

Checklist for Compensatory Mitigation Proposals

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Revised June 10, 2008

U. S. Army Corps of Engineers

Charleston District, Regulatory Branch

69 A Hagwood Avenue

Charleston, South Carolina 29403-5107

The following information will normally be required for consideration of a proposal regarding compensatory mitigation for adverse ecological effects. Applicants may choose to provide eight copies of proposals to expedite agency notification. The following information requirements relate exclusively to review of mitigation proposals. Other information may be needed as part of the Regional General Permit process, the Nationwide Permit process, or the Individual Permit process. Those requirements are not addressed by this checklist. Be careful to reference the applicant name, project title, and applicable file number on all submittals. In the following listing a mark means the indicated information is needed to complete the decision making process for your proposal.

Basics. The following marked items are required.

- Applicant's or permittee's name, address, and phone number.
- If an agent has been authorized, the agent's name, address, and phone number.
- Primary and secondary contact person's name and phone number.
- Names, addresses, and phone numbers for all parties responsible for mitigation and monitoring.
- The application or permit number for which the mitigation is proposed.
- The nearest waterway to the proposed mitigation site.
- The nearest town or city to the proposed mitigation site.
- The county where proposed mitigation will take place.
- A brief narrative description of the proposed mitigation, project location and the purpose of the project.

Certifications and Signatures. The following marked items are required.

- Signature of applicant and the date signed.
- Signature of authorized agent, if any, and the date signed.
- Signed statement from the applicant authorizing the agent to act for the applicant.
- Certification that the applicant possesses the authority to undertake the proposed activities.
- Certification that the applicant or agent is familiar with the information contained in the mitigation proposal, and believes such information is true, complete, and accurate.

Maps.

A map identifying the location of the mitigation site must be provided on an 8½ x 11" portion (or copy) of a USGS Quadrangle map. The name of the Quadrangle must be shown. A county or local road map showing the site must also be provided. All maps must have title blocks similar to the other drawing sheets. The location maps must show roads leading to the site and must include the name or number of these roads. The site latitude and longitude must be annotated on the maps.

General Drawing Requirements. The following marked items are required.

- Drawings must be provided on 8.5 x 11 inch paper. Each sheet must include:
 - a title block;
 - a north arrow (not required for cross section views);
 - an unused margin of no less than 0.25 inch and no greater than 2 inches;
 - an appropriate graphic scale (where reasonable or necessary).
- Plans must be drawn with dark pencil or ink. All drawings and writings must be clear, readable, and reproducible using standard (non-color) office copy machines. Do not duplex drawings.
- Drawings must be in black and white only. Do not use colored inks or pencils. Instead use shading, hatching, or other annotated graphic symbology.
- A legend must be shown identifying each type of graphic symbology (e.g., cross-hatching, shading) used.

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- Drawings must have all relevant dimensions shown for each view. It is desirable that a graphic drawing scale be shown. Do not use ratio scales (e.g., 1" = 80') on plans which will be reduced because ratio scaling will give inaccurate information on the reduced copy. Mark and label all important dimensions.
- The mitigation site latitude and longitude must be shown on the mitigation plans.
- If the plan involves dredging in navigable waters, the drawings must include:
 - the method of dredging;
 - the site and plans for disposal of the dredged material;
 - a description of the type, composition and quantity of the material to be dredged.
- If the plan includes the discharge of dredged or fill material into Waters of the United States or the transportation of dredged material, the drawings must include:
 - the source of the material;
 - a description of the type, composition and quantity of the material;
 - the method of transportation and disposal of the material;
 - the location of the disposal site.
- A title block is required for each drawing sheet (including maps). The title block must include the applicant's name, project name, project location, drawing date, drawing number (e.g., sheet __ of __), and sufficient unused space for future revision dates and a 12 digit tracking number.

Plan View and Cross-Section View Drawing Requirements.

- Plan and elevation drawings are required showing the general and specific site location and character of all proposed activities, including the size relationship of the proposed work to the size of the impacted aquatic area and depth of water.
- All mitigation areas must be shown (enhancements, creations, restorations, etc.).
- Plan views of the proposed mitigation must be included. The mitigation plan views must show all wetlands in the mitigation area, areas proposed to be filled or modified as part of the mitigation activity, the mitigation boundaries, the property and/or lot boundaries, roadways, structure locations, location of pertinent water contours (e.g., MHW, MLW, OHW), and other relevant information.
- All wetland areas within the project boundaries (avoided, impacted, or mitigated) must be shown.
- In tidal waters, show the direction of tidal ebb and flow.
- In non-tidal waters, the direction of all nearby river or stream flows must be shown.
- For non-preservation mitigation areas, cross section views must be shown through each mitigation area.
- Existing and proposed ground surface contours must be shown on each cross section view relative to an appropriate reference elevation.
- Contour and datum elevation references must be shown as follows:
 - In tidal waters, show the existing and proposed water depths and land elevations relative to the nearby mean low water (MLW) contour or elevation.
 - In tidal waters, show the MLW and mean high water (MHW) contours on all views.
 - In non-tidal, navigable waters (Federally navigable), existing and proposed water depths and land elevations must be shown relative to mean sea level (MSL).
 - In non-tidal, non-navigable waters (Federally non-navigable), existing and proposed water depths and land elevations may be shown relative to the nearby ordinary high water (OHW) contour, or to MSL.
 - In non-tidal waters, the OHW contour must be shown on all views.
 - In lakes, the normal high water (NHW) level of the lake must be shown on the plans.
 - Show the mean high tide line and spring high tide line of all affected and all adjacent tidal waterbodies.
 - Show the OHW line of all affected and all adjacent non-tidal open surface waterbodies (e.g., streams, lakes).
- All proposed or existing retaining structures (e.g. bulkheads) for dredged or fill material must be shown.
- Each proposed structure, work, fill, or excavation must be clearly shown and located with respect to either a plat line or some fixed immovable object.

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For projects which encroach upon or lie adjacent to a site on which the Federal government has an easement to either deposit dredged material or excavate to improve channel operations, the drawings must clearly show the extent of encroachment or indicate if none is intended.

Quantification of Impacts. Provide areas in acres and square feet and volumes in cubic yards. (applicable definitions are given below)

Total volume of fill tabulated by category of impacted areas. This tabulation must be shown on the drawings.

Total volume of dredging tabulated by category of impacted areas and shown on the drawings.

Total area adversely affected by the permitted activities, cross tabulated by type of impact and by category of impacted areas. This tabulation must be shown on the drawings.

Total area adversely affected by the proposed mitigation, cross tabulated by type of impact and by category of impacted areas. This tabulation must be shown on the drawings.

Total area positively affected by the proposed mitigation, cross tabulated by type of mitigation and by category of impacted areas. This tabulation must be shown on the drawings.

Definitions *Tabulated* means that the data is presented in tabular format (i.e., rows and columns). As used above, *cross tabulated* means that the data is presented in tabular format with the columns representing types (impact or mitigation) and the rows representing the categories of impacted areas. As used above, *type of impact* means the dominant effect. For examples: flooded, cleared, drained, excavated, filled, shaded. As used above, *category of impacted area* means the dominant type of aquatic environment affected by the activity. For examples: Carolina bay, emergent marsh, naturalized borrow pit, Lake Moultrie, Congaree River. As used above, *type of mitigation* means the dominant compensatory mitigation. For examples: creation, restoration, enhancement, preservation.

Avoidance and Minimization requirements.

Provide a statement describing how impacts to waters of the United States are to be avoided and minimized.

Include a statement describing how impacts to waters of the United States are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts.

Required Components for a Final Mitigation Plan.

Objectives. A description of the resource type(s) and amount(s) that will be provided, the method of compensation (i.e., restoration, establishment, enhancement, and/or preservation), and the manner in which the resource functions of the compensatory mitigation project will address the needs of the watershed, ecoregion, physiographic province, or other geographic area of interest.

Site selection. A description of the factors considered during the site selection process, including consideration of watershed needs, onsite alternatives where applicable and the practicability of accomplishing ecologically self-sustaining compensatory mitigation at the mitigation project site.

Site protection instrument. A description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project site.

Baseline information. A description of the ecological characteristics of the proposed compensatory mitigation project site and, in the case of an application of a DA permit, the impact site.

Determination of credits. A description of the number of credits to be provided, including a brief explanation of the rationale for this determination.

Mitigation work plan. Detailed written specifications and work descriptions for the compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired upland community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For stream compensatory mitigation projects, the compensatory mitigation work plan may also include other relevant information, such as planform geometry, channel form, watershed size, design discharge and riparian area plantings.

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- Maintenance plan. A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.
- Performance standards. Ecologically-based standards that will be used to determine whether the compensatory mitigation project is achieving its objectives.
- Monitoring requirements. A description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting on monitoring results to the district engineer must be included.
- Long-term management plan. A description of how the compensatory mitigation project will be managed after the performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management.
- Adaptive management plan. A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures.
- Financial assurances. A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed in accordance with its performance standards.

Other.

- Plans and detailed information regarding the work for which the proposal provides compensatory mitigation.
- A draft restrictive covenants document.
- A mitigation monitoring plan.
- A schedule showing earliest start and latest completion dates for all significant activities.
- A listing of measurable success factors with quantifiable criteria for determining success.
- Definitions for all success factors and other significant terms used in the plan.
- Description of the equipment, materials, and methods required for execution of the plan.
- A wetland delineation of the proposed mitigation site must be accomplished and the existing wetland boundaries must be shown on the proposed plans. If a delineation has already been verified by this office, you must provide the identification number cited in the verification letter or a copy of the letter.
- To evaluate your proposal it has been determined that cost information will be required. All cost estimates must include detailed cost breakdowns for each element in the mitigation plan with quantity take-offs, unit prices, contingency allocations, total costs, etc. All costs must be in current (present value) dollars. See the Project Specific notes given below or in the accompanying letter regarding the required cost information.
- To evaluate your proposal a narrative explanation must be submitted explaining the proposed schedule for the mitigation work. In addition, you should prepare and submit a Critical Path Method (CPM) or Program Evaluation and Review Technique (PERT) analysis for the mitigation work and related aspects of the overall project.
- To evaluate your proposal it has been determined that larger sized plans will be needed for review. Please submit a complete drawing set on paper sized no smaller than 18 x 24 inch and no greater than 30 x 42 inch. Copies of the larger sized plans must also be provided to the indicated agencies circled below.
- It has been determined that certified topographic maps or drawings will be needed showing the contours and elevations of the mitigation area. The submitted maps or drawings must show relevant information such as the locations of plantings, type of plantings, and other key elements of the mitigation plan. Copies must be provided to the indicated agencies circled below.

U. S. Army Corps of Engineers
Charleston District Regulatory Division
69 A Hagood Avenue
Charleston, South Carolina 29403-5107

U.S. Army Corps of Engineers
Conway Field Office
1949 Industrial Park Road, Room 140
Conway, South Carolina 29526

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U.S. Army Corps of Engineers
Columbia Field Office
Strom Thurmond Federal Bldg.
1835 Assembly Street, Rm. 865 B-1
Columbia, SC 29201

S. C. Dept. of Natural Resources
P. O. Box 12559
Charleston, SC 29412

U. S. Environmental Protection Agency
Region IV, Wetlands Protection Section
61 Forsyth Street
Atlanta, GA 30303

S. C. Dept. of Natural Resources
1201 Main Street, Suite 1100
Columbia, SC 29201

National Marine Fisheries Service
Habitat Conservation Division
219 Fort Johnson Road
Charleston, SC 29412-9110

S. C. Department of Archives & History
State Historic Preservation Office
8301 Parklane Road
Columbia, SC 29223-4905

S. C. Dept. of Health & Environmental Control
Bureau of Water Pollution Control
2600 Bull Street
Columbia, SC 29201

U. S. Department of Interior
Fish and Wildlife Service
176 Croghan Spur Road, Suite 200
Charleston, SC 29407

S. C. Dept. of Health & Environmental Control
Office of Ocean & Coastal Resource
Management
1362 McMillan Avenue, Suite 400
Charleston, SC 29405

Project Specific. The following additional information is required.