



MEMORANDUM

STATE OF ALASKA

Department of Natural Resources
Office of Habitat Management and Permitting

ATTACHMENT 14

TO: Sadie Wright
Department of Natural Resources
Office of Project Management and Permitting

DATE: December 12, 2006

THRU: Jackie Timothy

FILE: AK 0611-05J

FROM: Kristen Dunlap
Habitat Biologist

SUBJECT: Lemon Creek
Horecny Gravel Mine
OHMP ACMP Comments

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Habitat Biologists from the Department of Natural Resources Office of Habitat Management and Permitting (OHMP) reviewed Mr. Ralph Horecny's proposal to mine sand and gravel in Lemon Creek for consistency with the Alaska Coastal Management Program (ACMP). The project is located approximately .5 miles above Glacier Highway in lower Lemon Creek, within Section 34, Township 40 S., Range 66 E., C.R.M., Juneau, Alaska.

Project Description

Mr. Horecny proposes to dredge approximately 200,000 cubic yards of sand and gravel, up to ten feet deep, from approximately 9.55 acres of privately-owned streambed in navigable waters. Berms will be built to divert the river away from the active mining location, alternating between the north and south side of the river.

Applicable ACMP Standards

Under the ACMP, the sand and gravel extraction standard applies (11 AAC 112.260). This standard permits the extraction of sand and gravel from coastal waters if there is a public need and no practicable alternative. We defer to the Juneau Coastal District to make a decision regarding public need.

The rivers section of the Habitats Standard also applies (11 AAC 112.270). The State manages rivers to avoid, minimize, or mitigate significant adverse impacts to natural water flow, active floodplains, and natural vegetation within the riparian management areas.^{*} The riparian management area for a split channel portion of the river is 200-feet on either side of the waterbody measured from the outermost extent of the ordinary high water mark.

*Natural Water Flow, Active Floodplains, and Natural Vegetation within the Riparian Management Areas
The City and Borough of Juneau, the Natural Resources Conservation Service, the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service sponsored a study of Lemon Creek hydrology, fluvial geomorphology, sediment transport and fish resources. Inter-Fluve, Inc., the study contractor, released a guidance document on November 29, 2004. Inter-Fluve recommended that for the short term,

removal of the RediMix Bridge would provide an immediate and significant reduction in flood levels. The RediMix Bridge was removed this year.

The active floodplain of lower Lemon Creek has been reduced from urban development and stream aggradation. The Inter-Fluve report recommends mitigated maintenance mining over the long term to maintain flood conveyance capacity (pg 50 of 88).

The report analyzes mitigated mining for lower Lemon Creek with the RediMix Bridge removed under three different scenarios. Though the best case scenario for a reduction in 100-year event water surface elevations involves mining from the RediMix Bridge site all the way up to the Corrections Center, that is not the proposal at hand. The proposal we are reviewing resembles option 3 between the Glacier Highway Bridge and the Corrections Center (pg 54 of 88), though it is so much smaller that there may not be an increase in flood conveyance capacity over the short term.

The Title 41 Fish Habitat Permit will require the applicant to construct aquatic habitat during and following mining. Habitat construction will be based on the recommendations in the Inter-Fluve report for sinuous pool and riffle complexes that will maintain the habitat complexity necessary to support spawning chum salmon, rearing and migrating coho salmon, and Dolly Varder char. Since streambank stabilizations are not proposed for this project, the reconstruction will not include bioengineered revetments.

We have observed numerous chum salmon spawning in this area. Therefore, the Fish Habitat Permit will require that in-water work occur after juvenile chum salmon have outmigrated and before adult chum salmon return to spawn. During this in-water work prohibition, the applicant will be allowed to cross the stream with equipment in designated locations to access islands where work may occur without harming spawning beds. Winter is an excellent time to mine these locations since the ground is often frozen and water levels are low. Areas being actively mined during this timeframe will be separated from spawning beds by a margin so the beds are not impacted by ground disturbing activities and sediment release. Since the in-water work area will be separated from the active river channel by a berm, work may occur during the time that coho salmon are migrating.

After the berms are built, and before mining ponds are connected, an OHMP biologist will need to be on site to trap stranded Dolly Varden char or juvenile salmonids and release them into the active channel. Though the applicant has proposed that the mining occur on the south side of the river first, and then on the north side, we will want to re-evaluate that request on-site. Given the dynamic nature of this system, conditions at the site may change before mining begins, and another strategy may prove more favorable.

We plan to draft our Title 41 Fish Habitat Permit flexibly so that an OHMP habitat biologist can work out specific details with the applicant on-site during mining activities and after mining is completed. We have appreciated the willingness of the applicant's agent to work with us in the field during past projects in the river to assess and re-assess the constantly changing conditions of Lemon Creek and conduct work accordingly so that impacts to fisheries resources and habitats are minimized.

After the 200,000 cubic yards of material is exhausted, OHMP will monitor the site with the applicant, review the project, and assess those strategies that best protected fish habitat and accommodated mining. We will discuss any lessons learned with interested parties. Since this is a depositional area, we can then make an informed decision about the efficacy of additional mining as material aggrades in the stream.

OHMP Conclusion

The sand and gravel mining proposal will not have a significant adverse impact on natural flow, active floodplains, and natural vegetation within the riparian management areas for the following reasons

- Though the project will impact natural water flow, the applicant can mitigate the impact by restoring the stream channel through the construction of aquatic habitat during and following mining as required by the Title 41 Fish Habitat Permit
- The applicant will not adversely affect active floodplains. While there may not be an increase in flood conveyance capacity due to the limited size of the proposal, we can draw the conclusion that this proposal will not decrease the flood conveyance capacity of the system
- The removal of 200,000 cubic yards of sand and gravel will not occur in the riparian management area, but within the ordinary high water mark of the river

Therefore, based on the Habitats Standard, we agree with the applicant's certification that the gravel mining proposal in Lemon Creek is consistent with the ACMP.

Thank you for the opportunity to comment. We will begin preparing a Title 41 Fish Habitat Permit so we will be able to issue within five days of the signed Final Consistency Determination.

Cc: by email

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