



DEPARTMENT OF THE AIR FORCE  
PACIFIC AIR FORCES

File Ship Creek - General  
Date 19 Dec  
File code 37-D-01-A  
Initials \_\_\_\_\_

DEC 7 2005

Brigadier General Herbert J. Carlisle  
Commander, 3rd Wing  
11550 Heritage Circle, Suite 200  
Elmendorf AFB AK 99506-2850

Mr. Kelly Hepler  
Director, Division of Sport Fish  
Alaska Department of Fish and Game  
333 Raspberry Road  
Anchorage AK 99518-1599

Dear Mr. Hepler

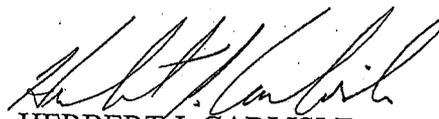
Thank you for your letter of October 28, 2005, opening a dialogue on removing dams and restoring fish passage in Ship Creek. We look forward to future discussions on this topic and encourage the participation of other interested state, local, and tribal stakeholders.

Although the proposed feasibility study appears to be a worthwhile endeavor, we believe it is premature for Elmendorf AFB to adopt "restoring fish passage to the upper reaches of Ship Creek" as a natural resource goal. This is a complex issue, and many questions must be answered before Elmendorf AFB can endorse such a goal. For example, removing these dams and allowing fish passage may attract bears to the base, attract poachers, increase erosion, alter groundwater hydrology, and ultimately fail to provide habitat conducive to spawning.

If the follow-on objective of the study is to determine the effects of allowing fish passage through the installation, we suggest the scope of the study be expanded to address fish passage. It could be that an Environmental Impact Study for the entire scope of the proposed action would be appropriate.

We look forward to working with you on this matter. My points of contact are Mr. Herman Griese, Wildlife Biologist (552-0200) or Ms. Mary Weger, Fisheries Biologist (552-0190).

Sincerely

  
HERBERT J. CARLISLE  
Brigadier General, USAF

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF SPORT FISH

CC  
CV  
MSG/CC  
FRANK MURKOWSKI, GOVERNOR

333 RASPBERRY ROAD  
ANCHORAGE, ALASKA 99518-1599  
PHONE: (907) 267-2452  
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October 28, 2005

Brig Gen Herbert "Hawk" Carlisle  
Commander, 3WG/CC  
11550 Heritage Circle, Suite 200  
Elmendorf AFB, AK 99506-2850

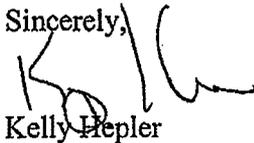
Dear Gen. Carlisle:

In recent years we have seen a growing public awareness of Anchorage watersheds and a desire to remove dams and restore fish passage to local streams. The Alaska Department of Fish and Game supports these efforts to improve and restore fish passage, and has secured money from USFWS to fund a feasibility study to look at the two spillway dams on Elmendorf AFB and Ft. Richardson. The State of Alaska and the US Department of Defense have long shared an interest in these structures. As you are probably aware, these two dams once diverted Ship Creek water to military power plants that have since gone offline. Hot water from the power plants was supplied to state hatcheries to help produce fish that provide angling opportunity locally and throughout the state.

The study we are planning to fund will provide resource and land managers with data on the possible contamination of sediment backed up behind the spillway dams, the effect removal or alteration of the dams would have on water levels and stream erosion up and downstream of the structures, and general water quality. With this information, agencies can then discuss and consider other possible effects fish passage upstream of the Elmendorf dam would have on military facilities, and what level of fish passage may be desirable. Discussions can focus on alternatives- dam removal or alteration- that would allow for fish passage without compromising the military's mission or existing facilities.

I have recently received and reviewed your Integrated National Resources Management Plan for Elmendorf AFB, 2000-2005. I hope you will agree that restoring fish passage to the upper reaches of Ship Creek fits in with the goals and objectives outlined in that management plan. It is my hope that as the principle resource managers, the Department of Defense and the Alaska Department of Fish and Game can partner to take the lead on this matter.

Sincerely,



Kelly Hepler  
Director, Division of Sport Fish  
Department of Fish and Game  
(907) 267-2195

**REVIEW COMMENTS**

<b>Document Reviewed: Preliminary Draft – Ship Creek Fish Passage Improvement Alternatives Analysis Past Elmendorf and Fort Richardson Dams</b>		<b>Page</b> 1 of 4
		<b>Date:</b> 8 Feb 2007
<b>Committer:</b> Elmendorf AFB Staff	<b>Organization:</b> 3 CES/CEV	<b>Email:</b> james.spell@elmendorf.af.mil
		<b>Phone:</b> (907) 552-1741

ITEM	PAGE	SECTION	COMMENT	Response
			Greg Schmidt, 3 CES/CEVP, 552-1609	
1.		General	While the study states fish passage as a goal, it does not address why fish passage is desirable. Some of the benefits cited (economic benefit, attract fisherman, enhanced property value) may not apply on a military installation.	By law, the Dept of Fish and Game is charged to protect, maintain and improve the aquatic plant resources of the state... Restoring fish to streams and spawning habitat where they once had access is part of that duty. Dept of Defense would benefit by insuring they are in compliance with state and federal laws governing fish passage.
2.	4	Project Goals	Page 4 of the report mentions several military goals, including our concern regarding bears / human interaction. It does not include the following concerns, which were mentioned in the kick-off meeting:  - Minimizing potential for intrusion by salmon poachers, and accompanying security risks - Minimizing Bird Aircraft Strike Hazard (BASH) risk - Minimizing impact to golf course, family housing and Family Camp areas from fish carcasses - Evaluating changes to contaminant plumes based on changed hydrologic gradient.	These will be added to the report.
3.		General	Since removal of the drinking water dam is off the table, it seems appropriate that an evaluation would occur of potential salmon spawning habitat	Noted. Beyond the scope of this study but a logical task for future phases.
4.		General	If more fish go upstream, will this not reduce the fish available for sport fisherman in Anchorage?	No. The recreational salmon fishery occurs downstream of Post Road and the Elmendorf AFB dam. For coho salmon, the ten year average return is 12,250 salmon. Anglers harvest 10,750 of those. Approximately 550 adult spawners are taken for brood at Elmendorf hatchery leaving a surplus of 950 coho salmon. Some or all of these could be allowed to pass to the upper 12 miles of Ship Creek.
5.		General	The action requires Environmental Impact Analysis in accordance with NEPA. EAFB looks forward to receiving an invitation to become a Cooperating Agency from the proponent.	Noted. This study is a starting point and not intended to be an EIA or NEPA document. EAFB will be fully involved in subsequent discussions and study.
ITEM	PAGE	SECTION	COMMENT	Response
			Mary Weger, 3 CES/CEVP, 552-0190/3865	

**REVIEW COMMENTS**

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6.		General	Would a dam removal project include any effort to stabilize the eroding banks of Ship Creek, especially in areas adjacent to the Elmendorf Golf Course?	For this conceptual level alternatives analysis the focus was on the stream reaches directly (construction) or indirectly (hydraulically) impacted by each alternative. Eroding banks beyond the reach influenced by each alternative could possibly be considered if agreed to during future phases.
7.		General	Many of the alternatives would require active and ongoing operations and maintenance (O&M); who would be responsible for the O&M of the fish passage structures, and what are the estimated O&M costs for each alternative?	Responsibility for O&M would be determined through future discussions. Given the conceptual scope of this study, O&M resources are based on a relative comparison of effort and costs.
8.		General	The fact that improving fish passage would reduce the downstream sport fishery needs to be emphasized to the public.	Noted.
			Melissa Markell, 3 CES/CEVR, 552-7111	
9.		General	The study does not adequately address potential impacts to contaminated groundwater and surface water should the water levels or flow regime change in Ship Creek. Elmendorf AFB OU5 plumes are located close to Ship Creek; a drop in Ship Creek water levels could induce a stronger groundwater gradient that might cause these TCE plumes to migrate into the creek. The Alaska Railroad Corporation may also have contaminant plumes that could be affected by changes in Ship Creek.	Noted. The scope of the ground water investigation for this study was limited to a general evaluation of ground water table levels and was not intended to predict changes in ground water flow or contaminant plumes. This concern will be noted in the report with text added stating that groundwater contamination must be considered during future phases.
10.		General	Because Elmendorf is a Superfund site and we have signed Records of Decision (RODs) in place, any changes to Ship Creek that could affect our current OU5 remedies will require coordination with USEPA and may require changes to the ROD. Such changes are accomplished only through following the CERCLA process, including public comment periods. ROD amendments will require 12-18 months to complete. This potential delay should be considered when selecting an alternative.	Noted. See response to no. 9.
<b>ITEM</b>	<b>PAGE</b>	<b>SECTION</b>	<b>COMMENT</b>	<b>Response</b>
11.		General	Water level data in Ship Creek and groundwater level data near Ship Creek on Elmendorf AFB are available and should be used for any modeling efforts undertaken as part of the study. Anyone interested in plume locations, water level data, or other environmental information related to OU5 should contact Melissa Markell at (907) 552-7111.	Noted.
12.		Alternative 2 – Bypass Channel	The fish bypass option appears to offer the best fish access to upstream areas with the least impact to groundwater levels.	Noted.
			Herman Griese, 3 CES/CEVP, 552-0200	

**REVIEW COMMENTS**

<b>Document Reviewed: Preliminary Draft – Ship Creek Fish Passage Improvement Alternatives Analysis Past Elmendorf and Fort Richardson Dams</b>		<b>Page</b> 3 of 4
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13.		General	We agree that Elmendorf’s Integrated Natural Resources Management Plan does identify the goal to restore and maintain ecological associations of local and regional importance. And we agree that salmon returning to, spawning and dying in Ship Creek are important components of the historical ecosystem in the Ship Creek Valley. However, we also identify in the plan the primary goal to support the military mission (primarily aircraft, pilot and public safety), and those actions that may affect the mission need to be thoroughly evaluated. We will insist that the decision to allow fish passage be preceded with a thorough scientific evaluation, to include a prediction of spawning zones, timing of spawning concentrations, potential bear feeding locations and prediction of smolt production vs. adult escapement. This information will facilitate a better prediction of impact on public and aircraft safety, and allow our leadership as well as the public to weigh the benefits and costs.	Noted. The suggested studies are a logical next step in evaluating impacts of restoring fish access to Ship Creek above the EAFB dam.
			Brian Dohmann, 3 CES/CECCM, 552-5445	
14.		General	If the upper water table drops on Elmendorf AFB by Post Road Gate - how will the wetland area between the railroad track and Post Road be affected?	The hydraulic analysis included in Appendix 7 indicates that stream water surface profiles for the 100-year event match existing conditions 700-ft upstream of the dam and 400-ft downstream of the dam. Beyond these limits the topography and surface water elevations match existing conditions - from the limited analysis included in this study the impact would be expected to be minimal. Additional study would be required during subsequent phases of study/design to state conclusively the impact to these wetlands.
<b>ITEM</b>	<b>PAGE</b>	<b>SECTION</b>	<b>COMMENT</b>	<b>Response</b>
15.		General	Not sure how the golf course irrigates/waters during the summer. May or may not be impacts to their operations.	Noted. See response to no. 14.
16.		General	A vehicle search facility is designed to be constructed near Post Road Gate on the south side of the road. Not sure if dam removal would impact this project.	Noted. See response to no. 6.

**REVIEW COMMENTS**

**Document Reviewed: Preliminary Draft – Ship Creek Fish Passage Improvement  
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**Page 4 of 4  
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**Commenter:**  
Elmendorf AFB Staff

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3 CES/CEV

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Randy Tyler, P.E.  
 Chief, Engineering Department  
 DPW, Fort Richardson

General Comments. Comments were compiled from email communication. Note that two occurrences of “[study]” replace “EA”.

No.	Comment	Response
1	Understanding that the Ship Creek Riparian corridor has been declared a special interest area in the INRMP, it is the objective of USAGAK, FRA to maintain the creek in as natural a state as possible. Even though we strongly suggest that the fish passage limitations remain status quo from EAFB dam upstream, FRA will continue to manage the creek for fish habitat should the native fishery ever be returned.	Noted. Clarification. The term “fishery” is used here and in other comments. Removing barriers to fish passage on Ship Creek would restore the “fish stocks” to the upper reaches of the creek, not necessarily create fisheries. If the alternative chosen for either dam allowed a harvestable surplus of fish upstream, then the Dept of Defense (DOD) could then decide if they wanted to pursue creating fisheries on those stocks or not.
2	Removal of the FRA, EAFB and lower dams would cause a HUGE safety problem for FRA due the greatly increased bear/human encounters it would produce. We already know there are many brown bears that utilize the Ship Creek corridor. A return to the native fishery in Ship Creek would be a huge attractant for these and additional bears and significantly increase the number of bears within high human use areas of Cottonwood Park, EAFB and FRA family housing areas, and the EAFB and FRA Golf Courses. This concentration of bears would mean more human/bear conflicts. We can't understate the impact this would have on the folks that live, work, and recreate in these FRA and EAFB areas. The [study] should list this safety hazard behind the CON portion of each alternative except the status quo. The report does not address this major concern.	Noted. Bear/human consideration will be added to Con list of alternatives.
3	Increased bear activity would also greatly impact and restrict use of training ranges in this area of FRA for the same reasons stated above.	Noted.
4	The increased fish and bear activity as a result of the proposed changes would also be an attractant to humans for sight seeing and fishing. This would create an increased management, enforcement and security burden to FRA.	Noted.
5	The ongoing Utility Privatization (UP) initiative has received proposals from bidders which include productive reuse of the CHPP for power generation. Alteration of the stream use and existing structures would impact the usability of the CHPP; possibly from both a change to the intake pool and discharge permit approval standpoint, thus disrupting the UP solicitation. Any change of this nature would affect the value of the CHPP for privatization.	The report will be edited to reflect that alternatives which modify the dam or intake would be considered only if the power plant is abandoned or the modifications are shown to have no negative impact on the function of the existing diversion.
6	It is our concern that restoration of the fishery with utilization of the stream and streambed by the fish for living and spawning could eliminate or severely restrict the ability of FRA to obtain permits necessary to dredge and release sediment downstream of the high dam. This drinking water reservoir provides the majority of the drinking water for FRA and EAFB, as well as for a portion of Anchorage, and is critical to the function of these installations.	Noted. In response to this concern, discussions with Alaska Dept of Natural Resources (ADNR) confirmed that Ship Creek is classified as an anadromous stream and permits are currently issued using those criteria. The restoration of fish passage should not restrict the ability of FRA or EAFB to obtain permits for removing ice dams, dredging, or other activities to protect DOD property or interests.
7	During certain weather cycles of heavy freezing, it is necessary for FRA to clear ice dams out of the creek on regular occasions. It is our concern that the utilization of the stream for a fishery as stated would very likely eliminate or severely restrict the ability of FRA to obtain permits necessary to clear the ice dams that threaten real property. It could also severely limit the methods and equipment allowed to FRA to perform the ice dam removal.	Noted. See above

General Comments - continued.

No.	Comment	Response
8	During portions of the year and in drought conditions Ship Creek has almost no flow above ground through the lower end of its course. If it is altered to provide a sustained fishery, it is our concern that this could significantly reduce the quantity of drinking water available for FRA and EAFB use.	Noted. See response 1
9	All alternatives described in the study, with the exception of the status quo, will require funds for demolition/construction of each alternative. While it was discussed during our meeting that there has been no source yet identified to provide funding any selected alternative, it needs to be clarified in the report that funding for any of these alternatives would not be sought from FRA.	Noted. A project proponent would be identified through discussions and mutual agreement during phases after finalization of this study.
10	All alternatives described in the study, with the exception of the status quo, require operation/maintenance of the alteration, some of which could become very expensive. It needs to be clarified in the report that maintenance for any of these alternatives would not be sought from FRA and would be funded and performed by other sources or government agencies. Any access to FRA for construction or maintenance would require FRA approved right of entry permit(s).	Noted. The responsible party would be determined during subsequent discussion.
11	A brief look at Army NEPA regs (32 CFR 651.41) indicate that an EIS is required if a proposed action has the potential to significantly affect environmental quality or public health or safety. The [study] should state all permits that would be required for construction of each alternative. Please note that the Army should not be considered as the proponent for the EIS or for the NEPA support.	A general overview of permits required for in stream construction is included in the Appendix. Additional permits may be required to meet FRA requirements. The purpose of this study is to provide an overview of a suite of alternatives that may be technically feasible and to serve as a vehicle for discussions to proceed.
12	Any alternative for total dam removal could start the erosion of the streambed that would progress upstream until the streambed is able to stabilize again. While this was addressed as a topic of discussion in our meeting, it is absolutely critical that the design for all alternatives absolutely ensure that progressive erosion be stopped within the area of the construction. The suggestion that there "appears" to be a stable streambed upstream of the proposed area of construction presents an unacceptable risk to existing FRA property and infrastructure. FRA has both above ground and underground structures and utilities such as water and sewer mains passing over and under Ship Creek with very little streambed cover. This infrastructure is critical to the function of FRA and its protection must be assured in any alternative.	Agreed. The scope of this study was to develop to a concept level features of a suite of alternatives. Future phases would require detailed survey, modeling and design to ensure stream stability meets goals and objectives to protect existing infrastructure.
13	Section 3 Project Goals, Last bullet under ADF&G: We could find no mention of a new fish hatchery or visitors center in the body of the report. Is ADF&G considering this and are they referring to something downstream of FRA or EAFB?	ADF&G is planning to replace its two existing state hatcheries on Ship Creek with a new facility. The location scope and features of the new fish hatchery are in the planning phase at this time, but the existing EAFB hatchery site is being considered as a location. ADF&G is also working with the Municipality of Anchorage to build a visitor's and education center at the EAFB Hatchery site. Until details are known it is not possible to say more in the report.
14	It should be clarified in the report that what is referred to as "Ship Creek Dam" is really the weir next to the Fish Hatchery and FRA Central Heat and Power Plant. This could be confused with the normal reference to Ship Creek dam on FRA as the high dam located upstream from the FRA golf course.	Noted. Report will be edited to clarify which structure is referenced.
End		