

PREPARING AN ALTERNATIVES ANALYSIS UNDER SECTION 404 OF THE CLEAN WATER ACT

Albuquerque District – Regulatory Division

Section 404 of the Clean Water Act (CWA) establishes a dredge and fill permitting program administered by the U.S. Army Corps of Engineers (USACE). In its evaluation of permit applications to discharge dredged or fill material into waters of the United States (WoUS), which includes wetlands and other special aquatic sites, the USACE is required to analyze alternatives to the proposed project that achieve its purpose. USACE conducts this analysis pursuant to the 404(b)(1) Guidelines (Guidelines), which is a different process from determining the preferred alternative under the National Environmental Policy Act (NEPA). This document is intended to assist applicants and consultants in ensuring that their alternatives analysis includes the key items that must be evaluated for permit decisions.

The fundamental precept of the Guidelines is that discharges of dredged or fill material into WoUS should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem. Furthermore, the Guidelines specifically require that *no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.* [40 C.F.R. §230.10(a)] In other words, the USACE can only permit the Least Environmentally Damaging and Practicable Alternative (LEDPA), provided that the LEDPA does not have other significant adverse environmental consequences.

DEFINITIONS

Project Purpose and Need. In basic terms, need is a problem statement and purpose is a solution statement. The applicant should provide a need and purpose in their application. The Corps will use that information to formulate a basic and overall project purpose.

Basic project purpose. The fundamental and essential purpose of the proposed project. It determines whether the project is water dependent or not. Water dependency refers to the necessity of siting a proposed discharge within a special aquatic site to fulfill its basic project purpose. For example, a commercial development is not a water dependent activity.

Overall project purpose. The overall project purpose bounds the applicant's stated purpose in a way that respects the intent of the project and allows for evaluation of a reasonable range of alternatives.

Example: To provide a medium-sized single-family residential development to meet local demand near Kirtland Airforce Base.

Practicable alternatives that satisfy the overall project purpose are used to determine the LEDPA. As such, the applicant should seek concurrence from USACE on the overall project purpose prior to conducting the alternatives analysis.

Special Aquatic Sites. The Guidelines cover all WoUS, but afford special aquatic sites a higher level of analysis and protection. Special aquatic sites include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and stream riffle and pool complexes. From a national perspective, the degradation or destruction of special aquatic sites is considered among the most severe environmental impacts covered by the Guidelines.

Practicable Alternative. An alternative that is or was available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose.

THE ALTERNATIVES ANALYSIS

An alternatives analysis is required for all proposed projects subject to standard permit review under Section 404 of the CWA. It is recommended that the applicant approach this requirement as a collaborative process, which will save time and effort in determining the LEDPA. For example, keeping the Corps informed at key decision points in the alternatives analysis process, including development of the purpose and need, alternative screening criteria, alternatives selected for detailed evaluation, and identifying the LEDPA, will help to prevent delays in the permitting process and project implementation. Ideally, this would be accomplished during pre-application coordination.

When a proposed activity is located in a special aquatic site (e.g. wetland fill) and it is not water dependent, the regulations presume that: 1) practicable alternatives that do not involve special aquatic sites are available, and 2) these alternatives would have less adverse impact on the aquatic ecosystem. Both of these presumptions must be clearly rebutted in writing by the applicant as a prerequisite to complying with the Guidelines.

The applicant must also provide the Corps with the following information to comply with the Guidelines:

1. An analysis of the practicable alternatives. Assess the impact (adverse and beneficial) of each alternative on the aquatic ecosystem and the environment overall. Consider alternatives that would involve both smaller and larger areal coverage as well as different locations.
2. Compare the impact of the alternatives and identify which one is believed to be the LEDPA and state why. Unless the Corps determines the applicant's preferred alternative is the LEDPA the Guidelines dictate that the permit request be denied.

The analysis should include both offsite and onsite alternatives which are available and capable of meeting the project purpose. As part of evaluating offsite practicable alternatives, the analysis should define and justify the geographic area utilized for evaluating available properties. Onsite configurations that were evaluated during project development should be included in the alternatives analyzed. The preparation of a matrix listing alternatives (both onsite and offsite) and analyzing them in terms of cost, logistics, and existing technology, as well as impacts, is recommended. It should also be noted that:

- a. Not owning a piece of property does not eliminate it from consideration.
- b. Just because an alternative site is not zoned for a certain type of development does not eliminate

it from consideration. Zoning is a planning tool, not an absolute, and is subject to adjustments through variances, as well as through policy changes. The effort involved in a rezone/variance can be considered in terms of logistics, costs, and existing technology.

MITIGATION

Compensatory mitigation may not be factored into the selection of the LEDPA under the Guidelines. In other words, the LEDPA is determined before compensatory mitigation is considered. Compensatory mitigation for lost aquatic resource values associated with the permitted alternative will be considered after impacts have been avoided and minimized to the greatest extent possible.

If it is determined that potential impacts have been avoided to the maximum extent practicable, the remaining unavoidable impacts will then need to be mitigated to the extent appropriate and practicable. Compensation for aquatic resource values can only be considered after impacts have been avoided and minimized to the greatest extent possible.

PERMIT DENIALS

No discharge of dredged or fill material shall be permitted if:

1. There is a practicable alternative to the proposed work that would have less adverse impact on the aquatic ecosystem (provided that alternative will not have other significant adverse environmental consequences);
2. It violates a State water quality standard, violates a toxic effluent standard, jeopardizes the continued existence of a threatened or endangered species, or violates protective requirements of a federal marine sanctuary;
3. It will result in significant degradation of WoUS.; or
4. If appropriate and practicable steps have not been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.
5. In addition to requirements of the Guidelines, the Corps also conducts a review of a variety of public interest factors and tribal concerns. If a project proposal is determined to be contrary to the public interest, the permit would be denied.

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