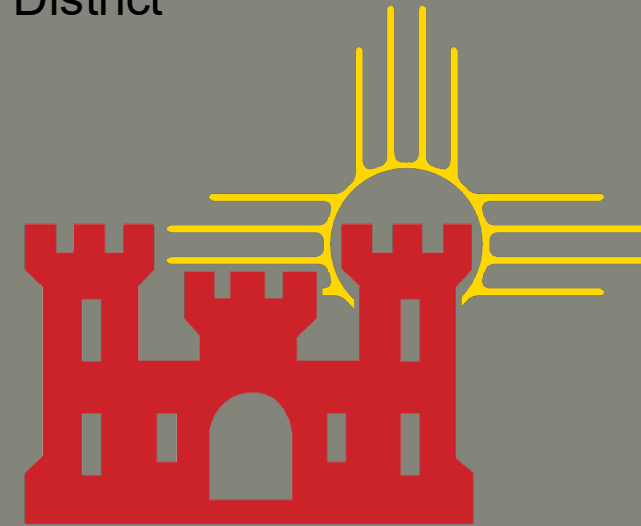


COMPENSATORY MITIGATION 101

South Pacific Division, Albuquerque District

May 5th, 2022



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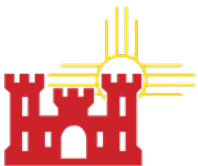




MITIGATION RULE (33 CFR 332)



- Published on April 10, 2008
- Establishes standards and criteria for the use of all types of compensatory mitigation
- Includes permittee responsible mitigation (PRM), mitigation banks, and in-lieu fee programs (ILF programs)
- Offset unavoidable impacts to waters of the U.S. authorized through a Department of the Army Permit
- Includes compensatory mitigation for impacts authorized pursuant to:
 - Section 404 of the Clean Water Act
 - Section 9 and/or 10 of the Rivers and Harbors Act





MITIGATION SEQUENCING (33 CFR 332.1(C))



- Mitigation: the action of reducing the amount or severity of impacts
- 1. Avoidance: First avoid impacts if there is a practicable alternative with less impact (i.e., activities in uplands).
- 2. Minimization: Second, minimize adverse impacts through Best Management Practices or other measures.
- 3. Compensatory Mitigation: Compensate for unavoidable impacts to replace lost functions and services.

<https://www.ecfr.gov/current/title-33/chapter-II/part-332>





COMPENSATORY MITIGATION



Compensatory mitigation means the restoration, establishment, enhancement, or preservation of aquatic resources to offset unavoidable adverse impacts (33 CFR 332.2)

Compensatory mitigation is required to replace the loss of wetland and aquatic resource functions and services in the watershed:

- After all avoidance and minimization has been achieved
- Mitigation should be directly related to the impacts of the proposal, appropriate to the scope and degree of impacts, and reasonably enforceable (33 CFR 320.4(r)(2))





WHEN DO WE REQUIRE COMPENSATORY MITIGATION?



- **Permanent losses of wetlands greater than 0.10 acre** (2021 NWP GC #23(c))
- **Permanent losses of stream beds greater than 0.03 acre** (2021 NWP GC #23(d))
- Some permanent impacts that are not losses of waters of the U.S.
 - To compensate for reduction or loss of functions and services
- To offset indirect effects
- To compensate for cumulative effects





TYPES OF COMPENSATORY MITIGATION (PART 1)



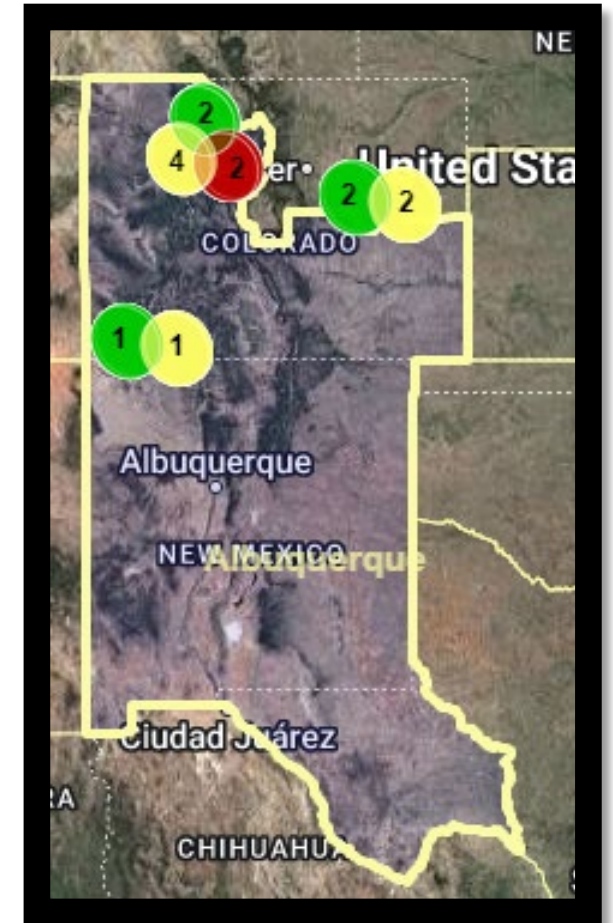
Mitigation Bank

- Third Party Compensatory Mitigation
- Sponsor assumes responsibility for the mitigation
- Permittees acquire credits to provide compensatory mitigation

In- Lieu Fee Programs

- Third party compensatory mitigation
- Sponsor is a governmental or non-profit natural resource management entity
- Sell Advance credits to collect funds in Program Account
- Funds are used to plan, establish, and manage future ILF Projects

**Currently there are no Mitigation Banks
or ILF Programs in New Mexico/West Texas ☹️**





TYPES OF COMPENSATORY MITIGATION (PART 2)



Permittee Responsible Mitigation (PRM)

- Compensatory mitigation undertaken by the permittee
- Responsibility for the compensatory mitigation stays with the permittee in perpetuity
- Mitigation sites should be selected using the watershed approach
 - (33 CFR 332.3(c)/40 CFR 230.93(c))
 - considers the importance of landscape position and resource type of mitigation projects for the sustainability of aquatic resource functions within the watershed
- Can be:
 - On-site or off-site
 - In-kind or out-of-kind
 - Off-site or out-of-kind can affect your mitigation ratio
- Mitigation plan is reviewed and approved during the permit review process on case-by-case basis.





PREFERENCE HIERARCHY



The Mitigation Rule gives a strong preference to the use of mitigation bank credits where available. (33 CFR 332.3(b))

- 1) ~~Mitigation bank credits~~
- 2) ~~In-lieu fee program credits~~
- 3) Permittee-responsible mitigation under a watershed approach
- 4) On-site and/or in-kind permittee-responsible mitigation
- 5) Off-site and/or out-of-kind permittee-responsible mitigation





COMPENSATORY MITIGATION METHODS

33 CFR 332.3(A)(2)



- Restoration: Re-establishment or rehabilitation of an aquatic resource.
 - Rehabilitation: repairing natural/historic functions to a degraded aquatic resource
 - Re-establishment: creating an aquatic resource where one previously existed
- Establishment: Creation of an aquatic resource where one did not previously exist.
- Enhancement: Heighten, intensify, or improve aquatic resource functions
- Preservation: Permanent protection of aquatic resources through legal and physical mechanisms.





PROCEDURES FOR DETERMINATION OF COMPENSATORY MITIGATION RATIOS



SPD Procedures for Determination of Compensatory Mitigation Ratios are publicly available:

<https://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/ratio/12501-SPD.pdf>

Requires the use of the mitigation ratio setting checklist

A separate checklist must be used for each impact site.

Coordinate with Corps PM to determine mitigation ratio and facilitate discussion on the amount of compensatory mitigation required





MITIGATION RATIO SETTING CHECKLIST



- Tool to determine and document the appropriate amount and type of compensatory mitigation

Attachment 12501.1 - SPD Mitigation Ratio Setting Checklist (See Revisions Sheet at [12501-SPD](#))

1	Date: _____ Corps file no.: _____ Project Manager: _____ Impact site name: _____ ORM impact resource type: _____ Hydrology: _____ Impact Cowardin or HGM type: _____ Impact area (acres): _____ Impact distance (linear feet): _____			
		Column A: Mitigation site name: _____ Mitigation type: _____ Resource type: _____ Cowardin/HGM type: _____ Hydrology: _____	Column B (optional): Mitigation site name: _____ Mitigation type: _____ Resource type: _____ Cowardin/HGM type: _____ Hydrology: _____	Column C (optional): Mitigation site name: _____ Mitigation type: _____ Resource type: _____ Cowardin/HGM type: _____ Hydrology: _____
2.a	QUALITATIVE impact-mitigation comparison: For preservation, complete steps 2.c. and 3. For other mitigation methods, has a Corps-approved functional/condition assessment been obtained? If not, complete step 2.a*; otherwise, complete step 2.b. *Optional: use Table 2 page 4. Yes <input type="checkbox"/> No <input type="checkbox"/>	Starting ratio: 1:1 Ratio adjustment: _____ Baseline ratio: _____ PM justification: _____	Starting ratio: 1:1 Ratio adjustment: _____ Baseline ratio: _____ PM justification: _____	Starting ratio: 1:1 Ratio adjustment: _____ Baseline ratio: _____ PM justification: _____
2.b	QUANTITATIVE impact-mitigation comparison: Use step 2.b if a Corps-approved functional/condition assessment has been obtained. Use Before-After-Mitigation-Impact (BAMI) spreadsheet (attachment 12501.4). See examples in attachment 12501.2.	Baseline ratio from BAMI procedure (attached): _____	Baseline ratio from BAMI procedure (attached): _____	Baseline ratio from BAMI procedure (attached): _____
2.c	Preservation baseline ratio (complete Table 2 step A).	Baseline ratio: _____:1 PM justification: _____	Baseline ratio: _____:1 PM justification: _____	Baseline ratio: _____:1 PM justification: _____
3	Description adjustment (complete Table 2 step B)	Ratio adjustment: _____	Ratio adjustment: _____	Ratio adjustment: _____





FACTORS THAT COULD INCREASE THE AMOUNT OF COMPENSATORY MITIGATION REQUIRED

12



- Mitigation site location
- Net loss of aquatic resource surface area
- Type conversion
- Risk and Uncertainty
- Temporal loss
- Type of compensatory mitigation
(Establishment, Rehabilitation,
Enhancement, Preservation)





PERFORMANCE STANDARDS

- Ecologically-based standards that will be used to determine whether the mitigation project is achieving its objectives.
- SPD has developed uniform performance standards that should be considered
<https://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/ups/12505.pdf>
- Monitoring Plans
 - Description of parameters monitored to determine whether the mitigation project is on track to meet performance standards and if adaptive management is needed.
 - A schedule for monitoring and reporting monitoring results
 - <https://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/558934/final-regional-compensatory-mitigation-and-monitoring-guidelines/>



Table 3. Performance Standards for Mitigation Wetlands

Category- No.	Performance Standard	Interim and Final (Year 5) Performance Standards ¹				
		Year 1	Year 2	Year 3	Year 4	Year 5
<i>Hydrologic-1</i>	The duration of inundation of each mitigation wetland must fall within the range of duration of inundation of the reference wetlands.	25%	40%	60%	80%	100%
<i>Flora-1</i>	The absolute cover of wetland plants (OBL, FACW, and FAC) in each mitigation wetland must fall within the range or exceed the absolute cover of wetland plants found within the reference wetlands.	25%	40%	60%	80%	100%
<i>Flora-2</i>	The absolute cover of non-native plants within each mitigation wetland will be less than or fall within the range of the absolute cover of non-native plants observed in the reference wetlands.	25%	40%	60%	80%	100%
<i>Flora-3</i>	The number of different native plant species observed in each established wetland will be equal to or more than the average number of native plant species observed in the reference wetlands.	25%	40%	60%	80%	100%

¹The percentages in this table represent the number of mitigation wetlands passing a given performance standard when compared to the total number of mitigation wetlands constructed.



FINANCIAL ASSURANCES



33 C.F.R. 332.4(c)(2) - (c)(14)

- Provide contingency funding for a third party to complete compensatory mitigation
 - Generally provided as bonds or letters of credit. See IWR White Paper: *Implementing Financial Assurances for Mitigation Project Success*. Government agencies may propose alternative mechanisms.
- https://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/Financial_Assurance.pdf

Types of Financial Assurances include:

- Letter of Credit
- Performance Bond
- Cash in Escrow (Escrow Account)
- Casualty Insurance
- Legislative Appropriations



33 CFR 332.3(n)(2) identifies “performance bonds, escrow accounts, casualty insurance, letters of credit, legislative appropriations for government sponsored projects, or other appropriate instruments.





FINANCIAL ASSURANCES (CONT'D)



- Amount of financial assurance (section 3.5.1 of IWR White Paper)
- The assurance amount should reflect all possible component costs of repairing or replacing a failed mitigation project under the worst-case scenario (i.e. complete project failure).
 - Consider Mitigation and/or Management Plan and Conservation Easement requirements
 - Identify specific tasks/materials to meet requirements
 - Determine frequency for each task/material needed
 - For short-term, include contingency funding

contractor. The cost estimates reflect the cost-opinion to conduct the work described in the Development Plan (Exhibit C-1 of the BEI).

Table 1. Construction Phase I: Vernal Pool, Seasonal Wetland, Stream, Pond Earthwork, Grading, and Cattle Exclusionary Fencing Installation

Activity	Total Estimated Cost
1.0 Demolition and Site Preparation	\$69,006
2.0 Vernal Pool Earthwork	\$489,942
3.0 Seasonal Wetland Earthwork	\$77,032
4.0 Stream and Pond Earthwork	\$14,898
5.0 Erosion Control, Seeding, and Planting	\$92,758
6.0 Fencing & Gates	\$218,300
Subtotal	\$961,936
Contingency (20%)	\$192,387
Phase I Grand Total	\$1,154,323

Table 2. Construction Phase II: Riparian Plantings Development, Irrigation,

Activity	Total Estimated Cost
1.0 Mobilization	\$5,000
2.0 Planting	\$407,413
3.0 Irrigation	\$519,220
Phase II Subtotal	\$931,633
Contingency (20%)	\$186,327
Phase II Grand Total	\$1,117,960





LONG-TERM SITE PROTECTION



Site Protection Instruments

- Required for permittee-responsible mitigation, mitigation banks, and ILF projects
- Description of legal arrangements, including:
 - Site ownership
 - Management
 - Enforcement of any restrictions
- Types of Instruments include:
 - Real estate instrument
 - Management plan
 - Other long-term protection instrument





LONG-TERM SITE PROTECTION (CONT'D)



- **Conservation Easements**
 - An interest in real property that precludes the property owner from using the property in ways that would adversely affect the conservation values of the mitigation site.
- **Restrictive Covenants/Deed Restriction**
 - A condition in a deed limiting or prohibiting certain uses of real property.
- **Transfer of Title**
 - Property transferred to a natural resource management federal agency, land trust, or other non-profit entity.
- **Conservation Land Use Agreement (CLUA)**
 - Includes Federal Facility Management Plan, Integrated Natural Resources Management Plan (for mitigation sites on Federal/State land).
- **Multi-Party Agreements**
 - MOA or MOU among several interested parties to protect a property





RELEVANT REGULATIONS AND RESOURCES



Corps Mitigation Rule (33 CFR 332): <https://www.ecfr.gov/current/title-33/chapter-II/part-332>

SPD Publications related to Mitigation:

<https://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf>

SPD Regional Compensatory Mitigation and Monitoring Guidelines:

<https://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/558934/final-regional-compensatory-mitigation-and-monitoring-guidelines/>

Implementing Financial Assurance for Mitigation Project Success, IWR, March 2016:

https://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/Financial_Assurance.pdf

SPA Mitigation Webpage: <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/Mitigation/>

