

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

December 23, 2004

Colonel Timothy J. Gallagher District Engineer, Alaska District Army Corps of Engineers P.O. Box 6898 Elmendorf AFB, Alaska 99506-6898

Re: Montana Creek

POA-2004-1189-4

Attn.: Jeffrey Koschak

Dear Colonel Gallagher:

The National Marine Fisheries Service (NMFS) has reviewed the December 2, 2004 public notice (PN) for Lowpete Construction, Inc.'s proposed subdivision development project. The applicant requests authorization to discharge approximately 12,747 cubic yards of fill into approximately 1.98 acres of a wetland identified in the Juneau Wetlands Management Plan (JWMP) as ML-1. The purpose of the project is to construct a 26-lot residential subdivision and associated public roadways in Juneau, Alaska.

The proposed subdivision would be located in the ML-1 wetland unit, a large Category A wetland located in the lower Montana Creek drainage and refered to as the Montana Fen. The JWMP ranks this 268-acre patterned fen in the lower Montana Creek drainage as providing high functional values for groundwater recharge, surface hydrologic control, sediment/toxicant retention, nutrient export, salmonid habitat, disturbance sensitive wildlife, regional ecological diversity, ecological replacement cost, recreational use/potential, and downslope beneficiary sites. This wetland has been impacted by fill placed for multiple individual house pads, roadways, driveways, and septic systems in the McGinnis subdivision off of Wren Drive. Extensive ditching has occurred for burying water lines, potentially altering the hydrology of portions of the fen.

NMFS' preliminary reviews of the proposed project included two site visits. As a result of our inspections of the construction site, we find the map of the proposed project's wetland delineation included in the PN to be in error. The wetlands delineated on the map indicate the limit of wetland habitat extends in an arc from lot 9 to lot 22; our inspection, however, revealed that lots 6 through 9, 18 and half of lot 5 consist of sedge fen with willow and alder cover. Thus our delineation of the wetland boundary roughly follows the proposed Steelhead Court right-of-way beginning at lot 19. A map with our wetland delineation is enclosed to clarify our estimate of the extent of wetlands composing the proposed building site.

Consequently, the extent of wetland habitat proposed for fill by this project is roughly 1.9 acres for residential housepads and driveways, and 1.5 acres for roadways, totaling 3.4 acres of wetland fill as opposed to the 1.98 acres of proposed fill described in the PN.

The City and Borough of Juneau (CBJ) Wetlands Review Board selected this wetland as its first choice for acquisition to preserve as part of a planned Wetlands Mitigation Bank. The CBJ wetlands management plan describes the enforceable policies for Category A wetlands as: "Category A wetlands might be developed only if there is no net loss of individual functional values in the wetland unit. One environmental function could not be substituted for another (CBJ Land Use Code: 49.70.1080(b)(4)(A)." We are concerned that the proposed development (fill and excavation) in the Montana Fen would degrade the high value wetland functions of the area and potentially affect the productivity of Montana Creek and the Mendenhall River.

The proposed project could disrupt the hydrology of the existing wetland unit. This wetland is shallow in depth and overlies a glacial outwash plain. It ranks especially high in terms of groundwater recharge function. The recharge function is most meaningful where aquifers are present beneath the organic soils - characteristics unique to Montana Fen among all of the wetlands studied in Juneau (Adamus 1987). The amount of recharge to the outwash aquifer underlying the Montana fen was liberally calculated as about 1,000 gallons/min. Adamus (1987) also modeled the effect that Montana Fen would have on the largest characteristic storm (or glacier-melt) occurring each month of the year and concluded that the fen reduced peak flows at its outlet during all months. The reduction ranged from 2 cfs (4%) in December to 187 cfs (43%) in July, when outlet peaks were 54 and 430 cfs, respectively, for average maximum storms during these months. During the critical fish spawning months of August-October, the runoff-buffering effect of the fen lowered the outlet peak by about 25% (normal peaks at this time are usually about 300 cfs). Maximum storage of runoff in the fen varies from about 5 acrefeet during winter months to 131 acre-feet in September, with 470 acre-feet theoretically being stored during the maximum storm of record. The fen also may enrich Montana Creek with phosphorus and in turn is enriched with nitrogen by the Creek.

The Clean Water Act Section 404 (B)(1) Guidelines (Subpart E, Section 230.41, Wetlands) emphasize that degradation or destruction of special aquatic sites should be avoided when less environmentally damaging practicable alternatives are available. Because this proposed development is not a water dependant activity, practicable alternatives are presumed to exist that meet the applicant's purposes and would have less adverse impact on Montana Fen. Damage to Montana Fen is likely to be high from the proposed project and is likely to have secondary and cumulative effects beyond the boundaries of the project itself in particular, NMFS is concerned about indirect effects on fish habitat in Montana Creek and the Mendenhall River.

This subdivision project for residential development does not need to be sited in a high value wetland area to fulfill the basic purpose of the applicant's proposed activity. Based on information provided in the PN, an upland alternatives analysis has not been conducted, nor has the applicant demonstrated that mitigation sequencing has been attempted (avoid, minimize, mitigate for wetland loss and impairment of functions).

NMFS recommendations:

- A new and accurate wetlands delineation should be conducted for the proposed project site. Estimates of proposed wetland fill should be recalculated based on this corrected delineation. The PN should be revised to accurately display the wetland boundary and estimate the proposed acreage and location of wetland fill.
- 2) A thorough evaluation of alternatives should be conducted for this proposed project. Many of the anticipated impacts could be avoided if the proposed construction occurred at a less sensitive site. Alternative sites dominated by non-wetlands or less ecologically valuable wetlands are preferred.
- 3) Development within Montana Fen should comply with the enforceable provisions of the JWMP that specifies there can be no net loss of wetland functions within the wetland unit. To accomplish this goal, NMFS recommends developing only the upland portions of this site and preserving the wetland habitats. Either fewer lots could be developed or higher density housing within the upland portions of the parcel could be planned in order to preserve the fen's functional values.
- 4) Should wetlands be permitted for fill at the proposed site, adequate on-site and in-kind mitigation replacing the wetland functions that would be degraded or destroyed by the project should be required in advance of any disturbance of Montana Fen. NMFS is willing to assist the Corps and the applicant in determining the type, amount and location of any such mitigation.

Approval of the proposed permit for wetland fill is likely to result in substantial impacts to a special aquatic site identified in an approved regional plan as locally very important for a large variety of wetland functions. Upland alternatives are not addressed in the public notice, but must be considered before permitting the degradation of biologically productive wetland habitats. NMFS recommends that the permit application, as currently proposed, be denied unless there is a convincing showing that no upland or other less damaging alternatives exist. Available information suggests, however, that either upland sites in the Mendenhall Valley could be developed with less adverse impact on wetlands, or the proposed development could be limited to the upland portions of the parcel.

Please contact Sue Walker (586-7646 or susan.walker@noaa.gov) to follow up on our recommendations for this project.

Sincerely.

James W. Balsige

Administrator, Alaska Region

