

Title 23: Highways

PART 777—MITIGATION OF IMPACTS TO WETLANDS AND NATURAL HABITAT

AUTHORITY: 42 U.S.C. 4321 *et seq.*; 49 U.S.C. 303; 23 U.S.C. 101(a), 103, 109(h), 133(b)(1), (b)(11), and (d)(2), 138, 315; E.O. 11990; DOT Order 5660.1A; 49 CFR 1.48(b).

SOURCE: 65 FR 82924, Dec. 29, 2000, unless otherwise noted.

§777.1 Purpose.

To provide policy and procedures for the evaluation and mitigation of adverse environmental impacts to wetlands and natural habitat resulting from Federal-aid projects funded pursuant to provisions of title 23, U.S. Code. These policies and procedures shall be applied by the Federal Highway Administration (FHWA) to projects under the Federal Lands Highway Program to the extent such application is deemed appropriate by the FHWA.

§777.2 Definitions.

In addition to those contained in 23 U.S.C. 101(a), the following definitions shall apply as used in this part:

Biogeochemical transformations means those changes in chemical compounds and substances which naturally occur in ecosystems. Examples are the carbon, nitrogen, and phosphorus cycles in nature, in which these elements are incorporated from inorganic substances into organic matter and recycled on a continuing basis.

Compensatory mitigation means restoration, enhancement, creation, and under exceptional circumstances, preservation, of wetlands, wetland buffer areas, and other natural habitats, carried out to replace or compensate for the loss of wetlands or natural habitat area or functional capacity resulting from Federal-aid projects funded pursuant to provisions of title 23, U.S. Code. Compensatory mitigation usually occurs in advance of or concurrent with the impacts to be mitigated, but may occur after such impacts in special circumstances.

Mitigation bank means a site where wetlands and/or other aquatic resources or natural habitats are restored, created, enhanced, or in exceptional circumstances, preserved, expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources. For purposes of the Clean Water Act, Section 404 (33 U.S.C. 1344), use of a mitigation bank can only be authorized when impacts are unavoidable.

Natural habitat means a complex of natural, primarily native or indigenous vegetation, not currently subject to cultivation or artificial landscaping, a primary purpose of which is to provide habitat for wildlife, either terrestrial or aquatic. For purposes of this part, habitat has the same meaning as natural habitat. This definition excludes rights-of-way that are acquired with Federal transportation funds specifically for highway purposes.

Net gain of wetlands means a wetland resource conservation and management principle under which, over the long term, unavoidable losses of wetlands area or functional capacity due to highway projects are offset by gains at a ratio greater than 1:1, through restoration, enhancement, preservation, or creation of wetlands or associated areas critical to the protection or conservation of wetland functions. This definition specifically excludes natural habitat, as defined in this section, other than wetlands.

On-site, in-kind mitigation means compensatory mitigation which replaces wetlands or natural habitat area or functions lost as a result of a highway project with the same or like wetland or habitat type and functions adjacent or contiguous to the site of the impact.

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

Service area of a mitigation bank means that the service area of a wetland or natural habitat mitigation bank shall be consistent with that in the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 FR 58605, November 28, 1995), *i.e.*, the designated area (e.g., watershed, county) wherein a bank can be expected to provide appropriate compensation for impacts to wetlands and/or other aquatic or natural habitat resources.

Wetland or habitat enhancement means activities conducted in existing wetlands or other natural habitat to achieve specific management objectives or provide conditions which previously did not exist, and which increase one or more ecosystem functions. Enhancement may involve tradeoffs between the resource structure, function, and values; a positive change in one may result in negative effects to other functions. Examples of activities which may be carried out to enhance wetlands or natural habitats include, but are not limited to, alteration of hydrologic regime, vegetation management, erosion control, fencing, integrated pest management and control, and fertilization.

Wetland or habitat establishment period means a period of time agreed to by the FHWA, State DOT, and U.S. Army Corps of Engineers, as necessary to establish wetland or natural habitat functional capacity in a compensatory mitigation project sufficient to compensate wetlands or habitat losses due to impacts of Federal-aid highway projects. The establishment period may vary depending on the specific wetland or habitat type being developed.

Wetland or habitat functional capacity means the ability of a wetland or natural habitat to perform natural functions, such as provide wildlife habitat, support biodiversity, store surface water, or perform biogeochemical transformations, as determined by scientific functional assessment. Natural functions of wetlands include, but are not limited to, those listed by the U.S. Army Corps of Engineers at 33 CFR 320.4(b)(2)(i) through (viii).

Wetland or habitat preservation means the protection of ecologically important wetlands, other aquatic resources, or other natural habitats in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation of wetlands for compensatory mitigation purposes may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the aquatic ecosystem.

Wetland or habitat restoration means the reestablishment of wetlands or natural habitats on a site where they formerly existed or exist in a substantially degraded state.

Wetland or wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Wetlands or habitat mitigation credit means a unit of wetlands or habitat mitigation, defined either by area or a measure of functional capacity through application of scientific functional assessment. With respect to mitigation banks, this definition means the same as that in the Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks.

§777.3 Background.

(a) Executive Order 11990 (42 FR 26961, 3 CFR, 1977 Comp., p. 121) Protection of Wetlands, and DOT Order 5660.1A,1 Preservation of the Nation's Wetlands, emphasize the important functions and values inherent in the Nation's wetlands. Federal agencies are directed to avoid new construction in wetlands unless the head of the agency determines that:

1DOT Order 5660.1A is available for inspection and copying from FHWA headquarters and field offices as prescribed at 49 CFR part 7.

(1) There is no practicable alternative to such construction, and

(2) The proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

(b) Sections 103 and 133 of title 23, U.S. Code, identify additional approaches for mitigation and management of impacts to wetlands and natural habitats which result from projects funded pursuant to title 23, U.S. Code, as eligible for participation with title 23, U.S. Code, funds.

(c) 33 CFR parts 320 through 330, Regulatory Program, U.S. Army Corps of Engineers; Section 404, Clean Water Act and 40 CFR part 230, Section 404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material, establish requirements for the permitting of discharge of dredge or fill material in wetlands and other waters of the United States.

(d) Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks presents guidance for the use of ecological mitigation banks as compensatory mitigation in the Section 404 Regulatory Program for unavoidable impacts to wetlands and other aquatic resources.

(e) Interagency Cooperation—Endangered Species Act of 1973, as amended (50 CFR part 402), presents regulations establishing interagency consultation procedures relative to impacts to species listed under the authority of the Act and their habitats as required by Section 7, Interagency Coordination, of the Endangered Species Act of 1973 (16 U.S.C. 1536).

§777.5 Federal participation.

(a) Those measures which the FHWA and a State DOT find appropriate and necessary to mitigate adverse environmental impacts to wetlands and natural habitats are eligible for Federal participation where the impacts are the result of projects funded pursuant to title 23, U.S. Code. The justification for the cost of proposed mitigation measures should be considered in the same context as any other public expenditure; that is, the proposed mitigation represents a reasonable public expenditure when weighed against other social, economic, and environmental values, and the benefit realized is commensurate with the proposed expenditure. Mitigation measures shall give like consideration to traffic needs, safety, durability, and economy of maintenance of the highway.

(b) It is FHWA policy to permit, consistent with the limits set forth in this part, the expenditure of title 23, U.S. Code, funds for activities required for the planning, design, construction, monitoring, and establishment of wetlands and natural habitat mitigation projects, and acquisition of land or interests therein.

§777.7 Evaluation of impacts.

(a) The reasonableness of the public expenditure and extent of Federal participation with title 23, U.S. Code, funds shall be directly related to:

(1) The importance of the impacted wetlands and natural habitats;

(2) The extent of highway impacts on the wetlands and natural habitats, as determined through an appropriate, interdisciplinary, impact assessment; and

(3) Actions necessary to comply with the Clean Water Act, Section 404, the Endangered Species Act of 1973, and other relevant Federal statutes.

(b) Evaluation of the importance of the impacted wetlands and natural habitats shall consider:

(1) Wetland and natural habitat functional capacity;

(2) Relative importance of these functions to the total wetland or natural habitat resource of the area;

(3) Other factors such as uniqueness, esthetics, or cultural values; and

(4) Input from the appropriate resource management agencies through interagency coordination.

(c) A determination of the highway impact should focus on both the short-and long-term affects of the project on wetland or natural habitat functional capacity, consistent with 40 CFR part 1500, 40 CFR 1502.16, 33 CFR 320.4, and the FHWA's environmental compliance regulations, found at 23 CFR part 771.

§777.9 Mitigation of impacts.

(a) Actions eligible for Federal funding. There are a number of actions that can be taken to minimize the impact of highway projects on wetlands or natural habitats. The following actions qualify for Federal-aid highway funding:

(1) Avoidance and minimization of impacts to wetlands or natural habitats through realignment and special design, construction features, or other measures.

(2) Compensatory mitigation alternatives, either inside or outside of the right-of-way. This includes, but is not limited to, such measures as on-site mitigation, when that alternative is determined to be the preferred approach by the appropriate regulatory agency; improvement of existing degraded or historic wetlands or natural habitats through restoration or enhancement on or off site; creation of new wetlands; and under exceptional circumstances, preservation of existing wetlands or natural habitats on or off site. Restoration of wetlands is generally preferable to enhancement or creation of new wetlands.

(3) Improvements to existing wetlands or natural habitats. Such activities may include, but are not limited to, construction or modification of water level control structures or ditches, establishment of natural vegetation, re-contouring of a site, installation or removal of irrigation, drainage, or other water distribution systems, integrated pest management, installation of fencing, monitoring, and other measures to protect, enhance, or restore the wetland or natural habitat character of a site.

(4) Mitigation banks. In accordance with all applicable Federal law (including regulations), with respect to participation in compensatory mitigation related to a project funded under title 23, U.S. Code, that has an impact on wetlands or natural habitat occurring within the service area of a mitigation bank, preference shall be given, to the maximum extent practicable, to the use of the mitigation bank, if the bank contains sufficient available credits to offset the impact and the bank is approved in accordance with the Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks, or other agreement between appropriate agencies.

(b) Mitigation banking alternatives eligible for participation with Federal-aid funds including such measures as the following:

(1) Mitigation banks in which mitigation credits are purchased by State DOTs to mitigate impacts to wetlands or natural habitats due to projects funded under title 23, U.S. Code, including privately owned banks or those established with private funds to mitigate wetland or natural habitat losses.

(2) Single purpose banks established by and for the use of a State DOT with Federal-aid participation; or multipurpose publicly owned banks, established with public, non-title 23 Federal highway funds, in which credits may be purchased by highway agencies using title 23 highway funds on a per-credit basis.

(c) Contributions to statewide and regional efforts to conserve, restore, enhance and create wetlands or natural habitats. Federal-aid funds may participate in the development of statewide and regional wetlands conservation plans, including any efforts and plans authorized pursuant to the Water Resources Development Act of 1990 (Pub. L. 101-640, 104 Stat. 4604). Contributions to these efforts may occur in advance of project construction only if such efforts are consistent with all applicable requirements of Federal law and regulations and State transportation planning processes.

(d) Mitigation or restoration of historic impacts to wetlands and natural habitats caused by past highway projects funded pursuant to title 23, U.S. Code, even if there is no current federally funded highway project in the immediate vicinity. These impacts must be related to transportation projects funded under the authority of title 23, U.S. Code.

§777.11 Other considerations.

(a) The development of measures proposed to mitigate impacts to wetlands or natural habitats shall include consultation with appropriate State and Federal agencies.

(b) Federal-aid funds shall not participate in the replacement of wetlands or natural habitats absent sufficient assurances, such as, but not limited to, deed restrictions, fee ownership, permanent easement, or performance bond, that the area will be maintained as a wetland or natural habitat.

(c) The acquisition of proprietary interests in replacement wetlands or natural habitats as a mitigation measure may be in fee simple, by easement, or by other appropriate legally recognized instrument, such as a banking instrument legally approved by the appropriate regulatory agency. The acquisition of mitigation credits in wetland or natural habitat mitigation banks shall be accomplished through a legally recognized instrument, such as permanent easement, deed restriction, or legally approved mitigation banking instrument, which provides for the protection and permanent continuation of the wetland or natural habitat nature of the mitigation.

(d) A State DOT may acquire privately owned lands in cooperation with another public agency or third party. Such an arrangement may accomplish greater benefits than would otherwise be accomplished by the individual agency acting alone.

(e) A State DOT may transfer the title to, or enter into an agreement with, an appropriate public natural resource management agency to manage lands acquired outside the right-of-way without requiring a credit to Federal funds. Any such transfer of title or agreement shall require the continued use of the lands for the purpose for which they were acquired. In the event the purpose

is no longer served, the lands and interests therein shall immediately revert to the State DOT for proper disposition.

(f) The reasonable costs of acquiring lands or interests therein to provide replacement lands with equivalent wetlands or natural habitat area or functional capacity associated with these areas are eligible for Federal participation.

(g) The objective in mitigating impacts to wetlands in the Federal-aid highway program is to implement the policy of a net gain of wetlands on a program wide basis.

(h) Certain activities to ensure the viability of compensatory mitigation wetlands or natural habitats during the period of establishment are eligible for Federal-aid participation. These include, but are not limited to, such activities as repair or adjustment of water control structures, pest control, irrigation, fencing modifications, replacement of plantings, and mitigation site monitoring. The establishment period should be specifically determined by the mitigation agreement among the mitigation planners prior to beginning any compensatory mitigation activities.