

F – Environmental Review



Introduction.

The purpose of this chapter is to present a high-level overview and screening of the potential environmental considerations of the Terminal Area Conceptual Development Plan for Ketchikan International Airport (KTN or Airport). The following narrative provides preliminary information concerning environmental resources in an effort to define and identify critical resources that would need to be addressed in the preparation of environmental documentation for the proposed Airport development identified in the development program.

Alternatives involving the future configuration of the terminal area and terminal building have been reviewed in previous chapters. The primary changes proposed to the existing terminal area layout include the phased expansion of the terminal building, the expansion of the aircraft parking apron, the relocation of the seaplane pullout dock, a new vehicle parking area and a new airlines maintenance/cargo facility.

Existing Conditions

The Ketchikan Gateway Borough is located in Southeast Alaska in a maritime climate zone. Much of Southeast Alaska is covered by the Tongass National Forest and surrounded by the Inside Passage, an area known for its scenic, rugged coastline with steep terrain and forested islands. The Airport is located on Gravina Island, across the Tongass Narrows from Ketchikan. The Tongass Narrows waterway

Terminal Area Plan : F—Environmental Review

is part of the Alaska Marine Highway and is used by recreational vessels, passenger vessels (including large cruise ships), commercial fishing vessels, commercial freight barges, commercial tank barges, kayaks, floatplanes, charter vessels, and passenger ferries.

The climate of the Ketchikan Gateway Borough is characterized as a mild maritime or oceanic climate, that frequently has heavy cloud cover, high humidity and abundant rainfall averaging 153 inches per year, while the average snowfall is about 40 inches per year. The average annual maximum temperature is 52° F, and the average annual minimum temperature is 39° F.

The Borough has authority over the zoning and development codes that help guide development on Gravina Island. Much of Gravina Island is undeveloped and owned by the United States Forest Service (USFS). The area immediately south and west of the Airport has an Airport Reserve designation that is intended for future airport uses. There is an Airport Development zone beyond the Airport Reserve zone, which is intended for other airport facilities such as parking facilities and airport related businesses. The area north of the Airport Development zone was formerly a timber processing plant is designated as heavy industrial. There are also two residential zones, one on the northern side of the island and one at Clam Cove south of the Airport.

There are limited surface transportation facilities on the island. Vehicle access to the Airport is provided by the Airport ferry. Passenger terminal access is provided by the Airport Access Road from the ferry dock. The Airport Access Road also connects to Lewis Reef Road and the Gravina Island Highway.

Future Conditions

The following future conditions discussion is based on the assumption that all the projects included in the proposed terminal area 20-year capital improvement program are implemented. An analysis of the potential environmental impacts of implementing these projects allows for the identification of any potentially significant environmental concerns and also allows for the identification of the level of documentation that may be required to receive environmental clearance for each project. It is anticipated that the majority of the terminal area projects can be environmentally cleared under a Categorical Exclusion Form. However, several development projects identified in the development program may result in potential impacts to several resource categories and may require the preparation of an Environmental Assessment (EA). Specifically, it's assumed that potential impacts related to the North Airport Service Road Relocation and the Vehicle Parking Expansion, which are interrelated projects, could be evaluated in a single EA.¹

Air Quality

The proposed development outlined in this Terminal Area Plan is not expected to have a significant impact on the long-term quality of the air in the vicinity of the Airport. According to the U.S. Environmental Protection Agency (EPA), Ketchikan Gateway Borough is in attainment area with federal health-based air quality standards known as the National Ambient Air Quality Standards (NAAQS). A

¹ Note that the Seaplane Pullout Dock Relocation/Replacement project (A1) is a currently planned project, and the replacement location is located outside of the terminal area. Therefore, this project is not addressed in this chapter.

Terminal Area Plan : F—Environmental Review

non-attainment area is defined as a locality where air pollution levels persistently exceed the NAAQS. The EPA normally makes this designation only after air quality standards have been exceeded for several consecutive years. Furthermore, a conformity analysis conducted to ensure actions included in a non-attainment or maintenance area “conforms” to any relevant State Implementation Plan (SIP) will not be required because Ketchikan Gateway Borough is not considered a non-attainment or maintenance area.

Short-term air quality impacts may be expected during construction of the proposed projects from heavy equipment pollutant emissions, fugitive dusts resulting from cut and fill activities, and the operation of portable concrete batch plants. Compliance with all applicable local, state, and federal air quality regulations and permitting requirements will be the responsibility of construction contractors.

Biological Resources

The *Endangered Species Act*, as Amended, requires each federal agency to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species. According to the U.S. Department of the Interior Fish and Wildlife Service (USFWS), Information for Planning and Consultation (IPaC) website, there no known occurrences of federal threatened, endangered, and candidate species or migratory birds of conservation concern located within the Ketchikan Gateway Borough.²

Section 305 of the Magnuson-Stevens Act requires federal agencies to identify and conserve essential fish habitat (EFH) for federally managed fish species. EFH is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” According to the National Marine Fisheries Service (NMFS), the Tongass Narrows is identified as EFH for five pacific salmon species and various ground fish.³ Projects that involve fill into the Narrows could result in direct habitat loss as well as indirect effects to physical processes that shape aquatic habitats and the species that live there. An EFH assessment could be required for the North Airport Service Road Relocation and the Vehicle Parking Expansion development projects.

Marine mammals are protected under the Marine Mammal Protection Act. The 2017 environmental documentation related to the Gravina Access Project notes that eight species of marine animals have been documented in the Tongass Narrows east of the Airport: harbor seals, Steller sea lions, humpback whales, killer whales, Dall’s porpoises, Pacific white-sided dolphins, minke whales, and harbor porpoises.⁴ A Biological Assessment for some or all of these species may be required for the North Airport Service Road Relocation and the Vehicle Parking Expansion development projects. Placing concrete, rock, and other fill materials or removing materials in intertidal and subtidal areas could in

² U.S. Fish & Wildlife Service, 2020. Information for Planning and Consultation. Accessed June 20, 2020. Available at: <https://ecos.fws.gov/ipac/location/index>.

³ National Marine Fisheries Service, 2019. Alaska Essential Fish Habitat Mapper. Accessed June 20, 2020. Available at: <https://alaskafisheries.noaa.gov/portal/apps/webappviewer/index.html?id=bf2254ed51f444a8a16c564add54250>

⁴ Federal Highway Administration (FHWA) and the Department of Transportation & Public Facilities (DOT&PF), 2017. Gravina Access Project Final SEIS, Chapter 4 Environmental Consequences, p 4-57. Accessed June 20, 2020. Available at: http://dot.alaska.gov/sereg/projects/gravina_access/assets/FSEIS_6-2017/12-Chap4_EnvConseq_red.pdf

Terminal Area Plan : F—Environmental Review

long-term effects by eliminating small percentages habitat. The North Airport Service Road Relocation and the Vehicle Parking Expansion may result in some loss of marine mammal habitat; however, it's unlikely that any resulting habitat loss would be substantial in nature. In-water construction activities routine maintenance associated with the North Airport Service Road Relocation and the Vehicle Parking Expansion would likely result in temporary audible impacts to marine mammals. Marine mammal habitat and food sources are unlikely to have substantial long-term impacts.

Coordination with the USFWS, NMFS, and Alaska Department of Fish and Game (ADF&G) may be necessary to determine whether any major development project actions are likely to jeopardize the continued existence of ESA-listed species and marine mammals, or would result in the destruction or adverse modification of federally designated critical habitat. Best Management Practices (BMPs) should be incorporated into development projects to mitigate temporary construction impacts, protect water quality, and minimize effects related to runoff.

Coastal Zone Management and Wild and Scenic Rivers

In 2011, Alaska chose to discontinue the Coastal Management Program, which was developed under the Coastal Zone Management Act of 1972. However, under the *Ketchikan Coastal Management Plan* (1978), the Borough of Ketchikan established enforceable coastal development (CD) policies that provide guidelines and requirements for developing along the waterfront. The North Airport Service Road Relocation and the Vehicle Parking Expansion projects will need to be designed to comply with the policies outlined in this plan.

According to a listing of Wild and Scenic Rivers compiled and managed by the USACE, the Bureau of Land Management (BLM), the National Park Service (NPS), the U.S. Forest Service (USFS), and the U.S. Fish and Wildlife Service (USFWS), there are no wild and scenic rivers located within the vicinity of KTN. Therefore, there will not be any impacts to a nationally significant river resource as a result of the proposed development within the Airport's terminal area.

Noise and Noise Compatible Land Use

The proposed terminal area projects are not anticipated to have an impact on the number or type of aircraft operations occurring at KTN over the 20-year planning period. An aircraft noise analysis will likely not be required prior to implementation of any of these projects. The KTN noise contours also do not encompass any noise sensitive land use such as residential, schools, hospitals, nursing home and churches.

Natural Resources and Energy Supply

The proposed development outlined in this Terminal Area Plan is not expected to have a significant impact on natural resources and energy supply in the vicinity of the Airport.

Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Socioeconomics. The potential effects of proposed airport projects can extend to nearby residents and communities to cause direct or indirect socioeconomic impacts. The principal social impacts that should

Terminal Area Plan : F—Environmental Review

be considered during project analyses include those associated with relocation or other community disruption, transportation, planned development, and employment. In some cases, the effects of proposed projects can extend beyond current Airport boundaries to cause the relocation of residents or businesses, disrupt an established community, affect transportation patterns, or conflict with off-site development plans or land uses. Project implementation may also affect employment by creating temporary or permanent jobs associated with Airport development or by relocating jobs to another location.

All proposed development projects, with the exception of the proposed North Airport Service Road Relocation and the Vehicle Parking Expansion will occur within the Airport boundary. As such, none of the proposed development projects will result in the relocation of residents or businesses or conflict with off-site development land and land uses.

Construction activities related to the North Airport Service Road Relocation and the Vehicle Parking Expansion could potentially result in temporary effects to residents and businesses near the Airport. Potential temporary construction effects could include noise, dust or light emissions from construction activities, or could be associated with changes to surface traffic. These proposed development projects will be evaluated in a subsequent NEPA evaluation to identify the potential to result in temporary or permanent socioeconomic effects.

Environmental Justice. Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. None of the proposed development projects are likely to disproportionately affect minority or low-income populations in the Borough.

Children’s Environmental Health and Safety Risks. Under NEPA, sponsors and federal agencies must consider environmental health risks and safety risks that may disproportionately affect children and ensure that policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. Children’s Health and Safety Risks are generally risks that would be attributable to products or substances children are likely to encounter or ingest through air, food, drinking water, recreational waters, soil, or other projects that children might use or to which they might be exposed.

Given the isolated location of the Airport on Gravina Island, there are no residential structures, schools, churches, hospitals, or assisted living facilities present within 1-mile of the Airport. No impacts to Children’s Environmental Health and Safety Risks are anticipated with any of the proposed development projects.

Terminal Area Plan : F—Environmental Review

Water Resources

Under Section 10 of the Rivers and Harbors Act of 1899, approval by the United States Army Corps of Engineers (USACE) is required prior to any work in, over or under navigable waters of the United States, or which affects the course, location, condition or capacity of such waters. Since the Tongass Narrows is a navigable waterway, this would be required for Airport improvement projects that involve construction of any piers, ramps, floats, and cable or pipeline crossings; dredging or disposal of dredged material; and excavation, fill or other modifications to into the Narrows. USACE will be required for the North Airport Service Road Relocation and the Vehicle Parking Expansion development projects. National Pollutant Discharge Elimination System (NPDES) construction permits will be needed for projects that include new ground disturbance or changes in impervious surface.

Also, Section 404 of the Clean Water Act requires permit authorization to discharge dredged or fill material into the waters of the United States, including wetlands. Section 404 permitting will be required for the North Airport Service Road Relocation and the Vehicle Parking Expansion projects, as they involve discharge fill or dredged material into the Tongass Narrows, as well as the placement of riprap and road fills.

Prior to completing any projects at the Airport where there is potential for wetlands impacts, coordination with the USACE is recommended to confirm whether wetland features are present in project areas and to classify any such wetland features. If wetlands will be disturbed as a result of a project, the requisite permits would need to be obtained. The National Wetlands Inventory (NWI) classifies most of the developed area of the Airport as uplands, which is a non-wetland area. The shoreline along the Tongass Narrows and the Narrows itself are classified as and estuarine and marine wetlands, which consist of deepwater tidal habitats and adjacent tidal wetlands. The North Airport Service Road Relocation and the Vehicle Parking Expansion projects will result in some loss of these wetlands. These areas will need to be surveyed and mapped prior to construction of these projects to determine the extent of wetlands that would be impacted, and some form of mitigation will likely be required.

The Airport is located within the Tongass Narrows-Frontal Clarence Strait watershed, which has been designated as a priority watershed by the Alaska Department of Environmental Conservation (ADEC).

Farmland

There are no prime or unique farmlands in Alaska because the soil temperatures in the state do not meet the criteria established by congress. Furthermore, no farmlands of statewide importance have been designated in Alaska and there are no farmlands of local importance in the Ketchikan area.

Visual Effects (Light Emissions/Visual Resources)

Airfield lighting and rotating beacons are the main sources of light emissions emanating from an airport. Lighting required for construction activities could result in temporary light emissions, however no significant lighting impacts are expected from any of the proposed development projects.

Terminal Area Plan : F—Environmental Review

Visual effects refer to the extent to which a project would emit light that creates annoyance or interferes with other activities, contrasts with or detracts from visual resources, or affects the visual character of the existing environment. Per NEPA regulations, proposed Terminal Area Plan projects will require evaluation of potential impacts on visual resources associated with new structures, roadways, and/or aviation facilities. Proposed development in the Terminal Area Plan is not anticipated to significantly change the lighting or visual environment at the Ketchikan International Airport.

Summary

On a project-specific basis, each improvement specified in this Terminal Area Plan that receives federal funding or requires a change to the Airport Layout Plan, will require environmental clearance prior to implementation. The environmental documentation required to receive the clearance differs with the complexity of the project and the anticipated level of environmental impacts. This documentation can range from a Categorical Exclusion for simple projects to a full Environmental Impact Statement for projects with potentially significant impacts. The purpose of this Environmental Review chapter is to attempt to document and potentially uncover any significant environmental concerns that might greatly influence the ability to implement one or more of the recommended improvement projects and determine the level of environmental documentation required.

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