

Federal Guidance on the Use of Off-Site and Out-of-Kind Compensatory Mitigation Under Section 404 of the Clean Water Act

I. Purpose

This document provides interagency guidance on the use of off-site and out-of-kind compensatory mitigation undertaken to meet permit requirements under Section 404 of the Clean Water Act (CWA). The permit program relies on compensatory mitigation to offset unavoidable impacts to aquatic systems by replacing aquatic functions lost in association with permitted activities.

For the purposes of this document the relevant terms are identified as follows:

On-Site: within the project boundaries and/or areas adjacent or contiguous to the impact area¹.

Off-Site: areas not meeting the definition for on-site.

In-Kind: the same physical and functional type as that of the impact area (e.g., same Cowardin Subclass or hydrogeomorphic type).

Out-of-Kind: a different physical and functional type than the impact area².

II. Operational Background

CWA Section 404 regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The Army Corps of Engineers (Corps) is responsible for processing Section 404 permits and analyzing impacts associated with proposed projects that include the discharge of dredged or fill material into jurisdictional waters. Under 40 CFR 230, the Corps reviews proposals using a “sequencing” procedure: avoidance, minimization and finally compensation for unavoidable impacts. When an applicant proposes a project with unavoidable impacts, the Corps often requires the applicant to provide compensatory mitigation. The mitigation package can include different types of mitigation, including both on-site and off-site mitigation, or in-kind and out-of-kind mitigation. However, provision of the mitigation package is the responsibility of the applicant (33 CFR 320 et seq.).

The Corps reviews and approves the proposed mitigation plan in accordance with EPA regulations (40 CFR Part 230). In most cases, the applicant provides the Corps with one mitigation plan for review. The Corps’ decision to accept on-site or off-site, in-kind or out-of-kind mitigation is based on a review of the applicant’s proposed mitigation plan, not on a comparison of several mitigation sites. The Corps will review the applicant’s mitigation plan and determine if the proposal meets regulatory requirements or must be modified (which can include changes to the plan, additions, or reductions in specific types of mitigation). In making a determination that a proposed plan is acceptable, the Corps must consider not only the

¹ 1990 Memorandum of Agreement concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines (Mitigation MOA) between the Environmental Protection Agency (EPA) and the Department of Army.

² U.S. Army Corps of Engineers Regulatory Guidance Letter (RGL) 02-2.

environmental factors, but practicability³ factors as well (33 CFR 320 et seq.; 40 CFR 230 et seq.).

III. Existing Policy and Guidance

There are several documents that currently provide guidance on compensatory mitigation for the 404 Permit Program and they are discussed in this section. The Section 404(b)(1) Guidelines of the CWA are regulations that govern the evaluation of permit applications. Other documents provide guidance concerning the use of on-site and off-site, in-kind and out-of-kind compensatory mitigation:

1. The 1990 Memorandum of Agreement concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines (Mitigation MOA) between the Environmental Protection Agency (EPA) and the Department of Army;
2. The 1995 Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (Banking Guidance);
3. The 2000 Federal Guidance on the Use of In-Lieu-Fee Arrangements for Compensatory Mitigation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (ILF Guidance);
4. The 2002 Corps Regulatory Guidance Letter (RGL) 02-2, Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899⁴.

A. Section 404(b)(1) Guidelines (The Guidelines)

The Section 404(b)(1) Guidelines require that impacts be avoided if there is a practicable alternative to the discharge that would have less adverse impact (40 CFR 230.10 (a)). The Guidelines also require that appropriate and practicable steps be taken to minimize unavoidable adverse effects (40 CFR 230.10(d)). Compensatory mitigation may be used to minimize potential adverse effects (40 CFR 230.75(d)) to the aquatic environment⁵. Subsequent documents, discussed in the following sections, provide further clarification regarding mitigation requirements established in the Guidelines.

B. Existing Federal Guidance concerning Off-site Compensatory Mitigation

The 1990 Mitigation MOA emphasizes the agencies' preference for compensatory mitigation to be undertaken, when practicable, in areas adjacent or contiguous to the impact area (on-site

³ Practicable is defined as "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes" [40 CFR 230.10(a)(2)].

⁴ Additionally, the 2003 Federal Guidance on the Use of the TEA-21 Preference for Mitigation Banking to fulfill Mitigation Requirements under Section 404 of the Clean Water Act and Section 10 of the Clean Water Act (TEA-21 Guidance), also currently provides compensatory mitigation guidance. However, the TEA-21 Guidance was developed to provide interagency guidance on applying the preference for wetlands mitigation banking mandated in the Transportation Equity Act for the 21st Century, and only applies to Federal aid highway projects.

⁵ "Compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternatives for the purposes of requirements under Section 230.10(a)" (Mitigation MOA).

compensatory mitigation)⁶. This preference was expressed because some aquatic habitat functions that depend on location and environment may not be transferable to another location - functions such as flood control, nutrient retention, sediment filtering, and critical habitat for endangered or migratory species, to name but a few. The Mitigation MOA further states that in cases where completing all compensatory mitigation on-site is not practicable, off-site compensatory mitigation "should be undertaken in the same geographic area if practicable (i.e., in close proximity to and, to the extent possible, the same watershed)."

More recent guidance on mitigation banks and in-lieu-fee mitigation also address on-site vs off-site mitigation. Mitigation banks are an appropriate way to satisfy compensatory mitigation requirements off-site when 1) on-site compensation is not practicable, or 2) use of the mitigation bank is environmentally preferable to on-site compensation. In-lieu-fee arrangements are another option for satisfying compensatory mitigation requirements off-site. Both the Banking Guidance and the ILF Guidance recognize that for minor impacts (such as those typically authorized under General Permits), off-site mitigation is often preferable because under a Mitigation Bank or ILF arrangement, a number of small mitigation requirements can be consolidated into a larger project with a better chance of ecological success than numerous scattered projects.

Additionally, RGL 02-2 briefly discusses on-site and off-site mitigation. RGL 02-2 states that mitigation should be required, when practicable, in areas adjacent or contiguous to the project impact site. However, off-site mitigation may be used when there is no practicable opportunity for on-site mitigation, or when off-site mitigation provides more watershed benefits than on-site mitigation.

To summarize, the documents discussed above note that when conditions required for successful on-site mitigation are present, on-site mitigation is generally preferred because it provides compensation for functions that are lost or degraded at the impact site. However, there are circumstances in which on-site mitigation is not practicable nor is it environmentally preferable: e.g., minor impacts associated with general permits, or compensation for larger impacts that, if mitigated on-site, would be surrounded by urban features and prone to anthropomorphic impacts. Under such circumstances, the appropriate use of other environmentally preferable compensatory mitigation alternatives such as off-site mitigation, use of a mitigation bank, or use of an in-lieu-fee arrangement should be evaluated. RGL 02-2 states that when evaluating compensatory mitigation options, Corps Districts will consider 1) the likelihood for ecological success; 2) ecological sustainability; 3) practicability of monitoring and maintenance; 4) proximity to watershed where related impacts occur; and, 5) the economic costs of alternatives when deciding between on-site and off-site mitigation.

C. Existing Federal Guidance concerning Out-of-Kind Compensatory Mitigation

The 1990 MOA states "Generally, in-kind compensatory mitigation is preferable to out-of-kind." This preference for in-kind compensation is based on the premise that the best way to ensure that

⁶ The MOA does not apply to General Permits (GPs) such as Nationwide Permits (NWP), which generally authorize small impacts and mitigation reflecting that level of impacts.

lost aquatic functions are replaced is to compensate for their loss with the same type of aquatic resource. In-kind compensatory mitigation is particularly important when the affected aquatic resource is considered locally important. The ILF Guidance includes a preference for in-kind mitigation, stating that if a local mitigation bank does not provide in-kind replacement, an in-lieu-fee arrangement may be used if it would provide in-kind restoration as mitigation. RGL 02-2 states that in-kind replacement is generally required when the impacted resource is locally important.

However, current guidance also recognizes that there are circumstances in which out-of-kind compensatory mitigation may be environmentally preferable to in-kind mitigation. The 1990 MOA states that acceptable out-of-kind compensatory mitigation may occur in the use of a mitigation bank, where it may be environmentally preferable to use mitigation bank credits to restore a large aquatic resource or a complex of habitats.

The Banking Guidance identifies the advantages of using out-of-kind compensation at a mitigation bank to address a specific resource objective, such as the restoration of a particularly vulnerable or valuable wetland habitat type. Another example of appropriate out-of-kind compensation noted in the Banking Guidance is when the out-of-kind aquatic habitat type is determined to have greater ecological value to a particular region than the affected habitat type. However, the Banking Guidance states that non-tidal wetlands should typically not be used to compensate for the loss or degradation of tidal wetlands, or vice-versa. RGL 02-2 also states that out-of-kind mitigation is appropriate when it is practicable and provides more environmental or watershed benefits than in-kind compensation.

A watershed-based approach to compensatory mitigation, as discussed in Section IV.C. of this guidance, would prioritize restoration efforts, allowing for identification of situations when out-of-kind compensatory mitigation would be environmentally preferable to in-kind mitigation.

IV. Additional Recommendations and Guidance

A. National Research Council Recommendations

The National Research Council (NRC) addressed the issue of appropriate use of off-site and out-of-kind compensatory mitigation in part through recommending a watershed approach to site selection (NRC, 2001; p. 59)⁷:

“Site selection for wetland conservation and mitigation should be conducted on a watershed scale in order to maintain wetland diversity, connectivity, and appropriate proportions of upland and wetland systems needed to enhance the long-term stability of the wetland and riparian systems. Regional watershed evaluation should greatly enhance the protection of wetlands and/or the creation of wetland corridors that mimic natural distributions of wetlands in the landscape.”

⁷ National Research Council Report entitled *Compensating for Wetland Losses Under the Clean Water Act*, 2001. Page 4 of 9

The NRC report also states (pg. 144):

"The committee endorses the watershed approach and finds the automatic preference for in-kind and on-site compensatory mitigation... to be inconsistent with that approach."

B. Relationship of This Guidance to Other Mitigation Guidance Under Development

As part of the Mitigation Action Plan released in December of 2002, the agencies plan to publish guidance regarding making compensatory mitigation decisions in a watershed context by 2005. The Watershed Context Guidance will likely incorporate the recommendations contained in this Off-Site and Out-of-Kind Compensatory Mitigation Guidance. The agencies also have developed a model mitigation plan checklist and guidance for incorporating the NRC Guidelines for Creating and Restoring Self-sustaining Wetlands into the Clean Water Act Section 404 program, and are developing standards for mitigation planning and monitoring. These guidance documents are relevant to mitigation projects in a broad sense, in contrast with this Off-Site and Out-of-Kind Guidance, which is relevant where one is considering the appropriateness of site and kind alternatives.

C. Watershed Context

Existing guidance specifies a preference for on-site and in-kind compensatory mitigation but allows for off-site and/or out-of-kind mitigation when it is determined to be practicable and environmentally preferable. The best tool for determining whether off-site or out-of-kind compensatory mitigation is environmentally preferable is a holistic watershed plan⁸ incorporating mitigation or restoration priorities. Without such a plan, there may be many diverging opinions about what is "best" for a watershed. In the absence of a holistic watershed plan, evaluations of mitigation options should take into account a wide range of factors such as: site conditions that favor or hinder success; the needs of sensitive species; chronic environmental problems such as flooding or poor water quality; current trends in habitat loss or conversion; current development trends; and the long-term benefits of available options.

D. Combining Mitigation Types

Decisions on whether to propose or authorize in-kind, out-of-kind, on-site, or off-site compensatory mitigation need not be either/or decisions. In some circumstances, a combination of two or more types of mitigation will provide the best replacement of wetland functions lost to authorized projects. For example, flood control functions may be best replaced on-site, whereas habitat for species sensitive to human presence may be best replaced off-site. Similarly, the best way to provide habitat for locally important animal species may be to replace lost habitat with a

⁸ Holistic watershed plans are those that: 1) have been reviewed and approved by Federal and State agencies; 2) consider multiple stakeholder interests; and, 3) address issues of habitat, water quality, hydrology, competing uses, cumulative impacts, and restoration priorities. These plans could include, for example, the "comprehensive conservation and management plans" created as part of the National Estuary Program, or a comprehensive state planning effort such as the Louisiana Coast 2050 plan.

combination of habitats, some of which would be in-kind replacement, but others that would be out-of-kind habitats. As with any mitigation proposal, but especially when mitigation is split between two or more sites, it is essential to provide sufficient information to demonstrate the ecological benefits of the proposal.

E. Off-site Mitigation

If off-site mitigation is consistent with or supported by a holistic watershed plan, then it is considered acceptable. If it is not, other considerations for determining if off-site mitigation is environmentally preferable include, but are not limited to the following:

- On-site conditions do not favor successful establishment of the required vegetation type, or lack the proper soil conditions, or hydrology.
- On-site compensation would result in an aquatic habitat that is isolated from other natural habitats or severely impaired by the effects of adjacent development.
- Off-site location is crucial to one or more species that is threatened, endangered, or otherwise of concern, and the on-site location is not.
- Off-site location is crucial to larger ecosystem functions, such as providing corridors between habitats, and the on-site location is not.
- Off-site compensation has a greater likelihood of success or will provide greater functional benefits.

When determining whether off-site mitigation is environmentally preferable, the value of the site-specific functions at the project site, such as flood control, nutrient retention, sediment filtering, and rare or unique habitats or species, should be fully considered. When conditions do not favor on-site compensation, off-site compensatory mitigation should be located as close to the impact site as possible, while still replacing lost functions. Preference should be given to off-site options within the same hydrologic unit (e.g., based on the 8-digit U.S. Geological Survey Hydrologic Unit Code or appropriate substitute) or ecoregion as the impact site.

F. Out-of-kind Mitigation

If out-of-kind mitigation is consistent with or supported by a holistic watershed plan, then it is considered acceptable. If it is not, other considerations for determining if out-of-kind mitigation is environmentally preferable include, but are not limited to the following:

- In-kind compensation would result in undesirable aquatic habitat type, such as one that is dominated by non-native invasive species.
- In-kind compensation is extremely difficult to do successfully.
- Out-of-kind compensation is crucial for protecting or replacing important functions specific to a particular wetland or other particular aquatic habitat type, and in-kind compensation is not. Such function might include habitat for a species that is threatened, endangered, or otherwise of concern; or a water quality function that is best performed by one type of aquatic habitat.

- Out-of-kind compensation is necessary to prevent the decline of a habitat type that is rare or becoming scarce, and in-kind compensation is not.
- Out-of-kind compensation will provide or protect scarce functions to replace common or readily available functions.
- Out-of-kind compensation has a greater likelihood of success or will provide greater functional benefits.

G. Characteristics of Successful Compensatory Mitigation Projects

Whether compensatory mitigation is on-site, off-site, in-kind, or out-of-kind, a number of characteristics are generally associated with successful compensatory mitigation proposals. These characteristics should be considered when designing or evaluating mitigation projects.

The mitigation project should:

- Be sustainable in the context of adjacent land uses. Although urban or suburban mitigation sites are often considered unsuitable because of adjacent land uses, such a determination should not be made until after the site is evaluated for vulnerability to pollutants, disturbance, and other impacts from uses associated with adjacent land parcels. Considerations such as appropriate buffers and site restriction mechanisms may need to be incorporated to expect reasonable success for projects in these more vulnerable areas.
- Be sustainable in the context of natural processes, particularly with respect to hydrology. The aquatic habitat at the compensation site should mimic natural processes and landscape position.
- Have little or no adverse impacts on the environment.
- Include good stewardship and long-term protection provisions (e.g., financial assurances, site protection mechanisms, monitoring and contingency provisions, etc.).
- Have clear goals, with specifically defined measurable performance standards, in order to improve mitigation effectiveness. Performance standards in permits should reflect mitigation goals and be written in such a way that ecological viability can be measured and the impacted functions replaced.

V. General

A. Current Food Security Act (FSA) legislation (also known as “Swampbuster”) limits the extent to which mitigation can be used for FSA purposes. Notwithstanding anything in this guidance, if a mitigation proposal is to be used for FSA purposes, it must meet the requirements of FSA.

This guidance does not alter or modify requirements of any Federal law or regulation, or modify any prior guidance. The signatory agencies will employ this guidance in concert with the 1990 MOA between the EPA and the Corps, the 1995 Federal Guidance on Mitigation Banking, the 2000 Federal Guidance on In-Lieu-Fee Arrangements, and the 2002 Corps RGL on Compensatory Mitigation Projects.

B. The statutory provisions and regulations mentioned in this document contain legally binding requirements. However, this guidance does not substitute for those provisions or regulations, nor is it a regulation itself. This guidance does not impose legally binding requirements on the signatory agencies or any other party, and may not apply to a particular situation in certain circumstances. The signatory agencies retain the discretion to adopt approaches on a case-by-case basis that differ from this guidance when they determine that it is appropriate to do so. Such decisions will be based on the facts of a particular case and applicable legal requirements. Therefore, interested parties are free to raise questions and objections about the substance of this guidance and the appropriateness of its application to a particular situation.

C. This guidance does not and is not intended to alter any provisions of applicable state law or regulations. It is the responsibility of the applicant to comply with all applicable state laws and regulations.

D. As of the date of the last signature below, the agencies will take this guidance into account in their evaluation of compensatory mitigation proposals.

E. This guidance is based on evolving information and may be revised periodically without public notice. The signatory agencies welcome public comments on this guidance at any time and will consider those comments in any future revision of this guidance.

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