COMPENSATORY MITIGATION

*The views presented are those of the speaker or author and do not necessarily represent the views of DoD or its components.

Presentation Objectives

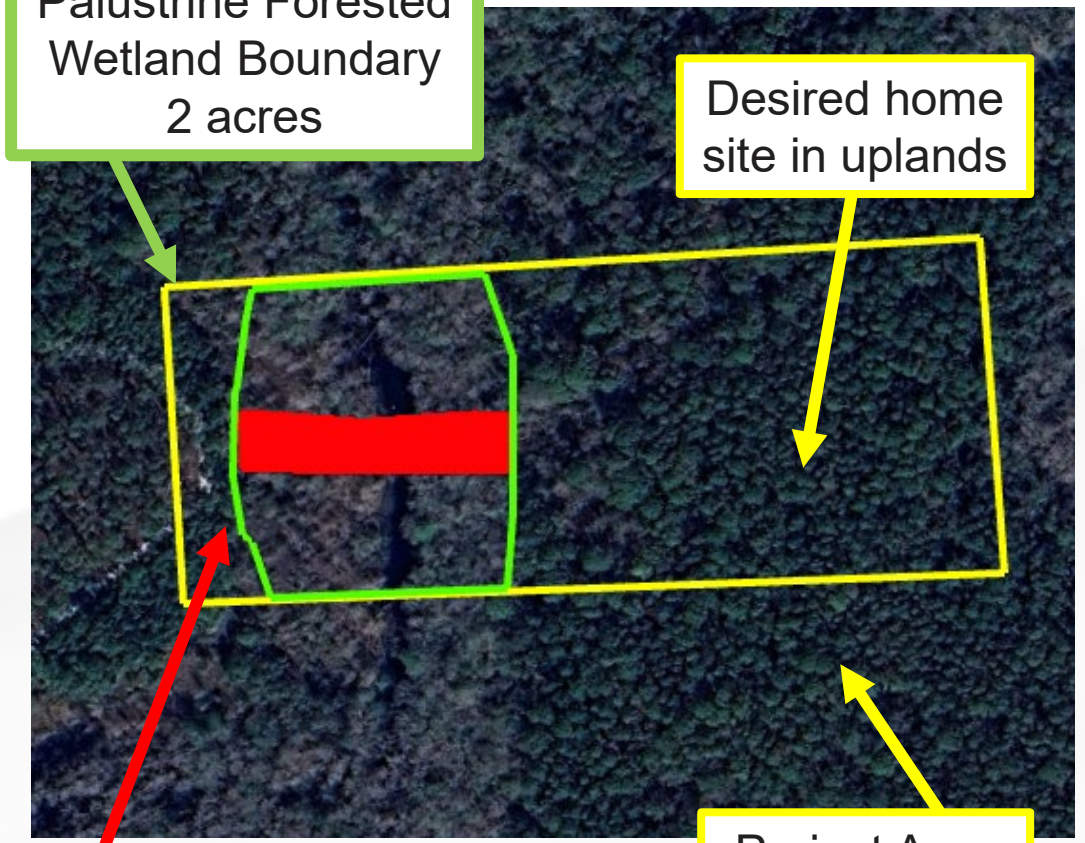
- ✓ Introduction To Compensatory Mitigation and the 2008 Mitigation Rule
- ✓ Compensatory Mitigation Hierarchy
- ✓ Functional Assessments
- ✓ How To Find Mitigation Bank Credits
- ✓ The Proximity Factor Tool
- ✓ Permittee Responsible Mitigation and Mitigation Plan Components
- ✓ Advanced Permittee Responsible Mitigation Sites (APRMS)

What is Compensatory Mitigation?

33 CFR 332.2 "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.

The Corps said there are jurisdictional Waters of the U.S. (WOTUS) on my property, and I need a Department of the Army (DA) permit.

Do I also need mitigation to put a driveway through WOTUS to access my uplands and build a house…maybe…



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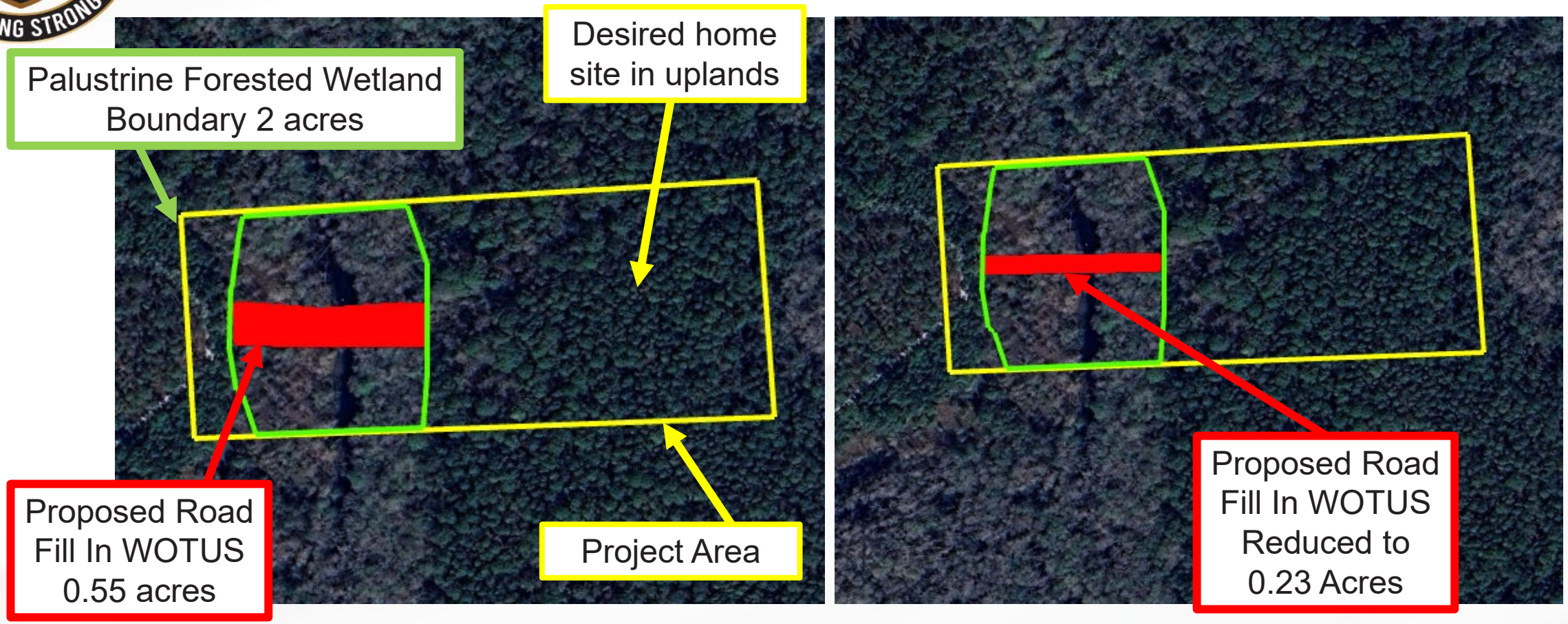
Introduction to Compensatory Mitigation

SEQUENCE

- Replace lost functions/services.
- Must be related to project impacts.
- Corps determines the adequacy of type and amount of compensatory mitigation proposed by applicant.
- May be required to meet 404(b)(1) Guidelines or as a result of a public interest review (reduces the overall project impacts to less than significant).

What is Compensatory Mitigation?



Avoid

Minimize

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When is Compensatory Mitigation Required?

Nationwide Permits: 0.1-acre wetland loss threshold

- **GREATER THAN 0.1 acres**, unless no more than minimal adverse effects w/ Activity Specific Waiver.

- **LESS THAN 0.1 acres**, if needed to ensure only minimal adverse effects.

Nationwide Permits: 0.03 acres stream loss threshold

- **GREATER THAN 0.03 acres**, unless no more than minimal adverse effects w/ Activity Specific Waiver

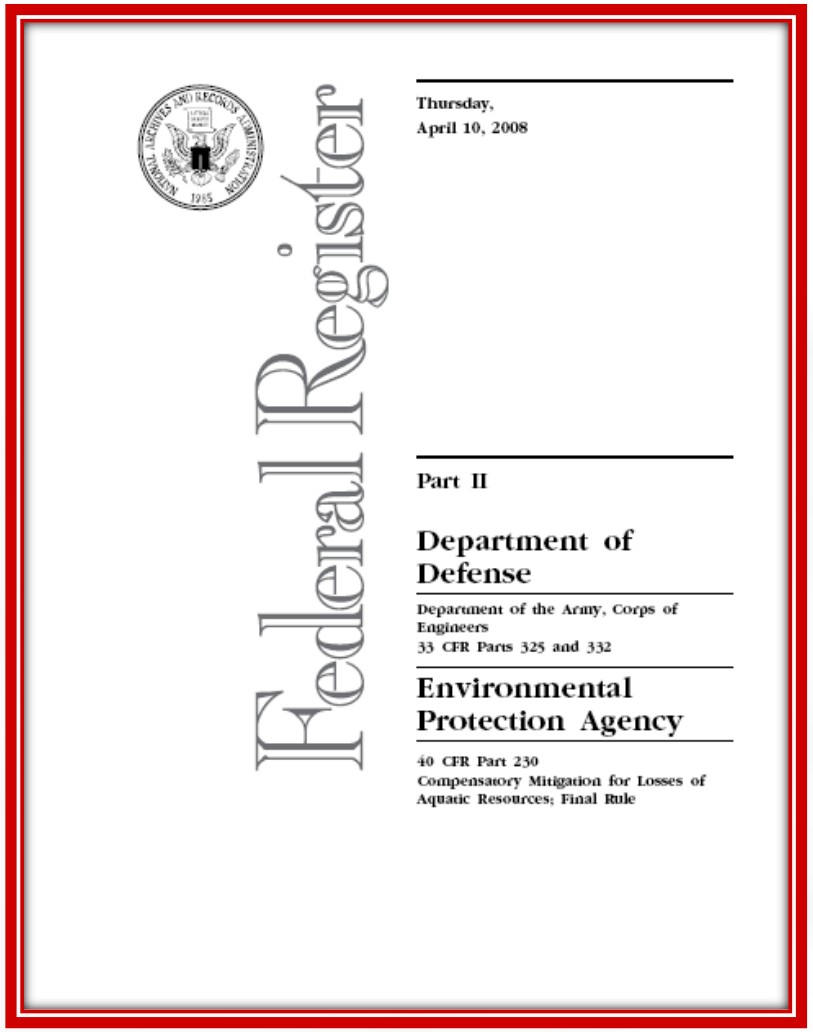
- **LESS THAN 0.03 acres**, if needed to ensure only minimal adverse effects:

Individual Permit: Required for impacts ≥0.50 acre in freshwater wetlands

Introduction to Compensatory Mitigation

33 Code of Federal Regulations (CFR) 332
Table of Contents

Mitigation plan components


Federal Register

Thursday,
April 10, 2008

Part II

Department of Defense

Department of the Army, Corps of Engineers
33 CFR Parts 325 and 332

Environmental Protection Agency

40 CFR Part 230
Compensatory Mitigation for Losses of Aquatic Resources; Final Rule

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Mitigation Option Differences

Mitigation Type	Responsible Party	When Mitigation Type Can Be Considered For Compensatory Mitigation	Are Credit Sales Allowed	Who Can Use As Mitigation	Instrument Required	Credit Releases	Service Area
Mitigation Bank	Mitigation Bank Sponsor as identified in the Mitigation Banking Instrument (MBI).	Credits must be available prior to impacts.	Yes	Permittees as approved by the permitting agency consistent with the provisions of the permit and MBI.	Yes	Yes	Yes
ILF	ILF Program Sponsor as identified in the ILF program instrument.	Credits must be available prior to impacts.	Yes	Permittees as approved by the permitting agency consistent with the provisions of the permit and the ILF program instrument.	Yes	Yes	Yes
PRM	Permittee	Mitigation effort must be implemented in advance (i.e., APRMS Project) or concurrently with impacts.	No	Permittee responsible for PRM site.	No	No	No

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Mitigation Hierarchy

The Mitigation Rule establishes the following preferential hierarchy for the type and location of compensatory mitigation (mitigation hierarchy) in 33 CFR § 332.3(b).

1. **Mitigation Bank Credits:** 33 CFR § 332.3 (b)(2)
2. **ILF Program Credits:** 33 CFR § 332.3 (b)(3)
3. **Permittee Responsible Mitigation (PRM) under Watershed Approach:** 33 CFR § 332.3 (b)(4)
4. **PRM On-Site and In-Kind:** 33 CFR § 332.3 (b)(5)
5. **PRM Off-Site and/or Out-of-Kind:** 33 CFR § 332.3 (b)(6)

How many Mitigation Credits do I need?

Determination of Credits 33 CFR 332.4(c)(6)

Perform A Functional Assessment

- Used to evaluate the physical, chemical, and biological processes that occur in ecosystems.
- Determines baseline score for existing conditions and post project/post mitigation conditions.
- Generates values (currency) for functional gain (mitigation) and functional loss (impacts to WOTUS).

Functional Assessment Methods Used in Florida:

- Uniform Mitigation Assessment Method (UMAM). **Primary in Florida**
- Wetland Benefit Index (Developed by Broward County, FL)
- Wetland Assessment Technique for Environmental Review (WATER)
- Wetland Rapid Assessment Procedure (WRAP)
- Modified Wetland Rapid Assessment Procedure (M-WRAP)
- Estuarine Wetland Rapid Assessment Procedure (E-WRAP)
- Hydrogeomorphic Approach (HGM)
- Little Pine Island (LPI)

The functional assessment methodology that is used for the impact site and mitigation site must be the same in order for an "apples to apples" comparison.

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UMAM Overview

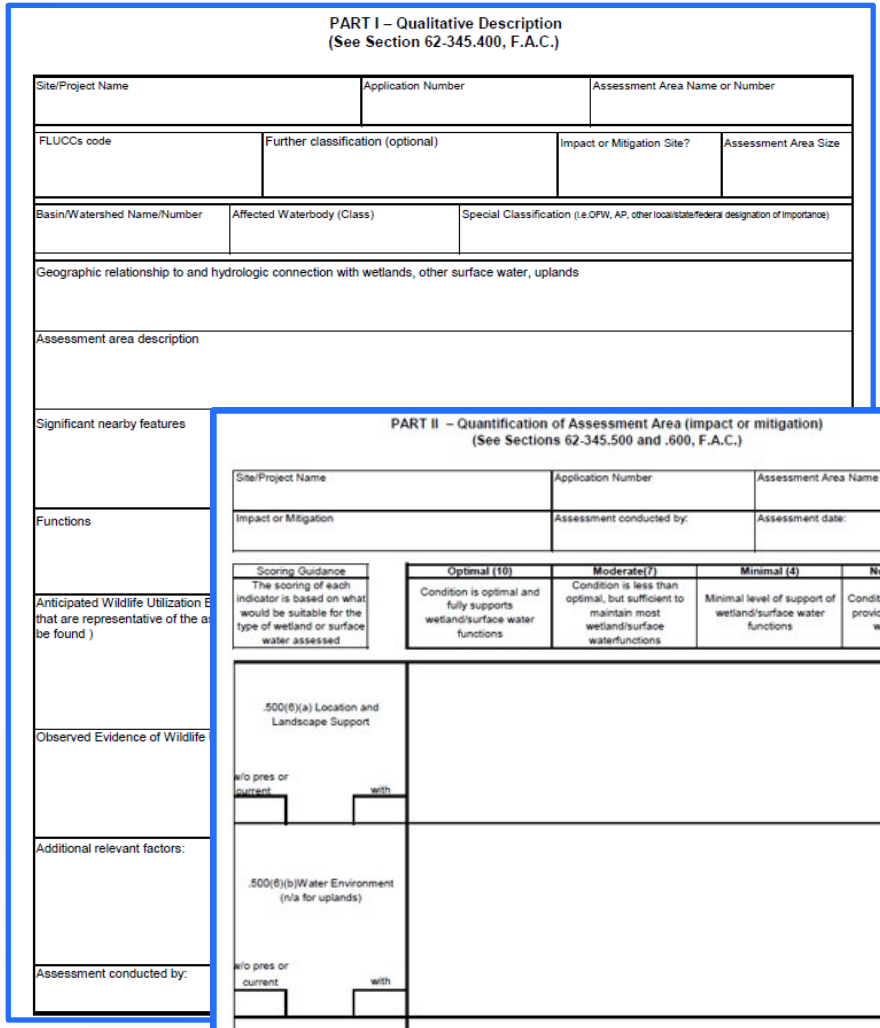
Adopted from Chapter 62-345, Florida Administrative Code (FAC)
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-345

Two-part methodology used to assess Functional Loss and Functional Gain.

- Part 1: Qualitative
- Part 2: Quantitative

Provide whole number scores (0-10):

1. Location, Landscape, and Support
2. Water Environment
3. Community structure



PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FLUCCs code	Further classification (optional)	Impact or Mitigation Site? / Assessment Area Size
Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands		
Assessment area description		
Significant nearby features		
Functions		
Anticipated Wildlife Utilization E that are representative of the a be found)		
Observed Evidence of Wildlife		
Additional relevant factors:		
Assessment conducted by:		

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Impact or Mitigation	Assessment conducted by:	Assessment date:

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o pres or current	with
.500(6)(a) Location and Landscape Support		
.500(6)(b)Water Environment (n/a for uplands)		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0	

If preservation as mitigation,	For impact assessment areas
Preservation adjustment factor =	FL = delta x acres =
Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

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UMAM Attribute Tables

UMAM Scoring Worksheet ~ Community Structure: *Terrestrial*

Community Structure	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
1. Vegetation and Structural Habitat	vegetation community and physical structure provide conditions which support an optimal level of function to benefit fish and wildlife	vegetation community and physical structure limited to 70% of optimal level of function to benefit fish and wildlife in Part I	vegetation community and physical structure limited to 40% of optimal level of function to benefit fish and wildlife in Part I	vegetation community and physical structure do not provide function to benefit fish and wildlife in Part I
I. Plant species in the canopy, shrub, or ground stratum	all or nearly all appropriate and desirable	majority appropriate and desirable	majority inappropriate or undesirable	no appropriate or desirable species
II. Invasive exotics or other invasive plant species	not present	present, but cover is minimal	majority of plant cover	high presence and cover
III. Regeneration & recruitment	normal and natural	near-normal	minimal evidence	no evidence
IV. Age & size distribution	typical of type of system with no deviation from normal patterns of succession or mortality	no indication of permanent deviation, but may have had temporary deviations or impacts to age and size distribution	atypical and indicative of permanent deviation from normal successional pattern, with greater than expected mortality	high percentage of dead and dying vegetation, with no typical age and size distribution
V. Density and quality of coarse woody debris, snag, den, and cavity	optimal structural habitat	slightly lower or slightly greater than normal quantity	not present or greater than normal because vegetation is dead or dying	not present or exist only because native vegetation is dead or dying
VI. Plant condition	good condition, with very little to no evidence of chlorotic or spindly growth or insect damage	generally good, with little evidence of chlorotic or spindly growth or insect damage	generally poor, with evidence of chlorotic or spindly growth or insect damage	overall very poor, with strong evidence of chlorotic or spindly growth or insect damage
VII. Land management practices	optimal for long term viability of plant community	generally appropriate some possible fire suppression or water control features that have caused a shift in plant community	partial removal or alteration of natural structure, or introduction or artificial features, such as furrow or ditches	removal or alteration of natural structure, or introduction or artificial features, such as furrow or ditches
VIII. Topographic features such as refugia ponds, creek channels, flats or hummocks	present and normal	slightly less than optimal	reduction in extent of topographic features from what is normal	lack of topographic features that are normal for the area being assessed
IX. Siltation or algal growth in submerged aquatic plant communities	no evidence	minor degree of siltation or algal growth	moderate degree of siltation or algal growth	high degree of siltation or algal growth
X. Upland mitigation area - level of habitat and support for fish and wildlife in the associated wetlands or surface waters	optimal level of habitat and life history support	high, but less than optimal level of habitat and life history support	moderate level of habitat and life history support	little or no habitat and life history support

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UMAM Attribute Tables

UMAM Scoring Worksheet ~ Water Environment

	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Water Environment	hydrology and water quality fully supports functions and provides benefits to fish and wildlife at optimal capacity	hydrology and water quality supports functions and provides benefits at 70% of optimal capacity	hydrology and water quality supports functions and provides benefits at 40% of optimal capacity	hydrology and water quality does not support functions and provides no benefits to fish and wildlife
a. Water levels and flows	appropriate	slightly higher or lower than appropriate	moderately higher or lower than appropriate	extreme degree of deviation
b. Water level indicators	distinct and consistent with expected	not as distinct or as consistent as expected	not distinct and not consistent with expected	not present or greatly inconsistent with expected hydrologic conditions
c. Soil moisture	appropriate with no evidence of soil desiccation, oxidation or subsidence	minimal soil oxidation or subsidence; soils are drier than expected	strong evidence of soil desiccation, oxidation or subsidence	strong evidence of substantial soil desiccation, oxidation or subsidence
d. Soil erosion or deposition	not atypical or indicative of altered flow rates	minor alteration in flow rates or points of discharge	atypical and indicative of alterations in flow rates or points of discharge	greatly atypical and indicative of greatly altered flow rates or points of discharge
e. Evidence of fire history	not atypical frequency or severity due to excessive dryness	fire frequency or severity may be more than expected	frequency or severity much more than expected, possibly due to dryness	great deviation from typical, due to extreme dryness
f. Vegetation - community zonation	appropriate in all strata	inappropriate in some strata	inappropriate in most strata	inappropriate in all strata
g. Vegetation – hydrologic stress	no signs of hydrologic stress such as excessive mortality, leaning or fallen tress, thinning canopy, insect damage or disease associated with hydrologic stress	slightly greater than normal mortality, leaning or fallen tress, thinning canopy, or signs of insect damage or disease associated with hydrologic stress	strong evidence of greater than normal mortality, leaning or fallen tress, thinning canopy, or signs of insect damage or disease associated with hydrologic stress	strong evidence of much greater than normal mortality, leaning or fallen tress, thinning of canopy, or signs of insect damage or disease associated with hydrologic stress
h. Use by animal species with specific hydrological requirements	consistent with expected hydrological conditions	less than expected	greatly reduced	lacking
i. Plant community composition – species tolerant of and associated with water quality degradation or flow alteration	Plant community composition is not characterized by species tolerant of and associated with water quality degradation or flow alteration	some species tolerant of and associated with water quality degradation or flow alteration	much of the community consists of species tolerant of and associated with water quality degradation or flow alteration	community consists predominantly of species tolerant of and associated with water quality degradation or flow alteration
j. Direct observation of standing water	no water quality degradation such as discoloration, turbidity, or oil sheen	slight water quality degradation such as discoloration, turbidity, or oil sheen	moderate water quality degradation such as discoloration, turbidity, or oil sheen	significant water quality degradation such as obvious discoloration, turbidity, or oil sheen
k. Existing water quality data	conditions are optimal for community type	slight deviation from normal, with minimal ecological effects	moderate deviation from normal, with expected ecological effects	large deviation from normal, with expected adverse ecological effects
l. Water depth, wave energy, currents and light penetration	optimal for community type	generally sufficient but expected to cause some changes in species, age classes and densities	not well suited for and expected to cause significant changes in species, age classes and densities	inappropriate for community type

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UMAM Attribute Tables

UMAM Scoring Worksheet ~ Location and Landscape Support

Guidance: *This worksheet is only a summary and is not intended to replace the rule. The rule should be used to resolve any question or dispute.*

	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Location and Landscape Support	full opportunity to perform beneficial functions at optimal level	opportunity to perform beneficial functions is limited to 70% of optimal ecological value	opportunity to perform beneficial functions is limited to 40% of optimal ecological value	provides no habitat support or opportunity to provide benefits to fish and wildlife
a. Support to wildlife by outside habitats	full range of habitats needed to support all wildlife species	optimal support for most, but not all wildlife species	fail to provide support for some, or minimal support for many wildlife species	no habitat support for wildlife
b. Invasive exotics or other invasive plant species in proximity of the assessment area	not present	present but cover is minimal and has minimal adverse effects	majority of plant cover consists of invasive exotics that adversely affect functions	predominance of plant cover consists of invasive exotics so that little or no function is provided
c. Wildlife access to and from outside – distance and barriers	not limited by distance or barriers	partially limited by distance or barriers	substantially limited by distance or barriers	precluded by distance or barriers
d. Functions that benefit fish & wildlife downstream – distance or barriers	not limited by distance or barriers	somewhat limited by distance or barriers that reduce opportunity to provide benefits	limited by distance or barriers that substantially reduce opportunity to provide benefits	functions not present
e. Impacts of land uses outside assessment area to fish and wildlife	no adverse impacts on wildlife	minimal adverse impacts on wildlife	significant adverse impacts on wildlife	severe adverse impacts on wildlife
f. Benefits to downstream or other hydrologically connected areas	opportunity is not limited by hydrologic impediments or flow restrictions	limited by hydrologic impediments or flow restrictions so that benefits are provided with lesser freq. or magnitude	limited by hydrologic impediments so that benefits are rarely provided or are provided at greatly reduced levels	no opportunity to provide benefits due to hydrologic impediments or flow restrictions
g. Benefits to downstream habitats from discharges	downstream habitats are critically or solely dependent on discharges	downstream habitats derive significant benefits from discharges	downstream habitats derive minimal benefits from discharges	downstream habitats derive negligible or no benefits from discharges
h. Protection of wetland functions by upland mitigation assessment areas	optimal protection of wetland functions	significant, but suboptimal, protection of wetland functions	minimal protection to wetland functions	no protection of wetland function

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UMAM Attribute Tables

Assessment Area	Impact Type	FLUCCS (3 digits) / FLCCS (4 or more digits)	Location and Landscape Support		Water Environment		Community Structure		Delta	Acreage	Functional Loss Units
			Without	With	Without	With	Without	With			
Wetland 1	Permanent - Dredge or Fill	22331 - Bottomland Forest Wetlands	8	0	8	0	7	0	-0.77	0.23	-0.18

The proposed impact to 0.23 acres of bottomland forested wetlands would result in 0.18 units of functional loss.

The applicant would be required to either purchase 0.18 palustrine forested credits OR if credits are not available develop a permittee-responsible mitigation plan that would generate at least 0.18 units of functional gain.

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How to Find Mitigation Bank Credits

0.18 Palustrine Forested Credits needed to satisfy permit requirements

1) Regulatory In-Lieu Fee Bank Information Tracking System (RIBITS) https://ribits.ops.usace.army.mil

2) Select Jacksonville District From Dropdown Menu

3) Click “Find Credits” Under “Tools” header.

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How to Find Mitigation Bank Credits

1) Enter coordinates of impact site in decimal degrees.

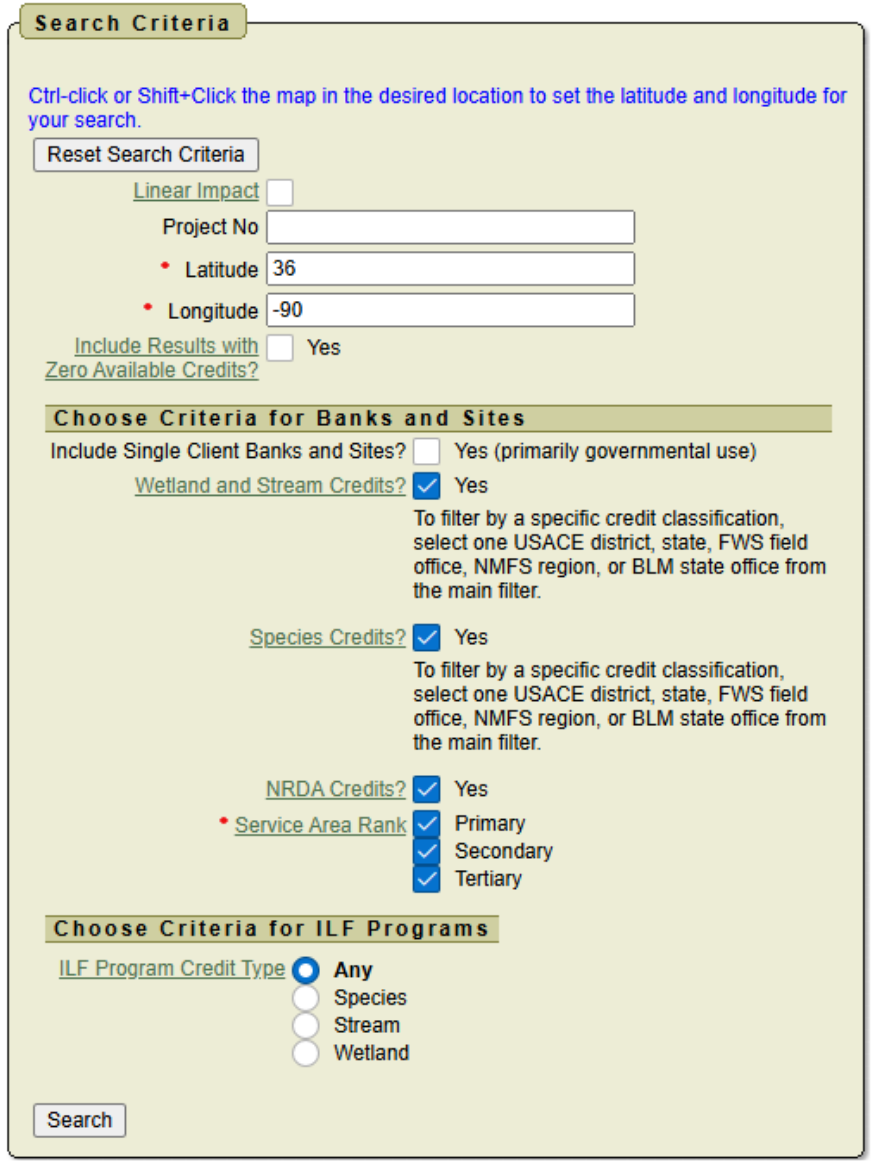
2) Check “Wetland and Stream” credits for Section 404 impacts to WOTUS.

3) For species credits to satisfy ESA/USFWS requirements, check “Species Credits.” Please note at this time there are no joint 404/Species banks in Florida.

4) Jacksonville District only has Primary service areas but recommend checking all three options.

5) Check option for ILF credit type desired.

6) Click search!



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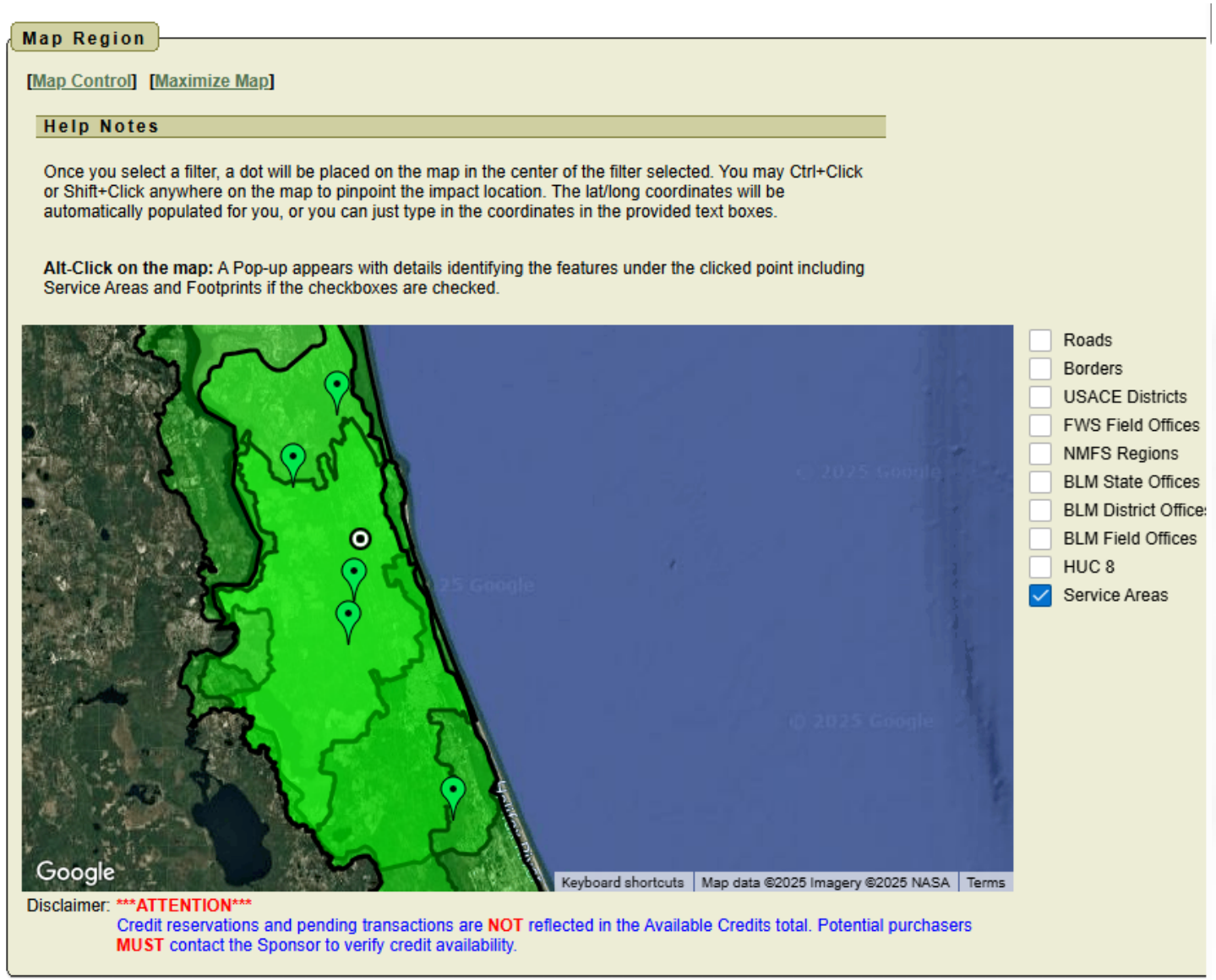
How to Find Mitigation Bank Credits

- The search will depict the banks or ILF sites with service areas covering the impact site.
- Hovering over each pin will identify the bank which then can be searched under the “Mitigation” and “Banks & Sites” tab.
- This search reveals 5 banks have a service area covering the impact site.



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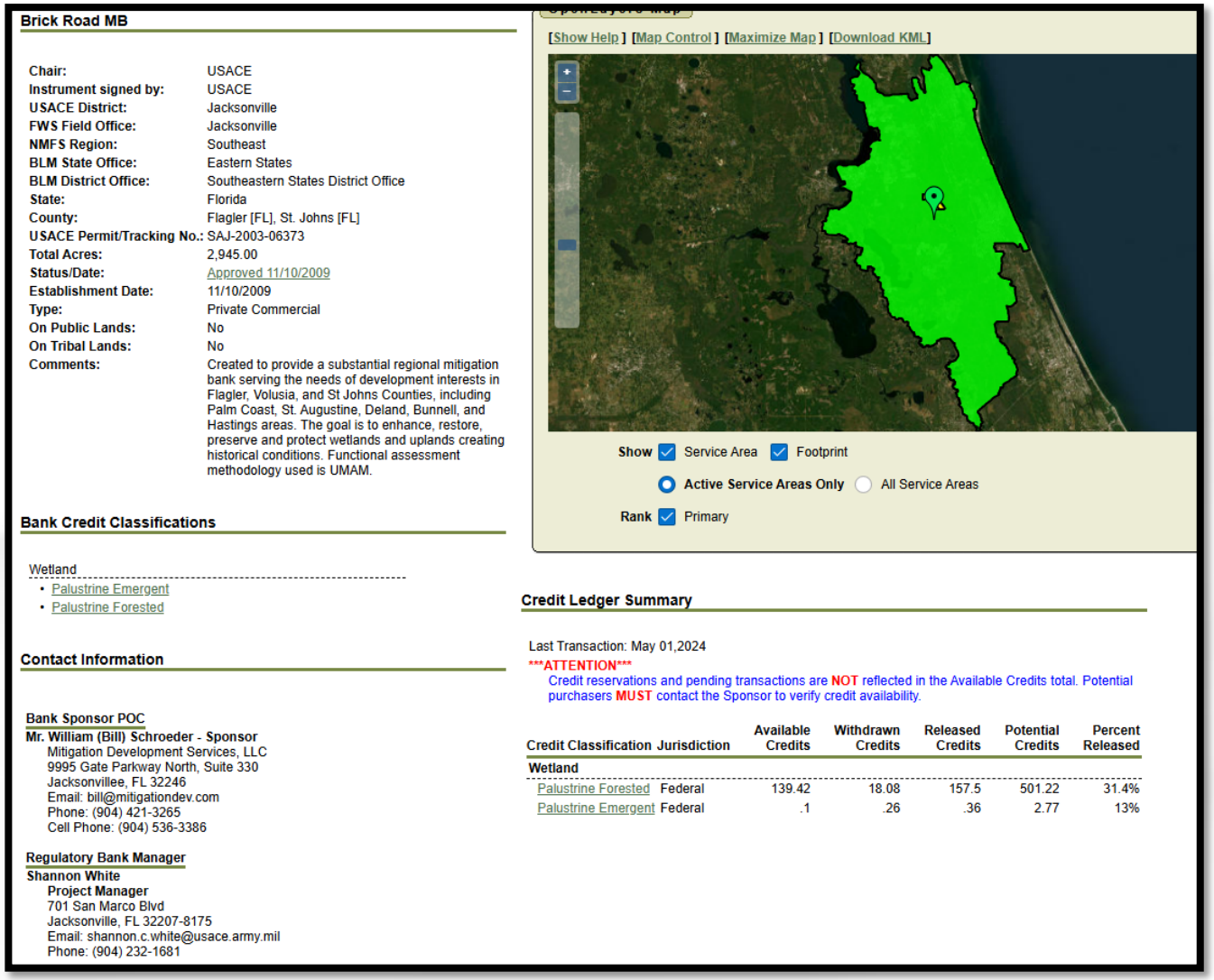
How to Find Mitigation Bank Credits

- Depicts status (approved/suspended) and available credit types.
- Identified current status (approved or suspended)
- Depicts date approved (Established Date)
- Lists the bank Sponsor.
- Identifies the Corps PM.
- Depicts the functional assessment utilized at the bank in the Comments section.
- “Trick the system” to look for outside of service area options by entering coordinates further away.



Brick Road MB

[Show Help] [Map Control] [Maximize Map] [Download KML]

Chair:	USACE
Instrument signed by:	USACE
USACE District:	Jacksonville
FWS Field Office:	Jacksonville
NMFS Region:	Southeast
BLM State Office:	Eastern States
BLM District Office:	Southeastern States District Office
State:	Florida
County:	Flagler [FL], St. Johns [FL]
USACE Permit/Tracking No.:	SAJ-2003-06373
Total Acres:	2,945.00
Status/Date:	Approved 11/10/2009
Establishment Date:	11/10/2009
Type:	Private Commercial
On Public Lands:	No
On Tribal Lands:	No
Comments:	Created to provide a substantial regional mitigation bank serving the needs of development interests in Flagler, Volusia, and St Johns Counties, including Palm Coast, St. Augustine, Deland, Bunnell, and Hastings areas. The goal is to enhance, restore, preserve and protect wetlands and uplands creating historical conditions. Functional assessment methodology used is UMAM.

Show Service Area Footprint

Active Service Areas Only All Service Areas

Rank Primary

Bank Credit Classifications

Wetland
- Palustrine Emergent
- Palustrine Forested

Contact Information

Bank Sponsor POC
Mr. William (Bill) Schroeder - Sponsor
Mitigation Development Services, LLC
9995 Gate Parkway North, Suite 330
Jacksonville, FL 32246
Email: bill@mitigationdev.com
Phone: (904) 421-3265
Cell Phone: (904) 536-3386

Regulatory Bank Manager
Shannon White
Project Manager
701 San Marco Blvd
Jacksonville, FL 32207-8175
Email: shannon.c.white@usace.army.mil
Phone: (904) 232-1681

Credit Ledger Summary

Last Transaction: May 01,2024

ATTENTION
Credit reservations and pending transactions are NOT reflected in the Available Credits total. Potential purchasers MUST contact the Sponsor to verify credit availability.

Credit Classification	Jurisdiction	Available Credits	Withdrawn Credits	Released Credits	Potential Credits	Percent Released
Wetland						
Palustrine Forested	Federal	139.42	18.08	157.5	501.22	31.4%
Palustrine Emergent	Federal	.1	.26	.36	2.77	13%

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How to Find Mitigation Bank Credits

Does this mitigation bank have the 0.18 Palustrine Forested credits that I need…maybe?

Credit Ledger Summary

Last Transaction: May 01,2024

ATTENTION

Credit reservations and pending transactions are **NOT** reflected in the Available Credits total. Potential purchasers **MUST** contact the Sponsor to verify credit availability.

Credit Classification	Jurisdiction	Available Credits	Withdrawn Credits	Released Credits	Potential Credits	Percent Released
Wetland						
Palustrine Forested	Federal	139.42	18.08	157.5	501.22	31.4%
Palustrine Emergent	Federal	.1	.26	.36	2.77	13%

Please note that the available credits may not be accurate for a variety of reasons, and it is recommended to reach out to the Bank Sponsor or credit sales POC as the Corps does not track credits that may be reserved by the Sponsor for a particular project.

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What if no credits are available?

SAJ Proximity Factor Tool:
Provides additional mitigation options to the entire State of Florida

- Approved for Use: March 30, 2023, and updated for clarity on October 4, 2024. Public notice and tool located on Jacksonville District Source Book webpage.

- Consistent method for determining amount of compensatory mitigation proposed
  1) outside approved MB and ILF Program/Site service areas (OSA) or
  2) outside impact 8-digit HUC watersheds for PRM

- Based on ratio multipliers for multiple variables.
- Variables Considered:
  - 8-digit HUCs relative to the impact and compensatory mitigation sites.
  - In-kind versus out-of-kind replacement.
  - EPA Level 4 Ecoregions

Proximity Factor Tool

Proximity Factor Calculation Table	Variables
If the impact site is outside of a mitigation bank/ILF service area boundary, but within the same 8-digit HUC that contains the mitigation bank location/ILF service area boundary, enter 1. For PRM, if the impact site is located within the same 8-digit HUC that contains the PRM site, enter 1. If the impact site is located outside the 8-digit HUC that contains the mitigation bank/ILF service area boundary or PRM site, enter 0 and proceed to the next row.	0
If the impact site is outside of a mitigation bank/ILF service area boundary and one 8-digit HUC away from the mitigation bank location/ILF service area boundary, enter 1.5. For PRM, if the impact site is located one 8-digit HUC away from the proposed PRM site, enter 1.5.	
For each additional 8-digit HUC away from the mitigation bank, ILF service area boundary, or PRM site, add 0.25. If not applicable, enter 0.	
If the mitigation entails in-kind replacement of impacted WOTUS, enter 0. For out-of-kind replacement of impacted WOTUS, enter 0.75.	
If the mitigation occurs within the same EPA Level IV Ecoregion, enter 0. If the mitigation occurs within a different EPA Level IV Ecoregion, enter 0.25.	
Proximity Factor Multiplier:	

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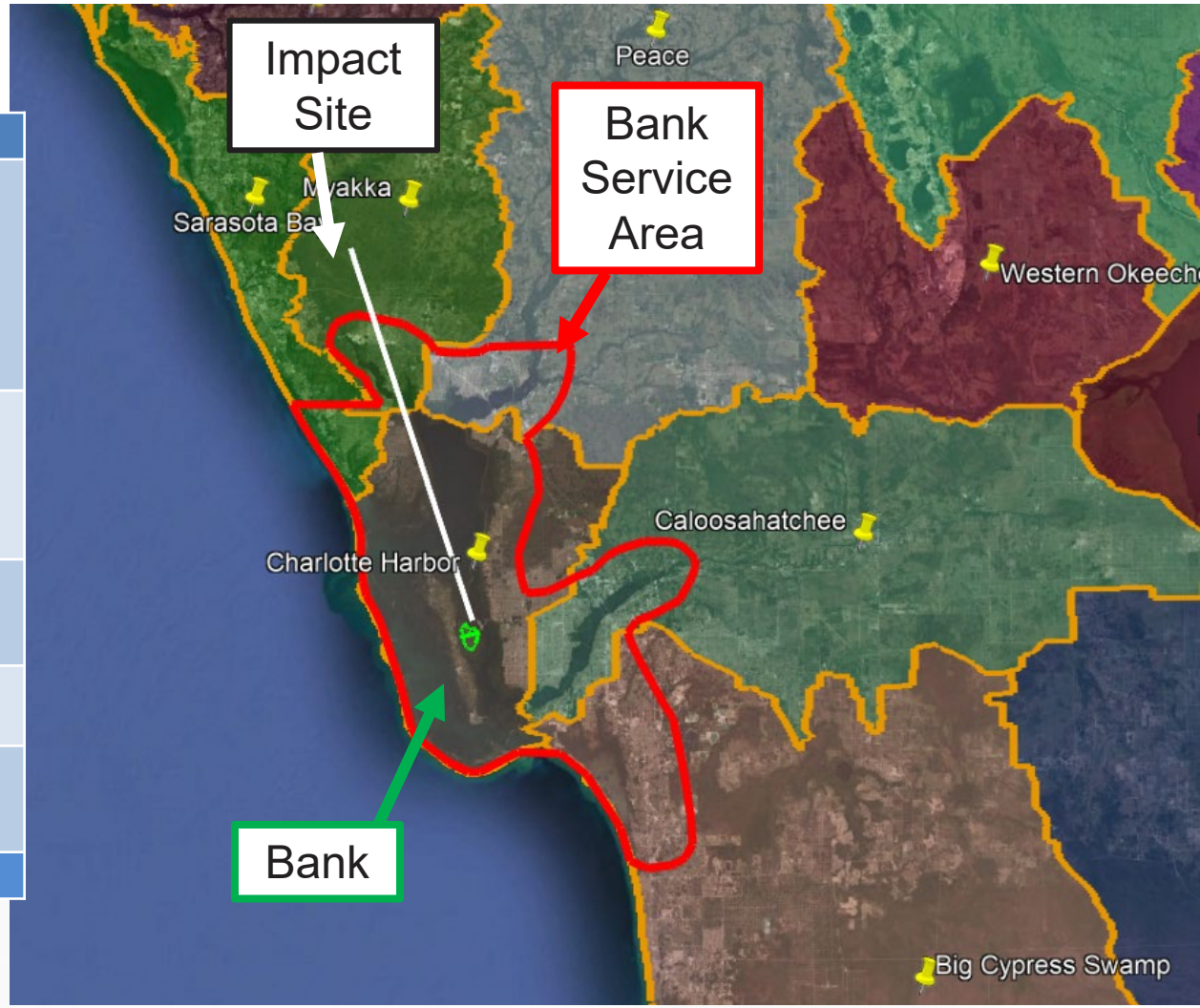
Proximity Factor Example

Proximity Factor Calculation Table	Variables
If the impact site is outside of a mitigation bank/ILF service area boundary, but within the same 8-digit HUC that contains the mitigation bank location/ILF service area boundary, enter 1. For PRM, if the impact site is located within the same 8-digit HUC that contains the PRM site, enter 1. If the impact site is located outside the 8-digit HUC that contains the mitigation bank/ILF service area boundary or PRM site, enter 0 and proceed to the next row.	0
If the impact site is outside of a mitigation bank/ILF service area boundary and one 8-digit HUC away from the mitigation bank location/ILF service area boundary, enter 1.5. For PRM, if the impact site is located one 8-digit HUC away from the proposed PRM site, enter 1.5.	1.50
For each additional 8-digit HUC away from the mitigation bank, ILF service area boundary, or PRM site, add 0.25. If not applicable, enter 0.	0
If the mitigation entails in-kind replacement of impacted WOTUS, enter 0. For out-of-kind replacement of impacted WOTUS, enter 0.75.	0
If the mitigation occurs within the same EPA Level IV Ecoregion, enter 0. If the mitigation occurs within a different EPA Level IV Ecoregion, enter 0.25.	0
Proximity Factor Multiplier:	**1.5**



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Proximity Factor Example

Proximity Factor Calculation Table	Variables
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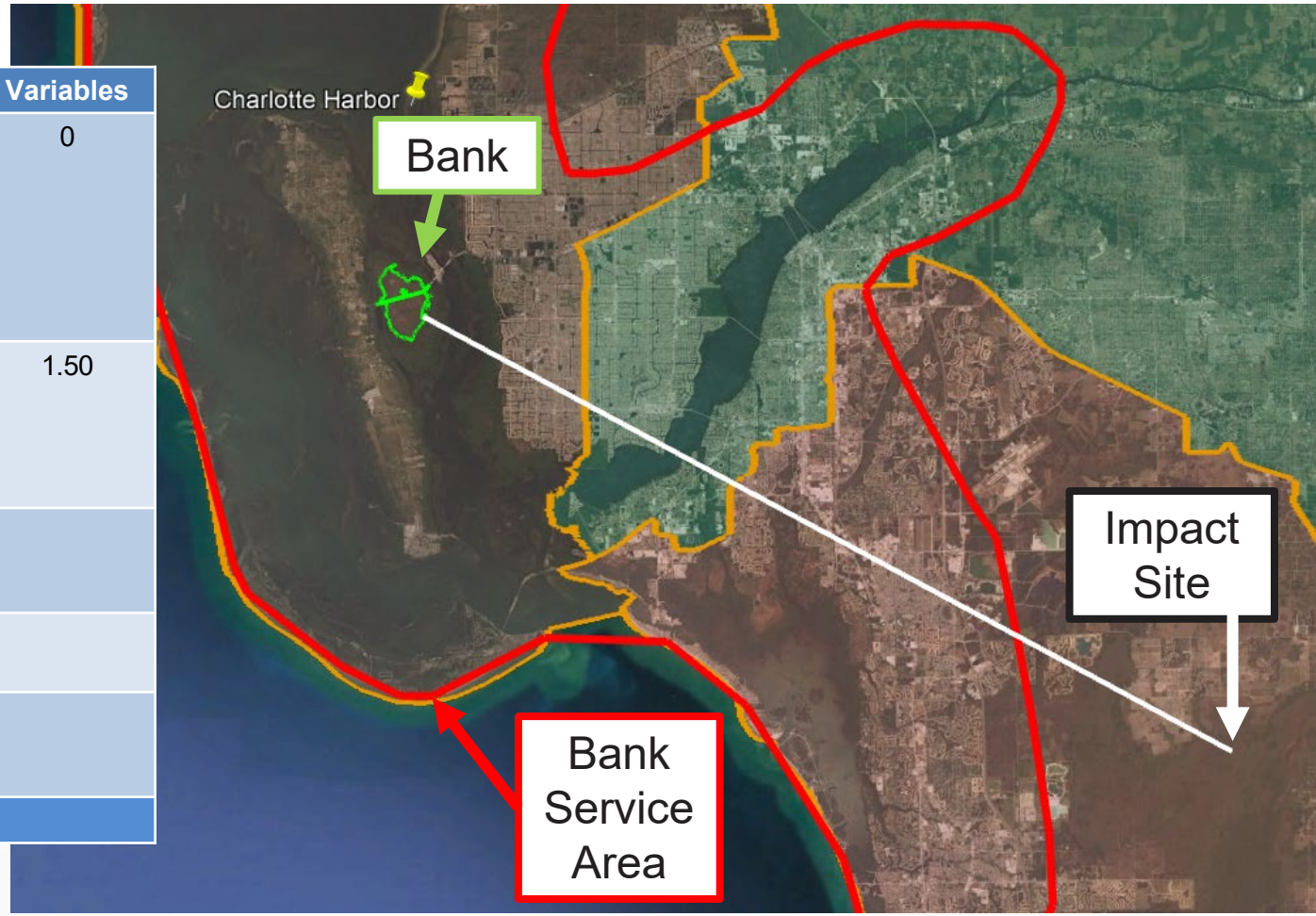
If the impact site is outside of a mitigation bank/ILF service area boundary and one 8-digit HUC away from the mitigation bank location/ILF service area boundary, enter 1.5. For PRM, if the impact site is located one 8-digit HUC away from the proposed PRM site, enter 1.5.	1.50
For each additional 8-digit HUC away from the mitigation bank, ILF service area boundary, or PRM site, add 0.25. If not applicable, enter 0.	
If the mitigation entails in-kind replacement of impacted WOTUS, enter 0. For out-of-kind replacement of impacted WOTUS, enter 0.75.	
If the mitigation occurs within the same EPA Level IV Ecoregion, enter 0. If the mitigation occurs within a different EPA Level IV Ecoregion, enter 0.25.	
Proximity Factor Multiplier:	



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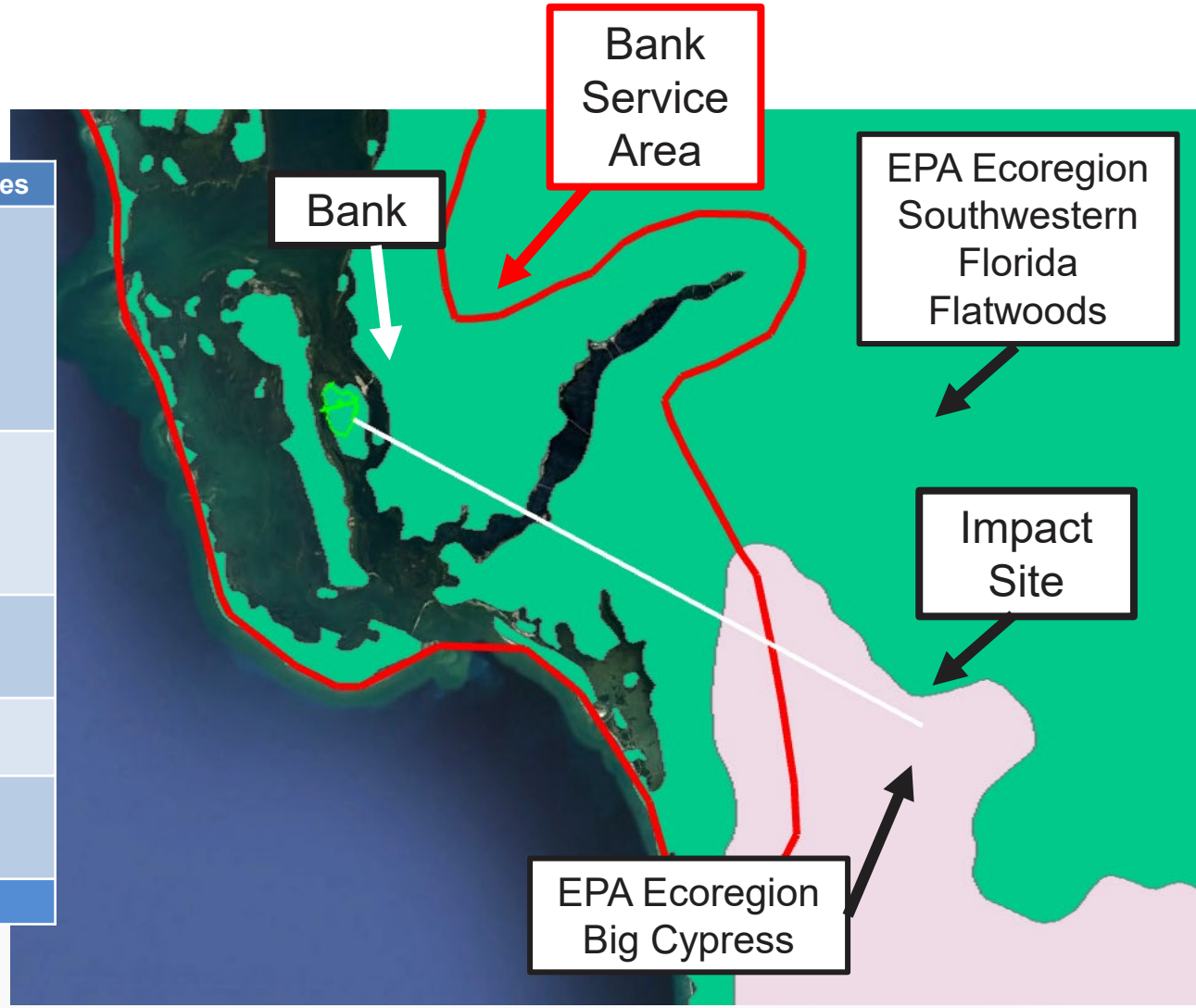
Proximity Factor Example

Proximity Factor Calculation Table	Variables
If the impact site is outside of a mitigation bank/ILF service area boundary, but within the same 8-digit HUC that contains the mitigation bank location/ILF service area boundary, enter 1. For PRM, if the impact site is located within the same 8-digit HUC that contains the PRM site, enter 1. If the impact site is located outside the 8-digit HUC that contains the mitigation bank/ILF service area boundary or PRM site, enter 0 and proceed to the next row.	0
If the impact site is outside of a mitigation bank/ILF service area boundary and one 8-digit HUC away from the mitigation bank location/ILF service area boundary, enter 1.5. For PRM, if the impact site is located one 8-digit HUC away from the proposed PRM site, enter 1.5.	1.50
For each additional 8-digit HUC away from the mitigation bank, ILF service area boundary, or PRM site, add 0.25. If not applicable, enter 0.	0
If the mitigation entails in-kind replacement of impacted WOTUS, enter 0. For out-of-kind replacement of impacted WOTUS, enter 0.75.	0
If the mitigation occurs within the same EPA Level IV Ecoregion, enter 0. If the mitigation occurs within a different EPA Level IV Ecoregion, enter 0.25.	0.25
Proximity Factor Multiplier:	**1.75**



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Proximity Factor Tool

- MB or ILF Instrument must allow for OSA consideration.
- Out of the 100 approved mitigation banks, 42 currently identified with provisions in the MBI that allow for credit sales for OSA impacts.
- List of banks approved for OSA on a case-by-case basis is located on RIBITS under “Bank and In-Lieu Fee Establishment” tab. It is updated regularly, but it is recommended to contact the bank PM or Sponsor if not on list.
- The proximity factor tool does not supersede the Corps’ considerations of compensatory mitigation options in the order presented in 33 CFR 332.3(b)(2) through (b)(6).

What if PRM Is the environmentally preferrable option?

The <u>four types</u> of compensatory mitigation are:

1. **Restoration** – divided into two categories:
    - **Re-establishment** (gain in aquatic resource area and functions)
    - **Rehabilitation** (gain in functions only)

2. **Enhancement** (gain in selected aquatic resource function/s, may cause decline in other functions)

3. **Establishment** (creation, gain in aquatic resource area and functions)

4. **Preservation** (no gain in aquatic resource area or functions)

When does mitigation need to be finalized?

CFR 332.3(k)
Individual Permit Mitigation Requirements

- Mitigation plan must be finalized and approved along with permit.
- If using a mitigation bank or ILF program, the number/type of credits and specific bank need to be identified in permit.

Nationwide Permit Mitigation Requirements

- Permit must describe the compensatory mitigation proposal, which may be either conceptual or detailed. However, construction may not begin until mitigation plan is approved by the Corps.
- If using a mitigation bank or ILF program, the number/type of credits must be identified in the permit.

Mitigation Plan Components - 33 CFR 332.4(c)

1. Objectives
2. Site Selection
3. Site Protection Instrument
4. Baseline Information
5. Determination of Credits
6. Mitigation Work Plan
7. Maintenance Plan
8. Performance Standards
9. Monitoring Requirements
10. Long-Term Management Plan
11. Adaptive Management Plan
12. Financial Assurances

Mitigation Plan Components

Objectives 33 CFR 332.4(c)(2)

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.

Example:
Re-establishment of XXX acres of drained Wet Flatwoods (FNAI) through filling of on-site ditches, raising the invert of two culverts, removal of Florida Invasive Species Council (FISC) Category I&II Invasive/Exotic species, thinning of planted pines, and return of prescribed fire to the existing upland Coniferous Plantation (FLCCS 183332) to result in XXX acres of Wet Flatwoods identified as assessment area W2.

Mitigation Plan Components

Site Selection 33 CFR 332.4(c)(3)

A description of the factors considered during the site selection process. This should include consideration of watershed needs, on-site alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site.

Site Protection Instrument 33 CFR 332.4(c)(4)

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.

Conservation easements are primary form of site protection for mitigation projects in Florida.

Mitigation Plan Components

Baseline Information 33 CFR 332.4(c)(5)

A description of the ecological characteristics of the proposed compensatory mitigation project site and, in the case of an application for a DA permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of WOTUS on the proposed compensatory mitigation project site.

Please note that proposed re-establishment of hydrology or wetland establishment is likely to require installation of monitoring wells and water table monitoring to establish the baseline hydroperiod.

Mitigation Plan Components

Determination of Credits 33 CFR 332.4(c)(6)

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

- For PRM, this should include an explanation of how the compensatory mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.

- For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and resource type of credits to be secured and how these were determined.

Mitigation Plan Components

Mitigation Work Plan 33 CFR 332.4(c)(7)

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 plant 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 mitigation work plan may also include other relevant information, such as planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, and riparian area plantings.

Mitigation Plan Components

Maintenance Plan 33 CFR 332.4(c)(8)

A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed. These are the activities to occur between construction and long-term management.

Performance Standards 33 CFR 332.4(c)(9)

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

33 CFR 332.5(a) - Performance standards should relate to the objectives of the compensatory mitigation project, so that the project can be objectively evaluated to determine if it is developing into the desired resource type, providing the expected functions, and attaining any other applicable metrics.

33 CFR 332.5(b) - Performance standards must be based on attributes that are objective and verifiable. Ecological performance standards must be based on the best available science that can be measured or assessed in a practicable manner…

Mitigation Plan Components

Monitoring Requirements 33 CFR 332.4(c)(10)

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 33 CFR 332.4(c)(11)

A description of how the compensatory mitigation project 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.

Templates approved for use by the State of Florida and the Corps for long-term financing options for mitigation banks along with example cost estimate spreadsheet are located on RIBITS. These are good foundations for use and can be edited to remove reference to mitigation banks for a PRM project or reach out to project manager for PRM templates.

Mitigation Plan Components

Adaptive Management Plan 33 CFR 332.4(c)(12)

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. The adaptive management plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success.

Financial Assurances 33 CFR 332.4(c)(13)

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.

Financial assurances need to include costs for construction as well as the implementation activities described for Maintenance.

UMAM Corps and State Time Lag Differences

Corps Time Lag	
Time (years) until achieve target success/score	Time Lag Factor
≤ 1	1.0000
2	1.0170
3	1.0341
4	1.0518
5	1.0696
6	1.0876
7	1.1058
8	1.1238
9	1.1431
10	1.1614
11	1.1805
12	1.2000
13	1.2197
14	1.2397
15	1.2600
16	1.2805
17	1.3013
18	1.3224
19	1.3437
20	1.3654
21	1.3873
22	1.4096
23	1.4321
24	1.4549
25	1.4780
26	1.5015
27	1.5252
28	1.5492
29	1.5736

Corps Time Lag	
Time (years) until achieve target success/score	Time Lag Factor
30	1.5983
31	1.6233
32	1.6486
33	1.6743
34	1.7002
35	1.7265
36	1.7532
37	1.7802
38	1.8075
39	1.8352
40	1.8633
41	1.8917
42	1.9282
43	1.9577
44	1.9791
45	2.0178
46	2.0485
47	2.0795
48	2.1110
49	2.1322
50	2.1751
51	2.1962
52	2.2289
53	2.2619
54	2.2953
55	2.3292

State's Time Lag Table (62-345.600(1))	
Years until achieve target success/score	Time Lag Factor
≤ 1	1
2	1.03
3	1.07
4	1.1
5	1.14
6 – 10	1.25
11 – 15	1.46
16 – 20	1.68
21 – 25	1.92
26 – 30	2.18
31 – 35	2.45
36 – 40	2.73
41 – 45	3.03
46 – 50	3.34
51 – 55	3.65
>55	3.91

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UMAM Risk Factor

- ✓ **Risk Factor Values Range from 0 (no risk) to 3 (high risk)**

- ✓ **Consider the following criteria when assessing risk:**
  - The vulnerability of the mitigation to and the extent of the effect of different hydrologic conditions than those proposed.
  - The vulnerability of the mitigation to the establishment and long-term viability of plant communities other than that proposed.
  - The vulnerability of the mitigation to colonization by invasive exotic or other invasive species.
  - The vulnerability of the mitigation to degraded water quality.
  - The vulnerability of the mitigation to secondary impacts due to its location, considering potential land use changes in surrounding area, existing protection provided to surrounding areas by easements, restrictive covenants, or federal, state, or local regulations, and the extent to which these factors influence the long-term viability of functions provided by the mitigation site.
  - The vulnerability of the mitigation to direct impacts.

Preservation

Preservation Requirements in Mitigation Rule, 33 CFR § 332.3 (h)(1):

1. The resources to be preserved provide important physical, chemical, or biological functions for the watershed;
2. The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;
3. Preservation is determined by the district engineer to be appropriate and practicable;
4. The resources are under threat of destruction or adverse modifications; and
5. The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).

Preservation Adjustment Factor in UMAM

The Preservation Adjustment Factor (PAF) is used in conjunction with the Qualitative, Part II Assessment and Scoring \when considering “Preservation” Mitigation.

<u>PAF score is based on:</u>

1. The extent the preserved area will promote natural ecological conditions, i.e., fire patterns, exclusion of invasives, etc.
2. The ecological and hydrological relationship between wetlands, other surface waters, and uplands to be preserved.
3. The scarcity of the habitat provided by the proposed preservation area and the level of use by listed species.
4. The proximity of the preserved area to areas of national, state, or regional ecological significance, and whether the areas to be preserved include corridors between these habitats.
5. The extent and likelihood of potential adverse impacts if the assessment area were not preserved.

Permittee Responsible Mitigation UMAM

Mitigation Activity	FLUCCS / FLCCS (Existing Community)	Credit Type	Location and		Water		Community		Delta	Preservation Adjustment Factor	Risk Factor	Time Lag Factor	Relative Functional Gain	Assesment Area Acreage	Functional Gain Units
			Without	With	Without	With	Without	With							
Enhancement	22331 - Bottomland Forest Wetlands	Palustrine Forested	8	8	8	8	7	9	0.07		1	1.017	0.00	3.77	0.25

Enhancement to the community structure (invasive/exotic species removal) of 3.77 acres of palustrine forested wetlands necessary to mitigation for project impacts to WOTUS.

Results in a functional gain of 0.25 palustrine forested wetlands.

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Jacksonville Mitigation Guidance

RIBITS: ***Although catered to mitigation banking, the below guidance and templates are also relevant to PRM.***

- Mitigation Banking Instrument Template and Instructions
  - Detailed recommendations.
  - Formulas to calculate appropriate long-term financing mechanism funding amount.
  - Performance standard recommendations.
  - Baseline data needs.
  - Items to consider for evaluation
  - Standard adaptive management provisions.
  - Monitoring recommendations.
- Cost estimate spreadsheet for financial assurances.
- Financial assurance templates.
- Cost estimate spreadsheet for long-term management.
- Long-Term Financing Mechanism templates.
- Deed of Conservation Easement for Mitigation Banks with Third Party Beneficiary Rights template.
- Jacksonville District credit classification guidance.
- Supporting technical reference information.

Templates for use in Florida

This section is intended to contain templates specific to compensatory mitigation projects proposed within Florida, which is covered by the Jacksonville District Regulatory Division. Any template available in this section is provided by the Jacksonville District Regulatory Division in an effort to assist proponents of third party mitigation projects in the development of technically sound, biologically successful compensatory mitigation projects. The information and guidance provided in any template available in this section should be looked at as a suggestion for format and content. Providing the information in accordance with the template will help to get things to the Corps in a consistent manner which is intended to facilitate a smoother, more fast paced review process. While you are not required to utilize any template or guidance included within this section, we are suggesting that you do so.

- Construction and Implementation Standby Trust Financial Assurance Template.pdf | Download | Open File
- Construction and Implementation Trust Financial Assurance Template.pdf | Download | Open File
- Credit Sales Template (4/5/2023).docx | Download
- Deed of Conservation Easement for Mitigation Banks with Third Party Beneficiary Rights to the U.S. Army Corps of Engineers.pdf | Download | Open File
- Jacksonville District Mitigation Banking Instrument Template.pdf | Download | Open File
- Jacksonville District Mitigation Banking Instrument Template Instructions.pdf | Download | Open File
- Jacksonville District Mitigation Banking Prospectus Template.docx | Download
- Jacksonville District Mitigation Banking Prospectus Template Instructions.pdf | Download | Open File
- Letter of Credit Financial Assurance Template.pdf | Download | Open File
- Mitigation Bank PreApp Checklist.pdf | Download | Open File
- Mitigation Banking Instrument Cost Estimation Spreadsheet.xlsx | Download
- Perpetual Trust Long-term Financing Mechanism Template.pdf | Download | Open File
- Signature Delegation Template.docx | Download
- Surety Bond Financial Assurance Template.pdf | Download | Open File

Credit Classification Information

This section includes documents associated with the credit classification system used in the Jacksonville District.

- 20111103 CESAJ-RD Credit Classification.pdf | Download | Open File
- 1988 SAJ: A Guide to Selected Florida Wetland Plants and Communities.pdf | Download | Open File
- Classification of Wetlands and Deepwater Habitats of the United States.pdf | Download | Open File
- Cowardin Classification Tree.pdf | Download | Open File
- 1999 Florida Land Use, Cover and Forms Classification System.pdf | Download | Open File
- 2010-FNAI Guide to the Natural Communities of Florida.pdf | Download | Open File
- 2018 Florida Land Cover Classification System.pdf | Download | Open File

Jacksonville District Guidance Documents

This section is intended to contain guidance documents specific to compensatory mitigation projects proposed within Florida. The guidance and information contained within any document available in this section is provided by the Jacksonville District Regulatory Division in an effort to assist proponents of third party mitigation projects in the development of technically sound, biologically successful compensatory mitigation projects.

- Guidance on the development of a Mitigation Service Area.pdf | Download | Open File
- Hydric Rating by Map Unit.pdf | Download | Open File
- Guidance for Multipurpose MBs and ILFs.pdf | Download | Open File
- Jacksonville District Credit Sales Notification and Verification Process Instructions (8/17/2022).pdf | Download | Open File
- Out of Service Area List (04/29/2025).pdf | Download | Open File

Miscellaneous Technical Documents

This section is intended to contain documents intended to assist in the development of different components of compensatory mitigation projects proposed within Florida. The guidance and information contained within any document available in this section is provided by the Jacksonville District Regulatory Division in an effort to assist proponents of third party mitigation projects in the development of technically sound, biologically successful compensatory mitigation projects. Using the information/guidance provided by these documents will assist in facilitating the development the compensatory mitigation project in a consistent manner which is intended to facilitate a smoother, more fast paced review process.

- 20180302-Wetland Delineation Public Notice.pdf | Download | Open File
- 1987 Wetland Delineation Manual.pdf | Download | Open File
- 2010-Wetland_Delineation_Manual-Atlantic_and_Gulf_Coastal_Regional_Supplement.pdf | Download | Open File
- SAJ JD Request Form and Wetland Delineation Requirement Info.pdf | Download | Open File
- AGCP Wetland Data Form.pdf | Download | Open File
- Hydric Soils Technical Standard.pdf | Download | Open File
- Application of a,a'-dipyridyl dye for hydric soil identification.pdf | Download | Open File
- Evaluation of Rainfall Normality.pdf | Download | Open File
- Sumner 2009 Methods to Evaluate Normal Rainfall.pdf | Download | Open File
- MFR St. Paul District Guidance Hydrology Performance Standards.pdf | Download | Open File
- Noble 2006 Water Table Monitoring Project Design.pdf | Download | Open File
- USACE 2005 Technical Standard for Water-Table Monitoring of Potential Wetland Sites.pdf | Download | Open File
- Iris Tubes.pdf | Download | Open File
- Simple and Reliable Approach For Quantifying IRIS Tube Data.pdf | Download | Open File

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Advanced Permittee Responsible Mitigation Sites

Advanced Permittee Responsible Mitigation Sites (APRMS) projects have historically been identified as Permittee Responsible Off-Site Mitigation Areas (PROMAs), Regional Off-Site Mitigation Areas (ROMAs), or Advance Permittee Responsible Off-Site Mitigation Areas (APROMAs).

Establishing an APRMS project provides no entitlement to, or guarantee of, use of that APRMS as compensation for any particular project causing impacts to WOTUS unless the APRMS project is approved in conjunction with a Department of the Army (DA) impact permit.

If proposing a new APRMS, please ensure to also include the following in addition to the components of a mitigation plan identified at 33 CFR 332.4(c):

- Identify the permittee to use the mitigation site. Considering the permittee must assume the responsibility for the associated compensatory mitigation, generally the APRMS will typically be used by one permittee who will be clearly identified in the permit letter which authorizes the APRMS project and its compensatory mitigation plan.
- All potential impact projects/sites for which the APRMS project may provide compensatory mitigation must be identified in the application that includes the APRMS project to the extent practicable.
- Ledger for tracking debits.

It is highly recommended to conduct a pre-application meeting with a mitigation SME prior to proposing an APRMS project.

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APRMS

If proposing to use an existing approved APRMS, please provide the following information:

1) Written justification demonstrating why the use of the APRMS is environmentally preferable in accordance with 33 CFR § 332.3(b).

2) Reference to the approved APRMS project including SAJ project number.

3) A summary of compliance with the Corps-approved APRMS compensatory mitigation plan and associated performance standards, including monitoring report results completed at the time of submittal of the DA permit application or the most recent monitoring report if less than one year old.

4) Description of how the APRMS adequately compensates for the unavoidable impacts to WOTUS associated with the proposed project.

5) Proposed amount and type of credits the applicant believes is necessary to offset unavoidable losses of WOTUS. The Corps retains the final decision on the type and amount of compensatory mitigation required for a specific DA permit.

6) An up-to-date ledger displaying the availability of credits at the APRMS project.

Questions?

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