Compensatory Mitigation Plan Requirements

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Objective

- Brief overview of mitigation process/sequence
- Define compensatory mitigation
- Identify requirements of a compensatory mitigation plan

Mitigation

Required Sequence

- Avoidance
- Minimization
- Compensation

Definition

Compensatory mitigation means 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.

Compensatory Mitigation

- Identified in 33 CFR 332 (April 10, 2008)
  - "Mitigation Rule"
  - 332.4(c) (2-13): Permittee Responsible
- Set a consistent bar
- Replaced previous guidance
- Culmination of best practices of successes and lessons learned from past failures

Compensatory Mitigation Hierarchy*

- Mitigation Banks (MB)
- In Lieu Free Programs (ILF)
- Permittee Responsible Mitigation (PRM)
  - Under a watershed approach
  - Onsite/In-kind
  - Offsite/Out-of-kind

*Soft preference, not mandatory

12 Elements of a Compensatory Mitigation Plan

12 Elements

1. Objectives
2. Site Selection
3. Site Protection Instrument
4. Baseline Information
5. Determination of Credits
6. Mitigation Work Plan
7. Maintenance Plan

12 Elements Cont'n

8. Performance Standards
9. Monitoring Requirements
10. Long-term Management Plan
11. Adaptive Management Plan
12. Financial Assurances

Objectives

A description of:

- Aquatic resource type(s) and amount(s) to be provided
- Method of compensation (restoration, establishment, preservation etc.)
- How the anticipated functions of PRM site will address watershed needs

Site Selection

A description of the factors considered during the site selection process. This should include:

- Consideration of watershed needs
- Onsite alternatives, where applicable
- Practicability of accomplishing ecologically self-sustaining 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 mitigation site.

- Conservation Easements
- Dead Restrictions
- Government Entity Open Space/Preserve Management Plan*

*Requires justification why other options are not used

Baseline Information

Description of the ecological characteristics:

- Needed for impact and PRM sites
- Historic and existing:
  - ► Plant communities, hydrology, soil conditions
  - ► Include a delineation of aquatic resources for the PRM site
- Other characteristics appropriate to the type of resource proposed as compensation
  - ► Adjacent land uses, easements, mineral rights
- Reference Site characteristics, if used (recommended)
- *For MB/ILF use- only needs to provide baseline information about the impact site

Determination of Credits

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

- For PRM, include an explanation of how mitigation project will provide the required compensation for unavoidable impacts.
  - How PRM compares to impact site, in watershed, risk and uncertainty factors
- For MB/ILF, number and resource type of credits to be secured and how these were determined

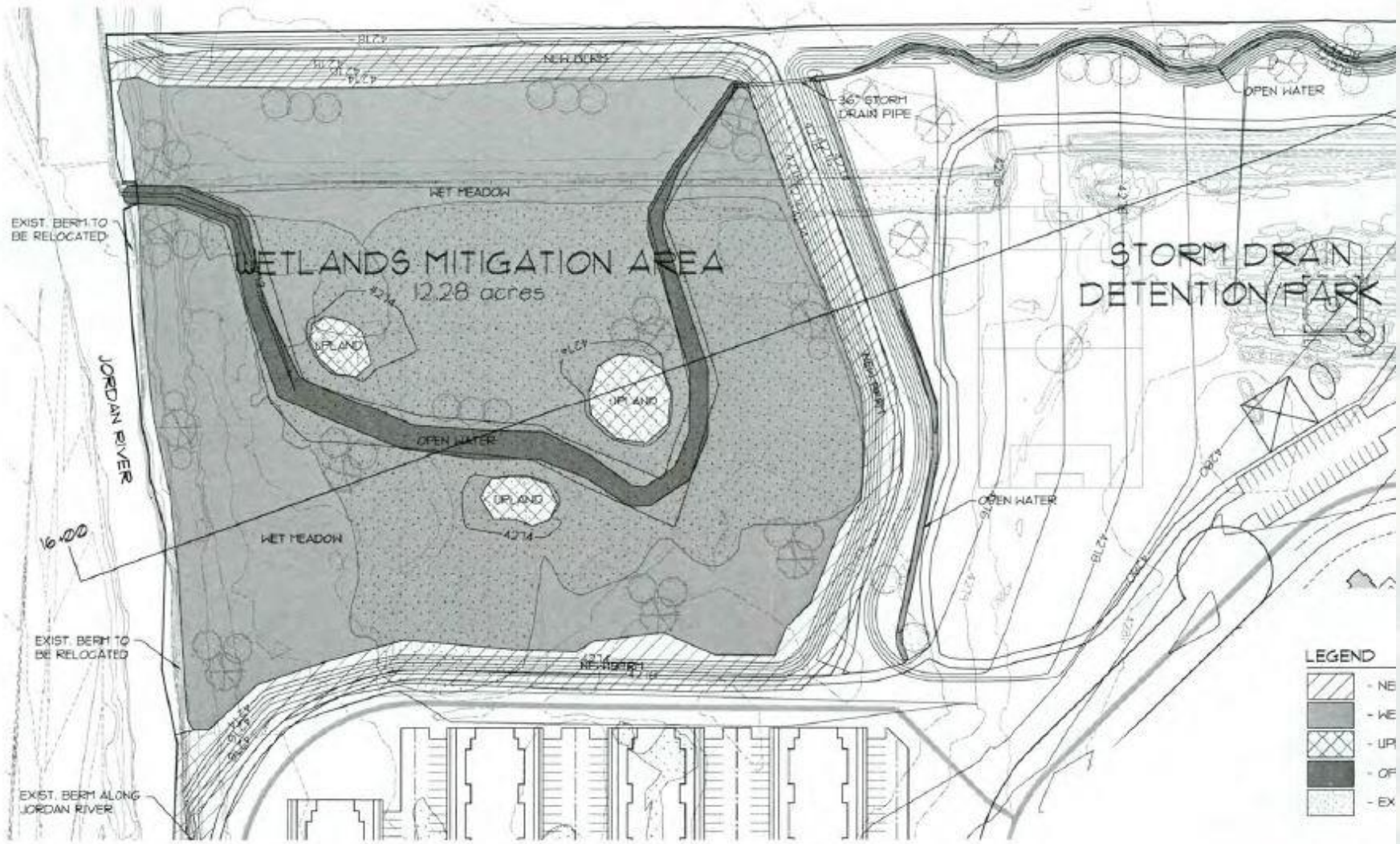
Mitigation Work Plan

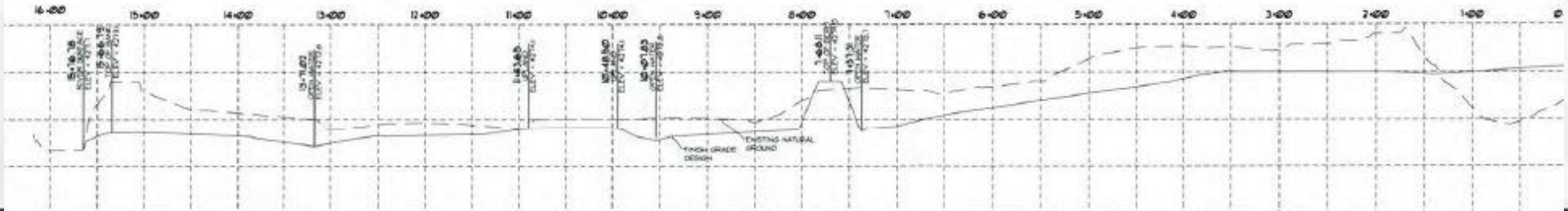
Detailed written specifications and work descriptions for the PRM project, including:

- The geographic boundaries;
- Construction methods, timing, and sequence;
- Source(s) of water (water right needed/secured?);
- Method(s) for establishing the desired plant community;
- Plans to control invasive plant species;
- Proposed grading plan;

Stream mitigation projects, mitigation work plan may also include:

- Planform geometry
- Channel form (e.g., typical channel cross-sections);
- Design discharge;
- Riparian area plantings


WETLANDS MITIGATION AREA
12.28 acres
STORM DRAIN
DETENTION/PARK
WET MEADOW
OPEN WATER
UPLAND
JORDAN RIVER
EXIST. BERM TO BE RELOCATED
EXIST. BERM ALONG JORDAN RIVER
36" STORM DRAIN PIPE
NEW BERM
16+00
LEGEND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3+00
2+00
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FINISH GRADE DESIGN
EXISTING NATURAL GROUND

Maintenance Plan

A description and schedule of maintenance activities required to ensure the continued viability of the resource once initial construction is completed.

- Weed spraying
- Irrigation
- Maintaining fences

Performance Standards

Ecologically-based standards that will be used to determine whether the mitigation project is achieving its objectives.

- Use SPD Uniform Performance Standards (UPS)
  - ►Assume successful PRM site end state

  -or-

  - ►Characterize reference site (recommended)

Attachment 12505.2 Worksheet for SPD Uniform Performance Standards for Compensatory Mitigation Requiren

Number/Categories:	Performance Standards:		Targets ("R" indicates reference):	
1	Date: DA no.: Project manager:	Mitigation site name: Cowardin/HGM type: Habitat type: Site coordinates: Center/1st endpoint: Lat: Lon: 2nd endpoint (if linear) Lat: Lon:	Reference site name: Site coordinates: Center/1st endpoint: Lat: Lon: 2nd endpoint (if linear) Lat: Lon:	
2	Mitigation objective(s) to improve: [ ] habitat conservation/biodiversity; [ ] water storage/flow attenuation; [ ] water quality; [ ] target population of special status biot aquatic resource function(s); [ ] other:			
3	Mitigation type (select one): [ ] re-establishment; [ ] establishment; [ ] rehabilitation; [ ] enhancement			
	If enhancement, indicate function(s) to be increased: function 1:	function 2 (if applicable):	function 3 (if applicable):	
4	Primary type(s) of site treatment: [ ] introduction of plant materials; [ ] invasive species control; [ ] hydrological manipulation; [ ] topographic/substrate manipulation			
5	Aquatic resource type (select one): [ ] riverine; [ ] depressional wetland; [ ] tidal wetland; [ ] slope wetland; [ ] other:			
6	Performance standard categories (select all that apply): [ ] physical; [ ] hydrologic; [ ] fauna; [ ] flora; [ ] water quality (ecological)			
7	Using selections from 2-6 above, insert applicable performance standards and targets from .12505.1-SPD Table of Uniform Performance Standards for Compensatory M Requirements into worksheet rows below. Add or remove rows for any category, as needed.			

Physical-1		Year 1:	Year 2:	Year 3:	Year 4:
Physical-2					
Physical-3					
Hydrologic -1					
Hydrologic -2					

Monitoring requirements

A description of parameters being monitored to determine if mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting monitoring results to the DE must be included.

- Identify if multiple monitoring events occur each year
  - ► Ex: Monitor hydro in spring, but veg in summer/fall
- Identify transects/photo points
  - ► How many and where?

Long-term Management Plan

A description of how the PRM site will be managed after 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.

- Permittee continued responsibility
- Turn over to Third Party

Adaptive Management Plan

Management strategy to address unforeseen changes in site conditions or other components of the mitigation project, including the party or parties responsible for implementing adaptive management measures.

- Failure of the site (rehab or relocate)
- Act of nature (fire, flood)

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 mitigation project will be successfully completed, in accordance with its performance standards.

- Short-term: Construction/monitoring phase
- Long-term: Funds needed to manage site
  - Government entities: At Corps discretion

Additional Resources

SPD Regional Compensatory Mitigation and Monitoring Guidelines

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

SPD Uniform Performance Standards

https://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/ups/12505.pdf

SPD Standard Operating Procedure for Determination of Mitigation Ratios

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

Questions?

Thank You

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