

2022 USACE REGULATORY UPDATES WALLA WALLA DISTRICT REGULATORY BRANCH

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OUTLINE



- Waters of the U.S.
 - Pre-2015 Rule
- 2021 Nationwide Permits (NWP)
- Aspects of Stream Mitigation
- Tools and Helpful Links
- Questions and Discussion





WOTUS UPDATE



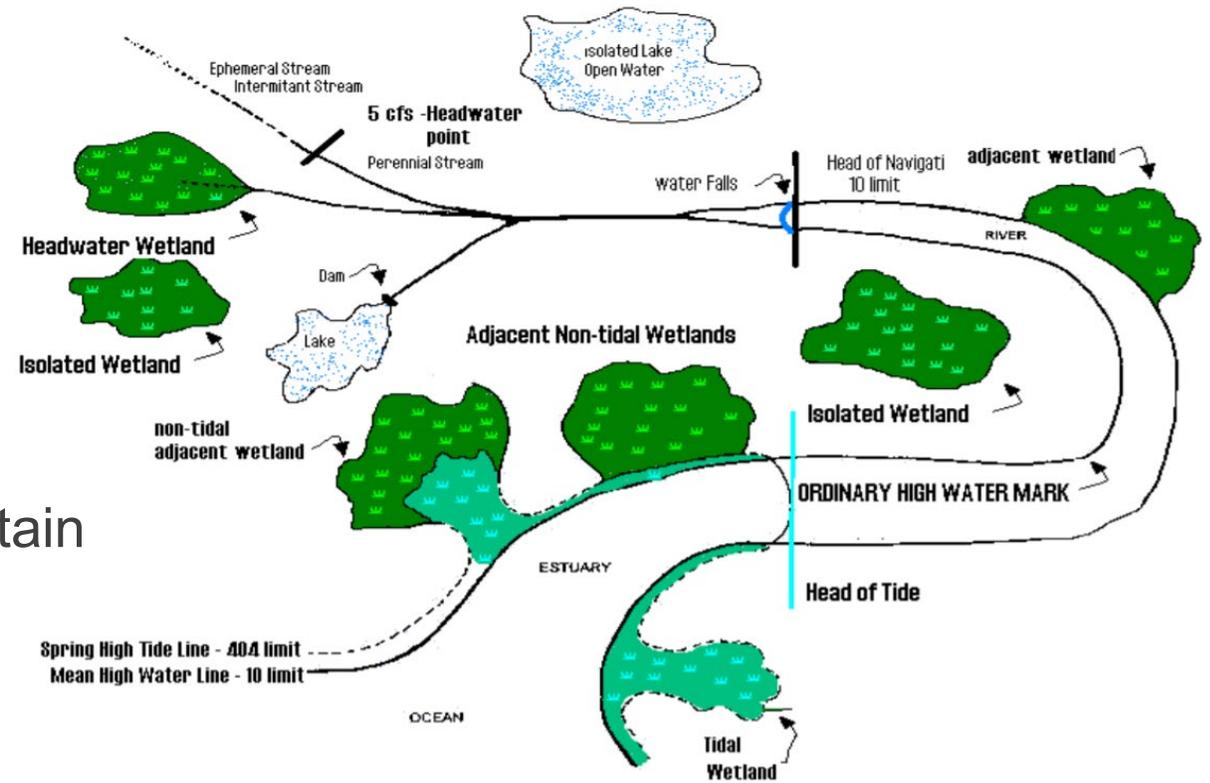
- On January 20, 2021 - the President signed Executive Order (E.O.) 13990: Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis.
- June 9, 2021 – EPA and Army announced their intent to revise the definition of "waters of the United States." via a 2-step rulemaking process.
- August 20, 2021 - District of Arizona issued an order vacating and remanding the Navigable Waters Protection Rule in the case of Pascua Yaqui Tribe v. U.S. Environmental Protection Agency.
- December 7, 2021 – the Agencies announced a proposed rule to revise the definition of “waters of the United States.”
- January 24, 2022 – Sackett II vs EPA (Docket 21–454)
- For more information, visit: www.epa.gov/wotus.



PRE-2015 REGULATORY REGIME



- 7 categories of jurisdictional waters
- Stand-alone interstate waters category
- Case-specific significant nexus analysis
- Tributary - Ephemeral features are no longer categorically excluded.
- Ditches – jurisdictional unless they meets certain criteria
- Wetlands – Adjacency definition

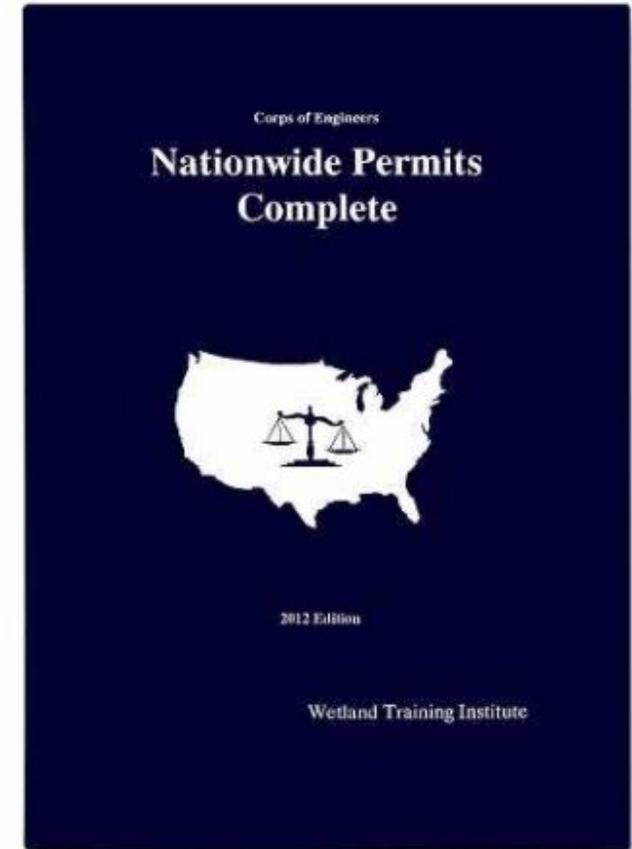




BASICS ON NATIONWIDE PERMITS



- Suite of Permits
- Nationally authorized and refined at the regionals level
 - Non-reporting / Pre-construction Notification (PCN)
 - Authorized ***if*** a project meets the terms and conditions of the specific NWP
 - General Conditions
 - Regional conditions
 - NWP specific conditions
- Renewed usually on 5-year cycle, 33 CFR 330.5 (b)
- Public outreach





2021 NWPS – GENERAL CONDITIONS



- 57 NWP total / 5 New NWP
- Proposed rule - effective Feb 25, 2022 – March 14, 2026
- Standardized the unit of measure for impacts
- General Condition 23(d) Stream mitigation threshold - all losses of stream bed that exceed 3/100-acre (~1300 sqft)
- General Condition 32 – Delineation is required for PCN activities





2021 NWPS – REGIONAL CONDITIONS



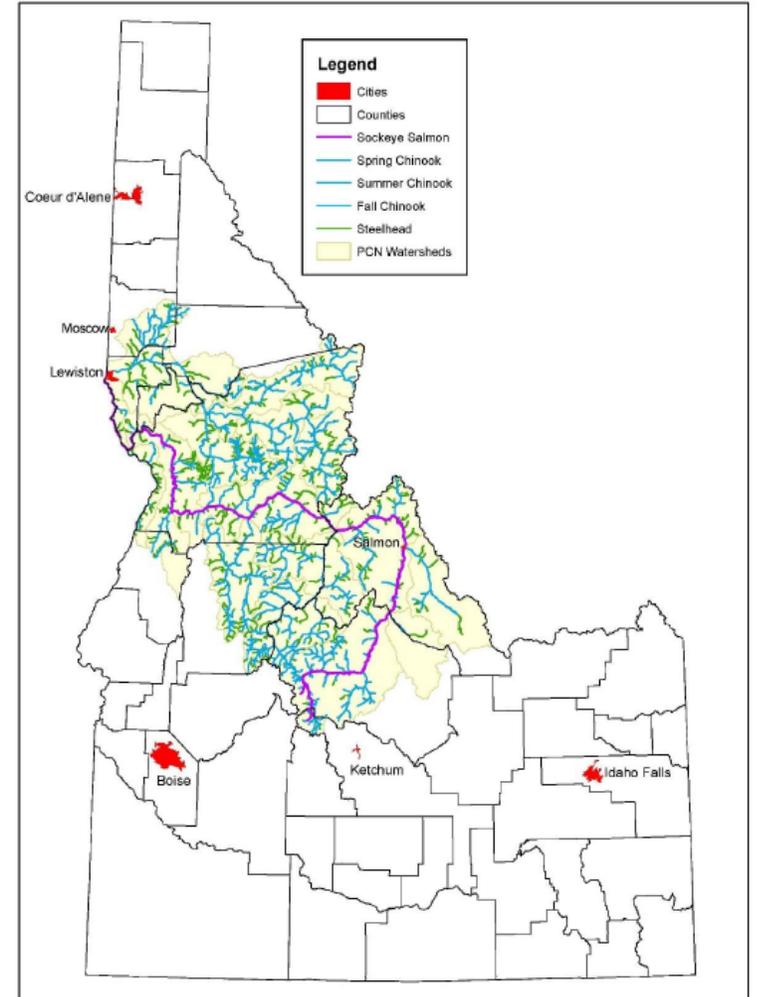
➤ Regional Conditions – broadened scope

➤ 9 Categories of Regional Conditions:

- A. PCN for Anadromous Fish Watersheds
- B. Vegetation Preservation and Replanting
- C. De-watering & Re-watering (as applicable)
- D. In-Water Structures and Complexes
- E. Temporary Sidecasting
- F. Suitability of Sediments for Open Water Disposal
- G. Avoidance and Minimization
- H. Erosion Control
- I. Reporting Requirement for Federal Permittees



Watersheds Requiring Pre-Construction Notification



0 20 40 80 Miles



STREAM FUNCTIONAL ASSESSMENTS



- Partial Loss
- Goals – Objectives – Performance Standards – Measures – Monitoring

Table 2.2 SFAM Function and Value Measures

Function Measures	
F1	Natural Cover
F2	Invasive Vegetation
F3	Native Woody Vegetation
F4	Large Trees
F5	Vegetated Riparian Corridor Width
F6	Fish Passage Barriers
F7	Floodplain Exclusion
F8	Bank Armoring
F9	Bank Erosion
F10	Overbank Flow
F11	Wetland Vegetation
F12	Side Channels
F13	Lateral Migration
F14	Wood
F15	Incision
F16	Embeddedness
F17	Channel Bed Variability

Value Measures	
V1	Rare Species Occurrence & Special Habitat Designations
V2	Water Quality Impairments
V3	Protected Areas
V4	Impervious Area
V5	Riparian Area
V6	Extent of Downstream Floodplain Infrastructure
V7	Zoning
V8	Frequency of Downstream Flooding
V9	Impoundments
V10	Fish Passage Barriers
V11	Water Source
V12	Surrounding Land Cover
V13	Riparian Continuity
V14	Watershed Position
V15	Flow Restoration Needs
V16	Unique Habitat Features

Table 4.2 Measures Informing Each Function Formula

Function	Function Measures																
	Natural Cover	Invasive Vegetation	Native Woody Vegetation	Large Trees	Vegetated Riparian Corridor Width	Fish Passage Barriers	Floodplain Exclusion	Bank Armoring	Bank Erosion	Overbank Flow	Wetland Vegetation	Side Channels	Lateral Migration	Wood	Incision	Embeddedness	Channel Bed Variability
Surface water storage						X			X		X			X	X		X
Sub/surface transfer									X	X	X						X
Flow variation*																X	X
Sediment continuity								X					X		X		
Substrate mobility							X									X	X
Maintain biodiversity		X	X	X		X				X	X			X			X
Create & maintain habitat			X	X		X	X					X		X	X	X	X
Sustain trophic structure	X	X	X						X	X							
Nutrient cycling	X				X				X	X							X
Chemical regulation					X				X	X							X
Thermal regulation	X																

*Flow Variation is also informed by the value measure, Impoundments. See Section 4.3 for information on this measure



KEY ASPECTS OF STREAM MITIGATION PLAN



➤ 12 Key Aspects

1. Objectives §332.4 (c)(2)
2. Site selection §332.4 (c)(3)
3. Site protection instrument §332.4 (c)(4)
4. Baseline information §332.4 (c)(5)
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12. Financial assurances §332.4 (c)(13)



UAV photo of stream reach where BDAs will be installed. Photo © Brian Cohen



UAV photo of stream with existing beaver ponds downstream of the previous photo, note the ponded water and green vegetation last October 2015 during a drought. Photo © Chris McColl





STREAM MITIGATION – SITE PROTECTION



- Legally Binding Instrument
- Prohibit incompatible uses, requires advanced notice for changes, completed concurrent or prior to impacts
- Private lands – i.e. Deed Restriction, Conservation Easements
- Federal Lands – Federal Facility Management Plans or Integrated Natural Resources Management Plans and Conservation Land Use Agreement





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STREAM MITIGATION - METHODS



- Compensatory mitigation for losses of streams should be provided, if practicable, through **stream rehabilitation, enhancement, or preservation**, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

Box 1: The 2008 Rule Mitigation Method Definitions

Restoration means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Re-establishment means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Establishment (creation) means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.

Enhancement means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Preservation means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Box 2: The 2008 Rule Preservation Criteria

Preservation is a permissible method only when five specifically enumerated criteria are met:

- (i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;
- (ii) 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;
- (iii) Preservation is determined by the district engineer to be appropriate and practicable;
- (iv) The resources are under threat of destruction or adverse modifications; and
- (v) 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).

(33 C.F.R. § 332.3(h)(1))



Figure_5-In relatively pristine wilderness river basins like the Middle Fork Salmon River, Idaho, shown here (Sulphur Creek, Frank Church River of No Return Wilderness; R. Thurow image), native salmonid assemblages

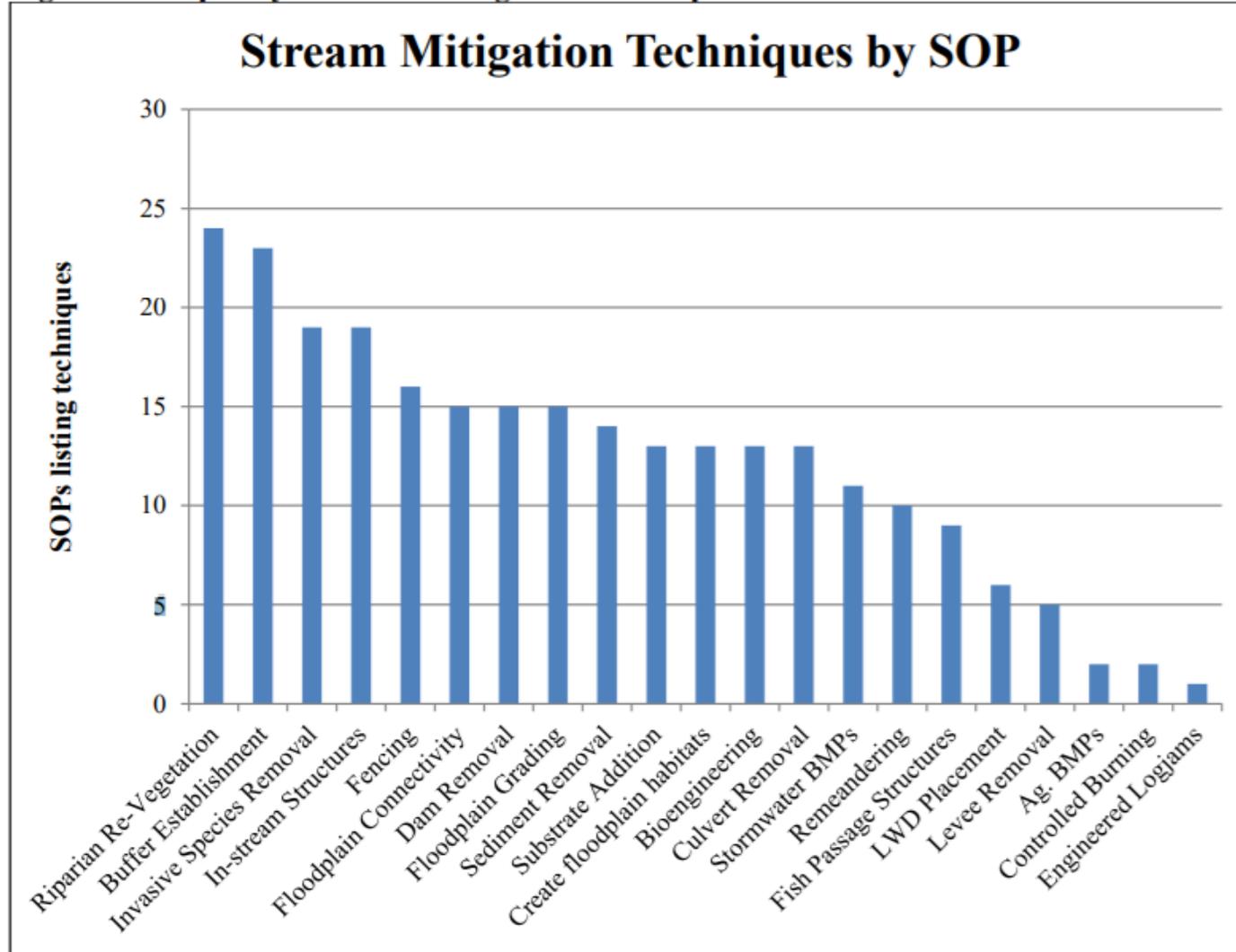


Color plate 9—Deep basin peatland. Aerial view of a floating mat surrounding a small lake in a basin setting. Hager Lake, Kaniksu National Forest, Idaho. Photo by Steve Spence.

STREAM MITIGATION - TECHNIQUES



Figure 2: Frequency of Stream Mitigation Techniques





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STREAM MIT. – PERFORMANCE STANDARDS



- Ecologically-based standards
- Non-bias and verifiable.
- Best available science
- Measured or assessed in a practicable manner
- Reference aquatic resources
- Phasing
- (See 33 CFR § 332.5.)

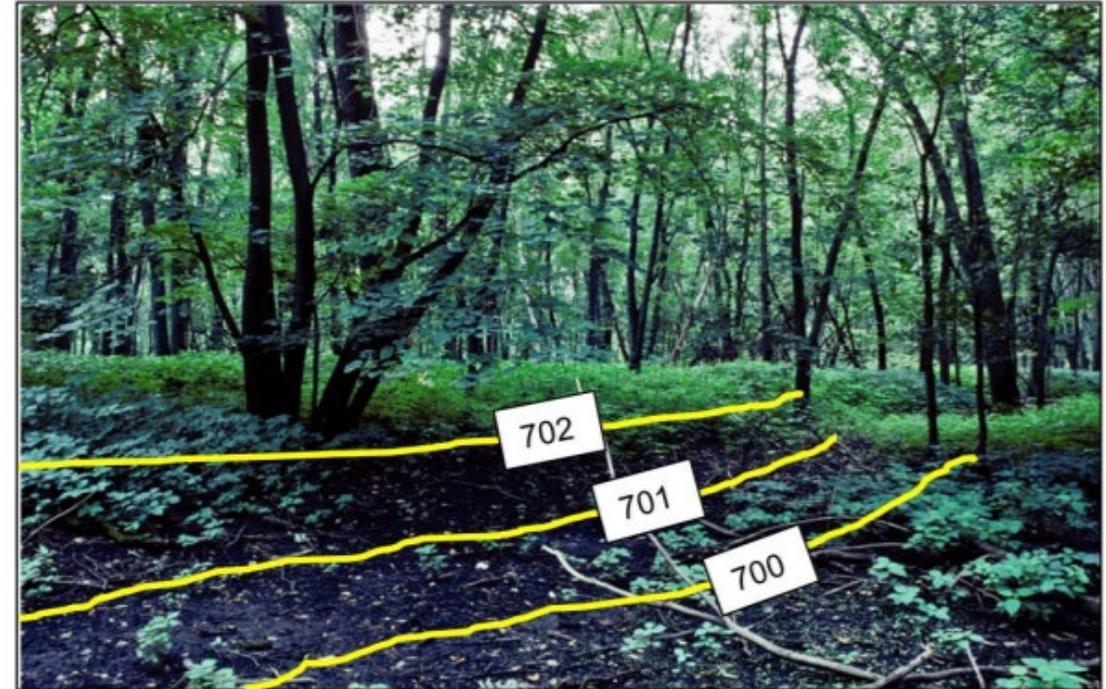


Figure 10
Example: **Target Hydrology for Floodplain Forest Communities**
Hydrology shall consist of inundation for a minimum of 14 consecutive days during the growing season at the following annual frequencies:

- Elevations below 700: $\geq 90\%$
- Elevations 700-701: $\geq 70\%$
- Elevations 701-702: $\geq 50\%$



STREAM MITIGATION - MONITORING



ANNUAL MONITORING REPORT FORMAT REQUIREMENTS

REFERENCE: *Regulatory Guidance Letter No. 08-03, OCT 2008*

Annual monitoring reports are required for all compensatory mitigation projects. Large, bulky reports that provide general information are discouraged. Annual monitoring reports should follow this 10-page maximum report format; larger projects may require a more complex mitigation monitoring report and may be longer than 10-pages.

I. PROJECT OVERVIEW *1-page*

- Corps of Engineers Permit Number, Mitigation Bank, or In-Lieu Fee Program
- Name and contact information of permittee, agent, and/or consultant
- Name of party responsible for conduction the monitoring and the date(s) the inspection was conducted
- A brief paragraph describing project purpose, acreage, type of aquatic resources impacted, mitigation acreage, and type of aquatic resources authorized to compensate for the aquatic impacts
- Written description of the location, any identifiable landmarks of the compensatory mitigation project, including information to located the site perimeter(s), and coordinates of the mitigation site
- Dates compensatory mitigation project commenced and/or was completed
- Short statement on whether the performance standards are being met
- Dates of any recent corrective or maintenance activities conducted since the previous report submission
- Specific recommendations for any additional corrective or remedial actions

II. REQUIREMENTS *2-pages*

List the monitoring requirements and performance standards, as specified in the approved mitigation plan, mitigation banking instrument, or special conditions of the permit. Also include an evaluation as to whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and the status of the developing mitigation site.

III. SUMMARY DATA *4-pages maximum*

Summary data must be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the finding and recommendations referenced in the monitoring report and to assist the Corps' project manager in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos must fit on standard 8-1/2" x 11" white sheets of paper, dated, and clearly labeled with the direction from which the photo was taken. Several photos per sheet are recommended. The photo location points should also be identified on the appropriate maps.

IV. MAPS and PLANS *3-pages maximum*

Maps should be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s), which will assist Corps' project managers in locating the mitigation area(s) during subsequent site inspections. Each map or diagram must fit on a standard 8-1/2" x 11" white sheet of paper and include a legend, north arrow, and the location of any photos submitted for review. As-built plans may be included.

Figure 6: Wilmington Monitoring Requirements Schedule

Monitoring Event	Stream Monitoring Activities Required
Pre-Construction	<input type="checkbox"/> Water Quality Monitoring <input type="checkbox"/> Macroinvertebrate Monitoring
Year 0 (as built)	<input type="checkbox"/> As-built Survey (includes longitudinal profile)
Year 1	<input type="checkbox"/> Vegetation Plot Monitoring <input type="checkbox"/> Stream Channel Stability/Hydrology Monitoring <input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Visual Monitoring, two times
Year 2	<input type="checkbox"/> Vegetation Plot Monitoring <input type="checkbox"/> Stream Channel Stability/Hydrology Monitoring <input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Visual Monitoring, two times
Year 3	<input type="checkbox"/> Vegetation Plot Monitoring <input type="checkbox"/> Stream Channel Stability/Hydrology Monitoring <input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Macroinvertebrate Monitoring <input type="checkbox"/> Visual Monitoring, two times
Year 4	<input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Visual Monitoring, two times
Year 5	<input type="checkbox"/> Vegetation Plot Monitoring <input type="checkbox"/> Stream Channel Stability/Hydrology Monitoring <input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Macroinvertebrate Monitoring <input type="checkbox"/> Visual Monitoring, two times
Year 6	<input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Visual Monitoring, two times
Year 7	<input type="checkbox"/> Vegetation Plot Monitoring <input type="checkbox"/> Stream Channel Stability/Hydrology Monitoring <input type="checkbox"/> Water Quality Monitoring, two times <input type="checkbox"/> Macroinvertebrate Monitoring <input type="checkbox"/> Visual Monitoring, two times



STREAM MIT. – LONG TERM MANAGEMENT



- Long term management plans requirements:
 - Responsible party
 - List management needs
 - Estimates of the annual cost
 - Establishment of funding mechanism in perpetuity





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STREAM MITIGATION – FINANCIAL ASSURANCE



- Help to ensure that work is initiated, completed, and maintained.

- Examples:
 - Performance Bond
 - Letter of Credit
 - Escrow Accounts
 - Casualty Insurance
 - Legislative appropriations

- Financial assurance may not be required in all circumstances.

- Short Term / Long Term





TOOLS AND HELPFUL LINKS FOR STREAM MIT



Site selection – Institute of Water Resources KMZ

Example Uniform Performance Standards -

<https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Mitigation/12505.1-SPD%20Table%20of%20Uniform%20Performance%20Standards.pdf>

Environmental Law Institute -

<https://www.eli.org/compensatory-mitigation/state-stream-compensatory-mitigation-science-policy-and-practice>

NWW Monitoring Report standards -

<https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/3133>

Rosgen Geomorphic Channel Design -

<https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17771.wba>



QUESTIONS?

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