



REGION 10

SEATTLE, WA 98101

November 29, 2024

Ms. Jennifer Mercer
Project Manager
U.S. Army Corps of Engineers
Alaska District, Regulatory Division
Post Office Box 6898
JBER, Alaska 99506-0898

Dear Ms. Mercer:

The U.S. Environmental Protection Agency has reviewed the U.S. Army Corps of Engineers' Public Notice (PN) POA-2024-00448 dated October 29, 2024. This PN describes a proposal by Kachemak Landing, LLC to fill wetlands in Kenai Peninsula Borough in order to "provide 44 residential parcels with direct access to an airstrip. The 44 parcels have been planned to all have suitable areas to construct building pads for a residence, airplane hangar, driveways, and on-site wastewater disposal systems."¹ The PN indicates the project would entail the filling of 12.5 acres of wetlands with 46,840 cubic yards of granular fill material. This material would be placed into a palustrine scrub-shrub palustrine forested wetland, riverine perennial wetlands, and palustrine emergent wetlands.

The EPA has reviewed the proposed discharges for compliance with the restrictions on discharge contained in the Clean Water Act (CWA) Section 404(b)(1) Guidelines (Guidelines).² The Guidelines are the substantive environmental criteria for the evaluation of proposed discharges of dredged or fill material into waters of the United States, including wetlands. Compliance with the Guidelines must be demonstrated before proposed discharges of dredged or fill material may be permitted.

The EPA appreciates the assistance of the Corps through the sharing of additional supporting documents. In addition to the PN, the EPA also reviewed the applicant's CWA Section 404 permit application and associated materials, including the Application for Department of the Army Permit for this project dated October 5, 2024,³ the project's alternatives analysis dated October 1, 2024,⁴ the project's mitigation plan & functional loss preservation credit calculations dated October 1, 2024,⁵ the

¹ US Army Corps of Engineers. 2024. Public Notice of Application for Permit, POA-2024-00448. October 29, 2024. pp. 1-2.

² 40 C.F.R. § 230.

³ Application for Department of the Army Permit. October 5, 2024.

⁴ POA-2024-XXXXX, ALTERNATIVES ANALYSIS Skyline Heights Estates Kachemak Landing Airpark. October 1, 2024.

⁵ POA-2024-XXXXX, Mitigation Plan & Functional Loss and Preservation Calculations Skyline Heights Estates Kachemak Landing Airpark. October 1, 2024.

project's wetland impact avoidance and minimization discussion dated October 1, 2024,⁶ the projects wetland delineation report dated August 1st, 2024,⁷ and the projects wetland impact maps date October 2, 2024.⁸ The EPA is providing the following comments pursuant our authorities under CWA Section 404 to support the Corps in making a defensible permit decision.

Based on the available information, it is not clear that the proposed discharges would comply with the restrictions on discharges contained in the Guidelines. First, the EPA believes that the applicant's stated purpose is too narrowly defined and should be described more broadly. Second, it is not clear that the proposed discharges represent the least environmentally damaging practicable alternative to achieve the project purpose. Lastly, the materials provided do not indicate that all appropriate and practicable steps will be taken to avoid, minimize, and compensate for the remaining unavoidable impacts to aquatic resources, consistent with 40 C.F.R. § 230.10(a) and (d) of the Guidelines. Specifically, the applicant proposes to preserve wetlands as compensation for wetland impacts, but the method of preservation proposed would need to be revised to protect these wetlands from development in perpetuity to comply with the requirements of the Guidelines.

The EPA appreciates the opportunity to provide comments on this project. We look forward to working with the Corps as necessary to address the issues raised in this letter. Should you have any questions or require further information, please do not hesitate to contact me at (206) 553-0285 or by email at jensen.amy@epa.gov, or you may contact Logan Newsom at (206) 553-1632 or by email at newsom.logan@epa.gov.

Sincerely,

Amy Jensen
Regional Wetland Coordinator

ENCLOSURE

1. Comments Related to Clean Water Act Section 404(b)(1) Guidelines for Public Notice POA-2024-00448

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regpagemaster@usace.army.mil

⁶ POA-2024-XXXXX, Wetland Impact Avoidance and Minimization Discussion Skyline Heights Estates Kachemak Landing Airpark. October 1, 2024.

⁶ POA-2024-XXXXX, Mitigation Plan. October 1, 2024.

⁷ Bishop Engineering, LLC. 2024. Wetland Delineation Report. August 1, 2024.

⁸ Bishop Engineering, LLC. 2024. Wetland Impacts Map. October 2, 2024.

Enclosure to EPA's Comment Letter on Public Notice POA-2024-00448

The following are detailed comments submitted by the U.S. Environmental Protection Agency in response to the U.S. Army Corps of Engineers (Corps) Public Notice POA-2024-00448. In addition to the PN, the EPA reviewed the applicant's Clean Water Act (CWA) Section 404 permit application, which included the Application for Department of the Army Permit for this project dated October 5, 2024,⁹ the project's alternatives analysis dated October 1, 2024,¹⁰ the project's mitigation plan & functional loss preservation credit calculations dated October 1, 2024,¹¹ the project's wetland impact avoidance and minimization discussion dated October 1, 2024,¹² the projects wetland delineation report dated August 1st, 2024,¹³ and the projects wetland impact maps date October 2, 2024.¹⁴

A. Restrictions on Discharge: Least Environmentally Damaging Practicable Alternative¹⁵

As referenced in the cover letter, the CWA Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Guidelines) are the substantive environmental criteria used to evaluate proposed discharges of dredged or fill material.¹⁶ Compliance with the Guidelines must be demonstrated before proposed discharges may be authorized.

The Guidelines at 40 CFR § 230.10 identify several specific restrictions on discharges. The first of these, at 40 CFR § 230.10(a), specifies 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, so long as the alternative does not have other significant adverse environmental consequences." An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes.¹⁷ Where the activity associated with a discharge is not "water dependent," practicable alternatives that do not involve a discharge to wetlands and other special aquatic sites "...are presumed to be available, unless clearly demonstrated otherwise."¹⁸ Special aquatic sites are defined in the Guidelines to include wetlands.¹⁹

To appropriately refine and simplify the project purpose the applicant should avoid overly prescriptive descriptions that limit the scope of analysis and alternative considerations under the requirements of the Guidelines. The project purpose should reflect a fundamental and objective statement of need rather than specific design elements. A narrowly defined project purpose, such as specifying the need

⁹ Application for Department of the Army Permit. October 5, 2024.

¹⁰ POA-2024-XXXXX, ALTERNATIVES ANALYSIS Skyline Heights Estates Kachemak Landing Airpark. October 1, 2024.

¹¹ POA-2024-XXXXX, Mitigation Plan & Functional Loss and Preservation Calculations Skyline Heights Estates Kachemak Landing Airpark. October 1, 2024.

¹² POA-2024-XXXXX, Wetland Impact Avoidance and Minimization Discussion Skyline Heights Estates Kachemak Landing Airpark. October 1, 2024.

¹³ POA-2024-XXXXX, Mitigation Plan. October 1, 2024

¹⁴ Bishop Engineering, LLC. 2024. Wetland Delineation Report. August 1, 2024

¹⁵ Bishop Engineering, LLC. 2024. Wetland Impacts Map. October 2, 2024

¹⁶ 40 C.F.R. § 230.10(a).

¹⁷ 40 C.F.R. 230.10; 40 C.F.R. § 230.12.

¹⁸ 40 C.F.R. § 230.10(a)(2).

¹⁹ 40 C.F.R. § 230.10(a)(3).

²⁰ 40 C.F.R. § 230.41.

for 44 residential plots, may improperly constrain the alternatives analysis by excluding options that could meet the overall need with fewer impacts to Waters of the United States.

To comply with the Guidelines, the project purpose should be articulated more broadly, such as “the purpose of the proposed action is to facilitate residential development with direct access to an airstrip” this framing enables the applicant to remain aligned with the regulatory intent of identifying practicable and less environmentally damaging alternatives and ensures the review process is conducted in good faith. Adopting this broader basic project purpose not only aligns with federal regulatory guidance but also enhances defensibility of the project against potential legal challenges.

Once practicable alternatives are determined for a proposed discharge, only the Least Environmentally Damaging Practicable Alternative (LEDPA) may be authorized. The LEDPA should be determined based on an evaluation of the combination of alternative sites or configurations within a site with a site design that meets the stated needs and provides the least impacts to waters of the U.S. Once the LEDPA has been identified, that is the version of the project which is evaluated against the other restrictions on discharge found in subsections § 230.10(b), (c), and (d).

Based on our review of the available information, the EPA believes the project purpose would not be considered water dependent because the achieving the desired activity is not reliant on its proximity to a water of the U.S. Since the project purpose is not water-dependent, the Guidelines presume alternatives exist that do not involve discharge to wetlands unless clearly demonstrated otherwise. As such, the applicant must demonstrate that there are no other alternatives that meet the project’s stated purpose.

Based on review of the provided documents, the EPA believes the applicant has not demonstrated there are no other project configurations that meet the project’s stated purpose. Specifically, the EPA believes that altering the proposed layout of the residential parcels would allow for fewer impacts to Waters of the United States. Upon review of the proposed building layouts, the EPA recognizes that the applicant has attempted to locate development within uplands when possible. However, the EPA would suggest that some parcels remain undeveloped due to the amount of wetlands present. In order to reduce the amount of wetland impacts, the applicant could opt to not develop parcels where more than 75 or 80 percent of the development footprint would be located in wetlands or development would result in the impoundment of wetlands. The applicant could potentially utilize larger lots that could serve more than one residence, if it is allowed in local regulations. The EPA requests a more detailed alternatives analysis be provided that identifies more robust alternative site configurations.

The EPA also believes additional avoidance and minimization actions are needed to minimize adverse impacts to adjacent and downstream aquatic resources in compliance with Subpart H of the Guidelines. EPA recommends installing culverts through roads and driveways to allow for natural surface flow, prevent ponding, and minimizing secondary impacts to adjacent wetlands. The EPA also recommends that the Corps’ permit include conditions to control erosion and sedimentation to minimize secondary impacts on adjacent wetlands. BMPs for erosion and sediment control may include use of asphalt fill material for residential pads and roads in place of gravel to reduce fugitive dust discharge, wetting down gravel (if asphalt is not a practicable alternative) surfaces during construction and in summer months to minimize dust, sediment fencing to trap silt-laden runoff from entering

wetlands and streams, planting of cover crops around residential pads, and persistent maintenance of gravel-topped features.

In the alternatives analysis, the applicant currently explores alternative 2.2 which represents a project that would not improve the airstrip, limit road construction, and would develop 20 residential parcels.²⁰ Alternative 2.2 does not explicitly state the wetland impacts but all parcel development would occur in uplands. The applicant states that this alternative was not chosen because it would only yield a 4.2 percent Return On Investment (ROI) at \$120,000 which would not be worth the investment of funds associated with the capital risk. Yet, the preferred alternative proposes to impact 12.5 acres of wetlands with sufficient ROI. The EPA agrees that the need for the development to be economically beneficial to the applicant is an appropriate evaluation criterion, but there seems to be a wide range in the ROI between alternative 2.2 and the preferred alternative. The EPA would prefer to see an alternatives analysis that shows an iterative exploration into differing levels of wetland impact with sufficient ROI.

Each considered alternative should be evaluated against a set of applicant-derived criteria to meet the project purpose, each of which should be clearly defined and justified; At a minimum, the applicant should indicate and justify the size of the site needed and the potential areas where parcels were considered. If there are any other requirements of the site, they should also be included, such as if the site would achieve a profitable economical outcome or the location and orientation of an airstrip. To ensure compliance with the alternatives analysis requirements within the Guidelines, we recommend the Corps work with the applicant to fully evaluate all practicable alternatives to reduce impacts to waters of the U.S.

B. Mitigation Sequence

Demonstrating compliance with the Guidelines at 40 CFR § 230.10(d) necessitates identifying and implementing appropriate steps to avoid, minimize, and compensate for any remaining unavoidable impacts associated with discharges subject to the Guidelines, as outlined in the 1990 Memorandum of Agreement regarding Mitigation between the EPA and the Department of Army. These steps form a mandatory mitigation sequence that must be followed in order, and no step may be substituted for another. This sequence was reaffirmed in the 2008 Final Rule on Compensatory Mitigation.²¹ Compliance requires outlining these steps prior to permit issuance, in accordance with both the Guidelines and the 1990 MOA.

Corps regulations at 33 CFR § 325.1(d)(7) require CWA Section 404 permit applicants submit a mitigation statement as part of a complete application. The mitigation statement must describe how impacts to waters of the United States are to be avoided and minimized. The mitigation statement must also describe how the unavoidable impacts to waters of the United States are to be compensated for or explain why compensatory mitigation should not be required for the proposed impacts. Permit applicants are responsible for demonstrating that compensation is not practicable.²²

²⁰ POA-2024-XXXXX, ALTERNATIVES ANALYSIS Skyline Heights Estates Kachemak Landing Airpark, October 1, 2024.

²¹ 33 C.F.R. Parts 325 and 332 and 40 C.F.R. Part 230.

²² 40 C.F.R. § 230.93(a)(1) states "Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts."

As there are currently no available options for third party compensation credits within this watershed, permittee-responsible mitigation is the only option for offsetting project impacts. The permit application indicates the applicant intends to use preservation as the sole mechanism of mitigation for this project by limiting future development. Additionally, they indicate that they plan to establish a Homeowners Association (HOA) that would be tasked with protecting the preserved wetlands from future development. While preservation is an accepted form of compensatory mitigation under the Guidelines, the applicant's proposal does not satisfy the requirements of preservation as outlined in the Guidelines. If the applicant intends to use preservation as their compensatory mitigation, any wetlands that are to serve as compensation should be placed under an appropriate real estate instrument, such as a conservation easement or deed restriction to provide a more robust legal defense against future development.²³ The Guidelines require that these wetlands are preserved in perpetuity.

To the extent appropriate and practicable, the Guidelines indicate preservation of wetlands should be accompanied by other forms of compensatory mitigation such as restoration, enhancement, or establishment.²⁴ This requirement may be waived by the district engineer where preservation has been identified as a high priority using a watershed approach, but compensation ratios shall be higher.²⁵ Because the wetlands proposed for preservation have not been identified as high priority for preservation in any sort of wetland management plan, the EPA encourages the applicant to evaluate any of their existing or any available properties for opportunities to provide additional forms of PRM, such as restoration or enhancement.

To determine how much compensation will be sufficient, the Guidelines recommend but do not require the use of a functional or condition assessment.²⁶ "If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used."²⁷

The applicant indicates in their mitigation plan that they used a compensatory mitigation assessment method that was developed by the Florida Department of Environmental Protection.²⁸ The EPA strongly opposes the use of assessment tools that were developed outside of the geographic region where they are applied as such methods often fail to account for specific ecological functions services and regional dynamics of the impacted watershed. When projects use assessment or mitigation methodologies developed outside of the relevant area, such methods often fail to accurately reflect the unique hydrological, ecological, and climatic conditions of the project site. Functional assessment tools developed for the state of Florida may not account for the differing vegetation, hydrology, and wildlife requirements for watersheds located in the state of Alaska or the Kenai peninsula. This misapplication can result in a significant discrepancy between the mitigation provided and the proposed loss of aquatic resources.

²³ 40 C.F.R. § 230.93(h)(1)(v).

²⁴ 40 C.F.R. § 230.93(h)(2).

²⁵ *Id.*

²⁶ 40 C.F.R. § 230.93(f)(1).

²⁷ *Id.*

²⁸ POA-2024-XXXXX, MITIGATION PLAN & FUNCTIONAL LOSS AND PRESERVATION CREDIT CALCULATIONS, October 1, 2024.

The Alaska District's Credit/Debit Methodology (CDM)²⁹ should be used calculate the required credits for any authorized impacts. The EPA notes that the CDM typically requires a higher ratio for credits generated by preservation, particularly in this area where there are limited threats to wetland loss. Use of the CDM typically yields a required preservation ratio of 4:1 or higher. Whereas, the applicant is proposing to only preserve 33.37 acres, which would yield a preservation ratio of approximately 2.67:1. However, the proposed land preservation does not currently satisfy the fifth criterion of preservation sites as required under the Guidelines.³⁰ As previously discussed, the applicant's compensatory mitigation plan does not identify any real estate or other legal instrument to protect the preserved portion of property permanently, such as a conservation easement or deed restriction. The EPA suggests identifying additional areas of wetlands that could be preserved and that these wetlands be protected in perpetuity through a recorded and enforceable real estate instrument to compensate for the permanent losses to WOTUS from the proposed project. We also recommend reducing wetland impacts further to increase the ratio of wetland preservation that could be achieved from the wetlands available for preservation within this area.

²⁹ U.S. Army Corps of Engineers. 2016. Alaska District: Credit Debit Methodology. Available at: <https://www.poa.usace.army.mil/Portals/34/docs/regulatory/specialpns/2016/Alaska%20District%20Credit%20Debit%20Methodology%20Version%201.pdf?ver=2016-09-21-132006-233>.

³⁰ 40 C.F.R. § 230.93(h)(1)(v) states "The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust)."