

**ENVIRONMENTAL ASSESSMENT
FOR THE
IMPROVEMENTS TO THE NATIONAL PARK SERVICE FIFTH
AVENUE AND MISSION STREET PROPERTY
IN KOTZEBUE, ALASKA**

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Prepared By

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National Park Service
Western Arctic National Parklands

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1.0 Purpose and Need

The National Park Service (NPS) is proposing additional development of a NPS owned property located at the corner of Fifth Avenue and Mission Street in Kotzebue, Alaska (Figure 1). The 2.61-acre site currently contains a shop, warehouse, bunkhouse, two fuel storage tanks, and ten conexes. The additional proposed development would include moving the maintenance shop near the warehouse, moving the bunkhouse east approximately 50 feet from Fifth Avenue, adding a sewage lift station, building a garage near the warehouse, adding two or three single family housing units, and adding two fourplex housing units.

The purpose of the project would be to design and construct an employee housing and maintenance facility on the Fifth and Mission property to meet current and future needs for the Western Arctic National Parklands (WEAR). The following needs are not being adequately met by existing facilities on the site.

- Western Arctic National Parklands (WEAR) is not able to provide suitable housing for the Kotzebue staff.
- There is no heated garage for vehicle maintenance.
- The current sanitary system at the Fifth Avenue and Mission Street property does not function adequately to cope with the facilities currently on the site.



Figure 1: View of the Proposed Site

In the Kotzebue housing market there are few homes or apartments available for sale, lease or rental. Houses that meet basic building codes are the exception and almost never come on the market. There are few lots with clear title available for new construction. There are no local contractors in Kotzebue who construct housing, and the cost of bringing in a contractor and building in the arctic is extremely expensive, generally beyond affordability for employees at the current NPS wage scales. The NPS has had difficulty recruiting and filling essential professional positions in Kotzebue and Nome due to the housing shortage. Federal government salaries are not equivalent to most local wages, and it is difficult to retain lower graded local hire employees who must pay high costs for all essential goods.

At the present time the NPS leases four homes from the local housing market at rates that are 300% higher than the rates established in Quarters Management Information System (QMIS) for housing in similar character. Safe, comfortable, efficient and affordable housing for

employees is necessary for the NPS to achieve its mission goals, particularly in Arctic communities where darkness and extreme winter temperatures force people to spend a great deal of time indoors. It is the goal of WEAR to improve inadequate housing through rehabilitation or replacement, and to effectively maintain adequate housing in order to help recruit and retain a professional, positive and productive staff.

The existing sewage system for the housing and maintenance infrastructure at the Fifth Avenue and Mission Street site has failed. Frost has jacked the system to a point where gravity flows are no longer possible, leaving sewage in the lines, freezing and reducing the capacity. The park has installed a temporary holding tank for the bunkhouse, which is pumped as needed, however there are weekly occasions where the tank overflows, spilling raw sewage onto the ground, adversely

effecting the area and violating local & state health codes. The system is a serious health and safety issue for NPS housing residents and park maintenance staff, as well as the public who occasionally walk through the area.

Currently there is no NPS available heated garage space for maintenance of the WEAR vehicle fleet. The vehicle fleet includes approximately eight trucks, ten snowmobiles, six four-wheelers and three boats. Due to the long cold winters adequate vehicle maintenance cannot be performed without a heated space to work. In addition, current WEAR maintenance facilities cannot provide space for a welding station and a heated battery storage space. All of the stated needs will be addressed with the construction of the proposed maintenance facility.

1.1 Background:

Western Arctic National Parklands (WEAR) is comprised of Bering Land Bridge National Preserve, Cape Krusenstern National Monument, Kobuk Valley National Park, and Noatak National Preserve, totaling over 11.7 million acres. These areas were established in 1978 by presidential proclamation and in 1980 by congressional action to protect the cultural values, including fish and wildlife, boreal forest, wide expanses of tundra and large wild river systems.

Kotzebue is situated on a low spit at the northern tip of Baldwin Peninsula, in Kotzebue Sound. The spit is formed by a series of beach ridges. The property is located in central Kotzebue and has been partially developed at the junction of Fifth Avenue and Mission Street. Current maintenance facilities consist of the NPS Maintenance Shop and the warehouse, both are located on the property. The developed areas have been scraped and filled over the years. A gravel roadway, dating to at least the early 1950s, runs along and within the western edge of the property. West of the property and roadway, the Friends Cemetery is located on the crest of a prominent beach ridge. The central portion of the property is an undeveloped, but disturbed wetlands area dominated by willow brush.

The 1986 General Management Plans (GMP) for the four WEAR units called for the construction of several new NPS facilities in Kotzebue, Alaska. They included a visitor contact facility, a museum, administrative offices, equipment storage, maintenance facilities and housing. In May 2002 WEAR issued the Western Arctic National Parklands Housing Management Plan. The Housing Plan details current housing market conditions, current WEAR housing deficits and projected needs. The Housing Plan analysis details a current deficit of six housing units and projects a deficit of eight housing units by 2004 in Kotzebue. This EA analyzes the NPS preferred alternative and the no-action alternative and related impacts. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and regulations of the Council of Environmental Quality (CEQ, 40 CFR 1508.9).

The Fifth Avenue and Mission Street property was purchased in fiscal year 1994 with the identified purpose of building a maintenance facility and for other purposes at that time yet defined (Bob Gerhard Memorandum to the WEAR files, L76, December 28, 1993).

1.2 Issues/Impact Topics:

The issues selected for impact analysis were identified based on agency and public concerns, regulatory and planning requirements.

Cultural Resources. Since the Fifth Avenue and Mission Street project location is within the Kotzebue Archeological District and previous archeological investigations in the general vicinity have found sites of significance, any renovation and/or construction could affect sites and objects of archeological significance. However, initial testing at the site during 2002 found no cultural resources eligible for the National Register of Historic Places. While some artifacts were recovered from the test trenches, most were found within a clearly disturbed context thus minimizing their archeological value.

Land Use & Land Use Plans. Development of the Fifth Avenue and Mission Street property may minimally affect existing land uses. However, such uses fall within those prescribed by the City of Kotzebue-Comprehensive Plan and would be consistent with the General Management Plans as outlined by the 1986 GMP and the 2002 WEAR Housing Management Plan.

National Park Operations. Renovation and improvements on the Fifth and Mission property would directly affect management and operations of Western Arctic National Parklands with respect to maintenance operations and housing requirements.

Vegetation, Including Wetlands. Renovation and construction of the Fifth and Mission property would impact vegetation, including approximately 0.75 acres of wetlands, due to the excavation and potential loss of open ground.

PERMIT NECESSARY TO IMPLEMENT THE PROJECT

Table 1 outlines the permit needed to complete the improvements to the Fifth Avenue and Mission Street site.

Table 1: Environmental Permit for Project Completion

Required Permit/Approval	Regulatory Agency	Authority	Description
U.S. ACE Nationwide #6 Permit: Survey Activities	U.S. Army Corps of Engineers (ACE)	Section 404, Federal Water Pollution Control Act of 1972, as amended in 1977 (Clean Water Act)	The U.S. ACE must authorize the discharge of fill in U.S. waters. A U.S. ACE Nationwide Permit #6 applies.

1.3 Issues Dismissed from Further Consideration:

Fish and Wildlife. The proposed site for the Fifth and Mission improvement is within the developed area of Kotzebue and does not support fish or wildlife populations (including threatened or endangered species). It may provide minimal seasonal habitat for birds and rodents.

Floodplains. The property is within Flood Zone B as shown on the National Flood Insurance Program Flood Insurance Rate Map, Panel 11 of 30. Zone B is described as, "Areas between limits of the 100-year flood and 500-year flood 'or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile' or areas protected by levees from the base flood" (ASCG, 2000). Under NPS guidelines building construction is allowable within a 500-year floodplain designation.

Minority or Low-Income Populations or Communities. Executive Order 12898 requires Federal agencies to incorporate environmental justice into their missions by identifying and addressing high and adverse human health or environmental effects in their programs and policies on minorities and low-income populations and communities. The NPS preferred alternative would not result in adverse impacts on any minority or low-income populations or communities and thus complies with this order.

Resources and Values of Western Arctic Parklands. Development of improvements to the Fifth and Mission property would have no adverse effect on the resources and values of Western Arctic National Parklands. The improvements would be located outside the boundaries of these units and would, in fact, help to promote the park's mission and values through improved housing for employees and improved maintenance facilities.

Subsistence. The improvements on the Fifth and Mission property would have no effect on subsistence resources because the proposed site, located in the village of Kotzebue, is not used for subsistence activities (see Appendix A for the ANILCA Section 810 subsistence evaluation).

1.4 Summary of Public Involvement:

The City of Kotzebue has been contacted about the proposed improvements to the Fifth Avenue and Mission Street property and they support the improvements on the site. In addition, the Northwest Arctic Borough, Kotzebue IRA, and Maniilaq Association have been briefed on the development and allowed to comment on the proposal while the EA was being developed. No comments or concerns with the improvements were brought to the attention of the NPS.

2.0 Description of Alternatives

2.1 Alternative 1: No Action

Under the no-action alternative the National Park Service (NPS) would continue to use its existing facilities in the City of Kotzebue. There would be no expansion of existing facilities. The Fifth Avenue and Mission Street property being considered for additional development would remain in its present state and maintain its present uses.

2.2 Alternative 2: Renovate and Construct on Fifth Avenue and Mission Property in Kotzebue, Alaska (NPS Preferred Alternative)

Improvements and renovations would include building (or moving in prefabricated) two or three single family housing units, building two fourplex units, building a maintenance shop garage, relocate the existing bunkhouse away from Mission Street, and relocate the current maintenance shop near the warehouse and building a new maintenance shop garage (Figure 2).

Each of the three single-family houses would be constructed on a 0.15-acre area of clean, compacted and leveled fill. The structures would be approximately 1,400 to 2,000 square feet and be on a piling system. They would be two or three bedroom and two bathrooms. The houses will be located on the west end of the site, north and east of the current shop location.

Each of the fourplex units would contain four three-bedroom, 1.5 bath, approximately 1,500 square foot housing units, built to meet the arctic conditions. Each of the fourplex units would have approximately 3,000 square foot layout on the site and will be constructed on a 0.25-acre area of clean compacted and leveled fill. One of the fourplex units would be built in the current shop location. The additional fourplex unit would be located to the east of the bunkhouse. The fourplex units would be on a piling system.

The 32 foot x 80 foot wood framed maintenance shop would be moved to the west of the warehouse from the current location of the corner of Fifth Street and Mission Street. The building would be placed on a 0.25-acre area of clean, compacted and leveled fill with a piling system.

The new 1,500 square foot maintenance shop garage would be of wood framing with a slab-on-grade foundation. The slab-on-grade is on a gravel pad with insulation and thermosyphons. The walls would be 2" x 6" wood construction and insulated with batt insulation and metal siding on the exterior with ½ " wood sheathing on the interior. The roof construction is wood framed with metal roofing.

The new septic system would consist of a lift station located west of the bunkhouse with sewage piping to all housing units, transplanted maintenance shop and the new maintenance shop garage.

The existing driveway system would be enhanced during the improvements to the site. It is estimated that 2,000 cubic yards of clean gravel fill will be needed for the driveways and housing/maintenance shop pads.

Activities associated with the proposed improvements would begin in the summer of 2004 with the construction or moving-in of the two or three prefabrication homes. Additionally in late 2004 the NPS would relocate the bunkhouse and maintenance shop. Construction of the sewage lift station and moving of the maintenance shop would be scheduled to begin in the fall of 2004. The first fourplex would be constructed in 2005-2006 and the second fourplex construction would be constructed in 2006-2007.

All construction would comply with local and federal building code requirements including those pertaining to flood hazards. Emergency warning and evacuation procedures would be maintained.

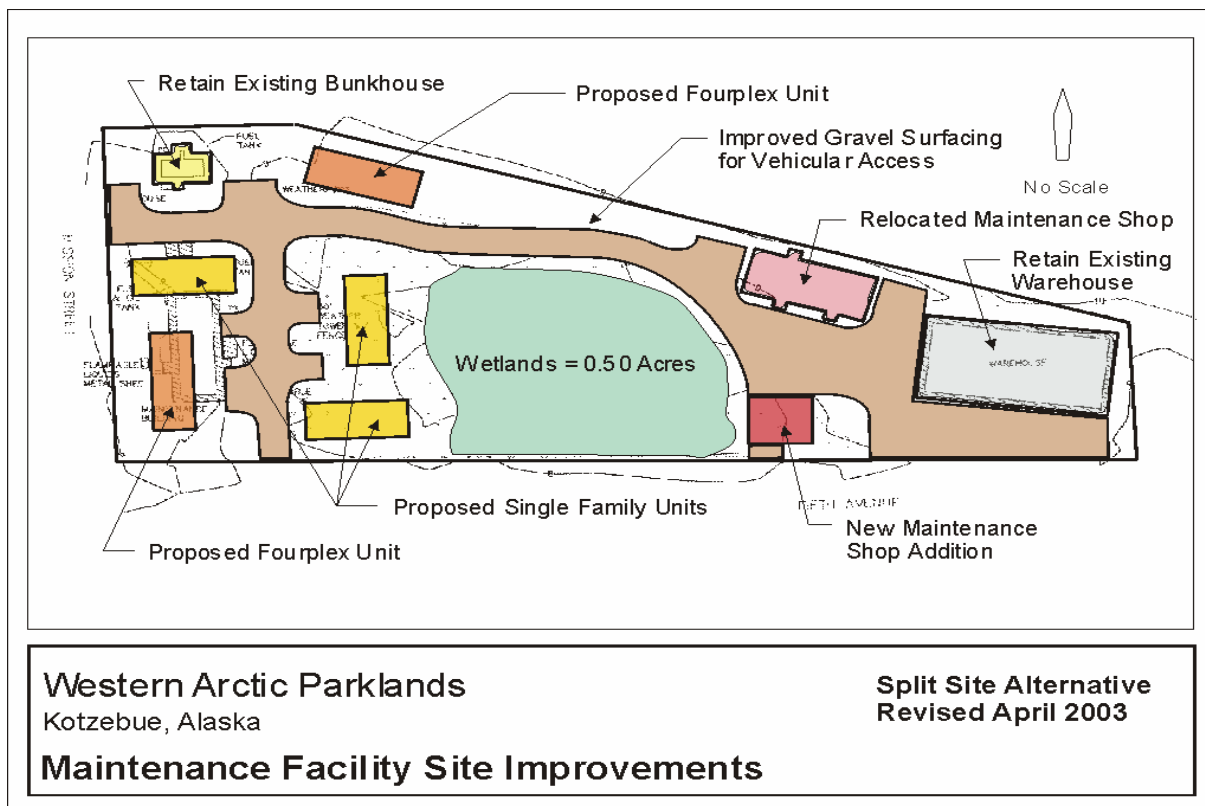


Figure 2: Proposed Improvements to the NPS Fifth Avenue and Mission Street Site

2.3 Environmentally Preferred Alternative

In accordance with Director's Order-12, *Conservation Planning, Environmental Impact Analysis, and Decision-making*, the NPS is required to identify the "environmentally preferred alternative" in all environmental documents, including EAs. The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act (NEPA) of 1969, which is guided by the Council on Environmental Quality (CEQ).

Generally, these criteria mean the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (Federal Register, 1981).

The "No Action Alternative" is the environmentally preferred alternative, because no further excavation or vegetation clearing would occur under this alternative for the improvements to the Fifth Avenue and Mission Street site thus causing the least damage to the biological and physical environment.

2.4 Mitigating Measures

Contaminants and Hazardous Substances. Through groundbreaking activities (earthmoving, major landscaping, and geophysical or subsurface studies) the site would be visually inspected for evidence of any soil and/or groundwater contamination by pollutants, contaminants or hazardous substances. If contamination were encountered, appropriate notification and remedial action would be taken to ensure compliance with all applicable federal, state, and local government environmental statutes and regulations.

Vegetation. Landscaping would incorporate native plants & grasses onto the site.

Cultural Resources. The proposed site falls within the Kotzebue Archeological District. No historic structures are contained on the site. Additionally, archaeological investigations have revealed sites and objects of significance within the general vicinity. While preliminary testing of the site did not yield much of significance the proposed project would proceed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) as well as with consideration for all Native American Graves Protection and Repatriation Act (NAGPRA) regulations. If archeological resources are inadvertently encountered during any project on the site, contactors will take necessary steps to protect them and notify the Park Archeologist, at WEAR.

Land Use and Building Codes. The proposed development would meet all City of Kotzebue Planning and Land Use requirements. Parking for the housing units would meet Kotzebue parking guidelines for office and public assembly buildings.

2.5 Summary and Comparison of Effects of Alternatives

Table 1 presents a summary and comparison of potential effects for Alternatives 1 and 2.

Table 1: Summary and Comparison of Effects for Alternatives 1 and 2

Impact Topic	Alternative 1: No-Action	Alternative 2: Improvements to the Fifth Avenue and Mission Street NPS Property
Cultural Resources	The continued use of NPS facilities would have no effect on cultural resources.	Property improvements would have minimal adverse effects on cultural resources.
Land Use and Land-Use Plans	The continued use of NPS facilities would not change existing land uses & would be consistent with Kotzebue planning & zoning.	Property improvements would have minimal adverse effects and would be consistent with Kotzebue planning & zoning & would not significantly change current land use.
National Park Operations	The current NPS facilities would continue to be inadequate for current and future needs.	Property improvements would have minimal adverse effects & would improve operations by providing expanded housing & improving maintenance facilities adequate.
Vegetation including Wetlands	The continued use of NPS facilities would have no effect on vegetation including wetlands.	0.71 acres of COE jurisdictional wetlands would be lost as part of the improvements.

3.0 Affected Environment

3.1 Land and Structures

- The property and buildings being proposed for renovation and/or construction consists of a 2.61- acre parcel located at the corner of 5th Avenue and Mission Street in Kotzebue, Alaska (Lot 1A, Block 11, U.S. Survey 2082) (Figure 3). The existing major structures on the site include: A 7000 sq foot cold storage warehouse located at the east end of the property

- The “Dairy Queen” building, currently the NPS Maintenance Shop, located at the west end of the property
- An 800 sq foot bunkhouse located northwest corner of the NPS shop.
- Two 1,000-gallon fuel tanks located east of the NPS shop.
- Ten movable conexes, two located north of the current shop and eight located south of the warehouse

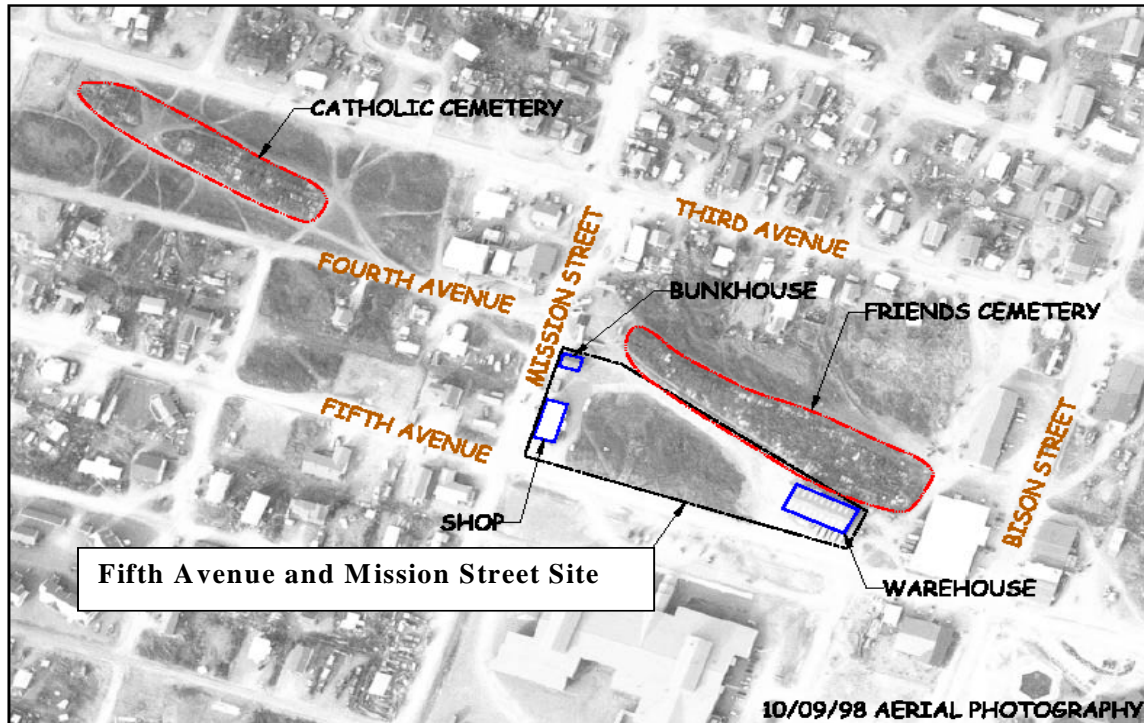


Figure 3: Current situation for the NPS Fifth Avenue and Mission Street site

The Fifth Avenue and Mission Street site is zoned a General Use District. The General Use District allows for activities like the NPS proposed improvements on the Fifth Avenue and Mission site and prohibits industrial uses and other uses that would be a nuisance to nearby residences.

Hazardous waste generation on the subject property includes small quantities of household products such as used oils and cleaning products. Wastes associated with equipment and vehicle maintenance (anti-freeze, batteries, solvents, used oil, fuel, etc.) have been generated on-site. Two pole-mounted transformers are located on the property; however, the owner of the transformers, the Kotzebue Electric Association, reported that the transformers do not contain polychlorinated biphenyls (PCBs). All hazardous material are handled and maintained by trained NPS staff in accordance with all applicable state and federal laws.

3.2 Cultural Resources

The project area is within the boundary of the Kotzebue Archaeological District, which has been determined eligible for the National Register of Historic Places. An Archeological evaluation done at the site during July and August of 2002, no cultural material of significance was found or eligible for the National Register of Historic Places. While a few artifacts were recovered, in most cases, they were found in a clearly disturbed context.

The stratigraphy of tested areas revealed the roadway was cut into the eastern shoulder of the beach ridge on which the Friends' Church cemetery (Figure 3) is located. The stratigraphic trenches on the eastern side of the roadway had remnants of organic matter mixed in the disturbed fill, which was overlain by additional fill material. This stratigraphy indicates that the road was initially constructed by "cut-and-fill" and later additional gravel fill was applied to the roadway. To confirm this interpretation, permission was obtained from David Miller of the Friends' Church to expose stratigraphic cuts along the cemetery side of the roadway. These two cuts, placed at the edge of the cemetery, revealed intact beach ridge surface organics underlain by water sorted beach gravels. The cuts confirmed our interpretation of the stratigraphy revealed in the trenches. The shovel tests, except where disturbed by development and/or heavy equipment traffic, generally revealed peat deposits overlying sandy gravels. The test cuts, trenches and shovel tests were all backfilled, restoring the original surface contours.

3.3 National Park Operations

Western Arctic National Parklands (WEAR) has offices in Kotzebue and Nome. The Kotzebue staff of WEAR consisted of 18 full time employees, with an additional 9 seasonal employees working various lengths of time throughout the fiscal year 2003. The Kotzebue full time staff consists of: Acting Superintendent, Budget Analyst, Administrative Assistant, Chief of Maintenance, Maintenance Worker, Chief of Interpretation, Interpretive Ranger, Environmental Educator, Chief of Natural Resources, Wildlife Biologist, Geologist, two Archeologists, Chief Ranger, three Wilderness Rangers, and a Public Information Officer. Seasonal staff provided support for the full time workers during the busy summer and fall seasons. Seasonal staff consisted of two Rangers, three Maintenance Workers, three Interpretative Rangers and an Expeditor.

Current maintenance facilities consist of the NPS Maintenance Shop and the warehouse, both are located on the Fifth Avenue and Mission Street property. Maintenance workers currently have no heated garage to work on NPS vehicles during the long and bitterly cold Arctic winter.

WEAR has 14 non-shared and 2 shared housing units in Kotzebue. A Housing Needs Assessment and Local Market Analyses were completed for Kotzebue in November of 1998. The final report stated that by the year 2002 Kotzebue would need 3 additional non-shared units and 7 additional shared units due to the lack of available housing in the local communities. A recent needs assessment and market analysis completed by park staff concludes the 2002 needs as projected in the 1998 Contracted Needs Assessment are accurate.

In May of 2000, a Management Assistance Program (MAP) review was conducted for the WEAR operations in Nome and Kotzebue. One of the primary recommendations made by the MAP Team was the eventual transfer of specific positions from Nome to the WEAR headquarters in Kotzebue when the office space and housing was available. The WEAR management staff has adopted this recommendation, and through attrition one position has already been moved to Kotzebue. Consequently the four additional housing units recommended for Nome by the Housing Needs Assessment are now needed in Kotzebue. As there is not enough NPS housing available to meet existing needs, housing is assigned to meet management needs or by a clearly defined bidding system.

Of the 12 housing units owned by WEAR in Kotzebue, 5 are currently rated as in poor condition in QMIS, however funding is in place to rehabilitate unit 150 (bunkhouse), and replacement of

units 152 and 152A (Appendix C). The remaining poor units, 154C and 154D are competing for funding in the FY 03-04-budget call.

In Kotzebue, the three units that are in poor condition lack adequate insulation, do not have safe and reliable heating and utility systems, do not meet egress and basic safety codes and cannot be kept operational during severe winter weather.

In Kotzebue there are currently 4 homes being temporarily leased by WEAR from the local housing market at rates which are up to 300% higher than the rates established in QMIS for housing of similar character.

3.4 Vegetation, including Wetlands

Kotzebue is located on a 3-mile long spit at the end of the Baldwin Peninsula. "The predominant vegetation type on the Baldwin Peninsula is moist coastal tundra. Moist tundra ecosystems usually form a complete ground cover and are extremely productive during the growing season. They vary, from almost continuous, uniformly developed cotton grass tussocks with sparse growth of other sedges and dwarf shrubs, to stands where tussocks are scarce or lacking and dwarf shrubs dominate (City of Kotzebue 2000). Moist tundra vegetation is classified as wetland in Alaska (NPS 1994).

The central portion of the Fifth Avenue and Mission Street site contains a wetland that meets the United States Corp of Engineer criteria for a jurisdictional wetland, which covers approximately 1.21 acres (Hart Crowser, Oct., 2001). Soils on the site are generally sedge peat to at least 18 inches deep with a small amount of gravel fill mixed in the upper 10 inches. In some areas the gravel fill forms a cap over the peat, but in most of these areas the fill soils also meets the hydric soil criterion because of low chroma matrix. Water enters the wetland as precipitation, run-off from the surrounding gravel roads, and from melting snow that is stockpiled on the site in the winter. Water collects on the site during the spring and early summer due to a shallow permafrost layer. Several ditches on the site contain surface water even in the late summer, but do not appear to carry surface water off-site.

The wetland has been modified by past filling and grading operations and is located in the middle of town. Because of the locally dense shrub cover and berry producing plants, the wetland provides some limited wildlife habitat, primarily for birds and small mammals. The wetland also likely provides a small amount of local floodwater storage. Wetland plant species cover 1.21 acres of the site and is dominated by several willow species (*Salix* spp. –FAC), cotton grass (*Eriophorum* sp. –OLB) and several sedges (*Carex* sp. –FAC).(Hart Crowser, 2001)

The remaining 1.4 acres has had sufficient amount of fill from past development activities to bury hydric soils more than 12 inches deep. The areas are incapable of sustaining plants (gravel roads and buildings) and wetlands conditions no longer exist.

4.0 Environmental Consequences

4.1 Alternative 1: No-Action

Effects on Cultural Resources. Under this alternative, the NPS would not build improvements on the Fifth and Mission site. Therefore, any cultural resources on this property would not be impacted.

Effects on Land Use & Land Use Plans. There would be no effects on land use or land use plans under this alternative. No change in existing structures would occur and there would be no anticipated change in present land use or land use plans.

Effects on National Park Operations. Park operations would continue to occur at a sub-optimal level. The current use of housing in poor condition would continue.

Effects on Vegetation, Including Wetlands. Under this alternative, the NPS would not renovate and construct on the site. Therefore, the vegetation, including wetlands on the Fifth Avenue and Mission Street would not be impacted.

Cumulative Impacts Analysis. Cumulative impacts are defined as the *incremental impacts* on the environment resulting from adding the proposed action to other past, present, and reasonably foreseeable future actions (also referred to as regional actions), including those taken by both federal and nonfederal agencies, as well as actions undertaken by individuals. Cumulative impacts may result from singularly minor but collectively significant actions taking place over a period of time (CEQ Sec 1508.7).

Past, present, and reasonable foreseeable future actions impacting the above issues within Kotzebue, Alaska include the following:

- Over the past century, Kotzebue has grown from a village of less than 200 people (1909) to one supporting about 3,000 people (City of Kotzebue 2000). To support this population growth, housing, gravel roads, schools, an airport, businesses, a hospital, water and wastewater systems, and other facilities were constructed. Most of the land suitable for development in Kotzebue has been developed. Land use within the most developed part of Kotzebue has clearly changed from natural or rural to quasi-urban over the last century and Land Use Plans, a new concept in this region, have begun to be implemented.
- Park operations are constrained and detracted from by the current infrastructure available in Kotzebue. This situation is anticipated to worsen as the town and WEAR staff continues to grow.
- The 2000 *City of Kotzebue Comprehensive Plan* predicts continued growth, including an additional 100 housing units, 70 apartment units, three new roads linking the village to other nearby communities or areas, and infrastructure improvement/replacement. It's expected that this new development would result in further loss of an unknown amount of moist coastal tundra vegetation.

Regardless of the above past, present, and reasonably foreseeable future actions, there would be no cumulative (incremental) impacts under this alternative, as no new actions would be taken.

Conclusion. The no-action alternative would not have any effect on cultural resources, land-use, or vegetation on the proposed project site since no additional facilities would be developed. Park

operations would continue to occur at a sub-optimal level. The current use of housing in poor condition would continue.

4.2 Alternative 2: Improvements to the NPS Fifth Street and Mission Avenue in Kotzebue, Alaska (NPS Preferred Alternative)

Effects on Cultural Resources. Earth moving and foundation work would be required under this proposal that could potentially disturb archeological resources. An archeological investigation of the site conducted during the summer of 2002 determined that projects on this property are expected to have no significant effect on cultural resources (NPS Archeological Survey 002-2002). In addition, WEAR would have an Archeologist on site during ground disturbing activities.

Effects on Land Use & Land Use Plans. This alternative would minimally change the land use that the property is currently experiencing. Nor is the proposed action expected to affect Land Use Planning for the area and, in fact, would fulfill the City's land use plan for that area.

Effects on National Park Operations. This proposal is expected to have a positive impact on National Park Operations by providing housing and maintenance facility space to meet staff and operational needs.

Effects on Vegetation, Including Wetlands. Vegetation would be impacted directly by the proposed improvements to the Fifth Street and Mission site, including the loss of 0.71 acres of wetlands. Although there is an impact through the loss of the wetland vegetation on the site, the city of Kotzebue is surrounded by hundreds of thousands of acres of intact, high quality, moist tundra vegetation, which is classified as wetland in Alaska (NPS 1994). Relative to the quantity and quality of wetlands surrounding Kotzebue the impact to 0.71 acres of marginal wetland is negligible.

Additionally, site development would include landscaping efforts that would enhance the vegetation currently found on parts of the property by introducing native grasses and other vegetation and providing conditions where they may be better able to thrive.

Cumulative Impacts Analysis. As noted in the "No Action Alternative," past, present, and reasonably foreseeable future actions have likely impacted cultural resources and clearly impacted vegetation, including wetlands, in many ways. These actions and related impacts would not differ under this alternative." Implementing the alternative would have a negligible adverse incremental impact on both cultural resources and wetlands and could possibly enhance the protection of cultural resources and establishment of native vegetation through landscaping. The loss of an additional 0.71 acres of wetlands in Kotzebue would have a minimal impact given the current condition that thousands of acres of high quality, moist tundra vegetation (wetland) would remain intact.

Conclusions. Cultural Resources and Land Use would experience minimal impacts. National Park Operations would be expected to experience a beneficial effect. In the case of vegetation, the loss of 0.71 acres of wetlands would have a negligible adverse impact on wetland vegetation.

5.0 List of Preparers

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Lois Dalle-Molle, Acting Superintendent, NPS, WEAR
Tom Heinlein, Chief of Natural Resources, NPS, WEAR
Archie Ferguson, Chief of Maintenance, NPS, WEAR
MaryAnn Porter, Chief of Interpretation, NPS, WEAR

6.0 Consultation and Coordination

The following agencies, organizations, and individuals were consulted in the preparation of this document.

Federal Agencies/Individuals Consulted

City of Kotzebue
Jeff Hadley, City Planner

Northwest Arctic Borough
Noah Naylor, Borough Planner

Maniilaq Association, Inc
Ed Ward, Maniilaq Planner

Kotzebue IRA
John Urlick, IRA Planner

7.0 Literature Cited

City of Kotzebue

1990 City of Kotzebue Zoning Regulations. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

2000 City of Kotzebue Comprehensive Plan. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

National Park Service

1986 General Management Plan and Environmental Impact Statement, Western Arctic Parklands (as four plans, one for each area). On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

- 1994 Memo to Files on NPS Land Acquisition of EON Property and Wetland Issue, prepared by Bob Gerhard, NPS, on February 9. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

- 2002 National Park Service Maintenance Facility Kotzebue, Alaska. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

- 2002 Archeological Investigation Report, Warehouse and Shop Property No.: 001-2002-WEAR. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

- 2002 WEAR Housing Management Plan. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

Hart Crowser

- 2001 Report 8740, Wetlands Determination Fifth Avenue and Mission Street, October 31, 2001. On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

United States of America

- 1969 United States Government, National Environmental Policy Act, U.S. Congress

United States Government, Code of Federal Regulations-Council of Environmental Quality (CEQ, 40 CFR 1508.7, 1508.9)

APPENDIX A

ANILCA SECTION 810 (a) SUMMARY EVALUATION AND FINDINGS

I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluations of potential restrictions to subsistence activities, which could result from the proposal to make extensive improvements to an already developed parcel of land (the 5th Avenue and Mission Street Property) owned by the National Park Service and located within the central part of the city of Kotzebue, Alaska.

II. THE EVALUATION PROCESS

Section 810(a) of ANILCA states:

“In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands ... the head of the federal agency ... over such lands ... shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands that would significantly restrict subsistence uses shall be affected until the head of such Federal agency -

- (1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to Section 805;
- (2) gives notice of, and holds, a hearing in the vicinity of the area involved;
- (3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.”

ANILCA created new units and additions to existing units of the national park system in Alaska. Cape Krusenstern National Monument, Noatak national Preserve, and Kobuk Valley National Park were created for the purposes among others of protecting and interpreting, in cooperation with Native Alaskans, archeological sites associated with Native cultures; protecting habitat for, and populations of fish and wildlife; and to protect the viability of subsistence resources. Subsistence uses by local residents will continue to be permitted under the provisions of Title VIII of ANILCA.

The potential for significant restriction must be evaluated for the proposed action’s effect upon “... subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use.”

III. PROPOSED ACTION ON FEDERAL LANDS

The National Park Service (NPS) plans on making extensive improvement to the NPS owned property located at 5th Avenue and Mission Street within the central area of the 2nd Class City of Kotzebue, Alaska. The property is already developed and contains several buildings consisting of a maintenance shop, warehouse, bunkhouse, summer seasonal quarters (a weatherport), and fuel storage facilities. Planned improvements include retaining the shop, warehouse, bunkhouse, and fuel storage facilities but relocating some of them elsewhere on the property. Additional improvements will consist of adding one duplex and one single family residential units, a new heated maintenance shop addition, a sewage lift station, improvements to the water and sewage systems, and improving the gravel surfacing for vehicle access onto the property. This analysis addresses two alternatives: the “No Action” alternative and the “Proposed Action” alternative.

IV. AFFECTED ENVIRONMENT

The City of Kotzebue¹ is located in northwest Alaska at the tip of the Baldwin Peninsula in Kotzebue Sound. It serves as a regional center providing a hub of governmental, social, medical, and transportation services for the ten outlying communities within the NANA region. The heavily developed area of town lays on a spit about three miles long and ranging in width from 1,100 to 3,600 feet. The larger area of town is comprised of an area of about 27 square miles of land and about 1.7 square miles of water that shows very little development. The location for the proposed action is within a developed area of town, although there is some relatively open space nearby the property such as that occupied by a cemetery. The site does not support important bird or other wildlife populations. The vegetation is largely characteristic of opportunistic species that have colonized the disturbed areas of town. The site consists of 1.7 acres of which about 1.21 acres are classified as wetlands. The proposal will result in impacts (a loss) to 0.1 acre of that 1.21 acres. Wetlands will be addressed elsewhere in the EA but will be considered in this 810 analysis only from the perspective of subsistence uses and impacts to those uses. The site, including the wetlands portion) does not support subsistence uses.

Kotzebue has a population of 3,082 people of which 76.7 % are Alaska Native. It has a mixed economy with the harvest of wild foods for subsistence purposes comprising a prominent sector of the economy. A 1986 study indicated that households in Kotzebue harvested an estimated 1,067,278 pounds of edible, wild resources. Caribou comprised 24.4 % of the harvest, bearded seal 19.0 %, salmon 18.4 %, and sheefish 12.2 %. A variety of remaining resources including but not limited to birds and their eggs, small mammals, and berries and green plants each comprised 3.2 % or less of the harvest by weight. The greatest percentage of this harvest took place outside of Kotzebue, especially at seasonal camps located particularly along the lower Noatak River, along the Kotzebue Sound-Chukchi Sea coast northwest of Kotzebue, the Kobuk River, and “Kobuk Lake”. An estimated 3.5 % of households maintained camps on the Baldwin Peninsula immediately adjacent to or very near Kotzebue. These included “North Tent City”, “South Tent City”, “Sadie Creek”, and *Iluviaq*. These camps were primarily used from May through October for fishing, seal and beluga hunting, and berry picking. Many Kotzebue residents pick berries in the tundra near Kotzebue especially between “Cemetery Hill” and “Sadie Creek”. Salmon fishing would be the most significant subsistence activity to occur in the

¹ The physical description and population information is taken from the Alaska Department of Community and Economic development web based Community Database. The subsistence information is taken from the 1986 study of subsistence uses in Kotzebue by Georgette and Loon. See the references section of this 810 for full citations.

vicinity of the proposed action since Kotzebue beaches remain a popular location for some residents for setting nets.

V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources that could be impacted.

- the potential to reduce important subsistence fish and wildlife populations by (a) reductions in numbers; (b) redistribution of subsistence resources; or (c) habitat losses;
- what effect the action might have on subsistence fisherman or hunter access;
- the potential for the action to increase fisherman or hunter competition for subsistence resources.

1) The potential to reduce populations:

The “No Action” alternative is the status quo. It does not involve any land acquisition by the National Park Service, and consequently has no potential to reduce populations of subsistence resources through the actual reduction of numbers, the redistribution of resources, or habitat loss beyond the existing level resulting from the existing level of development of the City of Kotzebue.

The “Proposed Action” alternative involves extensively modifying an already developed parcel of land located within the central area of the City of Kotzebue. The proposed site does not support any subsistence resources in useable amounts and consequently does not support subsistence uses. Consequently, the “Proposed” Action will not result in a reduction of populations of subsistence resources through the actual reduction of numbers, the redistribution of resources, or habitat loss beyond the existing level resulting from the existing level of development of the City of Kotzebue.

2) Restriction of Access:

The “No Action” alternative is the status quo. It does not involve any land acquisition by the National Park Service. Consequently, it will not lead to an increase in restrictions to access.

The “Proposed Action” alternative while it makes substantial improvements to the existing property adds no additional property and does not alter existing roads and traffic flow patterns within Kotzebue. The majority of subsistence uses occur outside the city with lesser levels occurring along beaches about ¼ of a mile from the project area. Consequently this alternative will not lead to any restrictions in access.

3) Increase in Competition:

The “No Action” alternative is the status quo. It does not involve any land acquisition by the National Park Service, nor anticipated change in land use. Consequently, it will not lead to an increase in competition.

The “Proposed Action” alternative includes no additional land acquisition. The additional housing may enable the NPS to hire 1-3 additional employees. However, it is also probable that the

new housing will go to existing positions currently living in non-NPS housing. The associated construction activities will not result in any significant or long-term population increase in the area. Consequently, this alternative will not result in an increase in the level of competition.

VI. AVAILABILITY OF OTHER LANDS

The 1986 General management Plan for Cape Krusenstern National Monument called for the construction of several new National Park Service facilities in Kotzebue. These included a visitor contact facility, a museum, administrative offices, and equipment storage. A more recent Needs Assessment completed in 2001 listed several other structures including an improved maintenance building, warehouse storage, curatorial storage and an employee bunkhouse. Currently, there are no other suitable lands available.

VII. ALTERNATIVES CONSIDERED

No alternatives other than the “NO Action” and “Proposed Action” alternatives were considered.

VIII. FINDINGS

This analysis concludes that the “Proposed Action” alternative will not result in a significant restriction of subsistence uses. The “No Action” alternative will also not result in a significant restriction of subsistence uses.

REFERENCES:

Alaska Department of Community and Economic Development

2001 Alaska Community Database – Community Information Summary.
http://www.dced.state.ak.us/mra/CF_CIS.cfm.

Georgette, Susan and Hannah Loon

1993 Subsistence Use of Fish and Wildlife in Kotzebue, Northwest Alaska Regional
Center Division of Subsistence, Alaska Department of Fish and Game, Juneau,
Technical Paper No. 167.

Western Arctic National Parklands

2002 Western Arctic National Parklands: Housing Management Plan – May 2002. Copy on file
at Western Arctic National Parklands office in Kotzebue, Alaska.

Appendix B

WETLANDS STATEMENT OF FINDINGS

Improvements to the NPS Fifth Avenue and Mission Street Property, Kotzebue, Alaska

June 2003

RECOMMENDED: _____
ACTING SUPERINTENDENT, WESTERN ARCTIC PARKLANDS DATE

CERTIFIED FOR TECHNICAL ADEQUACY AND SERVICEWIDE CONSISTENCY:

CHIEF, WATER RESOURCES DIVISION, NPS DATE

APPROVED: _____
REGIONAL DIRECTOR, ALASKA REGION DATE

INTRODUCTION

The National Park Service (NPS) is considering making improvements to 2.61 acres of land currently owned by the NPS in Kotzebue, Alaska. In accordance with regulations of the National Environmental Policy Act (NEPA) of 1969, the NPS has prepared and distributed an Environmental Assessment (EA) for this proposal.

Executive Order 11990 (Protection of Wetlands) requires all federal agencies to evaluate the likely impacts of proposed actions on wetlands. The objectives of Executive Order 11990 are to enhance and restore wetland values, avoid development in wetlands when practicable alternatives exist, and mitigate adverse impacts if a wetland will be occupied or modified.

The NPS has described agency policies for compliance with Executive Order 11990 in *Director's Order 77-1: Wetland Protection and Procedural Manual #77-1: Wetland Protection*. These policies and procedures stress exploring all practicable alternatives to building on or working in wetlands. NPS policies define a wetland as any area classified as wetland habitat according to the U.S. Fish and Wildlife Service's "Classification of Wetlands and Deepwater Habitats of the U.S." (1979 Cowardin et al.).

NPS wetland protection procedures require a "Statement of Findings" to be written justifying any unavoidable impacts to wetlands. In addition, National Park Service policy generally requires wetland impact compensation if the adverse impacts on wetlands from the entire project total 0.1 acre or more.-

Section 4.1.C of Procedural Manual #77-1 addresses applicability of NPS wetland protection procedures when the agency is acquiring land for administrative purposes. In cases where the land to be acquired includes wetlands that may be affected by future development, a Statement of Findings must be prepared and must focus on justifying why no sites with fewer potential wetland impacts were practicable.

PROPOSED ACTION

Under the Proposed Action Alternative, the National Park Service (NPS) would make improvements to the Fifth Street and Mission Avenue site in Kotzebue, Alaska. The 2.61-acre site currently contains a shop, warehouse, bunkhouse, two fuel storage tanks, and ten conexas. The additional proposed development would include moving the shop closer to the warehouse, moving the bunkhouse east approximately 50 feet from Fifth Avenue, adding a sewage lift station, building a garage near the warehouse, adding three single family housing units, and adding two fourplex housing units (Figure 1).

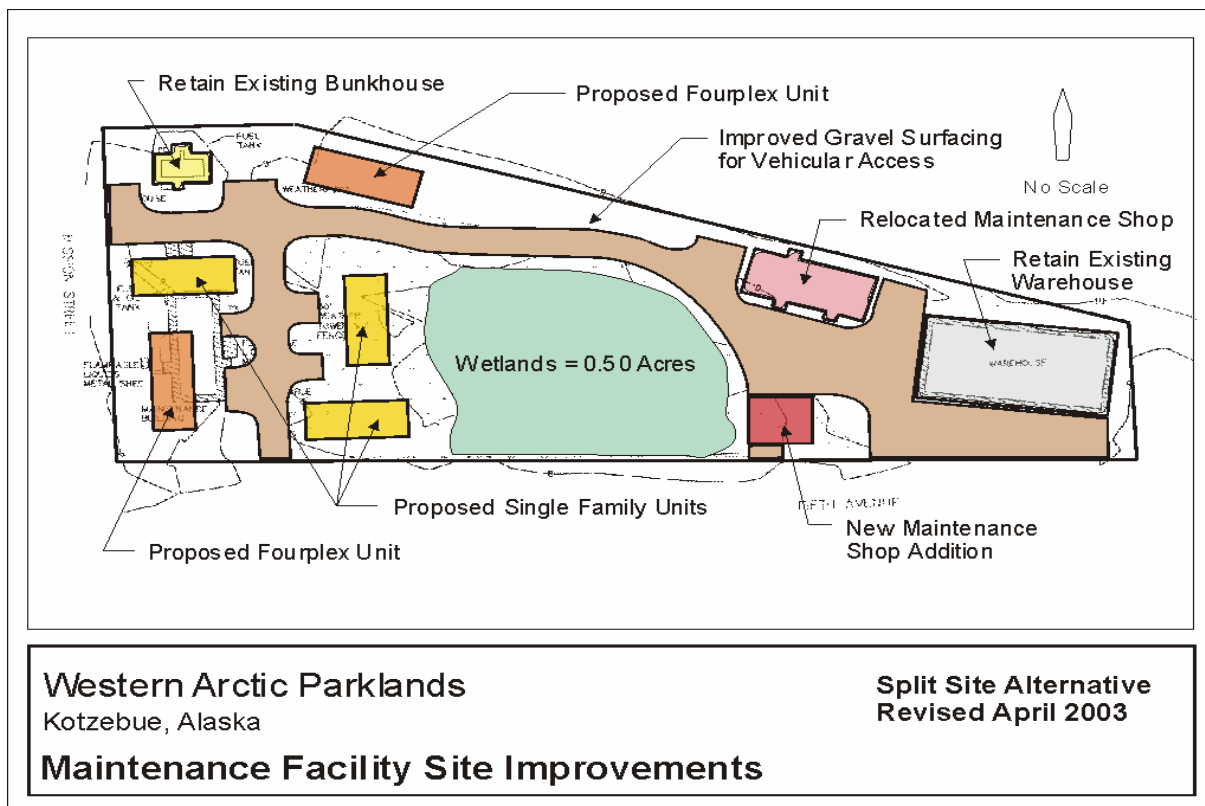


Figure 1: Proposed Improvements to the NPS Fifth Avenue and Mission Street Site

Purpose and Need for the Proposed Action

The purpose of this project would be to design and construct the proposed structures on the Fifth Avenue and Mission Street property to meet the current and future needs of the park. These needs are not being adequately met by current facilities:

- Western Arctic National Parklands (WEAR) is not able to provide suitable housing for the Kotzebue staff.
- There is no heated garage for vehicle maintenance.
- The current sanitary system at the Fifth Avenue and Mission Street property does not function adequately to cope with the facilities currently on the site.

At the present time the NPS leases four homes from the local housing market at rates that are 300% higher than the rates established in Quarters Management Information System (QMIS) for housing in similar character. Safe, comfortable, efficient and affordable housing for employees is necessary for the NPS to achieve its mission goals, particularly in Arctic communities where darkness and extreme winter temperatures force people to spend a great deal of time indoors. It is the goal of WEAR to improve inadequate housing through rehabilitation or replacement, and to effectively maintain adequate housing in order to help recruit and retain a professional, positive and productive staff.

The 1986 General Management Plans (GMP) for the four WEAR units called for the construction of several new NPS facilities in Kotzebue, Alaska. They included a visitor contact facility, a museum, administrative offices, equipment storage, maintenance facilities and housing. In May 2002 WEAR issued Western Arctic National Parklands Housing Management

Plan. The Housing Plan details current housing market conditions, current WEAR housing deficits and projected needs. The Housing Plan analysis details a current deficit of six housing units and projects a deficit of eight housing units by 2004 in Kotzebue.

OTHER ALTERNATIVES CONSIDERED IN THE ENVIRONMENTAL ASSESSMENT

One other alternative was analyzed in the EA, the no action alternative. Under the no action alternative, the NPS would not develop the property.

WETLANDS WITHIN THE PROJECT AREA

Hart Crowser, Inc., under contract to the National Park Service (NPS), prepared wetlands delineations for Lots 6, 7, and 8 of the NANA property. Field data collection was conducted on October 5, 2001 by Michael Muscari (Hart Crowser, Inc. wetland ecologist).

NPS Fifth Avenue and Mission Street Site

Director's Order #77-1 requires the NPS to use "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al. 1979) as the standard for defining, classifying, and inventorying wetlands. This is a different standard than that used by the Corps of Engineers (Corps) for delineating "jurisdictional wetlands" regulated under section 404 of the Clean Water Act. Both standards use three parameters to define wetlands: wetland hydrology, hydrophytic vegetation, and hydric soils. The fundamental difference between the two systems is that for the Corps method, under normal circumstances and typical conditions, a site must have all three parameters. The Cowardin definition recognizes all such sites as wetlands, but also recognizes some additional wetland types that for various physical or chemical reasons (e.g., wave action, strong currents, drastic water level fluctuations, high salinity) do not exhibit all three parameters. Examples might include mudflats, high-energy shorelines, or playas. Therefore, when delineating wetlands for NPS projects the Corps method can be used for most wetlands, but it must be recognized that some sites that do not qualify as wetlands under the Corps method must still be delineated according to the Cowardin system.

Routine Determinations wetland delineation methods were used, as described in the Corps of Engineers 1987 Wetlands Delineation Manual (Corps 1987). With few exceptions (e.g., atypical situations or problem areas), all three parameters are required for an area to be classified as a jurisdictional wetland. The site investigated was not considered to be atypical situations or problem areas; therefore, the Routine Determinations methods were deemed appropriate for use (Hart Crowser Inc, 2001).

Wetland classification follows the U.S. Fish and Wildlife Service wetlands classification system (Cowardin et al. 1979).

A report describing the methodology and findings of the wetlands delineation was prepared by Hart Crowser, Inc. and is available from the National Park Service's Alaska Support Office (Hart Crowser, Inc.2001). The sections below are extracted from this report:

General Site Description

Prior to the filling and grading operations that created the roads around and on this site, most of the site and the vicinity was likely wet or moist tundra and would therefore likely have met Corps definition of a jurisdictional wetland. Wetland conditions no longer exist in areas that have a sufficient amount of gravel fill to bury hydric soils more than 12 inches deep and those areas incapable of sustaining plants (gravel road and buildings),

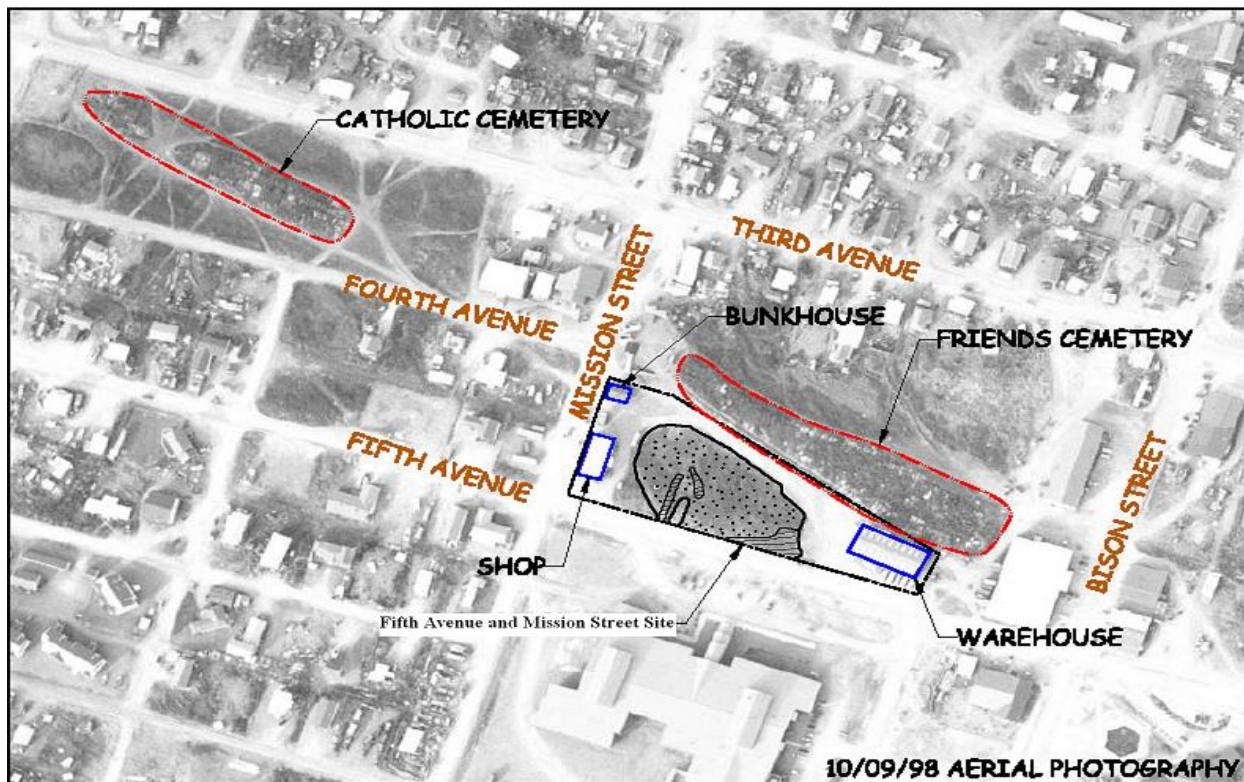




Figure 2: Current situation for the NPS Fifth Avenue and Mission Street site

-  Palustrine emergent wetland
-  Palustrine scrub-shrub wetland

Wetlands: The central portion of the site contains wetland that meets the Corps criteria for a jurisdictional wetland, which covers approximately 1.21 acres. This wetland is isolated within the City of Kotzebue. In January 2001 the U.S. Supreme Court (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 121 S. Ct. 675) limited the jurisdictional authority of the Corps on some isolated wetlands.

Soils on the site are generally sedge peat to at least 18 inches deep with a small amount of gravel fill mixed in the upper 10 inches. In some areas the gravel fill forms a cap over the peat, but in most of these areas the fill soils also meets the hydric soil criterion because of low chroma matrix. Water enters the wetland as precipitation, runoff from the surrounding gravel roads, and from melting snow that is stockpiled on the site over the winter. Water collects on the site during the spring and early summer due to a shallow permafrost layer. Several ditches on the site contain surface water in late summer and do not appear to carry surface water off site.

This wetland has been modified by past filling and grading operations and is located in the middle of town. Because of the locally dense shrub cover and berry producing plants, the wetland provides some wildlife habitat, primarily for birds and small mammals. The wetland also likely provides a small amount of local floodwater storage and water quality improvement.

According to the U.S. Fish and Wildlife Service (USFWS) classification system, the wetland has two distinct plant communities, including palustrine scrub-shrub (PSS) and palustrine emergent (PEM)(Cowardin, et al. 1979). The PSS wetland has a dense cover of shrubs over greater-than 80% of the area; the remaining 20% is a mix of shrubs and herbs. The PEM wetland is dominated by herbs, grasses and sedges and has less-than 30% cover of shrubs.

Wetland 1: The PSS wetland is approximately 1.05 acres. Past filling and grading activities have modified the wetland. The PSS is dominated by several willow species (*Salix* spp.-FAC) and has a small amount of crowberry (*Empetrum nigrum*-FAC), and bog blueberry (*Vaccinium uliginosum* –FAC). The main function provided by this part of the wetland is wildlife habitat primarily for birds and small mammals. A small amount of storm water storage and water quality improvement is also provided. The dense vegetation potentially acts to filter particulates out of the storm water that enters the wetland.

Wetland 2: The PEM wetland is approximately .16 acres. The subclass of this PEM wetland is palustrine emergent persistent, saturated. Past ditching and filling has modified this wetland. The PEM wetland is dominated by cotton grass (*Eriophorum* sp. OBL) and several sedges (*Carex* sp.- FAC). This portion of wetland is in the low-lying northeast corner of the site and in the ditches. Because of the landscape positions of this part of the wetland the primary functions are storm water storage and water quality improvement. Dense shrubs along the ditches slow the flow of water through the wetland, which helps to control erosion and filter out particulates. A small amount of wildlife habitat is also provided for birds and small mammals.

Table 1 shows the acreage of each wetland type on the property.

Table 1. Wetland Types and Wetland and Upland Acreage within Property Boundary

Wetland Type	Cowardin Wetland Description	Acreage within property boundary	Artificial, Natural, or Modified
Wetland 1	Palustrine scrub-shrub	1.05 acres	Disturbed and modified
Wetland 2	Palustrine emergent persistent, saturated	0.16 acres	Modified through past ditch digging and filling
Total Area		1.21 acres	

Functions of these wetlands include a minimal amount of local floodwater storage and water quality improvement, as it is an isolated wetland not connected to any streams or downstream water. Functions for wildlife would be limited to a small amount of habitat for bird and small mammals.

THE PROPOSAL'S IMPACT ON WETLANDS

The proposed improvements to the Fifth Avenue and Mission Street site would impact an estimated 0.71 acres of wetlands, decreasing the total area of the wetlands to 0.5 acres. The major function of the wetland would remain in tact and functioning. A habitat for birds and small mammals would remain and an area for storage of water during snow melting or periods of rain would remain.

WETLAND IMPACT MITIGATION MEASURES

Avoidance Efforts

There are no practicable alternatives that would avoid wetland impacts entirely. Other adequately sized properties potentially available for purchase within Kotzebue also contain wetlands. An analysis of different tracts of land within Kotzebue was conducted in 1994 as part of the NPS' EON site acquisition. The following statement is from a February 1994 memo on this subject (1994 NPS):

John Hall, the Alaska Region U.S. Fish and Wildlife Service coordinator for the Congressionally-mandated wetlands inventory in Alaska, has examined air photographs of the Kotzebue area. Mr. Hall has determined that all large vegetated tracts in the Kotzebue area are indicative of moist tundra. Moist tundra, as a vegetation type, is classified as wetlands in Alaska. With this determination, which is supported by site-specific visual observations of parcels available for purchase, it appears that all undeveloped parcels of land likely contain wetlands.

Based on a more recent phone conversation with Mike Holly, a Corps wetlands regulatory specialist familiar with Kotzebue, this assessment remains accurate today – there are no large parcels of land available for purchase within Kotzebue that are devoid of wetlands (Holly 2001). Moreover, the wetlands contained on these other parcels are likely similar to or of higher value than the wetlands on the Fifth Avenue and Mission Street property, so utilizing of an alternative site would not reduce wetland impacts.

Design Measures to Minimize Impacts

To the extent practicable, design measures to minimize impacts to the wetlands would be created should the NPS pursue development of the site as intended. These measures would be incorporated into subsequent design-related environmental documents, including an amended *Wetland Statement of Findings*.

COMPENSATION

As compensation for the loss of 0.71 acres of wetland Western Arctic National Parklands is proposing the removal of approximately 290 drums containing potentially hazardous substances located along the north coast of Bering Land Bridge on the Seward Peninsula, Alaska. These

drums are located in and near wetland associated with the high-energy beach environment of the north coast of the Seward Peninsula (Figure 3). The area of work includes a 155-mile stretch of beach from the Village of Wales to the north east of the Village of Shishmaref to Cape Espenberg that far exceeds the 0.71 acres of wetlands to be impacted. Approximately 100 miles of the coast is part of the Bering Land Bridge National Preserve (BELA) administered by the NPS.

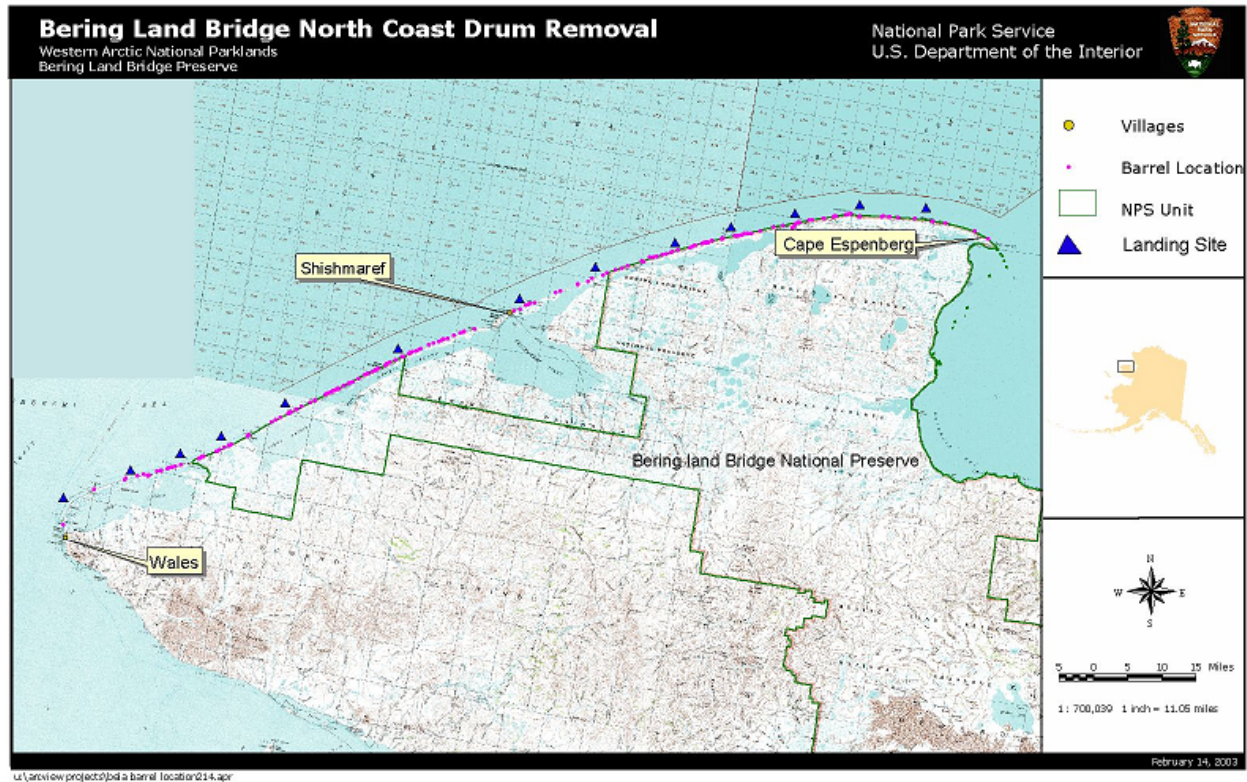


Figure 3: Bering Land Bridge North Coast Drum Removal Project Location

The drum removal operation is tentatively scheduled to begin on July 4th, 2003 near Wales and be completed by July 14th, 2003 at Cape Espenberg, weather permitting. The project is being contracted to Inuit Services, Inc., a subsidiary of the Bering Straits Native Corporation. The 135' M/V Arctic Wolf, with a removable 30' aluminum landing craft, designed specifically for coastal cleanups would be utilized as the staging, living and platform area for the project. Access to the drums would occur on the beach using All-Terrain Vehicles (ATV's), the drums would be drained and cleaned of hazardous materials on the Arctic Wolf, and substances would then be profiled and consolidated for recycling at the Oil and Hazardous Waste Recycling Center in Valdez, Alaska. Two NPS personnel would be on the project site at all times to provide resource protection guidance and oversight.

The purpose of this action would be to improve the water quality within the lagoons and wetlands in the coastal environment. In addition the project will reduce the risks to human health by the removal of potential sources of hazardous substances along the coast of the Seward Peninsula. Drums continually exposed to the harsh sub-arctic environment of the Bering Strait will break down, leading to water, surface and eventual ecosystem buildup of contamination. Preliminary sampling of barrels indicates the following hazardous substances may be

encountered: gasoline, diesel/heating oil, tar, motor oil, used motor oil, solvent, antifreeze, and denatured alcohol.

During the summer of 1999, a NPS survey team conducted an inspection of the drums located along the coast of BELA from Cape Prince of Wales to Cape Espenberg. Each drum was identified with a unique number. Drums were assessed to document location, radioactive emissions, container size, amount of fluid in the drum as a percentage, drum status for sealed or open drums, condition, gauge of construction, depth of burial, spillage, and other conditions such as holes, dents, and leaks. Drums were labeled as part of the survey.

The survey conducted by NPS personnel identified 876 drums with an additional 100 drums as being nearly rusted out. No radiation emissions were encountered and no spills were observed. Of the recorded drums, 290 drums contained some percentage of fluids. An estimated 3,700 gallons of potentially hazardous fluids were estimated to be present. No laboratory sampling was performed, only field techniques were employed. The survey concluded drums contained at least the following substances; gasoline, diesel/heating oil, water, tar, motor oil, used motor oil, solvents, antifreeze, and denatured alcohol.

A Sampling and Analysis Plan (SAP) has been prepared. The SAP presents the field procedures for the field screening of drum contents, classification of drum contents that cannot be determined from field screening, sampling of drums upon bulking operations, sampling of the rinse water used to clean drums that contained liquids, and field screening of any stained soils observed around collected drums.

Under the National Environmental Policy Act, as administered by the NPS, this project falls under NPS Directors Order #12: *Conservation Planning, Environmental Impact Analysis, and Decision Making* categorical exclusion E(4): Actions related to resource management and protection, Removal of non-historic materials and structures in order to restore natural conditions when the removal has no potential environmental impacts, including impacts on cultural landscape or archeological resources.

Potential impacts from the clean project are summarized below:

- A. Subsistence – This project may temporarily disrupt some very localized subsistence activity like fishing. Temporarily avoiding such locations and coordinating with the local subsistence users will easily avoid this potential impact. Activities associated with the project such as engine and propeller noise might cause very short term and temporary shifts in migration patterns of some fish and marine species. Any such disruption would be localized and very short term lasting no more than a couple of days. The timing of the project (early to mid-July) should avoid most of these potential problems.
- B. Habitat and Biological Resource Protection – The purpose of the project is to remove potential contaminants from the habitat. Potential effects from the project operations will be of a short duration and intensity lasting only a couple of days in a 20-mile stretch of coast and remaining at a location long enough to remove the barrel. .
- C. Air, Land, and Water Quality – All state and federal regulatory agencies have been contacted regarding necessary permits and approvals. All permit stipulations; federal statutes, regulations and procedures will be adhered to during all phases of the project.

- D. Historical, Prehistoric, and Archaeological Sites – Numerous previously identified archeological sites are located along project area. Many of the drum sites are near cultural resources. A potential of physical and potential for vandalism exists. To mitigate these potential impacts a qualified professional archaeologist will accompany the project providing cultural resources orientation and monitoring all activities that may potentially affect cultural resources. In addition, there will be no subsurface ground disturbance allowed, except during removal of partially buried drums on the active beach, unless supervised by the archaeologist.

CONCLUSIONS

The National Park Service has identified the proposed improvements to Fifth Street and Mission Property in Kotzebue, Alaska, as the preferred alternative. There are no practicable alternatives that would avoid wetland impacts entirely. The NPS currently owns the 2.61-acre site within Kotzebue and had always intended to develop the site in some way. Other adequately sized properties potentially available for purchase within Kotzebue also contain wetlands. The wetlands contained on these other parcels are likely similar to or more intact and of higher value than the wetlands on the Fifth Avenue and Mission Street Site. The proposed compensation will remove contaminants from pristine wetlands located within a National Preserve providing safer and higher quality wetlands. The area of work far exceeds the 0.71 acres of wetlands to be impacted. This project is consistent with E.O. 11990 and NPS Director's Order #77-1.

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Hart Crowser, Inc.

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Kelly, Mike

- 2001 Personal communication between Mike Holly, Regulatory Wetlands Specialist, U.S. Army Corps of Engineers, Anchorage Office, and Heather Todd Rice, Environmental Protection Specialist, NPS, November 15.

National Park Service

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- 1994 Memo to Files on NPS Land Acquisition of EON Property and Wetland Issue, prepared by Bob Gerhard, NPS, on February 9.). On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska

- 2002 Director's Order and Procedural Manual 77-1: Wetland Protection. *U.S. Department of the Interior, Washington, D.C.). On file at the National Park Service's Western Arctic National Parklands Office, Kotzebue, Alaska*

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APPENDIX C

Kotzebue NPS Housing Assessment.

Government furnished quarters available in Kotzebue include the following (all have electricity, oil heat, water, and sewer and other normal amenities):			Interior Conditio n	Exterior Conditio n
1	150	A 20'x32' bunkhouse (three bedroom. Six beds) erected on an NPS owned lot behind the maintenance building. Used for seasonal and transient housing.	Poor	Poor
2	152	Currently the "Superintendent's House", built in 1969 and purchased by the NPS in 1986. Used for permanent housing.	Poor	Poor
3	152A	A three-bedroom unit purchased by the NPS in 1986. Used for seasonal and transient housing.	Poor	Poor
4, 5, 6, 7	153A 153B 153C 153D	A four-plex unit built by the NPS in 1990. Units range from one to three-bedrooms in size. Unit 153B is handicap accessible. Used for permanent housing.	Good Good Good Good	Good Good Good Good
8	154A	A small one-bedroom house purchased in 1986 and extensively remodeled by NPS. Used for subject-to-furlough housing.	Fair	Fair
9 10	154C 154D	A small duplex purchased by the NPS in 1986. Each unit is a small efficiency unit. Transient and seasonal housing.	Poor Poor	Poor Poor
11 12	160-1 160-2	Two apartments in the "EON Building" purchased by the NPS in 1986. The apartments are one and two bedrooms respectively, and were completely rehabilitated in 1999. Permanent housing.	Excellent Excellent	Excellent Excellent
13	821C	2-bedroom duplex <i>leased from the private sector</i> , for permanent employee use.	Fair	Fair
14	679A	4-bedroom house <i>leased from the private sector</i> , for permanent employee use.	Good	Good
15	476	2-bedroom duplex <i>leased from the private sector</i> , for permanent employee use.	Good	Good
16	835A	3-bedroom house <i>leased from the private sector</i> , for permanent employee use.	Fair	Fair