

MEMORANDUM FOR RECORD

SUBJECT: Department of the Army Memorandum Documenting General Permit Verification

1.0 Introduction and overview: Information about the proposal subject to one or more of the Corps regulatory authorities is provided in Section 1, detailed evaluation of the activity is found in Sections 2 through 4 and findings are documented in Section 5 of this memorandum. Further, summary information about the activity including the administrative history of actions taken during project evaluation is attached (ORM2 summary) and incorporated into this memorandum.

1.1 Applicant name: Mobile Bay National Estuary Program
Attention: Mr. Jason Kudulis
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1.2 Activity location: Twelve Mile Creek headwaters located between Dickens Ferry Road and Foreman Road; Latitude: 30.686804° N, Longitude -88.203693° W; Section 20, Township 4 South, Range 2 West; Mobile, Mobile County, Alabama.

1.3 Description of activity requiring verification:

- a. Placement of 45 cubic yards of clean fill material from the newly realigned (cut) channel used to form a channel plug, preventing migration of the restored channel back into the old location.
- b. Placement of 178 cubic yards of rock fill material to form the riffle substrate in restored and re-contoured portions of 1,800 linear feet of Twelve Mile Creek.

The project will result in permanent placement of approximately 45 cubic yards of clean fill material and 178 cubic yards of rock/stone within 0.14-acre of Twelve Mile Creek headwaters and adjacent wetlands.

1.4 Permit authority: Section 404 of the Clean Water Act (33 USC 1344)

1.5 Applicable Permit: Nationwide Permit (NWP) 27

1.6 Activity requires written waiver? No

2.0 Evaluation of the Pre-Construction Notification

2.1 Direct and indirect effects caused by the GP activity: The proposed project involves stream restoration along 1,800 linear feet of ephemeral channel within the headwater system of Twelve Mile Creek. The proposed project involves multiple stream and riparian buffer restoration activities, which will include: 1) relocation

and/or establishment of new stream channel with appropriate dimension, pattern, and profile, including in-stream riffle features, for a stable stream appropriate for the watershed, constructed within the original floodplain or within a newly established floodplain; 2) filling a segment of the original channel to prevent migration of the new stream back to the old stream channel; 3) removal of extensive dominant exotic species subcanopy/understory component; and 4) installation of native groundcover, shrub, and subcanopy component. The proposed activities will involve ground disturbance and filling activities associated with clearing, grading, relocation, and re-contouring of the stream channel and floodplain, as well as the installation of in-stream structures such as riffle features and the planting of native vegetation.

Direct effects of the proposed activities include temporary loss of upland and riparian habitat functions in the restoration corridor due to vegetative clearing and ground disturbance; and potential temporary downstream turbidity due to loss of silt/sediment during ground disturbance activities. A loss of non-motile organisms within the fill and grading areas is expected. Considering the enhancement and restoration nature of the proposed project, the overall effect should allow for species to re-establish following project completion. Indirect effects of the proposed activities include improvements to floodplain functions, such as improved energy dissipation and reduction in sediment transport, water quality, and aquatic / riparian habitat within this reach of Twelve Mile Creek.

2.2 Site specific factors: The current segment of stream exists as a channelized and excavated flow way maintaining very little stream, wetland or riparian functions. The section of stream under consideration maintains significant alterations to the stream morphology and adjacent land use characteristics. These conditions have severely reduced or eliminated many of the physical and biological values and functions within this ephemeral reach of Twelve Mile Creek. Sediment from overland sources and stream bed and bank erosion is carrying pollutants including oxygen-demanding substances and nutrients. Much of the floodplain associated with the stream has been degraded due to disconnection of the stream. Uplands nearby the project area include residential subdivisions, apartment complexes, and commercial developments. The proposed project is located between Dickens Ferry Road and Foreman Road and will not impact road infrastructure, such as the existing culverts. Additionally, there are no structures proposed in the scope of this project.

2.3 Coordination

2.3.1 Was the PCN coordinated with other agencies? Yes

Application acknowledgment letter was provided to the Alabama Department of Environmental Management, and they will also be provided with a copy of the completed permit verification letter.

2.3.2 Was the PCN coordinated with other business lines of the Corps? No

2.4 Mitigation

2.4.1 Provide brief description of how the activity has been designed on-site to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site: The project has been designed to minimize impacts to aquatic/riparian habitat and water quality during construction activities and to ensure long-term stability of the restored stream through implementation of the following: 1) all fill areas, fill slopes, and disturbed upland areas will be stabilized during and after construction so as to prevent any erosion, sedimentation, siltation, or scouring; 2) best management practices for erosion control will be implemented and maintained at all times during construction to prevent siltation and turbid discharges in excess of State water quality standards; 3) erosion control methods may include but are not limited to staked wattles, trenched silt fencing, sodding, seeding, and mulching, and staged construction activities; 4) re-vegetation of riparian and upland buffer habitats with native species occurring in zones consistent with moisture requirements appropriate for each specific component; 5) invasive and exotic species will be treated, monitored, and maintained at levels considered appropriate. The applicant has provided detailed construction plans demonstrating avoidance and minimization of adverse impacts to waters of the United States at the project site and in receiving waters.

2.4.2 Is compensatory mitigation required for unavoidable impacts to jurisdictional aquatic resources to reduce the individual and cumulative adverse environmental effects to a minimal level? No.

Provide rationale: No mitigation is required because the proposed project consists entirely of restoration activities.

3.0 Compliance with Other Laws, Policies and Requirements

3.1 Section 7(a)(2) of the Endangered Species Act (ESA)

3.1.1 ESA action area: The ESA action area includes the 1,800-linear-foot stream restoration project, as well as the riparian corridor buffer restoration area which varies in width from the stream, and the temporary construction access and equipment staging areas.

3.1.2 Are there listed species or designated critical habitat that may be present or in the vicinity of the Corps' action area? Yes

Effect determination(s), including no effect, for all known species/habitat, and basis for determination(s): The following list of species was provided by the USFWS within a Google Earth data layer for the Toulmins Spring Branch – Three Mile Creek HUC Area (HUC# 0316 0204 0504): Wood Stork (T) (*Mycteria americana*), Gopher Tortoise (C) (*Gopherus polyphemus*), Eastern Indigo Snake (T) (*Drymarchon corais couperi*), Black Pine Snake (T) (*Pituophis melanoleucas lodingi*), and the Gulf Sturgeon (T) (*Acipenser oxyrinchus desotoi*).

There is no designated critical habitat within the permit area for any listed species.

See the following discussions for each of the potential species present:

Wood Stork (*Mycteria americana*) (T): Wood Storks use a wide variety of freshwater and estuarine wetlands, such as: freshwater marshes, narrow tidal creeks, and flooded tidal pools. Good foraging areas are calm, uncluttered by dense thickets of aquatic vegetation, and have a water depth of 2 to 15 inches with emergent areas and shallow open water areas. These habitats must provide sufficient density and biomass of forage fish and vegetation that allow storks to locate and capture prey. Wood storks will use both natural and man-made impoundments and are known or believed to occur in 43 of 67 Alabama counties. No successful nesting has been documented in Alabama.

Rationale: There are currently no documented, successfully nested colonies of Wood Stork in Alabama. The ESA action area of this project lacks the requisite foraging habitat described above. The project action area is an ephemeral, headwater stream that lacks the characteristic vegetation needed for the stork to locate and capture prey. Additionally, the stream is located in an urbanized area that incurs frequent human disturbance. No Effect.

Gopher Tortoise (*Gopherus polyphemus*) (C): The Gopher Tortoise is a large terrestrial reptile which possesses forefeet well adapted for burrowing. This species is associated with deep, well drained sandy soils near hill crests in open forests or savannas of the coastal plains. The gopher tortoise usually eats low-growing plants found in bright sunshine, primarily grasses, such as wiregrass. Some tortoises have been known to eat gopher apples, blackberries, and other fruits. For the gopher tortoise to thrive, the animal generally needs three things: well drained sandy soil (for digging burrows), plenty of low plant growth (for food), and open, sunny areas (for nesting and basking).

Rationale: This project's ESA action area includes a densely vegetated, ephemeral, headwater stream located in an urbanized area that incurs frequent human disturbance. No Gopher tortoise burrows or animals were observed during site surveys performed in July and September 2018 by Wetland Sciences Incorporated. The effect determination for this species is based upon the lack of suitable habitat and results of the site surveys performed by Wetland Sciences Incorporated. No Effect.

Eastern Indigo Snake (*Drymarchon corais couperi*) (T): The Eastern Indigo snake is a terrestrial snake associated with deep, well drained sandy soils near hill crests in open forests or savannas of the coastal plains. This snake is a commensal species with the Gopher tortoise.

Rationale: This project's ESA action area features a densely vegetated, ephemeral, headwater stream located in an urbanized area that incurs frequent human disturbance. No Gopher tortoise burrows or animals were observed during site surveys performed in July and September 2018 by Wetland Sciences Incorporated. It includes no pine forests or pine savannah types of habitat. Therefore, no suitable habitat is present for this species. No Effect.

Black Pine Snake (*Pituophis melanoleucas lodingi*) (T): The Black Pine snake is a terrestrial snake. Characteristics of primary habitat for the black pine snake include: (1) longleaf pine forests on well-drained, sandy soils, (2) pine stump holes, and (3) an abundance of herbaceous ground cover that provides habitat for prey such as cotton rats and various species of mice. Characteristics of secondary habitat include riparian areas, hardwood forests, and pine plantations adjoining primary habitat that may be used for foraging and as travel corridors between core primary habitat units. Unsuitable habitat includes non-forested areas such as open mowed areas, row-crop agriculture areas, ponds and lakes, intensively managed closed-canopy pine plantations, pine forest with dense shrub/sapling layer, and dense hardwood forest stands that are not within 300 feet of longleaf pine forests, as well as forested lands within an urban setting where only patches of forest remain between neighborhoods and commercial development.

*Rationale: This project's ESA action area features a densely vegetated, ephemeral, headwater stream located in an urbanized area that incurs frequent human disturbance. This location is characterized as unsuitable habitat based on geographical location between neighborhoods and commercial development. No animals were observed during site surveys performed in July and September 2018 by Wetland Sciences Incorporated. **No Effect.***

Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) (T): The Gulf Sturgeon is a large fish that primarily inhabits marine/estuarine waters in the fall and winter and migrates up river systems that drain into the Gulf of Mexico in the spring for spawning. Spawning substrates are usually hard clay, rubble, gravel, or shell. Juveniles spend their first two years in riverine habitats after which they migrate to marine/estuarine habitats.

*Rationale: The ESA action area is a densely vegetated, ephemeral, headwater stream and not within an area designated as critical habitat for the Gulf Sturgeon. The effect determination for this species is based upon the ephemeral nature of this headwater stream as having no potential to contain this species: **No Effect.***

- 3.1.3 Has another federal agency been identified as the lead agency for complying with Section 7 of the ESA with the Corps designated as a cooperating agency and has that consultation been completed? No
- 3.1.4 Consultation with either the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service was initiated and completed as required, for any determinations other than “no effect” (see the attached ORM2 Summary sheet for begin date, end date and closure method of the consultation) . Based on a review of the information above, the Corps has determined that it has fulfilled its responsibilities under

Section 7(a) (2) of the ESA. The documentation of the consultation is incorporated by reference.

3.2 **Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Stevens Act), Essential Fish Habitat (EFH)** N/A, there is no essential fish habitat in this district's area of responsibility.

3.2.1 Did the proposed project require review under the Magnuson-Stevens Act? No. the project is located on an inland freshwater, ephemeral stream outside of marine and/or estuarine waters regulated by NMFS and/or subject to EFH effects evaluation.

3.2.2 If yes, EFH species or complexes considered: N/A

3.2.3 Has another federal agency been identified as the lead agency for complying with the EFH provisions of the Magnuson-Stevens Act with the Corps designated as a cooperating agency and has that consultation been completed? No

3.2.4 Consultation with the National Marine Fisheries Service was initiated and completed as required (see the attached ORM2 Summary sheet for begin date, end date and closure method of the consultation) . Based on review of the above information, the Corps has concluded that it has fulfilled its responsibilities under the EFH provisions of the Magnuson-Stevens Act.

3.3 **Section 106 of the National Historic Preservation Act (Section 106)**

3.3.1 Section 106 permit area: The permit area includes those areas comprising waters of the United States that will be directly affected by the proposed work or structures. Activities outside of waters of the U.S. are not included because all three tests identified in 33 CFR 325, Appendix C(g)(1) have not been met.

Final description of the permit area: The permit area overlaps the ESA action area, including the 1,800-linear-foot stream restoration project, as well as the riparian corridor buffer restoration areas which vary in width, and the temporary construction access and equipment staging areas.

3.3.2 Known historic properties? No.

Effect determination and basis for that determination: **No Potential to Cause Effects** to historic properties listed or eligible for listing on the National Register of Historic Places (NRHP). A review of the Alabama Register of Landmarks & Heritage and a listing of Alabama properties listed on the National Register of Historic Places indicate there are no known cultural resource sites within proximity to the permit area. The project area in question has existed in a highly manipulated condition as a result of historic ditching, clearing, infrastructure placement and adjacent development activities. These previous land uses and current activities on site suggest that any cultural resource materials that might previously have existed in the permit area have either been destroyed or would be so disturbed that they could

provide no historically intact information about the area. No further cultural resource investigation of the permit area was requested.

3.3.3 Has another federal agency been identified as the lead federal agency for complying with Section 106 of the National Historic Preservation Act with the Corps designated as a cooperating agency and has that consultation been completed?

No

3.3.4 Consultation was initiated and completed with the appropriate agencies, tribes and/or other parties for any determinations other than “no potential to cause effects.” (see the attached ORM2 Summary sheet for begin date, end date and closure method of the consultation) . Based on a review of the information above, the Corps has determined that it has fulfilled its responsibilities under Section 106 of the NHPA. Compliance documentation incorporated by reference.

3.4 Tribal Trust Responsibilities

3.4.1 Was government-to-government consultation conducted with Federally-recognized Tribe(s)? No

Provide a description of any consultation(s) conducted including results and how concerns were addressed. The Corps has determined that it has fulfilled its tribal trust responsibilities.

3.4.2 Other Tribal including any discussion of Tribal Treaty rights? N/A

3.5 Section 401 of the Clean Water Act – Water Quality Certification (WQC)

3.5.1 Is a Section 401 WQC required, and if so, has the certification been issued, waived or presumed? A general WQC has been issued for this permit.

3.6 Coastal Zone Management Act (CZMA)

3.6.1 Is a CZMA consistency concurrence required, and if so, has the concurrence been issued, waived or presumed? N/A, a CZMA consistency concurrence is not required.

3.7 Wild and Scenic Rivers Act

3.7.1 Is the project located in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system? No

If yes, summarize coordination and the determination on whether activity will adversely affect the Wild and Scenic River designation or study status. The Corps has determined that it has fulfilled its responsibilities under the Wild and Scenic Rivers Act.

3.8 Effects on Corps Civil Works Projects (33 USC 408)

3.8.1 Does the applicant also require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would alter, occupy, or use a Corps Civil Works project? No, there are no Corps Civil Works project(s) in or near the vicinity of the proposal.

3.9 **Other (as needed):** N/A

4.0 Special Conditions

4.1 Are special conditions required to ensure minimal effects, protect the public interest and/or ensure compliance of the activity with any of the laws above? Yes

4.2 Required special condition(s)

a. The activity shall be conducted in accordance with the information submitted and meet the conditions applicable to the NWP, as described at Parts B and C of the NWP Program and State Regional Conditions.

Rationale: This condition emphasizes to the permittee the importance of undertaking due diligence to understand all regulatory conditions applicable to the permitted activity such that the permittee can ensure their project is in compliance with the terms and conditions of the permit and the individually issued permit verification.

b. The disposal of trees, brush and other project related debris in any wetland, stream corridor or other surface water is prohibited. Trees, brush, other debris, excess soil and other materials generated from project construction must be removed to an upland disposal area.

Rationale: This condition reinforces the authorized limits of project impacts and disposal area. This conditions specifies that permanent side-casting or unauthorized placement of any type of debris removed from the project area into wetlands or waters of the U.S. is an adverse impact that has not been authorized. Upland disposal is the only acceptable disposal method.

c. The attached yellow Notice of Authorization sign must be posted at the site during construction of the permitted activity.

Rationale: This condition informs the permittee of USACE, Mobile District requirement to post the Notification of Authorization sign at the site for the information and benefit of the general public and local/municipal inspectors.

d. It is the permittee's responsibility to ensure the contractors working on this project are aware of all general and special permit conditions.

Rationale: This condition places permit holder on notice that he/she is ultimately responsible to ensure that the permitted activity complies with all Regional, General, and Special Conditions placed on the Nationwide Permit regardless of contractors or subcontractors who may be hired to conduct work or monitor compliance.

e. Within 30 days of completion of the work authorized, the attached Compliance Certification form must be completed and submitted to the USACE.

Rationale: This condition included to emphasize to the permittee the requirement of general condition 30 of the Nationwide Permits requiring submission of the compliance self-certification document.

5.0 Determination

5.1 Waiver request conclusion, if required or select N/A: N/A

5.2 The activity, with the required mitigation, will result in no more than minimal individual and cumulative adverse effects on the aquatic environment and will not be contrary to the public interest, provided the permittee complies with the special conditions identified above.

5.3 This activity, as described, complies with all terms and conditions of the permit identified in Section 1.5.

PREPARED BY:

C. Dianne Jordan
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South Alabama Branch

Date:_____

APPROVED BY:

S. Brad Crosson
Team leader
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Date:_____