



National Park Service
U.S. Department of the Interior
Katmai National Park and Preserve
Interior Region 11 - Alaska

FINDING OF NO SIGNIFICANT IMPACT
Brooks Camp Wastewater Solids Treatment Pond

Recommended:

MARK STURM Digitally signed by MARK STURM
Date: 2021.03.12 10:25:47 -09'00'

March 12, 2021

Mark Sturm
Superintendent, Katmai National Park and Preserve

Date

Approved:

Don Striker
Acting Regional Director, National Park Service, Interior Region 11 - Alaska

Date

1. Introduction

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) prepared an Environmental Assessment (EA) to examine alternative actions and environmental impacts associated with the proposed action to construct a Wastewater Solids Treatment Pond (WSTP) near Brooks Camp within Katmai National Park and Preserve. The construction of the WSTP is necessary to facilitate the treatment of biosolids generated in the Brooks Camp area of the park. This will allow Katmai National Park and Preserve to continue operations at Brooks Camp as intended without interruption from a lapse in the ability to treat and store wastewater and biosolids generated by Brooks Lodge, and NPS operations at Brooks Camp.

The statements and conclusions reached in this Finding of No Significant Impact (FONSI) are based on documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below.

2. Selected Alternative and Rationale for the Decision

Selected Alternative

Based on the analysis presented in the EA, the NPS has selected Alternative 2: Construct Wastewater Solids Treatment Pond Near Brooks Camp (Proposed Action and Preferred Alternative). This alternative includes the construction of a new WSTP at a previously undisturbed area located at mile 1.8 along the Valley of Ten Thousand Smokes (VTTS) Road. The new site will consist of a facultative lagoon system which uses aerobic and anerobic processes to break down human waste. The remaining liquid wastewater will be separated out and allowed to drain into an adjacent percolation pond where it will percolate into the soil.

The proposed project location at mile 1.8 of the VTTS Road underwent geotechnical and percolation testing in 2020. The results of these tests indicate that the site is suitable to contain a new facility of this type based on the soil profiles and percolation rates. The proposed facility site is located within the VTTS Road Historic District, and outside of designated or eligible wilderness areas of Katmai National Park and Preserve. The distance from Brooks Camp to the proposed facility is favorable for this project and reduces travel time to and from the WSTP by park staff when compared to the current biosolids operation at 2.5-Mile Pit, and a potential alternative location considered at 5-Mile Pit.

The configuration of the WSTP includes a settling cell (also referred to as a lagoon) where biosolids are deposited, and a percolation cell where liquid wastewater drain to and percolate into the earth. The lagoon dimensions are designed to be 62 feet wide by 102 feet long by 13 feet deep at its deepest point. An 8-inch diameter high-density polyethylene (HDPE) influent pipe connected to an influent manhole will be installed at the eastern side of the settling cell to facilitate deposits from the NPS vacuum truck. Solids that accumulate at the bottom of the lagoon will break down over time through aerobic and anerobic processes. Liquids which occur in the upper portions of the lagoon will drain to the adjacent percolation cell through a settling cell transfer pipe and flow control assembly. The

percolation cell is designed to be 46 feet wide by 90 feet long by 6 feet deep, located to the west of the settling cell within the facility footprint.

The WSTP will be enclosed by both a vertical and horizontal perimeter fence. The vertical perimeter fence will be chain-link, stand 8 feet tall, and span approximately 680 linear feet. There will be approximately 15 feet of distance between the perimeter fence and the lagoon or settling cell to facilitate maintenance worker access to the entire facility. The eastern side of the fence also includes a double swing manually operated gate which can be locked during periods of non-activity to provide access control. The horizontal fence will be 6 feet wide, buried beneath grade, and laid flat adjacent to the vertical fence. The perimeter fence will provide a barrier to animals that might approach the facility and prevent access from animals attempting to dig or burrow into the facility.

In addition to the chain link fence there will be an electric fence constructed adjacent to but outside of the perimeter fence. This fence will span approximately 910 linear feet and stand approximately 4 feet tall with 3 strands of electrified braided poly-wire. The fence will use a system consisting of fiberglass posts with two angle braces per corner, and gate posts would be of a similar style but with a single angle brace. Smaller fiberglass posts will be installed every 20 to 30 feet to suspend the electrified braided poly-wire and prevent contact with the ground or vegetation which could cause an electrical short. The electric fence would extend beyond the eastern edge of the lagoon towards the access road by approximately 50 feet to allow for the vacuum truck and other maintenance vehicles to access the site within the electric fence. This fence system will be powered by a combination of solar panels connected to a 12-volt battery system. The proposed electrified fence system is compatible with other systems installed in and around Brooks Camp. The main purpose of the electric fence is to deter brown bears and other large mammals from entering the WSTP.

The WSTP will be connected to the VTTS Road by a single lane access road, consistent with traditional roadway intersections along the VTTS Road. The road will be approximately 12 feet wide at the intersection with the VTTS Road, approximately 16 feet wide leading into the facility, and approximately 350 feet long. The access road will be curved in order to further visually screen the facility from visitors using the VTTS Road. The facility will be set back from the VTTS Road by approximately 120 feet to minimize odors along the VTTS Road. The area between the new WSTP and the VTTS road consists of mixed birch and spruce forests which will remain intact to serve as a visual barrier between the VTTS Road and the WSTP.

Rationale

Alternative 2 was selected because it best meets the purpose and need identified in the EA: to provide a wastewater facility capable of receiving and treating vault toilet waste and septage (biosolids) generated at Brooks Camp and to ensure that sanitary systems in Brooks Camp can operate sufficiently to protect public health.

Human activity at Brooks Camp produces approximately 20,000 gallons per year of biosolid waste with that number expected to increase with visitation throughout the life of the facility (estimated as 30 years). NPS is working to meet the demand for visitation at Brooks Camp while ensuring a safe and high-quality visitor experience at Katmai National Park and Preserve. A facility is needed

proximate to Brooks Camp that can treat and store the volume of wastewater and biosolids generated in the area. The current method used to dispose of biosolids at Brooks Camp, which is described in the Background section of the EA, is projected to be filled to maximum capacity by the year 2023. Katmai National Park and Preserve must functionally replace this facility with a permanent WSTP in order to continue to operate Brooks Camp as intended for public use.

Disposal of human generated waste outside of the park boundary was considered but ultimately deemed unfeasible for reasons identified in the EA under Alternatives Considered but Dismissed: Off Site Disposal of Human Waste Solids. The construction of a solid waste disposal facility within the boundary of an NPS unit is prohibited under 36 Code of Federal Regulations (CFR) Part 6. However, the NPS has determined that a formal exemption to this regulation is not required because the primary purpose of the Brooks Camp WSTP is treatment of biosolids generated at Brooks Camp rather than the disposal of solid waste. Throughout the life of the facility, estimated at 30 years, biosolids will be treated through aerobic and anerobic processes reducing a large percentage of the volume of wastes deposited into the facility. Alternative 2 is the best solution to the need for treatment and storage of domestic sewage and raw human waste products generated within the park. Accordingly, the requirements outlined in 36 CFR Part 6 do not apply to this activity because it is part of an essential wastewater treatment effort, it is not a solid waste disposal site, and there are no other reasonable alternatives to sewage treatment available at this time.

The No Action alternative did not meet the purpose and need of this project. Park operations at Brooks Camp which rely on functional wastewater treatment systems include kitchen facilities at Brooks Lodge, public shower and flushable toilets provided by Brooks Lodge, NPS kitchen, toilet, and shower facilities located within staff residences, and NPS and concessioner staff laundry facilities. These wastewater sources all flow into underground septic tanks which must be emptied annually. Additionally, vault toilets throughout Brooks Camp and adjacent areas must have the biosolids removed at least annually. All of these operations at Brooks Camp would be unable to continue to function without a WSTP to service this area creating unsatisfactory conditions at the park which would jeopardize public health and result in diminished visitor experiences.

3. Best Management Practices

The NPS will implement the Best Management Practices (BMP) listed below in order to reduce impacts to park resources and values to acceptable levels. The BMPs will be implemented by Katmai National Park and Preserve staff in collaboration with subject matter experts from the NPS Region 11 – Alaska Regional Office and in consultation with other State and Federal agencies as appropriate.

Cultural Resources

- In order to limit impacts to previously unidentified archeological sites the NPS will conduct a comprehensive archeological field survey of the entire project area prior to construction and will have an on-site archeological monitor present during construction activities.

- If cultural resources are discovered during construction activities, work will be halted at the discovery site, the discovery will be protected, and the Katmai National Park and Preserve Superintendent or the Cultural Resources Program Manager shall be notified. Appropriate action will be taken to avoid adverse effects to any cultural resources.
- Adverse impacts to the VTTS Road Historic District will be mitigated to the maximum extent possible through consultation with the Alaska State Historic Preservation Office (AK-SHPO) as required by the National Historic Preservation Act and its implementing regulations (36 CFR Part 800).
- In the event that human remains are discovered during construction activities, all work on the project must stop and the park archeologist contacted immediately. As required by law, the coroner will be notified first. All provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.

Soils and Vegetation

- The NPS will preserve the top 2 feet of ground cover vegetation and organic soils removed from the project area to aid in revegetation and to prevent the establishment of invasive plant species following construction.
- Water runoff over improved and compacted surfaces following construction will be monitored by NPS to determine if sedimentation of surrounding lands is occurring; and if necessary, the NPS will implement best management practices contained in the State of Alaska Stormwater and Wastewater Protection and Prevention Permitting guidelines to mitigate these impacts.
- Viable wood removed from the project area will be bucked and cut into firewood for use in the Brooks Camp area. Woody vegetation such as small woody materials, root wads, and other types that cannot be repurposed will be transported to the 5-Mile Pit to be burned.
- Monitoring and removal (if required) of invasive plant species would occur following the construction of the new Brooks Camp WSTP to ensure that any such instances of invasive plant species are immediately addressed.

Visitor Use and Recreation Setting

- NPS rangers will inform visitors about the new WSTP either at the NPS visitor center at Brooks Camp or while on the VTTS Road daily bus tour to explain the benefits of the facility to Brooks Camp operations and to advise visitors about the potential of exposure to objectional odors within close proximity to the facility when there is an impact to tour operations or visitor questions.
- During the construction period for the WSTP the construction contractor will follow NPS protocols in the Brooks Camp area to ensure safe roadway operations along the VTTS Road.

Wildlife

- In order to prevent bears from accessing the proposed WSTP at mile 1.8 along the VTTS Road, a perimeter and an electrified fence will enclose the entire facility.
- The NPS will control emergent vegetation within the wastewater treatment ponds to avoid the creation of breeding areas for mosquitos and other potential insect pests.
- Katmai National Park and Preserve biologists will periodically monitor the WSTP to determine if migratory birds are being harmed by exposure to waters within the facility. If impacts to migratory birds are detected, staff would coordinate with the U.S. Fish and Wildlife Service (USFWS) and implement recommended best management practices to mitigate or reduce those impacts.
- Vegetation clearing activities necessary for the construction of the Brooks Camp WSTP will be avoided during late spring and summer (May 1 – July 15) to minimize impacts to nesting birds.
- The entire project site will be surveyed by NPS natural resources staff for the presence of bald and/or golden eagle nests prior to the commencement of construction activities. If a bald and/or golden eagle nest is encountered, NPS will coordinate with the USFWS and implement recommended best management practices to mitigate impacts to the birds or their nests.

4. Public Involvement/Agency Consultation

The EA was posted to the NPS Planning, Environment and Public Comment (PEPC) website on January 6, 2021 where it was available for public review and comment through February 5, 2021. News releases regarding the availability of the EA for public comment were sent to local and statewide newspapers, radio networks, television channels, and other publications including magazines and journals. The information was also published on the Katmai National Park and Preserve website.

Tribal Consultation

Consultation letters regarding this project were sent to federally recognized Alaska Native Tribes, Alaska Native Claims Settlement Act (ANCSA) regional and village corporations, and Alaska Native Descendant organizations culturally affiliated with Katmai National Park and Preserve. The following organizations were notified by certified mail (dated July 28, 2020) and by telephone thereafter of the proposed action and invited to consult with the park Superintendent:

Alaskan Native Tribal Organizations

Chignik Bay Tribal Council, Chignik Lagoon Village Council, Chignik Lake Traditional Council, Clarks Point Village Council, Curyung Tribal Council, Egegik Village Council, Ekwok Village Council, Igiugig Village Council, Iliamna Village Council, Ivanof Bay Tribal Council, King Salmon Tribal Council, Kokhanok Village Council, Levelock Village Council, Manokotak Village, Naknek Village Council, Native Village of Afognak, Native Village of Aleknagik, Native Village of Ekuik, Native Village of Karluk, Native Village of Larsen Bay, Native Village of Old Harbor, Native

Village of Perryville, New Koliganek Village Council, New Stuyahok, Newhalen Tribal Council, Nondalton Village, Ouzinkie Tribal Council, Pedro Bay Village, Pilot Point Tribal Council, Port Heiden Village Council, Port Lions Traditional Tribal Council, Portage Creek Village, South Naknek Village Council, Sun'aq Tribe of Kodiak, Tangirnaq Native Village, Traditional Village of Togiak, Twin Hills Village Council, and Ugashik Traditional Council.

Alaskan Native Village Corporations

Far West, Incorporated, Chignik Lagoon Native Corporation, Chignik River, Limited, Becharof Corporation, Igiugig Native Corporation, Kokhanok Native Corporation, Levelock Natives Limited, Paug-Vik Incorporated, Oceanside Native Corporation, Bay View Incorporated, Pilot Point Native Corporation, Uganik Natives, Incorporated, Afognak Native Corporation, Natives of Kodiak Incorporated, Karluk Native Corporation, Nu-Nachk Pit Incorporated, Old Harbor Native Corporation, Ouzinkie Native Corporation, Leisnoi Incorporated, Aleknagik Natives Limited, Saguyak Incorporated, Choggiung Limited, Ekuk Native Limited, Ekwok Natives Limited, Iliamna Native Corporation, Koliganek Natives Limited, Newhalen Native Corporation, Stuyahok Limited, Nondalton Native Corporation, Pedro Bay Corporation, Tanalian Incorporated, Ohgsenskale Corporation, Manokotak Natives Limited, Togiak Natives Limited, Twin Hills Native Corporation, Akhiok-Kaguyak Incorporated, and Alaska Peninsula Corporation.

Alaskan Native Regional Corporations

Bristol Bay Native Corporation, Koniag, Inc., and Cook Inlet Regional Incorporated.

Traditionally Affiliated Groups

Council of Katmai Descendants, and Heirs of Pelagia Melgenak.

In person consultation occurred between Katmai National Park and Preserve and the Council of Katmai Descendants who represent local tribes, ANCSA corporation Paug Vik Inc. Ltd., and the Levelock Tribal Council. These meetings were informative in nature and did not result in subsequent changes to the proposed project.

Cultural Resources Consultation

The park is engaged in formal consultation with the AK-SHPO concerning this proposed undertaking in accordance with the National Historic Preservation Act, and its implementing regulation, 36 CFR 800. NPS cultural resource professionals reviewed the project in 2020 and determined that this action had the potential to adversely affect the VTTS Road Historic District. The AK-SHPO concurred with this finding in January 2021. In order to mitigate impacts to the VTTS Road Historic District the NPS is working with the AK-SHPO to develop a Programmatic Agreement for this project.

Endangered Species Consultation

The park engaged in informal consultation with the USFWS in November 2020 through the Information for Planning and Consultation system to determine if threatened and endangered species were known to exist within the area of the proposed Brooks Camp WSTP. No threatened or endangered species, nor critical habitat for species of concern, were identified through this consultation and a formal Biological Assessment was not prepared for this project.

Public Comment

The project received two (2) comments during the public comment period for this project. The comments did not change the conclusions in the EA regarding the environmental effects of the action. Responses to public comments and errata are found in Appendix A.

5. Finding of No Significant Impact

As described in the EA, the selected alternative has the potential for adverse impacts to cultural resources, vegetation and soils, visitor use and recreation setting, and wildlife; however, no potential for significant adverse impacts was identified. In order to protect park resources and values the impacts described below are being reduced to the extent possible through implementation of BMPs listed in Section 3: Best Management Practices.

- **Cultural Resources:** The implementation of this project will result in adverse effects to the VTTS Road Historic District. These impacts are realized through the addition of a new modern facility within the historic district which would be directly connected to the VTTS Road corridor. These impacts are being minimized to the extent possible through design and planning developed in consultation with cultural landscape specialists and mitigated through implementation of a programmatic agreement between the NPS and the AK-SHPO.
- **Vegetation and Soils:** This project will impact approximately 1.8 acres of vegetation from the construction, maintenance, and use of the Brooks Camp WSTP facility. The vegetative ground cover throughout the project area will be removed. Invasive plant species are more likely to become established and take hold in areas that are affected by vegetative clearing and disturbance. The construction and operation of the Brooks Camp WSTP will also result in impacts to approximately 7,500 cubic feet of native soils. Soils in the project area will be removed, compacted, or otherwise altered by the construction and operation of this facility, which could lead to increased levels of erosion and drainage issues.
- **Visitor Use and Recreation Setting:** Visitors recreating along the VTTS Road in the vicinity of the Brooks Camp WSTP may be subjected to human-waste odors emanating from the facility which may detract from their overall park experience. When the new facility is functioning under optimal operating conditions the prevailing winds and the set-back distance from the VTTS Road will likely minimize the prevalence of these odors along the VTTS Road corridor. The daily VTTS Road Bus Tour may experience delays due to construction activities and associated traffic. This issue will be temporary and can be managed through proper communication between the construction crews and NPS operations at Brooks Camp. The scenic resources surrounding Brooks Camp will be impacted long term by the vegetative clearing necessary to construct this facility. Approximately 1.8 acres of previously undisturbed forest lands will be cleared to site this facility which will result in a visible scar in the forest adjacent to Brooks Camp. This cleared area and facility will be visible to visitors arriving to Brooks Camp by air and those recreating along the Dumpling Mountain Trail.

- **Wildlife:** The construction of the Brooks Camp WSTP will result in impacts to wildlife in this area of the park. Animals such as migratory birds and terrestrial land mammals will be attracted to the Brooks Camp WSTP and could be harmed by prolonged contact with the lagoon waters. Breeding and nesting birds could be disturbed or displaced during the construction period and by 1.8 acres of habitat loss.

Alternative 2 will not result in significant adverse impacts to cultural resources, soils and vegetation, visitor use and recreation setting, or wildlife.

Subsistence resources in the area will not be affected, as the project occurs within an area of Katmai National Park that is closed to subsistence use. There are also no significant impacts on public health, public safety, or unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the NPS selected alternative will not violate any federal, state, or local environmental protection law. The NPS has prepared a Non-Impairment Finding that is included as Appendix B.

6. Conclusion

As described above, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an Environmental Impact Statement (EIS). The selected alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA. Based on the foregoing, it has been determined that an EIS is not required for this project and, thus, will not be prepared.

This action complies with the Endangered Species Act, the National Historic Preservation Act, and Executive Orders 12898 and 13175. There will be no significant restriction of subsistence activities as documented by the Alaska National Interest Lands Conservation Act (ANILCA) Title VIII, Section 810 summary evaluation and findings.

Appendices Include:

- Appendix A: NPS Responses to Public Comments and Errata on the Environmental Assessment for the Brooks Camp Wastewater Treatment Pond
- Appendix B: Non-Impairment Finding on the Environmental Assessment for the Brooks Camp Wastewater Treatment Pond

Appendix A: NPS Responses to Public Comments and Errata on the Environmental Assessment for Brooks Camp Wastewater Solids Treatment Pond

Katmai National Park and Preserve

In response to the EA the NPS received two (2) comments through the Planning, Environment & Public Comment system, zero (0) comments were received through postal mail, and zero (0) comments were delivered by hand to the Katmai National Park and Preserve headquarters in King Salmon, Alaska. Both comments received were from private individuals (PI).

The NPS has read and considered all comments received. Responses to substantive comments are provided below. A substantive comment is defined as one which leads the NPS to: (1) modify an alternative, including the proposed action; (2) develop and evaluate an alternative not previously given serious consideration; (3) supplement, improve, or modify the environmental analysis; or (4) make factual corrections (CEQ NEPA Regulations 40 CFR 1503.4).

Comments and Responses

Comment #1 PI: I am commenting on the proposed wastewater facility near the Brooks Campsite. Going over your proposal, it states nothing about long term annual maintenance and/or maintenance costs per the life of a wastewater lagoon that can last decades. No flooding or overflow plan has been presented. Has the NPS reached out or consulted with the local area communities to see how the existing lagoons are holding up to time in the area, might be a good suggestion to do so. These things last a lot longer than the projected lifetime, the impact is not only the immediate vicinity habitat but overtime it can affect the entire area. I have long believed that the NPS has served a purpose of awareness but in recent times I am starting to believe the preservation and conservational aspects have taken a back seat to what can only be described as the NPS looking out for the NPS. The wildlife at Brooks has become complacent and content with human interaction, sure the goal is with the bear population is to not see human as a food source, but in doing so the population of bear that transitions to the Naknek River area have shown a content behavior in knowing human isn't a danger, whereas they do not fear in confrontations with local human population. I brought that up only to express the fact that all the NPS is doing with this proposal and the last road proposal to Olga Lake, is introducing more humanity into an area that has survived long before development but will not survive over industrialization.

Response #1 NPS: The purpose of an EA is to evaluate the impacts to the human environment which may result from taking a proposed action, in this case the construction of the Brooks Camp WSTP. Although costs do factor into the internal process the NPS goes through when considering a project and potential alternatives, costs do not affect environmental impacts associated with alternatives put forward for analysis and are not included in the EA.

The NPS did evaluate the potential for impacts related to this project from flooding. The project is located outside of the 100-year floodplain; therefore, the issue was dismissed from detailed analysis. This information is contained in the EA, Section 4: Issues – Issues Considered but Dismissed.

Consultation with local communities related to this project occurred through our outreach to Alaska Native Tribes, ANCSA regional and village corporations, and culturally affiliated groups with Katmai National Park and Preserve. Additionally, NPS consulted with the Bristol Bay Borough regarding the potential to dispose of biosolids within their facilities located in Naknek Village through a dewatering and disposal option for biosolids at the Naknek Landfill. The reasons that this alternative was not selected for detailed analysis are contained in the EA, Section 5: Alternatives – Alternatives Considered but Dismissed.

To the extent possible wildlife, including bears, will be excluded from the new Brooks Camp WSTP in order to protect the animals from potential harm as described in the EA Section 7: Impact Analysis, Alternative 2: Construct Wastewater Treatment Pond Near Brooks Camp (proposed Action and Preferred Alternative) – Wildlife. The Katmai National Park and Preserve General Management Plan and Bear-Human Management Plan describe the approach the NPS takes with regards to bear management. The stated goals of these plans are to “minimize human impacts on bear behavior and patterns of use” and to “allow their [bears] natural patterns of feeding and habitat use to continue.” The park will continue to work to achieve the combined goals of providing for human safety while minimizing impacts on bear behavior caused by human activity.

Errata

This errata section provides clarifications, modifications, or additional information to the EA and to the selected alternative, Alternative 2: Construct Wastewater Treatment Pond Near Brooks Camp (Proposed Action and Preferred Alternative).

General Edit, Throughout EA. All instances in the EA which refer to the proposed Brooks Camp WSTP which reads “... *wastewater disposal*...” will be modified to read “... *wastewater treatment*...”

Appendix B: Non-Impairment Finding on the Environmental Assessment for Brooks Camp Wastewater Solids Treatment Pond

Katmai National Park and Preserve

A determination of non-impairment is made for each of the resource impact topics carried forward and analyzed in the EA for the preferred alternative. The following criteria was used as a basis for determining the significance of the resource and whether or not impairment would occur:

- Necessary to fulfill specific purposes identified in the enabling legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park;
- Identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Cultural Resources

The cultural heritage of Katmai National Park and Preserve is specifically identified in the park's enabling legislation, expressed in the ANILCA expansion of the park lands, and in the park's Foundation Statement as a resource of significant value.

"Katmai National Park and Preserve contains a 9,000 year record of human adaptation to environmental and ecological change that continues today.

Historic Resources: The historic resources chronicle early use by Alaska Natives, researchers, explorers, trappers, miners, fishermen, tourists, and others.

Archeology: The park preserves prehistoric and historic sites that document a 9,000 year record of human history and that have cultural value to the native people who trace their ancestry to the park lands."

- Katmai National Park and Preserve Foundation Statement, 2009

"Katmai National Monument ... shall be managed for the following purposes, among others: To protect habitats for, and populations of, fish and wildlife including, but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features."

- ANILCA 202(2), 1980

"Whereas it appears that the public interest would be promoted by adding to the Katmai National Monument, Alaska, certain adjoining lands for the purpose of including within said monument, additional lands on which there are located features of historical and scientific interest..."

- President Herbert Hoover, 1931

Alternative 2 will impact the VTTS Road Historic District, a feature which is eligible for listing on the National Register of Historic Places. These adverse effects are attributed to the placement of a

new modern facility within the VTTS Road Historic District. The park has enacted a programmatic agreement with the AK-SHPO, which, when implemented will have the effect of reducing the adverse effects from this project to the maximum extent possible. These impacts will not result in impairment of the VTTS Road Historic District nor inhibit the eligibility of the property to be listed on the National Register.

Additionally, Alternative 2 has the potential to impact previously unidentified archeological resources located within the project area at mile 1.8 along the VTTS Road. Construction activities for this project have the potential to unearth previously unidentified archeological resources lying in situ which may result in their damage or destruction. These potential impacts will be mitigated through the implementation of a comprehensive archeological survey of the project area prior to construction and the presence of an NPS archeologist during the construction period to monitor for impacts to undiscovered resources. These impacts will not result in impairment of archeological resources at Katmai National Park.

Soils and Vegetation

Management for vegetation is not specifically identified as a purpose in the establishing legislation of the park and is not specifically identified in the park's general management plan as being of significance. Alternative 2 will impact approximately 1.8 acres of vegetation and will not result in impairment.

Management for soils is not specifically identified as a purpose in the establishing legislation of the park and is not specifically identified in the park's general management plan as being of significance. Alternative 2 will impact approximately 7,500 cubic yards of soils and will not result in impairment.

Visitor Use and Recreation Setting

Visitor use and recreation setting is identified in the General Management Plan for Katmai National Park and Preserve and the Development Concept Plan for the Brooks River Area as a resource of significant value.

“Provide for the general public resource-based recreation that does not impair natural and cultural resource values.”

- Final Development Concept Plan, Brooks River Area, Katmai National Park and Preserve, 1996

“Visitor use objectives include providing for visitor enjoyment and appreciation of the area, consistent with the natural and cultural resource values.”

- General Management Plan, Wilderness Suitability Review, Land Protection Plan: Katmai National Park and Preserve, 1986

Alternative 2 will impact the visitor use and recreation setting at Katmai National Park and Preserve during the construction period for the project and throughout the life of the facility. These impacts include subjecting visitors recreating along the VTTS Road to unpleasant odors in the immediate vicinity of the Brooks Camp WSTP, delays to the daily bus tour to the VTTS during the project construction period, and disruption of the scenic resources of the Brooks Camp area due to forest

clearing necessary to site the facility. These impacts would result in a minor reduction in visitor enjoyment and would not impair park resources or values.

Wildlife

Wildlife are included in the General Management Plan for Katmai National Park and Preserve, the Foundation Statement for the park, and the park's enabling legislation as a resource of significant value.

“Whereas it appears that the public interest would be promoted by adding to the Katmai National Monument, Alaska, certain adjoining lands for the purpose of including within said monument, additional lands on which there are located features of historical and scientific interest and for the preservation of the brown bear, moose, and other wild animals.”

- President Herbert Hoover, 1931

“Katmai National Monument ... shall be managed for the following purposes, among others: To protect habitats for, and populations of, fish and wildlife including, but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features.”

- ANILCA Section 202(2), 1980

Alternative 2 will impact wildlife species, including adverse impacts to brown bear and migratory birds which would be attracted to the Brooks Camp WSTP. The adverse impacts include 1.8 acres of habitat loss due to vegetative clearing activities related to the project and potential impacts to breeding and/or nesting of birds in the immediate project area. Construction and maintenance activities will disturb local wildlife, as will the ongoing operation of the Brooks Camp WSTP. These impacts will be localized around mile 1.8 of the VTTS Road and will not result in impairment of wildlife resources.

Conclusion

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of Alternative 2.