

MITIGATION AND MONITORING PROPOSAL GUIDELINES

Date: December 31, 2003

Response Required by: January 31, 2004

Location

These Mitigation and Monitoring Proposal Guidelines will be applied throughout the U.S. Army Corps of Engineers' (Corps) San Francisco District, which encompasses the coastal portions of California from northern San Luis Obispo County to the Oregon border; and the Sacramento District, which covers Central Valley of California, Nevada, Utah and western Colorado (see attached drawing). Both the San Francisco and Sacramento Districts shall here in be referred to as the "Districts" within this document. If modifications occur to the Districts' boundaries in the future, these Mitigation and Monitoring Proposal Guidelines will apply to all areas within the revised boundaries.

Overview

U.S. Army Corps of Engineers and U.S. Environmental Protection Agency (EPA) regulations (33 CFR 320-330 and 40 CFR 230) authorize the Corps to require compensatory mitigation for unavoidable impacts to wetlands and other jurisdictional "waters of the U.S." The Corps has commenced several initiatives in response to recommendations contained in the recent National Academy of Science / National Research Council publication "Compensating for Wetland Losses under the Clean Water Act," (2001) and is committed to improving the success of future compensatory mitigation projects.

These Mitigation and Monitoring Proposal Guidelines are designed to assist the regulated public with all aspects of the mitigation process and to provide information to ensure future compensatory mitigation sites successfully replace all lost functions and values associated with regulated impacts to waters of the U.S.

With this Public Notice, the Corps is soliciting comments on proposed revisions to existing Habitat Mitigation and Monitoring Guidelines published October 25, 1996 in the Sacramento District and October of 1991 in the San Francisco District. These Mitigation and Monitoring Proposal Guidelines would be applied to the regulatory program as administered within the Districts. These Mitigation and Monitoring Proposal Guidelines are being updated based upon experience, field investigations, and public input, and provide the next step in improving the success of compensatory mitigation projects within the Districts.

Table of Contents

- I. Mitigation Principles
- II. Mitigation Development Guidelines

IX. Completion of Mitigation Responsibilities

- a. Notification-When the initial monitoring period is complete, and if the permittee believes that the final performance criteria have been met, the permittee shall notify the Corps when submitting the annual report that documents this completion. For mitigation plantings, final performance criteria will not be considered met until a minimum of two years after all human support (e.g. irrigation, replanting, rodent control, fertilization) has ceased.
- b. Corps Confirmation-Following receipt of notification that the permittee believes the mitigation responsibilities have been fulfilled, the Corps may require a site visit confirm the completion of the mitigation effort. The permittee is not released from any mitigation obligation until written notice of completion is received from the Corps.

APPENDIX B: FORMAT INFORMATION

I. Reports/Proposals

- A. Headings
ALL cover, title page, or letter headings must contain the **CORPS FILE NUMBER** and the **DATE** of the document.
- B. Contributor Page
List all persons who prepared plan, did monitoring, and/or wrote or edited the text.
- C. Distribution Page
List names, titles, and companies/agencies of all persons receiving a copy of the report.
- D. Binding
Generally speaking, a mitigation proposal should be a single, stand-alone, separately bound document. Except for full-size drawings, all materials submitted should be, or be folded to, 8 ½" x 11." Three-ring binders, unfortunately do not fit on our filing shelves, so please bind your final submittal with this in mind.

II. Figure Format

All maps and plans submitted should be legible, complete, clear, and at the appropriate scale. Each should include the following:

1. Title block.
2. Date of preparation.
3. Date(s) of any modifications.
4. 1" margin at top of sheet.
5. North arrow (plan views).
The orientation of the map on the page (as it is read) should be the **same** for **all** maps submitted. By convention, North will normally be toward the top of the page.
6. Scale.
Base topo maps should be full-sized (1 inch = 100 feet or less, 1 inch = 200 feet for very large projects).
7. Datum.
Reference elevation datum **must** be indicated on both plan and section views.
8. Jurisdictional boundaries
Tidal waters – MLLW, MHW, HTL
Non-tidal waters (stream channels) – OHW
Wetlands - boundaries

9. Legend

Identify all symbols, patterns or screens used. If colors are used to indicate areas on the original map, color copies (or the original) should be included in the Corps submittal.

III. List of Tables, Schedules, and Maps to Be Submitted.

(This is an overall list. It is only necessary to submit the items that apply to your project.)

A. Tables

1. Impact acreage
2. Impact vs. Mitigation acreage
3. Plant species
4. Performance criteria/monitoring methods

B. Schedules

1. Implementation
2. Monitoring/Reporting
3. Maintenance

C. Maps

1. Overall Project
 - a. Road map
 - b. USGS map
 - c. Jurisdictional area topo map
2. Mitigation Site (if different from project site)
 - a. Road map
 - b. USGS map
 - c. Topo map
 - d. Jurisdictional map (if applicable)
3. Mitigation Design
 - a. Grading plan (including cross-sections and water control structures, if any).
 - b. Planting plan
4. As-builts (if different from plan)
 - a. Grading
 - b. Planting

APPENDIX C: OUTLINE FOR MONITORING REPORTS

Pages 1-2:

- A. Project Information
 - 1. Project name
 - 2. Applicant name, address, and phone number
 - 3. Consultant name, address, and phone number (if appropriate)
 - 4. Corps permit file number
 - 5. Acres of impact and type(s) of habitat impacted
 - 6. Date project construction commenced
 - 7. Indication of mitigation monitoring year (i.e. first, second, third, etc.)
 - 8. Amount and information on any required performance bond or surety, if any.
- B. Compensatory Mitigation Site Information
 - 1. Location of the site (regional map may be appropriate)
 - 2. Specific purpose/goals for the compensatory mitigation site
 - 3. Date mitigation site construction and planting completed
 - 4. Dates summary of previous maintenance and monitoring visits
 - 5. Name, address, and contact number of responsible parties for the site
 - 6. Summary of remedial action

Page 2 or 3:

- A. Map of the compensatory mitigation site
 - 1. Diagram of the site (no larger than 11 x 17) including:
 - a. Habitat types (as constructed)
 - b. Locations of any photographic record stations
 - c. Landmarks

Page 3 or 4:

- A. List of Corps-approved success criteria
- B. Tabulated results of the monitoring visits versus performance standards.

Page 4, 5, and/or 6:

- A. Photographic record of the site during most recent monitoring visit at record stations (at least four photos per page, no more than two pages of photos)

Page 5, 6, or 7:

- A. Summary of field data taken to determine compliance with performance standards and success criteria (at least one page, no more than two pages)

Page 6, 7, or 8 (if needed):

- A. Problems noted and proposed remedial measures.
- B. Original data sheets and technical appendices should not be submitted with this report; however they should be retained with the applicant and/or consultant until the Corps has signed off the mitigation. The permittee may need to make data sheets and technical appendices available to the Corps upon request.

APPENDIX D: SACRAMENTO AND SAN FRANCISCO COWARDIN HABITAT TYPES

<i>Common Name</i>	<i>Cowardin Name</i>	<i>Cowardin Code</i>
1. Seep	Palustrine Emergent Permanent(H)	PEMH
2. Seasonal wetland	Seasonal (C)	PEMC
a. Alpine Meadow	Seasonal (C)	PEMC
3. Vernal Pool/Swale	Seasonal (C)	PEMC
4. Bog / Fen	Palustrine Emergent	PEMI
5. Saline flat	Palustrine Flat	PFLC
6. Pond		
a. Salt	Palust. Unconsolidated Bottom Artificial(K), Hypersaline(l)	PUBK1
b. Freshwater	Palust. Uncon. Bottom Permanent, Freshwater(0)	PUBH0
7. Lake/Reservoir/Pond Edge	Lacustrine Littoral(2)	L2
8. Channel water		
a. Seasonal	Riverine Intermittent(4) StreamBed	R4SB
b. Permanent (steep gradient)	Riv. Permanent/High Grade(3) Steambed	R3SB
(low gradient)	Riv. Permanent/Low Grade(2) Steambed	R2SB
c. Tidal	Estuarine Intertidal(2) Steambed	E2SB
d. Muted tidal	Estu. Inter. Strembd Diked/Impounded(h)	E2SBh

<u>Common Name</u>	<u>Cowardin Name</u>	<u>Cowardin Code</u>
9. Channel-Side Habitat		
a. Trees	Palust. Forested(O)	PFO
b. Shrubs	Palust. Scrub/Shrub	PSS
c. Grassland	Palust. Emergent	PEM
10. Marsh		
a. Tidal Salt	Estu. Intertid. Emerg. Persistent(1), Euhaline(2)	E2EM12
b. Tidal Brackish	Mixohaline(3)	E2EM13
c. Muted Tidal Salt	Euhal. Diked/Impounded	E23M12h
d. Muted Tidal Brackish	Mixohal.Diked/Impounded	E2EM13h
e. Freshwater	Palust. Emerg. Persist. Fresh	PEM1H
11. Dune Swale	Palust. Emerg. Non-Persist.(2)	PEM2
12. Intertidal Zone		
a.Estuarine	Estuarine Intertidal(2)	E2
b.Marine	Marine Inter.	M2
13. Eelgrass Bed	Estu Inter. Aquatic Bed Submergent Vascular(2)	E2AB2
14. Mudflat	Estu. Inter. Flat Mud(3)	E2FL3
15. Open Water		
a. Ocean	Marine Subtidal(1) Open Water	M1OW
b. Bay	Estuarine Subtid. Open Water	E1OW
c. Lake/Reservoir	Lacustrine Limnetic (1)	L1