
National Park Service
U.S. Department of the Interior

Glacier Bay National Park and Preserve
Alaska



Finding of No Significant Impact

DIDSON Sonar Installation on the Bartlett River June, 2011

Recommended:

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Date

Approved:

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Regional Director, Alaska

6/28/2011
Date

FINDING OF NO SIGNIFICANT IMPACT

DIDSON Sonar Installation Glacier Bay National Park & Preserve, Alaska June, 2011

The National Park Service (NPS) prepared an environmental assessment (EA) to evaluate a proposal to install a dual frequency identification sonar (DIDSON) instrument on the Bartlett River in Glacier Bay National Park designated wilderness.

The NPS has selected alternative **B – DIDSON Sonar installation** with mitigation measures under which the NPS would install a DIDSON Sonar unit and operate it seasonally for the 4 year duration of the project.

Four parties provided comments during the 30-day public review period. The selected alternative was not modified by public comment. An attachment to the FONSI provides responses to substantive comments.

ALTERNATIVES

Two alternatives were evaluated in the EA.

Alternative A - No Action

No escapement estimates would be established for the coho salmon fishery on the Bartlett River. The contribution of these populations to area fisheries would be determined through angler counts and periodic creel and mail-back surveys. This alternative represents a continuation of the existing situation and provides a comparative baseline for evaluating the changes and impacts of the action alternatives.

Alternative A would be the environmentally preferable alternative.

Alternative B - DIDSON Sonar Installation (NPS Preferred Alternative)

A DIDSON sonar unit would be installed in the Bartlett River. The installation footprint would be approximately 32 ft² and consists of the DIDSON instrument, a fish diversion fence, fuel cell power source, 2 backup batteries and a laptop computer and data storage devices. The DIDSON unit would be installed in the water near the bank and a fish diversion fence would encompass the unit and divert the fish to the ideal distance for focused imaging. Some netting and measurement of fish will need to be conducted to ensure proper species apportionment.

Equipment would be installed and operated from August 1 to October 31 and be removed each fall for 4 years. The site would be visited 2-4 times each week on average with more site visits occurring during installation and removal. Whenever possible, staff would travel to and from the site using non-motorized boats on the Bartlett River. At the end of each operating season, all of

the electronics including DIDSON, EFOY fuel cell, batteries, etc., would be removed from the project area and stored at park headquarters. The other materials such as the equipment storage box, fish diversion fencing materials, and H-mount, would be stored at the installation site for use the following season. All equipment will be completely removed at the end of the project period.

PUBLIC INVOLVEMENT

The project proposal was initially released for public scoping and comment from January 8, 2011 to February 6, 2011. Consultation with the Hoonah Indian Association began February 28, 2011 and remained open through the public comment period. The consultation did not result in any changes to the proposal. The EA was sent by mail or email to 5 state and federal agencies, the Hoonah Indian Association, interest groups and individuals, and was posted on the NPS Planning, Environment and Public Comment System (PEPC) and the park's webpage.

The EA was released for public review and comment from April 7, 2011 to May 6, 2011. Comments were received from two State of Alaska agencies, the National Parks Conservation Association (NPCA); and an Alaska resident. The comments received generally supported the proposed action. The NPS responses to significant public comments are found in Attachment A. The public comments received did not change the conclusions in the EA about the environmental effects of the action.

DECISION

The NPS decision is to select Alternative B, DIDSON Sonar Installation along with the mitigating measures. No modifications of Alternative B were made during or after the public comment period.

Mitigating Measures

The following mitigation measures apply to the selected alternative B, DIDSON Sonar Installation

- Local residents in Gustavus and park visitors in Bartlett Cove would be notified of the expected dates, nature, and duration of the disturbance.
- Employee shoes, clothing and equipment will be cleaned and checked for the presence of non-native seed sources prior to accessing the site. The installation site will be periodically checked for non-native plants for 2 years following project termination. To prevent introduction or transfer of non-native aquatic organisms, felt-soled wading boots will not be used.
- All personnel will be trained in Leave No Trace techniques, efforts will be made to avoid enlarging the existing wildlife trail leading to the site.
- Camp and installation sites will be rehabilitated upon completion of the project.
- To prevent potential erosion, road fabric will likely be placed on the streambank and streambed in the immediate area of the diversion fence.

- The installation and all associated equipment will be completely removed at the end of the project.

Rationale for the Decision

Alternative B (NPS Preferred Alternative) with mitigating measures will satisfy the purpose and need of the project better than the no-action alternative (environmentally preferred alternative).

Coho and sockeye salmon populations can be estimated using visual counting methods such as foot, aerial, or snorkel counts that do not require an onsite installation. These methods were piloted in 2007 by the NPS fisheries crew. Turbid water quality and poor visibility conditions are the biggest obstacles to obtaining accurate fish escapement numbers on the Bartlett River system and make visual estimation the least accurate method. For this reason, a visual method was not selected.

The most accurate way to assess salmon escapement would be a floating board weir installed on the river and operated from August through October for the 4 year project. However, the scale, footprint, and impact of this type of installation spanning the entire river channel would be much greater. The weir would temporarily impede fish passage upriver, attract predators while in place, and result in significantly more impact to wilderness character. Fish would be subject to injury or predation from bird or mammalian predators. The weir would require 24 hour monitoring and a field camp to house staff on site. Because of higher levels of impact to wilderness qualities, this method was not selected.

Data from the DIDSON Sonar will enable the NPS to understand fish abundance and year to year variation on the Bartlett River to evaluate sustainability. Installation and operation of the sonar will have only negligible to minor effects on park resources.

Significance Criteria

The preferred alternative will not have a significant effect on the human environment. This conclusion is based on the following examination of the significance criteria defined in 40 CFR Section 1508.27.

1. Impacts that may be beneficial or adverse.

The EA evaluated the effects of Alternative B on vegetation, aquatic biota and habitat, wildlife and wilderness character. As documented in the EA the effects of the proposed action would range from negligible to minor depending on the resource.

2. The degree to which the selected alternative will affect public health or safety.

There would be neither a positive nor a negative effect on public health or safety by implementing the preferred alternative.

- 3. Unique characteristics of the geographic area such as proximity to cultural or historic resources, park lands, prime farm lands, wetlands, wild and scenic rivers, or ecologically critical areas.**

The DIDSON sonar installation would be located in Glacier Bay National Park and within designated wilderness. The EA evaluated the effects of installation, operation, and maintenance on the surrounding wilderness and concluded that the impacts would be minor.

The project lies within the traditional cultural property (TCP) of *L'eiw Shaa Shakee.aan*, Town on Top of the Sand Hill. The TCP encompasses the waterways of Bartlett Cove, the Bartlett River, Bartlett Lake and the Beardslee Islands, as well as portions of certain surrounding lands. Consultation with the Hoonah Indian Association revealed no effects to the TCP from taking this action.

- 4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.**

Scoping with Federal, State, local agencies, and the public did not identify any highly controversial issues or effects associated with the site.

- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.**

This proposal does not present any highly uncertain or involve any unique or unknown risks.

- 6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about future considerations.**

No other installation of this type exists within Glacier Bay National Park's wilderness. Upon completion of this project on the Bartlett River, the DIDSON Sonar unit, could be used in other areas of the park or lent to other agencies. Any other proposals to construct, operate and maintain similar facilities in a National Park shall require an appropriate level of NEPA documentation at the time of the proposal.

- 7. Whether the action is related to other actions with individually but cumulatively significant impacts.**

Glacier Bay National Park currently has 42 medium to large size installations within wilderness. Some of these are permanent, while 24 are slated for removal in the next three years. Within the project area there are three installations; a temporary staff gauge, a trail bridge and boardwalk. The proposed DIDSON installation is a temporary installation; it will cause a short term increase to the number of installations in the project area and in Glacier Bay's Wilderness. Over the next three years, the number of medium to large size installations in Glacier Bay's Wilderness is expected to decrease. The cumulative effect of the proposed action on wilderness character is negligible.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss of destruction of significant scientific, cultural or historic resources.

The project lies within the traditional cultural property (TCP) of *L'eiw Shaa Shakee.aan*, Town on Top of the Sand Hill. The TCP encompasses the waterways of Bartlett Cove, the Bartlett River, Bartlett Lake and the Beardslee Islands, as well as portions of certain surrounding lands. Consultation with the Hoonah Indian Association revealed no effects to the TCP from taking this action.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The selected alternative would not adversely affect any endangered or threatened species or its habitat. No endangered or threatened species are located within the project area.

10. Whether the action threatens a violation of Federal, State, or Local law or requirements imposed for the protection of the environment.

The selected alternative was found to be the "minimum necessary" through the Minimum Requirements Analysis (MRA) process. The MRA was included in the EA as Appendix A. The selected alternative is consistent with the Wilderness Act, Section 4(c) which states "except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act...there shall be...no structure or installation within any such area."

FINDINGS

The levels of adverse impacts to park resources anticipated from the selected alternative will not result in an impairment of park resources that fulfill specific purposes identified in the establishing legislation or that are key to the natural or cultural integrity of the park.

The selected alternative complies with Endangered Species Act, the National Historic Preservation Act, and Executive Orders 11988 and 11990. There will be no restriction of subsistence activities as documented by the Alaska National Interest Lands Conservation Act, Title VIII, Section 810(a) Summary Evaluation and Findings.

The National Park Service has determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement is not needed and will not be prepared for this project.

ATTACHMENT A

NPS RESPONSES TO PUBLIC COMMENTS for the Glacier Bay National Park & Preserve EA for DIDSON Sonar Installation

The public comment period for the DIDSON Sonar Installation Environmental Assessment (EA) in Glacier Bay National Park ended May 7, 2011 after a 30-day comment period. Four letters were received. Comment letters were received from one private individual, two state agencies, (State of Alaska ANILCA Implementation Program and Coastal Zone Management Program), and one private organization (National Parks Conservation Association). Described below are the substantive comments and agency responses.

Comment 1:

The State of Alaska ANILCA Implementation Program Office of Project Management and Planning agrees that available data regarding fisheries resources on the Bartlett River is limited and that accurate and reliable data assists management decisions. They do not perceive that there is a current or near term risk of insufficient escapement of coho salmon in the Bartlett River. They feel the current fishery management and monitoring tools are sufficient to ensure sustainability.

Response 1:

The NPS appreciates the states comments and acknowledgement that the available data regarding fisheries resources on the Bartlett River is limited. Our fisheries staff agree that it is unlikely that the fishery is currently being overharvested. However, NPS angler counts indicate a two fold increase in angler effort since creel surveys were conducted in the late 90's. The data collected by the DIDSON sonar will establish a baseline dataset on salmon escapement that can be used to make management decisions regarding visitor use and park resource protections.

Comment 2:

The State of Alaska ANILCA Implementation Program Office of Project Management and Planning noted that a Fish Resource Permit is missing from the list of permits in this EA.

Response 2:

The NPS will continue to coordinate with the State on all applicable permits and appreciates their assistance with the state permitting process.

Comment 3:

The State of Alaska ANILCA Implementation Program Office of Project Management noted that some of the ANILCA purposes listed on page 4 of the EA did not state purposes as specific directives for management of Glacier Bay National Park and Preserve.

Response 3:

The NPS recognizes that two of the items in this list are specific to Glacier Bay National Park and Preserve and the other items in the list are more general ANILCA purposes.