

CHAPTER 9

SUMMARY OF COMMENTS AND RESPONSES

9.1 INTRODUCTION

This chapter contains the Army's responses to comments received on the Supplemental Draft Environmental Impact Statement (EIS) released in March 2006 for the construction and operation of a Battle Area Complex (BAX) and Combined Arms Collective Training Area Facility (CACTF) within U.S. Army training lands in Alaska. During the public comment process for the Supplemental Draft EIS, comments were received from all levels of the U.S. government, Alaska Native tribes, special interest groups, and Alaska residents. All consultations and comments were carefully considered and aided USARAK in identifying key issues and analyses leading to the completion of this Final EIS.

U.S. Army Alaska (USARAK) appreciates all public, tribal and agency interest and participation associated with the proposed action over the past four years. During this time, the U.S. Army Corps of Engineers, Alaska District Regulatory Branch (USACE) was invited as a cooperating agency. Its involvement included wetland delineation and functional assessment. USARAK has also engaged in consultations with other governmental agencies to discuss cultural and environmental issues relevant to the proposed action, including Alaska Native tribes, the Alaska State Historic Preservation Office, the Bureau of Land Management Alaska Fire Service, the Alaska Department of Fish and Game, and the city of Delta Junction. USARAK also engaged in consultations with interior Alaska's general aviation community to clarify and discuss potential impacts to airspace.

Approximately 550 individual comments were received on the initial Draft EIS released in 2004. Most participants submitted comments covering multiple topics. These comments and responses were published in the Supplemental Draft EIS version only, and have not been duplicated in the Final EIS. Individual comments and the Army's responses on the initial Draft EIS can be viewed at <http://www.usarak.army.mil/conservation>.

The issues of concern identified during the public comment period on the initial draft EIS included opposition to Eddy Drop Zone, airspace use, public access, bison movement, impacts to the Cold Regions Test Center, and additional wetland analysis. Of these issues, all but additional wetland analysis continued to be major or controversial issues identified during the Supplemental Draft EIS public comment period.

A summary of the Supplemental Draft EIS public comment process is presented in Section 9.2. An overview of government-to-government consultation is presented in Section 9.3. Responses to comment letters from federal, state and local agencies, Alaska tribal entities, special interest groups, and the public are found in Section 9.4, as well as responses to comments made at tribal consultation meetings and public meetings. Publications cited in the responses can be found in Chapter 6, *Bibliography*.

9.2 SUMMARY OF THE PUBLIC COMMENT PROCESS

The Notice of Availability (NOA) for the Supplemental Draft EIS was published in the *Federal Register* on March 17, 2006. USARAK announced the public meetings in the *Fairbanks Daily-News Miner* and on the Delta News Web (a community website). Document availability and public meeting notices were also posted on public bulletin boards in Delta Junction. Approximately 150 digital copies of the Supplemental Draft EIS were sent to interested individuals. Paper copies of the Supplemental Draft EIS were made available for review at community libraries throughout the project area and at Delta Junction’s City Hall. Copies of the Supplemental Draft EIS were also available at Fort Wainwright and DTA Environmental Resource Departments and on the USARAK Conservation website (<http://www.usarak.army.mil/conservation>).

The 45-day public comment period began on March 17, 2006, and was scheduled to run through May 1, 2006. In response to comments received from the people of Fairbanks and Delta Junction, the public comment period was extended until May 18, 2006. Notices of the extension were published in the *Fairbanks Daily-News Miner*, posted at local public bulletin boards in Delta Junction, and displayed on the Delta News Web.

Public meetings were held in two communities in Alaska: Fairbanks (April 5, 2006) and Delta Junction (April 6, 2006). Total attendance was highest in Delta Junction. The format included a poster session that described the proposed range projects, alternatives considered, and impacts to resources. USARAK officials provided three briefings in Delta Junction and two in Fairbanks. Each briefing was followed by a question and answer session.

Verbal comments were recorded at public meetings held in Fairbanks and Delta Junction and written comments were received via mail and email. Comments were submitted by two federal agencies, one state agency, one local government, five tribal representatives, six special interest groups, and 42 individuals. Table 9.a provides a summary of the number of comments received sorted by topic and commentor.

Table 9.a Comment Summary by Topic and Commentor.

Topic	Commentor						Total Comments
	Federal	State	Tribal	Local Govt	Special Interest Groups	Individual	
Human Health and Safety	0	0	0	3	0	8	11
Alternative Selection	0	0	0	1	1	7	9
Opposition to Eddy Drop Zone Alternative	0	0	0	4	2	12	18
Permitting Timelines	0	0	2	3	0	1	6

Topic	Commentor						Total Comments
	Federal	State	Tribal	Local Govt	Special Interest Groups	Individual	
Support for the Construction and Operation of the Range Complex and/or the Army Mission	0	0	1	2	2	4	9
Support for Eddy Drop Zone Alternative	1	0	0	0	0	1	2
Impacts to Cold Regions Test Center Mission	2	0	0	0	0	0	2
Socioeconomic Impacts	0	0	0	2	1	4	7
Distrust of Analysis Presented in Supplemental Draft EIS and Overall Army Decision-Making Process	0	0	0	3	0	8	11
Wetlands	0	0	1	0	0	0	1
Flooding/Floodplains	0	0	0	5	0	7	12
Fire Management	0	0	0	3	0	12	15
Noise Management	0	0	1	1	0	11	13
Public Access and Recreation	0	0	0	0	0	9	9
Wildlife and Fisheries	1	1	1	1	0	2	6
Risks and Costs of Range Construction	0	0	0	1	0	1	2
Impacts to Airspace	0	0	0	1	26	9	36
Cultural Resources	0	0	11	0	0	4	15
Permafrost	0	0	0	1	0	0	1
Cumulative Impacts	2	0	0	0	1	0	3
Other	10	0	3	2	2	7	24

All comment letters and transcripts were analyzed for their content and the different perspectives they offered. Where comments presented new information or ideas that warranted changes, the text of the Final EIS was revised accordingly. Reference to the revision, if applicable, can be

found in the response to comments. Some comments did not require a response in the Final EIS. These expressions of opinion or preference were noted.

9.3 GOVERNMENT-TO-GOVERNMENT CONSULTATION

Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments*, directs federal agencies to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies and projects. The Department of Defense (DOD) American Indian/Alaska Native Policy: Alaska Implementation Guidance requires DOD components to “consult on a Government-to-Government basis with tribes, concerning DOD activities which may have the potential to affect tribal rights and resources, on or off Indian Land, and interests in Indian Land.” According to the Department of Army Pamphlet (DA PAM) 200-4, “[t]he end goal of consultation is the resolution of issues in terms that are mutually acceptable to the U.S. Army and to the participating Native American, Alaska Native, and Native Hawaiian groups” (Appendix).

In accordance with these EOs and policies, U.S. Army Garrison Alaska (USAG-AK) staff held a tribal consultation meeting on April 5, 2006, to provide tribes from the Upper Tanana region with information and to request tribal comments on the Supplemental Draft EIS. The tribal consultation was held independent of the public coordination process. Before the meeting, the USAG-AK Native Liaison contacted the tribes via phone, fax, and U.S. mail to notify them of the availability of the Supplemental Draft EIS and the meeting. The Supplemental Draft EIS packages were mailed to the tribes before the opening of the comment period.

The meeting was held in Fairbanks and attended by representatives of Dot Lake Village, Healy Lake Village, Northway Village, and the Native Village of Tanacross. Travel cost reimbursement was provided by USAG-AK for tribal members attending the meetings. USAG-AK personnel presented a general overview of the proposed action and alternatives along with specific information on potential impacts to a cultural resource site within the Eddy Drop Zone alternative. Tribes were invited to participate in the National Historic Preservation Act (NHPA) Section 106 consultation process. The concerns voiced at the meeting focused on the following: cultural resources and consultations with tribes during cultural resource survey work, survey and artifact methodology and curation, the location of wetland surveys, permitting timelines, impacts to migratory birds and moose movement, and noise impacts. Tribal members made several valuable suggestions regarding tribal elders and Alaska Native organizations that may have an interest in the proposed action and recommended further contact by USAG-AK.

9.4 COMMENTS ON THE SUPPLEMENTAL DRAFT EIS AND ARMY RESPONSES

This section contains summarized responses to the comments received on the Supplemental Draft EIS from federal, state and local agencies, Alaska Native tribal representatives, special interest groups and the public. Reproductions of comment letters and verbatim transcripts from the public hearings are not included in the Final EIS; however, they can be found on the USARAK Conservation website at <http://www.usarak.army.mil/conservation>.

The Army has prepared 20 general responses covering the most common items of concern raised by the public (Table 9.b).

Table 9.b Issues Raised During the Supplemental Draft EIS Comment Period.

Issue Number	Issue
1	Human Health and Safety
2	Alternative Selection
3	Opposition to Eddy Drop Zone Alternative
4	Permitting Timelines
5	Support for the Construction and Operation of the Range Complex and/or the Army Mission
6	Support for Eddy Drop Zone Alternative
7	Impacts to Cold Regions Test Center Mission
8	Socioeconomic Impacts
9	Distrust of Analysis Presented in Supplemental Draft EIS and Overall Army Decision-Making Process
10	Wetlands
11	Flooding/Floodplains
12	Fire Management
13	Noise Management
14	Public Access and Recreation
15	Wildlife and Fisheries
16	Risks and Costs of Range Construction
17	Impacts to Airspace
18	Cultural Resources
19	Permafrost
20	Cumulative Impacts

9.4.1 Summary of Commentors and Identification of Responses

Table 9.c lists commentor names alphabetically by last name or organization. Numbered responses corresponding to issues raised by each commentor and organization are listed in Table 9.c and refer to general responses located in Section 9.4.2. Comments that did not fall within a general issue category were responded to on an individual basis (Table 9.c).

Table 9.c List of Individual Commentors and Corresponding Responses.

Submitted by	Response
Aircraft Owners and Pilots Association (George, T.), Written Comment	A question was raised about the size of the area to be protected by a Controlled Firing Area (CFA). The CFA would be identical to the surface danger zone footprint depicted in Appendix, Figure 3.1. The surface danger zones are represented by a dashed line. Please refer to response 17.
Aircraft Owners and Pilots Association (Twombly, I.), Written Comment	Please refer to response 17.
Alaska Air Carriers Association (Casanovas, K.), Written Comment	Please refer to response 17.
Alaska Airmen’s Association, Inc. (Maguire, F.), Written Comment	Please refer to responses 3 and 17.
Alaska Department of Natural Resources, Office of Habitat Management & Permitting, Written Comment	Thank you for concurring with the fisheries information provided in the Supplemental Draft EIS.
Austin, G., Written Comment	Please refer to response 5.
Cascadia Wildlands Project (Scott, G.), Written Comment	Concern was expressed regarding the potential creation of hazardous waste and subsequent leaching into local waterways. Munitions to be fired at the proposed range complex would not contain explosives or hazardous waste, eliminating the possibility for contamination of local waterways. Please see Chapter 2 and Sections 3.2.5 and 4.2.5, <i>Human Health and Safety</i> , of the Final EIS for a complete analysis.
Cedzo, K., Delta Junction Public Comment Meeting	Concern was expressed about proposed Fort Greely enhanced use lease agreements. This topic is outside the scope of this proposed action. Please refer to responses 1, 2, 8, 9, 14 and 17.
Cold Regions Test Center, Written Comment	Please refer to responses 6 and 7.

Submitted by	Response
Cook, J., Fairbanks Public Comment Meeting	<p>A question on the costs of each alternative was asked. The estimated range construction costs are: Eddy Drop Zone – \$68.5 million, Donnelly Drop Zone – \$124.9 million, North Texas Range – \$127.6 million, and North Texas/Eddy Combination – \$170.3 million. The cost to hold the public meetings for the Supplemental Draft EIS was approximately \$8,000.</p> <p>Please refer to response 18.</p>
Cory, D., Delta Junction Public Comment Meeting	Please refer to responses 2, 3, 9, 12, 13, 14, 15 and 18.
Cory, D. and Johnson, B., Written Comment	Please refer to responses 2, 3, 9, 11, 12, 13, 14 and 18.
Dearborn, R., Written Comment	Please refer to response 17.
Delta Chamber of Commerce, April 13, 2006, and December 10, 2004, Written Comment	<p>The Supplemental Draft EIS lists the preferred alternative as Eddy Drop Zone.</p> <p>Please refer to responses 1, 2, 3, 4, 8, 9, 11, 12, 13, 15 and 17.</p>
Delta Industrial Services (Crouch, M.), Written Comment	Please refer to response 5.
Delta Industrial Services (Johnson, B.), Written Comment	Please refer to response 5.
Delta Meat and Sausage (McCollum, D.), Written Comment	Please refer to responses 2, 3 and 8.
Detzel, J., Delta Junction Public Comment Meeting	The document that Pete Hallgren read at the Delta Junction Public Comment Meeting has been responded to in this chapter. Please refer to Guess and Rudd, April 4, 2006, Written Comment, for the response.
Dighton, S., Delta Junction Public Comment Meeting	Please refer to responses 8, 9, 11, 12 and 13.
Dorshorst, L., Delta Junction Public Comment Meeting	Please refer to responses 9, 12 and 13.
Experimental Aircraft Association (Haggland, P.), Written Comment	Please refer to responses 17 and 20.

Submitted by	Response
Fifer, M., Fairbanks Tribal Consultation Meeting	<p>Commentor inquired about the concerns Delta Junction has with this project and wanted to know if tribal concerns are shared with Delta Junction. The city of Delta Junction has expressed concerns over the proposed ranges due to risks associated with fire, flooding, noise and safety. The comments and concerns expressed by Alaska Native tribes, Delta Junction and all other groups are part of the public comment section (Chapter 9) of the Supplemental Draft EIS and are available for anyone to view.</p> <p>Commentor requested information on the field crew conducting excavations for the archeological surveys. The field crew conducting archeological surveys, including shovel tests in the BAX area, are all qualified archeologists that either have, or are working towards, a bachelor's or master's degree.</p> <p>None of the munitions used for training would generate noise loud enough to cause avalanches.</p> <p>A discussion of global climate change on long-term impacts to permafrost areas can be found in Section 4.2.1.1.2.</p> <p>Please refer to responses 4, 10, 15 and 18.</p>
George, T., Fairbanks Public Comment Meeting	Please refer to response 17.
(Mayor) Gilbertson, R., Delta Junction Public Comment Meeting	Please refer to responses 3, 5, 9 and 12.
Gillispie, T., Written Comment	Please refer to response 18.
Guess and Rudd, April 4, 2006, Written Comment	Please refer to responses 1, 3, 4, 9, 11, 12, 16 and 19.
Guess and Rudd, April 26, 2006, Written Comment	The comment period was extended for an additional 18 days, from 30 April 2006 to 18 May 2006.
Hallgren, P., Delta Junction Public Comment Meeting	Please refer to responses 1, 3, 4 and 5.
Herman, E., Delta Junction Public Comment Meeting	Please refer to response 3, 9, 11, 12 and 13.
Herman, N., Delta Junction Public Comment Meeting	Please refer to response 3, 11, 12 and 13.

Submitted by	Response
Hicks, W., Delta Junction Public Comment Meeting	<p>Construction contractors would only utilize 33-Mile Loop Road for access to the BAX and CACTF range complex. Fleet Street would be off-limits to construction traffic.</p> <p>Please refer to responses 1, 2, 8, 13 and 14.</p>
Isaac, R., Fairbanks Tribal Consultation Meeting	Please refer to response 18.
Johnson, T., Written Comment	Please refer to response 6.
Karalunas, D., Fairbanks Public Comment Meeting	<p>Commentor inquired about the difference between the CD and the hardcopy versions of the Supplemental Draft EIS. The Supplemental Draft EIS has been made available as a CD, a paper version and on the web. These versions are identical.</p> <p>All comments received on the initial draft EIS were provided responses, reproduced and published as part of the Supplemental Draft EIS.</p> <p>Please refer to responses 1, 5, 11, 12, 14, 15, 16 and 17.</p>
Leith-Dowling, M., Delta Junction Public Comment Meeting	Please refer to responses 1, 2, 3 and 12.
Marsh, E., Delta Junction Public Comment Meeting	Please refer to response 3.
McCombs, S., Written Comment	Please refer to responses 1, 2 and 3.
Miller, L., Written Comment	Please refer to response 3.
Murphy, M., Delta Junction Public Comment Meeting	Please refer to response 12.
Native Village of Tanacross, Tanacross Village Council (Warren, G.), Written Comment	<p>Commentor requested consideration of local Native workers and Native-owned contracting firms for employment. The Army has taken this comment into consideration; however, this EIS does not have the authority to stipulate contracts with any single entity, be it government, tribal, or private sector.</p> <p>Please refer to responses 5, 15 and 18.</p>
Northway, D., Fairbanks Tribal Consultation Meeting	Please refer to response 18.
Odess, D., Fairbanks Public Comment Meeting	Please refer to response 18.
Pinkelman, R. & J., Written Comment	Please refer to responses 1, 3, 8, and 14.

Submitted by	Response
Sachau, B., Written Comment	U.S. Army Alaska appreciates your time to comment on the Supplemental Draft EIS.
Sparks, R., Written Comment	Please refer to response 3.
Tanana Chiefs Conference, Inc. (Gillispie, T.), Written Comment	<p>Commentor urged USARAK to invest time and funding resources to perform cultural resource management actions as quickly as possible. USARAK is required by Section 106 of the National Historic Preservation Act (NHPA) to consider effects of historic properties that may occur as a result of federal undertakings prior to the action. USARAK will continue to ensure Section 106 compliance throughout the BAX/CACTF project.</p> <p>Please refer to response 18.</p>
Travis/Peterson Environmental Consulting, Inc. (Packee, E.), Written Comment	<p>U.S. Army Alaska has reviewed and considered your comments. In some cases, changes have been made to soil resources and surface water. Please refer to Sections 3.2.1, 4.2.1 and 4.2.2.</p> <p>Please refer to response 11.</p>
Unidentified Speaker, Delta Junction Public Comment Meeting	Please refer to response 13.
Unidentified Speaker, Fairbanks Public Comment Meeting	Please refer to response 17.
Unidentified Speaker, Fairbanks Public Comment Meeting	Please refer to response 17.
Unidentified Speaker, Fairbanks Public Comment Meeting	Commentor requested general information on tribal meetings during the public comment period. The tribal meeting was held April 5, 2006, at the Marriott Spring Hill Suites in Fairbanks.
U.S. Department of the Interior, Office of Environmental Policy & Compliance, Written Comment	Please refer to response 15.
U.S. Environmental Protection Agency, Region 10, Written Comment	The EPA recommends including detailed range designs for the BAX and CACTF for each alternative location in the Final EIS. Range designs vary between each alternative based on the differences in the local environment. Analysis of the effects of the proposed action was divided into three activity areas: construction footprint, maneuver area, and surface danger zone. Adequate and comparable range design information was available for each alternative site to perform equal comparisons. Additional information can be found in Section 2.4.

Submitted by	Response
<p>U.S. Environmental Protection Agency, Region 10, Written Comment (continued)</p>	<p>The EPA recommends identification of potential storm water runoff sources and evaluation of effects. Additional information has been added on the sources of potential storm water runoff and impact, storm water runoff permitting requirements, and descriptions of best management practices. Please see Sections 3.2.1, 3.2.2, 4.2.1, and 4.2.2 for additional information.</p> <p>EPA recommends further analysis be included in the Final EIS to address Clean Water Act Section 404(b)(1) guideline requirements. The U.S. Army Corps of Engineers, Alaska District Regulatory Branch (USACE) is responsible for preparing a 404(b)(1) analysis as part of their permit review process. USARAK has prepared a separate Draft Finding of No Practicable Alternative. Economic cost and benefit information on the proposed action is contained in Sections 3.3.6 and 4.3.6, <i>Socioeconomics</i>, of the Final EIS. Technological feasibility and logistical considerations were addressed in various sections of the EIS (4.2.1 and 4.3.3). Proposed measures to avoid and minimize impacts to aquatic resources are listed in the EIS mitigation section under such subjects as soils, surface water, and wetlands. USARAK and USACE will continue to collaborate to ensure these two analyses are consistent.</p> <p>The EPA requests USARAK consider options for compensatory mitigation. USARAK will commit to those mitigation measures identified by the U.S. Army Corps of Engineers as part of the Clean Water Act Section 404 permit.</p> <p>The EPA recommends that the Final EIS include a discussion of the proposed monitoring and mitigation measures necessary to implement the preferred alternative. Please see Volume 2, Appendix, <i>Mitigation Analysis for Proposed Construction and Operation of a BAX and CACTF within Army Lands in Alaska</i>, for additional information on mitigation measures, including proposed monitoring measures.</p> <p>Please see Table 1.b for additional information on required permits, licenses and other entitlements.</p> <p>Please see Table 2.i for an alternatives comparison.</p>

Submitted by	Response
U.S. Environmental Protection Agency, Region 10, Written Comment (continued)	Please see Appendix, Figure 3.b for a soil survey map. Please see Section 3.3.3.3.1, <i>Wetlands Use Management</i> , for definitions of “higher function” wetlands. Please see Chapter 6, <i>Bibliography</i> . Direct web links were listed for reference, where applicable. Please refer to response 20.
Warren, G., Fairbanks Tribal Consultation Meeting	Please refer to responses 4 and 18.
Weller, J., Delta Junction Public Comment Meeting	Please refer to responses 1, 3, 9, 12 and 13.
Witteman, P., Delta Junction Public Comment Meeting	Please refer to response 5.
Wood, F., Written Comment	Please refer to responses 3, 4, 9, 11 and 12.

9.4.2 Responses to Comments Submitted During Supplemental Draft EIS Public Comment Period

The following responses address specific issues raised by the public and representatives from tribal and federal governmental entities. The community of Delta Junction has also demonstrated considerable interest in the construction of the BAX and CACTF. This high level of interest is reflected in numerous comments received, both orally and in writing. These public comments have been carefully considered, and many comments have helped USARAK to identify and evaluate further potential environmental impacts posed by the proposed project. Of the public comments received on the Supplemental Draft EIS, the most frequently voiced concerns relate to airspace use, opposition to Eddy Drop Zone, fire management, cultural resources, and noise.

These responses provide specific information helpful in understanding USARAK’s evaluation of potential environmental impacts associated with the BAX and CACTF projects. USARAK has carefully evaluated its training requirements, studied potential impacts to the human environment as a result of the proposed project, and considered public comments, arriving at the conclusion that sufficient care and mitigation has been incorporated into the proposed project.

Issue 1. Human Health and Safety

Comment: A local resident was concerned with impacts to human health and safety, including the possibility of weapons being aimed in the wrong direction.

Response: The Department of the Army Pamphlet (DA PAM) 385-63, *Range Safety*, establishes and maintains a comprehensive range safety program for the Army. This publication provides implementation guidance, standards, and procedures for the safe firing of ammunition, demolitions, lasers, guided missiles, and rockets for the purposes of training, target practice, and,

to the extent practicable, combat. In addition, it provides guidance on use of ranges and airspace, handling of ammunition, firing instructions, and target requirements.

On-the-ground surface danger zones are used to reduce the residual risk of projectile escape and/or other danger to the public to no greater than one in one million during live-fire training events. DA PAM 385-63 defines the space requirements to safely incorporate weapons in live-fire training events. All ranges must be designed and targets placed totally within Army installation boundaries. The Army also requires the placement of targets and anticipated firing locations (by weapon type) in an area that is able to accurately contain ricochets and establish a safe impact area for all projectiles. This area is large enough to contain projectiles fired at an optimal elevation and ensures that the energy of the fired projectile is totally depleted within the surface danger zone. For example, an M2 .50 caliber round, fired at an elevation to achieve maximum range, will travel 6,400 meters along the gun target line. To either side of the gun target line, there is a 5-degree dispersion area and an additional 5-degree ricochet area. This additional combined 10-degree fan extends along the entire length of travel.

The proposed range sited at the Eddy Drop Zone would be built and operated in strict compliance with Army regulations. The Eddy Drop Zone site offers sufficient area to provide a necessary surface danger zone for all types of training munitions that will be used by the units training on the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) ranges.

Please refer to Section 2.2.1.2.2.1, *Safety Precautions*, and Section 3.2.5.4, *Range Safety*, for additional information.

Comment: A representative of the city of Delta Junction and a local resident questioned whether or not the .50 caliber machine gun will be used as part of training and whether or not it is fail safe. A question was also raised about whether the 105mm is the largest munition to be used and if there are any restrictions on size of munitions at the range.

Response: Soldiers will be able to fire a .50 caliber round using an M2 machine gun at the BAX. The placement and size of the surface danger zone associated with the BAX has been designed to ensure that fired .50 caliber projectiles stay within the boundaries of the surface danger zone.

The Mobile Gun System, which fires a 105mm cannon Sabot round, is the largest weapon to be used at the BAX. This munition also requires the largest surface danger zone – a firing distance of 7.5 miles and a somewhat triangular-shaped, three-dimensional area of approximately 24,000 acres. Each alternative has a uniquely designed surface danger zone (see Appendix, Figure 2.d) to safely incorporate weapons during a live-fire event. Munitions with a range greater than the 105mm cannon Sabot round will not be used at the BAX.

Comment: Residents were concerned about their overall safety as a result of constructing the range at Eddy Drop Zone, and whether or not safety measures would be compromised for the sake of training.

Response: Neighboring concerns over safety are very understandable, but U.S. Army Alaska (USARAK) is sure that in time local residents will realize their fears are unfounded. The reason so much land is needed for the range is to provide a buffer zone (or surface danger zone) large

enough that no projectile of any type leaves the range complex. This concern for community safety also extends to managing training on the range facilities. Safety of both individuals and wildlife on and off range will not be compromised. Range activities will be altered or curtailed whenever conditions are not ideal. For example, whenever visibility is limited, certain weapons will not be used for live fire, and whenever there is an elevated risk of wild fires, military units will not be allowed to use pyrotechnic training devices. Additionally, fire crews will accompany units on the range during training activities.

USARAK will not compromise public safety. Insuring public safety will likely have short-term impacts on unit training schedules. Training events will be curtailed or rescheduled whenever conditions do not allow for the necessary margin of safety.

Issue 2. Alternative Selection

Comment: The Delta Chamber of Commerce, a local business owner, and several residents preferred either North Texas Range, Donnelly Drop Zone, Gerstle River Training Area, or the west side of the Delta River for construction of the range complex as each provided lower environmental impacts or were a further distance from private residences.

Response: All Army lands in Alaska were considered for siting of the proposed action. Possible locations for the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) range facilities were Tanana Flats Training Area, Donnelly Training Area West, Yukon Training Area, Gerstle River, Black Rapids, Fort Richardson, Eddy Drop Zone, Donnelly Drop Zone, and North Texas Range (see Appendix, Figure 2.c). Each of these locations was evaluated to determine its capability to meet range training, design, and siting criteria. After the screening of available U.S. Army Alaska (USARAK) properties, three locations remained for further analysis: Eddy Drop Zone, Donnelly Drop Zone, and North Texas Range. Only one of the three sites (Eddy Drop Zone) meets all three screening criteria requirements (Table 9.d). However, it was determined that while Donnelly Drop Zone and North Texas Range provide ready access for construction and training activities and are capable of meeting basic range design and training requirements, the two locations do not meet siting requirements. See Section 2.3.3, *Alternative Viability Analysis*, of the Final EIS for a discussion of each location considered. Complete descriptions of training objectives, range design criteria and range siting criteria can be found in Sections 1.2.2, 1.2.3 and 1.2.4 of the Final EIS, respectively.

Table 9.d Summary of Viability Analysis Based on Screening Criteria.

Location	Training Objectives	Range Design Criteria	Range Siting Criteria
Tanana Flats Training Area	yes	yes	no
West Donnelly Training Area	yes	yes	no
Yukon Training Area	no	no	no
Gerstle River Training Area	no	no	no

Location	Training Objectives	Range Design Criteria	Range Siting Criteria
Black Rapids Training Area	no	no	no
Fort Richardson	no	no	no
Eddy Drop Zone	yes	yes	yes
Donnelly Drop Zone	yes	yes	no
North Texas Range	yes	yes	no
North Texas Range/ Eddy Drop Zone Com- bination	yes	yes	no

Issue 3. Opposition to Eddy Drop Zone Alternative

Comment: Representatives for the city of Delta Junction, a local business owner, and several residents expressed opposition to construction and operation of the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) at the Eddy Drop Zone alternative.

Response: U.S. Army Alaska (USARAK) appreciates you taking the time to comment on the Supplemental Draft EIS. USARAK acknowledges your concerns and is taking all comments into account during its analysis of various location alternatives. The decision-maker will use the public input provided on all alternative locations to assist him in making a decision best supporting Soldier training while also considering and mitigating environmental, human health and safety, and socioeconomic impacts.

Issue 4. Permitting Timelines

Comment: Several representatives of the city of Delta Junction, two tribal representatives, and a local resident were concerned with the “fast-tracked” wetland permitting and water quality certification process associated with the proposed action since the applications were submitted simultaneously with release of the Supplemental Draft EIS.

Response: USARAK submitted an individual Clean Water Act (CWA), Section 404 permit application to the U.S. Army Corps of Engineers, Alaska District Regulatory Branch (USACE) on March 7, 2006. (By agreement between the USACE and the Alaska Department of Environmental Conservation, application for a CWA Section 404 permit may also serve as an application for state water quality certification). The Council on Environmental Quality’s Regulations for Implementing the Procedural Provision of the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508) indicate that agencies shall reduce delay by integrating NEPA requirements with other environmental review and consultation requirements. USACE will either approve or deny the permit application based on regulatory requirements and input from agency, public, and tribal review.

Submittal of a CWA Section 404 permit application does not imply that USARAK has made a final decision on where to locate the proposed range complex. USACE will not make a determination on the permit application prior to USARAK's Record of Decision and without completing a thorough evaluation. If a site location other than Eddy Drop Zone is selected, USARAK would be required to re-submit a revised CWA Section 404 permit application prior to construction.

Issue 5. Support for the Construction and Operation of the Range Complex and/or the Army Mission

Comment: Employees from a local business, representatives from the city of Delta Junction, and several residents expressed support for the construction and operation of the range complex and/or the Army mission.

Response: Thank you for supporting the Army mission, the need for the range complex, and the efforts of U.S. Army Alaska.

Issue 6. Support for Eddy Drop Zone Alternative

Comment: The Cold Regions Test Center and a local resident expressed support for construction and operation of the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) at the Eddy Drop Zone alternative.

Response: U.S. Army Alaska appreciates you taking the time to comment on the Supplemental Draft EIS.

Issue 7. Impacts to Cold Regions Test Center Mission

Comment: Concerns were expressed by the Cold Regions Test Center (CRTC) about the potential impacts to the local economy from the reduction in testing operations at its facilities if the North Texas Range location was selected as the preferred alternative.

Response: Information on potential impacts to the local Delta Junction economy as a result of CRTC's reduction in testing capability was added to the discussion under socioeconomics for the North Texas Range alternatives. The monetary impact category was changed from "beneficial" to "minor." See Sections 4.3.6.1.6 and 4.3.6.1.7 for additional information.

Comment: CRTC expressed concerns about the potential conflicts with testing infrastructure and the resulting inability of CRTC to complete its mission if the North Texas Range location was selected as the preferred alternative.

Response: Scheduling conflicts would likely arise with the CRTC, as the range construction footprint, maneuver area, and surface danger zone proposed as part of the North Texas Range alternative would bisect a large area currently used by both U.S. Army Alaska (USARAK) and CRTC Commands.

North Texas Range is intensively used by CRTC, as it is one of the only available sites at Donnelly Training Area East that has established impact areas. CRTC has numerous facilities in the area (which are not utilized by USARAK) including, Bolio Lake, Mississippi Test Site, and Texas Range (different from North Texas Range). Severe impacts to CRTC facilities would be expected under the North Texas Range alternatives due to closures of Meadows Road, inhibiting CRTC's access to facilities whenever training on the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) occurs. Close coordination and regular communication between USARAK and CRTC would be required to minimize training and testing scheduling conflicts. In this manner, both organizations would be able to maximize their ability to accomplish their respective missions.

Issue 8. Socioeconomic Impacts

Comment: The Delta Junction Chamber of Commerce, a local business owner, and several residents were concerned about the economic impacts to property values and future economic development as a result of building the ranges at Eddy Drop Zone.

Response: The EIS considered the short-term economic impacts to the region and concluded that construction of the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) at the preferred location would have a positive impact for the community. The positive impact will be a direct result of range construction and the additional new employment positions created by operation of the ranges. The EIS did not consider regional long-term property value trends as this subject was outside the scope of the National Environmental Policy Act (NEPA) analysis. Long-term regional property values are affected by a variety of local, regional, state and national economic events. An argument could be made that an increase in jobs and influx of capital into the region would result in an increase in property values, but other events in the region (i.e., increased or decreased oil prices, increased or decreased oil development, natural gas development, mining, etc.) can also heavily influence long-term valuation of regional property. Additional considerations for determining individual property values include the location of specific properties, condition of the property, size of the property, layout, and expectations and interest of the buying public.

Comment: The Delta Junction Chamber of Commerce was concerned about the economic impacts to local tourism as a result of building the ranges at Eddy Drop Zone.

Response: Tourism in the Delta Junction area consists primarily of summer visitors passing through the area either en route to other parts of the state, or as part of a multiple destination visit to Alaska. Delta Junction primarily serves as a refueling and supply stop for these visitors. Since the proposed range complex would be self-contained within the Donnelly Training Area (DTA) East area, existing tourist services and related commerce would be unaffected by the preferred Eddy Drop Zone location. Convoys to DTA East, from both Forts Richardson and Wainwright would be scheduled to minimize traffic congestion on state highways. Finally, as discussed in the Final EIS (Section 4.3.8, *Public Access and Recreation*) recreational use of military lands would be preserved to the extent possible in order to mitigate the loss of traditional recreational uses for fishing, hunting, and other activities in the DTA area.

Issue 9. Distrust of Analysis Presented in Supplemental Draft EIS and Overall Army Decision-making Process

Comment: Representatives of the city of Delta Junction and several residents expressed their lack of trust in the Army's analysis of the proposed action. Community members felt that the Army has not taken into account proposed risks to the community's residents and that the Army's actions are pre-decisional towards the Eddy Drop Zone site.

Response: U.S. Army Alaska (USARAK) recognizes that many neighboring residents are apprehensive about the planned range projects. The proposed Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) represent substantial changes for the Delta Junction community. The increased size and changing mission of USARAK units makes the proposed range project essential. The new range complexes will offer an environment for large-unit training that will ensure Alaska soldiers are able to develop and perfect unit skills needed to survive modern combat.

Selection of Eddy Drop Zone as the preferred alternative was made only after a comprehensive analysis of all possible sites on USARAK lands. While it's true that the Army manages more than a million acres in Alaska, most of the training land lies across two major rivers and is inaccessible during summer months. The cost of building a bridge to gain access to these areas, plus routing power and communication lines to such sites, is currently prohibitive at a time when many of the Army's resources are going to support the fight against terrorism.

None of the three Army installations in the state (Forts Richardson, Wainwright and Greely) have enough undeveloped land to accommodate the two range complexes and weapons safety zones. The remaining Army land that is accessible year-round does not have the amount of level ground needed for the ranges. At the end of this initial analysis, only the eastern section of Donnelly Training Area East (area east of Delta River) had enough readily accessible, upland terrain to accommodate the ranges and safety danger zones.

USARAK also understands local apprehension over a combat arms range being located near their community. The Army has spent more than two years investigating and analyzing every aspect of the project to both fully understand the potential environmental and social impacts, and to determine the best methods of designing, building and operating the proposed ranges to ensure protection of community health and safety. Through a scoping process, public meetings and meetings with community leaders, USARAK has been able to identify community concerns. As a consequence, USARAK experts have undertaken additional studies and analyses of the possible impact to environmental and social resources important to the community. The Supplemental Draft EIS is the product of this additional effort. The Supplemental Draft EIS doesn't simply analyze potential impact that will result from the proposed range projects. It also identifies various steps the Army can take to minimize environmental impacts and disruptions to the community lifestyle, and to ensure no risk to public safety.

USARAK is committed to ensuring that the new range projects will not significantly alter the community status quo. Army officials are committed to remaining engaged with the community during the construction and operation of the range projects as a means of identifying and resolving future community concerns.

Issue 10. Wetlands

Comment: An Alaska Native tribal member requested clarification on the location of wetland surveys and their proximity to the proposed range locations.

Response: U.S. Army Alaska (USARAK) submitted an individual Clean Water Act, Section 404 permit application to the U.S. Army Corps of Engineers, Alaska District Regulatory Branch. This application requires USARAK to submit a delineation of wetland and non-wetland areas. USARAK conducted wetland surveys, as well as determined the functional capability of wetlands, within all three proposed range locations. Please see Appendix, Figures 3.q, 3.r, 3.s, and 3.t for a map of the wetland survey areas. Additional information can be found in Section 3.3.3.1, *Wetland Surveys*, of the Final EIS.

Issue 11. Flooding/Floodplains

Comment: A resident questioned whether or not the cost of maintenance and potential repair of the range complex as a result of flooding was considered, and whether or not range components can be submerged on a semi-regular basis.

Response: The cost of maintenance and potential repair of the range complex as a result of flooding was considered. The range design was modified to accommodate aufeis flooding as well as the possibility of range components being submerged on an infrequent basis.

Comment: Representatives of the city of Delta Junction and several residents were concerned that construction of range features and culverts would alter downstream flooding.

Response: During the range design phase, placement and construction of facilities, access roads, and range targetry stations would be undertaken to ensure unimpeded flows and the maintenance of current flow rates through the area. For example, water crossings and culverts in road systems would be modified as needed to preclude impoundment behind roadway systems and to prevent potential overtopping, roadbed erosion, or diversion of surface waters. Vegetation within high water drainage ways and channels would be maintained, except in very localized areas. This natural channel vegetation slows water velocities and flow rates from flood events, thus lessening the downstream effects toward the Alaska Highway and Delta Junction. With these modifications, the overall impact of construction and operation of the range projects at Eddy Drop Zone would be moderate and would not produce a discernable change to flood water travel through the Eddy Drop Zone alternative. Please see Section 4.2.2.1.4 for additional information.

Comment: Representatives of the city of Delta Junction and several residents questioned the adequacy of flooding and floodplain analysis presented in the Supplemental Draft EIS.

Response: Floodplains were delineated for Jarvis Creek by combining the flooding conditions occurring under two different scenarios: with and without the effects of aufeis (river ice). Sound scientific, peer-reviewed modeling was applied using the U.S. Army Corps of Engineers River Analysis System computer program (HEC-RAS) and topographic data obtained through Light Detection and Ranging (LIDAR) surveys. LIDAR is a survey system that utilizes electromagnetic radiation at optical frequencies to take measurements of objects (in this case, topographic landforms). Areas of aufeis formation were determined from aerial photographs taken during the

spring 2004 flooding event. In addition, field observations were conducted and previous studies of the Jarvis Creek area were reviewed.

Issue 12. Fire Management

Comment: City of Delta Junction representatives and several residents were concerned about the risk of fires to the Delta Junction community and felt that the Supplemental Draft EIS inadequately accounted for this risk.

Response: Along with the broader Delta Junction area, Donnelly Training Area (DTA) East has a long history of wildfires. Ignition sources for the DTA area, associated with both military training and other non-military actions (lightning and recreational use), will continue to cause fires in DTA East as they have in the past. The impact at Eddy Drop Zone alternative is considered severe and significant, given the severity of potential harm during a large, uncontrolled wildfire. However, this threat would be reduced through (1) the reduction in the fuel load prior to any use of the range complex, and (2) the provision of a U.S. Army Alaska (USARAK) quick-reaction fire suppression capability at DTA. Additionally, the range siting at Eddy Drop Zone alternative lies between the potential source of a possible wildfire ignition and Delta Junction. This orientation insures a dedicated USARAK response at the Eddy Drop Zone site to protect Army infrastructure investments and, subsequently, the Delta Junction community.

In fire-prone areas, climate, human activity, and types of vegetation (or fuels) determine the level of wildland fire potential. Fire hazard assessments were conducted on USARAK lands in 2002 by the Alaska Fire Service (AFS) fuels management specialists, with the assistance of USARAK forestry personnel, to evaluate the potential implications of siting military ranges in certain areas. These assessments provided a high, moderate, or low potential fire behavior rating based on existing vegetation, topography, and general area weather characteristics. These assessments were based on established AFS fire hazard assessment methods.

The Eddy Drop Zone alternative has a high hazard assessment. The fuels are continuous stringers of black spruce, dwarf black spruce, and mixed hardwood with black spruce. Understory vegetation includes bluejoint reedgrass, mosses, and lichens. Localized weather patterns may create extremely hazardous fire situations. Typically, wind-driven fires in black spruce are high in intensity and they pose potential threats to state lands and private homesteads along the northern boundary (Musitano et al. 2002).

USARAK implemented numerous fire management strategies to prevent or reduce risks and others are planned as described in Sections 4.2.3.2.1 and 4.2.3.2.2 of the Final EIS.

Comment: A local resident expressed concerns about the adequacy of stationing and/or relying on fire fighting facilities and personnel at Fort Wainwright to respond to the Delta Junction area in case of a fire.

Response: Three management actions are used by USARAK to prevent wildfires and help reduce the risk of wildfire impacts on the community of Delta Junction. First, a fire danger rating system is used to reduce the likelihood of a fire by limiting military activities. Certain military activities are restricted when thresholds of wildfire risk are reached, as required by USARAK Range Regulation, 350-2 (USARAK 2004b).

Second, wildfire danger is reduced through the mechanical removal of accumulated fuels (vegetation), through prescribed burning, and/or construction and maintenance of fire or fuel breaks. The third fire management action is that of an Initial Attack Response Team, or wildland fire team. This wildland fire team (including a fire engine) would accompany troops that train at DTA. During times of high and extreme fire danger, the wildland fire team would remain on scene during all military training activities, and would provide both a wildfire safety briefing to incoming training units and a rapid initial response to potential wildfires in the area. During times of low and moderate fire danger, the fire team would conduct needed hazardous fuel reduction projects, such as mowing and “burning out” of grass patches around targets to prevent fire, removing dead trees, and thinning live trees to reduce potentially flammable fuels within the range complex.

Lastly, a detailed pre-attack plan (including egress routes for residents of Delta Junction living adjacent to military boundaries) will be developed before any live-fire training exercises occur. Pre-identification of these egress routes would speed up any required evacuations in the area in the event of a wildland fire.

Issue 13. Noise Management

Comment: The Chamber of Commerce and several residents are concerned about the increase in noise and vibrations from training activities, and requested further clarification of particular aspects of the noise analysis to include impact category definitions, use of noise models vs. actual on-the-ground measurements, and definition of “adverse weather conditions.”

Response: The four levels of impacts (none, minor, moderate, and severe) resulting from military activity are based on two noise levels – (1) an annual average of combined small arms, large weapons, and demolition noise, and (2) peak noise associated with a single noise event. Impact categories were assigned to each alternative location based on the extent of noise level expected to occur in that area rather than the total number of people potentially annoyed. For example, even though the human population near the Donnelly Drop Zone alternative is lower, it was still assigned a higher impact category than Eddy Drop Zone because peak noise levels would be expected to be heard more often outside of the military installation boundary. However, impact categories were modified to reflect expressed concerns. Impacts associated with single noise events at Eddy Drop Zone and both North Texas Range alternatives would be moderate. Impacts would be severe at Donnelly Drop Zone. Please refer to Section 4.2.4, *Noise*, for additional information.

Noise analysis is based on standard Army guidelines and utilizes standardized models that were developed at Army installations across the nation and worldwide. Environmental noise analyses are primarily accomplished through computer simulations since direct measurement of noise levels is often impractical, expensive, and inconclusive. Models can take into account local weather conditions and topography. Also, modeling allows large geographical areas to be analyzed, whereas direct measurement only records noise levels at a specific location.

Weather conditions can cause peak or single event noise levels to vary significantly from day to day, or even from hour to hour. Under certain weather conditions, noise from training can be heard over longer distances. Peak noise level estimates were created to show where noise would be heard during a variety of adverse weather conditions. Adverse weather conditions are defined

as a stiff wind blowing in the direction of the noise receiver, extreme cold weather or when a low cloud layer is present, which would cause sound to travel further distances. Two separate noise contours were developed – the Peak 10 (which encompasses the area where 90% of the time the noise level would be at 115 decibels or lower) and the Peak 50 (which encompasses the area where 50% of the time the noise level would be at 115 decibels or lower). According to Army noise guidelines, a low risk of complaints is expected with sound levels of 115 decibels or lower.

Comment: Two residents expressed concern about the noise levels and vibrations associated with aircraft use at the range complex.

Response: The levels of aircraft operations at Donnelly Training Area (DTA) East are not high enough to generate noise levels that would impact noise-sensitive land uses including but not limited to residences, schools, medical facilities, and churches. However, as with any impulsive noise event, there is still the possibility that an infrequent helicopter overflight may cause annoyance and possibly lead to complaints.

Comment: A local resident questioned the number of times a weapon would be fired during a training event.

Response: There is no Army standard that indicates the exact number of times a weapon should be fired during training. Rather, the frequency of weapon use is based on the amount of ammunition allocated to a certain unit. The actual number of training events at the Battle Area Complex (BAX) primarily depends on the required weapons training strategy for a particular unit. The Department of Army Pamphlet (DA PAM) 350-38, *Standards in Training Commission* (STRAC), delineates the ammunition allocated for training events that are required for Soldiers to meet minimum training standards from the basic individual level through the advanced collective unit level. The STRAC also delineates the number of iterations per year these events should be conducted to maintain skill proficiency. (See Chapter 2, Section 2.2.1.2.1, *Description of Units Using the BAX and Training Requirements*, for additional information). The maximum potential throughput or use of the BAX per year would be approximately 238 days. The minimum throughput of the BAX would be approximately 106 days.

Issue 14. Public Access and Recreation

Comment: Several residents expressed concerns about impacts to hunters trying to access the 33-Mile Loop Road area during hunting season as a result of range construction. Additional clarification was requested on the expected closures as a result of range construction.

Response: The primary use of military lands is for military training. Areas used for military training at Donnelly Training Area (DTA) are closed during training events to protect the public and prevent disruption to the training exercise. However, training areas not in use for field training exercises are released for recreational activities, as available.

In order to meet necessary training and maintenance needs, and to protect equipment and facilities and ensure public safety, a permanent closure (year-round) of the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) construction footprint and maneuver area (approximately 4,400 acres) to the public would occur. This closure would be a localized severe impact to public access and recreation. The maximum potential use of the BAX per year

would be approximately 238 days. The minimum use of the BAX would be approximately 106 days. Closure of the surface danger zone to the public during training events would occur at least 106 days out of the year and would likely occur for 238 days. The remaining portions of DTA East would be available for public access and recreation when military training is not occurring.

Development of the proposed BAX and CACTF at Eddy Drop Zone would be along 33-Mile Loop Road. Certain portions of 33-Mile Loop Road would be incorporated into the construction footprint and maneuver area of the BAX. Several methods to allow for continued recreational use and maximum public safety are proposed to reduce the adverse impact to public access and recreation within DTA East. Access gates could be placed in certain areas along 33-Mile Loop Road and 12-Mile Crossing to allow continued recreational access in certain areas during training. Exact gate placement would be determined following a decision on where the BAX and CACTF would be constructed. Other considerations include the construction of an “access corridor” through the permanently closed range complex to allow recreational use of the surrounding areas, improvement of Fleet Street (located northeast of the proposed BAX) use as an access point to 33-Mile Loop Road, or construction of a new road that would avoid the range complex and still allow access to 33-Mile Loop Road and surrounding lands.

The 33-Mile Loop Road provides access to adjacent non-military lands such as the Granite Mountains, which are used by the general public for sheep, caribou, and small game hunting, and other activities. Access to these areas via 33-Mile Loop Road and 12-Mile Crossing would be limited while the BAX and CACTF are in use under the Eddy Drop Zone alternative. 12-Mile Crossing may be the easiest access into the Granite Mountains; however, alternate access trails to the Granite Mountains exist off of military lands that would not be affected by the construction and use of the BAX and CACTF.

Several locations within the BAX and CACTF construction footprint and maneuver area traditionally used as hunting camps by the public during moose hunting season would no longer be available under this alternative.

Comment: A resident requested clarification on recent improvements to military land access procedures at DTA.

Response: U.S. Army Alaska (USARAK) acknowledges the difficulties that some members of the public may have had in obtaining necessary information to access military lands in the past. To help correct these issues, several modifications to the access process have been made, including the USARTRAK automated check-in phone system and making Recreational Access Permits (RAPs) available at the Fort Greely Visitor Center.

The public must obtain permission before entering military lands. Persons must first get a RAP before entering. Using their permit number, interested parties must call the USARTRAK automated check-in phone system (Delta Junction call-in number: 873-3181) and indicate where they will be going. When individuals check in, the latest information on military range closures and construction can be obtained.

Information on which training areas are open is recorded on USARTRAK. RAPs for DTA are available at the Fort Greely Visitor Center, located at the Front Gate. This facility is accessible to the general public Monday through Friday from 6 a.m. to 8 p.m. In addition, RAPs can be

obtained from either Fort Wainwright or Fort Richardson as the RAP is applicable to all three military installations.

Comment: Several residents requested clarification on the methods USARAK proposes to use to control non-military land access points by military personnel.

Response: Fleet Street and all other non-military land access points in the DTA are off limits to military personnel during training. Prior to operation of the BAX and CACTF, gates will be installed at access points that will be closed during training and re-opened when training is not occurring.

Issue 15. Wildlife and Fisheries

Comment: The Delta Chamber of Commerce and two residents expressed concerns about the impact of construction and operation of the range on the Delta bison herd, and how past use of the area west of the Delta River may have impacted bison. Specifically, the public commented on the potential impact to bison migrating along 33-Mile Loop Road.

Response: Selection of either North Texas Range alternatives (Alternatives 4 and 5) could result in a severe impact to the Delta bison herd. Construction of the ranges and subsequent training could cause a significant change in distribution patterns and may lead to increased crop depredation on the Delta Agricultural Project (located northeast of Donnelly Training Area (DTA) East). In addition, training activities would have the potential to affect the population dynamics of the herd. Restrictions imposed by Army regulations and agreements with the State of Alaska for the protection of the Delta bison herd obligates the Army to cease firing operations in the direction of bison, if present.

Range construction at Eddy Drop Zone would impact less than 1 percent of preferred bison habitat, and vehicle maneuvers would cause a short-term adverse impact to about 1 percent of preferred bison habitat. Bison do not use the area regularly or for extended periods of time. The Eddy Drop Zone area is primarily a migration area for portions of the bison herd. In addition, no bison food plots would be impacted by construction, maneuver, or munitions training within the Eddy Drop Zone alternative. Impacts to bison would be minor.

Comment: Alaska Native tribal members were concerned about the impacts to moose movement as a result of range construction and use.

Response: Most of DTA East is a high density area for moose where densities typically exceed four moose per square mile (USARAK 2004a). The proposed project under any alternative would affect less than 10 percent of high quality moose habitat, and the construction and training activities would affect only a small portion of the population, with no long-term impacts to the sustainability of moose on DTA or within Game Management Unit 20 (see Appendix, Figure 3.m). Direct disturbance resulting from maneuver and firing use of the range would keep vegetation in early successional stages. This would benefit moose, which may be attracted to the vegetation within the range complex. However, training activities would be limited or suspended if moose were in the firing lanes. Takes of animals could occur as trees and shrubs can conceal their locations. Impacts to moose on DTA East could be potentially moderate if winter habitat is disturbed. Overall, impacts to moose would be minor.

Comment: Alaska Native tribal members were also concerned about the impacts to migratory birds as a result of training.

Response: The region surrounding Delta Junction and DTA East is an important migratory stop over for migratory birds and is used for roosting and feeding. Waterfowl are common on the many lakes in the eastern and southern portions of the Eddy Drop Zone alternative and along the Delta River, lakes and wetland areas of the North Texas Range alternatives. Sandhill cranes use these locations as a feeding area and occasionally as a roosting area during fall migration. Some of the other wetlands within the alternatives are also used as roost sites. Roosts could be most affected by use of the range at night, but, coupled with the limited time cranes are present, negative impacts would be minimal. Development and use of Eddy Drop Zone alternative could be expected to degrade portions of foraging habitat over time, but the area is not critical nor would the impact be extensive. Overall, impacts to cranes and waterfowl would be minor at Eddy Drop Zone.

At North Texas Range, approximately 12 percent of preferred crane habitat and 10 percent of high quality trumpeter swan habitat could be affected by development and use of the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF). Development and use of North Texas Range alternatives could be expected to degrade portions of foraging habitat over time, and overall impacts to cranes would be moderate. Although disturbance rates would increase, swan habitat would not frequently be adversely affected within the surface danger zones. Impacts to swans would be minor because DTA East does not include high swan populations.

Waterfowl are common on the many lakes in this area. Few studies have addressed the effects of ground-based military training on waterfowl. A study in Maryland demonstrated that black ducks habituated to noise from low flying jet aircraft but wood ducks did not habituate, suggesting that the responses to disturbance may be species-specific (Conomy et al. 1998). Additional research suggests that low flying aircraft over concentrated breeding or staging areas could affect waterfowl and result in increased stress and lower reproductive success (USAF 1995). There are no known significant effects on documented populations of birds at DTA East, and the overall impact would be minor.

Comment: An Alaska Native tribal representative recommended that moose, caribou and waterfowl populations be monitored during construction and use of the range complex, and mitigation measures should be implemented if unanticipated affects are identified.

Response: The military mission is supported by protecting and enhancing the training lands upon which the mission is critically dependent. The Army utilizes an ecosystem management approach, including adaptive management techniques that have an overriding goal of protecting the properties and functions of natural ecosystems. Through implementation of the *Integrated Natural Resources Management Plan* (INRMP), the Army will continue to monitor the effects of military training on wildlife species during critical seasons. This continuously updated information will be used to develop and implement management strategies that minimize overall disturbance. Please see Volume 2, Appendix, *Mitigation Analysis for Proposed Construction and Operation of a BAX and CACTF within Army Lands in Alaska*, for additional information.

Comment: The Department of Interior, Office of Environmental Policy and Compliance suggested that an additional study be reviewed discussing the impacts of noise on moose.

Response: Information on this study has been added to Section 4.2.6.1.2, *Impacts Common to All Alternatives*.

Issue 16. Risks and Costs of Range Construction

Comment: Residents expressed concern about the Army's categorization of short-term construction dollar costs as more important than the local community's safety.

Response: While cost is not the main factor in selecting Eddy Drop Zone as the preferred location for the two range complexes, it is an important consideration. U.S. Army Alaska (USARAK) has a general obligation to take reasonable efforts to reduce project and construction costs. The cost of building the two range projects at the Eddy Drop Zone site is substantially less than building the same ranges at any of the other alternative sites (see Section 4.3.6, *Socioeconomics*, for additional information). This significant cost savings would not be reasonable if the alternative represented a serious safety concern for the community. After completing a very thorough review of all three alternative sites, USARAK is convinced that it can safely operate the range complexes at the Eddy Drop Zone site. The range complex is designed with a surface danger zone sufficiently large enough to contain all projectiles from all weapons used on the range. The range complex and supporting roads will be built so as to ensure they have no impact on spring auffs and intermittent flood events. Range activities will be managed to minimize the potential for forest fires. During fire season, fire response teams will accompany military units when training on the ranges. On the northern border of the range complex, between the Battle Area Complex (BAX) and Delta Junction, the Army intends to create a fuel break to provide an additional level of protection. Even with all these measures, the cost of constructing the project at Eddy Drop Zone is significantly less than building at any of the other alternative sites.

Issue 17. Impacts to Airspace

Comment: Selection of North Texas Range is preferred by the general aviation community as it would eliminate conflicts between military training and civilian air traffic within the Donnelly Training Area (DTA) vicinity.

Response: The ability to incorporate close-in air support during training operations at the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) was one of many factors considered in selecting a preferred location alternative. If the decision on where to locate the proposed range complex was based solely on airspace requirements, the North Texas Range site would be the most desired as it would have the least impact on airspace. However, in addition to considering airspace requirements, the decision-maker must also factor in operational requirements, environmental issues, community concerns and cost when selecting a site location.

Comment: The general aviation community was concerned about the potential for development of new restricted airspace to support the range complex and any potential future requirements.

Response: The establishment of new restricted airspace is not proposed as part of this project, as existing restricted airspace would be utilized when required. The Army has no plans to establish restricted airspace, nor does it foresee a future need to as a result of the BAX/CACTF proposed action. If such a need were to arise in the future, that proposed action would be the subject of

its own National Environmental Policy Act (NEPA) analysis and would involve the affected stakeholders at that time.

Comment: Commentors from the general aviation community questioned the adequacy of Controlled Firing Areas (CFA) to accommodate Army training requirements at the BAX and CACTF, and whether this method has been successfully utilized at other training ranges.

Response: Based on the proposed frequency of close air support training requirements and the various types of weapons to be fired at the BAX, U.S. Army Alaska (USARAK) believes that a CFA or a Small Arms Range Safety Area (SARSA) will be more than adequate to support operation of the range complex. A SARSA is an Army-established and Army-managed area designed to contain small arms range activities, which, if not conducted in a controlled environment, would be hazardous to nonparticipating aircraft. It is the SARSA-user's responsibility to provide for the safety of persons and property on the ground surface and in the air. The Army's current experience with general aviation in the Merrill Field flight corridor near Fort Richardson (which involves a larger volume of air traffic) has not resulted in any training or airspace use conflicts. Local control tower personnel at Allen Army Airfield at Fort Greely indicated that a very manageable number of aircraft transition through the area. This, combined with the Army's current ability to handle a much larger volume of air traffic near Fort Richardson, supports the Army's assertion that training would not be significantly impacted. Although information on exact numbers of aircraft transiting the area near the Eddy Drop Zone alternative does not exist, the Army believes the potential impact to training operations at the BAX and CACTF will be acceptable. Overall, operation of the BAX and CACTF will not impact the general aviation traffic transiting the area.

Comment: Members of the general aviation community recommended involving the Federal Aviation Administration (FAA) in the development of the proposed action and as a cooperating agency.

Response: The Army began preliminary discussions with the FAA on the use of a CFA as part of this proposed action. Public comment has helped the Army to establish this communication as a priority. The Army will continue to consult with the FAA throughout the development of the range complex. This ongoing consultation can be conducted without formally inviting the FAA as a cooperating agency in the preparation of this Final EIS.

Comment: General aviation members questioned what other specific aviation support would be associated with the range complex other than "off-set training."

Response: As stated in Section 2.2.1.2.4 of the Final EIS, USARAK intends to use all assigned helicopters in support of the BAX and CACTF in a non-firing mode (observation and transportation operations only). Specific helicopter types to be utilized include OH-58D, CH-47D/E, and UH-60. In addition, U.S. Air Force aircraft will be occasionally integrated into range scenarios in a non-firing simulated engagement role. Integration of these aviation assets will occur in accordance with current practices and will result in no change to existing airspace utilization.

Comment: General aviation comments indicated concern about the use of Unmanned Aerial Vehicles (UAV) to support training at the BAX and CACTF.

Response: The Army will use UAVs at the BAX and CACTF. Prior to utilization, the Army intends to coordinate closely with the FAA to determine how to best utilize UAVs during training operations at the range complex. Operation of UAVs requires a Certificate of Authorization from the FAA, which is renewed on an annual basis. The Army will not apply for a Certificate of Authorization until construction of the range complex occurs. The proposed range would not be utilized until 2008 for training. Over this time period, the Army will continue to refine UAV use requirements and explore available options.

Comment: A public meeting attendee asked about the types of technology that would be utilized to prevent firing on civilian aircraft during training events and to increase communication. An additional member of the general aviation community encouraged the use of the Special Use Airspace Information System (SUAIS) by the Army.

Response: The Army intends to work closely with the U.S. Air Force to improve the integration of Army training activities into the SUAIS. In addition, the Army intends to integrate all available Army, Air Force, and FAA technologies into Range Control safety procedures to be utilized at the proposed range complex. Recent Air Force radar and radio tower upgrades and Allen Army Airfield Air Traffic Control Tower capabilities will also be integrated in the Range Control safety procedures.

Issue 18. Cultural Resources

Comment: Alaska Native tribal representatives and a local resident expressed concerns about cultural resource survey and curation methodology, proposed site mitigation methods, and the amount of time and effort required to complete proposed mitigation.

Response: A summary of U.S. Army Garrison, Alaska (USAG-AK) archaeological survey methods can be found within the appendix, located in Volume 2 of the Final EIS, to include standards for artifact curation. Further discussions on the factors used in evaluating the eligibility of archaeological sites for listing on the National Register of Historic Places can be found in *Methodology: U.S. Army Alaska 2005 Range Developments, Section 106 Archaeological Inventory and Evaluation, Fort Richardson and Fort Wainwright*. USAG-AK's methodology is also consistent with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*. This document can be downloaded at: <http://www.usarak.army.mil/conservation>.

Development of mitigation measures and the ultimate decision on which method will offer the best solution to minimize or eliminate impacts to cultural resources will be based on consultations between the USAG-AK cultural resources staff, the Alaska State Historic Preservation Officer (SHPO), interested Alaska Native tribes and USAG-AK's Cultural Resources Working Group. The ultimate goal of mitigation is to eliminate or lessen any foreseeable impacts to cultural resources within and around the proposed project area.

Construction of the range complex is anticipated to begin in 2007, but the range is not scheduled to be operational until 2008, at the earliest. Impacts to cultural resources as a result of range construction will be addressed first to ensure avoidance or minimization prior to range construction or operation. In addition, all site evaluations have yet to be completed within the surface danger zone. USAG-AK will submit evaluations to the Alaska SHPO prior to actual use

of the range for military training. Coordination with other interested parties, including tribes, may occur as part of the site mitigation process, if applicable.

Comment: A local resident was concerned that the Alaska SHPO and other interested parties have not been afforded the opportunity to participate in the National Historic Preservation Act (NHPA) Section 106 consultation process.

Response: This proposed action will result in three areas of concern to cultural resources at Eddy Drop Zone: (1) the overall footprint of the Combined Arms Collective Training Facility (CACTF), (2) the construction and maneuver footprint of Battle Area Complex (BAX), and (3) the surface danger zone associated with the BAX. The actions associated with each of these areas result in different cultural resources concerns. USAG-AK is utilizing a phased approach to address these concerns, which is explained in the following paragraphs.

First, there are no archaeological sites located within the overall footprint of the Eddy Drop Zone CACTF. This area was surveyed in 2002 and no sites were identified. The Alaska SHPO concurred with these findings. Therefore, the NHPA, Section 106 consultation requirements for this portion of the project are complete.

Second, there are five cultural resource sites located within the construction and maneuver footprints of the Eddy Drop Zone BAX. One of these sites is considered eligible for the National Register of Historic Places (NRHP) and the other four are not considered eligible. USAG-AK has initiated Section 106 and site mitigation consultation with the Alaska SHPO for this portion of the proposed project. In addition, USAG-AK is coordinating and consulting with Alaska Native tribes from Dot Lake, Eagle, Healy Lake, Northway, Tanacross, and Tetlin, and the USAG-AK Cultural Resources Working Group. Consultations will continue during the mitigation development process. Notice has also been provided to the Advisory Council. USAG-AK is currently drafting a Memorandum of Agreement with the Alaska SHPO addressing mitigation measures and research design for the impacted site. Data recovery for this site is scheduled to occur during the 2006 field season.

Third, there are 105 sites located in the Eddy Drop Zone BAX surface danger zone. Cultural resource surveys within the surface danger zone will be complete by 2006. USAG-AK is currently evaluating each surveyed site and submitting the determinations of eligibility to the Alaska SHPO as they are completed. It is anticipated that all site evaluations will be submitted by the end of summer 2007. The next phase of Section 106 consultations consists of communication between Alaska SHPO, tribes, and the Cultural Resources Working Group addressing the evaluated sites within the surface danger zone. This will include the determination of adverse effects and development of mitigation measures to address potential impacts. Impacts to cultural resource sites located within the surface danger zone will vary due to such factors as location relative to target, size, and type of munitions used and distance from the firing point. Additional information on potential impacts can be found in Section 4.2.7, *Cultural Resources*.

Comment: A local resident was concerned about the methodology used to classify impacts to cultural resources in the EIS.

Response: Analysis of potential cultural resource impacts is based on the nature of proposed activities and their potential to affect cultural resources. The inherent nature of cultural resources

makes any impact potentially irreversible and the data that is lost irretrievable. The relative severity of impacts has been defined based on the probability of disturbance to sites considered eligible for listing on the NRHP and those sites identified but yet to be evaluated for eligibility for listing on the NRHP. Sites not eligible for listing on the NRHP were not considered in the analysis as they did not provide any additional cultural resource information, or all available data has been extracted or recorded from that location.

The impact categories of none, minor, moderate, and severe were used to assess potential impacts resulting from construction of the range, vehicle maneuver during training activities, and munitions training within the surface danger zone. Different definitions were assigned to each activity area (construction footprint, maneuver area, and surface danger zone), as the severity of impact from the different activities conducted within each area is unique. Percentage levels of impacts were determined from professional evaluations and assessments. Please refer to Section 4.2.7.1.2, *Impacts Common to All Alternatives*, for additional information.

USARAK will meet its obligations under Section 106 of the NHPA upon selection of a preferred alternative. Additional Section 106 consultations on a per site basis with the Alaska SHPO would occur as undertakings relating to construction and use of the BAX and CACTF are defined. Further consultations with Alaska Native tribes would occur as well.

Comment: An Alaska Native tribal member questioned whether tribes were consulted on the artifacts discovered during archaeological surveys at Donnelly Training Area (DTA) East and whether or not the tribe would like to acquire the cultural resource artifacts. Specifically, questions were raised on when artifacts were removed from the ground, were tribal members notified by USAG-AK so that the tribes could perform a ceremony at the site, and whether or not tribes were consulted regarding artifact removal.

Response: The tribal consultation meeting on April 5, 2006, was held to provide tribes from the Upper Tanana region with information and to request tribal comments on the Supplemental Draft EIS and a cultural resource site potentially impacted by the proposed range construction at Eddy Drop Zone. USAG-AK requested comments on the proposed measures to mitigate impacts to the cultural resources site. USAG-AK also committed to future consultation with the tribes regarding this site. USAG-AK will offer a site visit of the proposed BAX archaeological site for tribes during the summer of 2006.

USAG-AK is required to curate artifacts recovered through cultural resources management activities in compliance with 36 CFR 79, *Curation of Federally-Owned and Administered Archaeological Collections*. This regulation and 48 FR 44737, *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* establish the standards that curation facilities must meet in order to house artifacts removed from public lands. The University of Alaska Museum serves as a primary repository for cultural and natural history from university research and academic units, state and federal agencies, and Alaska Native corporations. As such, it will curate artifacts removed from Fort Wainwright and DTA. Further information regarding U.S. Army Alaska's plan for the curation of artifacts can be found on pages 90-91 of the *Integrated Cultural Resource Management Plan (ICRMP) 2001-2005 for Fort Wainwright and Fort Greely, Alaska*.

Cultural resource surveys specifically for the range complex were initiated in 2002. U.S. Army Alaska (USARAK) began sharing its archaeological methodology (prior to the field season) with tribes in 2003. USARAK also began sharing annual reports that detail the results of the cultural resource surveys in 2002. Specific artifacts found at the site located within the Eddy Drop Zone construction footprint included stone tools and lithic flakes. USARAK solicits tribal comments on the results of the surveys, including artifact origin. USARAK will continue to welcome any comments tribal members may have.

Through further consultation, USAG-AK will work with interested tribes in the area to provide the opportunity for tribes to do ceremonial activities at USAG-AK archaeological sites in the future. We hope to continue to improve our processes and further communicate on issues of importance to the tribes through the quarterly meetings with the Upper Tanana Inter-Tribal Coalition.

Comment: An Alaska Native tribal member questioned whether or not anyone else outside of the Upper Tanana tribes had ever been contacted, to include Tanana Chiefs Conference, Inc. (TCC).

Response: TCC was contacted in 2004 to participate in an archaeological survey of the Donnelly Ridge area. USAG-AK has also kept TCC informed of projects that the Army has collaborated on with tribes in the interior region of Alaska. Over the years, USAG-AK has coordinated with TCC staff members including Dr. Jim Simon, Tom O'Brien, and Bob Sattler and will continue to do so. Based on the suggestion of tribes during the April 5, 2006 comment meeting, USAG-AK has contacted TCC, the Fairbanks Native Association, and Denakkanaaga Inc. to get contact information for elders and tribal members who may have further information on the site that would be useful for the proper management of Army lands at DTA.

Comment: A question was posed by an Alaska Native tribal member about the Army's procedures when a grave or community site is found during archaeological survey work.

Response: If a grave is found during archeological surveys, USAG-AK will follow all procedures under the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990. NAGPRA provides for the protection of Native American human remains and associated funerary items that are discovered on federal and Indian lands. NAGPRA is discussed on pages 43-44 and 86-89 of USAG-AK's *Integrated Cultural Resource Management Plan (ICRMP) 2001-2005 for Fort Wainwright and Fort Greely, Alaska*. If human remains, funerary objects, sacred objects, and objects of cultural patrimony are encountered during an undertaking, NAGPRA requires all activity in the direct vicinity of the discovery to stop for 30 days. The site, regardless of apparent age, will initially be treated as a crime scene. The local law enforcement agency will maintain jurisdiction over the site until it is satisfied that no crime has occurred. Once the local law enforcement agency determines the site does not represent a crime scene, USAG-AK's Cultural Resource Manager will manage the site. If it is determined that a planned activity may result in the excavation of human remains, funerary objects, sacred objects, and objects of cultural patrimony, then consultation must be initiated to determine the ownership and right of control for the disposition of such items. The Cultural Resources Manager, in cooperation with USAG-AK's Native Liaison, will notify the tribal officials local to the area, TCC, and other consulting parties that are likely to be affiliated with any human remains, funerary objects, sacred objects, or objects of cultural patrimony that may be excavated. Please see the *Integrated Cultural Resource*

Management Plan (ICRMP) 2001-2005 for Fort Wainwright and Fort Greely, Alaska, pages 86-89 for further details regarding USAG-AK's plan for compliance with NAGPRA.

The discovery of a community historical site during the archeological surveys at the proposed construction site is not expected at this point. However, if such a site is found, then USAG-AK will re-evaluate to determine if an extra level of investigation is required. Tribes would be consulted throughout this process.

Comment: An Alaska Native tribal representative recommended that local communities be surveyed to identify traditional cultural properties (TCPs) so they may be avoided in the future.

Response: A comprehensive survey for the presence of TCPs at DTA has not been completed. It is expected that TCPs would be identified on DTA and would consist of sites and landmarks that have traditional, cultural and religious significance to tribes. Tribal members have not yet determined the probability of TCPs occurring specifically within the BAX and CACTF alternative study areas during initial consultations with tribes. Consultations with Alaska Native tribes to identify and evaluate TCPs that may be present on military managed lands in the interior of Alaska would continue as part of this proposed action.

Issue 19. Permafrost

Comment: Concerns of adequacy were expressed by city of Delta Junction representatives about permafrost information presented in the Supplemental Draft EIS, and completion of additional geotechnical surveying at the Donnelly Drop Zone was suggested.

Response: Permafrost data presented in the EIS is based on results from a Natural Resources Conservation Service (NRCS) soil survey completed in 2004. NRCS soil scientists verified soil types in the field by digging test pits. Soils characterized by permafrost were identified within the range construction footprints and maneuver areas using information from the soil survey. Permafrost information obtained by the NRCS soil surveys provides adequate information to determine relative permafrost amounts. Additional geotechnical surveys were not conducted at Donnelly Drop Zone, but would be conducted if this alternative is selected for construction of the range complex.

Issue 20. Cumulative Impacts

Comment: The general aviation community was concerned that cumulative impacts to airspace were not addressed in the Supplemental Draft EIS.

Response: Cumulative impacts to airspace were evaluated based on all relevant past, present and reasonably foreseeable future actions in the Delta Junction region. Please see Section 4.3.8.10, *Airspace*, for additional information.

Comment: The U.S. Environmental Protection Agency (EPA) suggested including information on the Northern Rail Extension project, including feasible alternatives, transportation of troops and equipment and potential cumulative effects.

Response: The Northern Rail Extension project was listed in Table 4.3.10.c as a potential future project. All current information available on this project was considered as part of the cumulative effects analysis. U.S. Army Alaska (USARAK) is not involved in project management of the railroad extension or with the preparation of any environmental analyses associated with the extension.

Comment: The EPA recommended further information be provided on the process and linkages between the various levels of cumulative effects analysis.

Response: Clarifying text was added to Section 4.3.10, *Cumulative Effects Analysis*.

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