

**UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

2017 MAR 21 AM 11:57

**IN THE MATTER OF:**

**Lincoln County  
512 California Avenue  
Libby, Montana 59923**

**Respondent**

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FILED  
EPA REGION VIII  
**ADMINISTRATIVE ORDER  
ON CONSENT**

Docket No. **CWA-08-2017-0008**

**I. INTRODUCTION**

1. This Administrative Order on Consent (Consent Order) is entered into voluntarily by the United States Environmental Protection Agency and Lincoln County (Respondent). This Consent Order concerns restoration of environmental damage caused by alleged unpermitted discharges of dredged or fill material into Callahan Creek and its adjacent wetlands in Section 13, Township 31 North, Range 34 West, Lincoln County, Montana (the Site).

**II. STATUTORY AUTHORITY**

2. This Consent Order is issued under section 309(a) of the Clean Water Act (CWA), 33 U.S.C. § 1319(a). The authority to issue this Consent Order has been properly delegated to the Assistant Regional Administrator of the Office of Enforcement, Compliance and Environmental Justice, EPA Region 8. This Consent Order is based on the following findings of violation of section 301(a) of the CWA, 33 U.S.C. § 1311(a), which, among other things, prohibits the discharge of pollutants into waters of the United States except as in compliance with section 404 of the CWA, 33 U.S.C. § 1344.

**III. PARTIES BOUND**

3. This Consent Order shall apply to and be binding upon the EPA and upon Respondent and Respondent's agents, successors and assigns. The signatories to this Consent Order certify that they are authorized to execute and legally bind the party they represent to this Consent Order. No change in

the ownership of the Site shall alter Respondent's responsibilities under this Consent Order unless the EPA, Respondent and the transferee agree in writing to allow the transferee to assume such responsibilities. Additionally, no later than thirty (30) calendar days prior to such transfer, Respondent shall notify the EPA at the address specified in paragraph 40, below.

#### **IV. STATEMENT OF THE PARTIES**

4. The following FINDINGS OF FACT AND OF VIOLATION are made solely by the EPA. In signing this Consent Order, Respondent neither admits nor denies the FINDINGS OF FACT AND OF VIOLATION. As such, and without any admission of liability, Respondent consents to the issuance of this Consent Order and agrees to abide by all of its conditions. Respondent waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Consent Order, including any right of judicial review under the Administrative Procedure Act, 5 U.S.C. §§ 701-706, providing for judicial review of final agency action. Respondent further agrees not to challenge the jurisdiction of the EPA or the FINDINGS OF FACT AND OF VIOLATION below in any proceeding to enforce this Consent Order or in any action under this Consent Order.

#### **V. FINDINGS OF FACT AND OF VIOLATION**

5. Respondent Lincoln County is a political subdivision of the State of Montana. Lincoln County's primary offices are located at 512 California Avenue, Libby, Montana 59923.

6. At all relevant times, Respondent or Respondent's agents directed operations at the Site.

7. On December 10, 2015, a representative of the Montana Fish Wildlife and Parks (MT FWP) met at the Site with Lincoln County Commissioner Gregory L. Larson and the Lincoln County Floodplain Manager, Lisa Oedewaldt, to discuss bank erosions problems following a recent flood event. During this meeting, the Lincoln County representatives proposed stream channelization of Callahan Creek. MT FWP stated that the proposed stream channelization would not solve bank erosion problems long-term and that stream channelization always causes more problems than it solves. MT FWP offered

to provide Lincoln County with alternatives to channelization of Callahan Creek. Furthermore, MT FWP informed the Lincoln County representatives that any further work in Callahan Creek that was not for an emergency would require permitting from several regulatory agencies.

8. On December 11, 2015, Commissioner Larson contacted the U.S. Army Corps of Engineers' Montana Regulatory Office (Corps) to discuss flooding and erosion on Callahan Creek and possible levee rehabilitation assistance from the Corps for recent damage to the Callahan Creek Levee. The Corps provided Commissioner Larson with contact information and directions for assistance and permitting requirements. The Corps specifically told Commissioner Larson that the County would need to obtain a section 404 permit prior to initiating any work in Callahan Creek. Commissioner Larson informed the Corps that the County's emergency management person was pulling the permits together.

9. Sometime during the second week of December 2015, the Lincoln County Road Crew, at the direction of Commissioner Larson, began channelization of Callahan Creek with heavy equipment to straighten, deepen, and widen the creek channel and construct levees or dikes along the creek banks at the Site. Additionally, the County rebuilt a portion of St. Regis Haul Road, which runs adjacent to Callahan Creek and had been damaged during the recent flood event.

10. On January 22, 2016, MT FWP notified the Corps that Lincoln County had commenced the channelization project on Callahan Creek at the Site. That same day, the Corps contacted Commissioner Larson to notify him that the ongoing work within Callahan Creek was done without a section 404 permit. The Corps also recommended that the County stop all work within the stream until further notice.

11. On February 1, 2016, the Corps issued a notice of violation of the CWA and cease and desist letter to Respondent.

12. On February 4, 2016, the Corps conducted a Site visit with Respondent. The Corps confirmed that Respondent and/or a person or persons acting on its behalf discharged dredged or fill material into Callahan Creek and its adjacent wetlands as a result of the channelization activities. The

Corps estimated that approximately 0.9 mile and 16 acres of Callahan Creek were impacted by the unauthorized work and 45,000 cubic yards of dredged or fill material were discharged into the creek and riparian habitat.

13. On March 7, 2016, the Corps referred this matter to the EPA for enforcement in accordance with the “*Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning Federal Enforcement of the Section 404 Program of the Clean Water Act*,” dated January 19, 1989.

14. On May 3, 2016, the EPA sent a letter of potential violation to Respondent, inviting Respondent to enter into preliminary discussions with the EPA. In consultation with the Corps, the EPA engaged in discussions with Respondent to consensually resolve this matter.

15. The activities described in paragraphs 9 and 12, above, resulted in discharges of dredged or fill material into Callahan Creek and its adjacent wetlands, which provide numerous functions and values including recreation, aquatic and wildlife habitat, water quality enhancement, flood attenuation and groundwater recharge.

16. Callahan Creek is relatively permanent tributary to the Kootenai River. From the Site, Callahan Creek flows approximately 0.3 mile to the Kootenai River. The Kootenai River is, and was at all relevant times, a navigable, interstate water.

17. Callahan Creek, at the location of the Site, is designated critical habitat for the threatened Bull Trout, (*Salvelinus confluentus*), listed under the Endangered Species Act of 1973, as amended.

18. The activities described in paragraphs 9 and 12, above, were performed using common earthmoving vehicles and equipment, which were operated by Respondent or persons acting on its behalf.

19. Respondent is a “person” as defined in section 502(5) of the CWA, 33 U.S.C. § 1362(5).

20. The material discharged at the Site described in paragraphs 9 and 12, above, is and was at all relevant times “dredged material” or “fill material” as defined in 33 C.F.R. § 323.2(c) or 33 C.F.R. § 323.2(e), respectively, and “pollutants” as defined in section 502(6) of the CWA, 33 U.S.C. § 1362(6).

21. The vehicles and equipment described in paragraph 18, above, are and were at all relevant times each a “point source” as defined in section 502(14) of the CWA, 33 U.S.C. § 1362(14).

22. Callahan Creek and its adjacent wetlands are and were at all relevant times “waters of the United States” as defined in 33 C.F.R. § 328.3(a) and therefore “navigable waters” as defined in section 502(7) of the CWA, 33 U.S.C. § 1362(7).

23. The placement of dredged or fill material into Callahan Creek and its adjacent wetlands constitutes the “discharge of pollutants” as defined in section 502(12) of the CWA, 33 U.S.C. § 1362(12).

24. Section 301(a) of the CWA, 33 U.S.C. § 1311(a), prohibits, among other things, the discharge of pollutants by any person into waters of the United States except as in compliance with section 404 of the CWA, 33 U.S.C. § 1344(a).

25. Section 404 of the CWA, 33 U.S.C. § 1344, sets forth a permitting system authorizing the Secretary of the Army, acting through the Chief of Engineers of the Corps, to issue permits for the discharge of dredged or fill material into navigable waters which are defined as waters of the United States.

26. According to 33 C.F.R. § 323.3(a), a permit issued by the Corps is required for the discharge of dredged or fill material into waters of the United States, unless an exemption pursuant to 33 C.F.R. § 323.4 applies.

27. Respondent is not and never has been authorized by a permit issued pursuant to section 404 of the CWA, 33 U.S.C. § 1344, to conduct any of the activities described in paragraphs 9 and 12, above.

28. The activities conducted by Respondent and/or by persons acting on its behalf as described in paragraphs 9 and 12, above, violate section 301(a) of the CWA, 33 U.S.C. § 1311(a). Each discharge of pollutants from a point source by Respondent into waters of the United States without the required permits issued pursuant to section 404 of the CWA, 33 U.S.C. § 1344, constitutes a violation of section 301(a) of the CWA, 33 U.S.C. § 1311(a). Each day the discharges remain in place without the required permits constitutes an additional day of violation of section 301(a) of the CWA, 33 U.S.C. § 1311(a).

29. Activities to be carried out under this Consent Order are remedial, not punitive, and are necessary to achieve the CWA's objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," as specified in section 101(a) of the CWA, 33 U.S.C. § 1251(a). Restoration and mitigation are appropriate to address the actual and potential harm to water quality, aquatic habitat and wildlife habitat, as well as other functions and values, caused by Respondent's unpermitted activities.

30. This Consent Order was issued after consultation and coordination with the Corps' Omaha District, Montana Regulatory Office.

## **VI. ORDER FOR COMPLIANCE**

Based upon the foregoing FINDINGS OF FACT AND OF VIOLATION and pursuant to the authority vested in the Administrator of the EPA pursuant to section 309(a) of the CWA, 33 U.S.C. § 1319(a), as properly delegated to the Assistant Regional Administrator of the Office of Enforcement, Compliance and Environmental Justice, EPA Region 8, it is hereby ORDERED:

31. Respondent shall immediately terminate all unauthorized discharges of dredged or fill material, now and in the future, into waters of the United States, unless specifically authorized by the Corps under applicable provisions of section 404 of the CWA, 33 U.S.C. § 1344. This prohibition includes all mechanical land clearing, dredging, filling, grading, leveling, installation of utilities,

construction and any other activities that result in a discharge of dredged or fill material into waters of the United States, without a permit or unless otherwise authorized by applicable law.

32. Respondent shall conduct restoration and mitigation activities for impacts to waters of the United States resulting from the unauthorized discharges of dredged or fill material at the Site in accordance with the schedule and other requirements set forth in paragraphs below.

33. Within fourteen (14) calendar days of receipt of this Consent Order, Respondent shall submit to the EPA the name and qualifications, including professional resume, of a consultant experienced in stream and wetlands restoration who will prepare a Removal Plan and a Restoration Plan (the Plans) and must directly supervise all work performed pursuant to each Plan, once it is approved by the EPA.

34. Within sixty (60) calendar days of receipt of this Consent Order, Respondent shall submit to the EPA for review, comment, and approval a Removal Plan, prepared by the consultant referenced in paragraph 33, for the removal of dredged or fill material that was discharged into the waters of the United States at the Site. Within ninety (90) days of completion of the items specified in the Removal Plan, Respondent shall submit to the EPA for review, comment, and approval a Restoration Plan that provides for the restoration, to their pre-impact condition, of the waters of the United States that were impacted as a result of Respondent's unauthorized discharges of dredged or fill material at the Site.

35. The Plans shall be prepared in general accordance with "U.S. Environmental Protection Agency, Region 8 Clean Water Act § 404 Enforcement: Removal/Restoration Plans and Habitat Mitigation/Monitoring Proposals," attached hereto as Exhibit A. Together, the Plans shall include:

- a. A complete assessment of the impacts to Callahan Creek and its adjacent wetlands due to Respondent's unauthorized discharges of dredged or fill material at the Site;
- b. A Site map at an appropriate scale showing the entire area of unauthorized disturbance. The Site map shall include existing undisturbed natural features that

were not impacted (e.g., riparian and wetland areas, riffle and pool complexes) and clearly identify all unauthorized man-made disturbances, fills, channel excavations, road crossings, culverts, structures, and any other work;

- c. A detailed work plan and schedule for all of the work and activities to be accomplished, as specified in the Plans, including the application for any required permits, providing for completion of all aspects of the work no later than three (3) years after the EPA approves the Removal Plan;
- d. Grading, planting and monitoring plans, measurable criteria for success of restoration and provisions for proper disposal of any excess soils or other material generated during removal and restoration; and
- e. Detailed professional drawings for removal of the fill and of the Site, including plan and profile drawings with control elevations for current conditions and proposed conditions.

36. The EPA will review each Plan and approve it, approve it with modifications or reject it with comments. If the EPA rejects a Plan, Respondent shall, within forty-five (45) calendar days of receipt of the EPA's rejection letter, submit a revised Plan that corrects the deficiencies identified by the EPA.

37. Respondent shall obtain all necessary permits to implement each Plan and then commence all restoration activities in accordance with the approved Plan, including the time frames specified therein, and all granted permits. Respondent shall demonstrate that all necessary permits have been granted by providing copies of all such permits, and any amendments thereto, to the EPA within seven (7) calendar days of the issuance of each permit.

38. All restoration activities conducted pursuant to this Consent Order and involving the use of heavy construction equipment shall be undertaken under the direct, on-site supervision of the County Engineer and/or its consultant retained pursuant to paragraph 33.

39. This Consent Order is not a permit or an authorization to place or discharge dredged or fill material in waters of the United States. Respondent shall consult with the Corps at the address and telephone number below to determine if any work to be performed pursuant to this Consent Order requires a permit from the Corps under section 404 of the CWA. If any such permit is required, Respondent shall obtain such permit(s) and provide a copy or copies to the EPA pursuant to paragraph 37, above, prior to initiating any work that is to be performed pursuant to this Consent Order.

U.S. Army Corps of Engineers  
Montana Regulatory Office  
10 West 15th Street, Suite 2200  
Helena, Montana 59626  
Telephone: 406-441-1375  
Facsimile: 406-441-1380

40. Respondent shall submit all notifications under this Consent Order and related correspondence to:

Kenneth Champagne, 8ENF-W-WO  
U.S. Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
Telephone: 303-312-6608  
Facsimile: 303-312-7518

A copy of all notifications and related correspondence also shall be provided to:

Wendy I. Silver, 8ENF-L  
U.S. Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
Telephone: 303-312-6637  
Facsimile: 303-312-6953

41. In addition to the notification requirements set forth in paragraph 40, after issuance of any Corps authorization for the restoration work, Respondent shall submit all notifications and correspondence to the Corps in accordance with the terms and conditions in the Corps permit(s).

42. The Plans and any other deliverables, reports, specifications, schedules and attachments required by this Consent Order are, upon approval by the EPA, incorporated into this Consent Order.

Any non-compliance with the Plan, deliverables, reports, specifications, schedules, permits or attachments shall be deemed a failure to comply with this Consent Order and shall be subject to EPA enforcement.

43. Respondent shall allow, or use its best efforts to allow, access by any authorized representatives of the EPA, the Corps, MT FWP, Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, U.S. Fish and Wildlife Service, or any of the agencies' contractors, upon proper presentation of credentials, to sites and records relevant to this Consent Order for any of the following purposes:

- a. To inspect and monitor progress of the activities required by this Consent Order;
- b. To inspect and monitor compliance with this Consent Order; and
- c. To verify and evaluate data and other information submitted to the EPA.

This Consent Order shall in no way limit or otherwise affect the EPA's authority or the authority of any other governmental agency to enter the Site, conduct inspections, have access to records, issue notices and orders for enforcement, compliance or abatement purposes or monitor compliance pursuant to any statute, regulation, permit or court order.

44. This Consent Order shall be effective upon receipt by Respondent of a fully executed copy.

45. Issuance of this Consent Order shall not be deemed an election by the United States to forego any civil or criminal action to seek penalties, fines or other appropriate relief under the CWA for violations giving rise to the Consent Order.

46. The EPA agrees to submit all notifications and correspondence to:

Board of County Commissioners  
Lincoln County  
Commissioners Mark Peck, Jerry Bennett, and Mike Cole  
512 California Avenue  
Libby, Montana 59923

47. Any party hereto may, by written notice, change the address to which future notices shall be sent or the identities of the persons designated to receive notices hereunder. The parties acknowledge that the Commissioners may change over time and this Consent Order shall be binding only on the County acting through its active Commissioners, and shall not be binding upon or otherwise applicable as to any retired or past Commissioner.

48. If an event causes or may cause delay in the achievement of the requirements of this Consent Order, Respondent shall notify the EPA orally as soon as possible and in writing within ten (10) working days from the date Respondent first knew of such event or should have known of such event by exercise of due diligence, whichever is earlier. Respondent's written notice shall specify the length of the anticipated delay, the cause(s) of the delay, the measures taken or to be taken by Respondent to minimize the delay and a timetable by which those measures will be or have been implemented. Notification to the EPA pursuant to this paragraph of any anticipated delay, by itself, shall not excuse the delay or the obligation of Respondent to comply with the requirements and deadlines of this Consent Order, unless the EPA grants in writing an extension of the applicable requirement or deadline.

49. If Respondent demonstrates to the EPA's satisfaction that the delay or anticipated delay has been or will be entirely caused by circumstances beyond Respondent's control (or the control of any of Respondent's agents) that Respondent could not have foreseen and prevented despite due diligence, and that Respondent has taken all reasonable measures to prevent or minimize such delay, the EPA may excuse performance or extend the time for performance of such requirement for a period not to exceed the actual delay resulting from such circumstances. The EPA's determination on these matters shall be made as soon as possible, and in writing within (10) ten working days, after the receipt of Respondent's written notification of the event. The parties agree that changed economic circumstances shall not be considered circumstances beyond the control of Respondent.

50. Each party shall bear its own costs and attorneys fees in connection with this matter.

51. Respondent understands and acknowledges the following:

- a. Section 309(d) of the CWA, 33 U.S.C. § 1319(d), authorizes civil penalties of up to \$52,414 per day for each violation of an order issued by the Administrator of the EPA under section 309(a) of the CWA, 33 U.S.C. § 1319(a).
- b. Compliance with the terms and conditions of this Consent Order shall not be construed to relieve Respondent of its obligations to comply with any applicable federal, state or local law or regulation.
- c. Failure by Respondent to complete the tasks described herein in the manner and time frame specified pursuant to this Consent Order may subject Respondent to a civil action under section 309 of the CWA, 33 U.S.C. § 1319, for violation of this Consent Order.

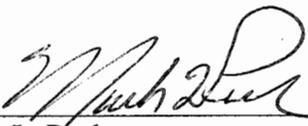
**UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY REGION 8**

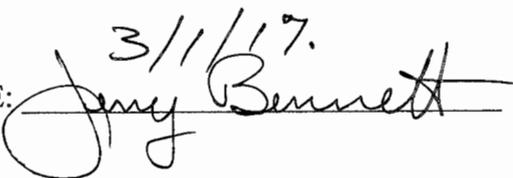
DATE: 03/21/2017

By:   
Kimberly S. Opekar, Acting  
Assistant Regional Administrator  
Office of Enforcement, Compliance and  
Environmental Justice

**LINCOLN COUNTY**

DATE: 03/01/2017

By:   
Mark L. Peck  
Commissioner – District No. 1, Libby  
Lincoln County

DATE: 3/1/17  


By:   
Jerry Bennett  
Commissioner – District No. 2, Troy  
Lincoln County

DATE: 3-1-17

By: M. Cole  
Mike Cole  
Commissioner – District No. 3, Eureka  
Lincoln County

# EXHIBIT A

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 8

CLEAN WATER ACT § 404 ENFORCEMENT:  
REMOVAL/RESTORATION PLANS  
AND HABITAT MITIGATION/MONITORING PROPOSALS

**INTRODUCTION**

These guidelines are designed to assist respondents in the preparation of (1) removal and restoration plans and (2) habitat mitigation and monitoring plans associated with projects required under EPA administrative orders. They have been developed from the experiences of many cases and are intended to be merely guidelines. In the event of a conflict between an administrative order and these guidelines, the administrative order controls.

For answers to questions regarding the interpretation of these guidelines or of acceptable restoration and mitigation for a specific project, please contact the person at EPA Region 8 in the Technical Enforcement Program who is handling the case.

## **CLEAN WATER ACT § 404 ENFORCEMENT:**

### **GENERAL GUIDELINES FOR DEVELOPMENT OF REMOVAL AND RESTORATION PLANS**

#### **I. GENERAL INFORMATION**

The following guidelines serve as general specifications for preparing removal and restoration plans to remediate the unpermitted filling of wetlands. As environmental conditions vary from site to site, precise specifications will depend upon the environment conditions peculiar to the site in question. The size of the wetland area to be restored, its biological and physical characteristics, and the level of disturbance the wetland has experienced will further define the scope and complexity of the restoration plan. In most cases, the types of information listed below represent only the minimum required to formulate an acceptable removal and restoration plan.

**When these guidelines are incorporated into an EPA administrative order, the recipient of the order should obtain the approval of EPA's technical representative on the case before departing from the general specifications outlined below.**

#### **II. RECOMMENDED REMOVAL AND RESTORATION PLAN FORMAT**

The removal and restoration plan should be presented using the following six subsections when possible. An explanation of the kind of information that should be included in each subsection is provided.

##### **1. Existing Physical Conditions**

- A. A surveyed site plan depicting property boundaries, streets, buildings, waterbodies (with ordinary high water line indicated), wetlands, FEMA 100-year floodplain (if applicable), areas of unpermitted fill, elevation contours, and other ground surface features at a scale no greater than 1":40'. This plan shall include a cross-section view of the site which shows soil depths, fill depths, and average depth to groundwater across the site.
- B. A narrative description of existing physical conditions, including the area of the site; area of unpermitted fill; existing wetlands (including the types of vegetation); the soil types present (including the types of unpermitted fill present); the hydrologic regime of the site; and other relevant information.

##### **2. Proposed Physical Conditions**

- A. Using the site plan described in Subsection 1.A. as a base, show the exact areas where remedial activities will occur (e.g., removal of fill, replacing dredged

material into ditches, etc.). Indicate proposed finished grades, expected ordinary high water elevations, the location of proposed plantings/seedings, and the location of all sediment and erosion control structures (e.g., hay bales, silt screens, etc.). This plan shall include a cross-section view of the site which shows proposed soil depths and average depth to groundwater across the site.

- B. Provide a narrative description of the remedial work to occur, including the methods and equipment to be employed; how access to the site to perform the work will be obtained; how equipment will be brought to the site; the location of the ultimate disposal site for any removed fill; how the work will progress across the site; a listing of the plant species to be seeded/planted at the site; the sources of the plant material [*note*: as a rule, transplanting of plant stock will not be permitted]; the planting method(s) and scheme (i.e., physical layout of the how plant material will be installed); any methods to be used to minimize adverse impacts while remedial work is underway; the expected hydrologic regime of the site in its restored condition; and other relevant information.
- C. Delineate the area(s) on the site to be restored by installation of flagging, sedimentation and erosion control structures, or other appropriate method. This delineation shall represent the limit of construction activities such that no work shall occur beyond those boundaries.

### **3. Actual Restored Physical Conditions**

Using the site plan described in Subsection 1.A. as a base, show the actual physical conditions to exist at the site at the completion of grading activities (i.e., as “as-built” plan), including actual finished grades and all pertinent ground surface features. This plan shall include a cross-section view of the site which shows actual soil depths and average depth to groundwater across the site. This as-built plan shall be prepared and submitted prior to planting/seedling activities.

### **4. Monitoring/Measures of Success**

- A. Normally, monitoring shall be performed midway through and near the end of the first and second growing seasons, then annually near the end of each successive growing season for the duration of the required monitoring period. Monitoring shall be performed for a period of at least five years due to the scope and complexity of the remedial efforts required.
- B. A monitoring plan shall incorporate a simple statistical approach to assessing relative success or failure of restoration efforts (e.g., transects with sampling stations for measuring parameters such as percent areal cover in each vegetative stratum). A permanent photographic record shall be included as part of the monitoring plan.

- C. Depending upon the scope and complexity of the remedial efforts, general criteria to measure success shall be determined by EPA. These criteria shall be directly related to reestablishing the structural components of the aquatic ecosystem being restored. A general provision shall be included to allow for corrective action to be taken, at the direction of EPA, should monitoring show that criteria for success are not being met.
- D. A report shall be prepared and submitted after each monitoring event which describes the environmental conditions at the site and assesses relative success or failure of restoration efforts. This report shall include photographic evidence as well. This report shall identify any problems discovered and recommend appropriate corrective action to ensure the success of restoration.

**5. Inspections**

The plan shall provide for inspections by EPA personnel after installation of all sedimentation and erosion control structures, after completion of grading activities, after completion of initial planting/seeding activities, and after monitoring indicates that the criteria for success have been attained.

**6. Schedule**

A comprehensive schedule integrating all removal, restoration, inspection, and monitoring activities as well as report/product submissions shall be included.

## **CLEAN WATER ACT § 404 ENFORCEMENT:**

### **GENERAL GUIDELINES FOR DEVELOPMENT OF HABITAT MITIGATION AND MONITORING PROPOSALS**

#### **I. GENERAL INFORMATION**

Submission of a mitigation and monitoring proposal as described in these guidelines will not be a substitute for complete compliance with the Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Mitigation under the Clean Water Act Section 404(b)(1) Guidelines dated November 7, 1989, which took effect on February 7, 1990. Therefore, mitigation proposals will only be considered if avoidance and minimization have been fully pursued.

Although all the individual components presented here may not be applicable to every project, a proposal should address each heading in the guidelines. Appendix A provides text and figure format guidelines.

#### **II. PLACE OF MITIGATION AND MONITORING PROPOSAL IN CLEAN WATER ACT § 404 PERMIT PROCEDURE**

##### **1. Individual Permit**

If a respondent is applying for an individual permit from the U.S. Army Corps of Engineers (the "Corps") and proposes mitigation, it is preferable that a preliminary mitigation and monitoring plan be submitted along with application materials. A detailed preliminary mitigation plan should generally not be completed until a final jurisdictional map has been accepted by EPA, and the area of fill to be mitigated for has been identified. The final mitigation plan will usually be submitted following the public comment period and Corps review of the preliminary plan.

##### **2. Nationwide Permit**

If a respondent is requesting confirmation of a project's qualification for a Corps nationwide permit and proposes mitigation, a detailed mitigation and monitoring plan must be submitted with the request for confirmation.

##### **3. Final Submission**

The final submission of all mitigation and monitoring plans must be in a *single* document. It must contain up-to-date versions of all materials, even if other versions were submitted earlier in the application process.

### **III. EPA/CORPS POLICY**

In general, the goal of both EPA and the Corps is to permit no net loss of functions and values of wetland habitat. The replacement ratio of wetland acreage required to achieve this goal is typically *at least* 1:1, and is often higher. The attainment of replacement functions and values and an acreage replacement ratio are usually included in final success criteria associated with the completion of a respondent-permittee's mitigation responsibility.

### **V. SUMMARY OF RECOMMENDED MITIGATION AND MONITORING PROPOSAL FORMAT**

The mitigation and monitoring proposal should be presented using the following nine subsections when possible. Detailed explanations of the kind of information that should be included in each subsection is provided in Section VI below.

#### **1. PROJECT DESCRIPTION**

- A. Location of Project
- B. Brief Summary of Overall Project
- C. Responsible Parties
- D. Jurisdictional Areas to be Filled
- E. Type(s), Functions, and Values of the Jurisdictional Areas

#### **2. GOAL(S) OF MITIGATION**

- A. Type(s) of Habitat to be Created
- B. Functions and Values of Habitat to be Created
- C. Time Lapse

#### **3. FINAL SUCCESS CRITERIA**

- A. Target Functions and Values
- B. Target Hydrological Regime
- C. Target Jurisdictional Acreage to be Created

#### **4. PROPOSED MITIGATION SITE**

- A. Location and Size of Mitigation Area
- B. Ownership Status
- C. Existing Functions and Values of Mitigation Area
- D. Present and Proposed Uses of Mitigation Area
- E. Jurisdictional Delineation (if applicable)
- F. Present and Proposed Uses of All Adjacent Areas
- G. Zoning

**5. IMPLEMENTATION PLAN**

- A. Rationale for Expecting Implementation Success
- B. Responsible Parties
- C. Site Preparation
- D. Planting Plan
- E. Schedule
- F. Irrigation Plan
- G. As-Built Conditions

**6. MAINTENANCE DURING MONITORING PERIOD**

- A. Maintenance Activities
- B. Responsible Parties
- C. Schedule

**7. MONITORING PLAN**

- A. Performance Criteria
- B. Monitoring Methods
- C. Annual Reports
- D. Schedule

**8. COMPLETION OF MITIGATION**

- A. Notification of Completion
- B. Corps Confirmation

**9. CONTINGENCY MEASURES**

- A. Initiating Procedures
- B. Alternative Locations for Contingency Mitigation
- C. Funding Mechanism
- D. Responsible Parties

**VI. DETAILED RECOMMENDED MITIGATION AND MONITORING PROPOSAL FORMAT**

Detailed information to be included in each subsection of the mitigation and monitoring proposal is presented below. The nine subsections should be preceded by a one-page summary of the report contents.

## 1. PROJECT DESCRIPTION

### A. Location of Project

1. Describe
2. Provide:
  - a. Road map with site location clearly indicated
  - b. USGS quad map with project site outlines (clear photocopy is acceptable)

### B. Brief Summary of Overall Project

In one or two paragraphs, describe the overall project (not just the jurisdictional area to be filled). Include type of development and project size.

### C. Responsible Parties

Provide the name(s), title(s), address(es), and phone number(s) of the applicant(s)<sup>1</sup>, including the contact person(s) if the applicant is a company, and of the preparer(s) of the mitigation plan.

### D. Jurisdictional Areas to be Filled

Provide a full-size topo base map with verified Corps/EPA jurisdictional area(s) and area(s) of proposed fill outlines. (See Appendix A for map format information.)

### E. Type(s), Functions, and Values of the Jurisdictional Areas

1. Type: e.g., seasonal wetland, vernal pool, freshwater marsh, playa, etc.
2. Functions and Values

Formal procedures to assess functions and values of wetlands have not yet been adopted. Therefore, to assist in evaluation of the project, a knowledgeable professional should provide a summary of the functions and values of the wetland to be filled. Any jurisdictional areas other than wetlands should also be assessed for functions and values. Examples of features to be addressed are:

#### Water Quality

- ground water
- recharge/discharge
- flood storage

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<sup>1</sup> The “applicant” refers to the permit applicant, who will in most instances be the respondent.

- other

#### Habitat

- rare/threatened/endangered species
- known or probable wildlife use
- plant communities
- complete species list
- known or probable fish, shellfish, and aquatic vertebrate use
- other

#### Recreational Use

- non-consumptive (e.g., birdwatching, walking)
- consumptive (e.g., fishing, hunting)

## **2. GOAL(S) OF MITIGATION**

This refers to the long-term goals, which may not be reached until some years after the applicant's mitigation responsibilities have been completed.

### **A. Type(s) of Habitat to be Created**

If out-of-kind, present rationale. (Refer to Subsection 1.E.1 above.)

### **B. Functions and Values of Habitat to be Created**

Identify, describe, and provide location of any local reference site if different from the wetland to be filled. (Refer to Subsection 1.E.2. above.)

### **C. Time Lapse**

Describe how many years it is likely to take for the long-term goal habitat to develop.

## **3. FINAL SUCCESS CRITERIA**

These are the criteria that are proposed by the applicant for Corps approval and are used to determine completion of permittee's mitigation responsibilities. Fulfillment of these criteria should indicate that the mitigation area is progressing well toward the habitat type, functions, and values which constitute the long-term goal of this mitigation. For mitigation plantings, final success criteria will not be considered to have been met until a minimum of two years after all human support (e.g., irrigation, replanting, rodent control, and fertilization) has ceased. Major factors to be considered are:

- A. Target Functions and Values
  - wildlife species
  - percentage vegetation cover and/or density
  - approximate plant height criteria (shrubs and trees)
  - plant and animal species diversity
  - root development
  - canopy stratification
  - other quantifiable measures of success

- B. Target Hydrological Regime
  - source(s) of water
  - discharge point(s)
  - area(s) affected by seasonal flooding
  - direction(s) of flow
  - size (and map) of watershed

C. Target Jurisdictional Acreage To Be Created

Where applicable, a formal wetlands delineation must be submitted for Corps approval as a part of the final success criteria.

**4. PROPOSED MITIGATION SITE**

A. Location and Size of Mitigation Area

1. Describe location, including rationale for choice. If offsite, indicate distance from project site.
2. Provide the following maps:
  - a) full-size copy of USGS quad map with the mitigation location outlined
  - b) road map marked with the site location
  - c) base topo map with the proposed mitigation area outlined and acreage indicated. (See Appendix A for figure format information.)

B. Ownership Status

1. Indicate who presently owns the mitigation site. If any owner is different from the permit applicant(s), describe and explain the availability of the property. Describe and explain any easements or encroachments that the property carries. If any of the property is located on public land, describe and explain what arrangements, if any, have been discussed with the

managing agency.

2. Indicate expected ownership of the mitigation area following completion of the mitigation project. Identify who will be responsible for long-term management and protection of the area. Describe and explain what if any long-term management plan has been prepared for the area. If an entity other than the applicant will assume management responsibilities following completion of the mitigation project, describe and explain any signed, written agreement that the manager will manage the area in conformance with goals of the mitigation. Include copies of any written plans or agreements.
3. Indicate what entity, if any, controls water flow to or from the site. Identify and describe the party who is to maintain water control structures. Describe and explain what arrangements have been made to guarantee appropriate water flow in the mitigation area during and after the establishment of the mitigation project.

C. Existing Functions and Values of Mitigation Area

(Refer to Section I.E. above.)

D. Present and Proposed Uses of Mitigation Area

Briefly describe all known present and proposed uses of the mitigation area. Discuss non-native landscape plantings, pipelines, powerlines, roads, distance and location of nearest structures, if any, etc., on the property containing the mitigation site.

E. Jurisdictional Delineation (if applicable)

Describe any jurisdictional areas that are already present on the mitigation site. Provide a topo base map of the site with jurisdictional areas (and any proposed fill) indicated. Describe the probable future of the mitigation area as habitat if left undisturbed.

F. Present and Proposed Uses of All Adjacent Areas

Briefly describe all known present and proposed uses of all property sharing a common border with the property containing the mitigation.

G. Zoning

Give all present and proposed zoning designations for the mitigation site and adjoining properties, including city, county, BCDC, etc.

## 5. IMPLEMENTATION PLAN

### A. Rationale for Expecting Implementation Success

May refer to previous relevant experience of applicant and/or implementation consultant or to other similar and successful mitigation projects. Include hydrology and soils information.

### B. Responsible Parties

Provide the name(s), title(s), address(es), and phone numbers of the person(s) responsible for implementing the mitigation project.

### C. Site Preparation

1. Describe plans for grading, hydrologic changes, water control structures, soil amendments, erosion control, bank stabilization, equipment and procedures to be used, site access control, etc., as applicable. Include a description of exotic vegetation control techniques, planting hole excavation methods (e.g., auguring, hand digging), and the size of the planting hole (e.g., twice size of container).
2. Provide base topo maps showing planned site preparation. (See Appendix A for figure format information.)
3. Provide representative cross-sections of the mitigation site with elevations and scale indicated.
4. Provide the name, title, address, and phone number of the person supervising or providing biological monitoring during grading activities.

### D. Planting Plan

1. Briefly describe the planting plan and methods
2. Provide a table of species to be planted, including numbers, spacing, types of propagules, pot sizes, etc.
3. Indicate the source-locale of seeds, plant plugs, cuttings, etc.
4. Show planting and species locations on a base topo map. (See Appendix A for figure format information.)

5. If transplanting is to be done, describe the storage method and duration.
6. Describe any expected volunteer native revegetation that is included in mitigation planning.

E. Schedule

Provide a schedule in the form of a legible flow chart showing intended timing of site preparation and plantings.

F. Irrigation Plan

1. Describe irrigation method(s), estimated frequency, and amount during dry months.
2. Indicate water source(s) for the mitigation area.
3. Show the planned irrigation system and/or water flow on base topo (may be included on the planting plan map).

G. As-Built Conditions

The plan should specify that the applicant will:

1. Submit a report to EPA within 6 weeks of the completion of site preparation and planting, describing the as-built status of the mitigation project. If avoidance is incorporated into development project design, describe the as-built status of the development project, including any deviations from the original plan in the vicinity of, or that will affect, jurisdictional area(s). Submit separate reports for grading and planting work if not completed within six weeks of each other.
2. Provide topo maps showing as-built contours of the mitigation area. Indicate the location of plantings and any other installations or structures.

**6. MAINTENANCE DURING MONITORING PERIOD**

A. Maintenance Activities

Describe planned maintenance activities, including irrigation system inspection, plant replacement, weeding, water structure inspection, fertilization, erosion control, herbivore protection, trash removal, and/or any other such activities.

B. Responsible Parties

Identify the persons/entities responsible for financing and carrying out maintenance activities, including names, titles, addresses, and phone numbers.

C. Schedule

Provide a table showing the schedule of maintenance inspections.

**7. MONITORING PLAN**

A. Performance Criteria

Provide yearly target criteria to be met, as appropriate, based on reasonably-paced progress toward final success criteria. (Refer to Section III.)

B. Monitoring Methods

1. Describe the monitoring methods. If using sampling methods, include sample sizes, statistical justification for sampling regime, and data analyses to be performed. If appropriate, include assessment of natural population growth by target species.
2. Provide samples of all proposed data sheets.
3. Photos shall be taken during each monitoring period. They shall be taken from the same vantage point and in the same direction every year, and shall reflect material discussed in the monitoring report. When percent cover estimates are made of herbaceous vegetation, photographs shall be taken of sampling quadrants.

C. Annual Reports

1. Annual reports shall be submitted which present monitoring results. They shall assess both attainment of yearly target criteria and progress toward final success criteria.
2. Annual reports shall include the following:
  - a. A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year.
  - b. A copy of any Corps permit attached. Special Conditions and any subsequent Letters of Modification shall be included as an

appendix.

- c. Analysis of all quantitative monitoring data.
  - d. Prints or good quality photocopies of all included monitoring photographs.
  - e. Maps identifying monitoring areas, transects, planting zones, etc., as appropriate. (See Appendix A for figure format information.)
3. Copies of all field data sheets shall be available for Corps review as needed.

D. Schedule

Since planting and/or site modification may not occur when planned, monitoring and performance criteria shall be tied to the actual implementation date rather than to predetermined years (e.g., the first annual report shall be delivered on (month, day) of the year following the first growing season after planting.)

## 8. COMPLETION OF MITIGATION

A. Notification of Completion

When the initial monitoring period is complete, and if the applicant believes that the final success criteria have been met, the applicant shall notify the Corps when the annual report that documents this completion is submitted. If it is appropriate here, a current jurisdictional delineation of the created wetland areas should be submitted with the report. (This delineation shall be accompanied by legible copies of all field data sheets.)

B. Corps Confirmation

Following receipt of the report, the Corps may require a site visit to confirm the completion of the mitigation effort and any jurisdictional delineation.

## 9. CONTINGENCY MEASURES

A. Initiating Procedures

If an annual performance criterion is not met for all or any portion of the mitigation project in any year, or if the final success criteria are not met, the permittee shall prepare an analysis of the cause(s) of failure and, if determined necessary by the Corps, propose remedial action for approval.

B. Alternative Locations for Contingency Mitigation

Indicate specific alternative mitigation locations that may be used in the event that mitigation cannot be successfully achieved at the intended mitigation site. Include current ownership information for any offsite alternative locations.

C. Funding Mechanism

Indicate what funds will be available to pay for planning, implementation, and monitoring of any contingency procedures that may be required to achieve mitigation goals.

D. Responsible Parties

List names, addresses, and phone numbers of persons/entities responsible for implementing and monitoring contingency procedures.

## APPENDIX A – FORMAT INFORMATION

### A. Text Format Notes for Mitigation/Monitoring Proposals, As-Built Reports, and Annual Reports.

1. The Corps file number and the date of the report should be included in title-page reading.
2. Include a distribution page listing names, titles, companies/agencies and addresses of all persons/agencies receiving a copy of the report.

### B. List of Figures to be Submitted

*(Page and section numbers in parentheses indicate location of figure request in annotated outline. For recommended figure formats, refer to Section (C) below.)*

1. Mitigation and Monitoring Proposal
  - a. Jurisdictional Areas and Proposed Fill on Project Site (*p. 8, 1.D.*) (outlines and acreages indicated.).
  - b. Location and Size of Mitigation Area
    - U.S.G.S. quad map (*p. 10, 4.A.2*)
    - road map (*p. 10, 4.A.2*)
    - topo map (*p. 10, 4.A.2*)
  - c. Jurisdictional Areas and Any Proposed Fill on Mitigation Site (*p. 11, 4.E.*)
  - d. Mitigation Site Preparation (*p. 12, 5.C.2*)  
(base topo map showing preparation plans)
  - e. Planting Plan (*p. 13, 5.D.4*)
    - plan view of base topo
    - representative cross-sections
  - f. Irrigation Plan (*p. 13, 5.F.3*) (may be on planting plan topo)

2. As-Built Report (*p. 14, 5.G.2*)
  - a. Final site contours
  - b. Plantings as installed

**C. Figure Format Notes**

- All maps and plans submitted shall be legible and include title, date of preparation, and date of submission.
- A legend shall be provided if symbols, patterns, or screens are used on the map or plan.
- If colors are used to indicate areas on the original map, color copies shall be included in all copies of the report submitted to the Corps.
- Indicate North and provide a scale and datum (if appropriate, i.e., tidal data).
- Scale and orientation shall be the same for all maps, except for detail sections.
- Base topo maps (i.e., for jurisdictional areas, location and size of mitigation areas, mitigation site preparation plans, planting plans, irrigation plans, and as-built reports) shall be full-size (1 inch = 100 feet or less, 1 inch = 200 feet for very large projects).
- USGS quad maps shall be full-size and full scale (may be photocopies, if clearly legible).

NOTE: Reduced copies of maps shall be bound with all documents to facilitate review by advisory agencies. For Corps review, at least two sets of full-sized copies shall accompany mitigation and monitoring proposal, and one set shall accompany each annual report.

**D. Schedule**

When submitting the mitigation and monitoring plan, the applicant shall indicate the month and date on which the yearly report will be delivered. If plan involves planting, this date should be made between growing seasons for the primary plants so that timely decisions can be made about any modifications to the plan.