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Purpose of this SOP

This standard operating procedure (SOP) outlines the process for a TxDOT district to fulfill the requirement of wetland/stream compensatory mitigation under Section 404 of the Clean Water Act via Permittee Responsible Mitigation (PRM). The TxDOT district shall first attempt to use and implement the directives of the SOP Acquiring and/or Purchasing Section 404 Compensatory Mitigation Credits, and only use and implement this SOP if the project-specific mitigation needs cannot be met under the previously mentioned SOP. The project sponsor or department delegate may also reference the Section 404 Compensatory Mitigation Flowchart.

Subject Overview

Prior to authorizing discharge into Waters of the U.S. (WOTUS), attempts to avoid and minimize adverse impacts to WOTUS must be evaluated and considered to the extent practicable. For unavoidable impacts, compensatory mitigation may be required to replace the loss of aquatic functions. The U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (USEPA) 2008 Mitigation Rule (Compensatory Mitigation for Losses of Aquatic Resources; Final Rule [33 CFR Parts 325 and 332 and 40 CFR Part 230], effective on June 6, 2008) dictates that compensatory mitigation adhere to the following priority order: mitigation banks, in-lieu fee programs (none currently available in Texas), and PRM. The TxDOT district shall proceed to PRM only after determining that mitigation bank credits are not available, or not enough or the right type of mitigation credits are available.

For specific, up-to-date information on any current third-party mitigation providers that are currently under contract services with the State, please contact ENV-Water@txdot.gov.

Authorities

The use of this SOP is Environmental Affairs Division (ENV) policy in accordance with the USACE's 2008 Mitigation Rule.

Personnel

The TxDOT district, ENV, Right-of-Way Division (ROW), and General Counsel Division (GCD) have responsibilities in this SOP.



Procedure 1.0 – Confirm Mitigation Requirements with USACE

1.1. Confirm that Mitigation is Required, Confirm Type of Assessment Needed

If, after avoidance and minimization measures are completed, there are still unavoidable impacts to WOTUS, USACE may require compensatory mitigation. Determine USACE District where project impacts are located. Confirm with the USACE that likely impacts will require mitigation and what type of impact assessment is needed. The type of assessment and level of effort will differ by USACE District. If assessments were previously completed under the *SOP Acquiring and/or Purchasing Section 404 Compensatory Mitigation Credits*, determine a) if compensatory mitigation is still required, and in the same amounts; and b) the previously completed assessment was appropriate. If both questions can be answered in the affirmative, move to Procedure 2.0; if not, proceed to 1.2.

1.2. Complete Required Assessment of Impacted Resources

Complete required assessments of impacted jurisdictional resources (can include, but is not limited to, streams, wetlands, open water, etc.). For those USACE Districts that have conditional assessment methods in place (all except Albuquerque), the resulting number of debits¹ determined through the assessment process will equal the number of credits² of that resource type required as mitigation. In other words, the proposed amount of functional uplift (credits) at a mitigation site as determined through the same assessment process must at least equal the amount of impacts (debits) at the impact site. For the Albuquerque USACE District, ratios based off the number of impacts (generally in linear feet or acres) are used to determine mitigation need. For instance, 500 linear feet of perennial stream impacts at a 2:1 ratio would require 1,000 feet of perennial stream mitigation.

Assessments can be completed by consultants who are already completing the environmental work or under a separate contract, as appropriate. Assessment policy and guidance can be found for each USACE District on the Regulatory In-lieu fee and Bank Information and Tracking System (RIBITS) and USACE District websites, links to which are provided below. Effective dates, where given, are indicated. Confirm that the guidance or assessment method version is the latest available. If not, use latest available from the USACE.

- 1.2.1 Albuquerque: Ratio-setting checklist (streams and wetlands) <u>https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-</u> <u>Permits/Mitigation/</u> [effective January 2017]
- 1.2.2 Fort Worth Texas Rapid Assessment Method (TxRAM) (streams and wetlands) <u>https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Application-</u> <u>Submittal-Forms/</u> [version 2; effective September 2015]

¹ The assessment method output of aquatic resources to be impacted. For example, the output in the Texas Rapid Assessment Method (TxRAM) is a change in score (or delta; unit-less) between the existing condition and the impacted condition. This delta is then multiplied by the impacted unit amount (in linear feet or acres) to determine debits.

² The assessment method output of aquatic resources to be restored. For example, the output in TxRAM is a change in score (or delta; unit-less) between the existing condition and the restored condition. This delta is then multiplied by the restored unit amount (in linear feet or acres) to determine credits.



- 1.2.3 Galveston:
 - Wetlands: Interim Hydrogeomorphic Method (iHGM) /https://www.swg.usace.army.mil/Business-With-Us/Regulatory/Wetlands/Functional-Assessment/ [no date given on iHGM model documents, though the District wetland SOP is dated September 2008]
 - Streams: Stream Level I and Level II SOP
 <u>https://www.swg.usace.army.mil/Business-With-Us/Regulatory/Streams/</u>
 [Level I effective date June 2013; Level II effective date March 2014]
- 1.2.4 Tulsa: TxRAM or other approved assessment (streams and wetlands) <u>https://www.swt.usace.army.mil/Missions/Regulatory/Mitigation/</u> [version 2; effective September 2015]
- 1.3 Confirm Type and Amount of Required Mitigation with USACE

Share assessment results with the USACE to confirm type and amount of mitigation that will be required at permitting.



Procedure 2.0 – Identify the PRM Provider or PRM Planner and Provider, and Potential Mitigation Site

2.1 Determine whether the consultant currently working on the Section 404 permit will (1) develop the PRM plan and identify a PRM provider, or (2) simply identify a PRM planner and provider.

If the Section 404 consultant will develop the PRM plan and identify a PRM provider, then the TxDOT district issues supplemental work authorization to the Section 404 consultant to develop the PRM plan and identify a PRM provider (assuming this is within the scope of the contract with the Section 404 consultant and not covered by a previous work authorization). Note that if development of the PRM plan will require any engineering or surveying services, it may not be possible to have the Section 404 consultant develop the PRM plan, as engineering and survey contracts are different than scientific services contracts.

If the Section 404 consultant will simply identify a PRM planner and provider, then the TxDOT district issues supplemental work authorization to the Section 404 consultant to identify a PRM planner and provider (assuming this is within the scope of the contract with the Section 404 consultant and not covered by a previous work authorization).

In identifying the PRM planner and provider or the PRM provider, Section 404 consultant provides a written analysis of why the PRM planner and provider or the PRM provider will provide the best value to TxDOT.

- 2.2 Execute turnkey agreement with PRM Planner and Provider (only if the same entity will be both the planner and provider if the Section 404 consultant will be the planner, then execution of an agreement with the Provider will occur after USACE's approval of the PRM plan).
 - Determine what source of funding will be used for the turnkey agreement, which would typically be either district funds or ROW funds. The project sponsor or department delegate will develop the Mitigation Memo Packet that requests funding from District/ ROW Funds. See SOP: Acquiring and/or Purchasing Mitigation Credits when submitting the Mitigation Memo Packet for District/ROW funds.
 - TxDOT will negotiate a turnkey agreement with the PRM planner and provider under the authority of Transportation Code, §201.617(a)(1), which provides TxDOT with the authority to "pay a fee to an appropriate public agency or private entity in lieu of acquiring or agreeing to manage property" to mitigate an adverse environmental impact from a highway project.
 - Under the turnkey agreement, the PRM planner and provider assumes full
 responsibility and liability for the planning, development, implementation,
 construction, oversight, monitoring, and completion of the PRM plan,
 including site acquisition and ownership. There are two main phases under
 the turnkey agreement planning and providing. The providing part only
 happens after USACE approves the plan.



- The turnkey agreement with the PRM planner and provider must be approved by GCD, the district, and ENV. If ROW funds will be used, the turnkey agreement must also be approved by ROW.
- TxDOT executes the turnkey agreement with the PRM planner and provider.
- 2.3 Mitigation Site Identification (this might have been done prior to execution of the turnkey agreement with the PRM planner and provider)

Based on the 2008 Mitigation Rule, a watershed approach shall be used in the selection, design, and siting of compensatory mitigation projects, which can include, but is not limited to, stream or wetland restoration, enhancement, establishment (creation), or in certain cases, preservation. With a watershed approach, compensatory mitigation can be on- or off-site, and both may be evaluated during the site identification process. A watershed approach seeks to maintain and improve the quality and quantity of aquatic resources in relative proximity to impacts, which generally means within the same watershed (8-digit Hydrologic Unit Code [HUC] at the largest scale). Important considerations for use with a watershed approach include, among others: 1) current trends in habitat loss or conversion; 2) sources of watershed impairments; 3) cumulative impacts of past development activities; 4) site conditions that might hinder the success of compensatory mitigation (e.g., encroaching development); and 5) presence and habitat requirements of sensitive species. The level of information and analysis needed will vary and should be commensurate with the scope and scale of aquatic resource impacts.

As even the development of a draft plan requires more detailed surveys and design work, it is imperative that the USACE be allowed to comment during site selection to ensure ultimate approval of the mitigation plan.

2.4 Site Feasibility

Regardless of the contracting mechanism employed, the PRM planner or PRM planner and provider will look for sites (generally in the 8-digit HUC) that meet the mitigation need as determined in Procedure 1.0. Landowners of potential sites will be contacted to ascertain their willingness to sell an easement or property to the PRM provider. If the landowner is willing, the preferred site will have a preliminary assessment completed to determine if proposed mitigation techniques will result in enough aquatic resource credits to satisfy the mitigation need.

The PRM planner or PRM planner and provider shall work to select the most desirable property for the proposed PRM Plan. Ecologists must perform wetland delineations and functional analyses of the properties to determine suitability for wetland mitigation. The PRM planner or PRM planner and provider will perform Phase I Environmental Site Assessments, title searches, title opinions, and civil surveys of the selected properties, as appropriate, in keeping with both federal regulations and compensatory mitigation best practices. The TxDOT district and ENV will participate in discussions with the PRM planner or PRM planner and provider and the USACE during the site feasibility determinations.

If no sites can be located in the 8-digit HUC watershed, it will be necessary for the PRM planner or PRM planner and provider to consult with the USACE to determine appropriate next steps or ratios for out of watershed sites. Based on site feasibility and alternatives analyses, relative risk, and cost, select which site(s) will continue through the approval process with development of a draft mitigation plan (next procedure).



PRM planner or PRM planner and provider provides a written analysis of why the selected site will provide the best value to TxDOT.



Procedure 3.0 – Draft Mitigation Plan Development

- 3.1 The PRM planner or the PRM planner and provider will develop a draft mitigation plan using USACE District template guidance and/or PRM checklists where available. PRM planner or PRM planner and provider provides a written analysis of why the draft plan will provide the best value to TxDOT. The draft plan will allow official review by the regulatory agencies before project permitting, when a final mitigation plan will be submitted. Links to relevant guidance or checklists are provided below. Effective dates, where given, are indicated. Confirm that the guidance or checklist is the latest available, as these are subject to periodic change.
 - 3.1.1 Albuquerque: use regional guidelines for mitigation plan requirements; no District specific checklist or guidance available. <u>https://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf</u> [effective date January 2015]
 - 3.1.2 Fort Worth:
 - Mitigation plan templates: <u>https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Mitigation-Templates/</u> [effective date October 2016]
 - PRM guidance: <u>https://www.swf.usace.army.mil/Portals/47/docs/regulatory/Permitting/MitigationTemplates/</u> <u>PRM_Guidelines.pdf?ver=2016-10-27-113321-103</u> [effective date October 2016]
 - 3.1.3 Galveston: use national guidelines for mitigation plan requirements; no District specific checklist or guidance available. See Appendix C for national guidance on Mitigation Plan components.
 - 3.1.4 Tulsa: District-specific mitigation guidelines and mitigation plan checklist available. <u>https://www.swt.usace.army.mil/Portals/41/docs/missions/regulatory/mitigation/MMG.pd</u> <u>f</u> [effective date October 2004] and <u>https://www.swt.usace.army.mil/Portals/41/docs/missions/regulatory/mitigation/AppD-<u>Chklist.pdf</u> [not dated]</u>
- 3.2 The TxDOT district and ENV reviews the draft mitigation plan and works with the PRM planner or PRM planner and provider to finalize for submittal to the USACE.
- 3.3 The PRM planner or PRM planner and provider submits the draft mitigation plan to the USACE for review and comment. Depending on the time of the permit application, the mitigation plan will be posted for public notice (allowing agency review and comment) or submitted as part of an internal agency review if the permit has already gone out on public notice. After review and comment, the mitigation plan can be finalized and purchase of property or an easement by the PRM provider can occur. Texas Commission on Environmental Quality (TCEQ) review and 401 certification of the mitigation site will be part of the 404 permit process. This step ends with USACE concurrence of the mitigation plan.



Procedure 4.0 – Execute Agreement with PRM Provider (only if there was a separate PRM planner – otherwise, skip to Procedure 5.0)

- 4.1 Determine what source of funding will be used for the turnkey agreement with the PRM provider, which would typically be either district funds or ROW funds.
- 4.2 TxDOT will negotiate a turnkey agreement with the PRM provider under the authority of Transportation Code, §201.617(a)(1), which provides TxDOT with the authority to "pay a fee to an appropriate public agency or private entity in lieu of acquiring or agreeing to manage property" to mitigate an adverse environmental impact from a highway project.
- 4.3 Under the turnkey agreement, the PRM provider assumes full responsibility and liability for the development, implementation, construction, oversight, monitoring, and completion of the PRM plan, including site acquisition and ownership.
- 4.4 The turnkey agreement with the PRM provider must be approved by GCD, the district, and ENV. If ROW funds will be used, the turnkey agreement must also be approved by ROW.
- 4.5 TxDOT executes the turnkey agreement with the PRM provider.



Procedure 5.0 – PRM Construction, Monitoring, and Closeout

- 5.1 The PRM provider implements all aspects of the PRM plan, including site acquisition. Construction oversight will be completed by the PRM provider.
- 5.2 As-built drawings: the PRM provider will generate as-built drawings and a report, which will be submitted to USACE. As-builts document the stream length or wetland acreage actually restored or enhanced (which may differ from the mitigation plan), location of in-stream structures (where applicable), and species planted and in what densities. The as-built report serves as the baseline upon which yearly monitoring results will be compared. *NOTE: although the stream length or acreage actually restored or enhanced may differ from the mitigation plan, the approved mitigation quantity (Functional Capacity Unit [FCU]) FCU, acreage, length, etc.) must be achieved by the overall project.*
- 5.3 Annual PRM Monitoring: the PRM provider must monitor the PRM project after construction to ensure performance standards described in the mitigation plan are met. The monitoring period is typically 5 to 10 years, though the duration will be defined in the final mitigation plan. The types of monitoring activities to be completed are generally cataloged in the mitigation plan and can include but are not limited to 1) cross-section surveys; 2) visual inspection of in-stream structures; 3) permanent vegetation plots and photo stations; 4) installation and monitoring of wetland and stream gauges; and 5) wetland delineations. The PRM provider will complete annual monitoring activities and produce a report, which compiles yearly monitoring results and evaluates whether the PRM project is meeting its performance standards. The PRM provider submits the report to the appropriate USACE District and should follow District monitoring and reporting guidelines or templates, where applicable.
 - 5.3.1 Albuquerque: regional monitoring guidelines and report form template available <u>https://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf</u> [effective January 2015]
 - 5.3.2 Fort Worth: District-specific monitoring report form available <u>https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Mitigation-Templates/</u> [no effective date given, but this website should be updated with the most recent version]
 - 5.3.3 Galveston: none available; recommend using another District guidance as a template
 - 5.3.4 Tulsa: District-specific monitoring and report guidelines available <u>https://www.swt.usace.army.mil/Portals/41/docs/missions/regulatory/mitigation/MMG.pdf</u> [effective date October 2004]
- 5.4 The PRM provider will perform adaptive maintenance as needed to meet performance standards as defined in the mitigation plan. This type of maintenance may include fencing repair, adjustment of in-stream structures, re-planting, etc.
- 5.5 Project close-out: once the monitoring period has concluded and USACE accepts the mitigation, the PRM provider will transfer easement and long-term management responsibilities/monies to a 3rd party conservation organization (unless the PRM provider will retain ownership in perpetuity).



Appendix A: Acronyms and Definitions

Acronyms

Acronym	Full Name
CSJ	Control Section Job Number
ENV	Environmental Affairs Division
FCU	Functional Capacity Unit
GCD	General Counsel Division
HUC	Hydrologic Unit Code
iHGM	Interim Hydrogeomorphic Method
NRM	Natural Resources Management Section
POC	Point of Contact
PRM	Permittee Responsible Mitigation
RIBITS	Regulatory In-lieu Fee and Bank Information Tracking System
ROW	Right-of-Way Division
SOP	Standard Operating Procedure
SWA	Supplemental Work Authorization
TCEQ	Texas Commission on Environmental Quality
TxDOT	Texas Department of Transportation
TxRAM	Texas Rapid Assessment Method
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
WOTUS	Waters of the United States



Appendix B: Revision History

Effective Date	Reason for and Description of Change
May 2025	Version 3 was released. The project sponsor or department delegate may also reference the Section 404 Compensatory Mitigation Flowchart.
November 2024	Version 2 was released. SOP number 2 assigns the project sponsor and department delegate the responsibility to develop the Mitigation Memo Packet that requests funding from district/ROW funds.
September 2020	Version 1 was released.