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Policy Guidance for Section 404 Mitigation For Operation and Maintenance Activities

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Policy Guidance for Section 404 Mitigation For Operation and Maintenance Activities

St. Paul District, U.S. Army Corps of Engineers

1. References:

a. Section 906 of the Water Resources Development Act of 1986 (Public Law 99-662), Fish and Wildlife Mitigation.

b. Section 307 of the Water Resources Development Act of 1990 (Public Law 10-640, 28 November 1990).

c. Memorandum, CECW-OR, 7 February 1990, subject: Section 404 Mitigation Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines.

d. ER 1105-2-100, 28 December 1990, Section 7-35: Mitigation Planning and Recommendations.

e. Memorandum, CECW-PA, 7 March 1991, subject: Policy Guidance Letter No. 24, Restoration of Fish and Wildlife Habitat Resources.

f. 33 CFR 335-338, Discharge of Dredged Material Into Waters of the U.S. or Ocean Waters; Operation and Maintenance.

2. Background: Reference 1a. authorized the Secretary of the Army to mitigate damages to fish and wildlife resources resulting from any water resources project under the Secretary's jurisdiction, whether completed, under construction, or to be constructed. Reference 1b. established for the Corps of Engineers water resources development program an "interim goal of no overall net loss of the Nation's remaining wetlands base, as defined by acreage and function, and a long-term goal to increase the quality and quantity of the Nation's wetlands, as defined by acreage and function." Reference 1c. provides specific policy and procedures to be used by the Environmental Protection Agency and the Department of the Army in determining the type and level of mitigation necessary to demonstrate compliance with the Clean Water Act Section 404(b)(1) Guidelines for the Section 404 Regulatory Program. Reference 1d. provides guidance on mitigation planning in conducting civil works planning studies. For these studies, the guidance states that the project-caused adverse impacts to fish and wildlife resources shall be avoided or minimized to the extent practicable, and that remaining, unavoidable impacts shall be compensated

to the extent justified. Reference 1e. provides policy guidance for Corps activities regarding restoration of fish and wildlife habitat resources. This guidance document indicates that the policy under current budgetary constraints does not provide for implementation of the provisions of WRDA 1986 to mitigate for past damages to fish and wildlife resources at existing projects under Section 906(e). Reference 1f. provides guidance in evaluating dredged material disposal for navigation projects.

3. Purpose: To provide guidance and procedures for wetland mitigation for St. Paul District Operation and Maintenance (O&M) activities at existing Civil Works projects consistent with Corps policy and applicable laws and regulations.

4. Applicability: This policy guidance is applicable to all St. Paul District elements having Operation and Maintenance responsibilities for existing Civil Works projects. This guidance is not applicable to new starts, which are covered under reference 1d., or the regulatory program, which is covered under reference 1b. This guidance also does not apply to mitigation for degradation that in at least part was caused by the construction of and/or past operation and maintenance activities for existing projects (reference 1e.).

5. Definitions:

Appropriate: Commensurate with the scope and degree of environmental impacts of a project.

Avoidance: Precluding potential impacts by not taking a certain action or parts of an action or by modifying an action to eliminate impacts.

Balanced Multiple Resource Approach: Equitable emphasis on natural, cultural, social, recreational, and economic resources in developing and evaluating alternative actions (sustainable development).

Compensatory mitigation: Providing replacement for the unavoidable loss of aquatic/wetland resources that occur.

Cost Effective: Best use of money; most value.

Existing Technologies: Equipment and methods that are generally available.

Feasibility: To be workable, practicable, cost effective, and environmentally acceptable (in compliance with applicable environmental guidelines, regulations, and laws).

Federal Standard: Dredged material disposal alternative(s) identified by the Corps which represents the least costly alternatives consistent with sound engineering practices and environmental requirements. Under the federal standards determination process the alternative or alternatives are selected through the 404(b)(1) evaluation process, environmental assessment or environmental impact statement, and public notice coordination process.

Justifiable: To be practicable; appropriate, under existing guidance, regulations, and laws; and the most cost effective.

Least Costly: Least in terms of monetary costs, after considering engineering practices and environmental requirements.

Logistics: Factors (i.e., procurement, personnel, equipment, environmental constraints) influencing how, when, and what work is accomplished.

Offset: Balance.

Minimization: Limiting the degree or magnitude of an action; rectifying the impact by rehabilitating or restoring the affected resource; or reducing the impacts over time by preservation or maintenance over time.

Partnership: A group established to cooperatively work together to reach common goals.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Wetlands: Areas that under normal circumstances have hydrophytic vegetation (plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content), hydric soil (a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part), and wetland hydrology (permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the soil). Wetlands will be delineated by the U.S. Army Corps of Engineer's 1987 Wetlands Delineation Manual (Technical Report Y-87-1, with addenda) or the most current manual being used in the Corps 404 Regulatory Program.

6. Policy: The St. Paul District, in its O&M activities, will strive to avoid and minimize adverse impacts and compensate for unavoidable adverse impacts to existing wetlands and aquatic resources. The St. Paul District's interim goal in conducting the O&M mission will be to achieve

no overall net loss of wetland acres, values and functions, and a long-term goal to increase the quality and quantity of wetland acres and functions.

Mitigation planning will be sequential and follow the Council on Environmental Quality regulations (40 CFR 1508.20) to include avoidance, minimization (minimizing, rectifying, or reducing impacts over time), and compensation. The determination of what level of mitigation constitutes appropriate mitigation will be based on the acres, values and functions of the wetland/aquatic resources that will be affected. Mitigation planning for O&M activities will occur sequentially as follows:

a. Avoidance - No discharge of dredged or fill material will be done if there is a practicable alternative to the proposed discharge which would have less adverse impact to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. To determine whether practicable alternatives are available and capable of being done, consideration, as specified in the 404(b)(1) Guidelines, needs to be given to cost effectiveness, existing technology, and logistics in light of overall project purposes. It is the Corps' policy (see reference 1f.) to regulate the discharge of dredged material from its navigation projects to assure that dredged material disposal occurs in the least costly, environmentally acceptable manner, consistent with engineering requirements established for the project. The least costly alternative, consistent with sound engineering practices and selected through the application of the 404(b)(1) guidelines will be designated the federal Standard for the proposed project.

b. Minimization - Projects will be designed, to the extent practicable, to minimize unavoidable impacts to the aquatic ecosystem. Temporary impacts to wetlands (e.g., construction of a temporary access road or staging area) should be rectified by repairing, rehabilitating, or restoring the affected wetlands. After an activity is completed, further wetland impacts from draining or filling will be reduced or eliminated by maintaining, operating, and managing the project in a manner that preserves and maintains remaining wetland functions and values.

c. Compensatory Mitigation - Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been done. Compensatory mitigation (e.g., restoration of existing degraded wetlands, restoration of former wetlands that have been completely or partially drained or filled, or creation of man-made wetlands) should be provided, to the maximum extent practicable and justifiable, in areas adjacent or contiguous to the discharge site (on-site mitigation). If on-site compensatory mitigation is not practicable or feasible, off-site compensatory mitigation should be undertaken in the same geographic area (i.e., in close physical proximity and, to the extent possible, in the same watershed). In the special case of the District's 1995 modified Channel Maintenance Management Plan, a reduction in impacts at one of the selected disposal sites (included in the baseline exemption described in Section 6c(1)(c)) may be evaluated as a compensatory mitigation alternative at another disposal site.

In determining compensatory mitigation, the functional values lost by the resource to be affected must be considered. Generally, in-kind compensatory mitigation is preferable to out-of-

kind. The likelihood of success of habitat development of this type should be considered in determining appropriate and practicable compensatory mitigation. In general, higher priority would be given to restoration of former wetlands or existing degraded wetlands rather than creation of new wetlands.

Functions and values should be assessed by applying aquatic site assessment techniques generally recognized by experts in the field and/or the best professional judgment of Federal and State agency representatives. The determination of the appropriate assessment techniques to use in a given situation should be based on coordination with representatives of the Federal/State/local agencies involved. To the extent practicable, existing coordinating bodies like the River Resources Forum and the Minnesota River Partnership Group will be used to develop and evaluate mitigation alternatives, including the concept of mitigation banking. The final determination of the required level and kind of mitigation will be made by the District Engineer.

The objective of compensatory mitigation for unavoidable impacts is to offset environmental losses. Mitigation should provide, at a minimum, 1 for 1 functional replacement, with an adequate margin of safety to reflect the expected degree of success associated with the mitigation plan. In the absence of more definitive information on the functions and values of specific wetlands sites, a minimum of 1 to 1 acreage replacement may be used as a reasonable surrogate for no net loss of functions and values. However, this ratio may be greater where functional values of the area being affected are demonstrably high and the replacement wetlands are of lower functional value or the likelihood of success of the mitigation project is low.

Incremental analysis may be required to determine the most cost effective and justifiable compensation alternatives or measures. Compensatory mitigation will not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternatives.

(1) Exemptions - Compensatory mitigation for unavoidable impacts on wetlands will be exempt for the following situations.

(a) Normal or Emergency Maintenance or Repair of Existing Structures - A replacement plan for wetlands is not required for normal maintenance and repair of existing Corps of Engineers public works, provided the activity does not significantly change the dimensions or functions of the initial project and does not result in additional intrusion into wetlands or draining or filling, wholly or partially, of a wetland. 33 CFR 230.9(b)

(b) Emergency and Imminent Closure Dredging - A pre-approved replacement plan for wetlands/aquatic areas is not required prior to completing emergency or imminent closure dredging operations. Subsequent required mitigation will involve rectification, removal and restoration, and/or compensatory mitigation.

(c) Great River Environmental Action Team I (GREAT I) Channel Maintenance Plan - The major product of the GREAT I planning effort was a document describing the manner in which the navigation project should be operated and maintained through the year 2025. This GREAT I Channel Maintenance Plan was approved by all State and Federal

resource agencies, except the federal Department of Transportation, and was endorsed by Congress in the 1986 Water Resources Development Act. This channel maintenance plan attempted to balance environmental, recreational, social, and economic values. A great emphasis was placed on avoiding and minimizing impacts on aquatic and wetland habitats. The GREAT I selected plan would have affected 503 acres of aquatic or wetland habitat, compared to 915 acres with the GREAT I National Economic Development Plan and 215 acres with the Environmental Quality Plan.

The St. Paul District modified the GREAT I Channel Maintenance Plan through a series of long term management plans for dredged material placement. The District's 1996 recommended Channel Maintenance Management Plan (CMMP) further reduce the impacts to wetlands and aquatic areas to approximately 228 acres. The recommended plan does include some locations where the impacts to aquatic areas or wetlands exceed the GREAT I Channel Maintenance Plan. However, the overall recommended plan represents a significant reduction in the total number of acres to be affected. Therefore, a replacement plan for wetlands will not be required for implementation of the 1996 CMMP. The District will not take mitigation credit for the reduction in acres of affected wetlands from the GREAT I recommended plan for other O&M activities or channel maintenance activities that extend past the modified channel maintenance management plan.

The District's 1996 modified CMMP will form the baseline from which all future O&M actions will be evaluated to determine compensatory mitigation requirements. The boundaries of the 1996 CMMP disposal sites form the baseline of the wetland mitigation exemption. Site maps (ortho-rectified aerial photographs, most at a scale of 1" = 200') and narrative will be included in the 1996 Channel Maintenance Management Plan to clearly show and describe the specific areas acceptable to be used for dredged material placement as part of the baseline exemption.

(d) Regulatory Permits - A replacement plan for wetlands will be considered on a case-by-case basis for Corps O&M activities that meet the conditions of the Corps 404 Regulatory Program's Regional, Nationwide, or Programmatic Permits that do not require compensatory mitigation.

(e) Environmental Enhancement/Restoration - For dredged material placement plans and natural resource management activities that are considered environmental enhancement/restoration projects, replacement of acres directly impacted by material placement is not required as long as the anticipated benefits of the project exceed the direct impacts. The additional benefits gained will not be used to compensate for impacts of other projects.

(f) Recreation Beach Maintenance Plans - On the UMR, recreation beach maintenance sites that have been endorsed by the River Resources Forum or On-site Inspection Team, without the need to do compensatory mitigation, would be exempt from the requirements of compensatory mitigation.

(2) Wetland Mitigation Banking - Wetland banking may be an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful

bank. The wetland bank should be established as soon as practicable, preferably prior to accumulating any debts. If the concept of a bank is pursued for use on the UMR, the St. Paul District proposes a partnership effort with concerned local, State and Federal agencies to accomplish Section 404 compensatory mitigation of non-exempted O&M wetland/aquatic impacts. Potential mitigation studies and projects would be identified, developed, prioritized and endorsed by the River Resources Forum Partnership.

7. Monitoring - Compensatory mitigation projects will be monitored periodically to determine the long-term success of the mitigation project. Monitoring would be limited to physical and chemical parameters and plants. Qualitative information on fish and wildlife use, including macroinvertebrates, may also be collected during site visits.