

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)
AND
FINDING OF NO PRACTICABLE ALTERNATIVE (FONPA)
AIRFIELD BASH MITIGATION – GRAND FORKS AIR FORCE BASE, NORTH DAKOTA**

The 319th Reconnaissance Wing (319 RW) at Grand Forks Air Force Base (AFB), North Dakota, is proposing to reconstruct the ground topography and the natural and man-made water features within the Aircraft Movement Area plus 500 feet and all areas inside the AFB airfield security fence (hereinafter, “project area”). The United States (US) Air Force (Air Force) prepared this Environmental Assessment (EA) to evaluate the potential environmental impacts of the proposed changes to the project area in compliance with the *National Environmental Policy Act of 1969* (Title 42 of the United States Code [USC] § 4321 et seq.) (NEPA); the Council on Environmental Quality (CEQ) regulations that implement NEPA (Title 40 Code of Federal Regulations [CFR] Parts 1500–1508);¹ and Air Force’s Environmental Impact Analysis Process (EIAP) regulations at 32 CFR Part 989, *Environmental Impact Analysis Process (EIAP)*.

Purpose and Need

The purpose of the Proposed Action is to improve ground maintenance accessibility and operations to preserve war-fighting capabilities and support mission requirements. Vegetative cover within the project area must be maintained to a height between 7 and 14 inches and be converted to locally adapted vegetation species deemed unattractive to birds and other wildlife. The Proposed Action also includes replacement of the Installation’s west perimeter fence.

Grand Forks AFB needs to remove standing water, improve drainage, create unattractive habitat for wildlife, replace the western perimeter fence, and control vegetation heights to bring the project area into compliance with Department of Air Force Instruction (DAFI) 91-202, *The US Air Force Mishap Prevention Program*, and DAFI 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Program*. Grand Forks AFB needs to reduce standing water and improve drainage in order to access and maintain airfield grounds, which is made difficult by rough terrain and wet saline soils.

Description of Proposed Action and Alternatives

The 319 RW at Grand Forks AFB is proposing to reconstruct the ground topography and the natural and man-made water features within the project area totaling 1,291 acres. Grand Forks AFB would cultivate airfield vegetation unattractive to wildlife and maintain vegetation height between 7 and 14 inches within the project area to comply with DAFI 91-202 and DAFI 91-212. Grand Forks AFB intends to remove standing water by regrading the airfield’s West Ditch (up to 14,000 linear feet), conducting perimeter drainage maintenance, installing up to 35 acres of drain tile, and mitigating wetlands/floodplains. Reconstructing ground topography includes filling, clearing, grubbing, regrading (via heavy-equipment operation), landscaping, cultivating, and re-seeding no less than 150 acres of the project area to create both accessibility and functional grounds maintenance operations and unattractive wildlife habitat. The Proposed Action also would include replacement of the Installation’s west perimeter fence (22,240 feet of fence line). Fence posts would be driven into the ground to a depth of 8 feet and 10 feet apart, with no digging or trenching required. Seed selection for the project area would include species adapted to the local area, deemed unattractive for wildlife, and that can thrive in the local ecotype withstanding repeated mowing to successfully meet DAFI compliance.

No Action Alternative

Analysis of the No Action Alternative provides a benchmark, enabling decision-makers to compare the magnitude of the potential environmental effects of the Proposed Action. NEPA requires an EA to analyze the No Action Alternative. No action means that the Proposed Action would not take place at this time, and the resulting environmental effects from taking no action would be compared with the effects of deciding to

¹ This EA was prepared in accordance with the 14 September 2020 version of CEQ NEPA regulations (see Volume 85 of the *Federal Register*, page 43304; 16 July 2020), as modified by the CEQ NEPA Implementing Regulations Revisions Final Rule that became effective 20 May 2022.

move forward with the proposed activity. Under the No Action Alternative, no project activities detailed in the EA would occur on Grand Forks AFB.

Summary of Findings

Potentially affected environmental resources were identified through communications with state and federal agencies and review of past environmental documentation. The EA analyzed potential environmental consequences of the following resource areas: noise; safety; air quality; biological, water, and cultural resources; geology and soils; hazardous materials and wastes, toxic substances, and contaminated sites; and infrastructure, transportation, and utilities.

Noise

Under the Proposed Action, all project activities would occur entirely on Grand Forks AFB property. The affected environment for noise effects from these activities and ongoing operations is narrowly focused and compact, and generally would include the area lying within 0.5 mile to 1 mile of the proposed projects. Most noise-sensitive receptors are located on the opposite side of the runway from the proposed project area and would be unlikely to experience noise impacts associated with reconstruction and fence replacement activities. There would be no increases in operational noise with implementation of the Proposed Action.

Safety

Under the Proposed Action, no changes to existing accident potential zones, clean zones, or explosive safety quantity-distance arcs would be required. The Proposed Action would have a beneficial impact to BASH safety, reducing the overall presence of birds and wildlife on the airfield. Such actions would help to minimize strikes, crashes, and other incidents related to the interaction of birds, wildlife, and aircraft. Grand Forks AFB primarily operates unmanned aerial vehicles/drones that cost millions of dollars to manufacture. Reducing the potential for bird and wildlife strikes would likewise reduce costs of replacing unmanned aerial vehicles damaged from bird/wildlife strikes.

Construction activities can potentially expose personnel to health and safety hazards from heavy-equipment operation, hazardous materials and chemicals use, and working in noisy environments. Therefore, short-term, negligible-to-minor, adverse impacts on contractor health and safety would be anticipated as a result of proposed construction projects under the Proposed Action. To minimize health and safety risks, contractors would be required to use appropriate personal protective equipment and establish and maintain site-specific health and safety programs that follow all applicable Occupational Safety and Health Administration regulations for their employees. Additionally, all construction contractors at Grand Forks AFB would be required to follow ground safety regulations and worker's compensation programs to avoid posing any risks to workers or personnel on or off Base.

Air Quality

Emissions from the Proposed Action would primarily result from project activities associated with the following key actions: reconstruction of ground topography, regrading the airfield's West Ditch for drainage improvement, redesigning the drainage system, and replacing the perimeter fence. The highest annual emission rate from construction activities would be for PM₁₀ (93.782 tons per year), which would be below the insignificance indicator value. Impacts from earthwork projects, such as grading and trenching, would be primarily localized, with emissions occurring only during construction. Less-than-significant effects on air quality would be anticipated from implementing the Proposed Action. The Proposed Action would result in short-term, moderate, adverse impacts to air quality within Grand Forks AFB and surrounding environs.

No new stationary sources of air emissions would be anticipated under the Proposed Action. The addition of any new stationary sources in the future would need to comply with air quality permitting and operating requirements that apply to Grand Forks AFB.

Biological Resources

As part of the Proposed Action, the Base would cultivate airfield vegetation unattractive to wildlife such as a mown monoculture of grass without vertical habitat structure and minimal standing water. Vegetation height would be maintained between 7 and 14 inches. As a result, any grasslands within the project area would be regraded and replaced. Seed selection for the project area would include species adapted to the local area, deemed unattractive for wildlife, and that can thrive in the local ecotype withstanding repeated mowing to successfully meet DAFI compliance. The regrading and installation of drainage tile would replace the existing wetland vegetation in the project area with an herbaceous species that is adapted to drier conditions and periodic mowing. This would reduce the attractiveness of the area near the airfield.

As a result of the Proposed Action, existing grasslands habitat for common mammals and bird species would be reduced. Many bird species and larger mobile mammal species would likely relocate to other areas of similar habitat in the vicinity of Grand Forks AFB. Birds that are obligate wetland species would be displaced from the project area to other similar habitats in the region.

On 14 June 2023, the Air Force initiated Section 7 consultation under the ESA for the Proposed Action using the USFWS's Information for Planning and Consultation (IPaC) tool. Basic information concerning the location and nature of the projects included in the Proposed Action was input into IPaC to obtain an official species list from the USFWS. The list identifies threatened and endangered species and other protected species (e.g., migratory birds) with potential to be affected by the Proposed Action. No federally listed threatened or endangered species have been observed on Grand Forks AFB, nor does critical habitat exist within Grand Forks AFB. The Proposed Action would not adversely affect any federally threatened or endangered species or their habitat. The Air Force has determined the Proposed Action would have "no effect" on federally threatened or endangered species. Please note that the USFWS has not responded to requests to concur with the Air Force's "no effect" determination.

The quality of habitat available to migratory birds would be reduced by removal of wetland habitat and the replacement of existing grassland with a monocultural herbaceous species less attractive to birds. Migratory bird species, including the bobolink, black-billed cuckoo, Le Conte's sparrow, lark bunting, American bittern, dickcissel, black tern, red-headed woodpecker, chestnut-collared longspur, grasshopper sparrow, and Nelson's sparrow, would be less likely to occur within the project area. To the extent available, migratory birds may use similar habitat in the surrounding region.

Soil disturbance during project activities would create potential sites for establishment of invasive and noxious weed species. However, the Proposed Action would cultivate airfield vegetation unattractive to wildlife and maintain vegetation height between 7 and 14 inches. The planting and maintenance of that vegetation could aid in preventing the establishment of invasive species and noxious weeds by eliminating existing invasive species within the project area. Best Management Practices (BMPs), such as checking construction sites for presence of invasive plants and noxious weeds, would also be employed.

Water Resources

There are no surface waters located within the proposed project area. However, the Turtle River is located adjacent to the project area with parts of the project area draining to it through the Northwest Ditch and the West Ditch. While drainage maintenance and other improvements could be beneficial to regional surface waters, minor, adverse impacts to Turtle River would be expected due to runoff from construction activities and the filling of wetlands.

Under the Proposed Action, approximately 93 acres of wetlands (52.37 acres were determined by the USACE to be jurisdictional) would be filled and leveled to resolve standing water and reduce attractive habitat in the airfield and vicinity, resulting in a permanent adverse impact to affected wetlands. Wetland removal would decrease habitat, landscape diversity, and connectivity among aquatic resources. Common indirect impacts of wetland removal include influx of surface water and sediments or changes in local drainage patterns. Increases in soil erosion and sedimentation could impact the Turtle River.

The Proposed Action includes regrading the airfield's West Ditch (up to 14,000 linear feet) and conducting perimeter drainage maintenance. During construction, the Proposed Action would increase the risk of soil being eroded and transported to nearby water bodies during stormwater events. Impacts to surface waters from sedimentation and erosion would be minimized through the implementation of appropriate erosion and sediment control BMPs that would prevent sediment, debris, and other pollutants from entering the Turtle River directly via the stormwater conveyance system. BMPs utilized could include the installation of silt fences to reduce erosion from stormwater runoff and structural controls such as dikes to prevent accidental spills from reaching the environment.

Under the Proposed Action, activity for replacement of the perimeter fence would take place in several areas within the Turtle River 100-year floodplain. Although no digging or trenching would be required to install fence posts, there would be the potential for erosion and sedimentation to occur at the base of each post where it was driven into the ground. This would be managed with the implementation of erosion and sedimentation BMPs and adherence to applicable management plans, regulations, and permits. Adverse impacts to the floodplain due to the perimeter fence replacement would be short term and negligible.

Geology and Soils

The underlying geology of the area occupied by Grand Forks AFB would not change under the Proposed Action. No direct or indirect impacts to geology would be anticipated to occur with implementation of the Proposed Action.

The Proposed Action would involve ground topography reconstruction, including filling, clearing, grubbing, regrading (via heavy-equipment operation), landscaping, cultivating, and re-seeding up to 150 acres of the project area. Existing wetlands would be filled in, resulting in a leveling of the topography within the proposed project area. While reconstruction activities would alter the current topography within the project area, it is not anticipated that these activities would amount to large-scale alteration of current topography. Topography reconstruction activities would be limited to those necessary to maintain efficient drainage. Therefore, the Proposed Action would result in long-term, minor impacts to topography.

Ground-disturbing activities under the Proposed Action would disturb soils in the project area, primarily Gilby loam, Antler silty clay loam, Embden fine sandy loam, and Glyndon silt loam. The installation of drainage tiles, topography reconstruction, and regrading of the West Ditch would improve drainage conditions and lower the risk of runoff from those soil types as well as other soil types found in the proposed project area. Common indirect impacts of wetland removal include influx of surface water and sediments or changes in local drainage patterns. Increases in soil erosion and sedimentation resulting from implementation of the Proposed Action could impact the Turtle River.

Grand Forks AFB requires BMPs to be used during ground-disturbing activities to prevent soil erosion. BMPs used during project implementation could include, but would not be limited to, the prompt installation of sod and silt fences, post-construction soil stabilization measures, and any BMPs associated with required permits related to erosion and sedimentation prevention. With appropriate BMPs in place and adherence to all applicable permits, regulations, and management plans, impacts to soils would be short term and negligible.

Cultural Resources

No impacts to archaeological properties would occur under the Proposed Action. In the event of an unanticipated discovery of an archaeological resource during demolition or construction, ground-disturbing activities would be suspended, and a cultural resources meeting called to determine if an Unanticipated Discovery Plan would be developed and implemented.

No traditional cultural properties (TCPs), sacred sites, human remains, associated grave goods, unassociated grave goods, sacred objects, or objects of cultural patrimony have been identified or recovered on Grand Forks AFB. No impacts to TCPs would be anticipated to occur under the Proposed Action.

No eligible National Register of Historic Places-listed buildings are located within the proposed project area. Under the Proposed Action, no effects to architectural properties would be anticipated to occur.

Compliance with Section 106 of the NHPA and implementing regulations ([36 CFR Part 800](#)) was accomplished through the State Historic Preservation Office (SHPO). In a letter dated 15 December 2023, the State Historical Society of North Dakota concurred with Grand Forks AFB's determination of "No Historic Properties Affected."

Hazardous Materials and Wastes, Toxic Substances, and Contaminated Sites

The use of certain hazardous materials (HAZMAT) and wastes would be required during activities associated with the Proposed Action, such as petroleum fuel products used in equipment and machinery necessary for topography reconstruction. Construction contractors would be responsible for monitoring exposure to HAZMAT and hazardous wastes. Adherence to the Grand Forks AFB *Hazardous Waste Management Plan* would minimize impacts from the handling and disposal of hazardous substances and ensure compliance with state and federal HAZMAT regulations. Potential impacts from the accidental release of such products would be minimized by following response procedures specified in Grand Forks AFB's Spill, Prevention, Countermeasures, and Control Plan. Short-term, negligible impacts could occur due to the use of HAZMAT during activities associated with the Proposed Action.

Activities associated with the Proposed Action would not require the use of existing fuel storage facilities on Grand Forks AFB or the addition of new fuel storage facilities; therefore, no impacts to fuel storage would be anticipated to occur under the Proposed Action.

Although several Environmental Restoration Program (ERP) sites are located adjacent to the proposed project area, all activities associated with the Proposed Action would take place west of the ERP sites and would not result in disturbance to those locations. Therefore, no impacts to ERP sites would be anticipated to occur under the Proposed Action.

Implementation of the Proposed Action would not result in a change to the application of pesticides, fungicides, insecticides, and rodenticides at Grand Forks AFB. Herbicides would be used to assist in the replacement of existing grasslands with airfield vegetation unattractive to wildlife. With the establishment of new vegetation as part of the Proposed Action, broadleaf herbicides would continue to be used to manage weeds. Impacts to natural resources from herbicide applications include potential impacts to non-target species, runoff from application sites, and unintentional releases to the environment by spills and application errors of chemicals. All pesticide-related activities would continue to be monitored under Grand Forks AFB's *Integrated Pest Management Plan*. Pesticide usage would increase in the short term but would return to normal levels in the long term under the Proposed Action.

Infrastructure, including Transportation and Utilities

Since no new personnel are included as part of the Proposed Action, long-term vehicular traffic would not increase. During the construction phase of the proposed activities, increased truck traffic and construction workers commuting to the Installation would be expected to cause temporary increases in demand and increased congestion on local roads. At project sites, temporary lane closures would be expected during construction activities. However, construction-related traffic would most likely occur on the western side of the Base, away from daily traffic in the cantonment. The transportation system is in good condition and meets current and future mission needs. Overall, the Proposed Action would not impact the transportation systems on the Installation.

No impacts to the communications system, the potable water supply, sewage, or solid waste management would be expected.

Cumulative Impacts

The EA considered cumulative impacts that could result from potential impacts from the Proposed Action when considered in conjunction with other past, present, or reasonably foreseeable environmental trends and planned actions at Grand Forks AFB.

Under the Proposed Action, impacts to surface waters, wetlands, stormwater, and floodplains would be anticipated. Much of the surrounding land that was historically grasslands and wetlands has previously been converted to agricultural land. It is unknown what other present or future conversion of grasslands or wetlands may occur in the region. The Air Force would adhere to all terms required under Section 404/401 permits for the Proposed Action and would mitigate unavoidable impacts to wetlands where required under the *Clean Water Act*. When considered in conjunction with past loss of wetland and grassland habitat and any unknown present or future loss of similar habitat in the region, the Proposed Action would have moderate cumulative effects to water and biological resources following the implementation of BMPs and mitigation efforts.

Mitigation

The EA analysis concluded that the Proposed Action would result in significant environmental impacts; therefore, mitigation measures are required. BMPs are described and recommended in the EA where applicable. A Project Mitigation Plan has been prepared for the Proposed Action and identified two mitigation banks in Grand Forks County that could be used for in-lieu fee program credits; these mitigation banks include the Mekinock Site, a private commercial mitigation bank, and the Thompson Site, which is administered by Ducks Unlimited, a private nonprofit organization. Grand Forks AFB would submit a more detailed compensatory mitigation plan following the completion of project design along with the Section 404 permit application as required. Grand Forks AFB would take all necessary actions to remain in compliance with the *Clean Water Act*, and US Army Corps of Engineers and State of North Dakota wetland regulations. With strict adherence to 32 CFR §§ 989.22(c) and (d), 32 CFR § 989.14(j)(4), and all applicable permits and regulations, use of appropriate BMPs, and implementation of compensatory mitigation actions, adverse impacts to wetlands resulting from the Proposed Action would be long term and moderate.

Conclusion

Finding of No Practicable Alternative. Pursuant to Executive Order 11988, *Floodplain Management* (amended by Executive Order 13690), and Executive Order 11990, *Protection of Wetlands*, and considering all supporting information, the Air Force finds that there is no practicable alternative to the Proposed Action being located in floodplains or wetlands, as discussed in the attached EA. Grand Forks AFB needs to remove standing water, improve drainage, create unattractive habitat for wildlife, replace the western perimeter fence, control vegetation heights. In order to bring the project area into compliance with DAFI 91-202 and DAFI 91-212, Grand Forks AFB needs to reduce standing water and improve drainage in order to access and maintain airfield grounds; therefore, no practicable alternatives to project activities in the floodplain and the removal of wetlands exist.

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of NEPA, CEQ regulations, and 32 CFR Part 989, and which is hereby incorporated by reference, I have determined that the Proposed Action would not have a significant impact on the quality of the human or natural environment. Accordingly, an Environmental Impact Statement will not be prepared. This decision was made after considering all submitted information, including a review of agency comments submitted during the 30-day public comment period, and considering a full range of practical alternatives that meet project requirements and are within the legal authority of the US Air Force.

ANDREW E. DEROSA, Colonel USAF
Chief, Civil Engineer Division
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DATE