

MEMORANDUM OF AGREEMENT AMONG THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT'S WATER QUALITY CONTROL DIVISION, THE U.S. FISH AND WILDLIFE SERVICE'S COLORADO FIELD OFFICE AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 8'S ECOSYSTEMS PROTECTION AND WATER PROGRAMS REGARDING ENHANCED COORDINATION IN IMPLEMENTING COLORADO'S MIXING ZONE RULE/IMPLEMENTATION GUIDANCE AND THE SERVICE'S AUGUST 11, 2003 BIOLOGICAL OPINION ON THIS MATTER

I. Purpose

This Agreement is designed to facilitate coordination among the Colorado Department of Public Health and Environment's Water Quality Control Division (the Division); the U.S. Fish and Wildlife Service's Colorado Field Office (the Service); and the U.S. Environmental Protection Agency (EPA) Region 8's Ecosystems Protection and Water Programs (the Region) with respect to implementation of Colorado's Mixing Zone Rule (Section 31.10 of 5CCR 1002-31). Provisions in this Agreement are consistent with the Division's "Colorado Mixing Zone Implementation Guidance," the Region's September 16, 2002 biological evaluation, the Service's August 11, 2003 biological opinion (the biological opinion), and the January 2001 national memorandum of agreement (MOA) (66 FR 11202, February 22, 2001) among EPA, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services). Among other things, the Agreement will: (1) clarify the process by which the parties exchange the information needed in the preparation of National Pollutant Discharge Elimination (NPDES) permits that will appropriately implement the mixing zone rule and provisions of the biological opinion; (2) set out the process by which the Service would indicate its concurrence with draft and final NPDES permits; and (3) specify the manner in which disputes are to be resolved.

II. Authority

Section 7 of the Endangered Species Act (ESA) as amended (16 U.S.C. 1531 et seq.) imposes substantive and procedural obligations on federal agencies. Section 7 of the ESA requires that federal agencies, in consultation with and with the assistance of the Services, (1) utilize their authority to further the purpose of the ESA by carrying out programs for the conservation of listed threatened and endangered species; and (2) ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat that has been designated as critical for the species.

EPA's authorities under the water quality standards and NPDES permitting programs are contained in Sections 303(c), 304(a) and 402 of the Clean Water Act (CWA). Under Section 303(c), the development of water quality standards is primarily the responsibility of States and authorized Tribes. EPA, however, maintains an oversight role, and any revisions or new standards must be submitted to EPA for review and approval (or disapproval). EPA's approval of State or Tribal water quality standards is a federal action which may be subject to Section 7 consultation under the ESA. The Region's approval of Colorado's Mixing Zone Rule was

subject to ESA Section 7 consultation, and the Service's August 11, 2003 biological opinion concluded that consultation.

The CWA authorizes States or authorized Tribes to administer the NPDES program provided the program meets conditions specified in Section 402(b) of the Act and EPA regulations. Colorado has satisfied those conditions and has been delegated the NPDES program. When EPA approves State or Tribal authority to administer an NPDES program, EPA maintains oversight responsibility, including the authority to review, comment on and, where a permit is "outside the guidelines and requirements" of the CWA, object to State or Tribal draft permits. If EPA objects to a State or Tribal permit and the State or Tribe fails to revise the permit to satisfy EPA's objection, the authority to issue the permit is transferred to EPA.

III. Guiding Principles

The primary principle underlying this Agreement is a cooperative partnership among the parties aimed at implementing Colorado's Mixing Zone Rule in a manner that is consistent with the biological opinion and the goals of the ESA while facilitating the timely issuance of discharge permits. The Division's mixing zone implementation guidance, the Region's biological evaluation and the Service's biological opinion on this matter all commit to a process that will:

- focus attention on those proposed permitting actions that involve waters with occurrences of listed aquatic species¹ or designated critical habitat ("waters of concern");
- for these waters, allow the Service and EPA, where warranted, sufficient time to review proposed actions and identify those that are likely to have more than discountable, insignificant or beneficial effects on threatened or endangered aquatic species or designated critical habitat; and
- allow sufficient time for resolution of any issues identified by the Service before the draft permits are public-noticed for comment²

Implementation of this process, in almost every case, should eliminate or minimize the potential for more than minor detrimental effects, including possible incidental take, to candidate, proposed, or listed threatened or endangered aquatic species or designated critical habitat. In the rare situations where more than minor detrimental effects are unavoidable, the process provides for an approach that will minimize that effect. Application of the overall process, therefore, will support compliance with the parties' goal to implement Colorado's mixing zone rule in a manner consistent with the ESA.

¹ For purposes of this Agreement, listed aquatic species are those that are federally listed as threatened or endangered and aquatic species that are candidates or proposed for federal listing as threatened or endangered.

² Such resolution will normally involve the Division and the permittee/applicant except, in more complex situations involving conservation plans or multiple discharges, the Service and the Region also will be involved.

IV. Provisions and Understandings

Options to ensure mixing zone limits will avoid or, at a minimum, allow no more than a minor detrimental effect

The options presented below are derived from the Division's mixing zone implementation guidance, and are consistent with the Region's biological evaluation and the Service's biological opinion. The mixing zone implementation guidance identifies and supports a number of mixing zone implementation options that will avoid adverse effects to listed aquatic species or, at a minimum, will limit the potential for detrimental effects so as to be no more than minor. The options may be utilized individually, or in combination, depending upon the specific factual situation associated with the permit. The three principal options would effectively eliminate the mixing zone, and therefore, selection of one, or a combination of these options would require no separate demonstration, showing that listed aquatic species would be protected. These options are:

- Permit limits may be based on mixing that will result from the installation of a diffuser covering part of the low-flow channel, while allowing for an appropriate zone of passage.
- Permit limits may be based on relocation of the discharge to a waterbody or waterbody segment where there is neither occurrence of listed aquatic species nor designated critical habitat.
- Permit limits may be based on denial of a regulatory mixing zone with the requirement that water quality standards will be met at the point of discharge.

Alternatively, a permittee/applicant may elect to attempt to demonstrate that allowing a mixing zone, within a waterbody with either occurrence of listed aquatic species or designated critical habitat would be protective of those listed aquatic species. This option will require a separate demonstration, showing that adverse effects would be avoided or limited to no more than minor detrimental effects. This option is:

- Permit limits may be based on passive mixing. Passive mixing may involve use of all available dilution, if the permittee/applicant can demonstrate to the satisfaction of the parties that such mixing will be protective of listed aquatic species. One option here would be relocation of the discharge to a less sensitive portion of the receiving water (e.g., away from nursery areas of listed aquatic species).

Where a permittee/applicant believes none of these options is technologically or economically feasible, the permittee/applicant may prepare an analysis of infeasibility for consideration by the Division. A new, expanded, or renewed permit application for a discharge to a "water of concern" will require that these mixing zone implementation options be considered and the most appropriate one or combination thereof be employed in drafting the limits.

Information exchange and concurrence

(1) New or expanded permits.

The Division's Permits Section Manager will notify the Service's Colorado Field Supervisor at 6-month intervals (beginning 30 days after the signing of this Agreement and continuing each January and July) of upcoming new permit applications for discharges within waters of concern. Early in the permit drafting process, the Division will provide the permittee/applicant with a list of options which, for municipalities, would be incorporated into the preliminary effluent limits (PELs). These options would, in the Division's judgment, appropriately implement the Division's mixing zone guidance and the provisions of the biological opinion (i.e., the Division will apply the mixing zone options that would avoid effect or, at a minimum, would limit the potential for effect to no more than a minor detrimental one). The Division will share the draft permit and options/PELs with the Service, allowing adequate time (30 days) for review. The draft permit and options/PELs shall be accompanied by a cover letter (Attachment 1) that specifies the option selection. Where the Service agrees that the action will pose less than minor detrimental effects to listed aquatic species, the Service will informally (e.g., email message) notify the Division (within 30 days) that the options/PELs, as drafted, would appropriately implement the biological opinion and, if the final permit were issued as drafted, the Service would concur with the final permit. Where the final permit is issued as proposed, the Service will send the Division a concurrence letter (Attachment 2) documenting successful completion of the process set out in the biological opinion.

Where the Service disagrees with the draft options/PELs, the Service will (within 30 days) formally notify the Division (by letter) of its concern(s) and identify changes that, in the Service's view, would be needed to comply with the biological opinion. The Service and the Region will work with the Division to resolve the concern(s) identified by the Service. Once the Service's concern(s) is resolved, the Service will informally concur on the revised draft and concur on the final permit as described above. If for some reason resolution cannot be reached, the parties will follow the *Coordination Procedures Regarding Issuance of State or Tribal Permits* as set out in the January 2001 national MOA between the Services and EPA (the nine steps for avoiding and resolving disputes).

(2) Renewed Permits.

The Division's Permits Section Manager will notify the Service's Colorado Field Supervisor at 6-month intervals (beginning 30 days after the signing of this Agreement and continuing each January and July) of upcoming permit renewal applications for discharges within waters of concern. Early in the permit drafting process, the Division will notify the permittee/applicant of any changes that, in the Division's judgment, would be needed to implement the revised mixing zone rule, the Division's implementation guidance, and the biological opinion (i.e., the Division will apply one of the mixing zone options that would avoid effect or, at a minimum, would limit the potential for effect to no more than a minor detrimental one). Following the process outlined above for new or expanded permits, the Division will share

the draft permit with the Service, allowing adequate time for review. The draft permit shall be accompanied by a cover letter (Attachment 1) that specifies the option selected. Where the Service agrees that the action will pose less than minor detrimental effects to listed aquatic species, the Service will informally (e.g., email message) notify the Division that the draft permit would appropriately implement the biological opinion and, if the final permit were issued as drafted, the Service would concur with the final permit. Where the final permit is issued as proposed, the Service will send the Division a concurrence letter (Attachment 2) documenting successful completion of the process set out in the biological opinion.

Where the Service disagrees with the draft permit, the Service will formally notify the Division (by letter), identifying its concern(s). The Service and the Region will work with the Division to resolve the concern(s) identified by the Service. Once the Service's concern(s) is resolved, the Service will informally concur on the revised draft permit and will concur on the final permit as described above. If for some reason resolution cannot be reached, the parties will follow the *Coordination Procedures Regarding Issuance of State or Tribal Permits* as set out in the January 2001 national MOA between the Services and EPA (the nine steps for avoiding and resolving disputes).

(3) Unavoidable Effects.

Although implementation of the process set out in the biological opinion should eliminate or minimize the potential for more than minor detrimental effects to listed species, there may be a few situations where there are no feasible alternatives available that would entirely avoid adverse impacts to listed species. Where, through the information sharing process set out above, an impact identified by the Service is found to be unavoidable,³ the permittee/applicant will submit for review and implement a conservation plan⁴ that specifies reasonable and prudent measures (RPMs) to minimize such impact, and sets forth terms and conditions that must be complied with to implement these measures. In such cases, the Service, as specified in the August 11, 2003 biological opinion, will issue a supplemental biological opinion, acknowledging the implementation of the conservation plan, and authorizing take for that permit. In situations where this option is utilized, the supplemental biological opinion will serve as the Service's final document for approval of that particular action.

³ For example, a permittee/applicant has been able to successfully demonstrate that, in this specific case, none of the mixing zone implementation options that would avoid more than minor detrimental adverse effects is technologically or economically feasible.

⁴ In this context, a conservation plan is simply a plan to implement conservation measures aimed at protection of the species. Here, a conservation plan need not, nor is it intended to, result in a formal Habitat Conservation Plan.

(4) Final Concurrence Document.

As noted above, when the Division issues a final permit, within 30 days the Service will send the Division a concurrence letter (Attachment 2) documenting successful completion of the process set out in the biological opinion. This concurrence letter would note that the permit complies with the conservation measures in the biological opinion, and as such, the mixing zone provisions authorized in the permit would be unlikely to have more than a minor detrimental effect on listed aquatic species and implementation of the conservation measure(s) would appropriately minimize the potential for incidental take. The Service may expand on the general concurrence statement to explain that:

- As a general matter, the new mixing zone rule being implemented in the permit is a considerable improvement over the previous rule and includes specific authorization to limit or deny mixing zones, as needed, to protect listed aquatic species. Therefore, implementation of the rule should be beneficial to listed species, where the conservation measures are fully implemented, in that the existing condition of the waterbody will be improved.
- The comments in the concurrence letter: (1) are limited to the mixing zone element of Colorado's water quality standards, consistent with the scope of the biological opinion; (2) should not be interpreted as a comment on the protectiveness of the State's numeric water quality standards; and (3) the protectiveness of the numeric standards is a separate matter, beyond the scope of the current action.⁵
- While there may be uncertainty about the protectiveness of certain numeric standards, there are safeguards in place that mitigate the uncertainty to some extent and allow for decision-making while the national consultation is underway. Those safeguards include the knowledge that: (1) permits are written to require compliance at critical conditions⁶ resulting in instream concentrations of pollutants that are commonly at levels lower than would be allowed by the standards; (2) criteria derivation focuses on protection of a range of sensitive taxa and functional groups; and (3) sensitive life stages may not occur coincident with the critical conditions on which permits are written (e.g., sensitive stages of the listed Colorado River fishes would not be expected to occur at critical permitting conditions).

⁵ That question of protectiveness is being addressed in the national water quality criteria consultation now underway between EPA and the Service, and that process could result in future revisions to the State's water quality standards. EPA's approval of any such future revisions would be, as a separate matter, subject to ESA consultation.

⁶ Permit limits are developed based on protecting the water quality standards during a one in three year low flow event assuming that the discharge flow is at the maximum allowable level. Given that the flow in the receiving water will often be greater than the once-in-three-year critical low flow and given that facilities rarely discharge at their full permitted flow, absent significant unregulated pollutant sources, the quality of the receiving water downstream of the discharge is usually much better than the standard.

- Reinitiation of consultation is required if: (1) new information reveals effects of the federal agency action that may affect listed species or critical habitat in a manner or to an extent not considered in the biological opinion; (2) the federal agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion (e.g., a permit, implementing the biological opinion, is modified to allow a mixing zone where previously none had been authorized); or (3) a new species is listed or critical habitat designated that may be affected by the action.

V. Revisions to the Agreement

Parties to this Agreement may jointly revise this document.

VI. Reservation of Parties Positions

To the extent not inconsistent herewith, no party to this Agreement waives any administrative claims, positions or interpretations it may have with respect to the applicability or enforceability of the Colorado Water Quality Control Act, the Endangered Species Act, or the Clean Water Act.

VII. Obligation of Funds, Commitment of Resources

Nothing in this Agreement shall be construed as obligating any parties to the expenditure of funds in excess of appropriations authorized by law or otherwise commit any agencies to actions for which it lacks statutory authority. It is understood that the level of resources to be expended under this Agreement will be consistent with the level of resources available to the parties to support such efforts.

VIII. Nature of Agreement

This memorandum is intended only to improve the internal management of the Water Quality Control Division, the Service's Colorado Field Office and Region 8's Ecosystem Protection and Water Programs and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the State of Colorado or the United States, their agencies or instrumentalities, their officers or employees, or any other person.

IX. Effective Date, Termination

This memorandum will become effective upon signature by each of the parties hereto. Any of the parties may withdraw from this Agreement upon 60 days written notice to the other parties.

X. Severability

Should any portion of this MOA be determined to be illegal or unenforceable, the remainder of the MOA shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

XI. Signatures

David Akers October 13, 2005 (date)
David Akers, Water Quality Protection Section Manager, Colorado Water Quality Control Division

Susan Linner October 13, 2005 (date)
Susan Linner, Field Supervisor, U.S. Fish and Wildlife Service's Colorado Field Office

Karen Hamilton 10/12/05 (date)
Karen Hamilton, Acting Director, U.S. Environmental Protection Agency Region 8's Ecosystems Protection Program

Debra Thomas 10/13/05 (date)
Debra Thomas, Director, U.S. Environmental Protection Agency Region 8's Water Program

Attachment 1

Template of Cover Letter State WQCD Sends to the Service with Draft Permits

Water Quality Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Dear Ms. Linner (or) Mr. Pfister:

In accordance with the October 2005 Memorandum of Agreement (MOA) among the Colorado Water Quality Control Division (the Division); the U.S. Fish and Wildlife Service's Colorado Field Office (the Service); and the U.S. Environmental Protection Agency Region 8's Ecosystems Protection and Water Programs (EPA), the Division is providing a draft of Permit # _____ for the _____ (town/facility name) discharging to _____ River (list waterbody). Specific details about this effluent discharge and the proposed control requirements are provided in the enclosed draft permit.

The waterbody segment that will receive this discharge is a "water of concern" as described in the MOA in that there is an occurrence of a listed aquatic species¹ (state the name[s] of listed aquatic species potentially affected) or designated critical habitat for a listed aquatic species. As such and pursuant to the MOA, the permittee/applicant will implement Colorado's mixing zone provisions by _____ (list one of the three options that would be unlikely to result in more than a minor detrimental effect). As agreed upon in the MOA, implementation of this mixing zone option is unlikely to have more than a minor detrimental effect on listed aquatic species and will appropriately minimize the potential for incidental take.

The Division is sharing this draft of the permit with you to give the Service an opportunity, early in the permit drafting process, to review the draft permit, the proposed control requirements and the Division's determination that the permit, as proposed, is consistent with the MOA. As explained in the MOA, if the Service agrees with the Division's determination that the draft permit will pose no more than a minor detrimental effect to listed aquatic species, the Service will notify the Division (within 30 days): (1) that it agrees that the draft permit will appropriately implement the MOA, and (2) if the permit were issued as drafted, the Service would concur with the final permit.

¹ For purposes of the MOA, listed aquatic species are those that are federally listed as threatened or endangered and aquatic species that are candidates or proposed for federal listing as threatened or endangered.

If you have any questions, please contact me at _____ or _____, of my staff, at _____.

Sincerely,

Dave Akers

Enclosure

Attachment 2

Template for Mixing Zone Response Letter from Service to State WQCD

Water Quality Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Dear Mr./Ms. _____:

This letter is in reference to Permit # _____ for the _____ (facility name) discharging to the _____ River at (lat/long) near (within) the town of _____. The permittee/applicant intends to discharge (state type of effluent) and will be (installing a diffuser, discharging pollutants to meet end of pipe standards, or discharging to an area without listed aquatic species¹ concerns) to minimize impacts to (state the name[s] of listed aquatic species potentially affected).

We concur with your determination that implementation of (describe option) as outlined in Colorado's mixing zone implementation guidance and described in the October 2005, memorandum of agreement (MOA) that was developed between your agency, the Service, and the EPA, will result in less than minor detrimental effects to the listed aquatic species of the _____ River. This decision is based on review of the permit information submitted to the Service by your agency. Reinitiation of this process is required if new information reveals that the action may result in more than minor detrimental effects to listed aquatic species or critical habitat or if the action is subsequently modified in a manner that causes more than minor detrimental effects to listed aquatic species or critical habitat that was not considered in the original description.

We appreciate your submission of information to our office for review and concurrence. If the Service can be of further assistance, please contact Rick Krueger at (970) 243-2778, extension 17, or Rick_Krueger@fws.gov.

Sincerely;

Allan R. Pfister
Assistant Colorado Field Supervisor

¹ For purposes of the MOA, listed aquatic species are those that are federally listed as threatened or endangered and aquatic species that are candidates or proposed for federal listing as threatened or endangered.