Weaver Pit.

Dated this 7th day of February, 2018.

Christian, Samson & Jones, PLLC

_____
Cassie R. Dellwo

CERTIFICATE OF SERVICE

I hereby certify that on the 7th day of February, 2018, I served a true and correct copy of this Notice of Appearance, Notice of Appeal and Request for Hearing upon all parties listed below via e-mail and via First Class Mail:

Jasmine Icenhower

Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

DEQ
Montana Department of Environmental Quality

January 9, 2018

Lyle A. Weaver, Director
Little Bear Construction, Inc.
c/o Paul Fickes, Registered Agent
310 West Spruce Street
Missoula, MT 59802

CERTIFIED MAIL #7009 1680 0002 1393 2881
Return Receipt Requested

RE: Notice of Violation and Administrative Compliance and Penalty Order for violations of the Metal Mine Reclamation Act (Docket No. MM-17-01, FID 2567)

Dear Mr. Weaver:

Enclosed is a Notice of Violation and Administrative Compliance and Penalty Order (Order) for the above-referenced enforcement action. The Order alleges that Little Bear Construction, Inc. (LBCI) violated the Montana Metal Mine Reclamation Act at the Bob Weaver Pit, SMES No. 46-117C, in Granite County, Montana. Please refer to Sections II and III of the Order, and the Penalty Calculation Worksheet for a description of the violations, required corrective actions and an explanation of the penalty.

Pursuant to Section 82-4-361(6)(b), MCA, LBCI is entitled to a hearing before the Board of Environmental Review if a written request, stating the reason for the request, is submitted to the Board within 30 days of the date the Order is served. Section IV of the Order provides information on the appeal process and rights. Service of the Order by mail is complete three business days after mailing. Any written request for a hearing must be sent to:

Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

If LBCI does not request a hearing and submit testimony at the hearing, LBCI will forfeit its right to seek judicial review of the Montana Department of Environmental Quality's violation and penalty determination. If you have questions related to this matter, please contact me at either dkenney@mt.gov or the telephone number listed below.

Sincerely,

Daniel R. Kenney
Enforcement Specialist
Enforcement Division
(406) 444-1453; fax (406) 444-1923

Enclosures

cc via email: Ed Hayes, DEQ Legal
Dan Walsh/Whitney Bausch, DEQ Hard Rock Mining Bureau

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATION OF THE METAL MINE RECLAMATION ACT BY LITTLE BEAR CONSTRUCTION, INC. AT BOB WEAVER PIT, GRANITE COUNTY, MONTANA. (SMES NO. 46-117C; FID #2567)	NOTICE OF VIOLATION AND ADMINISTRATIVE COMPLIANCE AND PENALTY ORDER Docket No. MM-17-01

I. NOTICE OF VIOLATION

Pursuant to the authority of Section 82-4-361, Montana Code Annotated (MCA), the Department of Environmental Quality (Department) hereby gives notice to Little Bear Construction, Inc. (LBCI) of the following Findings of Fact and Conclusions of Law and Administrative Compliance and Penalty Order with respect to a violation of the Metal Mine Reclamation Act (MMRA) (Title 82, chapter 4, part 3, MCA), and the Administrative Rules of Montana (ARM) adopted thereunder, Title 17, chapter 24, sub-chapter 1.

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The Department hereby makes the following Findings of Fact and Conclusions of Law:

1. The Department is an agency of the executive branch of the State of Montana, created and existing under the authority of Section 2-15-3501, MCA. The Department administers the MMRA.

2. LBCI is a "person" as defined in Section 82-4-303(22), MCA, and is subject to the requirements of the MMRA and the rules adopted under the MMRA.

3. Section 82-4-303(30)(a), MCA, defines a small miner, in pertinent part, as a person, firm, or corporation that engages in mining activity and conducts: (i) an operation that results in not more than five acres of the earth's surface being disturbed and un-reclaimed; or (ii) two operations that disturb and leave un-reclaimed less than five (5) acres for each operation.

4. Under Section 82-4-335(1), MCA, a person may not engage in mining, ore processing, or reprocessing of tailings or waste material, construct or operate a hard-rock mill or disturb land in anticipation of those activities in the state without first obtaining a final operating permit from the department. Pursuant to Section 82-4-305(1), MCA, the permitting requirements of the MMRA do not apply to a small miner if the small miner annually agrees in writing: (a) that the small miner will not pollute or contaminate any stream; (b) that the small miner will provide protection for human and animal life through the installation of bulkheads installed over safety collars and the installation of doors on tunnel portals; (c) that the small miner will provide a map location of the miner's mining operations. This written agreement, known as a Small Miner Exclusion Statement (SMES), also includes the signatory's legal confirmation that the signatory meets the definition of "small miner" as defined by Section 82-4-303(30), MCA.

5. Pursuant to Section 82-4-305(10), MCA, the operating permit exemption given to small miners does not apply to an area that is covered by an operating permit issued under Section 82-4-335, MCA.

6. On March 3, 2000, LBCI submitted a SMES (SMES No. 46-117C) to conduct mining operations at the Bob Weaver Pit located in Township 11 North, Range 13 West, Section 14 (latitude 46.717007, longitude -113.20004) in Granite County, Montana to the Department.

7. The Department conducted inspections of the Bob Weaver Pit on March 29, 2012 and May 1, 2013. At the time of the inspections the Department estimated LBCI disturbed approximately 3.5 acres at the Bob Weaver Pit. The Department also observed that LBCI was stockpiling material and loading haul trucks at a loadout facility located within an area covered by Operating Permit No. 00022, issued to Robert Weaver and Lee Alt (Weaver & Alt) in April of 2006. The area covered by Operating Permit No. 00022 is located close to the Bob Weaver

Pit. The Department estimated the area of disturbance associated with LBCI's operation at the loadout to be approximately 7.2 acres.

8. On October 2, 2015, the Department issued Lee Alt and Robert Weaver a Violation Letter (October 2015 Violation Letter) for allowing LBCI to process and store materials within the Weaver & Alt boundary.

9. During an October 30, 2015, telephone call, the Department informed LBCI of the October 2015 Violation Letter and that LBCI should not use the area, covered by Operating Permit No. 00022 issued to Weaver & Alt, to load and haul rock materials. The Department further informed LCBI that it should cease mining operations until it renewed its SMES, as it failed to renew its SMES for calendar years 2014 and 2015.

10. On September 13, 2016, the Department conducted an inspection (September 2016 Inspection) of the Bob Weaver Pit and observed that LBCI had conducted mining operations on approximately 3.5 acres at the Bob Weaver Pit. The Department inspector also observed that LBCI continued to process and/or store materials at the loadout facility within the Weaver & Alt operating permit boundary in violation of the MMRA.

11. On June 2, 2017, the Department sent LBCI a Violation Letter (June 2017 Violation Letter) for conducting mining operations in violation of the MMRA. The June 2017 Violation Letter identified the violations observed during the September 2016 Inspection, as described in Paragraphs 17 and 21, and the actions necessary to correct the violations. The June 2017 Violation Letter informed LBCI that the matter would be referred to the Department's Enforcement Division if LBCI failed to respond to the Department within 30 days from receipt of the letter.

12. As of December 20, 2017, LBCI failed to respond to the Department's June 2017 Violation Letter.

//

Violation 1: Exceeding the five acre limit allowed under a SMES

13. Under a SMES, a small miner may not conduct mining operations that disturb more than five (5) acres of the earth's surface. See Section 82-4-303(30)(a), MCA.

14. During Site inspections conducted in 2012, 2013 and 2016, the Department observed that LBCI had disturbed approximately 10.7 combined acres between the Bob Weaver Pit and the loadout area located within the permit area covered by Operating Permit No. 00022. Thus, LBCI was in violation of Section 82-4-303(30)(a), MCA.

15. The June 2017 Violation Letter informed LBCI that conducting operations disturbing 10.7 acres was a violation of the MMRA.

16. By conducting mining operations that disturbed a total of 10.7 acres, LBCI does not qualify for an exemption from the permitting requirements of the MMRA under the small miner exclusion provisions.

17. LBCI violated Section 82-4-303(30)(a), MCA, by disturbing more than 5 acres of earth surface under SMES No. 46-117C.

Violation 2: Conducting SMES mining operations at permitted site

18. The small miners exemption provided under Section 82-4-305(1), MCA, does not apply to an area that is covered by a permit issued under Section 82-4-335. See Section 82-4-305(10)(a).

19. During inspections at the Site conducted by the Department in March 2012, May 2013 and September 2016, the Department observed that LBCI was using an area covered by Operating Permit No. 00022 issued to Weaver & Alt to process, store and load materials generated at the Bob Weaver Pit.

20. The June 2017 Violation Letter informed LBCI that conducting operations within the Weaver & Alt boundary was a violation of the MMRA.

21. LBCI violated Section 82-4-305(1), MCA, by using an area covered by Operating Permit No. 00022 to process, store and load materials generated under SMES No. 46-117C.

Violation 3: Failure to annually renew a SMES

22. Pursuant to Section 82-4-305(2), MCA, a small miner is required to annually renew a SMES in writing to the Department.

23. LBCI's SMES No. 46-117C was approved by the Department on March 3, 2000; therefore, LBCI is required to annually renew its SMES by March 3rd of each following year.

24. On June 5, 2012, the Department sent LBCI a "*Notice to Cease All Mining Operations Immediately*" for LBCI's failure to satisfy the annual renewal requirement set forth in Section 82-4-305. The Department informed LBCI that the annual renewal form was over 60 days late.

25. On June 29, 2012, LCBI submitted the 2012 annual renewal statement for SMES No. 46-117C.

26. On May 22, 2013, LCBI submitted the 2013 annual renewal statement for SMES No. 46-117C.

27. On May 23 and October 29, 2014, the Department sent LBCI a "*Notice to Cease All Mining Operations Immediately*" for LBCI's failure to satisfy the annual renewal requirement set forth in Section 82-4-305, MCA. The Department informed LBCI that the annual renewal form was over 80 and 250 days late, respectively.

28. On June 10, 2016, LBCI submitted the annual renewal statements for SMES No. 46-117C for 2014, 2015 and 2016.

29. On March 1, 2017, the Department sent LBCI a letter reminding it that the 2017 annual renewal statement for SMES No. 46-117C was due.

//

30. As of the effective date of this Order, LBCI has failed to submit the 2017 annual renewal statement for SMES No. 46-117C.

31. LBCI violated Section 82-4-305(1), MCA, by failing to submit timely annual renewal statements, for SMES No. 46-117C, for years 2012-2017. Timely submittals are those that are received by the Department on or before the March 3rd annual renewal date associated with SMES No. 46-117C.

Administrative penalty

32. Pursuant to Section 82-4-361(2), MCA, the Department may assess an administrative penalty not to exceed $1,000 for a violation of the Act and no more than $1,000 for each day during which a violation continues.

33. The Department has calculated an administrative penalty in the amount of $6,400 for Violations 1 and 2 using factors set forth in Section 82-4-1001, MCA, and ARM 17.4.301 through 17.4.308. The enclosed Penalty Calculation Worksheet is incorporated by reference herein.

34. The Department reserves the right to increase the penalty based on additional days of violation if LBCI conducts mining activity and/or causes additional areas of disturbance subsequent to receipt of this Order.

III. ADMINISTRATIVE ORDER

This Notice of Violation and Administrative Compliance and Penalty Order (Order) is issued to LBCI pursuant to the authority vested in the State of Montana, acting by and through the Department under the MMRA and administrative rules adopted thereunder. Based on the foregoing Findings of Fact and Conclusions of Law and the authority cited above, the Department hereby ORDERS LBCI to do the following:

35. Upon receipt of this Order, LBCI shall immediately suspend all mining operations under its SMES. Mining operations are to remain suspended until LBCI has satisfied all corrective action requirements in this Order and the Department terminates this Order in writing.

36. Within 30 days from the effective date of this Order, LBCI shall

a. Remove all LBCI owned and/or operated equipment and stockpiled materials currently located within the area covered by Operating Permit No. 00022 issued to Weaver & Alt. If LBCI wishes to continue using the equipment in its operation, it must relocate the equipment, along with the stockpiled material, to within a five (5) acre area that may be covered by SMES No. 46-117C; and

b. Submit to the Department the *Small Miners Exclusion Statement - Annual Report and Renewal Form* (*Renewal*) for SMES No. 46-117C for calendar year 2017. A copy of the *Renewal* is attached and incorporated by reference herein. The *Renewal* must be sent to:

Department of Environmental Quality
Hard Rock Mining Bureau
P.O. Box 200901
Helena, MT 59620-0901

37. Within 15 days of completing the requirement in Paragraph 36 a. of this Order, LBCI shall provide photographic documentation, with written descriptions, conclusively showing that removal of all LBCI equipment and stockpiled material from the area covered by Weaver & Alt's operating permit is complete. The photographic documentation shall be sent to the address listed in Paragraph 40.

38. Should the topographical constraints at the Bob Weaver Pit prohibit LBCI from locating all of its operations within a 5 acre area covered by SMES No. 46-117C, LBCI is required to submit a completed application for an operating permit no later than 60 days from the effective date of this Order. LBCI shall diligently pursue and complete the operating permit application process and timely respond to any deficiencies in the application identified by the Department. An application package is being provided to LBCI along with this Order. The *Application* must be sent to the address in Paragraph 36 b.

39. LBCI is assessed an administrative penalty in the amount of $6,400 for Violations 1 and 2.

40. No later than 60 days after service of this Order, LBCI shall pay to the Department the administrative penalty in the amount of $6,400 to resolve Violations 1 and 2. The penalty may be paid by credit/debit card or by check or money order. To pay by credit/debit card, please contact the Enforcement Division Fiscal Manager at 406-444-0379. To pay by check or money order, make payment payable to the "Montana Department of Environmental Quality" and send to:

Chad Anderson, Program Manager
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

41. Failure to comply with this Order by the specified deadlines may result in the Department seeking additional penalties and injunctive relief in district court, pursuant to Section 82-4-361(3) and (5), MCA.

42. None of the requirements in this Order are intended to relieve LBCI from complying with all applicable state, federal, and local statutes, rules, ordinances, orders, and permit conditions.

IV. NOTICE OF APPEAL RIGHTS

43. LBCI may appeal this Order pursuant to Section 82-4-361(6)(b), MCA, by having its attorney file a written request for a hearing, stating the reason for the request, before the Montana Board of Environmental Review no later than 30 days after service of this Order. Any request for a hearing must be in writing and sent to:

Board Secretary
Board of Environmental Review
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

//

44. Hearings are conducted as provided in the Montana Administrative Procedure Act, Title 2, chapter 4, part 6, MCA. Hearings are normally conducted in a manner similar to court proceedings, with witnesses being sworn and subject to cross-examination. Proceedings prior to the hearing may include formal discovery procedures, including interrogatories, requests for production of documents, and depositions. Because LBCI is not an individual, LBCI must be represented by an attorney in any contested case hearing. *See* ARM 1.3.231(2) and Section 37-61-201, MCA.

45. If a hearing is not requested within 30 days after service of this Order, the opportunity for a contested case hearing is waived and the Order is final.

46. The terms of this Order are satisfied when the Department acknowledges in writing that all corrective actions required under this Order have been completed.

47. This Order becomes effective upon signature of the Department. Service by mail is complete three business days after mailing.

IT IS SO ORDERED:

DATED this 9th day of January 2018.

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAD W. ANDERSON, Program Manager
Enforcement Division

Department of Environmental Quality - Enforcement Division
Penalty Calculation Worksheet

Responsible Party Name:	Little Bear Construction, Inc (LBCI)
FID:	2567 SMES No. 46-117C
Statute:	Metal Mine Reclamation Act (Act)
Maximum Penalty Authority:	$1,000.00
Date:	11/28/2017
Name of Employee Calculating Penalty:	Daniel R. Kenney

Penalty Calculation #1
Description of Violation:
Conducting mining operations that disturbed more than the five (5) acres allowed under a small miner exclusion statement (SMES) in violation of Section 82-4-303(30)(a), Montana Code Annotated (MCA). During site inspections conducted in 2012, 2013 and 2016, the Department observed that the disturbance associated with LBCI's mining operation totals approximately 10.7 acres. The violation and required corrective action(s) were documented in the Department's June 2017 Violation letter.

I. BASE PENALTY

Nature

Explanation:	
Conducting a mining operation in excess of the five (5) acres allowed by the SMES, without first obtaining an operating permit creates the potential to harm human health or the environment. Unless the Department has reviewed a permit application and issued a permit, there is no assurance that a mine operation exceeding five acres will be conducted in compliance with state laws that are designed to avoid or minimize environmental impact. In addition, the submission of a reclamation bond is a prerequisite to the issuance of an operating permit. Therefore, there is currently no financial assurance that the area will be reclaimed as required by the Act.	
Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:
Pursuant to ARM 17.4.303(5)(a), operating without a required permit has a major gravity.
Extent Explanation:
Disturbing approximately 5.7 acres over the five-acre limit that can be disturbed under a SMES constitutes a major deviation from the regulatory requirement.

Harm to Human Health or the Environment

Extent	Gravity: Major	Moderate	Minor		
Major	0.85	0.70	0.55		
Moderate	0.70	0.55	0.40		
Minor	0.55	0.40	0.25	Gravity and Extent Factor:	0.85

Impact to Administration

Gravity: Major	Moderate	Minor		
0.50	0.40	0.30	Gravity Factor:	

BASE PENALTY (Maximum Penalty Authority x Gravity and Extent Factor): $850.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:
As a business entity operating under a SMES, LBCI should have been knowledgeable about the regulations governing mining activities conducted under the SMES. LBCI was notified of this issue on several occasions and did not take the necessary steps to address the violation. LBCI had control over the circumstances surrounding the violation and should have foreseen that conducting mining operations on greater than the 5 acres allowed under the SMES would result in a violation. Therefore, an upward adjustment of 20% to the Base penalty for circumstances is appropriate.

Circumstances Percent:	0.20
Circumstances Adjustment (Base Penalty x Circumstances Percent)	$170.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:
As of the date of this penalty calculation, LBCI has yet to respond to the Department's June 2017 Violation Letter. Therefore, the Department is not reducing the base penalty for Good Faith and Cooperation.

Good Faith & Coop. Percent:	0.00
Good Faith & Coop Adjustment (Base Penalty x G F & Coop. Percent)	$0.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:
The Department is not aware of any amounts voluntarily expended by LBCI to mitigate the violation or its impact beyond what was necessary to come into compliance; therefore, no reduction is being allowed.

AVE Percent:	0.00
Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)	$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	$850.00
Circumstances	$170.00
Good Faith & Cooperation	$0.00
Amt. Voluntarily Expended	$0.00
ADJUSTED BASE PENALTY	**$1,020.00**
Maximum penalty authority	**$1,000.00**

III. DAYS OF VIOLATION

Explanation:
The Department conducted inspections in 2012, 2013 and 2016, and observed that LBCI had disturbed approximately 10.6 combined acres at the Site and the Weaver & Alt (Big Horn Calcium Co.) permitted site. In the June 2, 2017 Violation Letter, the Department required that LBCI notify the Department within 30 days of receipt of the Violation Letter of its intent to return its operation to compliance with the Act. LBCI received the Violation Letter on June 5, 2017; therefore, LBCI was to respond to the Department by July 5, 2017. As of the date of this penalty calculation, November 28, 2017, LBCI has not responded to the Department. Using the date LBCI was to respond to the June 2, 2017 Violation Letter (July 5, 2017) to the date of this penalty calculation, the Department estimates that LBCI conducted mining operations on more than 5 acres for at least 146 days. The Department believes that using 146 days to calculate the penalty results in a penalty that is greater than the amount needed to provide deterrence. Therefore, pursuant to ARM 17.4.305(2) the Department is collapsing days of violation to one day for each month (4) of violation. Therefore, the Department has calculated a penalty of $4,000 based on 4 days of violation. (4 x $1,000 = $4,000).

Number of Days:	4
ADJUSTED BASE PENALTY x NUMBER OF DAYS:	**$4,000.00**

IV. OTHER MATTERS AS JUSTICE MAY REQUIRE

Explanation:
Not applicable.

OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:	**$0.00**

V. ECONOMIC BENEFIT

Explanation:
The Department requires a $500 fee with a permit application. In addition, the Department estimates it would cost less than $5,000 to prepare an application. However, because that is a cost that LBCI will need to bear in any event, the Department is choosing not to consider the economic benefit of delaying that expense in its calculation of the economic benefit for the four days of violation.

ECONOMIC BENEFIT REALIZED:	**$0.00**

Responsible Party Name:	Little Bear Construction, Inc (LBCI)
FID:	2567 SMES No. 46-117C
Statute:	Metal Mine Reclamation Act (Act)
Maximum Penalty Authority:	$1,000.00

Penalty Calculation #2
Description of Violation:
Conducting mining operations associated with a SMES on an area that is covered by an operating permit issued pursuant to 82-4-35 is a violation of Section 82-4-305(10)(a). During inspections conducted in 2012, 2013 and 2016, the Department observed that LBCI was processing and storing materials generated under its SMES on an area that is covered by Operating Permit No. 00022 issued to Weaver & Alt (Big Horn Calcium Co.) The violation and required corrective action(s) were documented in the Department's June 2017 Violation letter.

I. BASE PENALTY

Nature

Explanation:	
Conducting mining operations at a non-bonded or under-bonded site has an adverse impact on the Department's ability to fulfill its statutory duties and responsibilities. The Act requires operators to post a reclamation bond in order to ensure there are funds available for site reclamation, should the "person" fail to fulfill their reclamation obligations. Such situations leave the State at risk to fund and complete the reclamation. The nature of the violation is Administrative.	
Potential to Harm Human Health or the Environment	
Potential to Impact Administration	X

Gravity and Extent

Gravity Explanation:
Pursuant to ARM 17.4.303(5)(a), operating without a required permit has a major gravity.
Extent Explanation:
Not applicable.

Harm to Human Health or the Environment

Extent	Gravity: Major	Moderate	Minor		
Major	0.85	0.70	0.55		
Moderate	0.70	0.55	0.40		
Minor	0.55	0.40	0.25	Gravity and Extent Factor:	

Impact to Administration

Gravity: Major	Moderate	Minor		
0.50	0.40	0.30	Gravity Factor:	0.50

BASE PENALTY (Maximum Penalty Authority x Gravity Factor): $500.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:

As a business entity operating under a SMES, LBCI should have been knowledgeable about the regulations governing mining activities conducted under the SMES. LBCI was notified of this issue on several occasions and did not take the necessary steps to address the violation. LBCI had control over the circumstances surrounding the violation and should have foreseen that conducting SMES related mining operations at a permitted site would result in a violation. Therefore, an upward adjustment of 20% to the Base penalty for circumstances is appropriate.

Circumstances Percent:	0.20
Circumstances Adjustment (Base Penalty x Circumstances Percent)	$100.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:

As of the date of this penalty calculation, LBCI has yet to respond to the Department's June 2017 Violation Letter. Therefore, the Department is not reducing the base penalty for Good Faith and Cooperation.

Good Faith & Coop. Percent:	0.00
Good Faith & Coop Adjustment (Base Penalty x G F & Coop. Percent)	$0.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:

The Department is not aware of any amounts voluntarily expended by LBCI to mitigate the violation or its impact beyond what was necessary to come into compliance; therefore, no reduction is being allowed.

AVE Percent:	0.00
Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)	$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	$500.00
Circumstances	$100.00
Good Faith & Cooperation	$0.00
Amt. Voluntarily Expended	$0.00
ADJUSTED BASE PENALTY	**$600.00**

III. DAYS OF VIOLATION

Explanation:

The Department conducted inspections in 2012, 2013 and 2016, and observed that LBCI conducted mining operations associated with its SMES at the Weaver & Alt (Big Horn Calcium Co.) permitted site. In the June 2, 2017 Violation Letter, the Department required that LBCI notify the Department within 30 days of receipt of the Violation Letter of its intent to return its operation to compliance with the Act. LBCI received the Violation Letter on June 5, 2017; therefore, LBCI was to respond to the Department by July 5, 2017. As of the date of this penalty calculation, November 28, 2017, LBCI has not responded to the Department.

Using the date LBCI was to respond to the June 2, 2017 Violation Letter (July 5, 2017) to the date of this penalty calculation, the Department estimates that LBCI conducted mining operations at the Weaver & Alt (Big Horn Calcium Co.) permitted site for at least 146 days.

The Department believes that using 146 days to calculate the penalty results in a penalty that is greater than the amount needed to provide deterrence. Therefore, pursuant to ARM 17.4.305(2) the Department is collapsing days of violation to one day for each month (4) of violation. Therefore, the Department has calculated a penalty of $2,400 based on 4 days of violation. (4 x $600 = $2,400).

Number of Days:	4
ADJUSTED BASE PENALTY x NUMBER OF DAYS:	**$2,400.00**

IV. OTHER MATTERS AS JUSTICE MAY REQUIRE

Explanation:	
Not applicable.	
OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:	

V. ECONOMIC BENEFIT

Explanation:	
Economic benefit is addressed in Violation 1.	
ECONOMIC BENEFIT REALIZED:	**$0.00**

Department of Environmental Quality - Enforcement Division
Penalty Calculation Summary

Responsible Party Name:	Little Bear Construction, Inc (LBCI)
FID:	2567 SMES No. 46-117C
Statute:	Metal Mine Reclamation Act (Act)
Maximum Penalty Authority:	$1,000.00
Date:	1/9/18
Signature of Employee Calculating Penalty	Daniel R. Kenney

	Penalty #1	Penalty #2	
I. Base Penalty (Maximum Penalty Authority x Matrix Factor)			
Maximum Penalty Authority:	$1,000.00	$1,000.00	
Percent Harm - Gravity and Extent:	0.85	0.00	
Percent Impact - Gravity:	0.00	0.50	
Base Penalty:	$850.00	$500.00	
II. Adjusted Base Penalty			
Base Penalty:	$850.00	$500.00	
Circumstances:	$170.00	$100.00	
Good Faith and Cooperation:	$0.00	$0.00	
Amount Voluntarily Expended:	$0.00	$0.00	
Adjusted Base Penalty:	$1,020.00	$600.00	
Maximum Per Violation:	$1,000.00		
III. Days of Violation or Number of Occurrences	4	4	
Total Adjusted Penalty:	$4,000.00	$2,400.00	*$6,400.00*
IV. Other Matters as Justice May Require		$0.00	
V. Economic Benefit	$0.00	$0.00	
VI. History*			
Subtotal(s)	$4,000.00	$2,400.00	

Total calculated penalty: $6,400.00

*LBCI does not have a prior history of violations of the Metal Mine Reclamation Act (Act) documented in either an administrative order, judicial order, or judgment within the last three years.

Kenney, Daniel

From: Kenney, Daniel
Sent: Tuesday, January 09, 2018 2:30 PM
To: Hayes, Edward; Bausch, Whitney; Walsh, Dan; Rolfes, Herb
Subject: Enforcement Correspondence [FID2567]

Issued order at: \\Deqproj001\proj\ENFORCEMENT\HARD ROCK\IssuedOrders\2567_NOVACPOpacket_010918.pdf

Daniel R. Kenney
Enforcement Specialist
Enforcement Unit
MT Department of Environmental Quality
406-444-1453 (phone)
406-444-1923 (fax)

DEQ
Montana Department of Environmental Quality

Board of Environmental Review

Memo

TO: Sarah Clerget, Hearing Examiner
Board of Environmental Review

FROM: Lindsay Ford, Board Secretary
P.O. Box 200901
Helena, MT 59620-0901

DATE: February 13, 2018

SUBJECT: Board of Environmental Review Case No. BER 2018-01 JV

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW

OF THE STATE OF MONTANA

IN THE MATTER OF: THE DENIAL OF MOTOR VEHICLE WRECKING FACILITY LICENSE MVWF-0376.	Case No. BER 2018-01 JV

The BER has received the attached request for hearing.

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Bradley Jones
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Ed Thamke
Bureau Chief
Waste & Underground Tank Mgmt Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

James E. Brown
THE JAMES BROWN LAW OFFICE, PLLC
30 South Ewing Street, Suite 100
Helena, MT 59601
Telephone: (406) 449-7444
Facsimile: (406) 443-2478
Email: thunderdomelaw@gmail.com

Attorney for Payne Logging, Inc.

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 30 day of January, 2018
at 4:20 o'clock p.m.
By: Lindsay Ford

**BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA**

IN THE MATTER OF THE DENIAL OF MOTOR VEHICLE WRECKING FACILITY LICENSE MVWF-0376	Cause No. BER 2018_____ **NOTICE OF APPEAL AND REQUEST FOR HEARING**

Comes now Appellant Payne Logging, Inc. ("Payne Logging"), by and through its undersigned counsel of record, pursuant to MCA Section 75-10-515, and appeals the DEQ's Denial of Motor Vehicle Wrecking Facility 2018 License MVWF-0376. The DEQ'S denial letter is attached as Exhibit "1".

INTRODUCTION:

1. Robert Payne owns and operates Payne Logging, Inc. ("Payne Logging"). Payne Logging in turns owns and operates a wrecking facility in Libby, Montana. The facility takes in wrecked vehicles, which are later resold as vehicle scrap, vehicle parts, and/or repaired vehicles.
2. In 2015, Payne filed an appeal of the DEQ's decision to deny Payne's application to modify the boundaries of his wrecking facility. That appeal is before the Board of Environmental Review as Cause No. BER 2015-08 JV.

3. The 2015 appeal arose out Payne's attempt and effort to comply with a compliance plan developed by DEQ for Payne's facility.
4. In 2017, Payne applied for his 2018 license. On or about January 8, 2018, the DEQ denied Mr. Payne a license. The pretext for the denial was "due to your history of non-compliance with the Motor Vehicle Recycling and Disposal Program's (MVRDEP) rules and regulations and failing to submit an acceptable compliance to the DEQ." See, Exhibit "1".
5. The basis of the denial, failure to submit an acceptable compliance plan to the DEQ, directly relates to and involves the subject matter involved in Cause No. BER 2015-08 JV. That is, the previous and ongoing case involves the DEQ's denial of Payne's attempt to submit an acceptable compliance plan to the DEQ.

BASIS FOR APPEAL AND ALLEGED ERRORS OF FACT OR LAW.

I. MCA SECTION 75-10-515 AUTHORIZES THIS APPEAL AND THE APPEAL IS TIMELY.

6. This appeal is timely filed and proper pursuant to MCA Section 75-10-515.

II. THE DEPARTMENT ERRED IN DENYING PAYNE A 2018 LICENSE

7. Payne presently has an appeal pending before the BOR relating to the Department's denial of Payne's attempt to modify the boundaries of his existing licensed facility.

8. That previously filed appeal involved and involves Payne's efforts to submit an acceptable compliance to the DEQ.
9. Because Payne has taken steps to submit an acceptable compliance plan to the DEQ previously, and because Payne's attempt was unreasonably and unlawfully denied, the Department's purported basis for denying Payne's 2018 license is not supported by law or fact.
10. If Payne's 2015 application had been or is approved, Payne would come into compliance with DEQ's compliance demands, thereby vitiating the present denial action by the Department.
11. As such, DEQ's denial of decision of January 8, 2018 is not supported by law and must be reversed, thereby allowing Payne to continue to operate lawfully.

III. THE DEPARTMENT WAS PROHIBITED BY LAW FROM TAKING ANY ACTION TO DENY OR REVOKE PAYNE'S LICENSE.

12. As noted, Payne has an ongoing appeal challenging the Department's decision to deny his 2015 application to modify the boundaries of his existing facility.
13. In that just-referenced appeal proceeding, the Department is arguing that Payne filed for a new license and that the shielding exemptions set forth in MCA Sections 75-10-504 do not apply as a result.
14. In making this argument, the Department is asserting in Cause No. BER 2015-08 JV that Payne's denied application involved an activity, namely operation of the Payne facility, that was continuing in nature.

15. Under MCA Section 2-4-631(2), Payne's license is to continue and to be treated as lawful until such time as Cause No. BER 2015-08 JV is fully and finally resolved.

16. As Cause No. BER-2015-08 JV is an ongoing appeal, the Department was and is prohibited as a matter of law from seeking to deny or revoking Payne's existing license.

17. Yet, on January 8th, 2018, the Department notified Payne it was revoking his existing license. See, Exh. "1".

18. This action by the Department is contrary to law, and was made in bad faith given the existing appeal filed by Payne challenging the Department's prior denial decision. As such, the Department's January 8, 2018 denial decision must be overturned.

IV. PAYNE IS ENTITLED TO ATTORNEYS' FEES AND COSTS AS A RESULT OF FILING THIS APPEAL.

19. Montana law authorizes Payne to recover attorney's fees and costs against the Department pursuant to MCA Section 25-10-711.

20. The Department was aware of Cause No. BER-2015-08 JV and its pending case status at the time it took action to deny Payne's motor vehicle wrecking facility license MVWF-0376.

21. The Department's actions in seeking to revoke Payne's license during the time period when Payne is challenging the Department's wrongful denial of his efforts to amend the very same license in order to come into compliance with the Department's compliance demands constitutes bad faith on the part of the Department. *Accord*, MCA Section 2-4-631(2).

22. Should the Department defend against this appeal and should Payne prevail, Payne is clearly entitled to an award of attorneys' fees and costs pursuant to MCA Section 25-10-711. A copy of this provision of Montana law is attached as Exhibit "2".

PAYNE'S REQUEST FOR RELIEF

A. The Department's denial of MOTOR VEHICLE WRECKING FACILITY LICENSE MVWF-0376 must be overturned and/or reversed;

B. The Department should, pursuant to MCA Section 2-4-631, be prohibited from taking any adverse action against Mr. Payne or Payne Logging pending resolution of this appeal and appeal number BER 2015-08 JV;

C. Payne should be awarded his attorneys' fees and costs pursuant to MCA Section 25-10-711 or other provision of law for prosecuting this action; and

D. Payne should be accorded any relief in law or equity the Court deems appropriate.

DATED this 30th day of January, 2018.

THE JAMES BROWN LAW OFFICE, PLLC

James E. Brown
Attorney for Payne Logging, Inc.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing *Notice of Appeal and Request for Hearing* was served via U.S. first-class mail, postage prepaid, on this 5th day of January, 2018, upon the following:

Brad Jones
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Robert Payne
Payne Logging, Inc.
P.O. Box 381
Libby, MT 59923

Jim Brown

DEQ
Montana Department of Environmental Quality

EXHIBIT
1

MAILED
JAN 08 2018

January 8, 2018

CERTIFIED MAIL
7010 2780 0000 9973 6780

Robert Payne
Payne Logging, Inc.
PO Box 381
Libby, MT 59923

SUBJECT: Denial of Motor Vehicle Wrecking Facility License MVWF-0376

Dear Mr. Payne,

On December 21, 2017, the Department of Environmental Quality (DEQ) mailed you a certified letter, stating our intent to deny your 2018 Motor Vehicle Wrecking Facility license (MVWF) MVWF-0376, unless you submitted a plan to DEQ, within 10 days describing how you would correct the deficiencies at your facility.

Pursuant to Administrative Rule of Montana (ARM) 17.50.206, this letter is to notify you that DEQ is denying your license.

ARM 17.50.206 states:

"(1) When the department determines to deny an application for a license, to deny the renewal of a license, or to revoke a license pursuant to 75-10-514, MCA, it shall notify the applicant or licensee of its intended action.

(2) The department shall give the applicant or licensee the opportunity to submit an acceptable compliance plan setting specific dates for compliance which shall be submitted within 10 days after receipt of the notification.

(3) Upon the failure of the applicant or licensee to submit an acceptable compliance plan within the prescribed time, the department may deny the application, deny the renewal, or revoke the license. The decision by the department to deny the application, deny the renewal, or revoke the license may be appealed pursuant to 75-10-515, MCA"

DEQ's decision to deny your license is due to your history of non-compliance with the Motor Vehicle Recycling and Disposal Program's (MVRDP) rules and regulations and failing to submit an acceptable compliance plan to the DEQ.

Your $100 renewal fee will be returned to you. Please be advised, that without a license, you are no longer able to operate a Motor Vehicle Wrecking yard. As stated in the certified letter dated December 20, 2017, you have until July 1, 2018 to remove junk vehicles on your property to a licensed motor vehicle wrecking facility. Failure to properly manage the junk vehicles on your property may result in an enforcement action, including issuing an administrative order and penalty.

Pursuant to Montana Code Annotated 75-10-515, the "decision by the department to issue, deny, or revoke a motor vehicle wrecking facility or graveyard license may be appealed to the board within 30 days after receipt of official notice of the department's decision." This letter is notice triggering the 30-day appeal period which will begin once you have received it.

Lincoln County can assist you in removing all the junk vehicles on your property at no cost to you.

My contact information is below if you have questions or need additional assistance.

Sincerely,

Brady Christensen

Brady Christensen, CHMM
Motor Vehicle Recycling and Disposal Program
(406) 444-3048 or email at bchristensen@mt.gov

cc Jennifer Nelson, 418 Mineral Ave, Libby, MT 59923
Kathi Hooper, 418 Mineral Ave, Libby, MT 59923
Mike Rieger, DEQ Enforcement
Jim Brown, Esq., via email at jim@thunderdomelaw.com

IMPORTANT
THIS IS *NOT* THE MOST CURRENT MCA
THE 2017 MCA IS AVAILABLE HERE.
PLEASE UPDATE YOUR BOOKMARKS.

25-10-711. Award of costs against governmental entity when suit or defense is frivolous or pursued in bad faith. (1) In any civil action brought by or against the state, a political subdivision, or an agency of the state or a political subdivision, the opposing party, whether plaintiff or defendant, is entitled to the costs enumerated in 25-10-201 and reasonable attorney fees as determined by the court if:

(a) the opposing party prevails against the state, political subdivision, or agency; and

(b) the court finds that the claim or defense of the state, political subdivision, or agency that brought or defended the action was frivolous or pursued in bad faith.

(2) Costs may be granted pursuant to subsection (1) notwithstanding any other provision of the law to the contrary.

History: En. Sec. 1, Ch. 402, L. 1979; amd. Sec. 435, Ch. 56, L. 2009.

Provided by Montana Legislative Services

EXHIBIT
2

Board of Environmental Review

Memo

TO: Sarah Clerget, Hearing Examiner
Board of Environmental Review

FROM: Lindsay Ford, Board Secretary
P.O. Box 200901
Helena, MT 59620-0901

DATE: March 16, 2018

SUBJECT: Board of Environmental Review Case No. BER 2018-03 SUB

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA	
IN THE MATTER OF: APPEAL REVOCATION OF COSA, FISCHER LAND DEVELOPMENT SUBDIVISION [ES# 42-78-S3-173] AND FISCHER HOMES [ES# 42-80-T1-15], ROGER EMERY, SIDNEY, RICHLAND COUNTY, MONTANA. [FID# 2214]	Case No. BER 2018-03 SUB

The BER has received the attached request for hearing.

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Aaron Pettis
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Margarite Juarez Thomas
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 9 day of March, 2018
at 10:36 o'clock a.m.
By: Lindsay Ford

Roger Emery
8955 McGuire Road
Belgrade, MT 59714

(406) 570-8046

March 8, 2018

Board Secretary
Board of Environmental Review
1520 E. Sixth Ave.
P.O. Box 200901
Helena, MT 59620-0901

Re: Request for Hearing to Appeal Revocation of COSA (Enforcement Case File FID 2214)

Greetings:

Pursuant to DEQ's letter from Rachel Clark P.E. dated February 16, 2018 revoking the 1977 COSA (ES# 42-78-S3-173) and the 1980 CTCA (ES# 42-890-T1-15) from the property described below, I formally request a hearing before the Board of Environmental Review to state my case for the decision for revocation.

The subject property located at 2144 S Central Ave., Sidney, MT 59270-5525 is described as follows:

Lot 2B of Fischer Land Development Subdivision, Amended Document #498724 on record in the Richland County Clerk and Recorder, within the SE1/4 Section 5, T22 N, R59 E.

Lot 3B of Fischer Land Development Subdivision, Amended Document #498724 on record in the Richland County Clerk and Recorder, within the SE1/4 Section 5, T22 N, R59 E.

Parcel 02B of COS 27-642 on record in the Richland County Clerk and Recorder, within the N1/2 SE1/4 Section 5, T22 N, R 59 E.

The basis for this appeal is presented in the following chronology:

1. Due to the abrupt down turn in the oil business since 2015, the Sunrise Motel on Lot 2B has had fewer than 25 guests per day, and as business continued to dwindle, the entire facility has been closed and the utilities winterized since July 2017.

2. The 7 mobile homes which occupied the narrow north portion of Lot 2B, were totally disconnected from water, sewer and electric power in autumn 2012 and left on the property in storage.

3. The RV and camping sites have not been occupied since the summer of 2013, and the water piping which supplies these spaces has been shutoff.

4. Of the 20 mobile homes on Tract 2 of COS 27-642 in 2016, no more than 7 have been occupied since 2014, and all rental agreements will be phased out during the month of March 2018.

5. The 1.000 acre property identified as Amended Lot 3B is occupied by a steel building which has no plumbing facilities installed.

All facilities described above will remain inoperable and unoccupied, thereby diverting no groundwater for domestic and commercial purposes, and discharging no wastewater sewage until approved potable water supply and wastewater sewage treatment/disposable has been designed, approved by DEQ and installed in accordance with all applicable state and county regulations.

Since last spring, the potential of connecting to the regional water and sewer utilities was researched. In September 2017, Dry-Redwater Regional Water Authority quoted their cost at $132,261 to connect all facilities on these properties. In a second quote to connect only 9 mobile homes, DRWA's price was $103,530.00. In the current economic conditions in Sidney, the Sunrise Motel facility cannot attract adequate business to come anywhere close to paying a connection fee of over $100K. Additional on-site infrastructure costs would also be required to facilitate these connections.

I commit to keeping the potable water and sewage disposal systems serving this property inoperable and the facilities unoccupied until approved water and sewer systems can be approved by DEQ and installed. I am actively pursuing buyers for this property and keeping the current DEQ approval documents in place will assist in finding a new owner who can upgrade or replace the existing on-site facilities.

Your consideration of this repeal request is greatly appreciated. I look forward to the opportunity to make my case before the Board.

Sincerely,

Roger S Emery

Roger Emery
Landowner

Montana Department of Environmental Quality

February 16, 2018

Roger Emery
8955 McGuire Road
Belgrade, MT 59714 Certified Mail # 7006 2760 0000 9025 8079

Roger Emery
PO Box 147
Dodson, MT 59524 Certified Mail # 7006 2760 0000 9025 8086

Re: **Notice of Revocation**

Sunrise Motel/RV Park
Richland County, Montana
Fischer Land Development Subdivision Amended ES# 42-78-S3-173 and Fischer Homes ES# 42-80-T1-15
Enforcement Case File (FID 2214)

Dear Mr. Emery:

The Department of Environmental Quality has had extensive contact with you regarding your violations of the Sanitation in Subdivisions Act, Mont. Code Ann. §§ 76-4-101 through -135 ("the Act"), on Lots 2B and 3B of the Fischer Land Development Subdivision Amended in Sidney, Montana, at which you own and operate the Sunrise Motel and an adjacent mobile home park on Tract two of Richland County Certificate of Survey number 27-642. This property is subject to a certificate of subdivision approval that was issued on September 14, 1977 (ES# 42-78-S3-173) ("1977 COSA") and a certificate of trailer court approval that was issued on February 22, 1980 (ES# 42-80-T1-15) ("1980 CTCA"). The property is served by the Sunrise Motel public water supply system (PWSID MT 0001906).

The 1977 COSA required the property to be served by a one-well water supply system and prohibited any development of the property that would raise the total population served by the lagoon above 100 persons or an equivalent amount of waste from commercial use. The 1980 CTCA limited the number of spaces for mobile homes to 20.

The Act prohibits a person from constructing or using facilities that deviate from the certificate of subdivision approval unless the person receives Department approval for the deviation. Mont. Code Ann. § 76-4-130. Department inspections and sanitary surveys have observed that you have developed the property to include a 48-unit motel, more than 20 spaces for mobile homes, and spaces for 42 recreational vehicles. These inspections and surveys have also observed that you have constructed two unapproved public water supply wells and that all of the units are connected to the water and wastewater systems. With this number of units, these systems now

have the potential to serve a population of 200 or more persons, at least double the approved amount.

On September 26, 2013, the Department issued to you an administrative order that concluded that you had violated and continued to violate § 76-4-130 by exceeding the 100-person capacity of the wastewater lagoon, as approved by the 1977 COSA, and by operating a subdivision with more units than allowed by the 1980 CTCA. The order also concluded that you had violated and continued to violate Mont. Code Ann. § 75-6-112 by constructing and using two public water supply wells without the Department's review and approval. The order imposed a total administrative penalty of $31,600, with $21,000 of that penalty for violations of the Act. The order required you to pay the penalty and to take corrective action, either by complying with the requirements in the 1977 COSA and 1980 CTCA or by submitting to the Department an application to amend those prior approvals.

On March 6, 2015, the Board of Environmental Review affirmed the Department's order and imposed on you the requirements in the order. To date, you have not paid the administrative penalty and have not taken corrective action to comply with the Act.

On March 21, 2017, the Department discussed with you the ongoing violations. You agreed that, by July 1, 2017, you would submit the appropriate plan and schedule to comply with the Act. To date, you have not submitted any plan or schedule.

The Department may revoke a certificate of subdivision approval if the Department determines that there has been a violation of the Act, a rule adopted under the Act, or an order issued under the Act. Mont. Code Ann. § 76-4-108(5). The Department has determined that you have violated and continue to violate the Act and an order issued under the Act in the following ways:

1. You violated and continue to violate § 76-4-130 by exceeding the 100-person capacity of the wastewater lagoon approved by the 1977 COSA.
2. You violated and continue to violate § 76-4-130 by providing more spaces for mobile homes and recreational vehicles than allowed by the 1980 CTCA.
3. You violated and continue to violate § 76-4-130 by constructing and using two unapproved public water supply wells instead of a one-well water supply system approved by the 1977 COSA. The construction and use of these wells also violated and continues to violate § 75-6-112(1).
4. You violated an administrative order issued under the Act when you failed to complete the corrective action and pay the administrative penalty required by the order issued to you on September 26, 2013, and affirmed by the Board of Environmental Review on March 6, 2015.

In light of these violations of the Act and an order issued under the Act, the Department hereby revokes the 1977 COSA (ES# 42-78-S3-173) and the 1980 CTCA (ES# 42-80-T1-15) and reimposes sanitary restrictions on Lots 2B and 3B of the Fischer Land Development Subdivision

Amended and Tract 2 of Richland County Certificate of Survey number 27-642 in Sidney, Richland County, Montana.

This revocation will become effective 30 days from the date of issuance unless, on or before that date, you request a hearing before the Board of Environmental Review. The hearing request must be in writing and must state the reason for the request. The request for a hearing must be sent to the following:

Board Secretary
Board of Environmental Review
1520 E. Sixth Ave.
P.O. Box 200901
Helena, MT 59620-0901

If you choose not to appeal this revocation, or if you appeal and the revocation is upheld, you will be prohibited from disposing of any lot within the subdivision, erecting any facility for the supply of water or disposal of sewage or solid waste, erecting any building or shelter in the subdivision that requires facilities for the supply of water or disposal of sewage or solid waste, or occupying any permanent buildings in the subdivision until a certificate of subdivision approval has been issued. Mont. Code Ann. § 76-4-121(1). If you do not appeal, or if the appeal is resolved in the Department's favor, the Department will notify the Richland County Clerk and Recorder of the revocation.

Sincerely,

Rachel C

Rachel Clark PE
Department of Environmental Quality
Water Quality Division
Engineering Bureau
406-444-6722

c: file
DEQ Enforcement
DEQ Legal
Richland County Sanitarian

USPS Tracking®

FAQs > (http://faq.usps.com/?articleId=220900)

Track Another Package +

Tracking Number: 70062760000090258079

Remove ×

Your item was delivered to an individual at the address at 5:08 pm on February 21, 2018 in BELGRADE, MT 59714.

Delivered

February 21, 2018 at 5:08 pm
Delivered, Left with Individual
BELGRADE, MT 59714

Get Updates

Text & Email Updates

Tracking History

Product Information

See Less

Can’t find what you’re looking for?

Go to our FAQs section to find answers to your tracking questions.

How can I help you?

202

STATE OF MONTANA
DEPARTMENT OF JUSTICE
AGENCY LEGAL SERVICES BUREAU

Tim Fox
Attorney General

1712 Ninth Avenue
P.O. Box 201440
Helena, MT 59620-1440

TO: The Montana Board of Environmental Review

FROM: Sarah Clerget, Board Attorney

RE: In the matter of the Appeal of Oilfield Rock and Logistics, Docket No. OC-16-12 (FID2506), Redstone, Montana, BER 2016-11 OC

DATE: March 28, 2018

The purpose of this memo is to assist BER when reviewing a hearing examiner's proposed decision in a contested case proceeding.

The record before the Board consists of a written record and an opportunity for the parties to make oral arguments to the Board. Pursuant to the contested cases provisions of the Montana Administrative Procedures Act (MAPA), Mont. Code Ann. § 2-4-601 *et. seq.*, as the hearing examiner in this case, I issued an *Order on DEQ's Motion for Summary Judgment* (Proposed Order) on February 20, 2018. I also issued an Order on Exceptions on February 22, 2018. Neither party filed exceptions to the Proposed Order.

The Proposed Order and Order on Exceptions are included in the Board's materials for the April 6th meeting. As the parties filed no exceptions to the Proposed Order, there are none included in the meeting materials. If any member of the Board wishes to review any portion of the record in this case, in order to render a final decision, the entire record is available through Aleisha Solem, the Hearings Assistant. Board Members can contact her directly to arrange logistics of receiving or viewing that record. While Board Members may view any portion of the underlying record, they are not required to review it unless the Board decides to modify a finding of fact (as described further below).

In addition to the written materials, the parties can make oral arguments to the Board at the April 6th meeting.

Based on the written record and the oral arguments before it, the Board must decide, by seconded motion, what to do with my Proposed Order. MAPA provides BER with the following options:

> The agency may adopt the proposal for decision as the agency's final order. The agency in its final order may reject or modify the conclusions of law and interpretation of administrative rules in the proposal for decision but may not reject or modify the findings of fact unless the agency first determines from a review of the complete record and states with particularity in the order that the findings of fact were not based upon competent substantial evidence or that the proceedings on which the findings were based did not comply with essential requirements of law. The agency may accept or reduce the recommended penalty in a proposal for decision but may not increase it without a review of the complete record.

Mont. Code Ann. § 2-4-621(3).

In other words, BER has three options regarding what action to take upon review of a hearing examiner's proposed order:

(1) Accept the proposed order in its entirety and adopt it as the Board's final order;

(2) Accept the findings of fact in the proposed order, but modify the conclusions of law or interpretations of administrative rules; or

(3) Reject the proposed order, review the entire record that was before the hearing examiner, find that the Proposed Order is not supported by substantial evidence, and modify the findings of fact and conclusions of law in the proposed order accordingly. This could mean a modified order granting summary judgment, an order denying summary judgment and ordering a hearing, or some combination of the two.

When choosing among these three options, the Board should keep certain legal standards in mind. Regarding options (2) and (3), the agency may "correct a hearing examiner's incorrect conclusions of law" in a final order, without having to review the entire factual record. *Mont. Dept. Transp. v. Mont. Dept. Labor and Indus*., 2016 MT 282, ¶ 23 (herein, *MDOT*); Mont. Code Ann. § 2-4-621(3). However, the agency is more constrained with regard to modifying findings of fact. The agency cannot discard a hearing examiner's factual findings without reviewing the entire record. *Mayer v. Bd. of Psychologists*, 2014 MT 85, ¶¶ 7, 27-29. "Under MAPA, an agency may reject a hearing officer's findings of fact only if, upon review of the complete record, the agency first determines that the findings were not based upon competent substantial evidence."

Blaine Cnty. v. Stricker, 2017 MT 80, ¶ 25 ((internal quotations marks omitted; citing *Moran v. Shotgun Willies*, 270 Mont. 47, 51, 889 P.2d 1185, 1187 (1995), Mont. Code Ann. § 2-4-621(3)). "In reviewing findings of fact, the question is not whether there is evidence to support *different* findings, but whether competent substantial evidence supports the findings actually made." *Mayer*, ¶ 27 (citing *Knowles v. State ex rel. Lindeen*, 2009 MT 415, ¶ 21 (emphasis supplied in *Knowles*)).

"An agency abuses its discretion if it modifies the findings of a hearing officer without first determining that the findings were not supported by substantial evidence." *Stricker*, ¶ 25. "[A]n agency's rejection or modification of a hearing officer's [factual] findings cannot survive judicial review unless the court determines as a matter of law that the hearing examiner's findings are not supported by substantial evidence."[1] *Id.* (internal citations omitted). With regard to whether substantial credible evidence supports the factual findings, *Stricker* explained:

> Substantial evidence is evidence that a reasonable mind might accept as adequate to support a conclusion. It consists of more [than] a mere scintilla of evidence but may be less than a preponderance. The evidence is viewed in the light most favorable to the prevailing party when determining whether findings are supported by substantial credible evidence.

Stricker, ¶ 26 (internal citations and quotations omitted); *see also Mayer*, ¶ 27 (quoting Black's Law Dictionary 635, 636, 639, 640 (Bryan A. Garner ed., 9th ed., Thomson Reuters 2009)).

Members of the Board may therefore look at any portions of the underlying record in order to decide whether or not findings of facts are supported by "competent substantial evidence," but once the Board determines that factual findings are not so supported, the Board must review the entire record before modifying any fact found by the Hearing Examiner.

Once a decision is made, BER may utilize the Board Secretary or Board Attorney to assist in drafting the final order memoralizing the Board's substantive decision, for the signature of the Board Chair. If the decision is dispositive (ending the case), then the aggrieved party may appeal to state District Court for review. If the Board's decision is not dispositive, the Board can decide to retain jurisdiction of this matter or assign it to a hearings examiner for further proceedings.

[1] This standard should not be confused with the legal determination of whether the facts, as found, meet a party's burden of proof by a preponderance of the evidence. *See Mont. Envtl. Info. Ctr. v. Mont. Dep't of Envtl. Quality*, 2005 MT 96, P17-26.

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF: **APPEAL DOCKET NO. OC-16-12 (FID2506)** **REDSTONE, MONTANA**	**CASE NO. BER 2016-11 OC**

PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW AND RECOMMENDED ORDER GRANTING DEQ'S MOTION FOR SUMMARY JUDGMENT

This matter concerns the Department of Environmental Quality's (DEQ) November 30, 2016, Administrative Compliance and Penalty Order issued under Mont. Code Ann. § 82-4-441. This Order asserted multiple violations against Oilfield Rock and Logistics (Oilfield), including the failure to reclaim the site within one year of the revocation of Oilfield's right to mine the site.

On December 15, 2016, Oilfield filed a Notice of Appeal and request for hearing before the Board of Environmental Review (BER). On November 2, 2017, DEQ filed a Motion for Summary Judgment and Memorandum of Law in Support of the Motion. After requesting an extension of time in which to file its response, Oilfield filed its response on January 2, 2018. Neither party requested oral argument and the matter is ripe for decision.

For the reasons set forth below, the undersigned recommends to the Board of Environmental review that the following findings of fact and conclusions of law be entered, DEQ's motion for summary judgment be granted in full, and DEQ's

November 30, 2016, Administrative Compliance and Penalty Order be affirmed, pursuant to Mont. Code Ann. § 82-4-441(5)(b).

FINDINGS OF FACT

1. Fisher Sand and Gravel Co. (Fisher), was originally granted Opencut Mining Permit No. 2019 (the Fisher Permit) for the 65.3-acre K & K Opsahl Pit Area 2 site near Redstone, Montana (the Site) on September 2, 2010. Affidavit of Colleen Owen, sworn to on November 2, 2017 (Owen Aff.) at ¶¶ 7-10, *citing* July 9, 2010 Fisher Sand and Gravel Co. Application for Opencut Mining Permit and Plan of Operation (Fisher Application and Plan of Operation), Exhibit DEQ-B, at 3, 4; September 2, 2010 Opencut Mining Permit No. 2019 issued to Fisher Sand and Gravel Co. (Fisher Permit), Exhibit DEQ-C at ¶¶ 1-3.

2. According to the Fisher Application and Plan of Operation, soil data based on test borings indicated that the following soil and overburden thickness was present at the Site:

(a) Access road area soil*	**Range: *10* to *12* inches**	**Average thickness: *12* inches****
(b) Other facility-level area soil	**Range: *10* to *12* inches**	**Average thickness: *12* inches****
(c) Mine-level area soil	**Range: *10* to *12* inches**	**Average thickness: *12* inches****
(d) Mine-level area overburden	**Range: *8* to *24* inches**	**Average thickness: *18* inches****

* - For new road locations or areas disturbed to improve existing roads. Improvements include substantial widening, cutting, and filling. An existing road is typically a worn two-track trail.
** - During reclamation the operator must replace soil and overburden to at least the average thicknesses reported here. In some cases, the operator may be required to replace more than the average thickness of overburden; see III-F of this plan.

Owen Aff. ¶ 8, *citing* Fisher Application and Plan of Operation, Exhibit DEQ-B, at 3, 4.

3. The ranges and averages set forth in the Fisher's application for the Fisher Permit (12" of soil and 18" of overburden) were derived from Fisher's field data, which was also summarized in the Fisher Application and Plan of Operation as follows:

Test Hole or Observation Point I.D. on map	Soil Thickness (inches)	Overburden Thickness (inches)	Comments
1	12	24	Total depth is15 feet, stopped in gravel.
2	12	24	Total depth is 15 feet, stopped in gravel.
3	12	18	Total depth is 14.5 feet, stopped in gravel.
4	12	12	Total depth is 14 feet, stopped in gravel.
5	10	8	Total depth is 13.5 feet, stopped in gravel.
6	12	24	Total depth is 15 feet, stopped in gravel.

Owen Aff. ¶ 9, *citing* Fisher Application and Plan of Operation, Exhibit DEQ-B, at 4.

4. DEQ approved the Fisher Application and Plan of Operation based the information contained therein and issued the Fisher Permit with the requirement that eighteen inches (18") of overburden and twelve inches (12") of soil be stripped and stockpiled for replacement as part of site reclamation for the mine-level area of the Site. Owen Aff. ¶ 10, *citing* Fisher Application and Plan of Operation, Exhibit DEQ-B, at 4.

5. Fisher conducted opencut operations at the Site pursuant to and with the benefit of the Fisher Permit from 2010 through 2011. Owen Aff. ¶ 11, *citing* Exhibit DEQ-D, Fisher's 2010 to 2011 Annual Progress Report, referencing Permit No. 2019, K&K Opsahl Pit Area No. 2.

6. In 2011, Fisher mined 140,710 cubic yards of material from the Site. Owen Aff. ¶ 11, *citing* Exhibit DEQ-D, Fisher's 2010 to 2011 Annual Progress Report, referencing Permit No. 2019, K&K Opsahl Pit Area No. 2.

7. In 2010, Fisher mined 110,100 cubic yards of material from the Site. Owen Aff. ¶ 11, *citing* Exhibit DEQ-D, Fisher's 2010 to 2011 Annual Progress Report, referencing Permit No. 2019, K&K Opsahl Pit Area No. 2.

8. From 2010 through 2011, Fisher mined a total of 250,810 cubic yards of material from the Site. Owen Aff. ¶ 11, *citing* Exhibit DEQ-D, Fisher's 2010 to 2011 Annual Progress Report, referencing Permit No. 2019, K&K Opsahl Pit Area No. 2.

9. At no time during Fisher's operation of the Site under the Fisher Permit did Fisher report to DEQ that Fisher had discovered that there was not sufficient overburden (that is, 18") on site to complete reclamation in the mine-level area as required by the Fisher Permit. Owen Aff. ¶ 12.

10. On April 6, 2012, Oilfield sought approval from DEQ for an assignment of Fisher's Permit via an Application for Assignment of Opencut Mining Permit (Oilfield's Assignment Application). Owen Aff. ¶ 13, *citing* Oilfield Assignment Application, Exhibit DEQ-E.

11. Oilfield's Assignment Application included Oilfield's certification that it understood that, upon DEQ's approval of the Assignment of the Fisher Permit to Oilfield, Oilfield was assuming responsibility for all outstanding permit and site issues, along with responsibility for compliance with all terms of the Fisher Permit, including all provisions

of Fisher's Plan of Operation. Owen Aff. ¶ 14, *citing* Oilfield's Assignment Application, Exhibit DEQ-E, at [1].

12. Oilfield's Assignment Application included a Reclamation Bond Spreadsheet dated February 4, 2012, which provided for the replacement of twelve inches (12") of soil and eighteen inches (18") of overburden in the mine-level area in connection with the reclamation of the Site. Owen Aff. ¶ 15, *citing* Oilfield's Application Assignment, Exhibit DEQ-E, at [3].

13. On May 2, 2012, DEQ approved Oilfield's Assignment Application, based on the information contained in Oilfield's application, and allowed the Fisher Permit to be assigned to Oilfield as Opencut Permit No. 2277 (the Oilfield Permit). Owen Aff. ¶ 16, *citing* Oilfield Permit, Exhibit DEQ-F.

14. The Oilfield Permit incorporated Oilfield's Assignment Application by reference. Owen Aff. ¶ 17, *citing* Oilfield Permit, Exhibit DEQ-F, at ¶¶ 1; 7.

15. Upon DEQ's approval of the Assignment Application and issuance of the Oilfield Permit, Oilfield assumed responsibility for all outstanding permit and site issues and for compliance with all provisions of Fisher's Plan of Operation, which in turn required that eighteen inches (18") of overburden and twelve inches (12") of soil be stripped, stockpiled, and replaced in the mine-level area in order to reclaim the Site. Owen Aff. ¶¶ 10; 14-17, *citing* Exhibits DEQ-C, Fisher Permit at ¶¶ 1; 3; DEQ-B, Fisher Application and Plan of Operation at 4; DEQ-E, Oilfield's Assignment Application at [1]; DEQ-F, Oilfield Permit at ¶¶ 1-7.

16. Oilfield did not, in connection with its Assignment Application, apply for any amendment or revision to Fisher's Plan of Operation. Owen Aff. ¶ 18.

17. Pursuant to Mont. Code Ann. § 82-4-434(5)(a), the Oilfield Permit provided that Oilfield could apply for a permit amendment at any time. Owen Aff. ¶ 19, *citing* Exhibit DEQ-F, Oilfield Permit, at ¶ 9.

18. Oilfield mined 1,674 cubic yards of opencut materials from the Site under the Oilfield Permit in 2012. Owen Aff. ¶ 20, citing Exhibit DEQ-G, Oilfield 2012 Annual Progress Report, referencing Oilfield Permit No. 2277.

19. Oilfield's right to mine the Site was revoked effective September 11, 2015. Owen Aff. ¶ 21, *citing* Exhibit DEQ-H, March 16, 2016 Letter from Kevin and Kim Opsahl to DEQ and Oilfield.

20. As a consequence of the revocation of Oilfield's right to mine the Site, Oilfield was required pursuant to ARM 17.24.219(1)(i)(i) to have completed reclamation by September 11, 2016. Owen Aff. ¶ 22, *citing* Exhibit DEQ-F, Oilfield Permit, ¶ 7.

21. At no time prior to September 2, 2016 did Oilfield notify DEQ that Oilfield believed there was not sufficient overburden in the permit area at the Site to complete reclamation as required by the Oilfield Permit. Owen Aff. ¶ 23, *citing* Exhibit DEQ-I, Oilfield's September 13, 2017 Responses to DEQ's First Discovery Demands (Oilfield's Discovery Responses),

22. Oilfield did not gather and/or analyze any data relating to the amount of overburden at the Site until after mining had been conducted in the permit area. Owen

Aff. ¶ 24, *citing* DEQ Exhibit I, Oilfield Response No. 28 to DEQ's First Discovery Demands.

CONCLUSIONS OF LAW

A. Legal Authority

1. This matter is governed by the Opencut Mining Act (the Act), Mont. Code. Ann., Title 82, Chapter 4, part 4, and by the Montana Administrative Procedures Act (MAPA), Mont. Code Ann., Title 2, chapter 4, part 6, as well as by Montana Administrative Rule 17.4.101 which in turn incorporates the Attorney General's Model Rules for contested cases, Admin. R. Mont. 1.3.211 through 1.3.225.

2. "The Montana Rules of Civil Procedure do not apply to administrative hearings." *Citizens Awareness Network v. Mont. Bd. of Envt'l. Review*, 2010 MT 10, ¶ 20, 355 Mont. 60, 227 P.3d 583. However, "they may still serve as guidance for the agency and the parties." *Id*.

3. Under MAPA contested case, "all parties must be afforded an opportunity for hearing after reasonable notice." Mont. Code Ann. § 2-4-601(1). However, an evidentiary hearing is not required when there are no material facts in dispute. *In re Peila*, 249 Mont. 272, 281, 815 P.2d 139, 144-45 (1991). Where material facts are not in dispute, and a party has had reasonable opportunity to be heard, summary judgment is appropriate in a MAPA contested case. *Id*.

4. In determining this motion for summary judgment, the Board of Environmental Review (Board) must determine whether a "moving party demonstrates

both the absence of any genuine issues of material fact and entitlement to judgment as a matter of law. M. R. Civ. P. 56(c)(3)." *Sullivan v. Cherewick*, 2017 MT 38, ¶ 9, 368 Mont. 350, 391 P.3d 62 (internal citation omitted). "Once the moving party has met its burden, the opposing party must present material and substantial evidence to raise a genuine issue of material fact." *Id*. A party opposing summary judgment is entitled to all reasonable inferences from the offered evidence, but cannot rely on conclusory statements, speculative assertions or mere denials. *Id*.

5. Rule 56 of the Montana Rules of Civil Procedure provides at subsection (2) as follows:

> (2) Opposing Party's Obligation to Respond. When a motion for summary judgment is properly made and supported, an opposing party may not rely merely on allegations or denials in its own pleading; rather, its response must – by affidavits or as otherwise provided in this rule – set out specific facts showing a genuine issue for trial. If the opposing party does not so respond, summary judgment should, if appropriate, be entered against that party.

6. The Parties have received reasonable notice of the motion for summary judgment and dispositive arguments and have had a reasonable opportunity to respond and be heard.

7. While reasonable opportunity was afforded, Oilfield's response to summary judgment is entirely deficient. Oilfield's response is two pages long and cites no law. It also attaches emails that may or may not constitute inadmissible hearsay with no argument or explanation save on the cover page of the exhibits, which is neither a brief nor an exhibit.

8. DEQ's motion for summary judgment was properly made and supported by admissible evidence. As discussed further below, DEQ has submitted factual evidence and legal argument that its November 30, 2016, Administrative Compliance and Penalty Order should be affirmed, pursuant to Mont. Code Ann. § 82-4-441(5)(b). DEQ has therefore met its burden to show that there were no genuine issues of material fact and it was entitled to judgment as a matter of law. Oilfield failed to adequately respond to DEQ's well-supported motion for summary judgment and failed to produce affidavits, facts or legal authority supporting his response, as required by Mont. R. Civ. Proc. 56(2). Oilfield has therefore failed to meet his burden in response to DEQ's Summary Judgment Motion. DEQ's motion for summary judgment should therefore be granted pursuant to Mont. R. Civ. Proc. 56(2), "if appropriate." As explained below, it is appropriate to grant DEQ's Motion.

9. Oilfield does not dispute any of the facts found above. Oilfield SDF p. 1 (Jan. 2, 2018.). There are, therefore, no genuine issues of material fact and summary judgment is appropriate.

B. Permit and Reclamation Requirements

10. Under the Act, a permit is required to conduct opencut mining operations and a permit requires and incorporates a Plan of Operation. A plan of operation must provide that the affected land will be reclaimed and that reclamation will be to a productive use, which includes provisions relating to soil and overburden. Mont. Code Ann. §§ 82-4-431(1), 82-4-432(2)(c), 82-4-434(2), (3)(c).

11. Regarding the statutory requirement that "soil and other suitable overburden will be salvaged and replaced on affected land," the implementing regulations require the plan of operation to have "[t]he depth of soil and other suitable overburden to be placed on the reclaimed area specified in the plan." Mont. Code Ann. § 82-4-434(3)(c).

12. The law requires opencut operators to comply with the terms of their permits, this includes terms of their plan of operation, including reclamation conditions. Mont. Admin. R. 17.24.225.

13. In 2012, Oilfield sought and received approval for an assignment of Fisher's permit. DEQ SUF ¶¶ 10-13. Oilfield therefore assumed responsibility for all outstanding permit and site issues, along with the responsibility to comply with all terms and conditions of the permit, including Fisher's plan of operation. DEQ SUF ¶ 11.

14. The amount of overburden required was clearly stated in the plan of operation and thus the permit. DEQ SUF ¶ 15. It was clear that 12" of soil and 18" of overburden would be required for reclamation. *Id*.

15. Oilfield now contends that the overburden requirement of 18 inches, as stated in the permit, was/is an "error" and that Oilfield should therefore not have to comply with that requirement. Rather, Oilfield argues, it should be able to address the error in this administrative procedure. Oilfield admits it should have noticed the "error" but failed to do so until after the administrative time frame to correct the "error" had elapsed. Oilfield Resp. p. 2 (Jan. 2, 2018).

16. Pursuant to Mont. Code Ann. § 82-4-432(3), prior to applying for the permit Oilfield could have notified DEQ of its intention to submit an application and requested DEQ examine the area to be mined in order to make recommendations regarding the proposed opencut operation. Oilfield could have then requested a meeting with DEQ in order to address its concerns regarding the required amount of overburden. Additionally, after the permitting process had completed, under Mont. Code Ann. § 82-4-432(11), Oilfield could have submitted an amendment to the application, allowing DEQ to review the amendment and correct any "error". Oilfield exercised neither remedy.

17. Oilfield had two administrative remedies that it could have utilized to challenge the overburden conditions listed in the Fisher permit before it took over the permit and after it had completed the application process. Oilfield exercised neither remedy and instead chose to challenge the administrative penalty order DEQ issued after it found Oilfield in violation of the Opencut Mining Act.

18. Oilfield asserts that, "[o]ilfield presents a very unique situation where there is contemporaneous, clear, and un-controverted evidence regarding pre-mining conditions. In these rare occurrences the Department 'should' re-evaluate its requirements, and when it doesn't, the Board has the right to re-evaluate the situation and modify the Department's Order…" Oilfield Resp. p. 2. Oilfield however cites no legal authority which would allow the board to "re-evaluate" its particular situation and modify the permit outside of the amendment or original permitting activities, as discussed above.

To the contrary, Mont. Code Ann. § 82-4-441(5)(b) indicates the board shall affirm, modify, or rescind the order.

19. Oilfield does not disagree that it could have challenged the overburden, but instead states it "should" have noticed the "error" but did not until the applicable time frame to correct its error had elapsed. This is insufficient and unpersuasive as a legal theory and does not overcome DEQ's well-supported arguments that it is entitled to judgment as a matter of law.

CONCLUSION

There are no genuine issues of material fact, and DEQ is entitled to judgment as a matter of law. Oilfield has provided no law or authority to suggest that the BER can modify the terms of a permit. To the contrary, Mont. Code Ann. § 82-4-441(5)(b) is clear that the BER's jurisdiction lies solely in affirming, modifying, or rescinding an Order issued under Mont. Code Ann. § 82-4-441(5)(a).

RECOMMENDED ORDER

For the reasons set forth below, the undersigned RECOMMENDS to the Board of Environmental review that DEQ's motion for summary judgment be granted in full and DEQ's November 30, 2016 Administrative Compliance and Penalty Order be affirmed, pursuant to Mont. Code Ann. § 82-4-441(5)(b).

DATED this 20th day of February, 2018.

/s/ SARAH CLERGET

Sarah Clerget
Hearing Examiner
Agency Legal Services Bureau
1712 Ninth Avenue
P.O. Box 201440
Helena, MT 59620-1440

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and accurate copy of the Proposed Findings of Fact and Conclusions of Law and Recommended Order Granting DEQ's Motion for Summary Judgment to be mailed to:

Lindsay Ford
Secretary, Board of Environmental Review
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
Lindsay.Ford@mt.gov

Mark Lucas
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Mark.Lucas@mt.gov

John Arrigo, Division Administrator
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
jarrigo@mt.gov

Michael Kakuk
Kakuk Law Offices, P.C.
1717 Harrison Avenue
Helena, MT 59601
info@kakuk.com

Robert C. Griffin
Crowley Fleck PLLP
500 Transwestern Plaza II
490 North 31st St.
P.O. Box 2529
Billings, MT 59103
rgriffin@crowleyfleck.com

Greg F. Dorrington
Crowley Fleck PLLP
900 North Last Chance Gulch, Suite 200
P.O. Box 3389
Helena, MT 59624-3389
gdorrington@crowleyfleck.com

DATED: 2/20/18 /s/Aleisha Solem

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF: **APPEAL DOCKET NO. OC-16-12 (FID2506)** **REDSTONE, MONTANA**	**CASE NO. BER 2016-11 OC**

ORDER ON EXCEPTIONS AND NOTICE OF SUBMITTAL

On February 20, 2018, the undersigned issued *Proposed Findings of Fact and Conclusions of Law and Recommended Order Granting DEQ's Motion for Summary Judgment*. The Order has been served on the parties. Mont. Code Ann. § 2-4-621 affords "each party adversely affected to file exception and present briefs and oral argument to the officials who are to render the decision." *See* Mont. Admin. R. 1.3.223(1).

Mont. Code Ann. § 2-4-621(3) provides:

> The agency may adopt the proposal for decision as the agency's final order. The agency in its final order may reject or modify the conclusions of law and interpretation of administrative rules in the proposal for decision but may not reject or modify the findings of fact unless the agency first determines from a review of the complete record and states with particularity in the order that the findings of fact were not based upon competent substantial evidence or that the proceedings on which the findings were based did not comply with essential requirements of law. The agency may accept or reduce the recommended penalty in a proposal for decision but may not increase it without a review of the complete record.

The Hearing Examiner's Proposed Order is now before the Board of Environmental Review (BER), which constitutes the "officials who are to render the decision." Mont. Admin. R. 1.3.223(1). The parties therefore have the opportunity to submit exceptions and make oral arguments before the BER concerning the Hearing Examiner's order. Based on the proposed order, any exceptions, and any oral arguments presented, the BER will decide on the final agency action pursuant to the options stated in Mont. Code Ann. § 2-4-621 at its next scheduled meeting.

IT IS ORDERED:

1. Any party adversely affected by the Hearing Examiner's Proposed Order will have until **March 8, 2018**, to file exceptions to the Proposed Order. If no party files exceptions this matter will be deemed submitted.

2. The parties will have until **March 15, 2018**, to file response briefs. If no party files a response brief, this matter will be deemed submitted.

3. Parties have until **March 22, 2018**, to file reply briefs.

4. This matter will be submitted for final agency action and placed on the **April 6, 2018**, agenda of the BER as an action item. The parties may present oral argument in person in front of the board at the April 6, 2018 meeting, or submit written statements in lieu of appearing and arguing in person. If a party chooses to submit a written statement rather than appear, it must be filed no later than **March 29, 2018**. Failing to appear in person or file a written statement will be deemed a waiver of the party's right to oral argument in front of the BER. The location, time, and agenda for the

BER meeting, as well as the materials available to the BER members for review, will be available on the BER's website http://deq.mt.gov/DEQAdmin/ber at least one week in advance of the BER meeting. The parties are encouraged to regularly check the Board's website for any additional updates on the meeting.

DATED this 22nd day of February, 2018.

/s/ SARAH CLERGET

Sarah Clerget
Hearing Examiner
Agency Legal Services Bureau
1712 Ninth Avenue
P.O. Box 201440
Helena, MT 59620-1440

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and accurate copy of the Order on Exceptions and Notice of Submittal to be mailed to:

Lindsay Ford
Secretary, Board of Environmental Review
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
Lindsay.Ford@mt.gov

Mark Lucas
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Mark.Lucas@mt.gov

John Arrigo, Division Administrator
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
jarrigo@mt.gov

Michael Kakuk
Kakuk Law Offices, P.C.
1717 Harrison Avenue
Helena, MT 59601
info@kakuk.com

Robert C. Griffin
Crowley Fleck PLLP
500 Transwestern Plaza II
490 North 31st St.
P.O. Box 2529
Billings, MT 59103
rgriffin@crowleyfleck.com

Greg F. Dorrington
Crowley Fleck PLLP
900 North Last Chance Gulch, Suite 200
P.O. Box 3389
Helena, MT 59624-3389
gdorrington@crowleyfleck.com

DATED: 2/22/18

/s/ Aleisha Solem
Paralegal/Investigator

A PETITION
TO THE MONTANA BOARD OF ENVIRONMENTAL REVIEW
FOR THE CONSIDERATION OF

The Gallatin River

AS AN OUTSTANDING RESOURCE WATER OF THE STATE OF MONTANA

By
Cottonwood Environmental Law Center
&
Gallatin Wildlife Association

1. Request

Pursuant to Mont. Code Ann. 75-5-316(3)(a), Cottonwood Environmental Law Center and the Gallatin Wildlife Association respectfully submit this petition for rulemaking. Cottonwood Environmental Law Center and the Gallatin Wildlife Association request that the Board of Environmental Review classify the section of the Gallatin River from the boundary of Yellowstone National Park to the confluence with Spanish Creek in Gallatin Canyon as an Outstanding Resource Water. Based on the relevant criteria found within the following pages, this section of the Gallatin River is an exceptional natural resource water deserving of Outstanding Resource Water ("ORW") status. Cottonwood Environmental Law Center and the Gallatin Wildlife Association request that, pursuant to Mont. Code Ann.75-5-316 the Montana Board of Environmental Review ("Board") accept and approve this nomination and recommend its findings to the Montana State Legislature ("Legislature") who might ultimately designate this section of the Gallatin River as an Outstanding Resource Water.

2. Petitioners

Cottonwood Environmental Law Center ("Cottonwood") is a conservation organization dedicated to protecting the people, forests, water and wildlife of the West. Located in Bozeman, Cottonwood maintains a committed membership of approximately 400 citizens. The members of Cottonwood use this section of the Gallatin River and its immediate area for hiking, camping, fishing, kayaking, canoeing, rafting, swimming, photography, scientific research, solitude, residence, family outings, and driving for pleasure, and other recreational and professional purposes.

The Gallatin Wildlife Association ("GWA") is a non-profit volunteer wildlife conservation organization made up of dedicated hunters, anglers and other wildlife advocates in Southwest Montana and elsewhere. Our mission is to protect habitat and conserve fish and wildlife for this and future generations. We support sustainable management of fish and wildlife populations through fair chase public hunting and fishing opportunities that will ensure these traditions are passed on for future generations to enjoy. We also support the Montana constitution which states: "the opportunity to harvest wild game is a heritage that shall forever be preserved" and that "the legislature shall provide adequate remedies to prevent unreasonable depletion of natural resources."

The long term protection of the water quality of the Gallatin River is important to Cottonwood and GWA's members, as well as local businesses, ranchers, landowners, recreationists, the citizens of Montana, and the Nation because it possesses outstanding recreational, ecological, and economic significance. The value of the Gallatin River to Montana citizens and tourists alike is exemplified by more than the 1,500 individuals and business owners that signed the petition (bit.ly/ProtectTheGallatin) supporting designating the Gallatin as an ORW. The information in this petition demonstrates the outstanding values of the Gallatin River. It also shows the appropriateness and need for the ORW designation.

Cottonwood and GWA have updated and refiled the petition initially filed in 2001 by American Wildlands. That petition was signed by more than 2,000 individuals, 75 businesses, and 21 conservation groups. Over the span of the following six years, an EIS was completed, but a Record of Decision was never issued. Cottonwood and GWA request that the Board now adopt the EIS Pursuant to the Administrative Rules of Montana (17.4.625) and issue a Record of Decision.

3. Legal Foundation

Citizens have the power to petition this Board for rulemaking to classify waters as outstanding resource waters (ORW). Mont. Code Ann. 75-5-316(3)(a). Cottonwood Environmental Law Center, the Gallatin Wildlife Asscition, our respective members and the above mentioned individuals, businesses and conservation groups ask that the Board designate the section of the Gallatin River, from the border of Yellowstone National Park to the confluence with Spanish Creek, as an Outstanding Resource Water (ORW) based on the criteria provided in this petition, as required by MCA 75-5-316(3)(a). Classification of this section of the Gallatin River as an ORW is necessary to protect the outstanding resources of the water body and there is no other effective process available that will achieve the necessary protection (please see below for a more detailed discussion on the necessity and lack of other effective processes). *See also MCA 75-5-316(3)(c).* Finally, as discussed in detail below, the Gallatin River satisfies the designation criteria.

4. Location

The Gallatin River originates above 9,500 feet as a very cold mountain stream in Gallatin Lake in Yellowstone National Park (YNP). Just outside of the YNP boundary, Bacon Rind Creek joins the Gallatin from the west. Bacon Rind Creek, along with Fan and Divide Creeks just within the Park boundary, more than double the flow of the Gallatin River and quickly make it into a mountain trout stream.[1]

The Gallatin then flows north through a pastoral valley for many miles and into the picturesque Gallatin Canyon, past Gallatin Gateway, Belgrade and Three Forks, and into the Missouri River. The portion of the Gallatin River in Yellowstone National Park is currently an Outstanding Resource Water (ORW). Mont. Code Ann. 75-5-103(20)(a). Cottonwood and GWA request ORW status for the segment of the Gallatin River from the boarder of Yellowstone National Park through the Gallatin Canyon to the confluence of Spanish Creek.

This segment of the Gallatin River flows through federal and private lands. The Gallatin National Forest is located on both sides of the River, interspersed with private lands. In several places private land occupies one side of the river, with Gallatin National Forest land on the other side. While the Gallatin River does not flow through any wilderness areas, the Lee Metcalf Wilderness Area and the Hylite-Porcupine Wilderness Study Area, are nearby.

5. Basis For ORW Designation

In Montana, outstanding resource waters are state waters that have been identified as possessing outstanding ecological "significance and subsequently have been classified as an ORW by the board" and approved by the legislature. ARM 17.30.702(18); 75-5-103(20)(b), MCA. The Montana Water Quality Act provides for the ORW designation process. First, the board shall initially review a petition using the criteria specified in the subsection 3(c) to determine whether the petition contains sufficient credible information for the board to accept the petition. MCA 75-5-316(a).

Listing Criteria

Subsection 3(c) contains three parts. Part one of subsection 3(c) provides that the board shall consider the following criteria in determining whether certain state waters are outstanding resource waters:

a. whether the waters have been designated as wild and scenic:
b. the presence of endangered or threatened species in the waters:
c. the presence of an outstanding recreational fishery in the waters;

[1] Yellowstone National Park website: http://www.yellowstonenationalpark.com/gallatinriver.htm

d. whether the waters provide the only source of suitable water for a municipality or industry;
e. whether the waters provide the only source of suitable water for domestic water supply; and
f. other factors that indicate outstanding environmental or economic values not specifically mentioned in this subsection (4).

Mont. Code Ann. 75-5-316(4).

Parts two and three of subsection 3(c) provide that the board may not adopt a rule classifying state waters as outstanding resource waters until it accepts a petition and finds that, based on a preponderance of the evidence: the classification is necessary to protect the outstanding resource identified under subsection 3(a) and there are no other effective processes available that will achieve the necessary protection. MCA 75-5-316(c)(ii-iii). (These two parts are addressed later in this petition).

The criteria listed above are simply the criteria the board shall consider when making their determination. There is **no** requirement that a water body must meet or contain one or all of these criteria to be designated as an ORW and the last criteria in reality captures all other relevant information. The Gallatin River clearly meets several of these criteria, detailed below, and possesses many additional environmental and economic values. These demonstrate that the Gallatin River is a river of outstanding ecological, recreational, and economic significance, and therefore should be classified as an ORW by the board.

The portion of the Gallatin River petitioned here is a clear, cold river, flowing out of Yellowstone National Park, through the scenic Gallatin Canyon. The river corridor provides habitat for many native aquatic species, including the sensitive westslope cutthroat trout, wildlife, birds, and plants.[2] The Gallatin provides significant recreational opportunities for locals and tourists/ visitors alike, which in turn provides significant social and economic benefits to the state, and local communities. In addition, the Gallatin River provides downstream landowners and ranchers with clean, clear water. Below is a more detailed discussion of the reasons the Gallatin River is of outstanding recreational, economic, and ecological significance and should therefore be designated as an ORW.

---

[2] Westslope cutthroat trout were listed as a "sensitive" species for the Custer Gallatin National forest in 2011. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5366363.pdf
A "sensitive species" is one whose "population viability is a concern, as evidenced by: a) significant current or predicted downward trends in population numbers or density or, b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution."

6. Wild and Scenic River Designation

The first criterion for the board to consider is whether the Gallatin River has been designated as wild and scenic. The Gallatin River is not designated as a wild and scenic river under the Wild and Scenic Rivers Act of 1968 (PL 90-542). However, the Proposed Action-Revised Forest Plan for the Custer Gallatin National Forest (January 2018) identifies the Gallatin River as eligible for designation as a wild and scenic river. To be eligible for designation, a river must be free-flowing and, with its adjacent land area, must possess one or more "outstandingly remarkable" values. Examples of such values include scenic, geologic, historic, cultural, ecologic, or fish and wildlife habitat values. (Gallatin National Forest, Forest Plan, p. J-1).

The currently proposed Forest Plan finds that the Gallatin possesses several of these outstandingly remarkable values. When developing the Gallatin Forest Plan, the Forest Service completed an analysis which identified river segments within the Gallatin National Forest having "outstandingly remarkable" values as described in the Wild and Scenic Rivers Act. "The outstandingly remarkable values of the Gallatin river were its scenic, recreation and fisheries values." (Gallatin National Forest, Forest Plan, p. J-3.)

Eligible river segments are assigned a potential classification of wild, scenic or recreational. The Gallatin was determined as a potential recreational river. In finding that the Gallatin River has potential for classification as a recreational river under the Wild and Scenic Rivers Act, the Forest Plan states:

> The river segment begins at the National Forest boundary and extends upstream to the Yellowstone National Park boundary. The river is very popular for a variety of recreational activities including white water rafting and kayaking, fishing, and hiking. The Gallatin River fishery is nationally known. The scenic backdrop of the river is the Madison and the Gallatin Ranges which range from steep cliffs, to broad tree covered mountain sides and to snow capped peaks. The views of the river from the highway which parallels the entire segment are very scenic. The route is a main access route to Yellowstone National Park. The channel is largely unchanged by man's activities however there is some evidence of rip rapping and some minor diversion structures. A portion of National Forest lands have been developed for recreational use and there is development on private lands. For these reasons, the river was potentially classified a Recreational River.

According to the current Forest Plan, Recreational rivers are "those rivers or sections of rivers that are readily accessible by roads, have some development along their shorelines and may have some history of impoundment or diversion" (Forest Plan, p. J-1). The forest plan goes on to say, "the outstandingly remarkable values of the Gallatin River were its scenic, recreation and fisheries values." (Forest Plan, p. J-4.)

The next step in the wild and scenic designation process is a suitability study. The Forest Plan states that a separate suitability study will be completed for each eligible river segment at a later date. (Forest Plan J-3). However, this suitability study has not yet been initiated, shows no signs of occurring during the ongoing Forest Plan Revision Process.

The Gallatin River is recognized as containing outstandingly remarkable scenic, recreation and fisheries values, and is seemingly eligible for federal Wild and Scenic listing. The determination of outstandingly remarkable values for wild and scenic designation are similar to the outstanding ecological significance values for ORW designation, where fisheries, scenic, and recreation values are all taken into consideration. The eligibility of the Gallatin as a Wild and Scenic River, lends weight and credibility to its eligibility as an ORW.

7. Outstanding Recreational Fishery

Another criteria the board shall consider is the presence of an outstanding recreational fishery. As mentioned above, the Gallatin River was determined to contain outstanding and remarkable fisheries values. The Gallatin River supports an outstanding recreational fishery in its waters. The scenic, water quality, and fisheries values of the Gallatin River draws anglers from around the state, the Nation, and the world. This recreational fishery provides opportunities for anglers of all ages and skill levels, and provides significant social and economic benefits to the State, and local communities.

The Gallatin is classified as a "Blue Ribbon" stream of national significance, and was listed initially in 1999 in Trout Unlimited's Guide to America's 100 Best Trout Streams ("Guide") (Ross 2013). According to the Guide, the Gallatin River "holds something for anglers of all skill levels, from the greenest novice who's yet to wet a wader, to the grizzled pro who's been there and done that and plans to keep doing it forever."

The Environmental Impact Statement for the Gallatin Forest Plan states that fishing on the Gallatin National Forest is of national interest, and that the Gallatin river is one of three "blue ribbon" trout streams on the Forest of national significance (The other two are the Madison and Yellowstone Rivers). Forest Plan EIS III-33.

The outstanding recreational fisheries value of the Gallatin has been well known for decades, and its popularity is continually growing. According to the Pacific Northwest Rivers Study conducted in 1988, high sport fishery values dominated the fishery assessment in the Gallatin River drainage. Eighty-five miles of the Gallatin and its two forks received a Class I or II sport fishery value. The 30-mile stretch of the Gallatin from the West Fork to Gallatin Gateway received a Class I (Outstanding) rating in sport fishery value. This stretch incorporates a portion of the segment within Gallatin Canyon being petitioned here for ORW designation. A Class I rating signifies that fish production is based on natural reproduction and trout are abundant. The rest of the reach within the Gallatin Canyon was rated as Class II (Substantial). (Graham 1988)

Fishing along the Gallatin River has increased in the past few decades. An assessment in the late 90's found, for the reach between the West Fork of the Gallatin and Spanish Creek, all of which is within the stretch proposed for ORW designation, a trout biomass of 275 pounds per 1,000 feet with 1,013 fishing days/year/mile. (Long Term Compliance Work Plan for Wastewater Treatment and Disposal, Big Sky, Montana, HKM Engineering p. 38 (hereinafter HKM Report)). This report found that fishing pressure for Spanish Creek to the headwaters was 21,745 angler days in 1997. Fishing pressure for this study was calculated for the entire reach, so that number includes some pressure in Yellowstone National Park. (HKM Report).

Two Gallatin River use surveys were completed for the Gallatin National Forest to address Gallatin River use and to be used for future management of the Gallatin River. One survey, entitled "A Survey of Gallatin River Users" (hereinafter "1997 Survey"), was completed in 1997 to collect information on Gallatin River user demographics and views associated with use conditions. This survey was a coordinated effort between Montana Department of Fish, Wildlife and Parks and the Gallatin National Forest. The second survey is discussed in the next section. The 1997 Survey reach extends from the Squaw Creek bridge upstream to where the West Fork of the Gallatin River enters the mainstem Gallatin River. (May 1997). This reach is completely within the stretch being petitioned for Outstanding Resource Water designation. According to the 1997 Survey, this reach of river accommodates a significant amount of angler use and nearly all floating use that occurs on the river. Also, in recent years, rafting of river sections upstream of the West Fork has increased. The 1997 Survey includes information developed for the "Know Your Watershed: Gallatin Workshop" (Stroock 1997) which:

> indicated that fishing use of the entire Gallatin River increased by an estimated 58% between 1968 and 1995. Angling use was estimated at 42,485 angler days in 1968 and was 67,422 angler days in 1995. Within the Gallatin canyon, angler use has been approximately 30-40% of the total river use. In 1995, use within the Gallatin canyon was estimated at 20,069 angler days. During this same time period the demographics of anglers also changed substantially. In 1968, resident anglers (e.g. estimated at approximately 70%) were the dominant angling public using the Gallatin River. By 1995, nonresidents accounted for nearly 65% of the anglers using the river. The economic impact of these levels of angling use was viewed as significant (i.e. estimated at $5.9 million in 1995; Stroock, 1997).

Of the anglers interviewed for this survey, the majority were from outside Montana. A substantial portion (77%) indicated that the Gallatin River was a target destination, and most (62%) had visited the river before. (May 1997).

The 1997 Survey asked participants to identify factors that had a positive influence on their river use. "[A]pproximately 50% referred to various aspects of the scenery of the area as being important. A relatively large number referred to the quality of the fishing experience (e.g. size of

fish, number of fish, type of fishing, etc.) as a positive factor. River beauty and river conditions (e.g. clarity, flows, habitat quality, etc.) were also identified as positive factors." (May 1997)

The Montana Statewide Angling Pressure report of 2005 found that the Gallatin received 87,285 angler days. This report covers the entirety of the river, from its source in Yellowstone National Park to Three Forks. The same report, for 2013, showed that the Gallatin received over 65,000 more angler days than in 2005, with a total of 153,076. Pressure on this resource is steadily increasing and the river deserves every protection possible to keep it an enjoyable experience for everyone.

The petitioned stretch of the Gallatin River contains an outstanding recreational fishery of national significance, which provides benefits to locals and visitors alike. The Gallatin Rivers outstanding recreational fishery provides significant ecological, social, recreational and economic benefits to the state, and more specifically the surrounding communities. ORW designation will ensure that this outstanding recreational fishery will thrive for today and into the future.

8. Other Factors that Indicate Outstanding Environmental or Economic Values

The board must also look at other factors that indicate outstanding environmental or economic values. The Gallatin River is outstanding not only as a recreational fishery but for other ecological and economic values. The clean, clear waters of the Gallatin River provide recreational, aesthetic and spiritual benefits to thousands of people each year, residents and visitors alike. The use of the Gallatin River for recreational purposes is of outstanding economic value to the state and local economies. According to the Gallatin Watershed Sourcebook and the two surveys mentioned above, demand for waters to provide recreation, as well as other uses of the water resource, is rising. This section will include a discussion of the different uses people make of the Gallatin River, such as fishing, rafting, kayaking, and other recreational pursuits, the demographics of Gallatin River users, and how they feel about their experiences on the river.
In addition to recreational values, the Gallatin River contains outstanding ecological values. Native fish, birds and wildlife depend on the Gallatin River for habitat needs. There are unique springs that feed the Gallatin River and keep portions of it ice-free throughout the winter. These ecological values will be examined in more detail below.

It is important to note that in addition to the ecological, economic and recreational benefits within the area proposed for ORW designation, downstream users and landowners benefit from the clean water flowing out of the canyon and into lowland areas that are used for agriculture and ranching, fishing, hunting, wildlife viewing, and birding.

The ecological, recreational, and economic values of the River are inextricably linked. High quality ecological values provide exceptional recreational opportunities, which benefit the state and local economy. Clean water is important to support the numerous landowners, ranchers, fish,

wildlife and birds that live along and depend on the river. Healthy wildlife and bird populations provide additional recreational opportunities and economic benefits.

Recreational and Economic Values

Recreation services contribute significantly to the Gallatin Valley's economy. In the early to mid-1990's it was estimated that recreation services employed over 500 persons at an annual payroll of 5 million dollars. "Flyfishing guides, rafting outfitters, innkeepers and sporting goods dealers are just a few of those directly employed in providing recreational services in the area." (Forrest 1997). These numbers have continued to grow substantially. The portion of the Gallatin River being petitioned for ORW designation is the source of commercial rafting adventures and commercial fly-fishing operations. The Gallatin is also important for other recreational activities.

The 1997 Gallatin River User Survey interviewed 426 river users during the summer (May) of 1997. This survey demonstrates that the Gallatin River is a specific destination for recreationists, that it is used for a variety of recreational activities, and that users will likely return to experience the Gallatin River in the future. The majority (69%) of people interviewed for the 1997 Survey were from outside of Montana compared with 31% of individuals from Montana. Seventy of the individuals interviewed resided in the Gallatin Valley or the Gallatin Canyon. Some of those from outside Montana were from foreign countries such as Germany, Canada, Belgium, Denmark and Norway. 76% of those surveyed indicated that the Gallatin River was a specific destination, and over half had visited the Gallatin River before. 62% of anglers and 53% of floaters indicated that they were on a repeat visit.

> When asked about the primary nature of their river use, most (57%) indicated that fishing was the principle reason for being on the Gallatin River. Montana anglers comprised 33% of anglers interviewed. This was followed by individuals which had come to use the river for floating (34%). Montana residents also comprised 33% of floaters interviewed. Forty respondents (9%) indicated that they were using the river for other activities which included sight-seeing, photography, picnicking, painting and general enjoyment of nature. (May 1997).

White-water boating has increased substantially on the Gallatin River. The 1997 Survey found that white-water floating on the Gallatin River has increased substantially over the last two decades. In 1980, the first commercial rafting company began providing tours on the river with a volume of rafting use estimated at 300 rafter days. Through the 1980's, commercial rafting use increased substantially to an estimated level of 3,900 rafter days in 1990. (May 1997). Today there are four companies operating raft trips on the river and "commercial rafting use on the Gallatin River has grown at the explosive rate of 5,500% over the last 17 years. Gross value of the 1997 use was approximately $750,000 (Stroock, 1997).

> The Gallatin River springs from the snow-clad peaks of the Madison and Gallatin mountain ranges and courses for more than 90 miles before joining the Madison and Jefferson rivers at Three Forks. The Gallatin comes close to being an alpine stream as it spills through the scenic Gallatin Canyon, where frequent rapids alternative with deep, green pools alive with trout.
> The upper 40 miles of the Gallatin River contain some of Montana's very finest whitewater with an abundance of technical rapids, tight turns, big rocks, and large waves. While much of Montana's whitewater consists of large drops separated by long stretches of flat water, the Gallatin distinguishes itself with its quantity of whitewater as well as its quality. Some stretches have nearly continuous action. Almost all of the Gallatin's whitewater is easily accessible as the river flows mostly through public land and generally runs close to U.S. Highway 191. Even though the Gallatin is a small river, it can sustain good boating well into the summer. (Fischer 1999).

Gallatin River users appreciate its spectacular scenery and river conditions. The 1997 Survey found that Gallatin canyon scenery was identified by the largest number of respondents as the single most important positive factor influencing their use of the Gallatin River. This was followed by positive comments associated with the river and river conditions (e.g. water clarity, white-water conditions, river beauty, etc.). Other positive factors included accessibility of the river and user facilities, commercial services, and the association with friends, family and acquaintances. Negative factors included the highway and associated traffic. There were both positive and negative comments associated with the amount and nature of development within Gallatin canyon.

Of floaters interviewed for the 1997 Survey (144), the majority were from outside Montana, and a substantial portion of the floaters (118) indicated that the Gallatin River was a target destination. The majority of floaters (62%) indicated that they were using the services of a commercial guide, and a majority of floaters (53%) indicated that they had visited the Gallatin River before. Factors that had a positive influence on their river use included commercial services and access as well as scenery and river conditions. In general, floaters did not view general river use levels as being undesirable.

The 1997 Survey also interviewed some river users not associated with angling or floating. "These users were drawn to the Gallatin River because of the areas beauty. Most were nonresidents traveling through the area. Approximately 37% had visited the Gallatin River canyon before."

In 1999, Ripple Marketing LLP, at the request of the Gallatin National Forest, collected data from various Gallatin River users and created a report summarizing the findings and gave recommendations. The purpose of the study was to better understand the activities, behavior and perceptions of those people that use the Gallatin River, and the area around it, for recreation. The

study was limited to the 11 mile stretch of the Gallatin River between Big Sky and Squaw (Storm Castle) Creek, all of which is within the area petitioned for designation as an Outstanding Resource Water. The results of this survey are similar to the 1997 Survey results, and shows significant use and appreciation of the river for recreational purposes.

The Ripple Marketing Survey (hereinafter "1999 Survey") interviewed 100 people in the summer of 1999 (41 anglers, 38 rafters, 8 kayakers, 4 sightseers, and 9 other). Of those interviewed, 64% were from out of state and 36% were from Montana. Of the in-state respondents, 56% were from Bozeman and 44% from 11 other cities. The out-of-state respondents represented 28 different states and 2 different European countries. (1999 Survey). Of the respondents, 41% were first time Gallatin River users; of these, 98% were from out of state. 28% of respondents have been using the Gallatin River for over 9 years, and 64% of these were from Montana. Of these long-time users, 11% fish, 17% raft, 22% kayak and 50% use the river for different activities such as swimming, sightseeing, hiking, etc. Of the other users, 6% have used the Gallatin for 6-9 years, 8% for 3-6 years, and 17% for 1-3 years. "Of those that have been using the Gallatin River for 1-3 years, 47% were from Montana and 53% were from out-of-state. There were nearly the same number of anglers and rafters from both in and out of the state in this category." (1999 Survey).

According to this study, the vast majority of Gallatin River users would revisit the Gallatin River for recreational use. 72% of Montana residents surveyed said that it is "Very Likely" that they will revisit the Gallatin for recreation. 61% of out-of-state visitors and 43% of out-of-state first time visitors also indicated that it is "Very Likely" that they will revisit for recreation. (Id.) One issue that arose in the 1999 Survey is the threat of Big Sky's proposed sewage disposal into the Gallatin River. The substantial number of comments in the 1999 Survey and to the DEQ during the permit comment period against the proposed discharge shows a significant interest in and support for protecting the River's high water quality. The dischargee issued was resolved for the better part of a decade, but it of growing concern again today.

Although many in Big Sky do not want to directly discharge their effluent into the Gallatin River, without the protection of the ORW Designation, the potential for direct discharge will always be a threat to the health of the river, its resident species and the economies that depend on a healthy and clean Gallatin. The ORW designation will ensure the character of the Gallatin is protected for future generations.

The pristine character of the Gallatin River made it a logical choice for filming many of the river scenes in the movie "A River Runs Through It." The Gallatin River was used in the movie because the Blackfoot River, about which the book and movie was based, is not nearly as scenic as the Gallatin. There was also the issue of pollution that plagued the Blackfoot until the past decade.

The Gallatin Whitewater Festival is an annual event on the Gallatin River. It is an annual gathering of kayak and canoe enthusiasts, who compete in a series of recreational and

competitive river events for all abilities. The event has been a river runner's tradition since 1977, and draws boaters, recreationists, and spectators from around the region. The event also draws a number of spectators who come to watch the slalom, rodeo and downriver whitewater events.

The Wave Train kayak program uses the Gallatin River to teach local children how to kayak and safely appreciate the water. Wave Train is also one of the sponsors and organizers of the Gallatin Whitewater Festival. Wave Train provides a team learning environment for local children through the age of 18. It is in its fifth year, and there are currently about 20 kids in the program, which utilizes the Gallatin River to teach kayak technique and safety.

Ecological Values

This portion of the Gallatin River is also special ecologically. The river corridor is home to a wide diversity of fish, bird, wildlife and plant species including threatened and endangered species such as wolf, grizzly bear, lynx, and bald eagle. There is a known wolf pack inhabiting the Gallatin Canyon within the area of the petitioned river section. Grizzly bear inhabit the Gallatin and Madison Mountain ranges on either side of the Gallatin River, and the upper portion of the petitioned river section is within the Greater Yellowstone core grizzly bear recovery area. Bald eagles often forage in the Gallatin Canyon.

Peregrine falcon, an endangered species, nest in and around the Gallatin Canyon, in the Gallatin River corridor. There has been an active peregrine falcon eyrie since 1994 near the confluence of the Gallatin River with Squaw Creek. It fledged 2 baby peregrines in 1997, 1 in 1998 and 2 in 1999.

Other important species present in the Gallatin Canyon include slender Indian paintbrush, large leafed balsamroot, discoid goldenweed, boreal owl, golden eagle, wolverine, bighorn sheep, moose, elk, and deer. (Montana Natural Heritage Program) The Gallatin Canyon is also home to the Gallatin Mountain snail. Slender Indian Paintbrush is a Forest Service sensitive species and a BLM watch species. It is located in wetlands along the Gallatin River and tributaries. According to the Gallatin National Forest, sensitive species are "those plant or animal species which are susceptible or vulnerable to activity impacts or habitat alterations" (Forest Plan FEIS VII-38).

The boreal toad and northern leopard frog are both Gallatin National Forest sensitive species that may be present in the Gallatin River corridor. (Bev Dixon, Biologist, Gallatin National Forest, personal communication 6/12/01). While their habitat is present in the wetlands and riparian areas along the Gallatin River, the presence of the northern leopard frog along the Gallatin River has not been confirmed. (Id.). The boreal toad has been documented as present along the petitioned section of the river. (Wally Mclure, Biologist, Gallatin National Forest, personal communication 6/12/01). These two species inhabit wetland or riparian areas, and both are considered "species of special concern" by the by the Montana Natural Heritage Program, Montana Fish Wildlife and Parks, and Montana American Fisheries Society. The term "species of special concern" includes taxa that are rare, endemic, disjunct, threatened or endangered

throughout their range or in Montana, vulnerable to extirpation from Montana, or in need of further research. The term also encompasses species that have a special designation by organizations or land management agencies in Montana, including: Bureau of Land Management Special Status and Watch species; U.S. Forest Service Sensitive and Watch species; and U.S. Fish and Wildlife Service Threatened, Endangered and Candidate species. (Montana Natural Heritage Program).

Riparian areas are important to the survival of many of the species present in the river corridor. According to the Gallatin Watershed Sourcebook:

> Riparian areas are the green areas adjacent to rivers and streams. Healthy riparian areas usually contain a swath of lush growth of water-adapted plants. Healthy riparian areas are the key to maintaining healthy stream systems. Streamside vegetation helps stabilize streambanks (reducing siltation and streambank movement), helps slow water during peak flows, provides important breeding habitat and cover for wildlife, keeps water cooler in the summer for fisheries, prevents ice damage in winter, and traps and filters runoff that may contain sediments or pollutants from adjacent lands. (Forrest 1997).

The Gallatin's riparian vegetation consists of cottonwoods with an understory of dogwood, willow, alder, snowberry, chokecherry and grasses. The Wolfs Willow, a Forest Service sensitive species is located in the riparian areas along the Gallatin River.

The upper section of the river, before it enters the canyon, "is much favored by animals, which do not interfere with the fishermen but do add interest to the landscape by creating a wilderness aspect even though the highway is right beside you." (Yellowstone National Park website). In the canyon section "there are mountain sheep on the mountains and the canyon walls above the river and in May and sometimes June the sheep will come down along the river, giving one a rare glimpse of these creatures of the high places. One can also encounter moose or elk anywhere on this stream" (Id.)

Highway 191, which parallels the Gallatin River for most of the stretch in the canyon, and development have impacted a significant amount of the Gallatin's riparian areas. The River is essential to the health of the stream and the fish, birds and wildlife that depend on its riparian areas to protect the remaining riparian areas from further loss.

The Gallatin River is a relatively pristine, nutrient poor water body with clear, cold water. Riparian areas help keep the Gallatin in this condition. The lake from where it originates and the characteristics of the watershed make the Gallatin River a cool stream that is stable in temperature, only moderately mineral rich and well supplied with oxygen. (Yellowstone National Park website).

Recreational Use

Recreational use of the Gallatin River has increased substantially over the past decade, and will continue to grow. (See Above). For many users, the Gallatin River is a specific destination, and visitors return to enjoy its spectacular scenery and recreational experiences. Numerous state and local businesses benefit from the recreational values of the Gallatin River including guide and recreation equipment businesses, restaurants, grocery stores, rental car agencies, travel agencies, hotels, airports, art galleries, and other retail businesses. ORW designation will not reduce the level of use of the Gallatin River. Instead, ORW designation will assure that the water quality of the Gallatin River remains high to support the expected levels of recreational use both within the designated section and downstream. This high quality water will continue to draw people to this beautiful canyon for its exceptional recreational experiences.

In addition, ORW designation will assure that the Gallatin River will continue to support the exceptional fish, wildlife, bird and plant species within the designated area and downstream. Whether appreciated for their ecological value, hunting, fishing, or viewing, these species make the Gallatin River and its surrounding area a special place appreciated by landowners and visitors.

9. The Classification Is Necessary to Protect the Resource and There Is No Other Effective Process Available That Will Achieve the Necessary Protection

According to the Outstanding Resource Water provision of the Montana Water Quality Act, the board may not adopt a rule classifying state waters as outstanding resource waters until it accepts a petition and finds that, based on a preponderance of the evidence, the classification is necessary to protect the outstanding resource and there is no other effective process available that will achieve the necessary protection. MCA 75-5- 316(3)(c)(ii-iii). The preponderance of evidence standard is a low threshold. This means that the weight supporting the petition is greater than the weight opposing it, or that what the petition promotes is more probable than not.

Outstanding Resource Water designation is necessary to protect outstanding ecological and economic values of the Gallatin River, and there is no other effective process available that will achieve the necessary protection. *Water quality laws are generally designed to be reactive, not preventative*. As a result, if someone wants a permit to degrade water quality they, more often than not, get that permit. Once water quality is degraded, other mechanisms, such as TMDLs, attempt to restore water quality. No other mechanism other than ORW designation will continuously protect the Gallatin's high quality waters from degradation.

ORW protection is the tool state and local governments can use to take this active role in defining the management of Montana's water: For the Gallatin River it is the only tool to employ. The quality of the Gallatin River experience today is outstanding. In order to keep it this way, it is necessary, to manage our behavior and plan for future needs. ORW designation is the

mechanism to ensure that the outstanding ecological, recreational and economic values of the Gallatin River are retained for our future. ***It is the only pro-active water quality protection tool provided by the Montana Water Quality Act.***

As explained above, the Gallatin River is a pristine, nutrient poor water body. The water is cold and clear, and landowners and river users appreciate it for this quality. However, land use activities on public and private lands and the substantial increase in development in the canyon has impacted the water quality of the Gallatin River by adding nutrients and sediments and impacting riparian areas. Tributary streams have been degraded and some are listed as impaired on the State's 303(d) list of impaired water bodies: Taylor Creek, the West Fork Gallatin River, the Middle Fork of the West Fork Gallatin River, and the South Fork of the West Fork Gallatin River. These tributaries bring pollutants into the Gallatin River. Absent the protections of an ORW designation, the Gallatin will be incrementally degraded by these and other causes. This has been the history of every main-stem waterbody in the state.

Many of the land management activities that have impacted the Gallatin River (and continue to do so) were done with little or no mitigation. To protect the River's water quality, it is necessary to ensure that all future development and land management activities in the Gallatin Canyon are done in a responsible manner. ORW designation will prohibit permanently degrading the water quality of the Gallatin River. For example, ORW designation may make it necessary for developers and land managers such as the Forest Service to implement improved conservation measures such as more advanced septic systems or larger stream buffers for logging activities. Such measures should be taken to preserve the ecological integrity and beauty of the Gallatin River for all users, including homeowners and visitors alike.

In many locations along the petitioned stretch of the Gallatin River, the water quality is at a level above the minimum allowed by state and federal law. ORW designation is necessary to keep the Gallatin's water quality at this higher than minimum level. Without ORW designation, activities may be permitted that would lower the water quality of the river to the minimum level allowable, and below.

Because the Gallatin is so cold and nutrient poor, a significant amount of pollutants, such as nutrients, could be added before reaching the allowable minimum level of water quality. Such changes will significantly alter the characteristics of the Gallatin River, reducing its clarity, increasing moss, algal and plant growth in the river, and changing the aquatic insect composition. No mechanism except ORW designation will protect this.

10. Gallatin River Reassessment

In some instances, the Gallatin River's water quality has declined, especially near highly developed areas such as Big Sky. The Gallatin River, from Spanish Creek to the Montana State border, which is the stretch being petitioned here, is listed on the state's waterbody reassessment schedule. This reassessment schedule was developed in conjunction with the 303(d) list of degraded waters. Reassessment waterbodies are those for which the state did not have sufficient credible data to support a listing, and will be monitored and assessed as soon as possible to determine whether it is a threatened or impaired water body. This section of the Gallatin River fortunately has not been on a 303(d) list since 1996.

If, during its usual monitoring and assessment of the Gallatin River, the DEQ finds that the Gallatin River is neither threatened nor impaired, then ORW designation will prevent the Gallatin River from ever becoming threatened or impaired - preventing its addition to the State's 303(d) list of impaired waters, and preventing the need to spend money to clean it up. ORW designation requires that the water quality of the river be maintained or protected. As explained previously, future activities that may lower the water quality of the designated section of the river would be modified or mitigated to ensure there is no permanent lowering of the water quality of the ORW.

The state already has over 900 waterbodies that are considered polluted and in need of clean-up plans (Total Maximum Daily Loads, or TMDLs). These waters do not support some or all of their designated uses, such as drinking water, agriculture, cold or warm water fishery, and primary or secondary recreation. The DEQ currently spends a significant amount of time and money developing clean-up plans for these streams. ORW designation will prevent this outstanding section of the Gallatin River from being added to this list.

If during its usual monitoring and assessment the state determines that portions of the Gallatin River are in fact threatened or impaired, the state must develop a TMDL for each pollutant. This must happen regardless of ORW designation. ORW designation will not affect the requirement to do a TMDL, nor will it affect the implementation of the TMDL, and it will not require the state to make the TMDL more restrictive, since the DEQ must ensure that, after implementation of the TMDL, the waterbody meets state water quality standards and supports beneficial uses. However, ORW designation will proactively insure that the Gallatin does not become impaired and necessitate listing and restoration.

ORW designation is economically and ecologically sensible because preventing harm is always of more economic and ecologically beneficial than reclaiming harm already done. Moreover, this

proactive approach is the only way to insure that the River is not degraded. As discussed, Outstanding Resource Water designation is necessary to protect outstanding ecological and economic values of the Gallatin River, and there is no other effective process available that will achieve the necessary protection. Without this designation, the water quality of the Gallatin River could be permanently compromised and degraded so that it no longer supports its beneficial uses or meets state water quality standards. Because of its outstanding ecological, economic, and recreational values, the Gallatin River deserves this added protection and assurance that no permanent degradation will be allowed.

11. Conclusion

For the foregoing reasons, Cottonwood Environmental Law Center and the Gallatin Wildlife Association respectfully request the Montana Board of Environmental Review recommend to the Montana State Legislature that the Gallatin River be designated as an ORW, from the Yellowstone National Park Boundary downstream to the confluence with Spanish Creek. An ORW designation is necessary to protect the outstanding character and quality of the Gallatin River.

Submitted on behalf of Petitioners, Gallatin Wildlife Association and Cottonwood Environmental Law Center, by:

_____

John Meyer, Executive Director, Cottonwood Environmental Law Center

_____

Glenn Hockett, Volunteer President, Gallatin Wildlife Association

On:

_____

January 31, 2018

Citations

Gallatin National Forest, Land and Resource Management Plan, Final EIS

Decker-Hess, Janet, Gael Bissell, Stewart Allen, Tom Ring, Nancy Johnson, Susan Reel. 1998.

Pacific Northwest Rivers Study, Final Report: Montana, May 1988

Fischer, Hank, Carol Fischer. 1999. Paddling Montana, 32 great rivers under the Big Sky, a Falcon Guide.

Forrest, Steve. 1997. The Gallatin Watershed Sourcebook: A Resident's Guide

May, Bruce, Kimberly Schlenker, Bruce Rich. 1997. A Survey of Gallatin River Users

Montana Fish, Wildlife, and Parks, Montana Statewide Angling Pressure Report, 2005, 2013

Montana Natural Heritage Program

Montana Rivers Information System

Ripple Marketing LLP. October 18, 1999. Gallatin River Usage Study; Prepared for the Gallatin National Forest.

Stroock, B. 1997. Water and land use trends in the Gallatin River watershed. Know Your Watershed: Gallatin Workshop. October 1996. p. 6-8.

Ross, John, 1999. Trout Unlimited's Guide to America's 100 Best Trout Streams
18

Final Environmental Impact Statement Amending and Adopting the Draft Environmental Impact Statement for the Gallatin River Outstanding Resource Water Designation

Montana Department of Environmental Quality

Montana Department of Environmental Quality
Director's Office
Metcalf Building, 1st Floor
PO Box 200901
Helena, MT 59620-0901

January 9, 2007

Final Environmental Impact Statement Amending and Adopting the Draft Environmental Impact Statement for the Gallatin River Outstanding Resource Water Designation

Prepared for:

Montana Department of Environmental Quality
1520 East 6th Avenue
Helena, Montana 59620

Prepared by:

Garcia and Associates
1716 West Main Street
Suite 8-F
Bozeman, Montana 59715
Phone: 406-582-0661
FAX: 406-582-0659

In Association with:
HydroSolutions, Inc.

January 9, 2007

J5060-2

Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

January 2007

Dear Reader:

Enclosed is the Final Environmental Impact Statement (EIS) for the Gallatin River Outstanding Resource Water Designation adopting the draft EIS as a part of the final, responding to public comments, and providing substantive changes that amend the draft EIS in response to public comments. The final EIS contains responses to public comments on the draft EIS and adopts the draft EIS as part of the final with modifications in response to public comments. Thus, the draft EIS, as amended by this final EIS, is adopted as part of the complete final EIS.

In December 2001, the Montana Board of Environmental Review (BER) received a petition to designate the Gallatin River as an outstanding resource water (ORW) from the Yellowstone National Park boundary to Spanish Creek. At its March 2002 meeting, the BER ordered the Montana Department of Environmental Quality (DEQ) to prepare an EIS to disclose the potential impacts of ORW designation.

The draft EIS was published on September 8, 2006. Public comments were accepted until October 27, 2006. A public hearing on the draft EIS and the draft rules was held in Gallatin Gateway on October 25, 2006.

Under the Proposed Action, the BER would adopt a rule for the Administrative Rules of Montana designating the river an ORW. The legislature would have to approve legislation to implement the rule.

The final decision will be made in the Record of Decision that will be published no sooner than 15 days after the release of this final EIS.

DEQ and the BER appreciate the public's involvement in preparing the final EIS. The draft and final EISs are available on DEQ's web site at www.deq.mt.gov. Additional copies are also available upon request from DEQ. A copy of the Record of Decision will be sent to everyone who receives the final EIS.

Richard H. Opper
Director

Executive Summary

Introduction

This Final Environmental Impact Statement (FEIS) adopts the Draft Environmental Impact Statement for the Gallatin River Outstanding Resource Water Designation, published in September 2006, as final with amendments made in response to public comments. This EIS has been prepared to assess the impacts of designating a reach of the Gallatin River as an Outstanding Resource Water (ORW). In 1995 Montana passed legislation allowing such designation, and in 2001 the Montana Board of Environmental Review (Board) was petitioned to consider designating the reach of the Gallatin River from the Yellowstone National Park boundary downstream to the river's confluence with Spanish Creek (Figure 1), as Montana's first ORW outside of a national park or wilderness. The geographic scope of this EIS includes the ORW reach and lands around the ORW which have a hydrologic connection to this reach. The ORW designation would protect water quality in the reach by prohibiting certain actions that would decrease its current level of quality. Upon review of this EIS, the Board may adopt a rule to classify the specified reach of the Gallatin River as an ORW; however, the designation as an ORW will not become effective until the Montana State Legislature votes to approve it.

Purpose and Benefits of the Proposed Action

The purpose and benefit of the proposed action is to protect existing water quality in the ORW reach of the Gallatin River. Under ORW status the DEQ could not grant an authorization to degrade water quality, nor could it allow a new or increased point source discharge that resulted in a permanent change in the water quality of the ORW reach. The petitioner believes that this level of protection is necessary due to the current high water quality, and due to potential sources of degradation. Six of the nine major tributaries in the upper Gallatin River drainage are currently listed as having impaired water quality. Further, the Montana Water Quality Act allows users to apply for discharges that may result in degradation of existing water quality. Finally, county zoning and DEQ regulations (including point source nondegradation reviews) allow for incremental reductions in water quality. Thus, the petitioner held that ORW status is the only regulation that would allow for protection of the ORW reach by preserving the current high quality of water in the proposed ORW reach. The Board will review this EIS and determine whether it agrees with the petitioner on this count.

Alternatives Description

Several alternatives were considered in this EIS, and some were eliminated from further consideration. The alternatives fully evaluated in the EIS were the No Action Alternative, the Proposed Action Alternative (ORW designation,) and the Cumulative Impacts Analysis Alternative, under which DEQ would exercise existing authority to evaluate cumulative impacts to water quality.

No Action Alternative

Under the No Action Alternative, the Board would not adopt a rule and ORW designation would not proceed. Current water quality laws would remain in force and there would be no changes to DEQ's water quality management in the proposed ORW reach. DEQ could issue authorizations

to degrade, and permits for new and increased point source discharge. Narrative nondegradation limits could be used in lieu of numeric nondegradation limits. Water quality could be allowed to degrade to current state standards, but could not exceed those standards.

Proposed Action Alternative: Outstanding Resource Water Designation

Under the Proposed Action Alternative, the Gallatin River would be designated an ORW from the Yellowstone National Park boundary to the river's confluence with Spanish Creek. Under this designation DEQ could not allow any activity that caused any permanent and measurable change to water quality within this reach. DEQ could not issue any authorizations to degrade.

To assess land use and socioeconomic impacts from the Proposed Action Alternative, DEQ developed a footprint, a map of land areas that have a direct hydrologic connection to the surface waters of the proposed ORW reach. Any planned developments that would discharge wastewater to ground or surface water within the area of hydrologic connectivity would have to pass water quality reviews showing that their impacts, when reviewed cumulatively with other discharges, would be below numeric trigger values for water quality standards. No narrative water quality standard would be used. The two trigger values most relevant to development and water quality in the proposed ORW reach are measures of phosphorus and nitrogen, specifically inorganic phosphorus and nitrate (as N). If conventional methods of wastewater treatment for a development did not meet ORW limits, then alternative methods of wastewater treatment and disposal would need to be used for development to proceed.

Cumulative Impacts Analysis Alternative

Under the Cumulative Impacts Analysis Alternative, DEQ would exercise its discretion to evaluate the impact of developments to surface water quality when added to those of other past and pending permits. Although DEQ has the authority to perform this kind of nondegradation review, its current policy is to evaluate each development independently. Similar to the Proposed Action Alternative, this alternative was evaluated using the footprint, which indicates which lands have a direct hydrologic connection to the surface waters of the Gallatin River. However, under this alternative, if a development did not meet the nondegradation standards, the owner could apply for an authorization to degrade, and could request use of a narrative water quality standard, two options which are not available under the Proposed Action Alternative. DEQ could rescind its use of the cumulative impacts analysis at any time, without public review or comment. Under the Cumulative Impacts Analysis Alternative each development that contributed to the allowable nutrient load to the Gallatin River would reduce the remaining load. Therefore, later developments may have to meet stricter wastewater discharge concentration criteria.

Alternatives Considered and Eliminated

Several alternatives were initially considered, but not fully analyzed as they were not reasonable or feasible, or do not meet the purpose and benefit of the Proposed Action. Designating the Gallatin River as a Wild and Scenic River was considered; however, this federal designation only protects water quantity, and does not protect water quality. Consideration was also given to developing trigger values for water quality for five sub-watersheds within the Gallatin ORW. However, development of such water quality sub-watershed values would require difficult mathematical modeling and would create regulatory confusion among agencies. Another

alternative considered and dismissed would be to divide up the pollutant load into values applicable to each single family equivalent, and then limit housing and commercial development. However, this alternative was dismissed as impractical since DEQ does not have the authority to implement zoning or regulate development.

Affected Environment

The affected environment section provides a baseline of information from which to analyze and compare the effects of the various alternatives. The dominant hydrologic feature in the Upper Gallatin Valley is the Gallatin River and its tributaries. The mainstem Gallatin River is generally broad, meandering and low gradient, while the tributaries are steeper, straighter and narrower. Nine major tributaries flow into the proposed ORW reach, including Spanish Creek which delineates the downstream end of the proposed ORW reach. US Highway 191 encroaches on the Gallatin River in several places in the proposed ORW reach, and crosses it three times.

Historic development in and around Big Sky has affected water quality via increased nutrients (nitrates and inorganic phosphorus) through wastewater discharges, construction activities, and other sources. Algal growth in the river indicates input of nutrients from the West Fork into the mainstem Gallatin River. Six tributaries to the proposed ORW reach have had recent TMDL assessments, and are listed as impaired for some of their beneficial uses. The West Fork of the Gallatin River was downgraded in the 2006 assessment to “non-support” for both the cold water fishery and contact recreation designated uses. Water quality in the mainstem is generally very good with some nitrate enrichment.

Most of the land along the river is in public ownership, largely under federal management by the Gallatin National Forest. Private land ownership is concentrated near Big Sky, with some private ownership along the Gallatin River and US Highway 191. The primary recreational uses of the proposed ORW reach are fishing, and commercial and recreational rafting and kayaking. The Gallatin River is known as a ‘blue-ribbon’ trout fishery. Rainbow trout dominate, while brown trout are more limited; other fish common in the river are mountain whitefish, two species of sucker, and a sculpin. There are no known cultural sites that overlap the proposed ORW reach, although the surrounding area has several documented cultural sites.

Over half the housing in and around Big Sky is leisure-oriented or seasonally occupied. One out of three people in Big Sky and West Yellowstone are directly employed in tourism. The current net economic value of the recreational fishery and commercial rafting in the proposed ORW reach are estimated at $3.8 and $4.6 million per year, respectively.

The vegetation along the Gallatin River is dominated by coniferous forest, grasslands, shrubland, and riparian vegetation. A number of big game species frequent the area including moose, elk, mule deer, whitetail deer, and bighorn sheep. The riparian vegetation is used by songbirds, including neotropical migrants, and by raptors and waterfowl.

Comparison of Alternatives and Impacts

This EIS evaluates the Proposed Action (ORW designation), the No Action, and the Cumulative Impacts Analysis alternatives. This EIS differs from others in that it evaluates a regulatory action; thus the Proposed Action Alternative analyzes the impacts of maintaining the existing water quality conditions in the Gallatin River. The No Action Alternative analyzes the impacts of maintaining the existing regulatory environment. The Cumulative Impacts Analysis Alternative analyzes the impacts of DEQ exercising its discretion to review cumulative impacts of multiple developments on the ORW reach. Table 1 displays an annotated comparison of impacts across all alternatives and all resource areas.

No Action Alternative

Under the No Action Alternative, residential and commercial development could proceed along the proposed ORW reach, with water quality regulated under existing law and rules. The current nondegradation rules of DEQ would apply (both numeric and narrative limits) and water quality in the ORW reach would be allowed to deteriorate in incremental amounts.

Land use analysis shows there are approximately 652 developable units left within the footprint area of the ORW. For purposes of water quality permitting, the Gallatin River mainstem could be considered a mixing zone, and loading of nitrate and inorganic phosphorus in soils due to septic systems would increase. However, analysis shows that exceedance of the inorganic phosphorus trigger value in the Gallatin River mainstem would occur well before full build-out in the footprint. Given this information, it is likely that some restrictions on wastewater treatment may be enacted before full build-out is completed in order to comply with the water quality regulations for high quality waters. In addition, nutrient enrichment would likely contribute to more algal growth. Algal growth and nutrient level increases could contribute to changes in the macroinvertebrate communities, decreases in recreational value, and lower angler catch or satisfaction. Further, changes in the macroinvertebrate community could lead to slower fish growth and a decreased quality of angling experience in the Gallatin River.

Proposed Action Alternative: Outstanding Resource Water Designation

Under the Proposed Action Alternative, DEQ could not permit actions that would permanently degrade water quality. This regulation would limit the development that could occur within the footprint that used traditional wastewater treatment systems (septic systems and drainfields). However, with mitigation, such as the use of alternative wastewater treatment systems, including advanced subsurface treatment (recirculating sand filters, chemical removal, and composting or incinerator toilets), zero discharge options (off-site disposal), or centralized treatment options, development within the area of hydrologic connection could proceed to over 50% of full build-out. Even using combinations of advanced treatment options, there will probably be a loss of approximately 291 of the developable units left with the footprint; these units will not be able to be developed, given current technologies, economic constraints, and regulations. However, if regulations were revised and on-site non-discharging options, such as holding tanks, were allowed, then all 652 units could be developed within the footprint. For units that are developed,

these alternative wastewater treatment systems would add, on average, roughly 2% to the cost of a lot and home in the area surrounding the proposed ORW reach.

Nutrient loading in the soils would be limited within the developable lands in the footprint. Without mitigation, approximately 67 residences (Single Family Equivalents) could be built within the footprint before the inorganic phosphorus trigger value in the Gallatin River was reached.

Cumulative Impacts Analysis Alternative

The impacts of the Cumulative Impacts Analysis Alternative would be similar to those under the Proposed Action Alternative. Limited loading of nutrients to soils in the footprint would be allowed. Each successive development would have to show that its input to the river would not exceed trigger values when combined with inputs from existing and concurrent developments. As the area became more developed and the nutrient level in the river approached trigger values, passing cumulative impact nondegradation analysis would become more and more difficult using a conventional wastewater treatment system. In essence, this alternative would create a 'first come, first served' situation where development shortly after implementation would undergo little or no additional restrictions, but eventually the inorganic phosphorus load in the river would approach the trigger values. Thereafter, developments would be restricted or would need to discharge outside of the footprint area. This alternative might thus create a rush of development as developers try to get projects approved before the trigger values for nutrients in the ORW are approached. The trigger values are the same under all alternatives; therefore, under this alternative as under the Proposed Action Alternative, approximately 67 SFEs could be built in the footprint before trigger values would be reached.

Secondary and cumulative impacts to water quality, aquatic resources, fisheries and recreation are similar under this alternative to those under the Proposed Action Alternative. This alternative differs from the Proposed Action Alternative in that its protection of water quality in the mainstem Gallatin River is less certain, due to the administrative rather than legislative nature of the protection.

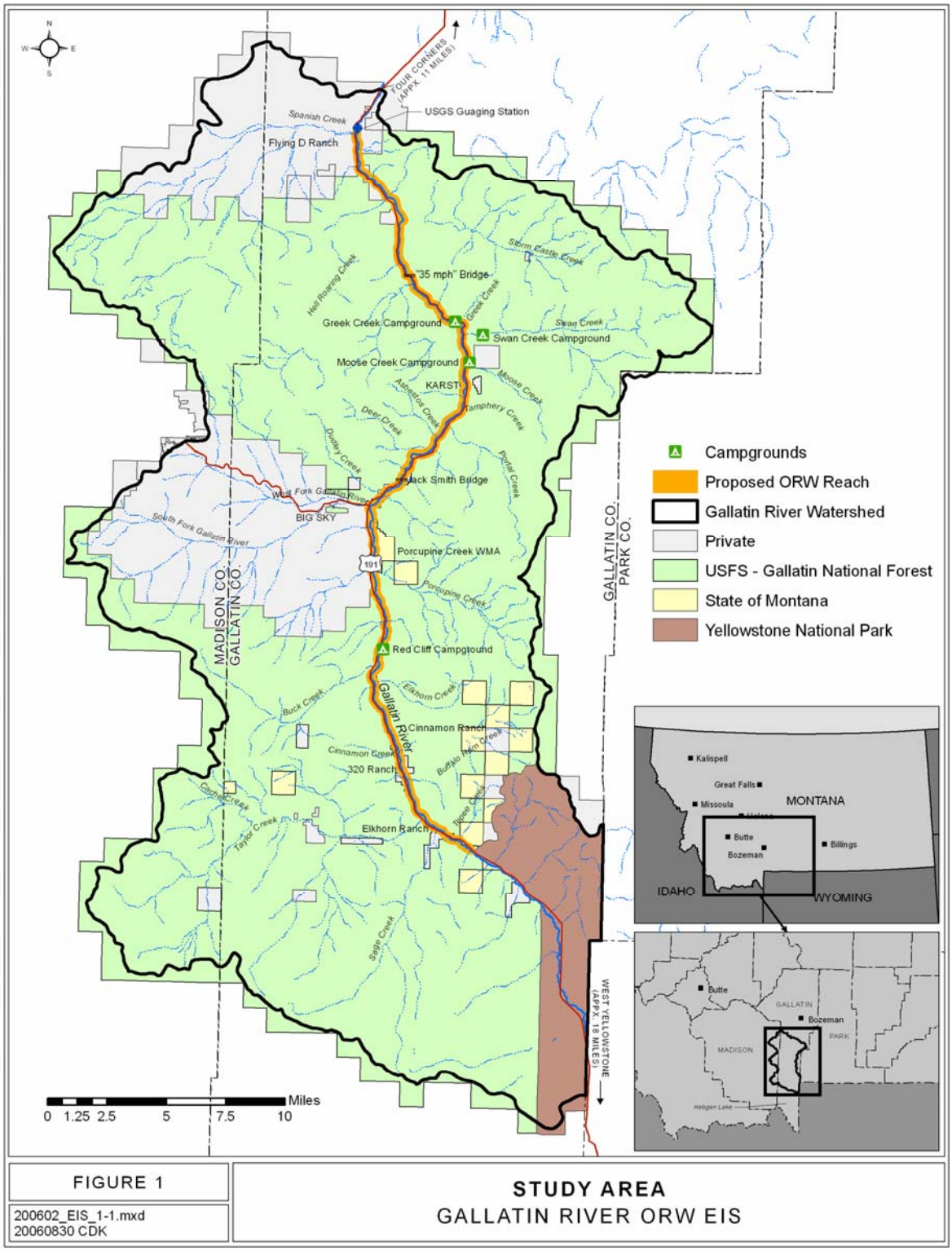

Figure E-1. Study area for the proposed Outstanding Resource Water reach of the Gallatin River in Gallatin and Madison counties, Montana.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Hydrology and Water Quality							
Water quality - general	**(PI)**: Water quality standards remain same.	**(PI):** Nondegradation standards for inorganic phosphorus and nitrate (as N) remain numeric and narrative. Water quality regulated under the existing rules of DEQ and counties. Local governments required comply with nondegradation requirements that are not part of State's review. Additional nutrient loading to Gallatin River from future build-out. Probable measurable change in water quality.		**(SI):** Change from recently documented trend degrading water quality to stabilized level. Limit amount phosphorus & nitrogen entering the river; prevent permanent, measurable degradation water quality. **(SI):** Stabilization of, or even improvement aquatic habitat.		**(SI):** Similar to those described under Proposed Action.	
Water quality – regulated sources		**(SI):** Increased nutrient loading in Gallatin. **(CI):** Cumulative impacts from regulated sources which contribute nutrients. Increases in sediment loading due to projected levels development on undeveloped and partially developed private land. Expansion residential development in Big Sky likely increase service connections to Big Sky County Water and Sewer District. This increase could lead to more nutrient loading in Gallatin River if District uses its MPDES flow-based discharge permit. Cumulative impacts regulated and nonregulated development lead to measurable increases in pollutant levels in Gallatin River.		**(SI):** Due to restriction nutrient loading from subsurface wastewater treatment systems, septic system drainfields outside footprint when development lies within footprint. This placement may concentrate drainfields adjacent to footprint boundary, potentially impacting other groundwater sources due spatial limits on drainfield locations. New development may be forced outside footprint. **(CI):** Cumulative impacts to water quality of Gallatin River would less than from No Action Alternative, since pollution from regulated sources of nutrients capped by "no measurable change" criteria.		**(SI):** Developers may seek approval sooner than later for drainfields within footprint to take advantage of waste load allocation. May encourage faster development within footprint until cumulative impacts analysis indicates trigger value met, then placement may concentrate drainfields adjacent to footprint boundary, potentially impacting other groundwater sources.	
Water quality – nonregulated sources	**(CI):** Sources wastewater discharge, not regulated by the federal, state or local agencies, not addressed. Cumulative degradation from these sources & permissible nonpoint sources may degrade water quality.	**(SI):** Unregulated development may lead measurable nutrient increases receiving streams; including landscape fertilizer runoff, livestock associated with recreation industry, release soil nutrients from timber clearing, increased storm water runoff, or general soil disturbance.					

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Cumulative Impacts		**(CI):** Cumulative impacts from multiple independently proposed developments not evaluated in regulatory framework.		**(SI):** Accounts for cumulative impacts subsurface wastewater treatment by limiting total nutrient loading under low flow conditions to below measurable change, i.e. trigger value for inorganic phosphorus.		**(SI):** Similar to Proposed Action.	
Mixing zones		**(SI):** If nondegradation limits nutrients not met in ground water prior to effluent reaching Gallatin River, mixing zone in river can be adopted. Result in localized reaches with elevated nutrient levels which may exceed trigger values until attenuation reduces levels below measurable change. Could allow permitting subsurface wastewater treatment systems which rely on mixing zone in Gallatin River for compliance.					
Water withdrawals	**(CI):** Water withdrawals expected increase with more individual wells drilled. Impact directly related to number SFEs using individual or community wells. (See Impacts described under Land Use and Socioeconomics for these numbers)						
Nutrient input		**(SI):** Increased transport nutrients to receiving waters (Gallatin River or tributaries). Increase nutrients could enhance algal and periphyton growth.		**(SI):** Decreased transport nutrients to receiving waters (Gallatin River or tributaries). Maintenance nutrient levels in ORW reach would limit proliferation periphyton and nuisance algae. **(CI):** Increase service connections to Big Sky County Water and Sewer District could cause more nutrient loading in Gallatin River if District uses its MPDES flow-based discharge permit.	**(SI):** Nutrient input could not increase with mitigation. Impacts same as under Proposed Action	**(SI):** Intermediate between those described under Proposed Action and No Action. Cumulative assessment should reduce overall nutrient input compared to No Action.	**(SI): N**utrient input could not increase with mitigation. Impacts same as under unmitigated Cumulative Impacts Analysis Alternative.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Wastewater discharge and management		**(SI):** Increased nutrient loading soils result in nutrient saturation, primarily inorganic phosphorus. Increased mass soil containing or holding contaminants within footprint.		**(SI):** Reduced nutrient loading soils from subsurface wastewater treatment in footprint. Less nutrient loading soils due to limit of receiving stream (Gallatin River or tributaries) required have no measurable change water quality.	**(SI):** To meet ORW regulations nutrient input could not increase with mitigation. Therefore Impacts in this area would be the same as under the Proposed Action Alternative	**(SI):** Similar those under Proposed Action.	**(SI):** Nutrient input could not increase with mitigation. Impacts same as under unmitigated Cumulative Impacts Analysis Alternative.
Geology and Soils							
Ground disturbance	**(PI):** Disturbance would occur.	**(SI):** Increased erosion of disturbed soils could degrade water quality. **(CI):** Development footprint continues to full build-out.	**(CI):** Development and ground disturbance could occur same or greater density as unmitigated alternative.	**(CI):** Limits development could potentially limit total ground disturbance.	**(CI):** Development and ground disturbance could occur, but would be less than with unmitigated alternative.	**(CI):** Total acres disturbed for developed units probably between no-action and proposed action alternative.	**(CI):** Development and ground disturbance could occur with similar density as unmitigated alternative.
Erosion/sediment transport	**(CI):** Increased sediment loading due to projected levels development on undeveloped and partially developed private land.			**(CI):** Increased sediment loading lower, due to projected lower levels development on undeveloped and partially developed private land.	**CI):** Increased sediment loading lower than No Alternative, but higher than Proposed Alternative without mitigation		
Developable terrain	**(SI):** Development in footprint would continue.	**(SI):** Greater likelihood disturbance wetlands & riparian habitat. **(CI):** Development footprint continues on suitable terrain. Development steep terrain likely.	**(CI):** Development in footprint same or greater density, within limits of zoning regulations, if alternative wastewater management facilities employed.	**(SI):** To prevent receiving streams from experiencing measurable water quality change, sources nutrient loads to groundwater hydrologically connected to streams within footprint limited. Within/near footprint some development could shift to less amenable terrain; steeper slopes or less stable soils. Could cause soil disturbance steeper areas with higher erosion potential.	**(CI):** Development in footprint with density still less than under No Action.	**(CI):** Total numbers developed units probably between No Action and proposed action. Difficult to assess spatial arrangement on developable terrain.	**(CI):** Development in footprint with density similar to No Action may occur if alternative wastewater management facilities employed.
Wastewater management		**(PI):** Less stringent management. **(SI):** Increased nutrient loading to soils result in nutrient saturation, primarily inorganic phosphorus. Increased mass soil containing/holding contaminants within footprint. Increased transport nutrients to receiving waters.		**(SI):** Reduced nutrient loading to soils from subsurface wastewater treatment in footprint. Less nutrient loading soils due to limit of receiving waters required to have no measurable change water quality. Decreased transport nutrients to receiving waters.	**(SI):** Nutrient input could not increase with mitigation. Impacts same as under Proposed Action.	**(SI):** Similar to Proposed Action.	**(SI):** To meet cumulative assessment regulations, nutrient input could not increase with mitigation. Impacts same as under unmitigated Cumulative Impacts Analysis Alternative.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Land Use and Recreation							
Land use - general		**(SI):** No impact on existing or planned land use within footprint or beyond ORW study area. Development would proceed according to plans/regulations agencies having land use jurisdiction within footprint.	**(SI):** Same as No Action without mitigation.	**(SI):** Restrict new development using conventional septic tank/leach fields in footprint. Development restrictions on private land applied to all undeveloped or partially developed land in footprint.	**(SI):** Development restrictions not entirely mitigated by use alternative wastewater management systems. Use of such systems involves increased development cost. About one-third of SFE development curtailed.	**(SI):** New development in footprint using conventional septic tank/leach field would likely be restricted, but to lesser extent than allowed by Proposed Action without mitigation, due to continued availability narrative standard & authorization to degrade options within existing regulations. Development restrictions (or potential) on private land not equally applied. Permitting of new development on a first come, first served basis. Applicants acting first, before cumulative pollutant trigger values reached able to develop using conventional septic tank/leach fields. Once cumulative trigger values reached, further applicants face increased costs or restrictions on allowable development.	**(SI):** Development restrictions similar to Cumulative Impacts Analysis Alternative without mitigation. First come, first served approach inherent; mitigation likely used by later applicants.
Allowable development		**(SI):** Private Land: Current Gallatin County plans/ zoning regulations allow up to 652 additional dwelling units and estimated 419,000 sq. ft. additional commercial & community facilities built on currently undeveloped or partially developed lands in footprint. Forest Service Land: No plans for new facilities or expansions existing facilities in t footprint. State Land: Montana Fish, Wildlife and Parks may seek expansion Porcupine Creek complex near Big Sky; however no current plans to expand.	**(SI):** Same as No Action without Mitigation	**(SI):** A total of 75 additional dwelling units (DU) and approximately 2,645 sq. ft. additional commercial & community facilities allowed in footprint using conventional septic tank leach field wastewater management systems. This impact represents an 89% reduction in allowable additional dwelling units and an overall 99% reduction in allowable additional commercial or community facilities square footage.	**(SI):** Assuming use of alternative wastewater management, probably reduction in one-third of developable SFEs compared to No Action.	**(SI):** Not possible to quantify allowable development under this alternative due to narrative standard and authorization to degrade variables. Additional development in footprint would likely higher than estimates for Proposed Action without mitigation, due to availability these options. However, given State regulations & policy related to nondegradation, and the same degradation trigger values as under Proposed Action, unlikely that development approaching that expected under No Action would be permitted.	**(SI):** Assuming use of alternative wastewater management, potential additional development in footprint similar to No Action.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Recreation	**(PI):** No primary impacts on recreation.	**(SI):** No adverse primary impacts on recreation: Neither levels nor extent of development anticipated in footprint would impose new constraints on river access or capacity of river to accommodate recreation. **(SI):** Secondary water quality impacts due to increased development in footprint can have corresponding secondary impacts on recreation: Adverse fishery impacts (reduced fish size or carrying capacity in ORW reach) would adversely impact angler use and satisfaction; and adverse aesthetic impacts (as algal blooms) could reduce attractiveness of ORW reach. **(C1):** Water quality impacts from development in footprint could act cumulatively with similar impacts from development outside footprint (e.g., the larger Big Sky area), resulting corresponding cumulative secondary impacts to recreation.	**(SI, CI)**: Avoidance of or reduction in secondary or cumulative recreation impacts dependent on mitigation measures applied for secondary water quality impacts. If water quality mitigation successful, corresponding recreation impacts reduced.	**(SI):** Reduction in pollutant loads in river, compared with No Action; long-term positive effect on recreation by protecting river attributes important to recreation users. Quality of recreational experience, as influenced by water quality, protected.	**(SI):** Same as Proposed Action without mitigation.	**(SI):** Similar to Proposed Action without mitigation.	**(SI):** Similar to Proposed Action without mitigation.
Rafting/boating	**(SI):** Commercial rafting days & private shoreline & river-boating use days expected to continue & may increase slightly. **(CI):** Might be slight increase commercial rafting & recreational tourism.			**(SI):** Probably same as No Action.		**(SI):** Probably same as No Action.	
Angler use		**(SI):** If trout population declines, recreational fishery could see decreased angler use. Potentially fewer anglers make ORW destination for fishing trips. Impacts to popular caddis, mayfly & stonefly hatches could affect recreational fishery. Anglers may fish alternative rivers (Yellowstone & Madison) if seasonal hatches on Gallatin		**(SI):** Anglers continue come to Gallatin to fish “blue ribbon” fishery. Angler use may increase in short term if publicity of ORW designation entices them to the river.		**(SI):** Angler satisfaction likely remains high.	

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
		noticeably reduced. Relocation angler activity would reduce associated tourism dollars.					
Angler satisfaction		**(SI):** Adverse impacts to the fishery (i.e. reduced trout growth and carrying capacity, therefore reduced size and numbers of fish) would reduce angler satisfaction.		**(SI):** Angler satisfaction likely remains high or increase with cachet ORW status.		**(SI):** Angler satisfaction likely remains high.	
Socioeconomics							
Angler benefits and economic value		**(SI):** Slight reduction from current $3.84 million annual value to anglers.		**(SI):** Maintain existing $3.84 million annual value to anglers.	**(SI):** Maintain existing $3.84 million value to anglers.	**(SI):** Maintain existing $3.84 million value to anglers.	**(SI):** Maintain existing $3.84 million value to anglers.
Rafting/boating and "other" recreation economic value	**(SI):** Maintenance of existing $6 million net economic value of recreation benefits.	**(SI):** Net economic value to boaters expected to continue or increase slightly. **(SI):** Current trends of increased economic activity associated with recreation expected to continue. However, decrease in water quality associated with No Action could involve potentially adverse effects to existing angler use & spending, but may be offset by positive effects associated with build-out of residential & vacation units. **(CI):** Maintains current local economies of Big Sky & West Yellowstone. Most significant economic loss likely small reduction in net economic value fishing to anglers from reduced trout catch or trout size.		**(SI):** Maintain current quantity & quality recreation uses along ORW. Current trends of increased economic activity associated with recreation expected to continue. Current annual net economic value of fishing & other river-related recreation maintained. ORW designation could be interpreted as signal of quality, & attract additional anglers over No Action, further increasing economic value of fishing above current level. Net economic value for non-angling, noncommercial recreation days on river continue. **(CI):** Existing angler and other river recreation use levels, river tourism jobs and income maintained.	**(SI):** Maintain current quantity & quality recreation uses along ORW. Current trends of increased economic activity associated with river recreation expected to continue. Current annual net economic value of other river- related recreation maintained. ORW designation could be interpreted as signal of quality, & attract additional visitors over No Action, further increasing economic value above current level. Net economic value for non-angling, noncommercial recreation days on river continue.	**(SI):** Maintain current quantity & quality recreation uses along ORW. Current trends of increased economic activity associated with recreation expected to continue. Current annual net economic value of other river- related recreation maintained. Net economic value for non-angling, noncommercial recreation days on river continue.	**(SI):** Maintain current quantity & quality recreation uses along ORW to extent that narrative exclusions are not granted by DEQ or that advanced wastewater treatment is required in footprint. Existing other river recreation use levels maintained
Tourism related jobs and expenditures		**(SI):** Unknown small losses or small gains to existing 438 jobs & $7.3 million annual out-of-state visitor expenditures.		**(SI):** Maintain existing 438 jobs & $7.3 million annual out-of-state visitor expenditures.	**(SI):** Maintain existing 438 jobs and $7.3 million in annual out-of-state visitor expenditures.	**(SI):** Maintain existing 438 jobs & $7.3 million annual out-of-state visitor expenditures.	**(SI):** Maintain existing 438 jobs & $7.3 million annual out-of-state visitor expenditures.
Recreation employment		**(SI):** Employment with commercial rafting companies continues, & may increase slightly.		**(CI):** Existing net economic values associated with fishing & rafting continue; tourism-related income & employment continue.		**(SI):** Same as Proposed Action.	

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Construction related employment		**(SI):** Maintain existing jobs in study area.		**(SI):** If standard subsurface wastewater treatment used in new residential & commercial construction in footprint, reduced build-out would result in eventual loss up to 90 jobs in study area and associated $6.86 million per year worker income loss.	**(SI):** If advanced subsurface wastewater treatment is used in new residential & commercial construction in footprint under ORW designation, reduced build-out would result in eventual loss of about 30 jobs in study area and associated $2.3 million per year worker income loss.	**(SI):** Eventual loss up to 90 jobs in study area and associated $6.86 million per year worker income loss unless narrative standards approvals are granted or advanced treatment systems used.	**(SI):** May be similar job loss as under Proposed Alternative, depending on number of narrative standards approvals granted by DEQ.
Other employment sectors		**(SI):** Current level economic activity will maintain current levels direct employment in real estate sector. Associated increase in residents & rental visitors result in small increase income & employment in retail & food services sectors once build-out complete.		**(SI):** Multiplier effects from reduced build-out limitations result in loss up to 30 jobs in real estate, transportation, and local government. **(CI):** Build-out limitations imposed by maintenance of existing water quality would eventually reduce direct employment in construction sectors, and multiplier effects would result in slight reductions in real estate & transportation sectors in study area.	**(SI):** Multiplier effects from reduced build-out limitations result in loss of roughly 10 jobs in real estate, transportation, and local government. **(CI):** Advanced treatment systems would increase build-out potential in footprint & help maintain current levels employment in real estate at slightly lower than current levels. Slight increase employment in property management & waste management services with construction & maintenance more effective treatment systems.	**(SI):** Multiplier effects from reduced construction up to 30 less jobs real estate, transportation, local government unless narrative standards approvals granted or advanced treatment used.	**(SI):** Maintain jobs in real estate, retail & food services depending on advanced water treatment in new homes in footprint and number of narrative standards approvals granted by DEQ.
Property value		**(SI):** Reduction in water quality & aesthetics associated with algae will result in slight decline property values or slow down in rise in property values near ORW. **(SI):** 652 more housing units should moderate rise in house/condo price increases, & thus moderate degree of unaffordability of housing compared to household median income in West Yellowstone & Big Sky.		**(SI):** Protect existing property value differential associated with water quality. Limitations on build-out decrease number of new dwelling units, & may slightly increase prices for existing & new units. Housing affordability slightly worse than under No Action **(CI):** Housing affordability further reduced if demand for housing increases & build-out limited.	**(SI):** Probably slight rise in home values. Housing affordability slightly worse than No Action.	**(SI):** Maintain current value or slightly decrease in values due to uncertainty regarding housing permanence. Housing affordability slightly worse than No Action.	**(SI):** Maintain current value or slightly decrease values in area due to uncertainty regarding housing permanence. Housing affordability slightly than No Action.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Allowable new homes & commercial space in footprint		**(SI):** 652 dwelling units & 419,000 sq. ft. commercial space.		**(SI):** 75 dwelling units (89% reduction from No Action) and 2,645 sq. ft. commercial space (99% reduction from No action) if new homes and businesses in footprint use conventional water treatment.	**(SI):** Loss of 32% build out in footprint for SFEs, and loss of 96% commercial space development, depending on extent of use of advanced water treatment for new homes/commercial businesses in footprint.	**(SI):** 75 dwelling units (89% reduction from No Action) and 2,645 sq. ft. of commercial space (99% reduction from No Action).	**(SI):** Possible loss in SFEs and commercial space development depending on advanced water treatment for new homes/commercial businesses in footprint or # narrative standards approvals granted by DEQ.
Change in housing costs associated with use of advance wastewater systems		**(SI):** % Change per unit: None $ Change per unit: None Total dollar cost: None		**(SI):** No change to cost per unit if adopted with no mitigation.	**(SI):** % Change per unit: + 1.5% to 2.5% $ Change per unit: $15,700 Total dollar cost: > $6.83 million for study area	**(SI):** % Change per unit: + 1.5% to 2.5% $ Change per unit: $3,200 to $22,000 Total dollar cost: > $1.8 to $11.5 million	**(SI):** % Change per unit: + 1.5% to 2.5% $ Change per unit: $3,200 to $22,000 Total dollar cost: > $1.8 to $11.5 million
Passive use/Existence values to Montana households		**(SI):** Slight loss passive use values of MT residents expected with partial degradation current water quality.		**(SI):** Passive use values (option, existence & bequest values from water quality) to MT residents associated with current water quality maintained.	**(SI):** Passive use values (option, existence & bequest values from water quality) to MT residents associated with current water quality would be maintained.	**(SI):** Passive use values (option, existence and bequest values from water quality) to Montana residents associated with the current water quality would be maintained.	**(SI):** Passive use values (option, existence & bequest values from water quality) to MT residents associated with current water quality would be maintained.
Aquatic Life and Habitats							
TMDL Program	**(CI):** TMDL programs may reduce nutrient loading. Participation & cooperation with TMDLs voluntary for nonpoint sources (septic systems); no way to quantitatively assess potential nutrient load improvements.						
Water quality – phosphorus and nitrogen loading		**(SI):** Increased inorganic phosphorus & nitrogen loading. **(CI):** Potential reduction in flow due to increased well development would diminish overall dilution of nutrients after entering Gallatin River.	**(SI):** Any reductions nutrient levels benefit aquatic community compared to unmitigated No Action Alternative.	**(SI):** Cap on inorganic phosphorus & nitrogen loading.	**(CI):** Potential reduction flow due to increased well development would diminish overall dilution nutrients after entering Gallatin River.	**(SI):** Limit on inorganic phosphorus & nitrogen loading to trigger values as assessed against existing & permitted nutrient inputs.	**(SI):** Total nutrient loading allowed same as the unmitigated Cumulative Impacts Analysis.
Dissolved oxygen and nitrite levels		**(SI):** Potential reduction in dissolved oxygen due to increased algae. Increased nitrogen levels on trout fry expected to reduce trout numbers or size. **(CI):**	**(SI):** Any reductions nutrient levels would benefit aquatic community compared to unmitigated No Action.	**(SI):** Controlled nutrient levels contribute to maintaining existing dissolved oxygen and nitrite levels.		**(SI):** Similar to Proposed Action.	

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
		Reduction in available oxygen and increased nitrites.					
Macroinvertebrate community		**(SI):** Shift in composition macroinvertebrate community toward towards more nutrient tolerant community species with less energetic value to trout. Midges continue to be plentiful, but large hatches of caddis, mayflies, and stoneflies may be reduced.	**(SI):** Any reductions nutrient levels benefit aquatic community compared to unmitigated No Action.	**(SI):** Should remain same as current macroinvertebrate community.		**(SI):** Similar to Proposed Action.	
Periphyton and algae		**(SI):** As nutrient levels increase increased algae. Possible adverse aesthetic impacts (e.g. algal blooms) downstream of ORW reach (within ORW reach, cold water temperatures tend to minimize such impacts from increased nutrient levels).	**(SI):** Any reductions in nutrient levels benefit aquatic community compared to unmitigated No Action.	**(SI):** Algal communities remain same as current with no additional nutrients.		**(SI):** Algal communities remain same as current with no additional nutrients.	
Fisheries							
Effects to rare, threatened, and endangered species	**(SI):** No aquatic T&E species in study area. Montana species of concern only incidentally encountered in proposed ORW reach, and its not critical habitat for any Montana species of concern. Impacts to these species not significant.						
Effects to fish habitat		**(SI):** Gradual decline water quality would negatively impact fish community & its habitat. **(CI):** Cumulative impacts to Gallatin River's fishery exacerbated by shifts in periphyton & macroinvertebrate communities. Possible decreased surface water supply due to residential water use inside footprint. Any reduction in total surface flow would reduce available habitat for fish, & diminish overall dilution of nutrients entering Gallatin River.	**(CI):** If mitigation reduces overall nutrient input, impacts to fisheries habitat reduced.	**(SI):** Maintenance existing nutrient levels allow persistence high-quality aquatic habitat. **(CI):** Reductions total future numbers septic systems & residential wells help maintain existing groundwater supplies.	**(SI):** Maintenance existing nutrient levels allow persistence high-quality aquatic habitat. **(CI):** R-Partial reductions total future numbers septic systems & residential wells help maintain existing groundwater supplies.	**(SI):** Minor impacts due to slight increase in nutrient levels.	**(CI):** If mitigation allows increased build-out near or in riparian zone, potential negative impacts to fisheries habitat.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Fish community - eggs/fry	**(CI):** Unregulated nonpoint sediment sources continue to pose potential threat to incubating eggs & fry.	**(SI):** Increased nitrogen levels expected to reduce trout numbers or trout size. If nitrate levels reach 2.0 mg/L, likely to adversely affect rainbow trout fry and eggs.	**(SI):** Any reductions in nutrient levels benefit fish community compared to unmitigated No Action.	**(SI):** Trout reproduction & recruitment likely to continue at current levels.	**(CI):** If mitigation allows some build-out near riparian zone, possible negative impacts to trout reproduction & recruitment.	**(SI):** Trout reproduction & recruitment likely continue at current levels. Increase nutrient levels not likely significantly different from the Proposed Action.	**(CI):** Impacts likely similar to mitigated Proposed Action.
Fish community - adult		**(SI):** Added stress from increased nitrates; adverse effects on adult growth, reproduction, and survival of fish. If trout carrying capacity decreases, total trout population likely to decrease, or experience reduced growth, increased competition, increased susceptibility to disease, or reduced reproduction success.	**(SI):** Reductions in nutrient levels benefit fish community compared to unmitigated No Action Alternative.	**(SI):** Persistence of existing species diversity & preservation of Gallatin River habitat for salmonids.	**(CI):** If mitigation allows some build-out near riparian zone, possible negative impacts to trout reproduction & recruitment.	**(SI):** Impacts likely similar to Proposed Action.	**(CI):** If mitigation allows increased build-out near riparian zone, possible negative impacts to trout reproduction & recruitment.
Macroinvertebrate community shift		**(SI):** Shift composition trout food base may reduce trout numbers or trout size. Changes in aquatic macroinvertebrate community (food base for trout) potentially reduce growth and total carrying capacity of ORW reach. If food quantity or quality decreases, number trout that grow & thrive decreases.	**(SI):** Any reductions in nutrient levels would benefit fish community compared to unmitigated No Action.	**(SI):** Current macroinvertebrate community likely persists & provide consistent food base for trout.		**(SI):** Impacts likely similar to Proposed Action.	
Terrestrial Vegetation and Habitats							
Development		**(SI):** Increased ground disturbance from retained pace & extent development. **(SI):** Ground disturbance for development of permanent structures result in permanent loss of vegetation. Vegetative disturbances may be short-term if rough graded & soft graded areas revegetated with native species. Removal of existing weed biomass & seed source may be beneficial impact. **(CI):** Removal vegetation within riparian zone may cause		**(PI):** Decreased ground disturbance due to reduction extent of development. **(SI):** Reduction in build out result in less permanent loss of vegetation. Vegetative disturbances may be short-term if rough graded & soft graded areas revegetated with native species. **(CI):** Cumulative impacts same as No Action alternative, but to lesser extent.	**(PI):** Increased ground disturbance from partly retained pace & extent development. **(SI):** Ground disturbance for development permanent structures would result in permanent loss of vegetation. Vegetative disturbances may be short-term if rough graded & soft graded areas revegetated with native species. Removal existing weed biomass and seed source may be beneficial impact. **(CI):** Removal vegetation within riparian zone may cause cumulative impacts on water	**(SI):** Decreased ground disturbance due to reduction in extent of development. **(SI):** Reduction build out result in less permanent loss of vegetation. Vegetative disturbances may be short-term if rough graded &soft graded areas revegetated with native species. **(CI):** Cumulative impacts same as No Action, but to lesser extent.	**(SI):** Increased ground disturbance from retained pace & extent development. **(SI):** Ground disturbance for development of permanent structures result in permanent loss of vegetation. Vegetative disturbances may be short-term if rough graded & soft graded areas revegetated with native species. Removal existing weed biomass & seed source may be beneficial

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
		cumulative impacts on water catchment, infiltration, & delivery from rain. These changes in soil water content & water availability negatively affect vegetation but may benefit some noxious weeds.			catchment, infiltration, & delivery from rain. These changes in soil water content & water availability negatively affect vegetation but may benefit some noxious weeds.		impact. **(CI):** Removal vegetation within riparian zone may cause cumulative impacts on water catchment, infiltration, & delivery from rain. These changes in soil water content & water availability negatively affect vegetation but may benefit some noxious weeds.
Native plant communities		**(SI):** Native plant communities may be permanently altered or replaced with nonnative species, creating fragmented native habitat. Revegetated areas require time for vegetation to reestablish. **(CI):** Fragmentation could impact overall plant productivity and wildlife use. Fragmentation can impact size and proximity of habitat patches, increase amount of habitat edge, ultimately impacting quality of habitat for birds and mammals.		**(SI):** Native plant communities may be permanently altered or replaced with non-native species, creating fragmented native habitat. Revegetated areas require time for vegetation to reestablish. Impacts reduced if less development occurs. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Native plant communities may be permanently altered or replaced with nonnative species, creating fragmented native habitat; probably less than under No Action. Revegetated areas require time for vegetation to reestablish. **(CI):** Fragmentation could impact overall plant productivity and wildlife use. Fragmentation can impact size and proximity of habitat patches, increase amount of habitat edge, ultimately impacting quality of habitat for birds and mammals.	**(SI):** Native plant communities may be permanently altered or replaced with non-native species, creating fragmented native habitat. Revegetated areas require time for vegetation to reestablish. Impacts reduced if less development occurs. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Native plant communities may be permanently altered or replaced with nonnative species, creating fragmented native habitat. Revegetated areas require time for vegetation to reestablish. **(CI):** Fragmentation could impact overall plant productivity and wildlife use. Fragmentation can impact size and proximity of habitat patches, increase amount of habitat edge, ultimately impacting quality of habitat for birds and mammals.
Effects to rare, threatened, and endangered species		**(PI):** Potential removal of slender Indian paintbrush plants. **(SI):** Impacts from noxious weeds on species of concern include potential increased competition, displacement, & plant damage or mortality resulting from herbicide drift during weed management. **(CI):** Impacts on species of concern vary. Potential impacts caused by development & other ground disturbances could affect species		**(SI):** Could limit number of future dwelling units and commercial properties. Impacts to plants of concern are less likely. **(CI):** Same as No Action, but to lesser extent.	**(PI):** Potential removal of slender Indian paintbrush plants. **(SI):** Impacts from noxious weeds on species of concern include potential increased competition, displacement, & plant damage or mortality resulting from herbicide drift during weed management. **(CI):** Impacts on species of concern vary. Potential impacts caused by development & other ground disturbances could affect species	**(SI):** Could limit number of future dwelling units and commercial properties. Impacts to plants of concern are less likely. **(CI):** Same as No Action, but to lesser extent.	**(PI):** Potential removal of slender Indian paintbrush plants. **(SI):** Impacts from noxious weeds on species of concern include potential increased competition, displacement, & plant damage or mortality resulting from herbicide drift during weed management. **(CI):** Impacts on species of

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
		ability to persist, & vulnerabilities to extinction in Montana.			ability to persist, & vulnerabilities to extinction in Montana.		concern vary. Potential impacts caused by development & other ground disturbances could affect species ability to persist, & vulnerabilities to extinction in Montana.
Slender Indian paintbrush		**(PI):** Potential removal slender Indian paintbrush plants. **(SI):** This species vulnerable to hydrologic alterations if water table lowered by increased number of wells. Will incur greatest impacts from future development since occurs on private lands that are partially developed. Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Any loss in abundance or habitat for slender Indian paintbrush probably not affect ability to persist in Gallatin County.		**(SI):** Vulnerability to hydrologic alterations reduced due to fewer SFEs & thus fewer wells. Direct impacts to slender Indian paintbrush less likely. Because occurrences next to existing roads & trails, degree of secondary impacts same as under No Action. Habitat could experience impacts from noxious weed spread. **(CI):** Impacts on slender Indian paintbrush would not affect ability to persist in Gallatin County.	**(PI):** Potential removal slender Indian paintbrush plants. **(SI):** This species vulnerable to hydrologic alterations if water table lowered by increased number of wells. Will incur greatest impacts from future development since occurs on private lands that are partially developed. Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Any loss in abundance or habitat for slender Indian paintbrush probably not affect ability to persist in Gallatin County.	**(SI):** Vulnerability to hydrologic alterations reduced due to fewer SFEs & thus fewer wells. Direct impacts to slender Indian paintbrush less likely. Because occurrences next to existing roads & trails, degree of secondary impacts same as under No Action. Habitat could experience impacts from noxious weed spread. **(CI):** Impacts on slender Indian paintbrush would not affect ability to persist in Gallatin County.	**((PI):** Potential removal slender Indian paintbrush plants. **(SI):** This species vulnerable to hydrologic alterations if water table lowered by increased number of wells. Will incur greatest impacts from future development since occurs on private lands that are partially developed. Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Any loss in abundance or habitat for slender Indian paintbrush probably not affect ability to persist in Gallatin County.
Hall's rush		**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Ability persist in Gallatin County may be reduced. Overall viability in Montana &global range not impacted.		**(SI):** Habitat could experience impacts from noxious weed spread. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Ability persist in Gallatin County may be reduced. Overall viability in Montana &global range not impacted.	**(SI):** Habitat could experience impacts from noxious weed spread. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Ability persist in Gallatin County may be reduced. Overall viability in Montana &global range not impacted.
Large-leafed balsamroot		**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Ability persist in Gallatin County may be reduced. Overall viability in Montana &global range not impacted.		**(SI):** Habitat could experience impacts from noxious weed spread. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Ability persist in Gallatin County may be reduced. Overall viability in Montana &global range not impacted.	**(SI):** Habitat could experience impacts from noxious weed spread. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Ability persist in Gallatin County may be reduced. Overall viability in

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
							Montana &global range not impacted.
Discoid goldenweed		**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Potential impacts caused by development & other ground disturbances could increase vulnerability to extinction in Montana, but not global viability.		**(SI):** Habitat could experience impacts from noxious weed spread. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Potential impacts caused by development & other ground disturbances could increase vulnerability to extinction in Montana, but not global viability.	**(SI):** Habitat could experience impacts from noxious weed spread. **(CI):** Same as No Action, but to lesser extent.	**(SI):** Distribution & abundance could suffer from increased invasion noxious weeds. **(CI):** Potential impacts caused by development & other ground disturbances could increase vulnerability to extinction in Montana, but not global viability.
Noxious weeds		**(SI):** Future development has potential to increase area & density of infestations. Soil brought in for development may provide better habitat for weeds than native soil. If development spreads weed seed to new areas, weeds become a problem on additional public & private lands. Conversely, removal existing weed biomass & seed source may be beneficial. **(CI):** Cumulative impacts of noxious weed spread may include declines in native plant community diversity, increased sedimentation, & decreased wildlife or livestock forage.		**(SI):** Reduced development result in less ground disturbance (assuming no mitigation), thus secondary impacts of noxious weed spread lower. **(CI):** Cumulative impacts noxious weed spread may include declines native plant community diversity, increased sedimentation, & decreased wildlife or livestock forage.	**(SI):** Future development has potential to increase area & density of infestations, probably less than with No Action. Soil brought in for development may provide better habitat for weeds than native soil. If development spreads weed seed to new areas, weeds become a problem on additional public & private lands. Conversely, removal existing weed biomass & seed source may be beneficial. **(CI):** Cumulative impacts of noxious weed spread may include declines in native plant community diversity, increased sedimentation, & decreased wildlife or livestock forage.	**(SI):** Reduced development result in less ground disturbance (assuming no mitigation), thus secondary impacts of noxious weed spread lower. **(CI):** Cumulative impacts noxious weed spread may include declines native plant community diversity, increased sedimentation, & decreased wildlife or livestock forage.	**(SI):** Future development has potential to increase area & density of infestations. Soil brought in for development may provide better habitat for weeds than native soil. If development spreads weed seed to new areas, weeds become a problem on additional public & private lands. Conversely, removal existing weed biomass & seed source may be beneficial. **(CI):** Cumulative impacts of noxious weed spread may include declines in native plant community diversity, increased sedimentation, & decreased wildlife or livestock forage.
Wildlife							
Wildlife - general	**(PI):** No primary impacts to wildlife.	**(SI):** If eutrophication reduces fish or invertebrate productivity or changes species composition, fish-eating (river otter, bald eagle, osprey or mergansers) or insect-eating (shrews, swallows or warblers) wildlife may be	**(SI):** Using alternative water treatment so no negative effects on aquatic ecology; would be no impacts to wildlife from reduced water quality. **(CI):** Zoning, planning development with wildlife habitat as focus, and	**(SI):** Secondary impacts to wildlife may be beneficial. Proposed Action represents the potential for an overall 89% reduction in allowable dwelling units & 99% reduction in commercial square footage (less	**(SI):** Mitigation would partly reduce build-out compared to No Action. Partial benefits to wildlife due to reduced land use in footprint.	**(SI):** Impacts to wildlife likely intermediate between Proposed Action & No Action. Magnitude of impact depends on use of narrative standard, approval of application to degrade. If surge in development occurs early on,	**(SI):** Impacts with mitigation would be intermediate to impacts with mitigation from the No Action & Proposed Action alternatives.

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
		affected by change in prey base. **(CI):** Habitat losses from increased development combined with other habitat losses & increased encroachment on wildlife habitat may cumulatively affect wildlife by reducing long-term population viability. Species less compatible with humans (grizzly bear) or those requiring larger areas contiguous habitat; more likely affected.	implementing & enforcing food & garbage storage policies could reduce impacts to wildlife from increased development.	habitat loss), as well as long term protection of water quality. **(CI):** Any impacts beneficial relative to No Action.		& DEQ's continued adherence to Cumulative Impacts Analysis. **(CI):** Likely similar to Proposed Action & beneficial compared to No Action.	
Habitat		**(SI):** Increased development could cause habitat loss, habitat fragmentation, & increased disturbance by humans. Fragmentation plant communities detrimental to plant productivity & therefore wildlife use. Higher density development translates to more disturbances to wildlife, through traffic, domestic pets, & general human activity.		**(SI):** Less loss of habitat with less development, beneficial for wildlife.		**(SI):** Impacts to wildlife likely intermediate between Proposed Action & No Action. Magnitude of impact depends on use of narrative standard, approval of application to degrade. If less loss of habitat with less development, beneficial for wildlife.	
Effects to rare, threatened, and endangered species		**(SI):** Bald eagles could be negatively affected if No Action Alternative results in degraded water quality & reduction in prey base. Grizzly bears could be affected by increased human development & use in bear habitat. Effects to wolves or lynx not likely significant or measurable.		**(SI):** Would not adversely affect federally listed wildlife species, & may have beneficial effects. If Proposed Action results in lower dwelling unit density, loss of habitat & human disturbance less than under the No Action. Preservation water quality beneficial to bald eagles & indirectly to other species.		**(SI):** Would not adversely affect federally listed wildlife species, & may have beneficial effects. If Cumulative Impacts Analysis results in lower dwelling unit density, loss of habitat & human disturbance less than under the No Action. Preservation water quality beneficial to bald eagles & indirectly to other species.	
Air Quality							
	(SI): Some gradual decrease in air quality as level of development in Gallatin Canyon increases.			**(SI):** May limit development, & therefore less air pollution from fewer future construction activities.	**(SI):** If mitigations implemented, partial reduction development potential in footprint & subsequent impacts to air quality less compared to No Action.		

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement.

Potential Impact **(PI) = Primary** **(SI) = Secondary** **(CI) = Cumulative**	**Common to All Action Alternatives**	**Alternative 1: No Action**	**Alternative 1: No Action with Mitigation Measures**	**Alternative 2: Proposed Action**	**Alternative 2: Proposed Action with Mitigation Measures**	**Alternative 3: Cumulative Impacts Analysis**	**Alternative 3: Cumulative Impacts Analysis with Mitigation Measures**
Cultural Resources							
	(PI): No primary impacts to cultural resources likely. **(CI):** Possibly cumulative impacts to cultural resources.	**(SI):** Impacts cultural resources within study area due to ground disturbance during site development. Entire study area has not been surveyed; therefore, total number & distribution sites currently not known. However, given existing documentation, reasonable to assume some disturbance of cultural sites.		**(SI):** With less development, less ground disturbance and lowered impacts to cultural resources.	**(SI):** If mitigations adopted, Proposed Action will present secondary impacts similar to those under No Action.	**(SI):** If less development, less ground disturbance and lowered impacts to cultural resources.	
Aesthetics							
Visual resources	**(PI):** None. **(CI):** No effects to visual character or appearance of surrounding viewsheds or topography.	**(SI):** Aesthetic impacts from increased development primarily noticeable in commercial & residentially zoned areas. Density of development may impact aesthetic quality of the corridor near highway. **(CI):** Development could continue to full build-out; could impair aesthetic quality of river corridor near highway.		**(SI):** Substantially reduced level from No Action. Reduction in density of development would protect aesthetic quality of river corridor. **(CI):** Future development could impair aesthetic quality of river corridor near highway, but reduced from No Action.	**(SI):** Impacts similar as No Action. **(CI):** Development to less than full build-out, which could create less impairment aesthetic quality of river corridor near highway.	**(SI):** Substantially reduced level from No Action. Reduction in density of development would protect aesthetic quality of river corridor. **(CI):** Future development could impair aesthetic quality of river corridor near highway, but reduced than No Action.	**(SI):** Impacts same as No Action. **(CI):** Development to full build-out, which could impair aesthetic quality of river corridor near highway.

Table of Contents

Executive Summary E-1

List of Tables ii
List of Figures.....ii
List of Appendices iii

Chapter 1: Introduction to the Final EIS.....1

Chapter 2: Analysis of Comments 3
2.1 Geology and Soils 4
2.1.1 Comment Summary 4
2.1.2 Issues Raised and Responses 4
2.2 Water Quality 5
2.2.1 Comment Summary 5
2.2.2 Issues Raised and Responses 6
2.3 Land Use and Recreation 22
2.3.1 Comment Summary 22
2.3.2 Issues Raised and Responses 24
2.4 Socioeconomics 33
2.4.1 Comment Summary 33
2.4.2 Issues Raised and Responses 33
2.5 Fisheries and Aquatic Resources 45
2.5.1 Comment Summary 45
2.5.2 Issues Raised and Responses 45
2.6 Air Quality 52
2.6.1 Comment Summary 52
2.6.2 Issues Raised and Responses 52
2.7 MEPA Process 53
2.7.1 Comment Summary 53
2.7.2 Issues Raised and Responses 53
2.8 Other Comments 56

Chapter 3: Description of Public Involvement 57

Chapter 4: Public Comments Received.....59

Chapter 5: Distribution List.....61

Chapter 6: References Cited in the FEIS.....65

List of Tables

Table E-1. Condensed description of potential impacts related to the three alternatives considered in detail in the Gallatin River Outstanding Resource Water Designation Environmental Impact Statement. E-7

Table 2.3-1. (Revised version of Table 4.4-6 in the DEIS.) Allowable residential development (all numbers are in dwelling units [DU]) within the footprint using alternative wastewater treatment systems: Proposed Action, with and without mitigation. 28
Table 2.3-2. (Revised version of Table 4.4-7 in the DEIS.) Allowable commercial development (all numbers are in single family equivalents [SFE]) within the footprint using alternative wastewater treatment systems: Proposed Action, with and without mitigation. 29

Table 3.5-1 [DEIS]. Population and median age in the study area *in 2000* (Sonoran Institute 2003a, 2003b; *2000 Census*)..... 36
Table 3.5-5. Employment by industry in Gallatin County and Gallatin Canyon areas displayed in terms of number of jobs per sector and percentage of the total *in 2000*..... 37

Table 4.1. Sources of comments on the Gallatin ORW DEIS received by DEQ during the public comment period from September 8 to October 27, 2006..... 59

List of Figures

Figure 2.2-1. Map showing the footprint of the area hydrologically connected to the mainstem of the Gallatin River based on a one-year groundwater travel time. (Identical to Figure 2-1 in the DEIS) 11
Figure 2.2-2 (Revised version of Figure 4.3-9 in the DEIS). Predicted phosphorus (as P) concentration resulting from typical septic treatment, and four mitigation options (see Table 2.3-1). Concentrations are shown in relation to water quality standards trigger value of 0.001 mg/L in the mainstem of the Gallatin River. Plotted concentrations are based on calculated phosphorus loading and dilution based on 7Q10 flows as measure at USGS Station 06043500, near Gallatin Gateway, Montana. 20
Figure 2.5-1. Benthic macroinvertebrate data displayed as percent of total sample by taxonomic order for the sample site on the West Fork Gallatin River upstream of the Spur Road Bridge..... 46
Figure 2.5-2. Benthic macroinvertebrate data displayed as percent of total sample for the sum of all Ephemeroptera, Plecoptera, and Trichoptera (EPT) and the Dipteran taxa for the sample site on the West Fork Gallatin River upstream of the Spur Road Bridge..... 47
Figure 2.5-3. Benthic macroinvertebrate data displayed as percent of total sample by taxonomic order for the sample site on the Gallatin River just below the confluence of the West Fork Gallatin River at Jack Bridge. 48

Figure 2.5-4. Benthic macroinvertebrate data displayed as percent of total sample by taxonomic order for the sample site on the Gallatin River just below the confluence of the West Fork Gallatin River. 48

List of Appendices

Appendix A: Written Comments Received by DEQ during the Public Comment Period

Appendix B: Background and Rationale used to Evaluate the Hydrogeology along the Gallatin River

Chapter 1: Introduction to the Final EIS

Under the Montana Environmental Policy Act (MEPA), the intent of the Final Environmental Impact Statement (FEIS) is to summarize comments and participation from the public and interested agencies regarding the adequacy, direction, breadth, and extent of the analysis contained in a Draft Environmental Impact Statement (DEIS). Comments are evaluated based on their content, relevance, and jurisdiction of DEQ and associated agencies. Public comments may redirect the analysis or require new analyses. MEPA requires agencies to include in the FEIS all comments, or if not practical, a representative sample of comments and the agency's response to all substantive comments. Copies of all comments received on the DEIS for the Gallatin River Outstanding Resource Water (ORW) designation are found in Appendix A of this document. The DEIS is adopted as final with amendments made in response to public comments.

This FEIS summarizes comments received by DEQ during the comment period for the Gallatin ORW DEIS. This comment period encompassed 49 days from September 8, 2006 to October 27, 2006 (MEPA requires a minimum of a 30 day comment period.) Each comment was classified by the resource area addressed, and then forwarded to the appropriate specialist for assessment. Resource specialists read each comment, and responded with a brief analysis of how the DEIS addressed the comment, or when necessary, with additional analyses to answer the comment. Some comments requested analysis beyond the scope of the EIS, outside of the jurisdiction of DEQ, or inconsistent with the legal framework associated with the ORW petitioning process. These comments are catalogued in this report, but no further analysis was completed.

DEQ will recommend in a Record of Decision (ROD) a course of action for the Montana Board of Environmental Review (Board). The ROD is a concise public notice of DEQ's decision, explaining the reasons for the decision and any special conditions surrounding the decision or its implementation (Mundinger and Everts 2004). The Board will then make a decision on rulemaking. The Board may, based on DEQ's ROD, choose to proceed with the proposed rule (adopt the Proposed Action Alternative), decline to adopt the rule (adopt the No Action Alternative), or modify the proposed rule and send it out for further public comment. If the Board decides to decline the rule, the Board must identify its reasons. If the Board decides to move forward with the rule as proposed, the Board will finalize the rule to classify the specified reach of the Gallatin River as an ORW. The rule would then be adopted, but is not effective until approved by the Legislature (75-5-316(9), MCA). Throughout this entire process, DEQ has complied with MEPA's requirement for scheduling, open disclosure and reasonable provisions for the involvement of the public in the EIS process as detailed in Chapter 3.

Chapter 2: Analysis of Comments

Sixty-seven individuals or entities submitted comments to DEQ during the public comment period on the DEIS, and of these, nineteen commented at the October 25, 2006 public hearing. The majority of comments came from individual citizens. Twenty-two comments were received from agencies, law firms, and non-governmental organizations. Several commenters addressed more than one topic or resource area in their submittals. Thirteen of the individual comment letters received expressed support for the designation, but did not request specific direction or analyses in the FEIS. Similarly, two individual comments expressed opposition for the designation, but did not request specific direction or analysis. These comments were duly noted, but no other response was required. The remaining comment letters contained at least one substantive issue that is addressed in this FEIS. The comments have been sorted by resource area, and substantive comments have been addressed within these areas. No comments were received regarding the following resource areas: vegetation, wildlife, aesthetics, and cultural resources; therefore, no further analysis specific to these resource areas was necessary.

Where appropriate, section numbers, page numbers, or figure and table numbers from the DEIS as published by DEQ are included to assist the reader. These page numbers refer to the locations of any changed text, figures or tables in the DEIS, or direct the reader to places in the DEIS used to address a comment. New tables and analyses are accompanied by a reference to an approximate insertion point in the DEIS. Introductory material has been included to allow this document to stand alone as a summary of the changes to the DEIS. However, the FEIS does not replace the DEIS which contains the bulk of the analyses used to evaluate the alternatives.

2.1 Geology and Soils

Several comments were recorded at the October 25, 2006 public hearing and at least five additional comments were received by DEQ on issues regarding the analysis of the geology and soils related to the footprint in the DEIS. The comments generally fell into two areas: regulating nonpoint source discharges and the use of Best Management Practices.

2.1.1 Comment Summary

There were five comments related to geology and soils. One organization commented that impacts to timber harvesting and mining impacts were not addressed. Similarly, concerns were expressed related to nonpoint source activities, and whether highway maintenance activities would be affected. One commenter stated that Best Management Practices should handle soil disturbances due to any increased development in the study area. One commenter pointed out (correctly) that nonpoint sources will not be affected by ORW designation.

2.1.2 Issues Raised and Responses

Comment 1: The comments on soils and geology all referenced activities which will not be regulated differently under ORW designation than under current regulations. One comment also refers to section 2.3 of the DEIS and to 75-5-303, MCA. The commenter is unsure whether the ORW designation will curtail temporary degradation of state waters.

Response: Nonpoint source activities will not be regulated under the ORW designation.

Nonpoint Source Discharges: Montana Department of Transportation projects, such as road construction and maintenance, which produce nonpoint source pollutants will not be controlled differently under the ORW designation (75-5-316, MCA); refer to the definition of point source (75-5-103, MCA). These sources of pollutants not affected by ORW designation were addressed in the DEIS, Section 1.9, page 9. Silviculture and agriculture activities that are nonpoint sources are not controlled differently under the ORW designation, than without ORW designation (Section 1.9 of the DEIS).

There is currently no provision in 75-5-303, MCA, for “temporary degradation”; therefore, the proposed alternative will not change how temporary degradation is addressed. The nonsignificant activities that are listed in 75-5-317, MCA, will not be affected by ORW designation, since they are specifically exempted from the provisions of 75-5-303, MCA.

Mining Activities: While the DEIS stated there were no existing or planned mining operations in the ORW study area (P. Werner, pers. comm. 2006), (Section 3.4.3.2 of the DEIS), recent research shows there are two sand and gravel mine operations in the Big Sky area. These sand and gravel mines are commented on under land use in Section 2.3.2 of the FEIS.

2.2 Water Quality

Several comments were recorded at the October 25, 2006 public hearing and at least twenty-seven additional comments were received by DEQ on issues regarding the water quality impacts analysis related to the footprint. The comments generally fell into six areas: types of specific activities affected by ORW designation; current policy protecting water quality including TMDLs and water quality trends; water quality impacts analysis; the extent of ORW designation; mitigation measures; and the footprint of hydrologic connection.

2.2.1 Comment Summary

2.2.1.1 Specific Activities Affected by the ORW Designation

Comments asked specifically which activities would be affected by the ORW designation. One commenter stated that the DEIS did not appear to recognize the presence of the Gallatin Local Water Quality District, or to address potential impacts of the ORW designation to the Gallatin Local Water Quality District.

2.2.1.2 Current Policy and the Protection of Water Quality and Water Quality Trends

Thirteen individuals commented on existing water quality being protected by current policy or on the presence of measurable impacts. Many stated they thought water quality in the Gallatin River was adequately protected without ORW designation, while several commented they thought the river was not adequately protected from water quality degradation.

One commenter stated that there was no analysis of impacts from leaks from the Big Sky Water and Sewer District affecting water quality.

2.2.1.3 Water Quality Impacts Analysis

Nine people had comments or questions concerning the vulnerability footprint map and/or hydrologic connection. They generally wanted to know how the map was derived, and whether or not it had regulatory status.

2.2.1.4 Extent of the ORW

Several commenters made statements regarding flexibility of the ORW designated area. One commenter stated that the ORW was too weak, and would not protect water quality enough.

2.2.1.5 Mitigation Measures

Two commenters questioned whether full build-out could be achieved using proposed mitigation measures. Air quality as a result of specific mitigation measures (incinerator toilets) was a concern of one commenter. This comment is addressed under Air Quality, Section 2.7 of the FEIS.

2.2.1.6 Existing Regulation of Hydrologically Connected Groundwater

One comment addressed the possibility of conflicting hydrogeological evaluations during the hydrologic connectivity review as part of the nondegradation assessment.

2.2.2 Issues Raised and Responses

This section presents the issues raised and their responses based on the follow six areas presented above: types of specific activities affected by ORW designation; current policy protecting water quality including TMDLs and water quality trends; water quality impacts analysis; the extent of ORW designation; mitigation measures; and the footprint of hydrologic connection.

2.2.2.1 Specific Activities Affected by the ORW Designation

Comment 2: Several comments inquired as to which activities would be affected under ORW designation and, specifically, whether parcels with septic permits or approvals would be subject to new requirements under the Proposed Alternative.

Response: As stated earlier, the ORW designation only curtails measurable change from regulated point sources; nonpoint sources are not included. Refer also to Section 2.1.2 Issues Raised and Responses in the Geology and Soils Section of the FEIS.

ORW regulation does not apply to new or increased sources of pollution with a direct hydrologic connection to an ORW if the source was approved, authorized, licensed, or permitted by DEQ or a local government body prior to the effective date of the ORW designation, as outlined in the proposed ARM 17.30.617 Outstanding Resource Water – Designation.

Other Direct Discharges or Proposed Direct Discharges:

Comment 3: One commenter asked how many direct discharge permits (MPDES) were found in the area.

Response: Montana Pollutant Discharge Elimination System (MPDES) permits outlined in Section 3.3.3.1 of the DEIS shows four MPDES permits. There are two storm water permits and one MPDES permit, all near Big Sky, and one storm water permit in Upper Hell Roaring Creek.

There are two sand and gravel mining operations in the ORW study area. Neither facility has a listed MPDES permit, as outlined above, and there are no known discharges to surface water from either of the facilities.

Comment 4: One comment stated that the DEIS did not appear to recognize the presence of the Gallatin Local Water Quality District, or to address potential impacts of ORW designation to this District.

Response: The Cumulative Impacts Analysis Alternative, and to a greater extent the Proposed Action, should decrease transport of nutrients to and in the southern portion of the Gallatin Local Water Quality District by evaluating cumulative effects and measurable changes to water quality in the Gallatin River (the southern part of the District extends approximately 9.5 miles into the northern part of the proposed ORW segment). Development within the areas hydrologically connected to the Gallatin River will be affected in a similar fashion under ORW designation, whether they are inside or outside the Gallatin Local Water Quality District.

2.2.2.2 Current Policy and the Protection of Water Quality

Current Policy and Cumulative Impacts:
Comment 5: A number of commenters stated that they thought current policy was protective enough of water quality in the ORW.

Response: DEQ currently has the authority to regulate and implement a cumulative impacts analysis in any watershed in the state; however, the level and pace of development in most watersheds across Montana has not necessitated surface water cumulative impacts analysis in order to effectively protect water quality. (Section 2.4 DEIS)

Nondegradation Review:
Comment 6: At least one commenter stated that attenuation of pollutants such as phosphorus and nitrogen as they move through groundwater was not considered. Several commenters stated that they thought current nondegradation policy was protective of water quality in the Gallatin River.

Response: For sources adjacent to surface waters, current nondegradation reviews of Subsurface Wastewater Treatment Systems (SWTSs) for nitrate (as N) are evaluated based on meeting the nondegradation significance limits. Using the trigger values for each nutrient, inorganic phosphorus or nitrate (as N), the dilution equation is applied to determine if the source results in a measurable, or trigger value, change above existing background concentrations. The current background concentration is not considered because only the incremental measurable change is evaluated. If the source causes an exceedance in the trigger value for nitrate (as N), the applicant has the option of demonstrating compliance with the narrative standard for nitrate (as N) in ARM 17.30.715(1)(g), which states that changes in water quality for any parameter having only a narrative standard will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity.

Also, if the proposed source does not meet the 50-year break-through[1] limit for inorganic phosphorus, the proposed discharge cannot cause an increase above the trigger value for inorganic phosphorus. If the trigger value is exceeded as a result of the dilution equation evaluation, the applicant could demonstrate that the increase in phosphorus in the surface water would not be significant based on the narrative standard [ARM 17.30.715(1)(g)].

In the trigger value evaluation using the dilution equation, DEQ assumes that 100% of the effluent discharged from the SWTS will reach the surface water unless supporting data can be provided that shows a lower loading percentage. The trigger value evaluation is currently used for each individual activity and is not applied to cumulative effects of multiple activities, such as multiple, unrelated subdivisions. However, DEQ does have the authority to regulate new developments based on cumulative impacts analysis to high quality water bodies [ARM 17.30.506(2)(f) and 17.30.715(2)(a)].

The ORW designation would protect water quality from cumulative regulated discharges with regards to the trigger values, and would eliminate the use of the narrative standard. Under the current nondegradation review for SWTS, a 50-year break-through criterion is used for inorganic

[1] The travel time limit for a pollutant from its source to receiving waters, in this case 50 years.

phosphorus nondegradation analysis. Thus, using the current analysis procedure, permitted septic systems could allow inorganic phosphorus break-through to the surface water at any time greater than 50 years, where cumulative effects are not evaluated. The Proposed Action would provide additional protection by evaluating cumulative impacts of multiple sources to the Gallatin River.

Water Quality Trends and Background:

Comment 7: Several commenters stated that no impacts to water quality are currently seen in the Gallatin River mainstem. One commenter noted that Storm Castle Creek has never been listed on the 303(d) listed for impaired waterbodies.

Response: The requirements for ORW designation do not require a finding that the water body is impacted or impaired. But, rather that the water body is at risk of having at least one of the criteria listed in 75-5-316(4), MCA, compromised as a result of pollution. Data suggesting impacts are occurring are provided below to demonstrate that risk.

Modeling data in support of a nonsignificance determination have shown potential increases in algae concentration along the South Fork and West Fork of the Gallatin River as a result of one proposed development. Estimated levels of algae growth were shown to increase as much as 3.1% at the mouth of South Fork due to increases of the projected nitrate loading of the development. (Section 4.3.1.2 DEIS and Nicklin 2000b)

The Blue Water Task Force data collected from May 2000 to February 2004 along the Gallatin River and some of its tributaries, as presented in Section 4.3.1.2 of the DEIS, indicate higher nitrate concentrations in the West Fork of the Gallatin River (which is the tributary with the largest discharge and highest intensity of development in the area of the ORW) than the Gallatin River above the West Fork confluence. This result suggests a measurable change in nutrients increase in areas of higher intensity of development.

TMDL assessments have classified several designated uses as threatened in six tributaries: Storm Castle and Cache creeks, the Taylor Fork, West Fork, South Fork, and Middle Fork of the West Fork of the Gallatin River (DEQ 2006a, EPA 2005). The following list includes impairments due to nutrients as well as other causes:

- In 2004, Storm Castle Creek (MT41H005_010), formerly known as Squaw Creek, (which is the name used in the 303(d) lists) was 303(d) listed as only partially supporting aquatic life and coldwater fish due to bank erosion, fish habitat degradation, other habitat alterations and nutrients.

- Taylor Fork (MT41H005_020) was not listed as impaired on the 1996 303(d) list, but did appear on the 2004 303(d) list. In 2004, Taylor Fork was listed as only partially supporting aquatic life, coldwater fishery, and industry due to siltation, fish habitat degradation, suspended solids, and other habitat alterations.

- Cache Creek (MT41H005_030) was listed as impaired on the 1996 303(d) list due to siltation, which was impairing aquatic life and coldwater fish. In 2004, Cache Creek

was listed as only partially supporting aquatic life and coldwater fishery due to siltation, other habitat alteration, and suspended solids.

- In 2004, the Middle Fork of the West Fork of the Gallatin River (MT41H005_050) designated use – recreation – was added as being only partially supported due to impairments caused by nutrients, bank erosion, pathogens, suspended solids, and other habitat alteration. In 2006 this river segment was downgraded from partially supporting to non-supporting contact recreation (DEQ 2006c, Pg D-22).

- South Fork of the West Fork (MT41H005_060) was on the 2004 303(d) list due to impairments caused by nutrients, bank erosion, pathogens, suspended solids, and other habitat alterations.

- In 2004 for the West Fork of the Gallatin River (MT41H005_040), recreation was added as partially supported designated use on the 2004 303(d) list and the following causes were cited: nutrients, siltation, and algal growth (as indicated by chlorophyll *a* measurements). (Section 3.3.3.1 DEIS). The 2006 DEQ 303(d) report shows the West Fork Gallatin River as downgraded from partial support to nonsupport for cold water fishery and for contact recreation. DEQ's summary impairment comments on the West Fork included the following: "Nutrient enrichment and sedimentation negatively impact aquatic life and recreational uses. There is evidence that the stream is being colonized by *Tubifex tubifex*, the intermediate host for whirling disease and a species tolerant of sediment and nutrient pollution. Aquatic Life: CHEMISTRY - moderate impairment due to nutrient enrichment; HABITAT - moderate impairment due to sedimentation, Cold Water Fishery: Nutrient enrichment, sedimentation, nuisance algal growth."

Baldwin (1997) found that, of 21 domestic and five public water wells sampled in the Big Sky area, nutrient concentrations were always below the maximum contaminant level of 10 mg/L. His results showed levels of nitrate as high as 3.86 mg/L and was believed to be affected by septic system effluent in groundwater. (Section 3.3.3.2 DEIS)

DEQ finds this progression of water quality information strongly suggests that water quality degradation is occurring in the tributaries of the proposed ORW reach, and thus puts the quality of water in the Gallatin River at risk.

2.2.2.3 Water Quality Impacts Analysis
The Footprint Map (DEIS Figure 2.2-1):

Comment 8: Several commenters asked how the map of the footprint was developed, how its location was determined, and exactly how it would be used. Commenters wanted to know if the footprint would be used in a regulatory manner.

Response: The footprint map (Figure 2.2-1) was an assessment tool used in the DEIS evaluation to delineate the geographic area likely to be hydrologically connected to the Gallatin River and

its tributaries. The assessment criteria included estimated depth to groundwater, groundwater time of travel to the streams, geologic maps, and previously published scientific studies of the Gallatin River area. The footprint map was developed to estimate the surficial extents of a vulnerable area within which contaminants released to the subsurface may contribute to water quality impacts in the Gallatin River. Areas within the footprint were estimated as having potential to impact surface waters based on the available published information and scientific interpretation. However, the footprint map does not verify that development within the footprint will have direct water quality impacts to the river. Site-specific evaluation would be required to verify whether a particular site was, in fact, hydrologically connected to Gallatin River surface waters.

Development of the vulnerability footprint map was necessary to perform the assessment of potential impacts to land use and socioeconomic issues as required in the development of the DEIS. The footprint was not developed for direct regulatory use, although it may be used as a starting point by the public and by agencies in conjunction with nondegradation reviews. As indicated in the Notice for the Public Hearing, the Board of Environmental Review is proposing to amend ARM 17.30.617 to designate the specific mainstem section of the Gallatin River as an ORW and to amend ARM 17.30.638 (1) to add a new subsection clarifying that discharges to ground water with a direct hydrologic connection to an ORW fall within the statutory mandate prohibiting any permanent change in the water quality of an ORW resulting from point source discharges. Thus, the Proposed Action is based on “direct hydrologic connection”, and not on the footprint or its map (Figure 2-1) in the DEIS.

In response to the comment that the footprint is abrupt in its assumption of contaminants reaching the Gallatin River, the footprint setback is not unlike many other regulatory setbacks that utilize a single line to protect resources and human health. The DEIS could have proposed multiple footprint lines with varying percentages of wastewater discharged within each line assumed to reach the Gallatin, but that would have increased complexity of the footprint. DEQ does not believe that there were sufficient data available to propose a more complex scenario of multiple footprint boundaries within the ORW.

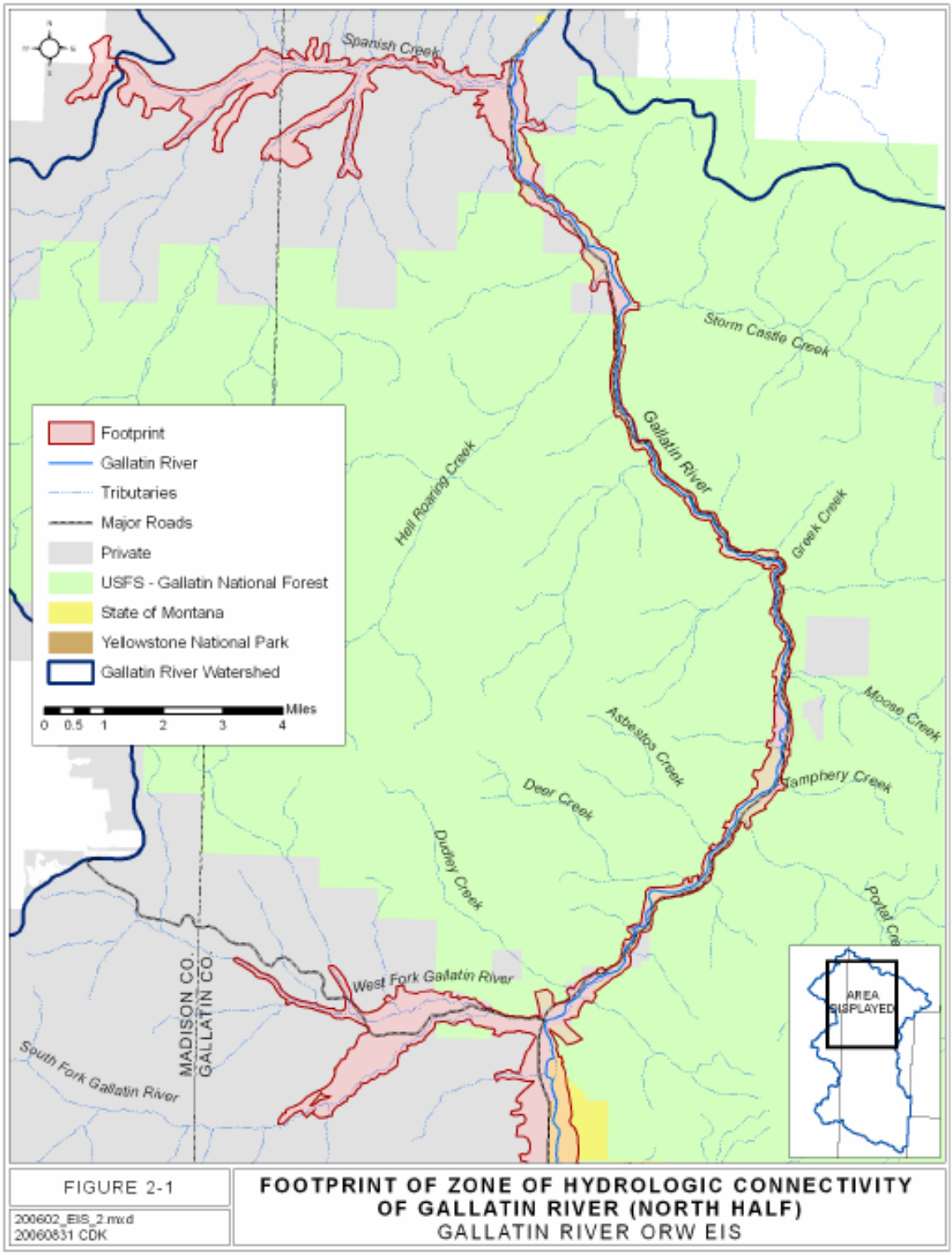

Figure 2.2-1. Map showing the footprint of the area hydrologically connected to the mainstem of the Gallatin River based on a one-year groundwater travel time. (Identical to Figure 2-1 in the DEIS)

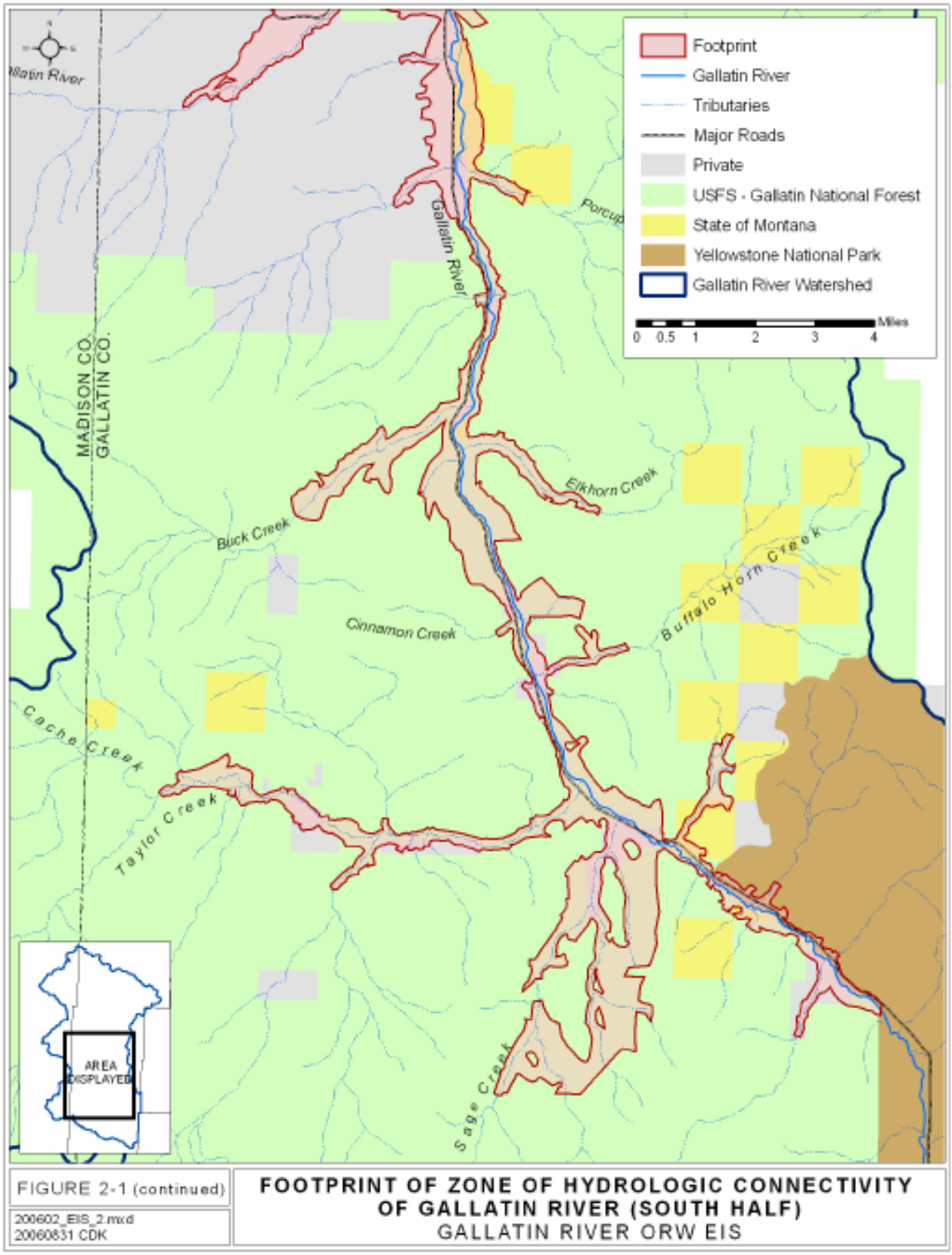

Figure 2.2-1. (Continued).

Responses to Technical Comments: Responses to a series of specific and technical comments made by one commenter are presented.

Comment 9: The commenter did not believe that sufficient evaluations were conducted to support the conclusions and alternatives set forth in the DEIS.

Response: The alternatives and analysis performed for the DEIS did not require extensive data analysis since the assessment of potential impacts to the Gallatin River were based on a standard approach routinely used by DEQ, the nondegradation analysis, which predicts the incremental increase in nitrate (an N) and inorganic phosphorus above current levels. Neither the DEQ nondegradation method, nor the proposed ORW designation requires an analysis of the sources and trends of historical or current levels of contaminants in the river.

Comment 10: The commenter has not detected any statistically significant discernable time trends in nutrient concentration.

Response: A determination of statistical significance or a correlation of potential variables regarding one or more specific water pollutants is not a pre-requisite for the Proposed Action or Alternative Actions.

Comment 11: In reference to DEIS Figure 4.3-6, when all variables are considered, there is no evidence of increasing nutrient concentrations from 2000 to 2004 in the Gallatin River either above or below its confluence with the West Fork. The comment also notes that the figure did not include orthophosphate data, even though inorganic phosphorus is considered the limiting nutrient in the DEIS.

Response: The DEIS (page 144) stated, regarding Figure 4.3-6, that the higher observed nitrate in the West Fork in winter months was, in part, likely due to the lower rates of dilution by surface runoff. Hence winter nitrate concentrations are likely more reflective of groundwater which is in communication with, and tributary to the river, and thus of interest in illustrating this hydrologic connection. The analysis on page 144 further notes that winter nitrate concentrations in the West Fork are as much as three times higher than concurrent concentrations in the Gallatin River mainstem above the confluence with the West Fork. DEQ believes that the available data plotted in Figure 4.3-6 are sufficient to indicate these trends are credible, even though there may be insufficient data to subject to a statistical analysis. The DEIS, on page 198, notes that one sample result in Figure 4.3-6 approached 1.0 mg/L (value 0.8 mg/L), and indicated that nitrate levels in the West Fork appeared to be trending seasonally higher than other measured stations. Overall, DEQ did not base its analysis on the single, highest nitrate data point in Figure 4.3-6 as implied by the commenter. In fact, the elevated winter nitrate concentrations of the West Fork, the most developed drainage in the Gallatin River basin, illustrate that groundwater in the Big Sky area currently contains sufficient nitrate to result in seasonally elevated nitrate levels in surface waters.

The DEIS considered phosphorus the “limiting” nutrient because, given the typical discharge from a domestic wastewater system, it would require fewer SFEs discharging to the Gallatin River to reach the phosphorus limit (0.001 mg/L) as compared to the nitrate limit (0.01 mg/L).

Comment 12: There is no conclusive evidence that nutrient levels are currently an issue on the Gallatin River mainstem on the basis of the Bollman studies.

Response: Neither the DEQ nondegradation method, nor the proposed ORW designation requires an analysis of the sources and trends of historical nor current levels of contaminants in the river. Also refer to Section 2.5.2 of this FEIS for an additional response to this comment.

Comment 13: The commenter requests information, data, citations and methods used to confirm that there is a scientifically supportable "documented trend" toward degradation and /or increase in nutrients that is based on data not inference.

Response: The DEIS did not have the objective of demonstrating a trend of degradation in water quality from nutrients or other pollutants. The ORW designation and other Alternatives are not predicated on correction of a trend of degradation, but rather protection from future point sources of pollutants. Also, see response in this FEIS to comments in Section 2.2.2.2 regarding Water Quality Trends and Background

Comment 14: The TMDL process is the best way to protect the Gallatin River.

Response: The ORW designation protects water quality from measurable change from point sources, including SWTSs, and considers cumulative effects. ORW designation is a process that will assist in preventing the need for TMDL limits in the future. TMDLs protect water quality to the water quality standard, but only come into consideration after water quality degradation has begun. In addition, TMDLs primarily address loads due to nonpoint sources. Refer to Current Policy and Cumulative Impacts, Section 2.2.2.2 above.

Comment 15: Using a footprint to artificially designate and draw a boundary whereby all nutrients either contribute, or do not contribute, is highly subjective and unrealistic.

Response: As described in Appendix F, the DEIS used standard hydrogeologic methods to designate the footprint, including previous similar mapping in the Big Sky area by Baldwin (1996, 1997). The location of the footprint boundary line was often determined by a geologic contact as mapped by the USGS and Montana Bureau of Mines and Geology. Groundwater flow direction, rate of flow and potential hydrologic connection to streams can be quite different across hydrogeologic units. Moreover, the DEIS recognized that site-specific conditions, not the DEIS map of the footprint, would ultimately determine whether a specific source of contaminants was considered to be in direct hydrologic connection to surface waters. See DEIS, pgs. 20 and 140).

As mentioned previously in the FEIS, development of the vulnerability footprint map was necessary to perform the assessment of potential impacts to land use and socioeconomic issues as required in the development of the DEIS. The footprint will not be used as an absolute boundary for review of impacts for future developments. As indicated in the Notice for the Public Hearing, the Board of Environmental Review is proposing to amend ARM 17.30.617 to designate the specific mainstem section of the Gallatin River as an ORW and to amend ARM 17.30.638 (1) to

add a new subsection clarifying that discharges to ground water with a direct hydrologic connection to an ORW fall within the statutory mandate prohibiting any permanent change in the water quality of an ORW resulting from point source discharges. Thus, the Proposed Action is based on "direct hydrologic connection" (as defined in Appendix B) and not on the footprint map as presented in the DEIS. Site-specific data will be used for each proposed development to determine if it is in direct hydrologic connection with the Gallatin River.

The footprint setback is not unlike many other regulatory setbacks that utilize a single line to protect resources and human health. The DEIS could have proposed multiple footprint lines with varying percentages of wastewater discharged within each line assumed to reach the Gallatin, but that would have increased complexity of the footprint. DEQ did not believe that there were sufficient data available to propose a more complex scenario of multiple footprints within the ORW.

Comment 16: The DEIS does not account for nonpoint sources of nutrients and only relies on a measurable change for its threshold.

Response: Neither the DEQ nondegradation method, nor the proposed ORW designation requires an analysis of the sources and trends of historical or current levels of contaminants in the river and are based on the incremental change of the parameter of concern such as nutrients. Also refer to Section 2.1.2 Issues Raised and Responses (FEIS) for nonpoint sources being excluded under ORW designation. Refer also to response to Comment 1.

Comment 17: The footprint map is too subjective to yield meaningful results owing to the myriad of factors described in previous comments.

Response: As stated in Appendix F of the DEIS, the footprint map evaluation was based on a review of the scientific literature, and the methodology developed for the vulnerability assessment was a hybrid of a "subjective rating method" and a "process-based method". The subjective portion utilized three categories of vulnerability (high = 3, medium = 2, and low = 1), as shown in Table F-1 of the DEIS. However, this rating system was based on the results of the process method, shown in Table F-2, which relied on a calculation of groundwater velocity and the one-year time of travel distance within each type of hydrogeologic unit in the footprint map area. Thus, the underlying basis for the vulnerability ratings and the footprint map was objective, and based on the available scientific information.

Comment 18: The DEIS appears to have omitted discussion of one of the key sources contributing nutrients to the West Fork of Gallatin River; historic leakage from the waste-water ponds at Meadow Village and the historic leakage of sewer piping in the watershed.

Response: Neither the DEQ nondegradation method, nor the proposed ORW designation requires an analysis of the sources and trends of historical nor current levels of contaminants in the river. In consideration, the commenter also states that both leakages were remedied by 1998. Although residual nutrients would require some time to dissipate, the footprint map outline includes the area likely to have a groundwater travel time to the streams of one year or less. Thus the current

impact of nutrients from these sources should be mostly dissipated from the mapped footprint area.

Comment 19: Concern is expressed regarding the classification of the Thermopolis Shale unit as "high vulnerability" in Appendix F of the DEIS, and the limitations of the permeability data.

Response: DEQ acknowledges that the permeability and groundwater transport characteristics of the rocks in the Big Sky area can vary from place to place. Thus the Proposed Action to amend ARM 17.30.638 (1) is based on "discharges to ground water with a direct hydrologic connection to an ORW" (which will be based on site-specific data) and not on the vulnerability footprint map as presented in the DEIS.

Comment 20: The commenter states he does not believe that the DEIS provides a realistic assessment of hydraulic conductivity[2] for the connectivity determination for the sedimentary units in the vicinity of Big Sky.

Response: See response to Comment 19 above. DEQ will utilize site-specific hydrogeologic information supplied by permittees to evaluate the potential hydrologic connection to surface waters. As this information accumulates over time, DEQ expects that the available data for assessing hydrologic connectivity will improve. As stated above, the Proposed Action to amend ARM 17.30.638 (1) is based on "discharges to ground water with a direct hydrologic connection to an ORW" (which will be based on site-specific data) and not on the vulnerability footprint map as presented in the DEIS.

Comment 21: It is odd that the hydraulic connectivity assessment for all intents and purposes yields a footprint that stops at or near the Gallatin County-Madison County boundary.

Response: The Gallatin County-Madison County line was not a factor in the footprint map evaluation. It was based on the criteria described in Appendix F of the DEIS. In fact Figure 2-1 of the DEIS (and FEIS) clearly shows that the footprint area extends in to Madison County in the Spanish Creek drainage.

Comment 22. The commenter performed a site-specific evaluation of the footprint area in Township 7S, Range 4E, Sections 5 & 6, and concluded that the hydraulic conductivity conditions assumed to create the footprint do not match the site conditions at this location. He opines that additional "ground truthing" and examination are necessary for the EIS process to be meaningful.

Response: See the general response to, "The Vulnerability Footprint Map" (DEIS Figure 2-1), and response to Comment 15. Mapped terrace gravel deposits were included within the footprint even though they may currently be unsaturated and/or lie above the 40-foot criterion defined in Table F-4 of the DEIS. This method was used because references cited in the DEIS (Morrison Maierle 1997, 2005) showed subsurface information indicating that terrace deposits were in direct contact with alluvium, and that nothing would prevent the migration of wastewater

[2] The extent to which a given substance allows water to flow through it, determined by such factors as sorting and grain size and shape.

through the terrace gravel to the river alluvium once wastewater disposal systems had been discharging. The commenter further describes site specific geologic interpretations including a deep well which he says indicates that significant water was not found until a depth of about 1,219-feet below ground surface. As indicated in the other responses referenced above, DEQ will consider site-specific information in the application of the proposed amendment to ARM 17.30.638 (1), which is based on "discharges to ground water with a direct hydrologic connection to an ORW", and not on the vulnerability footprint map as presented in the DEIS.

To further clarify footprint delineation in regard to mapped alluvium and gravel terrace deposits, an updated memo is provided in Appendix B, explaining in detail the delineation methods. This memo is slightly revised from its appearance in the DEIS, where it was Appendix F. The specific edits and changes to this memo since the DEIS are:

- Page 1, first paragraph - edits to update the background information
- Page 4, 4th bullet- added b)
- Page 5, first full paragraph – this addition is new and clarifies the exception, and
- Table 1. Third line from the end. Corrected 3-Lowest vulnerability to 1- Lowest vulnerability.

No changes to the footprint map were needed due to these revisions.

Comment 23: The recent decision by the Montana Supreme Court opined that all groundwater is directly connected to surface water and questions if this decision will have any impact on the ORW now or in the future.

Response: DEQ believes the commenter is referring to a recent water law ruling by the Montana Supreme Court. As the Proposed Action and Alternatives dealt strictly with water quality, DEQ does not believe there is a direct implication of this ruling for the ORW, since Montana water rights laws and water quality laws are distinct and separately administered. The criteria used to define what sites are in "direct hydrologic connection" are provided in detail in Appendix B of this FEIS.

Single Family Equivalents Determination:

Comment 24: Several commenters found the use of 'SFEs' confusing, or questioned why seasonal occupancy of residences in Big Sky was not taken into account in analyses in the DEIS.

Response: The use of SFEs is a standard method in the evaluating water quality impacts as a result of subsurface wastewater treatment systems (SWTS), which typically consist of a septic tank and drainfield (DEQ 2005). It is a baseline for effluent characteristics, or water quality and quantity of wastewater for both SWTSs as well as sewered connections. For this analysis, one SFE, or dwelling unit, was considered to be a single family residence having two bedrooms and two bathrooms.

Wastewater effluent characteristics have been studied and quantified based on SFEs. Using known characteristics of a typical household or SFE, and dividing by the trigger value, which is the measurable change for inorganic phosphorus as indicated in the DEQ-7 circular (DEQ

2006b), the number of typical households or SFEs which meet the trigger value can be determined. Refer to Appendix A of the DEIS for more complete discussion. In the case of the Gallatin River ORW EIS, the inorganic phosphorus trigger value was found to be more sensitive than the nitrate trigger value.

The trigger value is basically the smallest measurable change that can be practically quantified using laboratory analytical methods. These values are presented in DEQ-7 circular for numerous parameters, including nitrate (as N) and inorganic phosphorus (DEQ 2006b). This concentration, in the case of inorganic phosphorus, is 0.001 mg/L. To calculate how much inorganic phosphorus it would take to increase the concentration of the water by the trigger value, the quantity of water must be known.

The quantity or in this case, the 7Q10, is the 7-day consecutive, 10-year low flow for the Gallatin River stream gauging station near Gallatin Gateway. This quantity is based on a specific statistical analysis of historical flow. This standard low flow quantity is used by DEQ as the streamflow rate with which pollutant mixing and compliance are calculated for many water quality parameters, including inorganic phosphorus (ARM 17.30.516).

The inorganic phosphorus limit for the ORW designation is based on the Gallatin Gateway USGS gauging station 7Q10 for the Gallatin River of 204 cubic feet per second (USGS 2005). With this quantity of water, and a trigger value concentration of 0.001 mg/L of inorganic phosphorus, it would take approximately 401 lbs of inorganic phosphorus per year to raise the concentration in the Gallatin River to 0.001 mg/L inorganic phosphorus at the 7Q10 low flow conditions, as calculated by the DEQ dilution equation (Appendix A, DEIS).

The DEIS analysis adjusted the SFE wastewater flow to account for part-time occupancy, from the standard 200 gallons per day for each SFE, to 153 gallons per day. This adjustment was based on average flows measured at the Big Sky Water and Sewer District wastewater treatment system, which necessarily accounts for the seasonal use of many residences in the Big Sky area (Nicklin, 2000a). Therefore, the 401 lbs of P divided by 4.93 lbs P for each SFE would result in approximately 81 SFE to meet the trigger value concentration for inorganic phosphorus.

The 81 SFEs are reduced by 14 SFE for the allocation for conservation easements and development of state lands, giving 67 SFEs as referenced in the DEIS document (Section 4.3.2 DEIS).

2.2.2.4 Extent of the ORW

Comment 25: Several commenters stated they thought the area under consideration for ORW designation should be expanded, especially to go downstream to the confluence with the Missouri River.

Response: DEQ does not have the authority to change the extent of the ORW designation. The ORW reach is defined by the initial petition. (Section 1.9 DEIS)

2.2.2.5 Mitigation Measures

Advanced Treatment Options:

Comment 26: Several commenters questioned whether full build-out could really be achieved with the mitigation actions proposed in the DEIS. They referred to the mitigation actions for the Proposed Action Alternative.

Response: Some of the advanced treatment options could be used together in series in order to achieve higher nutrient removal than each individual treatment option alone. One such scenario would use a hybrid system incorporating the use of Option C, composting or incinerator toilets, to treat the black water from the toilets which results in zero discharge of the black water. This treatment would reduce the overall inorganic phosphorus by 59% by removing the black water. The remaining gray water (discharge from sources other than toilets, such as bath tubs) would be discharged through a chemical removal system (Option B) which would further reduce the inorganic phosphorus by 50%. Refer to Figure 2.2-2 (Revised version of Figure 4.3-9 in the DEIS), Predicted Phosphorus Concentrations to the Gallatin River above Background for Selected SWTSs. This revised graph shows the addition of the hybrid Option B+C (combined chemical treatment and composting/incinerator toilets) scenario outlined above.

The zero discharge mitigation measure of on-site storage of septage in sealed vaults is not legal in Montana. Although this treatment option would result in zero discharge, a change in the law to allow sealed vaults would have to be made. Another zero discharge hybrid option would use Option C for the treating the black water (discharge from toilets) and diverting the gray water to the storage vault for off site disposal, and the result would be a zero discharge system. This type of storage vault system is also not currently allowed. However, MEPA allows analyses to include methods which are feasible, but outside of DEQ's jurisdiction to implement.

Pollutant Trading:

Comment 27: One commenter asked whether pollutant trading will be allowed to help stay within the nutrient limits.

Response: EPA believes pollutant trading is appropriate for certain pollutants (including nutrients), and some states have policies to allow it. DEQ does not have a policy or applicable regulations to allow pollutant trading at this time. Although pollutant trading is not available as a mitigation measure under current regulation, it is something that could be made available with a change in law or rules.

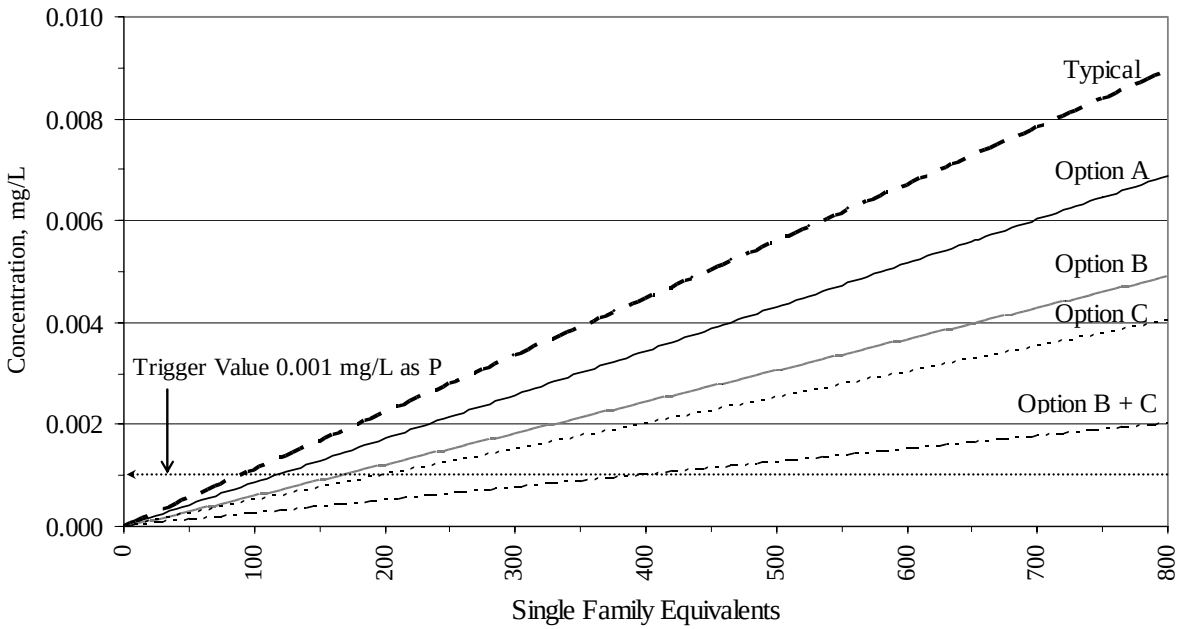

Figure 2.2-2 (Revised version of Figure 4.3-9 in the DEIS). Predicted phosphorus (as P) concentration resulting from typical septic treatment, and four mitigation options (see Table 2.3-1). Concentrations are shown in relation to water quality standards trigger value of 0.001 mg/L in the mainstem of the Gallatin River. Plotted concentrations are based on calculated phosphorus loading and dilution based on 7Q10 flows as measure at USGS Station 06043500, near Gallatin Gateway, Montana.

2.2.2.6 Existing Regulation of Hydrologically Connected Groundwater

Comment 28: Several commenters mistakenly asserted that the concept of hydrologic connection is new to nondegradation reviews.

Response: Section 2.2.1, page 16 of the DEIS addresses this issue: “In accordance with ARM 17.36.312, subdivisions located adjacent to state surface waters require an analysis of the effects of the proposed sewage treatment systems on the quality of the nearest down-gradient high quality state surface water” (DEQ 2005). DEQ’s subdivision nondegradation guidance document defines proximity to surface waters as a direct hydrologic connection to the water in question (DEQ 2005). Determining whether a discharge is in direct hydrologic connection to the surface water is site-specific and depends on geology, hydrogeology, volume of the discharge, sensitivity of the surface water, and other site properties (DEQ 2005). "For septic systems, DEQ’s nondegradation review first assesses surface water impacts in relation to the state’s trigger values (DEQ 2006b). Trigger values are used to determine if a given increase in the concentration of a toxic or nutrient parameter is “significant degradation” or “non-significant degradation” under the nondegradation rules (DEQ 2006b, ARM 17.30.715(1)(c)). If the proposed development stays below the trigger level for nutrients (nitrogen and phosphorus [nitrate (as N) and inorganic phosphorus]), it is considered to be in compliance with the nondegradation policy. If the development exceeds the trigger values for nitrogen and phosphorus [nitrate (as N) and inorganic phosphorus], the proponent can evaluate the surface water impacts via the narrative standard (DEQ 2005a; ARM 17.30.715(1)(g)). If the discharge of [inorganic] phosphorus can meet the

50-year breakthrough requirement (ARM 17.30.715(1)(e)), then the trigger level analysis is not required for [inorganic] phosphorus for subdivisions adjacent to state surface waters. DEQ has had sites fail the trigger value calculation, but then pass a nondegradation review by meeting the narrative standard through surface water modeling (E. Regensburger pers. comm. 2005). Under the No Action Alternative, permittees could continue to use this process to gain approval. Each trigger value analysis is independent of previous and subsequent reviews; therefore, the additive impact of several projects could exceed the trigger value, despite individual projects "passing" the trigger level criteria."

The Footprint will Invite Additional Disputes over Nondegradation Reviews

Comment 29: Several comments asserted that because the footprint of hydrologic connection ("footprint") is used in the DEIS as a guideline (rather than as a definitive boundary), that it will create a situation where the consultants hired by the applicant will be spending an inordinate amount of time arguing with DEQ hydrogeologists over whether a specific proposed subdivision is inside or outside of the footprint using the criteria in Appendix F of the DEIS.

Response: The footprint is defined in the DEIS using the following information related to the geology and hydrogeology of the site: distance from surface water; aquifer hydraulic conductivity; aquifer hydraulic gradient; depth to ground water; aquifer porosity; geologic formation; and confining conditions. Several of these parameters must already be determined by the applicant's consultant and agreed upon by DEQ in reviewing all subdivisions in the state for compliance with nondegradation rules. Distance from surface, aquifer hydraulic conductivity, aquifer hydraulic gradient, and confining conditions are already determined as part of the ground water mixing zone application. The remaining parameters are porosity, depth to ground water and geologic formation. Measurement of true field porosity is difficult, so it is commonly estimated from existing published information (as was done in the DEIS). Depth to ground water is easily determined through measurements in ground water wells. The geologic formation is easily determined through existing geologic maps or existing well logs.

Therefore, the amount of extra information that will be needed to be submitted by the applicant and approved by DEQ to define whether a specific site is within the footprint is minimal. In addition, the concept that ORW designation will initiate a new review process involving "dueling hydrogeologists" is incorrect. The process where applicants submit information for DEQ to review and comment on has existed since the nondegradation rules went into effect in 1994.

2.3 Land Use and Recreation

Several comments were received by DEQ regarding DEIS analysis of ORW impact to land use; only one, very general comment was received related to recreation use. The comments mostly focused on impacts to development potential on private lands. Other comments mentioned concerns about potential impacts to agriculture, logging and mining. Some comments supported the proposed ORW designation, noting that it is consistent with management of the Gallatin National Forest in the broader watershed and is a needed step in protecting environmental and recreation values along the ORW reach, and thus helping to protect the economy of the area.

2.3.1 Comment Summary

Comments regarding ORW impacts to land use on private lands focused largely on development potential on private lands and voiced the following concerns:

2.3.1.1 Area of ORW Impact on Land Use

Several comments reflect a belief that the area of land that would be subject to ORW restrictions would (or could) be significantly larger than that delineated within the footprint, potentially including such areas as Yellowstone Club, Spanish Peaks and Moonlight Ranch. One commenter further asserts that, due to this uncertainty, it is not feasible to (and the DEIS does not) accurately assess the extent of land use impacts. Related to this concern, other comments included requests for: 1) confirmation that land use outside of the footprint would not be restricted in any manner; 2) mapping showing more specifically which undeveloped and partially developed lands (by zoning classification) are encompassed by the footprint, and 3) a determination by DEQ of whether specific parcels are inside or outside of the footprint.

2.3.1.2 Context of DEIS Impact Analysis

One comment suggested that possible restrictions on development within the ORW footprint be reported in context of full build-out potential on all private land in Gallatin County. The suggestion was made that possible impacts/restrictions on build-out potential within the footprint may represent only a minor percentage of full build-out countywide. Related to this view, another comment requested a review of the build-out potential within the Big Sky Water and Sewer District (which would not be affected by the ORW designation), and comparison of this build-out potential with possible reductions in build-out potential within the ORW footprint.

2.3.1.3 Method and Assumptions used to Specify Allowable Development within the Footprint under the Proposed Action

Some comments requested additional explanation of how the build-out potential (expressed in dwelling units or square feet of commercial, industrial, recreational, and community facilities uses) was calculated for the alternatives.

One commenter stated that the following assumptions used in the DEIS are not valid and are overly restrictive: 1) the pollutants from on-site wastewater discharge systems (e.g. septic tank leach fields) would reach the river without any natural attenuation; and 2) dwelling units would be occupied year-round. The commenter indicated that natural attenuation would occur and should be taken into account and that many, if not most, dwelling units in the study area are only occupied seasonally.

2.3.1.4 Potential for Mitigation

The assertion in the DEIS that ORW impacts on land use and development potential can be fully mitigated by using zero-discharge or centralized treatment systems was questioned. Comments were made that zero-discharge systems are either not allowable or not truly practical in the area, and that affected lands are generally either not large enough or are zoned for too low density to make centralized treatment a viable option. In the latter regard, a commenter suggested that some potentially impacted lands near the existing boundary of the Big Sky Water and Sewer District could be incorporated into the District's system as a means of achieving full mitigation.

Another concern of commenters was that the most effective "advanced on-site treatment" options (e.g. incinerator and composting toilets) are either impractical in the study area or would not be as effective as indicated in the DEIS, thus yielding even less development potential than indicated on DEIS Tables 4.4-6 and 4.4-7.

2.3.1.5 Actual Impact of the ORW Designation

Several comments reflect the belief that the ORW designation will "shut down" building and development within the footprint, and that the land will become "unusable and worthless", with development rights essentially confiscated. The concern is also expressed by commenters that existing developments could be shut down.

2.3.1.6 Impact on the Big Sky Community Plan

Under the perception noted above (i.e. severe restrictions on further development within the footprint), the point is raised that the ORW designation would undermine the plan for a viable community in Big Sky, eliminating any future commercial and light industrial development and placing increased stress (e.g. truck traffic) on Hwy 191.

2.3.1.7 Grandfathering of Existing On-site Wastewater Systems within the Footprint

The DEIS notes that only new on-site wastewater systems would be subject to ORW regulations; existing systems would not be impacted. Another commenter suggested that all private parcels within the footprint should be grandfathered according to "development right" established by existing zoning.

2.3.1.8 Impacts to Public Lands

Comments related to public lands use within the ORW study area suggested that:

- The ORW designation will impact the ability of federal agencies to expand services.
- Activities such as agriculture and timber harvesting are nonpoint sources, and would thus not be subject to ORW-related regulation.
- Mining activity remains legal and possible. The DEIS should address this potential, including potential restrictions on sand and gravel mining or other mining activities that would need a discharge permit (whether inside or outside of the footprint).
- The USDA Forest Service indicates that an ORW designation "could be very compatible with Gallatin National Forest management of the Gallatin River watershed and river corridor" and that the Forest Service has no objections to and supports the designation. The Forest Service also suggests that additional information regarding the Forest's land

exchange, fuel treatment, timber harvest, mining and livestock grazing programs would be useful as part of the EIS.

2.3.1.9 Comments in Support of the Proposed ORW Designation

Two comments expressed support for the ORW designation whether or not it would reduce build-out potential or increase cost of development within the footprint. Points made by these commenters include:

- The river should be protected with this designation because history has shown that current regulations do not adequately protect water quality in the face of development, and this river corridor is a legacy worth saving.
- Protection of the river is important to the thousands of visitors who come for fishing, birding, and other enjoyment of a high quality environment. In this regards, river protection also protects revenue.

2.3.2 Issues Raised and Responses

Analysis of, and response to, comments on land use and recreation are provided below according to the same headings and order used above to organize and summarize the comments:

2.3.2.1 Area of ORW Impact on Land Use

Comment 30: The ORW footprint boundary is too uncertain to permit an accurate or reasonable analysis of land use impact; areas far larger than those encompassed by the footprint shown in the DEIS could be impacted by the ORW designation.

Response: The ORW footprint shown in the DEIS is the best available approximation of the area that would be affected by proposed ORW regulation. As discussed earlier in the water quality section of this FEIS, this footprint generally illustrates those lands along the ORW reach that have a direct hydrologic connection to the river. It is not an exact boundary, but it is based on the best available information. While an approximation, the footprint is sufficiently well defined to permit a reasonable analysis of potential impacts to land use and development. Further, the footprint is sufficiently well defined to support the assertion on which DEIS analysis is based—that the area of potential impact (i.e. area subject to ORW regulation) will not be significantly larger than shown by the footprint.

Comment 31: The DEIS should include more detailed mapping showing which lands (by zoning classification) and which specific parcels are within the footprint.

Response: The footprint boundary shown in the DEIS is sufficiently well defined to support generalized analysis of impact in the DEIS, but it is not sufficiently defined to allow parcel-by-parcel determinations. For this reason, mapping of land use and parcelization specifically related to the footprint is not provided in the DEIS. Providing such mapping would infer more accuracy in the footprint boundary than is actually the case.

In implementing ORW regulation, if adopted, DEQ will review and define the “direct hydrologic connection” boundary on a case-by-case basis as development permit applications are submitted and more detailed, site-specific hydrogeologic information is made available. This general approach is standard procedure for DEQ.

2.3.2.2 Context of DEIS Impact Analysis

Comment 32: Possible restrictions on development within the ORW footprint should be reported in context of full build-out potential on all private land in Gallatin County. Impacts or restrictions on build-out potential within the footprint may represent only a minor percentage of full build-out countywide.

Response: Early in the MEPA scoping process, the decision was made to focus analysis on the land area potentially impacted by the proposed ORW designation, and to not attempt collecting and analyzing land use data for all of Big Sky or Gallatin County as a whole. Thus, the DEIS does not compare potential build-out in the ORW footprint (under any alternative) with build-out in these larger areas. This approach (scope) for the DEIS is considered appropriate under MEPA both to focus attention specifically and clearly on the potentially impacted area, and for cost and time efficiency purposes. While a review of the relative proportion of Big Sky or Gallatin County build-out potential the footprint represents would be informative, it is not necessary to a direct understanding of ORW impacts.

Comment 33: The DEIS should provide a review of the build-out potential within the Big Sky Water and Sewer District (which would not be affected by the ORW designation), and compare this with possible reductions in build-out potential within the ORW footprint.

Response: The Big Sky Water and Sewer District is largely built-out. The acreage of undeveloped and partially developed land within the District is small compared with that in the ORW footprint outside of the District.

2.3.2.3 Method and Assumptions used to Specify Allowable Development within the Footprint under the Proposed Action

Comment 34: The DEIS should provide additional explanation of how the build-out potential (expressed in dwelling units or square feet of commercial, industrial, recreational, and community facilities uses) was calculated for the alternatives.

Response: Appendix H of the DEIS explains the method used to identify undeveloped and partially developed land (acreage) within the ORW footprint. Section 4.4.3.1 and Tables 4.4-2 and 4.4-5 of the DEIS explain the method used to determine allowable development on these lands under the proposed ORW designation without mitigation (i.e. most limited development analysis).

In short, water quality analysis determined that ceilings on allowable additional inorganic phosphorus and nitrate (as N) loading under an ORW designation would mean that there could be no more than 1 SFE per 27.6 acres of the remaining undeveloped/partially developed land in the footprint. For the purposes of analysis, one SFE was considered equal to one dwelling unit (see page 161, paragraph 3 of the DEIS for further explanation). Translations of this 1 SFE(DU)/27.6 acre allocation into square feet equivalent for commercial and industrial parcels are explained in footnotes b and c of Table 4.4-4 in the DEIS. These units were used in calculations to assess impacts, but are not proposed as a framework for implementation.

Calculations of allowable development under the various mitigation conditions discussed for the ORW Alternative simply accounted for the percentage of pollutants removed by the mitigation options (versus the unmitigated condition), thereby showing the additional development that

would be allowable using these advanced or alternative treatment options. For example, the chemical removal system option would reduce key pollutant loads by 50%, resulting in double the amount of allowable development when compared with the unmitigated condition.

Comment 35: The DEIS assumption that the pollutants from on-site wastewater discharge systems (e.g. septic tank leach fields) would reach the river without any natural attenuation is not valid and is overly restrictive.

Response: See also response to Comment 6. The DEIS used a most restrictive case approach in order to portray maximum potential for impact. This approach is the best available under the circumstances, as it avoids underestimating impacts. There may be natural attenuation of pollutant loads between the subsurface discharge point and the river; however, the degree of attenuation would be subject to many variables and would likely vary significantly from one area or parcel to another. It would be too speculative to attempt to define an "average" attenuation factor for the entire ORW footprint. If the Proposed Action Alternative is adopted, any applicant who wishes to demonstrate site-specific attenuation rates in calculating pollutant loading rates to the groundwater and surface water may submit that information to DEQ. DEQ will review and determine the applicability of proposed attenuation rates.

Comment 36: The apparent DEIS assumption that dwelling units would be occupied year-round is not valid and is overly restrictive. A high proportion of dwelling units in this area are only seasonally occupied

Response: The nutrient loading does take into account that most residences are occupied seasonally by reducing the gallons per day used for the dilution equation from 200 to 153 gallons per day (See Section 2.2.2.3, Single Family Equivalent Determinations, FEIS, and Section 4.3.1 of the DEIS)

2.3.2.4 Potential for Mitigation

Comment 37: The potential effectiveness and feasibility of mitigation shown in the DEIS is questionable. The most effective "advanced on-site treatment" options (e.g. incinerator and composting toilets) are either impractical in the study area or would not be as effective as indicated in the DEIS; zero-discharge systems are either not allowable or not truly practical in the area; and affected lands in the footprint are generally either not large enough or are zoned for too low density to make centralized treatment a viable option. Development potential in the footprint would actually be less than shown on DEIS Tables 4.4-6 and 4.4-7, and full mitigation is likely not feasible.

Response: Research prior to the DEIS on the practicality and effectiveness of advanced on-site treatment options (i.e. re-circulating sand filter, chemical removal, and composting or incinerator toilets) confirms that these options are available and feasible for use in the ORW study area and would achieve the level of mitigation shown in the DEIS (Tables 4.4-7 and 4.4-7).

It is also feasible to use the chemical removal and composting/incinerator toilet options in combination, resulting in another increment of mitigation under the category of advanced on-site treatment. Mitigation achievable using this option is shown on the revised Tables 4.4-6 and 4.4-7 shown below. See also Section 2.2.2.5 FEIS)

The zero discharge option is technically feasible and may be applicable to many areas in the ORW footprint. This option, because of its reliance on sealed storage vaults, is not allowed in

Montana under current regulations; a change in the law would be needed to permit the use of such vaults.

Centralized treatment systems are probably not practical for much of the undeveloped and partially developed land in the ORW footprint. Most of these lands have one or more of the following characteristics: 1) zoned for low density (e.g. multiple-acre lots); 2) relatively small parcel/contiguous area size; or 3) dispersed over large, discontinuous areas, often with intervening developed lands or such features as US Highway 191 or the river. It is not within the scope of this EIS analysis to determine with certainty if and where centralized treatment systems may be technically feasible and economically viable. However, it is likely that technical feasibility is less of a constraint in some areas; whereas economic viability is questionable over much of the study area.

Table 2.3-1. (Revised version of Table 4.4-6 in the DEIS.) Allowable residential development (all numbers are in dwelling units [DU]) within the footprint using alternative wastewater treatment systems: Proposed Action, with and without mitigation.

Land Use Classification	No Mitigation	Advanced On-Site Treatment Mitigation Options				Zero-Discharge and/or Centralized Treatment Mitigation Options
		A. Re-circulating sand filter	B. Chemical removal	C. Composting/ incinerator toilet	B+C. Chemical removal & composting or incinerator toilet	
Gallatin Canyon/Big Sky Zoning District						
Residential						
Single Family 7500	1	1	2	3	6	226
Single Family 11000	1	1	2	3	6	67
Residential Cluster 1 DU/acre	2	3	4	5	12	60
Residential Cluster 1 DU/2.5 acres	7	10	14	19	41	72
Residential Cluster 1 DU/5 acres	12	17	24	32	71	66
Residential Cluster 1 DU/10 acres	7	10	14	19	41	15
Residential Cluster 1 DU/20 acres	7	10	14	19	41	10
Subtotal	**37**	**52**	**74**	**100**	**219**	**516**
Percent change from full build-out:	**-93%**	**-90%**	**-86%**	**-81%**	**-58%**	**0%**
South Gallatin Zoning District						
Canyon Residential 1 DU/3 acres	5	7	10	14	31	48
Recreation and Forestry 1 DU/50 acres	15	21	30	40	88	8
Subtotal	**20**	**28**	**40**	**54**	**118**	**56**
Percent change from full build-out:	**-64%**	**-50%**	**-29%**	**-3%**	**111%**	**0%**
Spanish Creek-Karst Area						
Rural Areas (not zoned)	8	11	15	21	45	70
Conservation Easements (not zoned)	10	14	20	27	59	10
Subtotal	**18**	**25**	**35**	**48**	**104**	**80**
Percent change from full build-out:	**-78%**	**-69%**	**-56%**	**-41%**	**30%**	**0%**
Total DU	**75**	**105**	**149**	**202**	**441**	**652**
Percent change from full build-out:	**-89%**	**-84%**	**-77%**	**-69%**	**-32%**	**0%**

Table 2.3-2. (Revised version of Table 4.4-7 in the DEIS.) Allowable commercial development (all numbers are in single family equivalents [SFE]) within the footprint using alternative wastewater treatment systems: Proposed Action, with and without mitigation.

Land Use Classification	No Mitigation	Advanced On-Site Treatment Mitigation Options				Zero-discharge and/or centralized treatment mitigation options
		A. Re-circulating sand filter	B. Chemical removal	C. Composting/ incinerator toilet	B+C. Chemical removal & composting or incinerator toilet	
Gallatin Canyon/Big Sky Zoning District						
Community Commercial	374	534	748	1,011	2,211	91,000
Commercial & Industrial Mixed Use	1,980	2,829	3,960	5,351	11,707	270,000
Recreational Business	218	311	436	589	1,289	45,000
Community Facilities	73	104	146	197	432	13,000
Total	**2,645**	**3,778**	**5,290**	**7,148**	**15,639**	**419,000**
Percent reduction from full build-out:	**-99%**	**-99%**	**-99%**	**-98%**	**-96%**	**0%**

These findings suggest that the "best case" mitigation condition will be between (see Tables 2.3-1 and 2.3-2): 1) the level of development allowed under the combined chemical treatment and composting/incinerator toilet advanced on-site treatment option (i.e. overall reductions of 32% in allowable residential and 96% in allowable commercial/industrial uses compared with the No Action/full build-out Alternative), and 2) the 100% mitigation shown for zero-discharge or centralized treatment and disposal outside of the footprint. The second option has the potential to allow full build-out of the 652 dwelling units within the footprint. However, given the constraints on and questions about the zero-charge or centralized treatment options, the impact of the Proposed Action Alternative would likely be closer to the former condition.

2.3.2.5 Actual Impact of the ORW Designation

Comment 38: The ORW designation will shut down building and development within the footprint, and development rights will be essentially confiscated. Existing developments could also be shut down.

Response: Overall, the discussion in Section 2.3.2.4 suggests that the ORW designation could have significant impacts on development potential within the footprint if zero-discharge and/or centralized treatment systems are found not to be feasible on a case-by-case basis. In the absence of such "full mitigation" options, the impact would not represent a "shut down" of residential development, but would approach this description for commercial, industrial, and community facilities uses. However, the proposed ORW designation would not impact existing developments.

While acreage was used in the DEIS as a tool to predict the impacts on development of ORW designation, DEQ cannot issue permits on that basis. Permitting would essentially be first come, first served, as with the Cumulative Impacts Analysis Alternative. Unlike the Cumulative Impacts Analysis Alternative, ORW designation would prevent DEQ from permitting new or increased point source discharges to the Gallatin River and from authorizing degradation of water quality in the river. The effects on development would likely be similar to those indicated in the DEIS.

2.3.2.6 Impact on the Big Sky Community Plan

Comment 39: The ORW designation would undermine the plan for a viable community in Big Sky, eliminating any future commercial and light industrial development and placing increased stress (e.g. truck traffic) on Hwy 191.

Response: The question of impact to the Big Sky Community Plan centers mostly on whether land use restrictions created by the ORW designation would create imbalances in the community by reducing or eliminating the opportunity for one or more necessary/desirable land uses (e.g. eliminating further expansion of commercial or light industrial use, as cited in the comments on the DEIS). For one specific land use, this kind of impact could occur with the ORW designation. All land in Big Sky that is zoned for Commercial and Industrial Mixed Use is along Highway 191 within the ORW footprint. If zero-discharge or centralized treatment systems are found not to be viable for the 18 acres of remaining undeveloped land in this zoning classification, the ORW would essentially stop further development of this land use unless/until alternative lands could be re-zoned to accommodate this use. For other commercial or community land uses represented in the ORW footprint, acreage is generally small and other options for these uses exist within the Community Plan area. Regarding residential uses, while some level of restriction

on development in the footprint may occur, as discussed above, such restrictions would not likely severely upset the balance of uses crafted in the Community Plan.

2.3.2.7 Grandfathering of Existing On-site Wastewater Systems within the Footprint

Comment 40: All private parcels within the footprint should be grandfathered according to "development right" established by existing zoning.

Response: Existing, permitted on-site wastewater systems would not be impacted by the ORW designation. This "grandfathering" is true for both permitted and constructed systems, and for systems that have received permits but have not been built. However, the comment that all parcels in the ORW footprint should be "grandfathered" according to their zoned "development right" cannot be considered under the ORW Alternative for reasons discussed throughout the DEIS; this option is *de facto* part of the No Action Alternative.

2.3.2.8 Impacts to Public Lands

Comment 41: The ORW designation will impact the ability of federal agencies to expand services.

Response: The USDA Forest Service is the agency responsible for federal public lands in the ORW study area. The Forest Service indicates that an ORW designation "could be very compatible with Gallatin National Forest management of the Gallatin River watershed and river corridor" and that the Forest Service has no objections to and supports the designations.

Comment 42: Agriculture and timber harvesting are nonpoint sources and would not be subject to regulation under the ORW designation.

Response: The comment is accurate and is noted.

Comment 43: Mining activity remains legal and possible. The DEIS should address this potential, including potential restrictions on sand and gravel mining or other mining activities that would need a discharge permit (whether inside or outside of the footprint).

Response: The comment that mining activity is still possible in the ORW study area is valid. Under all of the DEIS alternatives, any future proposal for mining activity in the watershed, whether "hard rock", construction aggregate (sand and gravel), or other mineral would need to obtain an MPDES permit as described in Chapter 2 of the DEIS, for any direct discharge to the ORW reach of the Gallatin River. Under the Proposed Action Alternative, a requirement of the MPDES permit would be that the proposed discharge not result in a permanent change in water quality in the ORW reach of the Gallatin River.

Regarding the comment that there must be some existing examples of sand and gravel operations in the ORW study area (i.e. not recognized by the DEIS); there are, in fact, two sand and gravel extraction operations in the ORW footprint. They are both located in Big Sky, immediately west of Highway 191 and south of Highway 64. These operations would not, however, be impacted by the Proposed Action. Since their MPDES discharge permits were obtained prior to the effective date of the ORW designation, they would operate as part of the baseline condition, similar to existing on-site wastewater treatment systems.

Comment 44: Additional information regarding the Forest's land exchange, fuel treatment, timber harvest, mining and livestock grazing programs would be useful as part of the EIS.

Response: Relevant perspectives on these programs in the Gallatin National Forest surrounding the proposed ORW reach are provided in the DEIS. As noted in the Forest Service comments, these programs are consistent with and would not be directly regulated by the ORW designation. Additional information on any of these programs can be obtained by reviewing the Forest Service sources listed in Chapter 6 of the DEIS.

2.3.2.9 Comments in Support of the Proposed ORW Designation

Comment 45: The river should be protected with the ORW designation because history has shown that current regulations do not adequately protect water quality in the face of development, and this river corridor is a legacy worth saving.

Response: Comment noted.

Comment 46: Protection of the river is important to the thousands of visitors who come for fishing, birding, and other enjoyment of a high quality environment. In this regards, river protection also protects revenue.

Response: Comment noted.

2.4 Socioeconomics

The bulk of the comments recorded at the October 25, 2006 public hearing and at least twenty-seven additional comments received by DEQ were on issues regarding the socioeconomic analysis in the DEIS. The comments generally fell into the following areas: a) need for more recent figures on housing prices and construction employment; b) the large cost of forgone development with the Proposed Action of ORW designation without any mitigating measures; c) the relatively low percentage cost increase in a house with the Proposed Action of ORW with implementation of mitigating measures such as advanced waste treatment; and d) estimates of the benefits of ORW to river recreation, fishing and property values.

2.4.1 Comment Summary

A few comments were received on the need for reliance on more recent data for house prices and construction employment numbers. The commenters indicated that house prices have increased considerably in the last few years. They also noted their opinion that employment in the construction industry in Big Sky had to be much larger than reported in the DEIS due to all the activity in the area. Several commenters recommended obtaining a forthcoming study by the Montana Department of Commerce on the economic impact of Big Sky. Initial reports regarding that study put total jobs for all Big Sky economic activity at 10,000 jobs, far in excess of employment related to Big Sky reported in the DEIS. Some of these commenters indicated that the 300,000 plus skier days in Big Sky contributed far more economic activity to the region than did the fishing and rafting in the Gallatin River. Several commenters indicated that while water quality in the Gallatin River would have an effect on house prices, that house prices were more affected by the ski industry than water quality or fishing.

Several commenters raised issues about the potential for forgone development with the Proposed Action without any mitigating measures such as advanced treatment. These commenters suggested there would be many millions of dollars in economic losses in the form of lost property values on undeveloped lots and losses to the construction industry. They felt the DEIS underestimated these costs, in part, due to old data on the median prices of residential housing in the Big Sky area.

2.4.2 Issues Raised and Responses

2.4.2.1 Extent of Socioeconomic Analyses

Comment 47: It is invalid to confine analysis of economic impacts of ORW designation to just fishing, as that recreation segment is dwarfed by other recreation in the area. Big Sky reported 300,000 skier days that with a cost per lift ticket of $65, and $100 daily incidentals (food, lodging) is worth $49.5 million.

Response: There is no doubt that economic activity generated by skiing at Big Sky is a major visitor use and economic contributor to the Big Sky, West Yellowstone and Gallatin economies. For completeness, this contribution should have been mentioned in the DEIS. However, as noted in the following insertion of new text, the economic effects associated with skiing are not expected to change with any of the alternatives analyzed in the DEIS, and therefore skiing was not deemed a relevant topic for detailed analysis.

Nonetheless, the following has been added to Section 3.5.3.5 Overview of Components of On-Site Recreation Use Values of the DEIS, pages 89 to 90:

> The Gallatin River, and its associated water quality, fisheries, and recreation opportunities, provides several types of economic values to society. This section defines and estimates these values, and how the estimated values pertain to the present water quality of the Gallatin River. By defining and estimating the values of the Gallatin River and its present water quality, a benchmark is established by which to compare potential effects of each alternative.
>
> *While skiing is a major economic activity in the Big Sky area, there is no reason to expect that a skier's decision of whether to visit Big Sky for skiing would be influenced by whether the Gallatin River is designated as an ORW or not. Therefore, the current level of skier days, and skiing-related level of development, is expected to continue at least at the current level with any of the alternatives analyzed. The social and economic analysis focuses on the river-related recreation use that is most likely affected (directly or indirectly) by ORW designation, or by deterioration in water quality.*

Comment 48: One commenter stated that they presumed that conducting an original hedonic property study would be cost-prohibitive, which is why it was not done in the DEIS. However, they questioned any reliance on studies which were very different to quantify the impact from ORW designation on the Gallatin River.

Response: The commenter is correct that both budget and time cost prevented conducting an original hedonic property study, and therefore the DEIS relied upon existing studies in the literature for the value of water quality. While there were no such studies in Montana, there were several for the mid-west and east. The results of these other studies provide a range of estimates of the likely benefits that maintaining the existing water quality would have on house prices. As discussed in the DEIS, prior to utilizing these studies for this purpose, this type of benefit transfer is routinely done by federal agencies in just these circumstances. While reliance on benefit transfer is not as accurate as a carefully conducted original study, to omit providing any range of effects would leave in the reader's mind no idea of whether the effects of water quality on property values was substantial (20-40%) or extremely minor (less than one percent). Providing the range in the literature of 3% to 9% gave some perspective on the **relative** magnitude of the effects that might occur in the Gallatin River area. However, the insight that the housing market is driven more by skiing than fishing suggests that changes in water quality may not have as large an economic effect as it does elsewhere. Short of finding a western skiing community where a similar economic study has been conducted, it is difficult to accurately know the magnitude of water quality effects on property values.

2.4.2.2 Population and Gallatin County Economy Statistics

Comment 49: "In summary, a complete and more detailed analysis of the Gallatin County economy suggests the rapid growth is not due 'to the abundance of natural amenities and protection of those amenities in the region' rather, Gallatin County has a diverse economy where basic industries explain the short-run and long-run trends."

Response: The inference that growth in the area's population (11.5% from 2000 to 2004) and economy was due to natural amenities was reached by the authors cited in the DEIS (Rasker and Hansen 2000). This conclusion was based on their detailed analysis of the greater Yellowstone region, of which Gallatin County is part. As noted by the commenter, it is likely that some of the 11.5% increase in Gallatin County's population was also due to the growth in basic industries such as manufacturing in the Bozeman area. This growth in basic industries as a contributor to growth in Gallatin county population should have also been mentioned in the DEIS along with the Rasker and Hansen (2000) interpretation as well. Thus the following is added to Section 3.5.3.1. (page 86) of the DEIS at the end of the 3rd sentence in the paragraph of text:

> *Some of the 11.5% increase in Gallatin County's population was also due to the growth in basic industries such as manufacturing in the Bozeman area.*

This sentence is now included in the revised section below.

Population

Comment 50: Commenters noted that the text in Table 3.5-1 states 2005 but the sources are 2003, and that no date or original source was reported for Table 3.5-2, Table 3.5-3, Table 3.5-4, and Table 3.5-5.

Response: The DEIS contained an error in the date, which should have read 2004 for Gallatin County population in 2004, not 2005. The source of the 2004 population estimate for Gallatin County was from the State of Montana's Table 1, Annual Estimates of the Population for Counties of Montana April 1, 2000 to July 1, 2004, Available online at http://ceic.mt.gov/Demog/estimate/pop/County/CO-EST2004-01-30.htm.

The source data for Tables 3.5-2, 3.5-4, and 3.5-5 (Sonora Institute 2003a, 2003b) and 3.5-3 (Sonora Institute 2003b) were provided in the DEIS. Tables 3.5-2 and 3.5-3 should have stated the data are for 1999. Regarding Table 3.5-4, the year (2000) is given in the title of the table. Table 3.5-5, which addresses employment by industry does use data from the U.S. Census Bureau (2000), which includes North American Industrial Classification System (NAICS) labor category definitions.

Section 3.5.3.1. (Page 86 of the DEIS) is revised to read as follows (new text in italics):

> The population of Gallatin County increased by 11.5% from 67,831 in 2000 to 75,637 as of *2004*, according to the Montana Department of Commerce (2006). This increase in population continues an existing trend, which Rasker and Hansen (2000) attribute to the abundance of natural amenities and the protection of those amenities in this region. Gallatin County's population is dominated by the city of Bozeman, which has become a year-round gateway to numerous outstanding recreation opportunities in the area, including skiing, hiking, rock and ice climbing, rafting, and fishing. *Some of the 11.5% increase in Gallatin County's population was also due to the growth in basic industries such as manufacturing in the Bozeman area.* The West Yellowstone CCD population was estimated at 2,887 for *2000*, while Big Sky CDP was estimated at 1,221 residents (Table

3.5-1). These latter two populations increase with the arrival of summer and winter visitors, respectively. The West Yellowstone CCD has the highest median age at 38 years, followed by Big Sky CDP at 34 years, and Gallatin County at nearly 31 years.

Table 3.5-1 [DEIS]. Population and median age in the study area *in 2000* (Sonoran Institute 2003a, 2003b; *2000 Census*).

	Gallatin County	**West Yellowstone CCD**	**Big Sky CDP**
Population	67,831	2,887	1,221
Median Age	30.7	38.1	34.3

Comment 51: A commenter stated that a more complete analysis would examine trend data for population, income, housing, as well as data on local taxation, utilities, health/safety, law enforcement, fire protection, emergency medical services and medical facilities.

Response: Given the study time and budget constraints, trend data were not deemed essential for these sectors of the economy. Data on many of the other sectors (e.g., health/safety, law enforcement, fire protection, emergency medical services and medical facilities) were not expected to change significantly with ORW designation (especially with the mitigation measures of advanced treatment or centralized treatment).

Employment Patterns

Comment 52: Several commenters made the following statements regarding employment patterns. A draft comprehensive study being conducted by the State of Montana's Department of Commerce shows that an estimated 10,000 jobs have been created by all economic activity in the Big Sky area. A substantial number of those jobs are associated with construction. At the very least the EIS should not go forward without first waiting for the final draft report from Department of Commerce. "..it is important that the DEIS rely on the most current data available. Next month in November, Susan Ockert, economist with Montana Dept. of Commerce is due to publish Economic Impacts of Big Sky. … DEQ should consider and incorporate Ms. Ockert's analysis in any final EIS and ROD." The figures in the DEIS showing only 274 jobs are generated in these industries is absurd. "Any person who has stood at the intersection of Highway 191 and the Big Sky Spur Road knows empirically there are more than 274 workers in involved in the Big Sky CPD."

Response: The employment figures in the DEIS were obtained from the U.S. Census Bureau from the latest census (2000). They report that 110 people living in Big Sky were employed in construction. In Yellowstone CCD the census reports another 164 construction workers residing in this area, and hence a total of 274 workers. It is true that some fraction of the 2000 U.S. Census estimate of 5,249 construction workers living in Gallatin County (reported in Table 3.5-5 of the DEIS) probably commute to construction jobs in Big Sky, but this number is not known. But given the construction boom in Bozeman, it seems unlikely that a majority of the Gallatin County construction workers work in Big Sky.

DEQ obtained an advanced copy of parts of the Susan Ockert's (Montana Department of Commerce) analysis referred to by the commenters. In that report she estimates 3,784 workers were employed in the Big Sky area in residential and commercial construction in 2005. This

estimate seems high since the most recent Bureau of Economic Analysis (2003) employment figures for all of Gallatin County is 6,184 construction workers. For the Montana Department of Commerce number to be accurate would mean 61% of all construction workers employed in Gallatin County work in Big Sky. Given the construction boom in Bozeman, it does not seem likely that over half Gallatin county construction workers work in the Big Sky area. Emails from Ms. Ockert suggest that perhaps some of the Big Sky construction workers are from outside the Gallatin County area. A discussion of Ockert's construction worker estimate is added to the FEIS, with a note of caution that her estimates may be high.

Further, the 10,000 jobs referred to by the commenters includes the current 2,000 jobs associated directly with the ski industry, which will not change with or without ORW. The direct job estimate in Montana Department of Commerce from ALL economic activity is 8,868 in Big Sky. (This estimate seems high given that there are between 55,000 and 60,000 working in all of Gallatin County, so 1 in 6 workers would have to work part of the year in Big Sky.) It is only with the indirect or "multiplier effects" throughout the **entire** State of Montana that this figure reaches the 10,000 jobs referred to.

Nonetheless in response to comments the year "2000" has been added to the title of Table 3-5.5 on page 89 of the DEIS:

> Table 3.5-5. Employment by industry in Gallatin County and Gallatin Canyon areas displayed in terms of number of jobs per sector and percentage of the total *in 2000*.

In response to comments the following text has been **added** below Table 3-5.5 on page 89 of the DEIS:

> *The employment figures are reported by place of workers residence, which is not necessarily where they work. This effect is most evident in the case of many resort and construction workers who often do not live where they work, and commonly commute to and from ski area towns throughout the west. In the case of construction workers, recent estimates by Montana Department of Commerce (2006) indicate 2,691 workers are employed in residential construction and 1,093 in commercial construction in the Big Sky area. However, if this estimate were correct, it would require that almost two-thirds of all construction workers living in Gallatin County to be working in Big Sky (based on the U.S. Bureau of Economic Analysis [2003] Regional Economic Information System [BEA-REIS] data on construction workers for 2003). Given the construction boom in the Bozeman area and throughout other areas in Gallatin County, this level of construction employment in Big Sky seems unlikely. Nonetheless, construction employment in all of the Big Sky area is certainly larger than the 274 construction workers living in Big Sky CDP and West Yellowstone CCD*

Comment 53: One comment was made as follows: "Many jobs and lifestyles depend upon a certain amount of growth being able to take place in this area… If the ORW designation is given to the Gallatin, we will …lose our ability to create and maintain jobs in the area…"

Response: ORW would only affect residential and commercial construction within the hydrologic footprint, which is a fraction of the land in the Big Sky area. With the mitigation of

combined chemical advanced treatment along with composting toilets, or centralized treatment, the reduction in building within the hydrologic footprint would be about one-third of potential additional build-out. Given the large number of current jobs associated with the current ski industry, which will not be affected by the ORW designation and adoption of advanced treatment within the hydrologic footprint, it is expected that Big Sky should be able to maintain most of its current economic base.

Comment 54: One commenter stated: "I fully support designating the Gallatin River an ORW. While I am a real estate agent in the Big Sky area, I just don't believe the hype that protecting water quality means cutting jobs."

Response: There should be minimal job loss for ORW with adoption of the mitigation measures such as zero-discharge and for centralized treatment. However, even with combined chemical treatment and composting toilets, construction employment could be reduced by about one-third during the period of build-out.

Comment 55: Overview of Valuation Issues. One commenter questioned the use of the contingent valuation method in the economic analysis. They stated the calculation of net economic value of fishing and other recreation on the Gallatin River use a controversial method and there is no evidence that studies cited in Section 3.5.3.8 of the DEIS meet the guidelines published in the Federal Register. Therefore the estimates of net economic value may not be reliable and should not be included in ORW. The contingent valuation method is a controversial method.

Response: The economic value of fishing of $71 per day used in Section 3.5.3.8 of the DEIS is not derived using the contingent valuation method, but rather from the travel cost method which relies on anglers' actual behavior. Thus, the commenter's concern about contingent valuation method does not apply to the value of fishing on the Gallatin River used in the DEIS. The fact that the $71 value relies upon the travel cost method is now mentioned in the revised section on the bottom of page 93:

> In a report from Montana Fish, Wildlife and Parks, a net economic value was calculated *using the Travel Cost Method* for a fishing day on the Gallatin using the average value per fishing trip divided by the average number of days per trip (Duffield et al. 1987).

Contingent valuation method was used to estimate the value of rafting and other river-based recreation. The National Oceanographic and Atmospheric Administration (NOAA) panel report referred to by the commenter was focused on the use of contingent valuation method to estimate the more difficult to measure passive use or non-use values, not recreation use values. For valuing recreation use (where survey respondents do have actual experience with the goods they are being asked to value) the U.S. Water Resources Council (1983—cited in the DEIS) recommends the contingent valuation method as one of two methods for valuing recreation. Therefore the contingent valuation method derived values are sufficiently reliable for use in valuing recreation in the DEIS.

2.4.2.3 Mitigation Costs Analyses

Comment 56: The $3,500 per SFE charge by the Big Sky Water and Sewer District is just one of the costs of using an advanced centralized system. There are also monthly fees.

Response: The commenter is correct. The monthly fees are relatively modest however, and depend on usage. Nonetheless, to be complete the DEIS should have mentioned the monthly fees. If the residence was used year round by 1-2 people, the fees amount to an additional $33 per month or $400 per year. If the residence is used on a part time basis - as is more than half the housing in Big Sky - then the monthly fee is closer to $50 a year.

Therefore, an addition is made in to the DEIS on the bottom of page 183 and top of page 184. The following sentence (in italics) is added to the middle of the paragraph on Wastewater Plant Investment Charge (PIC) charges.

> The PIC charged by Big Sky Water and Sewer District is $3,500 per SFE (www.bigskywatersewer.com). An SFE is based on a two bedroom-two bath residential unit. Each additional bedroom requires an additional 0.4 SFE. Thus, a three-bedroom condominium or house would require 1.4 SFEs, for a cost of $4,900. Studio apartments and hotel/lodge rooms are 0.7 and 0.75 SFEs, respectively. The Big Sky Water and Sewer District has set SFE values for commercial properties as well. (See www.bigskywatersewer.com website for the Single Family Equivalent Unit Conversion Schedule for a complete listing. (WSD 2006b)). *There is also a monthly charge that the owner of each unit would pay. If the residence was used year round by 1-2 people, the fees amount to an additional $33 per month or $400 per year. If the residence is used on a part time basis - as is more than half the housing in Big Sky - then the monthly fee is closer to $50 a year.* In addition to these treatment costs with a centralized community system, the developer would also have to put in the infrastructure costs such as sewer pipes from each building to the centralized system.

Comment 57: One commenter states that her family's livelihood (local outdoor retail shop and fishing outfitter) depends on both pristine resources and thriving development. She supports ORW designation and states the economic costs are not significant considering the cost of cleaning things up twenty years down the road.

Response: The importance of the Gallatin River to local economy is acknowledged in both Chapters 3 and 4 in the DEIS. As stated in Chapter 3, Section 3.5 of the DEIS, more than 50 river guides are licensed to guide the Gallatin River.

2.4.2.4 Minimal Cost of Complying with ORW

Comment 58: Nine comments were received indicating that the increased cost to new residential construction from complying with the ORW through advanced on-site treatment mitigation would be a very small percentage (1-3%) of the cost of a new house or condo in the Big Sky area, and well worth the cost.

Response: These comments are consistent with the DEIS that indicates the cost of purchase and operation of the advanced on-site treatment is a very small percentage of the cost of new

construction in the Big Sky area. Given new real estate sales data, and public comments received on the recent increases in lot and construction prices in the Big Sky area, the costs of these advanced on-site treatment systems now represent even a smaller fraction of the cost of a new home in the Big Sky area. However, the new mitigation option (presented in the FEIS but not the DEIS) of using both chemical removal for gray water and composting/incinerator toilets, raises this minimum level of advanced treatment cost. Using cost figures from Table 4.3-1 on page 153 of the DEIS, the costs go from the original DEIS cost of 1% of median house price ($3,200 treatment/$250,000 median house price) to 6.28% of median house price ($3,200+$12,500)/$250,000) for the combined system. At the high end the cost is now 10% of the $250,000 median house price ($12,800+$12,500). However, with recent increases in lot prices to $424,000 at the low end, cost of the combined system would be 3.7% to 6% at the high end of the lot price. When a house is added to the lot price, the costs of the combined system are closer to 2% of the total newly constructed house price.

2.4.2.5 Economic Benefits of ORW

Comment 59: Eight comments were received indicating there were substantial benefits to the local, county or state economy from protecting the current water quality through ORW designation. These benefits took the form of tourism, household and business relocation to the state, property values, and fishing and rafting.

Response: These individuals' comments are consistent with Chapter 3 and 4 of the DEIS which describes these benefits in more detail, and where possible, quantifies them with data from the Gallatin River area or from similar studies elsewhere.

2.4.2.6 Economic Costs of ORW, Percentage Costs of ORW on Prices of New Construction

Comment 60: Several commenters suggested the $250,000 median price of a new home in Big Sky that was used for analysis in the DEIS was far too low. "…the cost of compliance as expressed as a percentage of construction may actually be lower than estimated: houses in the Big Sky area are far more expensive than $250,000 median home price cited in the DEIS."

"The DEIS uses several different numbers in estimating the cost of mitigation on new home prices… Page E-4 it cites less than 1%, page E-14, it says 1-8%, and on page 98 it says 1-3%. The DEIS bases all of these figures on a median existing home price of $250,000. The number seems far too low for the Big Sky housing market. Assuming the actual median home price is considerably higher, the cost impact of installing alternative treatment systems should be much lower on a percentage basis."

Response: Costs were displayed in the DEIS both for the initial purchase cost of composting and incinerator toilets, as well as for hook up fees to a centralized system (page 153 of the DEIS). Given these costs range from $3,200 to $12,800, calculations yield the 1% to 5% cost per home shown on page 182 of the DEIS. This cost represents the upfront costs of advance treatment. However, the 30 year total cost (purchase, operation and maintenance) is in the range of $13,000 to $22,000, which would represent the upper end of the 8% cost figure cited on page E-14 of the DEIS. This figure represents the added cost per SFE of advanced treatment systems for

development in areas hydrologically connected to the proposed ORW reach of the Gallatin River.

The revised Chapter 3 (page 88) and 4 (page 182) of the DEIS use recent (fall 2005) real estate listings for residential lots in the Big Sky area (Big Sky Properties 2006). These sources suggest an average listing or "asking" price for residential subdivision lots 0.5 acre or less of $424,000. The actual selling price for some of these lots would be somewhat less, but it indicates that prices have probably risen substantially since when the 2000 Census was taken and the median house price was $246,000. Further, the costs of using both a combined gray water chemical treatment and composting toilet are revised on page 182.

The following discussion has been added to Chapter 3, on page 88 of the DEIS (new text in italics):

> These house price statistics are from the 2000 Census and do not reflect the recent rather large increase in house prices (24% increase from 2001 to 2004 – see Polzin 2005), which has made areas in Montana less affordable than at the time of the 2000 Census. *Recent real estate listings of subdivision-sized residential lots 0.5 acre or less in the Big Sky area (Big Sky Properties, 2005) suggests an average listing or "asking" price for these lots was $424,000. The actual selling price for some of these lots would be somewhat less, but it indicates that prices may have risen even more than 24% since when the 2000 Census was taken and the median house price was $246,000*. However, it is also worth noting that over half (57.3%) of housing in the Big Sky area is used primarily as seasonal, recreational or for occasional use, rather than being primarily owner occupied housing (U.S. Census Bureau 2000)."

The $424,000 price is now used on page 182 of the DEIS to give an upper range for price of subdivision-sized lots most directly affected by the ORW hydrologic footprint. Using this number, along with the initial cost of the combined chemical treatment of gray water and composting or incinerator toilets, results in less than a 3.7% increase in the cost of a lot, and an even smaller percentage increase in final house price (about 2%).

The revised text on page 182-183 of the DEIS is (new text in italics):

> The economic impact of these higher costs is calculated by comparing these higher initial costs to existing house prices in the area. As noted in Chapter 3, the median price of an existing home *in 2000 was* nearly $250,000 in the Big Sky area. *With an initial cost of $3,200 for two composting toilets (equal to one SFE) plus the initial cost of chemical removal ($12,500), the total compliance costs of ORW could represent an increase in costs of 6% to 10% of the median house price in 2000. Given that ORW designation would only affect new construction, and given the recent increases in lot prices, the cost of the combined chemical removal and two composting toilets would represent an even smaller percentage of new construction. The December 2005/January 2006 Big Sky Properties (Big Sky Properties 2005) the "asking" or listing price of subdivision size lots 0.5 acre or less was $424,000. Although the actual selling price for some of these lots would be somewhat less, this price provides an upper range on which to figure costs of lots in the*

> *Big Sky area (lot prices in the hydrologic footprint outside of Big Sky may well be significantly less). Given these average lot prices ($424,000) the low end cost of the combined chemical treatment system and composting/incinerator toilets would be 3.7% to 6% at the high end. Once the house is put on the property, the overall wastewater treatment cost increase of a combined system would represent about 1.5% to 2.5% of the finished house price.*

The analysis of centralized system treatment has been revised on page 184 as follows:

> Even if the cost of constructing small development systems is significantly higher than the cost of a PIC, it is still a small fraction of the estimated median price of a home in area *in 2000.* As noted above, the median price of an existing home was nearly $250,000 in the Big Sky area *in the year 2000*. Therefore, the $3,500 PIC is 1.4% of the median house price in Big Sky in 2000. *Given the recent rise in house and lot prices in Big Sky, the $3,500 PIC is now less than one percent. That is, with average subdivision lots (0.5 acres or less) with listing prices of $424,000 the PIC is 0.8%.*

These increases in costs are also equal to or smaller than the value the house retains from maintaining high water quality. As noted in Section 3.5.3.9 of the DEIS, regarding empirical estimates of the effects of water quality on property values, maintaining water clarity and absence of algae adds at least 3%, to as much as 20%, to house prices, with an average of about 6% (Boyle and Taylor 2001).

Comment 61: Several commenters stated that the cost of forgone development with no mitigation was significant. “The potential economic harm of this omission is significant and could bring measurable economic harm to the region on the order of magnitude of 100’s of millions of dollars per year, contrary to the Gallatin River EIS conclusion.” “The DEIS understatement regarding the economic impact of development in the area borders on the absurd.” According to the DEIS, the proposed regulation will decrease the amount of development from 692 lots to 75 lots.” “For a 3,000 square foot home, the cost is approximately $600,000, which does not include the lot. … However, lot prices can easily rise to millions. This results in a loss of $530 million or $53 million annually if we assume a build-out over ten years.”

Response: The commenters’ statements or calculations overstate the costs of complying with ORW even without mitigation. First, the socioeconomic analysis in the DEIS did not use lots as a measure of development, but rather dwelling units. About one half (50%) of the dwelling units in the hydrologic footprint in the Big Sky area are small subdivision lots of 0.17 to 0.25 acre, which generally do not sell for $1 million or more. About 25% of the lots are 1-2.5 acres, and only the remaining 25% of lots which are fives acre or larger sell for $1 million or more.

An analysis of available subdivision lots of 0.5 acre or smaller during the December 2005 and January 2006 period through Big Sky Properties indicates the average price for these lots is $424,000. The overall average for all lots advertised by Big Sky Properties during this time period was $844,140.

Further, not all the reduction in possible development in the hydrologic footprint occurs in the Big Sky Zoning District; about 25% of the dwelling units are in South Gallatin Zoning District or Spanish Creek-Karst Area. These areas outside of the Big Sky basin may not command the high prices per acre of lots in Big Sky.

Therefore the use of the $1 million per lot as a benchmark to calculate the costs of the ORW regulations under the Proposed Action without the mitigation greatly overstates the costs. Further, the net cost to society as a whole is only any loss in land value that cannot be replaced elsewhere. The building materials and labor can be re-employed elsewhere. Also, there are lots outside of the hydrologic footprint in the Big Sky area where the $600,000 house construction (labor and materials) can be undertaken if the house cannot be built within the footprint. Lastly, there are other ski towns in Montana and elsewhere in the west where the displaced construction materials can be utilized.

However, the average price per subdivision lot and other lot sizes is now used to estimate a rough opportunity cost of the ORW regulations without mitigation. Thus, the following is inserted on page 180 of the DEIS (between the first full paragraph and the second full paragraph) to reflect the cost of forgone development of the Proposed Action without mitigation:

> *With the Proposed Action of ORW designation without any mitigation, there would be a reduction in approximately 281 dwelling units in Single Family Equivalents (SFEs) on subdivision lots of 0.5 acre or less. The lost value of the buildable lots is estimated to be roughly $120 million using an average subdivision lot price of $424,000. Using the relevant larger lot prices for reduction in residential cluster 1 (one unit per acre) and 2.5 (2.5 units per acre) and residential cluster 5, 10 and 20, the total loss in lot values is estimated at roughly $300 million over the decade of build-out in the hydrologic footprint. There would of course be an associated loss of the property taxes that would have been paid on the associated houses that would have been constructed on these lots. However, to arrive at a net figure, this reduction in property taxes needs to be balanced with the reduction in services that would no longer be required without building.*
>
> *For individuals and small real estate developers/builders the loss of one or more of these lots could cause substantial financial hardship, leading to personal stress and possibly social/community stresses in attempting to cope with or aid these individuals or developers/builders.*

With regard to the costs of the Proposed Action with Mitigation, the net costs are now estimated using this same range of lot prices times the number of lots no longer buildable under ORW even with mitigation. The first type of mitigation analyzed is the combined chemical treatment and composting/incinerator toilets. The text dealing with the percentage costs this would represent to new construction involving a new lot and home has been revised. The loss in land values associated with the reduction in dwelling units that can be built using this combined approach is discussed.

The revised text on page 183 in the DEIS in between the first full paragraph and the second full paragraph is:

Specifically, revised table 4.4-6 (Table 2.3-1 FEIS) indicates that with the combined chemical removal and composting/incinerator toilets, those 281 SFEs on lots of 0.5 acre would not be buildable due to ORW even with this combined treatment. Only with zero discharge via centralized treatment or vaults would they be buildable. The value of these unbuildable lots would represent a cost of $120 million in forgone lot values over the decade of build-out. Associated with this loss would be the loss in associated property taxes, although that loss may be slightly offset by the reduction in services that would need to be provided.

For individuals and small real estate developers/builders the loss of one or more of these lots could cause substantial financial hardship, leading to personal stress and possibly social/community stresses in attempting to cope with or aid these individuals or developers/builders.

The adoption of the combined advanced subsurface wastewater treatment systems (chemical and composting/incinerator toilets) would allow more of the build-out potential within the footprint than the Proposed Action without mitigation. However, the number of dwelling units mitigated would depend on the types of systems used. The adoption of mitigating wastewater treatment systems, compared to without mitigation would result in less reduction in the current levels of employment in the construction and real estate sectors of Big Sky CDP and West Yellowstone CCD. In particular, construction employment might fall by about one-third with the combined advanced wastewater treatment. Some of this amelioration of the reduction in employment may arise because adoption of combined subsurface wastewater treatment systems would likely require additional employment in the installation and maintenance of these systems.

Only if zero discharge from small subdivision lots can be achieved would full build-out in the hydrologic footprint be obtained. Zero discharge would either require: 1) changes in state law to allow sealed vault systems; or 2) small-scale centralized treatment systems that were economically feasible (centralized systems are economically feasible for areas of higher density, but become less economically feasible as density decreases). In these cases full build-out could occur with ORW designation, and current levels of construction employment could continue during the build-out period in Big Sky and Gallatin County. Further, if sealed vault systems were allowed, these sealed septic, or gray water systems would need to be pumped every four years, and the sewage or gray water disposed of outside the study area, creating additional jobs in this industry.

2.5 Fisheries and Aquatic Resources

Comments related to fish and aquatic resources were recorded at the October 25 public hearing and four additional comments were received by DEQ on issues regarding the fisheries and aquatic ecology analysis in the DEIS. The comments generally fell into three areas: effects on the fishery; potential changes to angler populations; and use of aquatic organisms in the data review and assessment process.

2.5.1 Comment Summary

Comments related to fisheries and aquatic resources received at the October 25 public hearing were varied, but generally focused on the recreational fishery. Commenters requested that the benefits to and effects on the fishery be acknowledged by the Board in their decisions. Two commenters described anecdotal evidence that declines in water quality were already affecting the food web in the Gallatin River, particularly aquatic macroinvertebrates.

Several comments related to the recreational activities surrounding fishing have been addressed under the socioeconomics (Section 2.4) and land use (Section 2.3) responses in the FEIS.

2.5.2 Issues Raised and Responses

2.5.2.1 Geographic Extent of Analysis

Comment 62: The DEIS did not assess tributary habitat and water quantity in relation to the Gallatin River fishery.

Response: This comment points out the interconnectedness of the river's ecology. However, the legal framework of the ORW designation process and direction under MEPA limits the extent of our analysis to the reach of river that has been petitioned. Also, although water quantity is integral to fish health, it is not specifically addressed in the ORW legislation, and thus no further analysis is provided in this document.

2.5.2.2 Macroinvertebrates and Sampling Analysis

Comment 63: Two commenters noted that they believed that mayfly and stonefly populations were being "lost to pollution" in the Gallatin River.

Response: Although the data are not specific enough to document the trend for any one species, more detailed analyses of the benthic macroinvertebrate populations are provided in this section.

Comment 64: The macroinvertebrate analysis presented in the DEIS is inaccurate. The contention put forward in the DEIS that the macroinvertebrate data showed a trend of declining water quality is not correct.

Response: While recent macroinvertebrate sampling data are limited to Bollman's studies from 1999 to 2005 (Bollman 1999, 2002, 2003, and 2005), there are studies from the 1970s that document a pollution-sensitive macroinvertebrate community prior to initial development in the West Fork Gallatin River watershed (Stuart et al. 1976). Stuart et al. (1976) began their study

just after work began to build the Big Sky complexes at Meadow Village and Mountain Village. Their study found short-term impacts from development along the West Fork Gallatin River that changed the macroinvertebrate species composition from a pollution intolerant mayfly-dominated one to a pollution tolerant midge-dominated one between 1971 and 1974. When Stuart et al.'s data from 1971 and 1974 are compared to those collected by Bollman between 1999 and 2005, it is difficult to discern a statistically significant trend. However, a cursory look at the data does suggest that the benthic community is shifting from less pollution-tolerant orders such as the Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies), to a more pollution tolerant, less diverse community dominated by Dipteran (flies) groups, especially the *Chironomidae* (midges) (Figure 2.5-1). At the site on the West Fork Gallatin River upstream of the Spur Road Bridge, mayflies have gone from comprising near 30 percent of the sample to less than 15 percent while fly and midge larvae have gone from comprising fewer than 12 percent to over 75 percent (Figure 2.5-1).

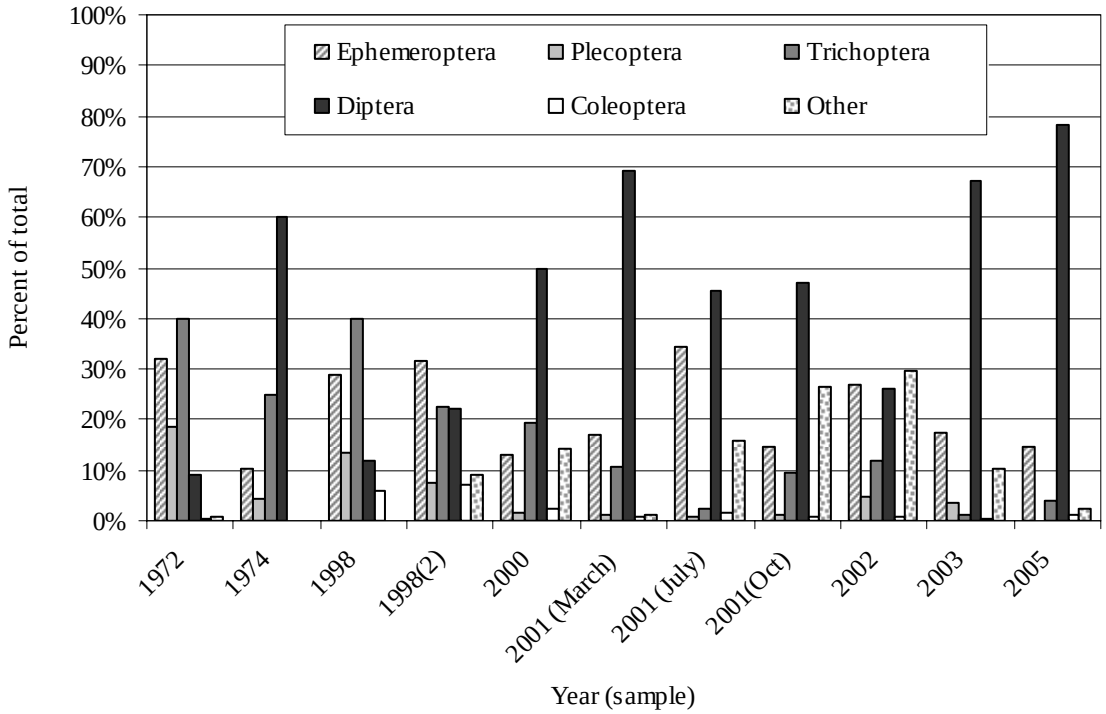

Figure 2.5-1. Benthic macroinvertebrate data displayed as percent of total sample by taxonomic order for the sample site on the West Fork Gallatin River upstream of the Spur Road Bridge. Sources for the data are Stuart et al. 1976; Bollman 1999, 2002, 2003, and 2005. A replicate sample was taken at the same site and same time in 1998, and three samples were taken at the same site during three different months in 2001. Dipterans include members of the midge family Chironomidae.

Combining the three pollution-intolerant taxa (Ephemeroptera, Plecoptera and Trichoptera; known as 'EPT') and comparing their total percent against the percent of Dipteran (pollution tolerant) taxa, the trend is even more apparent (Figure 2.5-2). The relative percent of EPT

compared to percent of Dipterans has reversed since 1998 (Bollman 1999, 2002, 2003, and 2005) (Figure 2.5-2).

Although the trend does not appear to persist for samples from the Jack Bridge site below the confluence of the West Fork Gallatin River and the mainstem Gallatin River, the contribution of nutrients from the West Fork Gallatin River is likely to cause degradation of the water quality in the mainstem Gallatin River (Figures 2.5-3 and 2.5-4).

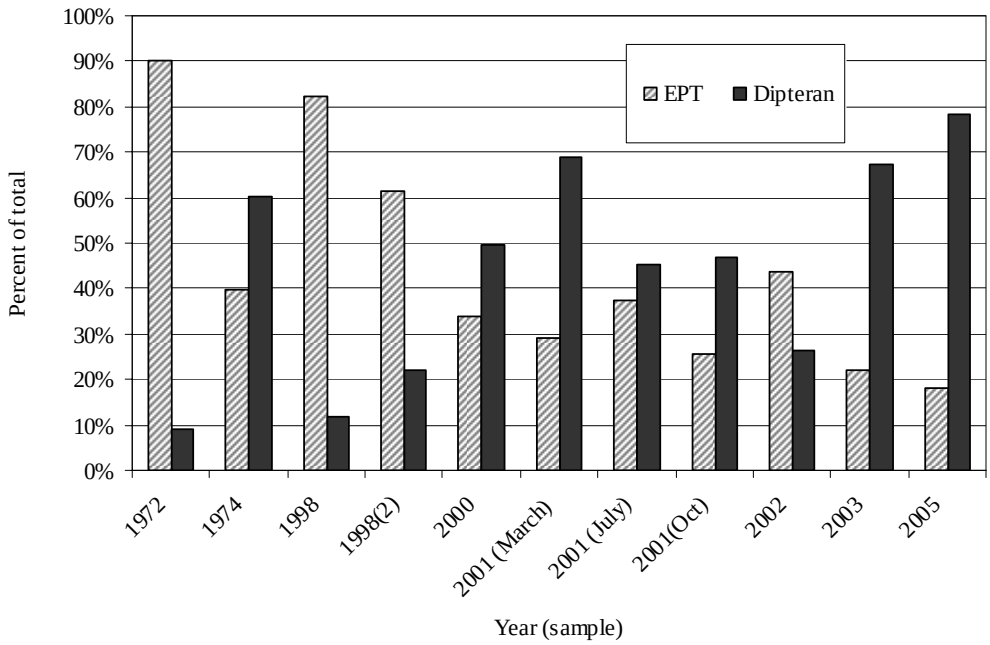

Figure 2.5-2. Benthic macroinvertebrate data displayed as percent of total sample for the sum of all Ephemeroptera, Plecoptera, and Trichoptera (EPT) and the Dipteran taxa for the sample site on the West Fork Gallatin River upstream of the Spur Road Bridge. Source data from Stuart et al. 1976; Bollman 1999, 2002, 2003, and 2005. A replicate sample was taken at the same site and same time in 1998, and three samples were taken at the same site during three different months in 2001. Dipterans include members of the midge family Chironomidae.

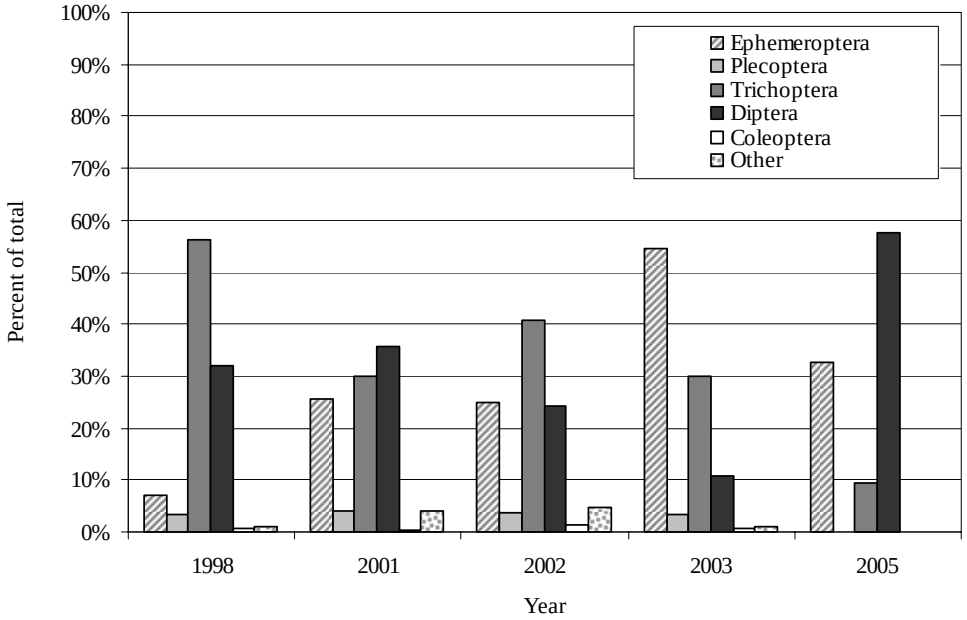

Figure 2.5-3. Benthic macroinvertebrate data displayed as percent of total sample by taxonomic order for the sample site on the Gallatin River just below the confluence of the West Fork Gallatin River at Jack Bridge. Sources for the data are Bollman 1999, 2002, 2003, and 2005. Dipterans include members of the midge family Chironomidae.

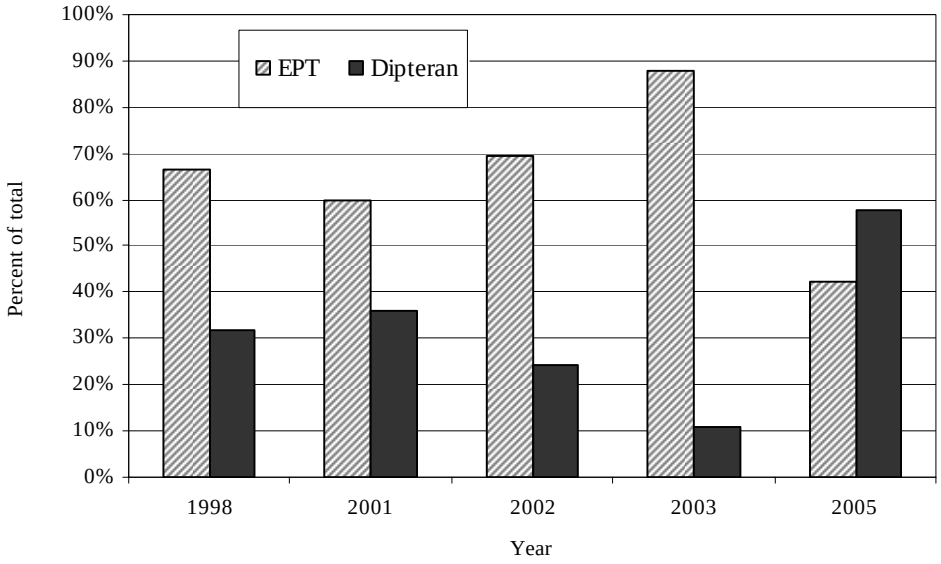

Figure 2.5-4. Benthic macroinvertebrate data displayed as percent of total sample by taxonomic order for the sample site on the Gallatin River just below the confluence of the West Fork Gallatin River. Sources for the data are Bollman 1999, 2001, 2003, and 2005.

Comment 65: Bollman (2005) suggests that low flows due to drought and possibly subsequent thermal effects (i.e. warming) may have exacerbated the changes in the macroinvertebrate community.

Response: This comment accurately describes of one of Bollman's (2005) conclusions. However, Bollman did not provide data or analysis to support these speculations. While low flows and warming can increase the impacts of nutrient levels in streams, the actual nutrient content in the water is the concern. DEQ water quality trigger values are set using the 7Q10 flow, the 7-day consecutive, 10-year low flow level; therefore, nutrient levels at low flows should be the focus of concern. During drought years stream fauna experience even greater stress with the same nutrient load as they would in a normal or high flow year where increased flows dilute the nutrients as they enter a stream. Therefore, any long-term reductions in flow would only serve to increase the negative impact of the No Action Alternative and the benefits of the Proposed Action Alternative.

Comment 66: The presence of whirling disease in the Gallatin River is another reason to be concerned about water quality in the proposed ORW reach.

Response: Although, no evidence of whirling disease infection has been documented in the proposed ORW reach, DEQ documented the presence of *Tubifex tubifex* in the West Fork in 1997 during their TMDL data assessment (DEQ 2006d, Kerans, et al. 2005). Kerans et al. (2005) found that temperature is the most likely limiting factor limiting the spread of whirling disease to the upper Gallatin River.

Comment 67: DEQ should identify all data used to determine the trend in water quality degradation.

Response: In addition to the benthic macroinvertebrate studies described above, the recently released DEQ report to EPA on impaired Montana waterbody (303(d)) listing shows the West Fork Gallatin River as downgraded from "partially supporting" in 2004 to "not supporting" in 2006 for both the cold water fishery, and contact recreation such as swimming (DEQ 2006c, pg D-22). In addition the Middle Fork of the West Fork Gallatin River has been downgraded from "partially supporting" to "not supporting" contact recreation (DEQ 2006c, Pg D-22). In other words, DEQ does not think it is safe for individuals to swim or "wet-wade" fish in these waterbodies. The possible causes listed for these reductions to beneficial uses are "septics and decentralized systems and land development/clearing" (CWAIC 2006). The specific pollutants listed include nitrogen, phosphorus and fecal coliform bacteria (DEQ 2006c).

2.5.2.3 Fisheries Data Analysis

Comment 68: The linkage between angling success and economic benefit is not clear in the socioeconomic or fisheries analyses. The impact of "lost anglers due to reductions in water quality" is not significant in the context of other economic sources in the study area.

Response: Although the work relied on in the DEIS is from the 1990s, the general premise that the fishery of the proposed ORW reach of the Gallatin River is important to the local economy is well established. The second portion of this comment seems to imply that reductions in water

quality sufficient to impact the fishery are acceptable. DEQ strongly disagrees with this assertion. Nondegradation policy requires the maintenance of designated uses of high quality waters such as the Gallatin River (See Section 1.3 DEIS). The fishery of the Gallatin River was one of the reasons cited by the Board to accept the ORW petition (See 75-5-316(4) MCA).

The FEIS includes references to the most recent water quality data related to fisheries and emphasizes the acknowledged degradation of the water quality of the West Fork Gallatin River to the point of "non-support" for the coldwater fishery due to nutrient pollution (DEQ 2006c App D-66). It is reasonable to assume that the nutrient-degraded waters from the West Fork Gallatin will impact the overall water quality of the mainstem Gallatin River. Declines in the fishery of the Gallatin River may result from the continued nutrient input originating from these 303(d) listed streams. In the absence of ORW designation, these impacts may increase as more potential nutrient sources are allowed within the footprint.

Comment 69: A comment was made that the DEIS on page 198 states that:

> "With full build-out, levels of nitrate are likely to remain well below this [2.0 mg/L] threshold, assuming the 153 gpd effluent (Nicklin 2000a). Figure 4.3-5 shows that at 652 SFE the additional nitrate concentration would be less than 0.04 mg/L above the existing background levels."

The commenter states that these levels are not sufficient to cause harm to the fishery.

Response: The DEIS (page 198) goes on to explain that background nutrient levels in the study area already approach one-half of the threshold that might adversely affect the fishery:

> "Figure 4.3-6 shows that background levels currently approach 1.0 mg/L at one of the BWTF monitoring sites, and that the background nitrate levels appear to be increasing (BWTF 2006). If full build-out was completed at current standards for nutrient loading, then nitrate levels could increase to 1.02-1.04 mg/L nitrate. These calculations assume no leakage from the Big Sky County Water and Sewer District and continued zero discharge from their facility. If conditions of the Big Sky County Water and Sewer District MPDES permit change, or if their facility infiltration rate increases, it is not unreasonable to assume that background nitrate levels will continue to increase and that total levels might approach the 2.0 mg/L threshold. This level of nitrate would not cause the recreational fishery to decline rapidly, but would be likely to adversely affect rainbow trout fry and eggs (Table 4.7-2) (Kincheloe et al. 1979). Since cold water temperature in the proposed ORW reach already limits rainbow trout growth, this added stress to the adults could also cause adverse effects on adult growth, reproduction, and survival (Crunkilton and Johnson 2000)."

2.5.2.4 Use of the TMDL Process

Comment 70: The existing TMDL process should be used to protect the water quality of the Gallatin River.

Response: The reach of the Gallatin River proposed for ORW designation is not currently listed as impaired, and would have to be declared as such before any TMDL process would provide

protection. Therefore, waiting for a detectable level of degradation to occur would not meet the petitioner's request, and would not provide a similar level of protection for the Gallatin River. The TMDL process would only be initiated after sufficient credible data were collected to affirm impairment, and would not meet the intent of the petitioner, which is to prevent impairment of water quality.

Fisheries-related issues raised that are outside of the scope of the EIS included: the ability of the ORW to protect in-stream flows. This concern was addressed in the scoping report.

2.6 Air Quality

2.6.1 Comment Summary

One comment was received by DEQ regarding the potential impact of incinerator toilets on air quality.

2.6.2 Issues Raised and Responses

Comment 71: Analysis of how expanded use of incinerator toilets might affect air quality in the study area was not included in the DEIS.

Response: Two leading incinerator toilet manufacturers were consulted regarding air emissions from their products (mention of product names is not an endorsement by DEQ):

1) E.B. Blankenship, technical/sales representative from INCINOLET®, indicated that their electric incinerator toilet utilizes a platinum catalyst to keep toilet exhaust odor-free. Heat and smoke are filtered through the catalyst and out a vent pipe to the atmosphere. INCINOLET® has not conducted studies on chemical makeup of the toilet's exhaust; however the main by-product of any combustible organic is typically carbon dioxide. The INCINOLET® toilet is a National Sanitation Foundation certified product (NSF P157).

2) STORBURN, a leading manufacturer of gas-fired incinerator toilets offers a written guarantee that "STORBURN GIVES OFF NO FOUL ODORS - INSIDE OR OUTSIDE". According to STORBURN's website (http://www.storburn.ca/info.html), "*the STORBURN toilet reduces untreated human waste to sterile mineral ash and harmless water vapor*" and "*the STORBURN toilet is self-contained and does not discharge any effluent into the soil or harmful gas into the atmosphere. All that remains after the incinerator cycle is sterile ash.*" Officials with STORBURN were not available at the time of this comment response.

In summary, it is not expected that use of these units in multiple locations would impact regional air quality; the primary air emissions from these units are expected to be water vapor and/or carbon dioxide.

2.7 MEPA Process

Several comments were made at the October 25, 2006 public hearing and at least ten additional comments were received by DEQ on issues related to MEPA or implementation of the ORW designation. Some of the comments also raised legal questions related to DEQ's authority and how the ORW may be interpreted if approved. The comments were diverse, but several issues came up repeatedly: scope of the analysis; public involvement; tiering with other environmental documents; and the timeline and funding of the EIS.

2.7.1 Comment Summary

2.7.1.1 MEPA Process

Comments were made related to the timeline and budget for the EIS. Some commenters felt that neither was adequate for a complete assessment. Others felt that the timeline had been imposed without good cause or substantiation. There were several comments on the adequacy of the DEIS. Comments specific to resource area analyses are addressed under the corresponding section of this FEIS. Comments related to compliance with MEPA are addressed below.

2.7.1.2 Alternatives and Analyses

Comments on the analyses for each resource area are addressed in their respective sections of this FEIS. Commenters expressed concern that the range of alternatives was too limited and that additional alternatives should be pursued.

2.7.2 Issues Raised and Responses

2.7.2.1 MEPA Process and Timeline

Comment 72: The DEIS timeline and budget imposed by DEQ did not allow for adequate analysis of impacts and issues.

Response: The deadline noted for this EIS was the outcome of establishing a schedule for completion that meets the timeframes required under MEPA (see 75-1-208(4)(a), MCA). The budget constrained the extent of some analyses, but did not preclude adequate analysis. Existing reports were used and few areas were found where data were lacking in quantity or quality. The existing budget prevented extraneous studies and focused the EIS.

2.7.2.2 Acceptance of the Petition

Comment 73: The Board failed to address how the proposed ORW meets all of the six criteria listed under 75-5-316(4), MCA.

Response: The text preceding the list of possible reasons for petitioning a water body for ORW designation states, "However, the board may determine that compliance with *one or more* of these criteria is insufficient to warrant classification of the water as an outstanding resource water" (Emphasis added). Therefore, the statute requires that at least one, but not necessarily all, of the criteria be met for the Board to be able to determine that ORW classification is warranted.

2.7.2.3 Purpose and Benefits of Proposed Action

Comment 74: The DEIS does not adequately describe the need for the proposed action.

Response: Under MEPA the purpose and benefits section (Chapter 1 in the DEIS) must address the reason why an agency is compelled to make a decision to implement an action. Under 75-5-315, MCA, if a petition to designate a waterbody as an ORW is presented to the Board and the Board decides the petition has merit, the Board must require the preparation of an EIS (75-5-316(6), MCA) (See pg 2 DEIS). Although the Board may accept the petition, the Legislature ultimately decides whether or not to designate the waterbody as an ORW. There are no provisions in Montana law for the Board to make an independent designation of an ORW without a petition.

Comment 75: The current water quality protection process adequately protects the Gallatin River and the EIS was not necessary.

Response: Under 75-5-316(3), MCA, the EIS must address whether there is *no other effective process available that will achieve the necessary protection* as ORW designation. As detailed in the DEIS on pages 15-18, current regulations would allow some level of degradation of water quality from point-source pollution:

> "DEQ, in accordance with Board rules and statutes, may authorize water quality changes above the nonsignificance threshold (i.e., degradation) if a discharger demonstrates by a preponderance of evidence that:
>
> - there are no economically, environmentally, and technologically feasible modifications to the proposed project that would result in no degradation;
> - the proposed project will result in important economic or social benefits that exceed societal costs of allowing degradation;
> - existing and anticipated uses of state waters will be fully protected; and
> - the least degrading water quality protection practices will be used (75-5-303(3), MCA).
>
> Once DEQ has reviewed the evidence, it issues a preliminary decision, and a 30-day public comment period begins. At the end of the comment period, DEQ issues its final decision, which may be appealed to the Board by persons who have an economic interest that might be directly affected. DEQ may review and revise authorizations to degrade once every five years and may modify the authorization as necessary. Under the No Action Alternative, permittees could continue to use this process to gain approval, even if water quality degradation would occur."

Therefore, the DEIS does demonstrate that ORW designation would provide a distinctly different level of water quality protection than would the No Action Alternative. The level of protection of water quality is the only standard of measure that is the focus in the ORW designation process.

Comment 76: DEQ must show why water quality is "of such importance as to outweigh any other societal problem."

Response: This level of analysis is not called for in 75-5-316, MCA, nor is it required under MEPA.

2.7.2.4 Alternatives and Analyses

Comment 77: The language in the alternatives analysis was too vague regarding the potential for water quality degradation in the proposed ORW reach. The DEIS uses words like "potentially," and "could be degraded." Therefore, the DEIS does not demonstrate a need for ORW designation.

Response: The recent DEQ 303(d) listing shows that water quality degradation is occurring and has occurred specifically in the West Fork of the Gallatin River (DEQ 2006c). The recently released DEQ report to EPA on impaired Montana waterbody (303(d)) listings shows the West Fork Gallatin River as downgraded from "partially supporting" in 2004 to "not supporting" in 2006 both the cold water fishery and contact recreation such as swimming (DEQ 2006c, pg D-22). In addition, the Middle Fork of the West Fork Gallatin River has been downgraded from "partially supporting" to "not supporting" for contact recreation (DEQ 2006c, Pg D-22). In other words, DEQ does not think it is safe for individuals to swim or wet-wade fish in these waterbodies. The possible causes listed for these reductions in beneficial use are "septics and decentralized systems and land development/clearing" (CWAIC 2006). The specific pollutants listed include nitrogen, phosphorus and fecal coliform bacteria (DEQ 2006c).

Comment 78: The range of alternatives considered in the DEIS was inadequate.

Response: There are limited ways to meet the level of protection afforded by ORW designation which requires that DEQ may not:

a) grant an authorization to degrade under 75-5-303, MCA, in outstanding resource waters; or
b) allow a new or increased point source discharge that would result in a permanent change in the water quality of an outstanding resource water (75-5-316 (2), MCA).

Given the specificity of the requirements of ORW, DEQ believes that the DEIS examined and described all reasonable alternatives to the Proposed Action. The commenters did not suggest any additional alternatives for consideration.

2.7.2.5 Extension of the ORW Designation to the Tributaries

Comment 79: Because the footprint encompasses portions of the lands surrounding the tributaries, that ORW designation is "*de facto*" extended to these tributaries.

Response: Although the waters in the tributaries do travel their full length to the proposed ORW reach of the Gallatin River in less than the one-year travel time criterion, surface water travel time was not used to delineate the footprint. The footprint encompasses areas where the shallow aquifers (groundwater) are in direct hydrologic connection with the Gallatin River or principal tributaries to the Gallatin within the study area, and therefore are likely to transmit contaminants to the river (Appendix F, DEIS). The footprint thus delineates the area where the groundwater is likely to reach the mainstem of the Gallatin River within one year. If the footprint were constructed to include all lands with a similar hydrologic connection to the tributaries, the acreage covered would be significantly greater.

2.8 Other Comments

Although every comment received was read and assessed as part of the public involvement phase for this FEIS, some comments were outside of the scope of work for the EIS analysis. Many of these comments have been addressed earlier in this document as well as in the scoping document (DEQ 2005). This section lists additional comments that are not addressed in the FEIS, and provides a brief explanation for their omission.

2.8.1 Geographic Scope

Several comments were made regarding increasing or reducing the geographic extent of the ORW designation. One commenter requested that the FEIS profile several other waters that might be eligible for ORW status.

The ORW reach is defined by the initial petition (American Wildlands 2001), and DEQ does not have the authority to change the extent of the ORW designation (75-5-316 (3)(c), MCA). Analysis of unrelated waterbodies is also beyond the scope of the DEIS.

2.8.2 Impacts to Water Quantity

Commenters requested analysis of water quantity and effects from development on in-stream flows. While water quantity does have some bearing on the concentration of pollutants within a water body, the ORW designation does not address water quantity as part of water quality; therefore, an independent analysis of water quantity is beyond the scope of this FEIS.

2.8.3 Nonpoint Source Regulation

Some commenters listed several specific materials (such as de-icers) used in various industries (e.g. road maintenance) that would need to be evaluated as potential point sources. These materials do not reach the river via any sort of discrete conveyance, which is part of the definition of a point source (75-5-103, MCA). Therefore, the potential for such materials to affect the water quality of the river was qualitatively assessed in the DEIS, but their use would not be controlled differently under the ORW designation (DEIS page 9) because ORW requirements are limited to point discharges.

2.8.4 Impacts to Highway Safety

Montana Department of Transportation (MDT) and individual citizens expressed concern that ORW designation might limit or reduce the ability of MDT and the County to conduct road maintenance and implement their safety improvements projects as planned. DEQ reviewed MDT's Environmental Assessment for proposed safety improvements and did not find any actions or aspects of the project that would require alterations in the current permitting and MEPA process (FHWA and MDT 2005). As noted above and under Section 2.2.2, ORW designation would not require any additional regulatory or permitting actions for nonpoint sources typical of transportation and road maintenance projects. In addition the temporary surface water discharge permits (318 permits) normally applied for as part of road construction and maintenance projects would not constitute a "permanent change" in water quality and therefore would not violate ORW requirements. Although MDT did participate in the scoping process, its comments were filed two months after the scoping period closed.

Chapter 3: Description of Public Involvement

The public involvement process is the core of MEPA. Several opportunities are provided during the MEPA process including public scoping, public comment on the DEIS and public meetings and hearings where members of the public can present their comments to the agencies involved. This chapter describes the opportunities for public involvement provided by DEQ during the preparation of the EIS for the proposed ORW designation of the Gallatin River from the Yellowstone National Park boundary to the confluence with Spanish Creek.

DEQ opened the scoping period for the Gallatin ORW Designation Environmental Impact Statement (EIS) on November 25, 2005. On December 12, 2005, DEQ held a public meeting in Gallatin Gateway, Montana, at the Gallatin Gateway Community Center. The meeting was well attended and several resource area representatives from DEQ and other State agencies were present to field comments from the public. Greg Hallsten, project manager for DEQ, moderated the meeting. Comments made at the meeting were collected and re-typed by DEQ, and sent to Garcia and Associates (GANDA) for inclusion in the scoping report. Comments received via postal mail or e-mail were forwarded to GANDA. The scoping period closed on December 28, 2005. The scoping report was published on the DEQ (http://www.deq.mt.gov) website on January 19, 2006.

DEQ distributed the Gallatin ORW Designation DEIS on September 8, 2006. One hundred and fifty copies were printed and mailed to local public libraries as well as to individuals and organizations that requested a printed copy. An electronic copy in PDF format was posted on the DEQ website to allow broader distribution of the information. This distribution via mail and website opened the comment period for the DEIS. On October 25, 2005, DEQ held a public hearing in Gallatin Gateway at the Gallatin Gateway Inn. All members of the Board of Environmental Review (Board) were present: Joe Russell, Heidi Kaiser, Kim Lacey, Don Marble, Bill Rossbach, Robin Shropshire, and Gayle Skunkcap. Joe Russell, Chairman of the Board, presided over the meeting and provided instructions to commenters as to format and procedures for presenting comments. A court reporter typed minutes of the meeting. The meeting was well attended.

Resource area representatives from DEQ presented introductory information on the EIS process and the proposed ORW. Greg Hallsten, EIS coordinator and Project Manager for DEQ, introduced the Board and outlined the MEPA process specific to this EIS. Bob Bukantis and Eric Regensburger presented technical and policy information on the ORW and on some of the findings presented in the DEIS. Comments made at the meeting were collected by the Board and oral comments were typed by the court reporter. Comments received via FAX, postal mail, or e-mail were forwarded to GANDA. The comment period on the DEIS closed on October 27, 2006. MEPA requires a minimum 30-day comment period; this comment period lasted 49 days.

The public hearing also addressed the rule-making process and proposed rule. The Board accepted written and oral comments on amending ARM 17.30.617 to designate the mainstem of the Gallatin River from the Yellowstone National Park boundary to the confluence of Spanish Creek as an ORW and to amend ARM 17.30.638:

(1) to add a new subsection clarifying that discharges to ground water with a direct hydrologic connection to an ORW are within the statutory mandate prohibiting any permanent change in the water quality of an ORW resulting from point source discharges, and
(2) to clarify that existing point sources or ground water sources that will result in discharges to an ORW, which have been approved, authorized, licensed, or permitted prior to the effective date of the ORW designation, are not subject to the prohibitions in the statute against causing permanent changes in the water quality of an ORW.

The comment period on the proposed rules ended on November 2, 2006. Comments on the proposed rule will be addressed by the Board.

Chapter 4: Public Comments Received

As required under ARM 17.4.619, the sources of all written and oral comments on the DEIS, including those obtained at public hearings, must be included in the FEIS. The following is a list of people, and any affiliations they provided that commented during the public comment period for the Gallatin River ORW Designation DEIS. Comments are separated below as to whether they were written or oral; a few individuals commented both orally and in writing. The written comments (including those emailed or Faxed) were electronically scanned and are found in Appendix A.

Table 4.1. Sources of comments on the Gallatin ORW DEIS received by DEQ during the public comment period from September 8 to October 27, 2006. Affiliations and representation are listed as provided by the commenter.

Name	Affiliation	Representing
Allen, Don; Trenk, Peggy; Roberts, Byron; Hegreberg, Cary	Western Environmental Trade Association	
Alvin, Katie		
Bauchman, John		
Becker, Mike and Stephanie		
Bell, James		
Bosse, Scott	Greater Yellowstone Coalition	
Breeden, Samantha		
Breeding, Noreen		
Cain, Clinton and Judith		
Clifford, Matt	Clark Fork Coalition	
Dolan, James J.	Spanish Peaks Holdings, LLC	
DuBose, Robert		
Durham, Rebecca		
English, Alan	Gallatin Local Water Quality District	
Gallik, Brian K.	Goetz, Gallik & Baldwin P.C.	Westland Enterprises, Inc. and Simkins Holdings
Hansberry, Charles E.	Garlington, Lohn & Robinson PLLP	Yellowstone Developments LLC and Yellowstone Mountain Club
Haugen, Gorden	Headwaters Sportsman Association	
Heath, Rebecca	Forest Supervisor, GNF	
Hether, Nicholas		
House, Verne		
Johnson, Jim		
Kelleher, Kevin		
Kirkland, David and Julie		
Kommers, Faye		
Lynch, Jim	Montana Department of Transportation	
Martin, Jenny		
Mest, John		
Nicklin, Michael E.	Nicklin Earth & Water, Inc.	
Ossorio, Eric		
Persons, Jacquie		

Table 4.1. Sources of comments on the Gallatin ORW DEIS received by DEQ during the public comment period from September 8 to October 27, 2006. Affiliations and representation are listed as provided by the commenter.

Name	Affiliation	Representing
Regnerus, Shawn	American Wildlands	American Wildlands
Sears, Lance		
Straehl, Sandra	Montana Department of Transportation	
von Pentz, Robert		
Walden, Richard	Richard Walden Law	Swan Range Log Homes, LLC
Wasia, Chris		
Wiegmann, Ralph; Truman, Suzanne		
Zarrabian, Saiid	Lone Peak Homes, Inc.	
Ansley, Charles		
Davis, Amy		
DeArmond, Ron		
Dolan, Brian		
Ellingsen, Kris		
Garvey, Lydia		
Grundman, Dennis		
Johnson, Katherine		
McClelland, Doug and Liza		
McMahon, Tom		
Patterson, Anna		
Ritter, Robert		
Schreiner, Suzanne		
Schuiery, Kathleen and Duane		
Steele, Bill and Carol		

Oral Comments presented at the public hearing on October 25, 2006. The hearing transcript is available from DEQ upon request.

Name	Affiliation	Representing
Koopman, Roger	State Representative, House District 70	
Kakuk, Michael		
Oppel, Glenn	Montanan Association of Realtors	
Simkins, W.		
Pruitt, A.D.		
Oslund, Michele		
Stewart, Dustin	Montana Building Industry Assoc.	
Zell, Margot	MT Whitewater	
Gettleman, Michael		
Borer, Anne	Big Sky Chamber of Commerce	
Gammon, Ross	Montana Department of Transportation	
Hawks Bob	State Senator, Senate District 33	
Kloczko, Justin		
Schroeder, David		

Chapter 5: Distribution List

The following is a list of individuals and entities to which a copy of the DEIS was mailed on or after September 8, 2006.

DUDLEY TYLER
418 S YELLOWSTONE ST
LIVINGSTON, MT 59047

HEIDI KAISER
5 WILLOW RUN
PARK CITY, MT 59063

SHANE BOFTO
HYDROSOLUTIONS, INC.
PO BOX 80866
BILLINGS, MT 59102

KIM LACEY
PO BOX 534
GLASGOW, MT 59230

JON BENGOCHEA
319 3RD ST S
GLASGOW, MT 59230

ROGER MUGGLI
RR 1 BOX 2216
MILES CITY, MT 59301

EARL SALLEY
1104 19TH ST S
GREAT FALLS , MT 59405

GAYLE SKUNKCAP
PO BOX 850
BROWNING, MT 59417

STEVIE NEUMAN
639 US HWY 89
VAUGHN, MT 59487

DON MARBLE
PO BOX 725
CHESTER, MT 59522

MICHAEL WENDLAND
PO BOX 142
RUDYARD, MT 59540

PEGGY TRENK
MT ASSOCIATION OF REALTORS
208 N MONTANA STE 203
HELENA, MT 59601

KEN WALLACE
WALLACE CONSULTING
906 STUART STREET
HELENA, MT 59601

ROBIN SHROPSHIRE
18 NORTH BENTON
HELENA, MT 59601

DON ALLEN
WESTERN ENVIRONMENTAL
TRADE ASSOC.
2301 COLONIAL DR
HELENA, MT 59601

DON SKAAR
MT FISH, WILDLIFE & PARKS
1420 EAST SIXTH AVE
HELENA, MT 59620

MONTANA SHPO
1410 EIGHTH AVE
HELENA, MT 59620

ENVIRONMENTAL QUALITY
COUNCIL
ROOM 171 STATE CAPITOL
HELENA, MT 59620

GOVERNOR'S OFFICE
ROOM 204 STATE CAPITOL
HELENA, MT 59620

JEAN RILEY
MT DEPT OF TRANSPORTATION
PO BOX 201001
HELENA, MT 59620

MONTANA STATE LIBRARY
1515 E SIXTH AVE
HELENA, MT 59620

JOHN WILSON
MONTANA TROUT UNLIMITED
PO BOX 412
HELENA, MT 59624

JEFF BARBER
MEIC
PO BOX 1184
HELENA, MT 59624

ELLEN ENGSTEDT
MT WOOD PRODUCTS ASSOC.
PO BOX 1149
HELENA, MT 59624

STEPHANIE NELSON
GALLATIN CO. HEALTH OFFICER
311 W MAIN RM 108
BOZEMAN, MT 59715

REP ROGER KOOPMAN
811 S TRACY AVE
BOZEMAN, MT 59715

R KENT ORMS
816 W KOCH
BOZEMAN, MT 59715

REP LARRY JENT
1201 S THIRD
BOZEMAN, MT 59715

VERNE HOUSE
4740 SOURDOUGH RD
BOZEMAN, MT 59715

SEN ROBERT L HAWKS
703 W KOCH ST
BOZEMAN, MT 59715

REP CHRIS HARRIS
1511 W BABCOCK ST
BOZEMAN, MT 59715

RYAN HAMILTON
520 EAST CURTISS
BOZEMAN, MT 59715

BRIAN K GALLIK
GOETZ GALLIK & BALDWIN PC
35 NORTH GRAND
BOZEMAN, MT 59715

JODEE KAWASAKI
I.R.D. TEAM LEADER
RENNE LIBRARY, MSU
BOZEMAN 59717

JEFF DUNN
209 E LAMME
BOZEMAN, MT 59715

SHAWN COTE
PO BOX 1768
BOZEMAN, MT 59715

PAUL BUSSI
GALLATIN CO. PLANNING DEPT
311 W MAIN
BOZEMAN, MT 59715

MATTHEW BAUER
1627 W MAIN ST PMB 297
BOZEMAN, MT 59715

SEN JOE BALYEAT
6909 RISING EAGLE RD
BOZEMAN, MT 59715

SHANE HARVEY
424 E MAIN ST STE 203A
BOZEMAN, MT 59715

KAREN BUCKLIN SANCHEZ
424 N 5TH AVE
BOZEMAN, MT 59715

SEN MICHAEL WHEAT
930 STONEGATE DR
BOZEMAN, MT 59715

KATHLEEN WILLIAMS
28 GOLDEN TROUT WAY
BOZEMAN, MT 59715

MARIAH TALBOTT
519 S 15TH AVE #1
BOZEMAN, MT 59715

REP BRADY WISEMAN
2 HALEY RD
BOZEMAN, MT 59715

BILL SIMKINS
426 W CLEVELAND
BOZEMAN, MT 59715

REP SCOTT SALES
5200 BOSTWICK RD
BOZEMAN, MT 59715

ROBIN ROBINSON
429 E STORY
BOZEMAN, MT 59715

BOZEMAN CITY LIBRARY
220 E LAMME
BOZEMAN, MT 59715

SHAWN REGNERUS
AMERICAN WILDLANDS
40 E MAIN
BOZEMAN, MT 59715

GALLATIN CO. COMMISSIONERS
311 W MAIN, RM 306
BOZEMAN, MT 59715

PETER FORSCIA
PO BOX 161470
BIG SKY, MT 59716

MARION & HENRY HATHAWAY
PO BOX 161473
BIG SKY, MT 59716

MARNE HAYES
PO BOX 160100
BIG SKY, MT 59716

KATIE ALVIN
BLUE WATER TASK FORCE
PO BOX 160513
BIG SKY, MT 59716

THE YELLOWSTONE CLUB
PO BOX 161097
BIG SKY, MT 59716

MARILYN HILL
PO BOX 160277
BIG SKY, MT 59716

REP JACK WELLS
150 COULEE DR
BOZEMAN, MT 59718

REP JOHN SINRUD
284 FRONTIER DR
BOZEMAN, MT 59718

DEBBIE BARNETT
1045 REEVES RD E STE C
BOZEMAN, MT 59718

JOEL TOHTZ
1400 SOUTH 19TH AVE
BOZEMAN, MT 59718

REP BILL WARDEN
6507 LEVERICH LN
BOZEMAN, MT 59718

STEVE WHITE
3800 BLACKWOOD RD
BOZEMAN, MT 59718

ALLAN LIEN
ASSOC OF GALLATIN AGRIC IRRIGATORS
8507 HUFFINE LN
BOZEMAN, MT 59718

CLINTON & JUDY CAIN
2551 MAGENTA RD
BOZEMAN, MT 59718

KEVIN GERMAIN
PO BOX 161
ENNIS, MT 59729

MICHAEL MILMINE
PO BOX 119
GALLATIN GATEWAY, MT 59730

ERV & JAN HINTZPETER
PO BOX 560
GALLATIN GATEWAY, MT 59730

PATTI STEINMULLER
14665 SPANISH BREAKS TRAIL
GALLATIN GATEWAY, MT 59730

MICHELE OSLUND
PO BOX 179
GALLATIN GATEWAY, MT 59730

JOHN VINCENT
680 LOW BENCH RD
GALLATIN GATEWAY, MT 59730

SEN GARY PERRY
3325 W CEDAR MEADOW LN
MANHATTAN, MT 59741

PATRICK UNDERWOOD
108 MID WAY
MANHATTAN, MT 59741

JOAN RYSHAVY
2383 STAGECOACH TRAIL RD
MANHATTAN, MT 59741

RICK ARNOLD
PO BOX 52
BOZEMAN, MT 59771

GALLATIN NATIONAL FOREST
PO BOX 130
BOZEMAN, MT 59771

SCOTT BOSSE
GREATER YELLOWSTONE COALITION
PO BOX 1874
BOZEMAN, MT 59771

CAROL ENDICOTT
PO BOX 1133
BOZEMAN, MT 59771

BILL ROSSBACH
401 N WASHINGTON
MISSOULA, MT 59802

TERRY MCLAUGHLIN
PO BOX 4707
MISSOULA, MT 59806

MATT CLIFFORD
PO BOX 7593
MISSOULA, MT 59807

JOE RUSSELL
1035 FIRST AVE WEST
KALISPELL, MT 59901

STEPHEN R BROWN
GARLINGTON LOHN & ROBINSON PLLP
PO BOX 7909
MISSOULA, MT 59807

JOHN LOOMIS
2930 SILVERWOOD DRIVE
FORT COLLINS, CO 80525

JOHN PETROVSKY
JPA
4831 WILLOW CREEK ROAD
EAGLE, ID 83616

JOHN GARCIA
GARCIA AND ASSOCIATES
1 SAUNDERS AVE.
SAN ANSELMO, CA 94960

Chapter 6: References Cited in the FEIS

American Wildlands. 2001. A petition to the Montana Board of Environmental Review for the consideration of the Gallatin River as an outstanding resource water of the state of Montana. Ament, R. Bozeman, Montana.

Baldwin, D.O. 1997. Aquifer vulnerability assessment of the Big Sky area, Montana. Thesis, Department of Geological Engineering, Montana Tech of the University of Montana, Butte, MT.

_____. 1996. Hydrogeologic and hydrochemical investigation of the Big Sky area. Prepared for Montana Department of Environmental Quality, Helena, MT.

Big Sky County Water and Sewer District (WSD). 2006b. Website. Available online at: http://www.bigskywatersewer.com/. Accessed January 30, 2006.

Blue Water Task Force (BWTF) 2006. Blue Water Task Force baseline data, Big Sky, Montana, Available online: http://bluewatertaskforce.org/BaselineData.pdf. Accessed March 8, 2006.

Big Sky Properties. 2005. Real Estate. December 2005 to January 2006. Big Sky Properties, Big Sky, MT.

Bollman, W. 2005. A biological assessment of four sites in the Gallatin River watershed and comparisons to historical assessments. July 2005. Rhithron Associates, Inc. Missoula, Montana. Report prepared for the Blue Water Task Force and the Montana Water Center, Bozeman, MT.

_____. 2003. A bioassessment of sites in the Gallatin River watershed: Gallatin County, Montana. 2001-2003. Rhithron Associates, Inc. Missoula, Montana. Report prepared for The Montana Water Center, Bozeman, MT.

_____. 2002. A bioassessment of the Gallatin River watershed, based on benthic invertebrate assemblages. Rhithron Associates, Inc. Missoula, Montana. Report prepared for The Blue Water Task Force, Bozeman, MT.

_____. 1999. Macroinvertebrates and bioassessment of the Gallatin River and tributaries of the West Fork of the Gallatin River. Rhithron Associates. Missoula, Montana. Report prepared for Montana Department of Environmental Quality. Helena, MT.

Boyle, K., and L. Taylor. 2001. Does the measurement of property and structural characteristics affect estimated implicit prices for environmental amenities in a hedonic model? Journal of Real Estate Finance and Economics 22: 303-318.

Clean Water Act Information Center (CWAIC). 2006. Water quality information for the Gallatin River watershed (1002008). Water Quality Planning Bureau, Montana Department of Environmental Quality. Helena. Available online at: http://www.deq.state.mt.us/cwaic/default.aspx?yr=2006. Accessed November 5, 2006.

Crunkilton, R., and T. Johnson. 2000. Acute and chronic toxicity of nitrate to brook trout (*Salvelinus fontinalis).* University of Wisconsin groundwater research and monitoring projects. Stephens Point, WI.

Duffield, J., J. Loomis, and R. Brooks. 1987. The net economic value of fishing in Montana. Helena, Montana, Montana Department of Fish, Wildlife and Parks.

Kerans, B.L., R.I. Stevens, and J.C. Lemmon. 2005. Water temperature affects a host-parasite interaction: *Tubifex tubifex* and *Myxobolus cerbralis*. Journal of Aquatic Animal Health 17:216-221.

Kincheloe, J.W., G.A. Wedemeyer, and D.L. Koch, 1979. Tolerance of Developing Salmonid Eggs and Fry to Nitrate Exposure, Bulletin of Environmental Contamination and Toxicology, vol. 3, pgs. 575-578.

Montana Department of Commerce website. 2006. Census and Economic Information Center. http://ceic.mt.us/ Accessed early 2006.

Montana Department of Environmental Quality (DEQ). 2006a. 2006 Integrated 303(d)/305(b) water quality report for Montana. Draft. Appendix H. Category 5 Impaired Waters (303(d) List). Prepared by: Water Quality Planning Bureau, Montana Department of Environmental Quality. Helena. Available online at: http://www.deq.state.mt.us/cwaic/wq_reps.aspx?yr=2006qryId=6578 . Last accessed on November 5, 2006.

_____. 2006b. Circular DEQ-7: Montana numeric water quality standards. Montana Department of Environmental Quality Planning, Prevention, and Assistance Division - Water Quality Standards Section. Helena, MT.

_____. 2006c. 2006 Integrated 303(d)/305(b) water quality report for Montana. Draft. Appendix D. Beneficial use designation changes from 2004 to 2006. Prepared by: Water Quality Planning Bureau, Montana Department of Environmental Quality. Helena. Available online at: http://www.deq.state.mt.us/cwaic/wq_reps.aspx?yr=2006qryId=6578 . Last accessed on November 5, 2006.

_____. 2006d. 2006 Integrated 303(d)/305(b) water quality report for Montana. Draft. Sufficient credible data and beneficial use determination data matrix for the West Fork Gallatin River (MT41H005_040). Prepared by: Water Quality Planning Bureau, Montana Department of Environmental Quality. Helena. Available online at: http://www.deq.state.mt.us/cwaic/results.aspx?qryId=7996 . Last accessed on November 17, 2006.

_____. 2005. How to Perform a Nondegradation Analysis for Subsurface Wastewater Treatment Systems (SWTS), Montana Department of Environmental Quality, March 2005.

Morrison-Maierle, Inc. 2005. Memorandum on Rimrock Subdivision Aquifer Test Results, Montana Dept. of Env. Quality, Helena, MT.

_____. 1997. Memorandum on Ramshorn Subdivision - Well No. 2 Hydraulic Conductivity. Submitted to Montana Department of Environmental Quality, Helena, MT.

Mundinger, J. and T. Everts. 2004. A guide to the Montana Environmental Policy Act. Helena, MT, Environmental Quality Council.

Nicklin Earth & Water, Inc. 2000a. Average daily flow per unit, Memo to DEQ, April 18, 2000.

Nicklin Earth & Water, Inc. 2000b. Final model results in response to DEQ comments issued 7/13/00, Memorandum to Montana Department of Environmental Quality, July 17, 2000.

Ockert, S. 2006. (November 6, 2006). Montana Department of Commerce. Personal Communication. (Email). Comments and house price data for Big Sky report, tables, etc.

Polzin, P. 2005. Strong economic growth continues in Montana. Bureau of Business and Economic Research, University of Montana, Missoula, MT. Available online at: www.bber.umt.edu/econ/pdf/05MT.pdf Accessed on February 20, 2006

Rasker, R., and A. Hansen. 2000. Natural amenities and population growth in the greater Yellowstone region. Human Ecology Review 7(2): 30-40.

Regensburger, E. 2005. Nondeg surface waters. Email to Leanne Roulson. November 30, 2005.

Sonoran Institute. 2003a. Economic Profile System (EPS). Bozeman, MT Available online at http://www.sonoraninstitute.org/programs/socioeconomics/si_se_downloads.html. Accessed 2005.

_____. 2003b. Economic Profile System-Community (EPS-C). Bozeman, MT. Available online at http://www.sonoraninstitute.org/programs/socioeconomics/si_se_downloads.html. Accessed 2005.

Stuart, D.G., G. Roemhild, T.T.Williams, J.J.Jezeski, J.E. Schillinger, and J.C. Wright. 1976. Impacts of large scale recreational development on water quality in a semi-primitive environment. MSU-NSF Gallatin Canyon Study Research Monograph No. 20. Institute of Applied Research, Montana State University, Bozeman.

United States Bureau of Economic Analysis. 2003. Regional Economic Information System (BEA-REIS) http://www.bea.gov/bea/regional/docs/reis2004dvd.asp

United States Census Bureau. 2000. Profile of General Demographic Characteristics: 2000. Big Sky CDP. Big Sky, Montana, U.S. Census Bureau.

United States Department of Transportation, Federal Highways Administration, and Montanan Department of Transportation. (FHWA and MDT) 2005. Environmental Assessment: Gallatin Canyon slope flattening/widening. STPHS 50-1(14)8. Control Number A544. Helena, Montana.

United States Environmental Protection Agency (EPA). 2005. Upper Gallatin, Total maximum daily load planning area, Phase I TMDL Status Report. Contract No. 68-C-02-109, April 2005.

United States Geological Survey (USGS). 2006. Water quality samples for Montana, USGS 06043500 Gallatin River near Gallatin Gateway, MT. Available online at: http://nwis.waterdata.usgs.gov/mt/nwis/qwdata. Accessed February, 2006.

_____. 2005. Statistical Summaries of Streamflow in Montana and Adjacent Areas, Water Years 1900 through 2002, Scientific Investigations Report 2004-5266, Peter M. McCarthy.

United States Water Resources Council. 1983. Economic and environmental principles for water and related land resource implementation studies. U.S. Government Printing Office, Washington D.C.

Werner, P. 2006. Minerals Branch, Gallatin National Forest, Bozeman. Personal communication (telephone conversation), February 7, 2006.

Appendices

Appendix A: Written Comments Received by DEQ during the Public Comment Period

Due to file size,
Appendix A is available as a separate download

Appendix B: Background and Rationale used to Evaluate the Hydrogeology along the Gallatin River

Technical Memorandum

November 7, 2006

To: Leanne Roulson, Garcia and Associates
Fr: Tom Osborne & Shane Bofto, HydroSolutions Inc.
Re: Rationale and Explanation for Final Aquifer Vulnerability Footprint Map, Gallatin Outstanding Resource Water Final EIS

A draft Technical Memorandum on this topic was distributed January 18, 2006 for review and comment by the GANDA Gallatin River Outstanding Resource Water (ORW) EIS project team and the Montana Department of Environmental Quality (DEQ). Comments were received January 26, 2006 from Eric Regensberger of the DEQ. A final Technical Memorandum, which was included in the Draft EIS, was issued June 14, 2006. It provided documentation of the procedures used to evaluate the Gallatin River Aquifer Vulnerability Footprint Map for the Draft EIS, and incorporates the edits and suggestions received. This revised final Technical Memorandum includes minor additions or edits in response to comments on the Draft EIS and internal review. The Footprint Map delineation was not changed from the Draft EIS.

HydroSolutions performed an aquifer vulnerability assessment and prepared a vulnerability "footprint" map in support of the Draft Gallatin River ORW EIS. The descriptor, "footprint", was utilized because, the shallow groundwater system has a direct hydraulic connection to the Gallatin River within this map outline, and because DEQ would likely apply non-degradation of water quality analysis to subdivision development within this area. In addition, other activities subject to water quality permitting and non-degradation rules could also be reviewed by DEQ.

This Technical Memo is a summary of the background and rationale used to evaluate the hydrogeology along the Gallatin River and identify areas where the shallow aquifers are in direct hydraulic communication with the Gallatin River or principal tributaries within the study area, and therefore are likely to transmit contaminants to the river. The principal goal of this study is to apply standard hydrogeologic methods and utilize existing information to produce scientifically defensible analyses and interpretations suitable for the policy and management objectives of the DEQ.

Groundwater vulnerability to contamination was defined by the National Research Council (Focazio, et al., 2000) as "the tendency or likelihood for contaminants to reach a specified position in the groundwater system after introduction at some location above the uppermost aquifer." In the context of the Gallatin River ORW assessment, the "specified position in the groundwater system" of most interest is anywhere that groundwater will likely discharge to the river; that is, where groundwater is in direct hydrologic connection with the river. We performed a type of vulnerability study which is termed an "aquifer-sensitivity" or "intrinsic-susceptibility" assessment. This is a measure of the relative ease with which water enters and moves through an

aquifer; it is a characteristic of the aquifer and overlying material and hydrologic conditions, and is independent of the chemical characteristics of the contaminant and its sources (Focazio, et al., 2000).

This study began with the review of hydrologic and geologic publications, literature, and data which specifically targeted the Gallatin River watershed, and provided examples of analogous vulnerability assessments conducted elsewhere, or were appropriate references for this work. Based on this review, the methodology developed for the vulnerability assessment is a hybrid of a "subjective rating method" and a "process-based method". Subjective methods produce categories of vulnerability (usually high, medium and low) that are targeted for use by agencies to achieve policy or management objectives. Process methods apply scientific methods or models to calculate the distribution of vulnerability based on movement of water and solutes. This method often requires further interpretation prior to use by agencies and others.

This vulnerability assessment stems from a previous study by David O. Baldwin, whose 1997 Masters degree thesis, was "Aquifer Vulnerability Assessment of the Big Sky Area, Montana". Baldwin produced this study for his Masters of Science degree in the Department of Geological Engineering at Montana Tech of the University of Montana. This study was an assessment of the intrinsic vulnerability of local aquifers at Big Sky, Montana. A Geographical Information System (GIS) was used as a platform to analyze the data and publish vulnerability maps. Baldwin's work was, in part, funded by the Montana DEQ. Baldwin authored a second report for DEQ, entitled, "Hydrogeologic and Hydrochemical Investigation of the Big Sky Area" (1996). This report is a baseline hydrogeologic and water quality evaluation of aquifers in the Big Sky area.

The Baldwin studies included only the watershed of the West Fork of the Gallatin River. However, most of the rock units and aquifers assessed in that study are also found throughout the study area for the Gallatin River ORW EIS. Subsequent to the Baldwin studies, a geologic map of the Ennis 30º x 60º Quadrangle was completed by the U.S. Geological Survey (Kellog and Williams, 2000). This assessment used the USGS rock classification system and made appropriate translations from Baldwin's rock categories where variations occurred, based on geologic age, lithology and map positions. The assignments of aquifer vulnerability classes and correlation with Baldwin's study are summarized in Table 1. Where geologic units were not specifically categorized by Baldwin, the vulnerability rating was assigned on the basis of estimated aquifer characteristics inferred from lithology, field inspection and experience.

The vulnerability criteria in the Baldwin studies (Baldwin, 1996; 1997) were:

- Aquifer characteristics
- Soil media
- Depth to groundwater, and
- Geologic units comprising the vadose zone.

Baldwin assigned vulnerability rankings to geologic units based on estimates of saturated hydraulic conductivity (K). HydroSolutions used values of hydraulic conductivity and hydraulic

gradient from Baldwin and from engineering studies conducted for subdivisions in the Big Sky area (Morrison-Maierle, 1997; 2005), along with effective porosity information from published sources to estimate groundwater velocities. Aquifers with rapid groundwater velocities result in a more direct hydraulic connection with the Gallatin River, and the zone of direct connection extends a greater distance from the river. The best estimate of the average linear velocity of groundwater in each type of aquifer was determined, and the corresponding distance of groundwater travel in one year (1-Year Time of Travel, or 1-Year TOT) was determined as indicated in Table 2. The 1-Year Time of Travel distance from the edge of the Gallatin River for each aquifer type was used as one of the setback criteria in the vulnerability footprint map. The 1-year TOT is selected as criteria because of the following:

- It is a well established basis for aquifer vulnerability assessments (Focazio, et al, 2000)
- It is already used by other DEQ programs such as Wellhead Protection
- A TOT less than one year provides little opportunity for dilution and attenuation of contaminants
- TOT may be estimated with limited hydrogeologic data, and
- TOT may be verified by hydrogeologic testing which is often already performed in the planning stages of subdivisions and other significant land developments.

The distribution of the geologic units along the Gallatin River EIS study area into aquifer vulnerability categories (high, moderate and low) based on this evaluation is provided in Table 3. Highly-vulnerable aquifers have a relative high inherent potential for contaminants to be transported to the Gallatin River, while low-vulnerability aquifers have relatively low inherent contaminant-transport potential, based on the best estimates of groundwater velocities from available information.

The vulnerability footprint map was produced by applying the criteria and classifications shown in Tables 1, 2 and 3 with other criteria from studies by Baldwin (1997) and Woessner, et al. (1996), including depth to groundwater, mapped septic system plume length, and whether the aquifer is confined or unconfined. The resulting footprint map guidelines and setback distances established for each category of aquifer vulnerability are summarized in Table 4.

The procedure for mapping the extent of the aquifer vulnerability footprint is as follows:

- The one-year TOT setback as shown in Table 4 was applied to each geologic unit that is in contact with the river, where that unit was likely to be unconfined by other low permeability rock units.

- The West Fork and its tributaries were mapped in general conformance to the criteria applied by Baldwin (1997); other tributaries were mapped from their confluence with the Gallatin River main stem to the most upstream extent of high vulnerability units in direct contact with the mapped blue line depicting that tributary.

- The setback distances in the first row of Table 4 were applied from the outermost banks of the Gallatin River or tributaries, as determined on 1:24,000 scale base maps.

- Setback distances were modified where: a) topographic contour lines indicated the land surface was 40 feet or greater above river elevation (indicating that the depth to groundwater at that point was probably 25 feet or greater), except that the minimum setback distance is 300 feet; and, b) alluvium (Qal) and terrace gravel deposits (Qg) mapped in apparent contact with alluvial deposits, were included within the footprint area even if greater than 40-feet above river level.

- A minimum setback was applied to the Madison Group everywhere, regardless of elevation, due to potential for karst conditions and known springs that discharge to the Gallatin River. This distance was not less than the shorter of, a) ½-mile, b) the ridge top of Madison Group closest to the river, or c) a change to another geologic unit.

The "40 foot elevation above river level modification" was derived from Baldwin's "high" vulnerability criteria of 25 feet or less to the water table. Using the water table gradient maps in Baldwin (1997), it was estimated that when the land surface elevation is 40 feet or greater above the river, the depth to the water table is likely to be at least 25 feet. The existing U.S. Geological Survey topographic maps use 40-foot topographic contour intervals, thus allowing for reasonably-accurate interpolations of the 40-foot elevation criteria in creating the vulnerability footprint map.

The minimum of a 300-foot setback from the river was obtained from studies of septic system plumes conducted by University of Montana hydrogeology Professor William Woessner, and his students (Woessner, et al., 1996). These studies were conducted in shallow groundwater settings near Missoula, which may not differ greatly from the Gallatin River valley. Their studies indicated that contaminants from residential septic systems could be measured in the aquifer at distances over 200 feet from the source. A Masters of Science degree report by Boer (2002), also of The University of Montana Department of Geology, evaluated sources of nitrate contamination to shallow groundwater near Lolo, Montana. He found concentrations of nitrate down-gradient of un-sewered subdivisions were commonly above 2.5 mg/l and reached 4.6 mg/l. He reported that nitrate-contaminated groundwater discharged directly to the Bitterroot River, and that this could potentially exceed the 0.010 mg/l trigger for non-degradation review.

The full extent of continuously mapped alluvium (Qal) and terrace gravel (Qg) deposits along river valleys were included in the footprint area even if greater than 40-feet above river level, since geologic data contained in available studies (Morrison Maierle, 1997, 2005), and well logs (GWIC, 2006) indicated that these deposits are typically very coarse-grained and have a direct potential connection to streams. Thus even though the alluvium and gravel terraces may be greater than 40-feet above river level, and may not be initially saturated with groundwater, discharge from on-site wastewater systems in these units would likely create a locally saturated zone or groundwater mound which would have a direct hydraulic connection to surface waters. For the purposes of the Draft EIS, including these areas prevented possible underestimation of

the extent of land area found to be in hydraulic communication with the Gallatin River or its tributaries in later site-specific evaluations.

The Madison Group aquifer is karstic, meaning it has large solution cavities and interconnected openings. Studies by Montana State University student, John Schaffer, under the direction of Earth Science Professor, Steven Custer, demonstrated that the Madison aquifer discharges about 70 cubic feet per second (cfs) of groundwater year-round to the Gallatin River near Big Sky. This discharge occurs in a series of springs which are visible both above and below the confluence with the West Fork. Snowflake Springs, just north of the Yellowstone National Park boundary, also visibly discharges a large quantity of groundwater directly to the Gallatin River. Groundwater can travel long distances in short times in karst aquifers, with little attenuation of contaminants. The setback distance was based on the shorter of the 1-Year TOT (1/2-mile), the distance to the closest ridge top from the Gallatin River, or a change to another geologic unit.

HydroSolutions applied the above methodology by computer-aided mapping in an ArcGIS environment. A GIS specialist magnified successive portions of the study area, and drew the outline of the vulnerability footprint area according to the above criteria. The outline was checked by an experienced hydrogeologist.

All contamination rating systems of this kind have limitations. Limitations of this method, include, but are not limited to the following:

- The vulnerability footprint map is based on existing information. Field studies were not conducted specifically for this evaluation.

- Hydrogeologic data from Baldwin (1997) are limited and may not represent the full range of parameters found in the geologic units along the main stem of the Gallatin River.

- Hydrogeologic characteristics vary substantially even within specific geologic units and the calculated setback distances vary with the parameters used in the calculations. The available hydrogeologic information was not sufficient to perform sensitivity analysis.

- The scales of the geologic maps and topographic maps limit the accuracy of the line used to define the vulnerability footprint area.

- It was assumed that the Gallatin River and its tributaries are a "gaining" stream system, that is, groundwater discharges to the river; in places it is possible that the river discharges to the groundwater system, although evidence of this was not found.

- Attenuation of contaminants is not specifically considered in developing the footprint map, since contaminants vary markedly with respect to attenuation mechanisms. The footprint map is consistent with advective groundwater transport of conservative contaminants.

References:

Baldwin, D.O., 1997. Aquifer Vulnerability Assessment of the Big Sky Area, Montana. Thesis, Department of Geological Engineering, Montana Tech of the University of Montana, Butte, MT.

Baldwin, D.O., 1996. Hydrogeologic and Hydrochemical Investigation of the Big Sky Area; prepared for Montana Dept. of Env. Quality, Helena, MT. 53 pgs + Appendices.

Boer, B., 2002. Septic-Derived Nutrient Loading to the Groundwater and Surface Water in Lolo, Montana. Report submitted in partial fulfillmaent of the requirements for the degree of Master of Science, The University of Montana, Department of Geology, Missoula, Montana; 182 pgs.

Kellog, K.S., and V.S. Williams, 2000. Geologic Map of the Ennis 30' x 60' Quadrangle, Madison and Gallatin Counties, Montana, and Park County, Wyoming. USGS Geologic Investigation Series -2690.

O'Neil, J.M. and R.L. Christiansen, 2002. Geologic Map of the Hebgen Lake 30' x 60' Quadrangle, Beaverhead, Madison, and Gallatin Counties, Montana, Park and Teton Counties, Wyoing, and Clark and Fremont Counties, Idaho. MBMG 464, Butte, MT.

Ground Water Information Center, 2006. On-line database of water well data in Montana. http://mbmggwic.mtech.edu/

Focazio, M.J., T.E. Reilly, M.G. Rupert, and D.R. Helsel, 200_, Assessing Ground-Water Vulnerability to Contamination: Providing Scientifically Defensible Information for Decision Makers. 33 pgs.

Morrison-Maierle, Inc. 1997. Memorandum on Ramshorn Subdivision- Well No. 2 Hydraulic Conductivity, submitted to Montana Dept. of Env. Quality, Helena, MT.

Morrison-Maierle, Inc. 2005. Memorandum on Rimrock Subdivision Aquifer Test Results, Montana Dept. of Env. Quality, Helena, MT.

Schaffer, M.A., Field Validation of the Hydrologic Model Used to Delineate the Yellowstone National Park Controlled Groundwater Area near Big Sky Montana, Senior Thesis, Montana State University, Department of Earth Science, 38 pgs.

Woessner, W.W., J. King, S. Lambert, T. Michalek, and N Hinman, 1996. Phase II Cumulative Effects of Domestic Sewage Disposal on Groundwater of Missoula Count: An Analysis of Carrying Capacity. The University of Montana, Department of Geology, Missoula, Montana.

Table 1. Geologic Unit Classifications.

Geologic Symbol	Description of Geologic Units in Footprint	Vulnerability Class #	Baldwin's Class	Relative Groundwater Velocity
Qal	Alluvium	3	3	High
Ql	Landslide deposits	1	1	Low
Qcl	Colluvium and loess	2	NA	Moderate
Qg	Terrace-gravel deposits	3	NA	High
Qti	Till	1	1	Low
Ku	Everts Fm., Virgelle Sandstone, Telegraph Creek Fm., Cody Shale, Frontier Fm., and Mowry Shale	2	2	Moderate
Kmo	Mowry Shale	2	2	Moderate
Kmt	Muddy Sandstone and Thermopolis Shale	3	3	High
Kk	Kootenai Fm.	3	3	High
Jm	Morrison Fm.	2	2	Moderate
JTru	Morrison Fm., Ellis Group, and Woodside Siltstone and Dinwoody Fm.	2	2	Moderate
Ps	Shedhorn Sandstone	3	3	High
Pmqa	Quadrand Sandstone, Amsden Group, and Snowcrest Range Group	3	3	High
Mm	Madison Group	3	3	High
MDtj	Three Forks Fm., and Jefferson Fm.	2	2	Moderate
Cmi	Park Shale, Meagher Limestone, Wolsey Fm., and Flathead Sandstone	2	NA	Moderate
Agp	Granite porphyry of Hell Roaring Creek	1	NA	Low
Agg	Granitic orthogneiss	1	NA	Low
Aqf	Quartzofeldspathic gneiss	1	NA	Low
Aam	Hornblende-plagioclase gneiss and amphibolite	1	NA	Low
Abs	Biotite shist	1	NA	Low
Abh	Biotite-hornblende gneiss of Beartrap Canyon	1	NA	Low

Geologic unit symbols and description from Kellog and Williams (2000).
Aquifer Vulnerability Ranking: 3 – Highest, 2 – Moderate, 1 – Lowest vulnerability (Baldwin, 1997).
NA – Classification by Baldwin (1997) not available; classified based on lithology, field inspection and experience.
Relative groundwater velocity based on calculations in Table 2.

Table 2. Groundwater Velocity And One-Year Time Of Travel Distance Calculations.

				Information Sources
High Velocity Unconsolidated Units				
Hydraulic Conductivity	K	1115	ft/d	Pumping Test of Ramshorn Subdivision #T-2 Well (Morrison-Maierle, 1997)
Gradient	i	0.0125	ft/ft	Determination of Significance for Ramshorn Subdivision (MDEQ, 1998)
Effective Porosity	n	0.25		Coarse-Medium Gravel (Walton, 1996)
Average Linear Groundwater Velocity	V	55.75	ft/d	
1 Year Travel Distance		20349	ft	
High Velocity Sedimentary Units				
Hydraulic Conductivity	K	1136	ft/d	Pumping Test of Well RR#4, Rimrock Subdivision (Morrison-Maierle, 2005)
Gradient	i	0.00125	ft/ft	Rimrock Subdivision Aquifer Test Results (Morrison-Maierle, 2005)
Effective Porosity	n	0.2		Fracture storage plus matrix storage (Freeze and Cherry, 1979)
Average Linear Groundwater Velocity	V	7.10	ft/d	
1 Year Travel Distance		2592	ft	
Moderate Velocity Sedimentary Units				
Hydraulic Conductivity	K	3.16	ft/d	Geomean of K for "Moderate" conductivity units (Baldwin, 1997)
Gradient	i	0.086	ft/ft	Fractured rock gradient (Baldwin, 1997)
Effective Porosity	n	0.05		Fractured shale (Freeze and Cherry, 1979)
Average Linear Groundwater Velocity	V	5.44	ft/d	
1 Year Travel Distance		1985	ft	
Low Velocity Units				
Hydraulic Conductivity	K	1	ft/d	Average K for "Low" conductivity unit (Baldwin, 1997)
Gradient	i	0.086	ft/ft	Fractured rock gradient (Baldwin, 1997)
Effective Porosity	n	0.025		Mid-range of fractured crystalline rocks (Freeze and Cherry, 1979)
Average Linear Groundwater Velocity	V	3.44	ft/d	
1 Year Travel Distance		1256	ft	

Average Linear Groundwater Velocity (V) = (Ki)/n.

Table 3. Aquifer Vulnerability Assessment And Footprint Map Guidelines For Gallatin River Outstanding Resource Water Draft EIS.

Highly Vulnerable Unconsolidated Units (high groundwater velocity)	**Highly Vulnerable Bedrock Units** (high groundwater velocity)	**Moderately Vulnerable Geologic Units** (moderate groundwater velocity)	**Low Vulnerability Geologic Units** (low groundwater velocity)
Rank: 3 [a]	**Rank: 3**	**Rank: 2**	**Rank: 1**
Qal- Alluvium [b]	Kmt- Muddy Sandstone and Thermopolis Shale	Qcl- Colluvium and loess	Ql- Landslide deposits
Qg- Terrace-gravel deposits	Kk- Kootenai Fm.	Ku- Everts Fm., Virgelle Sandstone, Telegraph Creek Fm., Cody Shale, Frontier Fm., and Mowry Shale	Qti- Till
	Ps- Shedhorn Sandstone	Kmo- Mowry Shale	Agp- Granite porphyry of Hell Roaring Creek
	Pmqa- Quadrand Sandstone, Amsden Group, and Snowcrest Range Group	Jm- Morrison Fm.	Agg- Granitic orthogneiss
	Mm- Madison Group	Jtru- Morrison Fm., Ellis Group, and Woodside Siltstone and Dinwoody Fm.	Aqf- Quartzofeldspathic gneiss
		MDtj- Three Forks Fm., and Jefferson Fm.	Aam- Hornblende-plagioclase gneiss and amphibolite
		Cmi- Park Shale, Meagher Limestone, Wolsey Fm., and Flathead Sandstone	Abs- Biotite shist
			Abh- Biotite-hornblende gneiss of Beartrap Canyon

[a] Ranking of relative aquifer vulnerability (3 = highest vulnerability) adapted from Baldwin (1997) with interpretations for additional units based on estimated aquifer properties.
[b] Geologic unit names and abbreviations taken from 1:100000 scale geologic map (Kellog & Williams, 2000).

Table 4. Setback Criteria For Potential Contaminant Sources From Main Stem Of Gallatin River And Perennial Tributaries By Characteristics Of The Uppermost Aquifer

Highly Vulnerable Coarse-Grained Units (high groundwater velocity)	**Highly Vulnerable Geologic Units** (high groundwater velocity)	**Moderately Vulnerable Geologic Units** (moderate groundwater velocity)	**Low Vulnerability Geologic Units** (lower groundwater velocity)
Rank: 3	**Rank: 3**	**Rank: 2**	**Rank: 1**
Full extent of continuous deposit in contact with Gallatin River or tributaries (1-Year TOT is greater than 1 mile) [a].	A setback of ½-mile (2640 feet) [a] where the aquifer is unconfined, or	A setback of 2000 feet [a] where the aquifer is unconfined, or	A setback of ¼-mile (1320 feet) [a] where the aquifer is unconfined, or
	A setback from the Gallatin River or tributaries where land surface is 40 [b] feet or greater above average river elevation in the shortest linear direction.	A setback from the Gallatin River or tributaries where land surface is 40 [b] feet or greater above average river elevation in the shortest linear direction.	A setback from the Gallatin River or tributaries where land surface is 40 [b] feet or greater above average river elevation in the shortest linear direction.
	except, that the minimum setback shall not be less than 300 feet;	except, that the minimum setback shall not be less than 300 feet;	except, that the minimum setback shall not be less than 300 feet;
	except, if bedrock aquifer is shown to be confined, the minimum setback of 300 feet [c] applies.	except, if bedrock aquifer is shown to be confined, the minimum setback of 300 feet [c] applies.	except, if bedrock aquifer is shown to be confined, the minimum setback of 300 feet [c] applies.
	except, the minimum setback for Madison Group (Mm) shall not be less than the shorter of ½-mile, the Madison ridge top closest to the river, or a change in geologic unit.		

[a] Setback distance based on One-Year Time of Travel distance calculated from best available data.
[b] 40-foot elevation difference results in estimated 25-feet or more above the water table; criteria from Baldwin (1997).
[c] 300-foot setback distance interpreted from septic system plume studies by Woessner, et al. (1996).