US Army Corps of Engineers®

12501-SPD
REGULATORY PROGRAM
STANDARD OPERATING PROCEDURE
FOR DETERMINATION OF
MITIGATION RATIOS

South Pacific Division

Table of Contents

1.0 Purpose. The purpose of this document is to outline the process for determining compensatory mitigation requirements as required for processing of Department of the Army (DA) permits under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act. .

2.0 Applicability. This process applies to the Regulatory Program within South Pacific Division (SPD), including its four subordinate districts, Albuquerque District (SPA), Sacramento District (SPK), Los Angeles District (SPL),and San Francisco District (SPN). Subordinate offices or organizations shall not modify this procedure to form a specific procedure. This procedure is applicable for all "new" (not requests to re-verify or modify previously-issued permits) permit applications received after 20 April 2011. For NWPs re-verification requests where the mitigation ratio checklist was not completed previously, use of the checklist is required in order to ensure minimal impacts (including consideration of compensatory mitigation), to ensure compliance with the 2008 Mitigation Rule (33 CFR Part 332), and to comply with this new QMS procedure designed to ensure compensatory mitigation is sufficient to offset authorized impacts. For individual permits (SIP and LOP), if the original application predates this QMS procedure (effective 20 April 2011), the checklist would not be required for subsequent modification requests (time extension or activity modifications), unless the requested

modification includes a substantial increase in impacts. In addition, in cases where compensatory mitigation has already been constructed or where the applicant can otherwise fully demonstrate substantial resources have been expended or committed in reliance on previous guidance governing compensatory mitigation for DA permits, the checklist would not be required.

3.0 References.

Compensatory Mitigation for Losses of Aquatic Resources (33 C.F.R. Part 332).

Smith, R. D., D. R., A. Ammann, C. Bartoldus, M. M. Brinson. 1995. An Approach for Assessing Wetland Functions Using Hydrogeomorphic Classification, Reference Wetlands, and Functional Indices., Wetlands Research Program Technical Report WRP-DE-9. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi.

Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. (Adapted from1979). Classification of wetlands and deepwater habitats of the United States. Wetlands Subcommittee, Federal Geographic Data Committee https://www.fgdc.gov/standards/projects/wetlands/nwcs-2013 (Version August 2013).

Collins, J.N., E.D. Stein, M. Sutula, R. Clark, A.E. Fetscher, L. Grenier, C. Grosso, and A. Wiskind. 2008. California Rapid Assessment Method (CRAM) for Wetlands. Version 5.0.2. 151 pp.

4.0 Related Procedures.

None.

5.0 Definitions.

Compensatory mitigation - The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Condition - The relative ability of an aquatic resource to support and maintain a community of organisms having a species composition, diversity, and functional organization comparable to reference aquatic resources in the region.

Enhancement - The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation) - The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.

Functions - The physical, chemical, and biological processes that occur in ecosystems.

Impact - Adverse effect.

In-kind - A resource of a similar structural and functional type to the impacted resource.

In-lieu fee program - A program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument.

Mitigation bank - A site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

Out-of-kind - A resource of a different structural and functional type from the impacted resource.

Permittee-responsible mitigation - An aquatic resource restoration, establishment, enhancement, and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility.

Preservation - *T*he removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation- The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration - The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: reestablishment and rehabilitation.

Temporal loss - The time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site. Higher compensation ratios may be required to compensate for temporal loss. When the compensatory mitigation project is initiated prior to, or concurrent with, the permitted impacts, the district engineer may determine that compensation for temporal loss is not necessary, unless the resource has a long development time.

Watershed - A land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

6.0 Responsibilities.

Regulatory Project Managers (PMs): For any actions where the PM determines compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, he/she must follow the procedures provided herein to determine the amount of compensatory mitigation to replace lost aquatic resource functions, to the extent practicable. PMs must also complete the mitigation ratio checklist and include it in the administrative record.

7.0 Procedures.

Historically, the South Pacific Division (SPD) Regulatory Program has lacked a standardized process or guidance for determining compensatory mitigation ratios as required for processing of Department of the Army (DA) permits under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act. In addition, the 2008 mitigation rule (33 C.F.R. Part 332) does not provide a detailed process for determining compensatory mitigation ratios. However, it does provide some general guidelines and requires that the rationale for the required replacement ratio must be documented in the administrative record for the permit action. To address this long-standing need, a multi-district Project Delivery Team (PDT) was formed to develop a regional process for determining and documenting compensatory mitigation ratios, as well as accompanying guidance for Regulatory project managers. The purpose of this new, regional process is to reduce inconsistency between project managers, offices, and districts in determining compensatory mitigation requirements, to incorporate current scientific understanding of mitigation concepts, and to require documentation of these key decisions, thereby reducing uncertainty on behalf of the regulated community regarding compensatory mitigation requirements. In addition, this new process incorporates recommendations of various outside reports/studies calling for greater

consistency and documentation in how mitigation ratios are determined.

7.1 A PM receives a complete permit application, including a statement describing how impacts to waters of the United States are to be compensated for (hereinafter referred to as a "compensatory mitigation proposal") or a statement explaining why compensatory mitigation should not be required for the proposed impacts. At the applicant's discretion, he/she may provide a conceptual mitigation plan as part of the permit application.

7.2 Upon evaluation of the permit application, a PM may determine compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, and shall review the compensatory mitigation proposal or plan, if provided (or request a proposal or plan for review, if none was provided). If the compensatory mitigation proposal or plan does not contain sufficient information to complete the checklist, or the proposed mitigation is not appropriate, the PM will request a revised compensatory mitigation proposal or plan (such plan being conceptual, detailed or draft, as appropriate, for general permits (GP), and draft for standard individual permits).

7.3 The PM will complete the mitigation ratio checklist using the applicant's compensatory mitigation proposal or plan.

- A separate checklist shall be used for each impact site/type.
- Each mitigation site/type shall be entered into separate columns on the checklist.
- Additional mitigation shall be assessed if the compensatory mitigation proposal or plan does not sufficiently account for project impacts.
- PMs must enter a separate justification for each adjustment within the checklist.

7.3.1 For each impact site/type with one mitigation site/type, complete column "A."

7.3.2 For each impact site/type with multiple mitigation sites/types, complete columns for each mitigation site/type (columns A-B or A-C, for two or three mitigation site/types, respectively).

- The PM will complete the checklist for the first proposed mitigation site/type, using column "A", to determine the required compensatory mitigation ratio.
- The PM will then use column "B" to compare any remaining, unmitigated impact with a second mitigation site/type:
  - ✓ If a second site/type has been proposed by the applicant, or;
  - ✓ If the required ratio from column A is greater than that proposed by the applicant
- The PM will then use column "C" to compare remaining, unmitigated impact with a third mitigation site/type:

- ✓ If a third mitigation site/type has been proposed by the applicant, or;

- ✓ If the required ratio from column B is greater than that proposed by the applicant

7.3.3 If any impact remains unmitigated or more than three mitigation site/types have been proposed, complete additional checklists.

7.4 The PM will notify the applicant of the mitigation ratio determination. If the ratio(s) is (are) different than those proposed by the applicant, the applicant may either (a) agree to the Corps' mitigation ratio and submit a revised, draft mitigation plan that addresses the entire amount of compensatory mitigation for the Corps' review and approval; or (b) submit an alternative compensatory mitigation proposal/plan for evaluation by the PM. In the event the applicant elects option "b," the PM will prepare a new checklist.

7.5 Once a final mitigation ratio has been determined, the PM will then review and comment on the adequacy of the mitigation plan in accordance with 33 C.F.R. 332.4(c) and any subsequent mitigation and monitoring guidelines.

7.6 The final ratio must be included in the final mitigation plan, the decision document, and by special condition in the permit/final verification letter.

7.6.1 Some states within SPD's AOR contain over appropriated basins, which make it very difficult to obtain an adequate water right to secure site hydrology. In some SPD states the authority responsible for managing water rights may impose a 1:1 area-based limit on compensatory mitigation projects. In these situations, the PM is still required to determine a compensation ratio using the mitigation checklist. If adequate water rights are not available to support an establishment or re-establishment ratio greater than a 1:1, the PM will consider options such as non-consumptive enhancement/rehabilitation projects, preservation, buffer establishment/restoration and protection, and restoration of floodplain connectivity, to obtain appropriate and practicable compensatory mitigation.

Note: The process outlined herein can also be used for determining compensatory mitigation requirements for unauthorized activities for which the Corps is the lead enforcement agency.

8.0 Records and Measurements.

8.1 All documents listed above will be filed in the corresponding project files in accordance with ES-QMS140, Records Management.

Type	Description	Responsible Office	Location	Record Media	Retention	Disposition
R	Mitigation Ratio Checklists	Regulatory Divisions within SPD Districts/Field Offices	Project file folders in filing cabinets Regulatory Divisions within SPD Districts; Electronic Checklists in ORM Database	P/E	7 years	Send to records holding

8.2 A Mitigation Ratio Checklist shall be completed for each permit application and included in the administrative record.

8.3 The SPD Regulatory Program Manager and District Regulatory Division management shall periodically inspect project files to ensure compliance with this guidance.

9.0 Attachments.

9.1 12501.1-SPD Mitigation Ratio Checklist

9.2 12501.2- SPD Instructions for Preparing Mitigation Ratio Setting Checklist

9.3 12501.3-SPD Mitigation Ratio Checklist Examples

9.4 12501.4-SPD Before/After-Mitigation-Impact Spreadsheet – Step 3 BAMI

9.5 12501.5-SPD Mitigation Ratio Training Presentation

9.6 12501.6-SPD Mitigation Ratio Checklist in Excel format

10.0 Flow Chart.