# Final Environmental Impact Statement

# Record of Decision

# Construction and Operation of a Battle Area Complex and a Combined Arms Collective Training Facility within U.S. Army Training Lands in Alaska

**United States Army, Pacific**

**United States Army Installation Management Agency, Pacific Region Office**

DEPARTMENT OF THE ARMY

UNITED STATES ARMY INSTALLATION MANAGEMENT AGENCY

PACIFIC REGION OFFICE

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Reviewed and Approved by:

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July 19, 2006
Date

DEPARTMENT OF THE ARMY

UNITED STATES ARMY, PACIFIC

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Reviewed and Approved by:

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19 JUL 06
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# Record of Decision

## Final Environmental Impact Statement for the Construction and Operation of a Battle Area Complex and a Combined Arms Collective Training Facility within U.S. Army Training Lands in Alaska

### 1. Introduction

The purpose of this Record of Decision (ROD) is to announce the Department of the Army's (DA) decision to build a Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) on U.S. Army Alaska training lands in central Alaska. This ROD explains the process used to make this decision. The proposed action is the subject of a Final Environmental Impact Statement entitled *Construction and Operation of a Battle Area Complex and a Combined Arms Collective Training Facility Within U.S. Army Training Lands in Alaska* (FEIS) dated June 2006, which is incorporated by reference into this decision document.

### 1.1 Decision

Based on the analysis contained in the FEIS, which sets forth the Army's requirements, the impacts associated with the Army's actions on the human environment, and the proposed means by which to mitigate such impacts, the Army has chosen Alternative 2 as its course of action. Under this alternative, the Army will construct and operate both range training facilities (BAX and CACTF) at the Eddy Drop Zone site within Donnelly Training Area East.

Selection of Eddy Drop Zone was based upon a very thorough analysis of the impacts of the proposed action, issues of concern, and comments provided by the general public and government agencies throughout the EIS development process. After careful consideration of the environmental analysis provided in the FEIS, the Army's operational requirements for the training range complexes, and the comparative costs associated with each potential alternative course of action, the Army has determined that the Eddy Drop Zone alternative is the only practicable alternative capable of achieving the Army's purpose and need.

Under Alternative 2, the Army will construct two training facilities at Eddy Drop Zone. The total area for the BAX project will be approximately 3,000 acres, plus an additional 24,000 acres for a surface danger zone. The total area for the CACTF will be approximately 1,200 acres, with an additional 1,100 acres for a surface danger zone. The BAX will provide a rural setting for company-level, live-fire training exercises. The CACTF will provide an urban setting for battalion-level weapons training exercises using training munitions.

### 1.2 Environmentally Preferable Alternative

Alternative 1 (No Action Alternative) would have the least environmental impact of all alternatives considered and is therefore the environmentally preferable alternative. Although each of the four action alternatives considered in the FEIS has significant impact to differing areas of the human environment, Alternative 2 (Eddy Drop Zone) represents the least

environmental impact. Constructing the range projects at the Eddy site would have substantially less impact to wetlands, permafrost, and important regional wildlife species.

## 1.3 FEIS Background

This FEIS was prepared in compliance with the National Environmental Policy Act of 1969 (42 USC § 4321 et seq.), Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and Army implementing regulations (32 CFR Part 651). The U.S. Army Corps of Engineers (Alaska District), U.S. Bureau of Land Management, regional Alaska Native tribal governments, U.S Environmental Protection Agency, Alaska Department of Fish and Game, and 11th Air Force have participated throughout the preparation of the EIS.

In June 2004 the Army published Notice of Intent to prepare an EIS for this action in the *Federal Register*. As part of the initial scoping process, the Army held meetings in Fairbanks and Delta Junction. The Army also met with government representatives from Alaska Native tribes and with officials from federal and state agencies. In November 2004, the Army published Notice of Availability (NOA) of a Draft EIS in the *Federal Register*. Additional notices of public hearings were published in local and regional newspapers. Public meetings were held in Fairbanks, Delta Junction, and Anchorage. Army officials also engaged in government-to-government consultation with Alaska Native tribal officials.

As a consequence of comments received from the public and from state and federal agencies, the Army concluded that additional analysis was needed before finalizing the Impact Statement. This additional analysis focused on resource areas of primary public and agency concern: fire management, soil/permafrost, surface water, noise human health and safety, wildlife and fisheries, historic and cultural resources, and airspace use.

In March 2006 a NOA was published for the Supplemental Draft EIS in the *Federal Register*, with additional announcements of public meetings published in local and regional newspapers. With no interest in the project from south central Alaska, the additional public meetings were limited to Fairbanks and Delta Junction. USARAK officials met again with Alaska tribal government representatives, and state and federal agency officials.

After careful consideration of all comments and recommendations, the EIS was finalized and Notice of Availability of the Final EIS was published in the *Federal Register* on 14 June 2006.

## 1.4 Purpose and Need

To fulfill its strategic commitments, the Army is transforming to a campaign-quality force with joint and expeditionary capabilities that will provide relevant and ready land power to combatant commanders and the Joint Force. At the same time, the Army must also provide operational support to forces fighting the global war on terrorism while maintaining the quality of the all-volunteer force. To fulfill its strategic commitments, the Army is undertaking a series of initiatives to increase unit readiness through operational deployment cycles and expeditionary force packages. These initiatives employ unit modular conversions, force stabilization and force rebalancing efforts to create pools of ready forces that are better able to conduct sustained

expeditionary operations. [See *Army Transformation Roadmap*, 2004; *Final Programmatic Environmental Impact Statement for Army Transformation* 2002; *Transformation of U.S. Army Alaska Final Environmental Impact Statement*, 2004; and *Conversion of the Airborne Task Force to an Airborne Combat Brigade Team Environmental Assessment, Fort Richardson, Alaska* 2005]

Individual and unit readiness for world-wide deployment is a key element of Army transformation. Combat skill proficiency is critical to unit deployment readiness and operational success. Units attain the necessary proficiency through regular collective training in realistic situations. The development and refinement of critical combat skills begins with the individual Soldier, and progresses through to squad, platoon, company, and larger units.

While USARAK has facilities appropriate for training individual, squads and platoon-size units, it does not have the necessary training facilities capable of providing company-size and larger units a year-round, comprehensive, and realistic live-fire training environment. To meet this need, the Army intends to build two state-of-the-art training complexes in Alaska, ensuring that USARAK Soldiers go into battle with the best possible assurance of success and survival.

## 1.5 Proposed Action

The Army intends to construct and operate two fully automated and instrumented combat training facilities on U.S. Army training lands in Alaska. The two range projects would consist of a Battle Area Complex (BAX) and a Combined Arms Collective Training Facility (CACTF).

The BAX will be a fully automated live-fire training facility that simulates a rural combat environment. The range complex is designed to be used by company-level units operating both mounted (in combat vehicles) or dismounted (on foot, with or without vehicle support). The BAX serves to test a unit's ability to detect, identify, engage, and defeat stationary and moving targets using the weapons and tools available to the modern Brigade Combat Team. The facility will be equipped with automated targets simulating individual enemy soldiers, armored vehicles, and hardened defensive structures. While the facility will have improved roads for combat vehicle gunnery training and improved trails for mounted and dismounted unit movement, the design will preserve most of the native vegetation to ensure a realistic rural setting. The BAX will accommodate up to 200 Soldiers and 25 combat support vehicles during a single training event.

The CACTF is a fully automated training complex that simulates an urban combat environment. To provide a realistic urban combat experience, the CACTF will consist of 24 structures designed to mimic municipal buildings, homes, businesses, schools and other facilities. The complex also includes streets, sidewalks, and an underground tunnel system. The CACTF will be capable of accommodating up to 800 Soldiers and 140 support vehicles during a single training event.

The BAX is intended to be used as a live-fire training facility. Soldiers will utilize direct fire weapons (line-of-sight), but munitions use would be limited to non-dud producing ammunition (no explosive projectiles). Weapons firing on the CACTF will be limited to short range training

ammunition, blanks, lasers, and simulated ammunition firing marker projectiles – much like paintballs.

The two range facilities will be served by a common support facility consisting of a range control tower, ammunition breakdown facility, fire response team, restrooms, and assembly areas. Military training land surrounding the two range complexes will be used for maneuver training, transition routes, and unit staging, and bivouac areas.

Additional details of the design and operating principles of the two training complexes are set forth in Section 2.2 of the Final EIS.

### 1.5.1 Project Criteria

NEPA regulations require a federal agency to consider a range of reasonable courses of action that are capable of fulfilling its purpose and need. For this analysis, a potential site for locating the range projects was considered a reasonable alternative if it was capable of meeting a series of operational, siting, and design criteria. A location meeting the criteria is capable of fulfilling USARAK training requirements in a timely manner and at a reasonable cost. Criteria applied to all potential alternative courses of action are set forth in detail in Section 1.2 of the Final EIS.

An important consideration for deciding where to build the BAX and CACTF is the need to locate the two range complexes in close proximity to each other. Co-location serves to enlarge the training spectrum by allowing units to practice transition from urban to rural settings.

The two range complexes must be designed and constructed in accordance with range standards set forth in Army Training Circular 25-8 and Army Field Manual 7-0. To accomplish this, a potential site for the range complexes must have enough usable undeveloped land to accommodate both the BAX and CACTF. To meet the general design and layout for the BAX, approximately 3,500 acres of trafficable land is needed for the layout of the actual complex, plus an additional 24,000 acres is needed for an associated surface danger zone (SDZ) capable of accommodating all weapons used on the range.[1] For the general layout of the CACTF approximately 1,100 acres is needed, plus an additional 1,300 acres for a SDZ capable of accommodating short range training (SRT) munitions that will be used on the urban training complex.[2]

Critical to fulfilling the Army's purpose for the range complexes is a location offering year-round access and availability. To meet current Army training standards, the range must be available for a minimum of 106 training days. Building the range complexes in a location that is accessible year round ensures the ability to accommodate inevitable scheduling adjustments (brought about by uncontrollable events) and still meet minimum training requirements. [See Section 2.2.1.2 of the FEIS for a detailed explanation.]

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[1] BAX SDZ ensures accommodation of weapon distance requirements of 7.5 miles, in accordance with Army Regulation 350-19, *The Army Sustainable Range Program* and with Department of Army Pamphlet 385-63, *Range Safety*.

[2] CACTF SDZ ensures accommodation of the maximum SRT munitions ammunition distance of 2,300 feet, IAW AR 350-19 and DA PAM 385-63.

A potential site for the range complexes must offer maximum flexibility for creating unique training scenarios. Commanders must be afforded the ability to alter training scenarios to produce new and varied challenges to the combat units in order to address specific training objectives. Such flexibility precludes predictive views of targetry and other limitations on effective training. In summary, an ideal site would have sufficient room to alter training scenarios and to force Soldiers to respond to unfamiliar challenges.

To ensure construction costs are kept at a reasonable level, the Army established a number of site requirements. These include reasonable proximity to electric power and communications, reasonable proximity to a gravel source (construction material), and an existing road to the potential site (ensuring accessibility for construction and routing communication lines).

## 2. Alternative Locations Considered

2.1 Initial Consideration. With more than a million acres of Army training lands in Alaska, project managers believed there would be a wide range of alternative locations for consideration. The realities of building in a state with an emerging infrastructure and harsh environmental conditions, coupled with past development of most readily-accessible training lands, however, significantly reduced the number of potentially viable sites for locating the two range complexes.

Project planners initially considered locations at Fort Richardson, Fort Wainwright, Tanana Flats Training Area, Donnelly Training Area West, Donnelly Training Area East, Yukon Training Area, Black Rapids Training Area, and Gerstle River Training Area. Of these, only Tanana Flats, West Donnelly Training Area, and Donnelly Training Area East had enough undeveloped, contiguous, and suitable land to locate the two range complexes. Tanana Flats and Donnelly Training Area West are isolated locations separated from the state road system by two broad rivers. Building at either would require construction of a major bridge, adding approximately three years and $75 million to the project. This physical barrier left Donnelly Training Area East as the only practicable area for the project.

2.2 Donnelly Training Area East (DTA EAST) consists of approximately 93,000 acres. DTA EAST is a relatively undeveloped setting situated near Fort Greely, Alaska. The area is situated due south of Delta Junction (population 830), a community resting at the junction of two major highways (Richardson & Alaska Highways). The Army identified three separate sites within DTA EAST as potentially suitable locations for the BAX and CACTF: Eddy Drop Zone, Donnelly Drop Zone, and North Texas Range. [See Figure 1, Site Alternatives] As a result of public and government agency input, USARAK added a fourth siting alternative, which would place the BAX at Texas and the CACTF at Eddy. While all three areas of DTA EAST initially appeared viable siting locations, the very thorough NEPA analysis revealed that only Eddy Drop Zone was capable of meeting operational requirements.

2.3 Factors Influencing the Decision

The critical factor in choosing the Eddy Drop Zone (Eddy) site for the BAX and CACTF is the impracticability of operating the BAX at either the Donnelly Drop Zone (Donnelly) or the North Texas Range (Texas) sites, as a consequence of environmental, legal, and fiscal considerations.

2.3.1 Wetlands Impairment. Essential to operational success of the BAX is that the terrain must be able to support and sustain off-road vehicle movement. In order for the BAX to meet USARAK training requirements, the terrain must be capable of accommodating a minimum of 1,012 combat vehicle passages through the range during summer months. [See Section 2.2.1.2.3 of the FEIS]

A large percentage of both Texas and Donnelly sites consist of wetlands, making it impossible to design the BAX to completely avoid these sensitive areas. Each combat vehicle passage through wetland areas damages surface vegetation. Repeated passes eventually turn the vegetative mat into an impassable quagmire. Based upon extensive studies of the sites, Army natural resource experts concluded that the Donnelly site would only be able to support approximately 988 passages during the summer before vehicles would not be able to maneuver freely through the range complex. [FEIS Section 4.2.1.1.5] The Texas site could support approximately 517 to 648 summer passages (depending on orientation of the BAX) before free maneuver was lost.[3] [Section 4.2.1.1.7 FEIS] Damage to wetlands would require extensive repairs and require closing large sections of the range for extended periods. In comparison, a BAX at the predominately upland Eddy site can support approximately 10,000 summer passages each year without severe damage.

To determine the practicability of operating a BAX at Donnelly and Texas, Army project managers and natural resource experts also considered how much wetland area would need to be filled at each of the two potential sites to allow for sustained free maneuver. About 198 acres of wetlands would need to be filled at the Donnelly site. This is in addition to approximately 390 acres of wetlands that would need to be filled to construct the two range complexes at Donnelly. Constructing the range at the Texas site would require filling from 170 to 220 acres, depending on the orientations of the two alternative sites for the BAX. To allow sustained free maneuver at the Texas BAX another 101 to 109 acres of wetlands would need to be filled.[4] Because the Eddy site is predominantly an upland environment, only 24.5 acres of wetlands will need to be filled to construct the range complexes, and there is no need to fill wetlands to ensure free maneuver across the range complex.

2.3.2 Bison. Another important factor making Texas impracticable is the Delta Bison herd. The Texas site sits within the Delta herd's established calving area. It is also important summer range for the herd. Critical to the state's bison management program is the need to keep the Delta herd out of regional agricultural fields (centered around Delta Junction) until after the

[3] The lower vehicle carrying capacity of Texas is a consequence of wetlands located near choke points where vehicles must pass around several small lakes. This causes a funnel effect, concentrating vehicles in certain areas, resulting in quicker deterioration of the wetlands, which in turn makes the range complex impassible.

[4] The smaller number of fill acres at Texas, when compared to Donnelly, is also a consequence of wetlands situated at chokepoints within the Texas site.

harvest. The state accomplishes this through habitat management that encourages the herd to remain in the vicinity of the Delta River south of Delta Junction (See Figure 3.m, FEIS Vol. II). According to state management studies, significant disturbances could pressure the herd to abandon this area and move north into the agricultural fields around Delta Junction. When the Army originally received permission to use the East Donnelly area for training during the 1950s, it was with the condition that military training would not negatively impact the bison herd. In the most recent Congressional re-authorization process for use of the area, the Army reaffirmed this obligation by committing to refrain from conducting activities or operations in or near bison habitat whenever bison were present. [*Alaska Army Lands Withdrawal Renewal, Final Legislative Environmental Impact Statement*, 1999; page 4-48]

State management studies show that the herd generally stays along the Delta River from mid-February to early September. Calving occurs in the area adjacent to the Texas BAX site in April-May; which would obligate the Army to curtail weapons firing during this time. Another consideration is that constructing the BAX will convert the existing forest habitat into grasslands more favored by bison. This will likely encourage bison to enter and stay in the range complex throughout the summer. The likelihood of bison being on or adjacent to the range at any time between February and September, and the legal commitment to discontinue military operations when bison are present, ensures unpredictable disruptions in training events. These disruptions would very likely require cancelling and rescheduling training activities at enormous costs in resources and training opportunity.

2.3.3 Comparative Costs. The significant differences in cost of building the range complexes at the different alternative sites is another important factor in determining the impracticability of building the range complexes at either Donnelly or Texas. The cost to build the training complexes at Eddy is expected to run approximately $68.5 million. To build the same facilities at Donnelly would cost $124.9 million. The Texas-only alternative would cost $127.6 million, and the Texas-Eddy alternative would cost $170.3 million due to the need to build separate support facilities for each training complex. The significant difference in cost between Eddy and the other alternatives is a direct consequence of wetlands, the need to relocate existing infrastructure and other challenging terrain features.

**Table 1.** Evaluation of Alternatives.

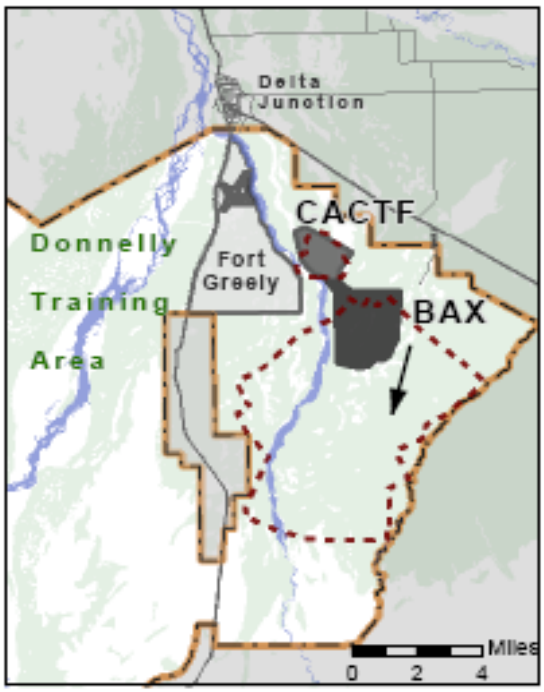
| **Criteria** | **Alternative 1** (No Action) | **Alternative 2** (Eddy DZ) | **Alternative 3** (Donnelly DZ) | **Alternative 4** (N. Texas Range) | **Alternative 5** (Texas-Eddy) |
|---|---|---|---|---|---|
| **Operational Capability** | | | | | |
| *Supports and sustains off road vehicle maneuver* | N/A | Excellent | Poor | Poor | Poor |
| *Provides for Weapons Engagement IAW TC 25-8* | N/A | Excellent | Excellent | Excellent | Excellent |

| | | | | | |
|---|---|---|---|---|---|
| *Provides maximum flexibility to create training scenarios* | N/A | Excellent | Poor | Poor | Good |
| *Meets Minimum training day availability* | N/A | Exceeds | Exceeds | Meets[5] | Meets[6] |
| **Environmental Considerations** | | | | | |
| ***Primary Issues*** | | | | | |
| *Soils* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Surface Water* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Fire Management/Fire Hazard Risk* | Insignificant | Significant | Insignificant | Insignificant | Significant |
| *Noise* | Insignificant | Insignificant | Significant | Insignificant | Insignificant |
| *Human Health and Safety* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Wildlife and Fisheries* | Insignificant | Insignificant | Significant | Significant | Significant |
| *Cultural [7]Resources* | Insignificant | Significant | Significant | Insignificant | Insignificant |
| *Airspace* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| ***Secondary Issues*** | | | | | |
| *Air Quality* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Groundwater* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Wetlands* | Insignificant | Insignificant | Significant | Significant | Significant |
| *Vegetation* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Threatened or Endangered Species and Species of Concern* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Socioeconomics* | Insignificant | Beneficial | Beneficial | Beneficial | Beneficial |
| *Subsistence* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |
| *Public Access and Recreation* | Insignificant | Significant | Significant | Significant | Significant |
| *Environmental Justice* | Insignificant | Insignificant | Insignificant | Insignificant | Insignificant |

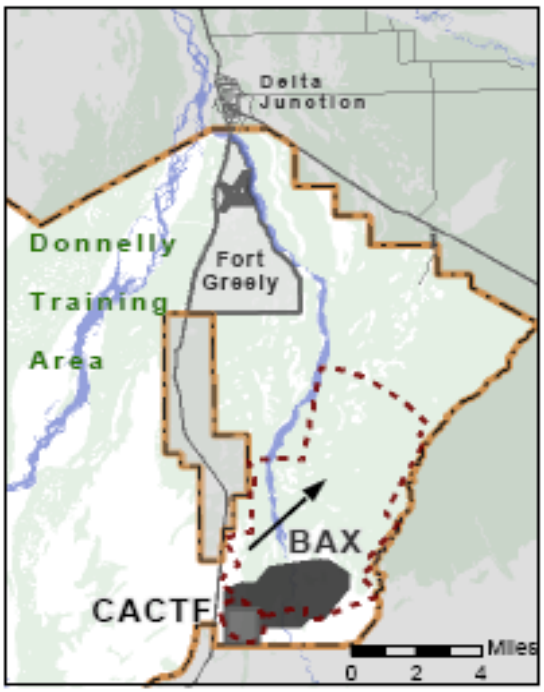
[5] Unpredictable presence of bison (Feb-Aug) could significantly reduce range availability at the Texas site. See Section 4.2.6 of the FEIS.
[6] See footnote 5.
[7] This category includes archaeological resources, Native Alaskan cultural resources, and historic structures and properties

| | | | | | |
|---|---|---|---|---|---|
| **Community Preference** | | | | | |
| *Delta Junction community* | Neutral | Oppose | Favorable | Favorable | Neutral |
| *State Organizations* | Neutral | Favorable | Oppose | Oppose | Oppose |
| *Other Civilian Organizations* | Neutral | Oppose | Oppose | Favorable | Favorable |
| | | | | | |
| **Siting** | | | | | |
| *Favorable Terrain for construction and operation* | n/a | Excellent | Poor | Poor | Poor |
| *Reasonable proximity to borrow site* | n/a | Good | Good | Good | Good |
| *Year-round road system access and reasonable proximity to utilities* | n/a | Good | Good | Good | Good |
| | | | | | |
| **Cost** | | | | | |
| *Cost to construct both BAX and CACTF* | $0 | $68.5 million | $124.9 million | $127.6 million | $170.3 million |

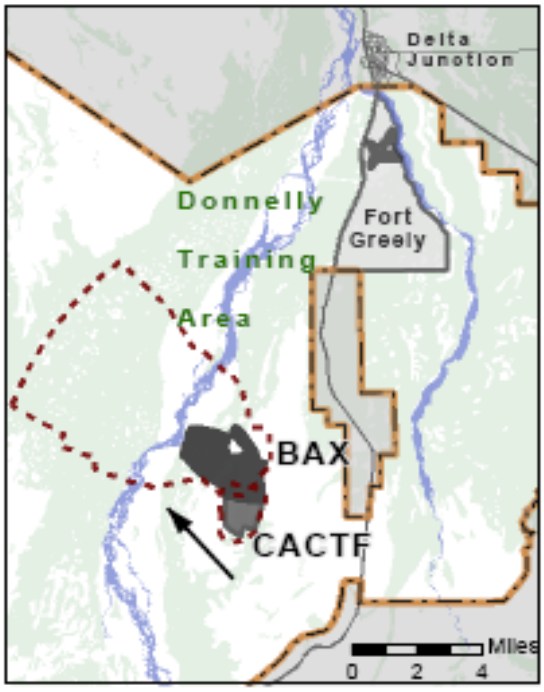
## Figure 1: Comparison of Alternatives



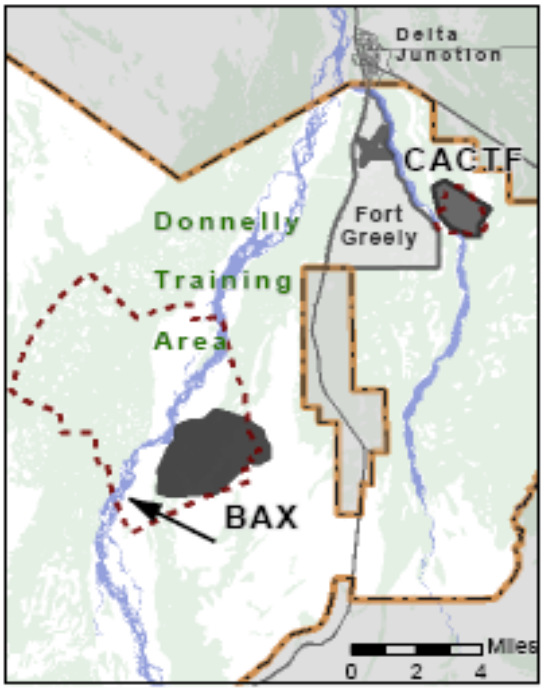

Alternative 2: Eddy Drop Zone




Alternative 3: Donnelly Drop Zone




Alternative 4: North Texas Range




Alternative 5: North Texas Range - BAX, Eddy Drop Zone - CACTF

2.4 Alternatives Carried Forward for Environmental Analysis

Alternative 1 – No Action Alternative
Alternative 2 – locating both the BAX and CACTF at Eddy Drop Zone
Alternative 3 – locating both the BAX and CACTF at Donnelly Drop Zone
Alternative 4 – locating both the BAX and CACTF at North Texas Range
Alternative 5 – locating BAX at North Texas Range and CACTF at Eddy Drop Zone

2.4.1 Alternative 1, the No Action Alternative serves as the baseline for comparing environmental impacts associated with each of the action alternatives considered. Baseline conditions are set forth in Chapter 3 of the FEIS.

2.4.2 Alternative 2, Eddy Drop Zone. The Eddy site is located almost immediately east of Fort Greely and southeast of Delta Junction. The location is predominately upland habitat, but the area where the BAX would be situated also lies within the 100-year floodplain of neighboring Jarvis Creek. The CACTF site rests about four miles from Delta Junction, and the BAX approximately five miles. The design of the BAX orients weapons firing to the south, away from Delta Junction.

2.4.3 Alternative 3, Donnelly Drop Zone. The Donnelly site sits about 15 miles directly south of Delta Junction, east of the Richardson Highway. The BAX site straddles Jarvis and Ober Creeks and their corresponding 100-year floodplains. Wetlands cover approximately two-thirds of the proposed project site. Weapons fire from a Donnelly BAX would be oriented northward in the general direction of the Delta Junction community, but design and placement of the range and surface danger zone ensures no fired projectiles would land outside of Army managed land.

2.4.4 Alternative 4, North Texas Range. The Texas construction site is located west of the Richardson Highway and Alaska Pipeline. The site rests on the east bank of the Delta River, 13 miles south of Delta Junction. Wetlands, lakes, and small water bodies cover approximately half of the project site. Weapons fire from the BAX would be oriented westward in the direction of the Delta River. The site lies within the core calving area of the Delta bison herd.

2.4.5 Alternative 5, North Texas/Eddy. Under this alternative, the BAX would be built at Texas and the CACTF at Eddy. Layout of the Texas BAX would differ from the Texas-only alternative but the general location and orientation of weapons fire would remain much the same. Location of the CACTF at Eddy would be at the same location as set for the Eddy-only alternative.

3. Public and Agency Involvement

Public and government involvement was extensive throughout the process and proved invaluable in the Army's efforts at focusing on important relevant issues. Army officials and subject matter experts met frequently with federal and state agency experts to ensure a full understanding and appreciation of important environment factors. Input from Alaska Native leaders, state and federal government agencies, and private citizens were also critical in identifying methods to better mitigate potential impacts resulting from constructing and operating the BAX and CACTF.

The Army received approximately 550 comments on the initial Draft EIS, and an additional 208 comments on the Supplement Draft EIS from individuals, government officials, and agency experts. All comments and recommendations received during the NEPA process were carefully considered and addressed. Throughout the NEPA process, comments, suggestions and criticism directed at the proposed action have been consistent. Broadly categorized, they fall into (1) concern with an increased potential for wildland fires; (2) concern that the project may negatively affect a local floodplain; (3) safety concerns over the Army conducting live-fire exercises near a community; (4) concern with increased noise from weapons, vehicles and aircraft activities; (5) negative impact on regional permafrost; (6) impact on wildlife resources, especially the state's Delta bison herd management program; (7) subsistence and recreational access; and (8) potential impact on general aviation traffic corridors.

Public and agency involvement has greatly influenced the approach taken in the EIS analysis. Reflecting public and agency input at the early stages of the NEPA process, the FEIS analysis is divided into Primary and Secondary Issues of Concern. Primary Issues are those resource areas or activities of which the general public or government representatives manifested concerns or interest. Secondary Issues are other resource areas or activities that could be impacted by constructing and operating the range complexes. Comments and recommendations received after release of the initial draft EIS from private individuals, tribal government officials, and representatives of federal and state agencies, convinced USARAK officials to conduct additional analysis and prepare a Supplemental Draft Environmental Impact Statement. Also reflective of public interest and recommendations, a fourth action alternative was added to the second effort, which considered the possibility of splitting the two complexes and site the BAX at the North Texas Range and the CACTF at the Eddy Drop Zone.

4. Environmental Consequences of Alternative Courses of Action

4.1 The FEIS analysis of potential impacts is divided into Primary Issues of Concern and Secondary Issues of Concern. A comparative assessment of environmental impacts for all five alternatives is provided in Table 1 of this decision document. Detailed analysis of impacts associated with each of the four Action Alternatives is set forth in Chapter 4 of the FEIS.

4.2 Alternative One (No Action). This alternative would retain the status quo for Donnelly Training Area East. The area would continue to be used extensively by Army units for training and field testing of equipment. Impacts associated with such use are set forth in the USARAK *Transformation EIS* (2004).

4.3 Alternative 2 (Eddy Drop Zone). Without mitigation, constructing and operating the BAX and CACTF at Eddy would have insignificant impact on soil resources, groundwater, surface water, noise levels, human health and safety, wildlife and fisheries, air quality, wetlands, and vegetation. Units training on the range would be required to suspend live-fire when private aircraft enter the area, ensuring no serious impact to general aviation traffic. Although the BAX will be built within the Jarvis Creek 100-year floodplain, the range will be designed to avoid altering flood patterns. Even though no explosive projectiles will be fired on the BAX, the training rounds that will be used have the potential to significantly impact buried archaeological

resources located in the surface danger zone. There are no historic properties on the site, and no Native Alaskan cultural resources have been identified within the site. Operation of the range complexes also significantly increases the potential for a serious wildland fire. Despite its green appearance, central Alaska is a desert-like environment, averaging 11 inches of rain annually. The area includes stands of highly flammable black spruce trees. While fires naturally occur as a consequence of summer thunderstorms, human activity significantly increases fire start potential. The close proximity of Eddy to the Delta Junction community means that a fire start on the range represents a greater threat. The FEIS identifies several measures to mitigate this risk, to include restrictions on activities during high and extreme fire conditions, reduction in fuels and employing a fire response team when the range is used during the fire season. [See Table 2 for summary of significant impacts.]

4.4 Alternative 3 (Donnelly Training Area). Without mitigation, constructing and operating the BAX and CACTF at Donnelly would have insignificant impacts on soil resources, air quality, human health and safety, groundwater, surface waters, fire management, vegetation, and fisheries and wildlife – with the exception of wood frogs which would be significantly impacted. Units using this site would be required to suspend live fire when private aircraft entered the area, ensuring no impact to general aviation traffic. The project would be located within the Jarvis Creek floodplain, but would also be constructed so that it has no discernable change to waters flowing through the floodplain. Building and operating the range complexes at this site would have significant impact on wetlands. On occasions during adverse weather conditions peak noise levels could be significant. Because of the location of identified sites in the safety danger zone (SDZ), operation of the BAX would have a significant impact on buried archaeological resources. There are no historic properties and no Native Alaskan cultural resources have been identified within the site.

4.5 Alternative 4 (North Texas Range). Without mitigation, constructing and operating the BAX and CACTF at the North Texas site would have insignificant impacts on soil resources, surface waters, fire management, noise levels, human health and safety, cultural resources, air quality, ground water, and vegetation resources. Because the Texas site rests beneath restricted airspace, the location would have no impact on general aviation traffic. Building and operating the range complexes would have a significant impact on wetlands, and on the Delta bison herd. The proposed BAX site sits within critical calving and summer habitat. Firing from the BAX would be in the direction of areas heavily used by bison during the spring and summer. Wood frogs and fish stocks of lakes within the site would also be significantly impacted. Impact would be insignificant to all other species known to inhabit the study area.

4.6 Alternative 5 (BAX at North Texas & CACTF at Eddy Drop Zone). Without mitigation, siting the BAX at Texas and the CACTF at Eddy would result in an insignificant impact to soil resources, surface waters, groundwater, noise levels, human health and safety, vegetation resources, and air quality. There would be no impact to general aviation traffic. The BAX would be built under restricted airspace. Weapons fire at the CACTF would be suspended whenever aircraft enter the range area. The location and orientation of the BAX at Texas would have significant impacts on the Delta bison herd. Building the BAX at Texas would significantly impact local wetlands. A Texas BAX would also significantly impact wood frogs and area fish

stocks, but impact would be insignificant to all other species known to inhabit the study area. Locating the CACTF at Eddy would significantly impact fire management.

4.7 Impacts Common to All Action Alternatives. Donnelly Training Area East is a popular recreational area for the local population. Constructing the range complexes at any of the three locations would have a significant impact on local recreational activities, as the range complexes would be permanently closed to the public, and SDZs would be frequently closed for training activities. Constructing the ranges at any of the three sites offers an economic benefit to the local community. Range operation also represents local employment potential and additional business for local merchants. Constructing and operating the range at any of the three locations would not disproportionately impact regional minority or low income populace. No threatened or endangered species would be adversely impacted. Adequate federal land is reasonably available to ensure no significant impact on subsistence practices in the region.

4.8 Cumulative Impact. In addition to the immediate impact a proposed action may have on the human environment, federal agencies must also consider the cumulative impact. Cumulative impact is the incremental effect of the proposed action "when added to other past, present, and reasonably foreseeable future actions." [40 CFR § 1508.7] Federal regulations recognize that while an individual action may only cause minor direct impacts, over a period of time the collective effect of several minor actions can be significant.

4.8.1 Focus of the FEIS Cumulative Effects Analysis. The recently completed programmatic *Transformation EIS* incorporated as part of the FEIS analysis, serves as a baseline for current and past environmental conditions and impacts. The FEIS also considered reasonably predictable future Army activities proposed for the region under review, and considered future activities proposed by the private sector and other government agencies. [See FEIS Table 4.3.10.c]

4.8.2 Methodology. The FEIS Cumulative Effects analysis was accomplished by following guidelines set forth in the Council on Environmental Quality's guide *Considering Cumulative Effects Under the National Environmental Policy Act* (January 1997). Details of the analysis and conclusions are found in Section 4.3.10 of the FEIS.

4.8.3 FEIS Cumulative Effects Analysis. The analysis provided in the FEIS indicates that the proposed action, when considered in context with past and foreseeable future activities, will not have a significant impact on soil resources, noise levels, human health & safety, air space use, air quality, groundwater, threatened and endangered species, or species of concern. The actions will not disproportionately impact minority and low income populations. Together with past and foreseeable activities, the proposed activity will result in economic benefits to the region.

From a regional perspective, current and future activities are expected to have a moderate impact on wetlands. In addition to facility development (including the BAX and CACTF), Army units will continue to use the Donnelly Training Area East for maneuver training. Although the incremental impact from these activities has the potential to significantly impact regional wetland resources, USARAK's active management plans serve to continually repair and restore damaged wetland areas. Regional activities and development also represent potential significant

cumulative effects on surface water resources sites, but Army policies and procedures would serve to mitigate the effect to an insignificant level.

Past and present military and civilian development has resulted in removal of approximately 4,600 acres of vegetation within Donnelly Training Area East. While a substantial amount, this represents only 5 percent of the total vegetated acreage. When added to the foreseeable development the overall affect is insignificant on both quantity and variety of regional vegetation.

Loss of vegetation and increased development will impact local wildlife populations but not on a significant scale. In conjunction with other past, present, and future development in the vicinity of Delta Junction and Fort Greely, construction of the BAX and CACTF at the Eddy site will reduce wildlife habitat and increase the potential for human-wildlife conflicts. The range project at Eddy, in conjunction with the recently constructed Cold Regions Test Center vehicle test facility will reduce the amount of habitat used by bison during their transition from winter to summer ranges. Not building the BAX and CACTF at North Texas Range ensures no long-term significant impact on the herd, as foreseeable regional development will remain well north of critical calving and summer habitat.

The incremental effect of the proposed action, in conjunction with past and future development and activities in the region will not significantly impact subsistence activities. As result of management classification, Donnelly Training Area East offers no subsistence opportunities for harvesting large animals. There are no salmon runs in the area. While local inhabitants will have fewer immediate areas to harvest small game and plant materials, there are substantial reasonably-accessible public lands available to the regional rural population.

Recreation access in the range complex area will be significantly curtailed as a consequence of the cumulative effect of past, current, and foreseeable development and activities.

Donnelly Training Area East has one of the largest identified concentrations of archaeological sites in interior Alaska. Over time, operation of the BAX at Eddy has the potential to significantly impact local resources. While uncertain, foreseeable construction activities could negatively impact other unidentified sites within the region. Army resource management programs would serve to mitigate impact to an insignificant level. There are no historic properties within DTA East, and no Native Alaskan cultural resources have been identified within DTA East.

With such a large expanse of flammable materials, in a very dry environment, in close proximity to human development, Donnelly Training Area East represents a natural hazard to area inhabitants. The potential for a serious wildland fire event increases in proportion with human activity in the training area. In and of itself, construction and operation of the BAX and CACTF at Eddy will significantly impact fire management. The addition of other human development and activities to the region will also increase fire start potential and impact fire management activities. A long-term regional fire management and mitigation strategy involving the private sector and government property managers is an effective way of reducing fire-start risk.

Current and future regional government and private sector development projects (i.e., Cold Regions Test Center test facilities, Fort Greely, Pogo Mine) offer immediate and long-term economic benefits to the community. Project construction will bring an initial influx of revenue to the region as a consequence of construction employment and added consumption. Once built, operation of the private and public sector facilities offers new long-term employment opportunities and increased consumption within the local economy. Regional minority and low income groups will benefit from the additional economic infrastructure.

**Table 2.** Summary of Alternative 2 Potential Significant Impacts Before Proposed Mitigation.

| **Primary Issues** | |
|---|---|
| Soil Resources | None |
| Surface Water | None |
| Fire Management | • High fire hazard risk<br>• Significant chance of potential harm to local community during a large, uncontrolled wildfire |
| Noise | None |
| Human Health and Safety | None |
| Wildlife and Fisheries | None |
| Cultural Resources | • Impacts to a large number of sites (105) within the surface danger zone as a result of weapons fire. |
| Airspace | None |
| **Secondary Issues** | |
| Air Quality | None |
| Groundwater | None |
| Wetlands | None |
| Vegetation | None |
| Threatened or Endangered Species and Species of Concern | None |
| Socioeconomics | • Beneficial to the local economy |
| Subsistence | None |
| Public Access and Recreation | • Permanent closure of approximately 4,400 acres<br>• Limits access to military and adjacent non-military areas |
| Environmental Justice | None |
| Cumulative Impacts | • Localized severe cumulative effects on recreational opportunities |

5. Mitigation of Impacts

The Army is committed to undertaking all practical efforts to avoid, minimize and rectify environmental harm resulting from the construction and operation of the BAX and a CACTF. Mitigation efforts identified in Chapter 4 of the FEIS represent practical means to avoid, reduce, or eliminate specific impacts to different resource elements in the affected environment. Chapter 4 of the FEIS identifies existing mitigation measures currently employed by the Army to address impacts associated with routine military training on USARAK installations and within USARAK managed training lands, which include Donnelly Training Area East. The Army has previously committed to undertaking these management programs and will continue to implement these programs, regardless of this decision. Chapter 4 of the FEIS also identifies a number of new mitigation measures to address new or greater environmental impacts associated with the construction and operation of the BAX and CACTF. All new mitigation measures identified in Chapter 4 are adopted by reference into this ROD, and the Army shall undertake these measures as a necessary part of the range complex project. A summary of both ongoing mitigation commitments and new mitigation measures are set forth in Table 3 of this ROD. All regulatory requirements will be implemented in their entirety.

The mitigation measures the Army will undertake are broadly divided into two categories. These are programmatic resource management measures, and independent undertakings in response to site-specific concerns. An example of the programmatic measures is U.S. Army Alaska's Integrated Natural Resource Management Plan, using an ecosystem management approach to its natural resources program. This approach helps protect biological diversity and facilitates sound decisions regarding the use of renewable natural resources to support both the military mission and needs of the region. Independent undertakings are used where programmatic efforts are not sufficient and additional effort or a different measure is required. An example of an independent mitigation undertaking would be assigning a fire fighting crew at the BAX and CACTF range complexes during times of high or extreme wildland fire potential.

A monitoring and enforcement program is hereby adopted as part of this action. Monitoring requirements are set out in Chapter 4 of the FEIS and are incorporated into this decision by reference. They are summarized in Table 3 of this decision document. Monitoring the effectiveness of resource management efforts in mitigating environmental impact is an essential element of the programmatic approach. Mitigation goals are considered in relation with the environmental status quo to determine what management actions are needed to affect sustainable conditions. USARAK resource management programs and specific monitoring requirements that are part of this action will be reviewed annually or more often if needed, to assess program effectiveness. This continued review of the management program ensures needed flexibility to change or add management efforts to ensure the effectiveness of mitigation efforts. The command will strictly enforce mitigation measures and limitations on the selected action related to environmental conditions.

**Table 3.** Summary of Mitigation.

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| Soil Resources | **Existing Mitigation**<br>• Comply with training exercise regulations (USARAK Range Regulation 350-2).<br>• Apply the Integrated Training Area Management (ITAM) program to inventory and monitor, repair, maintain, and enhance training lands.<br>• Implement programs to track munitions usage.<br>• Use Range Facility Maintenance Support System.<br>• Implement a soil and water monitoring program for DTA.<br>**New Mitigation**<br>• Adjust of site layouts to relocate structures away from areas having higher permafrost potential.<br>• Conduct additional drilling to confirm the initial interpretations, prior to final design and construction.<br>• Prevent off-road vehicle traffic in high permafrost areas during summer months when the ground is thawed.<br>• Incorporate existing cleared areas into design of range facilities.<br>• Utilize Best Management Practices (BMPs), common in the construction industry in Alaska, to localize impacts and to ensure soils would not erode from the site or enter waterways. |
| Surface Water | **Existing Mitigation**<br>• Comply with training exercise regulations (USARAK Range Regulation 350-2).<br>• Apply of the ITAM program to inventory and monitor, repair, maintain, and enhance training lands.<br>• Implement of programs to track munitions usage.<br>• Use of Range Facility Maintenance Support System.<br>• Implement of a soil and water monitoring program for DTA.<br>• Comply with Conditional Fog Oil Permit from ADEC.<br>**New Mitigation**<br>• Comply with Executive Order 11988 – *Protection of Floodplains* to minimize adverse impacts to floodplains.<br>• Monitor all sites to detect and correct future changes in drainage patterns.<br>• Design and build ranges to ensure they would not impede floodwaters.<br>• Avoid designing roads and trails in the general direction of preferential water flow and at ground level.<br>• Minimize construction of large areas of impervious surface.<br>• Minimize removal of vegetation to prevent increased overland flow.<br>• Design range facility drainage to accommodate general local snowmelt runoff each spring and during rainfall events throughout the year.<br>• Site ranges to avoid construction footprints near lakes and ponds.<br>• Prevent maneuver near lakes and ponds.<br>• Prevent direct fire into lakes and ponds.<br>• Comply with all conditions, BMPs and mitigation requirements of a National Pollutant |

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| | Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities (CGP) for Alaska.<br>• Construct permanent low-water crossings or other features at designated vehicular stream crossings to prevent bank erosion, widening of waterways and increased sediment in streams. |
| Fire Management | **Existing Mitigation**<br>• Use the Fire Weather Index (FWI), in cooperation with Alaska Fire Service (AFS).<br>• Strictly adhere and comply with existing fire risk index range regulations and restrictions (USARAK Range Regulation 350-2).<br>• Monitor of fire weather indices and prohibition of pyrotechnics use during training exercises when indices are high to extreme.<br>• Continue update and implementation of fire management plans prepared by USARAK and the AFS.<br>• Continue removal of hazardous fuels (creation of defensible space) around observation point sites, range targets and structures.<br>• Conduct prescribed burning to remove light flashy fuels where grass is the primary fuel type.<br>• Continue review of access to firing ranges to enable quick and effective response by initial attack forces in the event of a wildland fire.<br>• Comply with detailed "pre-attack" plan, including both (1) the initial DTA fire response plan and (2) emergency egress routes for residents of Delta Junction.<br>• Continue use of fire-fighting materials and equipment by all units on ranges or training areas during *high* to *extreme* fire risk index rating periods. Units trained to immediately suppress small range fires.<br>• Continue to grant modifications to training restrictions only if the exercise is required for deployment preparation.<br>**New Mitigation**<br>• Locate range operational areas within hardwood forests.<br>• Create a fire break along the northern boundary of the BAX.<br>• Station a USARAK wildland fire crew at FWA or FGA. The crew would accompany troops that train at DTA during *high* to *extreme* fire danger. During times of a lower fire risk index rating, the fire crew would conduct hazard fuel reduction projects.<br>• Publish a public notice of major training exercises throughout the Delta Junction community and in the local newspaper at least two weeks prior to the training event.<br>• Place fire weather stations at or near BAX and CACTF sites.<br>• Develop a fuels management plan for Bolio Lake Training Area. |
| Noise | **Existing Mitigation**<br>• Comply with training exercise regulations (USARAK Range Regulation 350-2).<br>• Continue public notification of nighttime firing.<br>**New Mitigation**<br>• Provide a 24-hour feedback line to collect comments or complaints regarding noise. |
| Human Health and Safety | **Existing Mitigation**<br>• Maintain current institutional control policy that limits access to contaminated sites, and maintenance of an active restoration program to clean up sites.<br>• Continue compliance with Alaska state law (18 AAC 75.300-.380), which requires notification to ADEC of an oil or hazardous substance discharge or release and site |

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| | characterization and cleanup.<br>• Continue management of environmental programs listed in current Integrated Natural Resources Management Plan (INRMP) and environmental awareness training to troops and civilians.<br>• Split convoys into smaller vehicle groups and staggering of departure times, per USARAK Regulation 55-2.<br>• Continue use of portable containment systems at in-field refueling points.<br>• Continue convoy-permitting processes with Alaska Department of Transportation.<br>• Consider alternate travel routes and methods for military convoys.<br>• Expand public notification of imminent convoy activity. |
| Wildlife and Fisheries | **Existing Mitigation**<br>• Continue to implement of USARAK natural resources conservation programs, including INRMPs and ecosystem management.<br>• Continue to monitor effects of military training on select wildlife species during vital seasons.<br>• Continue annual moose, bison, and caribou surveys in partnership with Alaska Department of Fish and Game (ADF&G) and swan surveys with the United States Fish and Wildlife Service (USFWS).<br>• Continue developing and implementing information and education program on conservation of wildlife and fisheries resources for DOD personnel and the public using USARAK lands.<br>• Comply with training exercise regulations (USARAK Range Regulation 350-2).<br>• Avoid conducting activities or operations in or near bison habitat during mid-February to early September when bison are present.<br>• Continue compliance with federal and state laws and regulations relating to fish and wildlife conservation or management.<br>• Continue to maintain existing bison food plots at DTA East.<br>**New Mitigation**<br>• Develop monitoring and adaptive management strategies for species that would be moderately or severely impacted by the selected alternative.<br>• Increase bison monitoring surveys in partnership with ADF&G.<br>• Conduct bison habitat studies.<br>• Provide additional radio collars for systematic radio-telemetry surveys of bison.<br>• Conduct prescribed burning on DTA East to improve or maintain habitat.<br>• Consider prescribed burn at DTA West near Buffalo Dome to increase bison forage.<br>• Conduct sandhill crane surveys during spring and fall migration periods.<br>• Maintain access to ADF&G stocked lakes.<br>• Support additional baseline fish surveys in Jarvis Creek. |

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| Cultural Resources | **Existing Mitigation**<br>• Develop and implement the Historic Properties Component of the Integrated Cultural Resources Management Plan (ICRMP).<br>• Continue to develop and implement information and education program on conservation of cultural resources for DOD personnel and the public using USARAK lands.<br>• Continue to evaluate for eligibility for inclusion in the National Register of Historic Places (NRHP) of archaeological sites potentially impacted by placing ranges in use.<br>• Continue consultations with Alaska Native tribes to identify and evaluate Traditional Cultural Properties (TCPs) that may be present.<br>• Continue consultations with Alaska Native tribes on cultural resource management issues.<br>**New Mitigation**<br>• Conduct a comprehensive survey for the presence of TCPs at DTA to properly locate sites and landmarks that have traditional, cultural and religious significance to tribes.<br>• Avoid archeological sites eligible for listing in the NRHP during construction by monitoring the building site and workers to prevent disturbance by construction equipment, providing construction contractors with maps indicating specific areas to avoid, and demarking areas that are off-limits.<br>• Adjust training operations to avoid sites if archaeological sites are discovered after placing the range in operation until evaluation for eligibility for inclusion in the NRHP is complete. If eligible, conduct appropriate mitigation.<br>• Adjust training operations within the maneuver areas to avoid archeological sites eligible for listing in the NRHP by installing permanent barriers to prevent access and incorporating site locations into existing environmental limitations overlays.<br>• Adjust berms and targets to avoid archeological sites eligible for listing in the NRHP by locating them away from known sites, installing berms between the target and the archeological site, installing berms around the target to capture munitions or installing berms around the site to shield it from weapons fire and maintaining the berms (if applicable and necessary).<br>• Retrieve information from archaeological sites through excavation of sites determined eligible for inclusion in the NRHP and impacted by range (if applicable and necessary).<br>• Conduct off-site mitigation by excavation of an eligible site, comparable in size, age, composition and setting, other than the site to be destroyed (if applicable and necessary).<br>• Cap a site to be impacted by range use (if applicable and necessary).<br>• Properly manage and preserve recovered archaeological material.<br>• Develop public education materials to provide information on the archaeological information retrieved from investigations of eligible sites. |
| Airspace | **Existing Mitigation**<br>• Continue using Notice to Airmen system.<br>• Continue complying with Final EIS Alaska Military Operations Areas (1995).<br>• Continue participation in Alaska Civil Military Aviation Council meetings.<br>**New Mitigation**<br>• Support and participate in U.S. Air Force SUAIS program.<br>• Develop and implement Small Arms Range Safety Area (SARSA) rules and procedures for small arms use on the range.<br>• Modify proposed firing point locations to reduce the adverse impact on training operations at |

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| | the proposed range complex resulting from the requirement to halt weapons use whenever civilian air traffic traveling within the Richardson Highway VFR corridor enter the Controlled Firing Area (CFA) or SARSA zone.<br>• Safely incorporate UAV use within the approved guidelines jointly developed by the FAA and USARAK.<br>• Work with the FAA to establish a CFA over the Eddy Drop Zone surface danger zone to support the firing of large caliber weapons on the range.<br>• Support proposed Allen Army Airfield tower radar purchase and integrate its use into range safety operations at the BAX/CACTF.<br>• Participate in USAF radar upgrade projects and research possible integration of these systems into range safety operations at USARAK, particularly at the BAX/CACTF. |
| Air Quality | **New Mitigation**<br>• Collect additional data to determine short-term and long-term impacts of fugitive dust generation through refined modeling analysis. Investigate the need for dust control plans to minimize fugitive dust generation.<br>• Establish a particulate matter (PM) sampling network and initiate sampling to determine what impact the proposed action may have on visibility over time.<br>• Establish and implement a dust control plan to reduce visibility impacts from fugitive dust.<br>• Re-evaluate need for construction and/or operating air quality permits based on final site selection and design prior to start of construction. |
| Groundwater | **Existing Mitigation**<br>• Continue and expand monitoring of groundwater resources.<br>• Continue implementing INRMPs. |
| Wetlands | **Existing Mitigation**<br>• Continue classifying wetlands as “higher function” or “other wetlands” for management purposes, and continued use of the environmental limitations overlays.<br>• Continue production of planning-level surveys, wetlands management and re-vegetation plans.<br>• Continue to implement INRMPs.<br>• Comply with training exercise regulations (USARAK Range Regulation 350-2).<br>• Apply the ITAM program to inventory and monitor, repair, maintain, and enhance training lands.<br>• Continue damage control measures.<br>**New Mitigation**<br>• Site facilities, targetry, access and firing roads/trails to avoid construction within wetlands, as much as practicable.<br>• Avoid melting permafrost by removing the least amount of vegetation as possible during construction.<br>• Use silt fences and other construction techniques to prevent siltation into wetlands during construction. Overburden would not be stored in wetland areas.<br>• Complete detailed wetland delineations as designs of the proposed BAX and CACTF facility are finalized and the exact locations of targets, trails, buildings and other construction elements are better known for utilization in siting of facilities. |

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| Vegetation | **Existing Mitigation**<br>• Continue inventorying forest resources to aid ecosystem management program.<br>• Continue use of environmental limitations overlays to protect vulnerable habitats.<br>• Continue implementing INRMPs.<br>• Continue implementing of Range and Training Land Assessment (RTLA) and Land Rehabilitation and Maintenance (LRAM) programs to minimize and to rehabilitate vegetation damage, and to gather long-term monitoring data.<br>• Continue implementing recreational vehicle use policies at USARAK.<br>• Timber removed and not sold by BLM will be offered to the public at no cost.<br>**New Mitigation**<br>• Re-seed and re-vegetate areas directly affected by construction or that are not recovering naturally with native grass.<br>• Retain as much existing vegetation as possible to provide cover, concealment and realism. Retain vegetation buffers areas along waterways or other specifically designated areas. |
| Threatened or Endangered Species and Species of Concern | **Existing Mitigation**<br>• Continue extraction of information regarding threatened or endangered species from other ongoing surveys.<br>• Develop management guidelines with the USFWS and the ADF&G to address threatened or endangered species if found on USARAK lands. |
| Socioeconomics | None |
| Subsistence | **Existing Mitigation**<br>• Continue complying with ANILCA regulations. Work with relevant federal and state officials to minimize impact to regional subsistence populations through a priority system when resources are reduced to protect the viability of subsistence in the area.<br>• Continue implementing the INRMPs.<br>• Continue ongoing soil and water quality monitoring to trace the fate of munitions constituents as described in INRMPs.<br>**New Mitigation**<br>• Make USARAK long-term training and convoy schedules available to the public. |
| Public Access and Recreation | **Existing Mitigation**<br>• Continue implementing recreational vehicle use policies.<br>• Continue implementing the USARTRAK automated check-in phone system.<br>• Continue streamlining public access to USARAK lands via individual permits. Maintenance of the extended two-year renewal duration on individual permits.<br>• Continue to work with ADF&G to provide hunter education safety courses.<br>• Monitor recreational use of each training area through the USARTRAK phone system.<br>• Maintain informational kiosks at all primary entrances to recreational areas and provision of visitor maps and range use information.<br>• Monitor recreational impacts on stocked lakes, and upgrading of access and recreational opportunities when needed.<br>• Continue to use conservation officers to enforce state and federal game laws, and military rules and restrictions. |

| RESOURCE | ALTERNATIVE 2: EDDY DROP ZONE |
|---|---|
| | **New Mitigation**<br>• Make USARAK long-term training and convoy schedules available to the public.<br>• Determine placement of access gates to allow for maximum continued recreational use and maximum public safety.<br>• Maintain access to ADF&G stocked lakes.<br>• Allow recreational activities outside of the construction footprint and maneuver area per current USAG-AK management policies.<br>• Work with ADF&G to support stocked lake program brochures, signs and improvements.<br>• Upgrade road access at Fleet Street, if determined to be a viable method to facilitate public access. |
| Environmental Justice | **Existing Mitigation**<br>• Maintain a USARAK website to provide up-to-date information to public.<br>• Continue to publish and distribute the Environmental Resources Newsletter and the Environmental Restoration Newsletter.<br>• Continue to participle in Restoration Advisory Boards as appropriate.<br>• Ensure existence of Alaska Native tribal coordination within USARAK.<br>• Publish and distribute a newsletter for Alaska Native tribes.<br>• Continue government-to-government relationships with Alaska Native tribes to ensure tribal interests are not significantly affected by USARAK activities.<br>**New Mitigation**<br>• Undertake measures identified as necessary to minimize impact to cultural resources. |
| Cumulative Impacts | **New Mitigation**<br>• Fire Management: A longer-term, regional fire management and mitigation strategy may be necessary. This strategy would need to be developed using a coordinated approach involving military and other governmental agencies and local stakeholders. |

## 6. Other Consequences

6.1 Irreversible and Irretrievable Commitment of Resources. There will be an irreversible and irretrievable commitment of three resources due to the implementation of the proposed action: wetlands, wildlife habitat, and energy resources. In addition, cultural resources could be irreversibly impacted.

Approximately 24.5 acres of wetlands will be permanently filled as a result of construction of roads, buildings, utility lines, and targetry in the range complex. In order to minimize any additional impacts to wetlands, avoidance of wetlands will be considered in the final engineering plans and layout of all range components. Wetland surveys are utilized during each design phase to assure that wetlands are avoided, when practicable.

In addition to the loss of wetlands, approximately 350 acres of wildlife habitat will be lost in non-wetland areas where roads, buildings, and targetry are placed.

Non-renewable energy resources will be used daily in the construction and operation of the BAX and CACTF. Fossil fuels will be directly consumed by construction equipment over the two-

year period in which the project will be built. On a long-term basis fossil fuels will also indirectly provide electrical power to operate the range facilities once built, and will power military and maintenance vehicles during training and range maintenance activities.

The inherent nature of cultural resources makes any impact on such resources potentially irreversible and the resulting loss of data irretrievable. Thus, to the extent that identified archeological sites may be adversely impacted by range operations, the resulting loss of scientific data that could have otherwise been obtained by their study is irreversible and irretrievable.

6.2 Unavoidable Significant and Adverse Impacts. There will be certain unavoidable, significant adverse impacts as a consequence of implementation of the proposed action at the Eddy Drop Zone site. There will be an increased wildfire hazard and associated greater chance of potential harm to the local community in the event of a large, uncontrolled wildfire. Although mitigation measures will substantially reduce this hazard, it will remain significant. Approximately 105 archeological sites identified within the BAX surface danger zone could be significantly impacted by firing activities. Mitigation efforts are likely to reduce these impacts to an insignificant level. Public access restrictions will significantly impact recreation in the area within and surrounding the project site. Mitigation efforts, however, are expected to reduce these impacts, except within the construction footprint and maneuver area where public access and recreation will be prohibited year-round to protect equipment and facilities and to ensure public safety.

7. Findings and Conclusions

7.1 FNPA Analysis & Conclusion (Wetlands & Floodplain). The Jarvis Creek 100-year floodplain extends into the section of Eddy where the BAX will be built. Both the BAX and CACTF sites contain wetlands. Pursuant to Executive Orders 11988 (*Floodplain Management*) and 11990 (*Protection of Wetlands*), before the Army may build within a floodplain or wetlands it must determine that there are no practicable alternatives to doing so and that all practicable measures have been taken to minimize harm to the floodplain or wetlands. As set forth in the Draft Finding of No Practicable Alternative (FEIS Volume 2, FNPA-1), the Army has thoroughly reviewed and analyzed the available range of alternative courses of action and concluded that there are no practicable alternatives to the Eddy Drop Zone location for constructing and successfully operating the BAX and CACTF. This ROD adopts the referenced analysis and specifically finds that there are no practicable alternatives to the Eddy Drop Zone location for construction and operation of the BAX and CACTF; this ROD determines that all practicable measures will be taken to minimize harm to the floodplain or wetlands.

At the beginning of the NEPA process, the Army considered nine possible locations for the range complexes. Of the nine only Eddy, Donnelly and Texas were considered possible viable locations (See FEIS Section 2.3). Through the extensive environmental and operational analysis of these three locations, forth in the FEIS, the Army concluded it is impracticable to construct and operate the range complexes at either the Donnelly or the Texas sites.

Like Eddy, the Donnelly construction site is situated within the Jarvis Creek 100-year floodplain. A large portion of the Donnelly construction and operating area also contains wetlands. Building

the two range complexes at Donnelly would require filling approximately 389 acres of wetlands. Another 198 acres would need to be filled to ensure sustained off-road vehicle maneuver through the BAX.

Building and operating the BAX and CACTF at Texas would also impact a substantial amount of wetlands. Depending on the orientation, constructing the range would require filling up to 272 acres of wetlands; and another 109 acres would need to be filled to accommodate sustained off-road maneuver. While the Texas site rests outside of any floodplain, there are other factors making the location impracticable. The Army is legally committed to refrain from conducting activities in or near habitat where bison are present. Both Texas and adjacent areas are favored calving and summer grazing locations of the Delta bison herd. Past studies show that between February and August portions of the herd move frequently in and out of the area needed for the range complexes and safety danger zones. The obligation to cease weapons training activities whenever bison are present, coupled with the inability to predict when bison would be on the complex, makes it highly probable that training events would be frequently disrupted or need to be cancelled due to the presence of bison on the range.

An additional factor in concluding the impracticability of the Donnelly or Texas sites is the disproportionate cost of building the BAX and CACTF at either alternative sight. Estimates for constructing the range are $68.5 million for the Eddy alternative, $124.9 for the Donnelly alternative, $127.6 for the Texas alternative, and $170.3 million for the Texas/Eddy alternative. The considerable difference in cost for building at the Donnelly or Texas sites is a direct consequence of the amount of wetlands within these two areas, the need to relocate existing infrastructure and other terrain features.

7.2 ANILCA Section 810. In deciding whether to permit a particular use of federal lands in the State of Alaska, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) (16 USC § 3120) requires the federal agency with primary management jurisdiction over the land to consider the potential impact of the planned use on subsistence practices. The purpose of the Section 810 review is to ensure agency actions do not unnecessarily impair rural subsistence practices. The Delta Junction and surrounding area is designated rural for Section 810 purposes.

The analysis provided in the FEIS, indicates that operation of the range projects will require closing a substantial amount of the Donnelly Training Area East (DTA EAST) to the regional population for a considerable portion of the year. Due to state and federal management decisions, the area is not presently available for large game subsistence harvest. There are no annual salmon runs in local streams. Harvesting small game animals and plant materials is the focus of the limited amount of subsistence practices in DTA EAST.

Although the construction and operation of the range complexes at DTA EAST will limit access to subsistence resources in the immediate area, the proposed action will not significantly restrict regional subsistence practices. Even though it is currently available to local residents, due to the unavailability of important subsistence species, DTA EAST offers only limited subsistence opportunities. Large areas of federal land are situated to the south, east, and north of DTA EAST. Available and reasonably accessible to the regional rural population, these areas offer the same resources as DTA EAST, plus opportunities for harvesting large mammals and salmon.

When not needed for military training events, sections of DTA EAST will be open to the public for harvest of small game and plant materials.

The cumulative effect of the proposed action and foreseeable regional projects and activities will not create conditions that will significantly restrict regional subsistence practices. Future government and private sector development and activities will be concentrated in DTA EAST, Delta Junction, and the Alaska Highway corridor, and will not substantially affect regional federal land currently available for subsistence activities.

7.3 Historic Preservation. The National Historic Preservation Act [16 USC § 470 et seq.] and the *Preserve America* Executive Order [EO 13287, March 3, 2003] obligates federal agencies to manage prehistoric and historic resources in such manner that will support the agency mission while preserving historic resources for the benefit of present and future generations. The analysis provided in the FEIS shows that construction and operation of the BAX and CACTF range projects have the potential to adversely impact archaeological sites. The field studies that were conducted during the NEPA process have not uncovered or identified any Native Alaskan tribal cultural properties within the BAX and CACTF project area. No historic buildings are within the BAX and CACTF construction or operational areas.

To meet its obligation to preserve identified archaeological resources, USARAK will undertake the mitigation steps identified in the FEIS in consultation and cooperation with the Alaska State Historic Preservation Office (SHPO). Such cooperative efforts will include additional reasonable procedures and mitigation measures deemed appropriate and necessary by the SHPO. The goal of these efforts is to minimize adverse impact on historic resources. In addition, USARAK officials will continue to engage in government-to-government consultation with regional Native Alaskan officials to determine whether there are any Native Alaskan cultural resources within DTA EAST.

7.4 Environmental Justice. Executive Order 12898 instructs federal agencies to determine whether a planned activity has the potential to cause disproportionately adverse health and environmental impacts on minority populations and low-income populations. After careful review of the potential impacts and the affected community, the Army has determined that no segment of the local population will be disproportionately adversely impacted by the construction and operation of the BAX and CACTF. The City of Delta Junction is the community most directly impacted by the proposed action. The percentage of individuals identifying with a minority group is less than the state's average. Less than 20 percent of the population has an income below the poverty level. The nature of the foreseeable environmental impacts and the positioning of the community in relation with the planned range projects serve to impact all community households in a like manner.

7.5 Global Commons. Executive Order 12114 requires federal agencies to consider the potential impacts major federal actions may have on the environment outside the United States, its territories and possessions. The intended course of action will have no discernable direct or indirect impact outside of the studied region. The effects of the intended course of action do not cross international borders, nor will it influence domestic or foreign manufacturing in any discernable fashion.

8. Point of Contact

For further information regarding this ROD or the FEIS, the public is invited to contact Major Kirk Gohlke, USARAK Public Affairs Officer, at (907) 384-1542. The ROD and FEIS can be viewed at: http://www.usarak.army.mil/conservation/. Copies of the FEIS are also available for review at the following locations: Noel Wein Public Library (1215 Cowles Street, Fairbanks, AK), Delta Junction Public Library (Deborah Street, Delta Junction, AK), Donnelly Training Area Natural Resources Office (Building T100, Room 230, Fort Greely, AK), and Fort Wainwright Environmental Resources Department (Building 3023, Fort Wainwright, AK).