

WILD AND SCENIC RIVER VALUES

ALAGNAK WILD RIVER | Alaska | May 2015

NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR





DEAR FRIENDS,

What comes to mind when you think about the Alagnak River?

Do you think of a wild river flowing through boreal forest and rolling tundra where one can experience solitude in a vast open landscape? A float trip through meandering braided channels that provides world-class sport fishing or a chance to glimpse brown bear feasting on spawning salmon or moose browsing above the riverbank? A waterway with enduring cultural ties that tells the many stories of those who depend on its abundant resources for survival?

The Alagnak Wild River is all of this and much more. To help us protect this river system for the benefit and enjoyment of future generations, we have contemplated this very question to determine what makes it outstandingly remarkable.

Knowledgeable people from the National Park Service, other agencies, and river partners contributed valuable information, insight, and perspectives to help answer this question. Based on this hard work and thoughtful input, I am pleased to present to you the wild and scenic river values of the Alagnak Wild River. The value statements that follow have been developed to provide a strong foundation for the future management and protection of this nationally significant river system—to help us focus our daily attention on the river's most important aspects.

I encourage you to read these statements and to share your thoughts with us about what makes the Alagnak Wild River outstandingly remarkable to you.

Best regards,

Diane Chung

Superintendent



THE WILD AND SCENIC RIVERS ACT AND THE ALAGNAK RIVER

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 USC 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

It is hereby declared to be the policy of the United States that certain selected rivers of the nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dams and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

Wild and Scenic Rivers Act, October 2, 1968

In order to protect the Alagnak's free-flowing characteristics, water quality, and outstandingly remarkable values, the upper 67 miles were designated a wild river in 1980 by the Alaska National Interest Lands Conservation Act (ANILCA) under the provisions of the 1968 National Wild and Scenic Rivers Act. Wild rivers are rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

The designated reach of the Alagnak Wild River is "that segment from the main stem and the major tributary to the Alagnak, the Nonvianuk River, within Katmai National Preserve" and "those segments or portions of the main stem and Nonvianuk tributary lying outside and westward of the Katmai National Park/Preserve and running to the west boundary of township 13 south, range 43 west" (Public Law 96-487). Approximately 83% of the lands within the Alagnak Wild River corridor are federally owned; the remaining 17% are under private ownership.

WILD AND SCENIC RIVER VALUES

Each river in the national system is administered with the goal of protecting and enhancing the values that caused it to be designated. Outstandingly remarkable values (ORVs), free-flowing condition, and water quality form the three pillars of protection under the Wild and Scenic Rivers Act. Because all wild and scenic rivers are free-flowing rivers whose water quality must be protected and enhanced, descriptions of these two values are included as part of this wild and scenic river values publication. These fundamental characteristics of the rivers are described after the ORV statements.



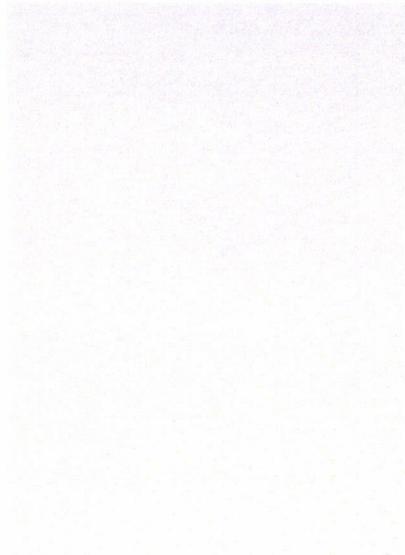
**Outstandingly
Remarkable Values**



Free-flowing Condition



Water Quality



OUTSTANDINGLY REMARKABLE VALUES

Outstandingly remarkable values are defined by the Wild and Scenic Rivers Act as the characteristics that make a river worthy of special protection. Thus, the foundation for wild and scenic river management is a clearly defined set of ORVs. The Interagency Wild and Scenic Rivers Coordinating Council has issued criteria for identifying and defining these values. The criteria guidance states that:

An ORV must be river related or dependent. This means that a value must

- be located in the river or on its immediate shorelands (generally within 0.25 mile on either side of the river)
- contribute substantially to the functioning of the river ecosystem
- owe its location or existence to the presence of the river

An ORV must also be rare, unique, or exemplary at a comparative regional or national scale. Such a value would be one that is a conspicuous example from among a number of similar values that are themselves uncommon or extraordinary.

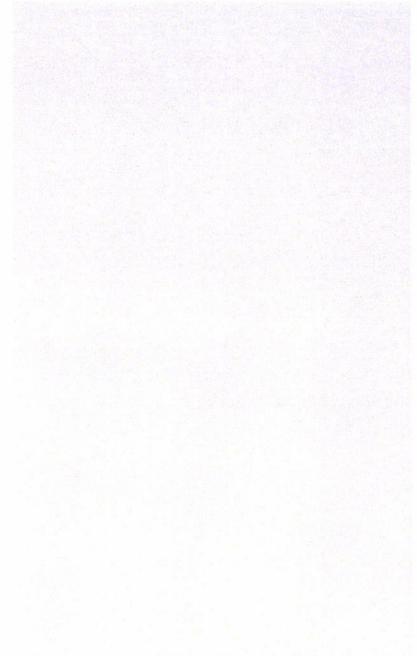
Based on these criteria and a careful analysis of the designated reaches of the Alagnak Wild River, the National Park Service (NPS) has determined that several ORVs are present. The analysis concluded that the Alagnak River contains the following ORVs: fish, wildlife, scenic, recreational, and cultural. A set of broad statements has been developed that articulates each ORV for the entire river designation. An evaluation process for each ORV was then used to determine which river segments contain the different ORVs. The results of this evaluation were used to develop segment-specific ORV descriptions for individual river segments, providing further evidence and support for the broad ORV statements. All of these broad statements and segment-specific descriptions are included in this document. The following matrix summarizes the evaluation results and provides organization to the ORV statements and segment-specific descriptions that follow. It indicates which segments of the Alagnak River possess the above-mentioned ORVs.

For the purpose of the ORV evaluation, the Alagnak River was divided into distinct river segments. The segments were defined based on physical processes, features, recreational use, development, and resources. The segments are defined as follows:

- Alagnak River and Nonvianuk River (upstream portions above confluence)
- Alagnak River (downstream portion below confluence with Nonvianuk River)



River Segment	ORV Category				
	Fish	Wildlife	Scenic	Recreational	Cultural
 Alagnak River and Nonvianuk River (upstream portions above confluence)	•	•		•	•
 Alagnak River (downstream portion below confluence with Nonvianuk River)	•	•	•	•	•



Fish Values

Aquatic habitat along the Alagnak is outstanding, based in part on the effect of its headwater lakes in moderating high flows. This is the only location in the Bristol Bay region where a lake-fed river has such high gradient with abundant habitat provided by multiple channels flowing between numerous small vegetated islands. Fish diversity is also outstanding, including five species of Pacific salmon and numerous freshwater species.

ALAGNAK RIVER AND NONVIANUK RIVER



(Upstream portions above confluence)

The lakes at the headwaters of the Alagnak Wild River stabilize the water flow regime, aiding in the hatching and rearing of salmon. Exemplary, high biomass salmon runs result from this spawning and rearing habitat at the lake outlets. The abundance of salmon eggs, flesh, and outmigrating smolts in turn results in rare aggregations of trout, burbot, and lake trout in the river’s headwaters.

ALAGNAK RIVER



(Downstream portion below confluence with Nonvianuk River)

Due to the volume of flow, high water quality, and abundant habitat, the downstream segment has all freshwater river species present within the region. Species include five Pacific salmon species, rainbow trout, grayling, and lamprey. The sockeye salmon runs are so substantial they support a major commercial fishery. High population numbers of multiple species, especially in the section known as the Braids that acts as a habitat multiplier, support an internationally known sport fishery.



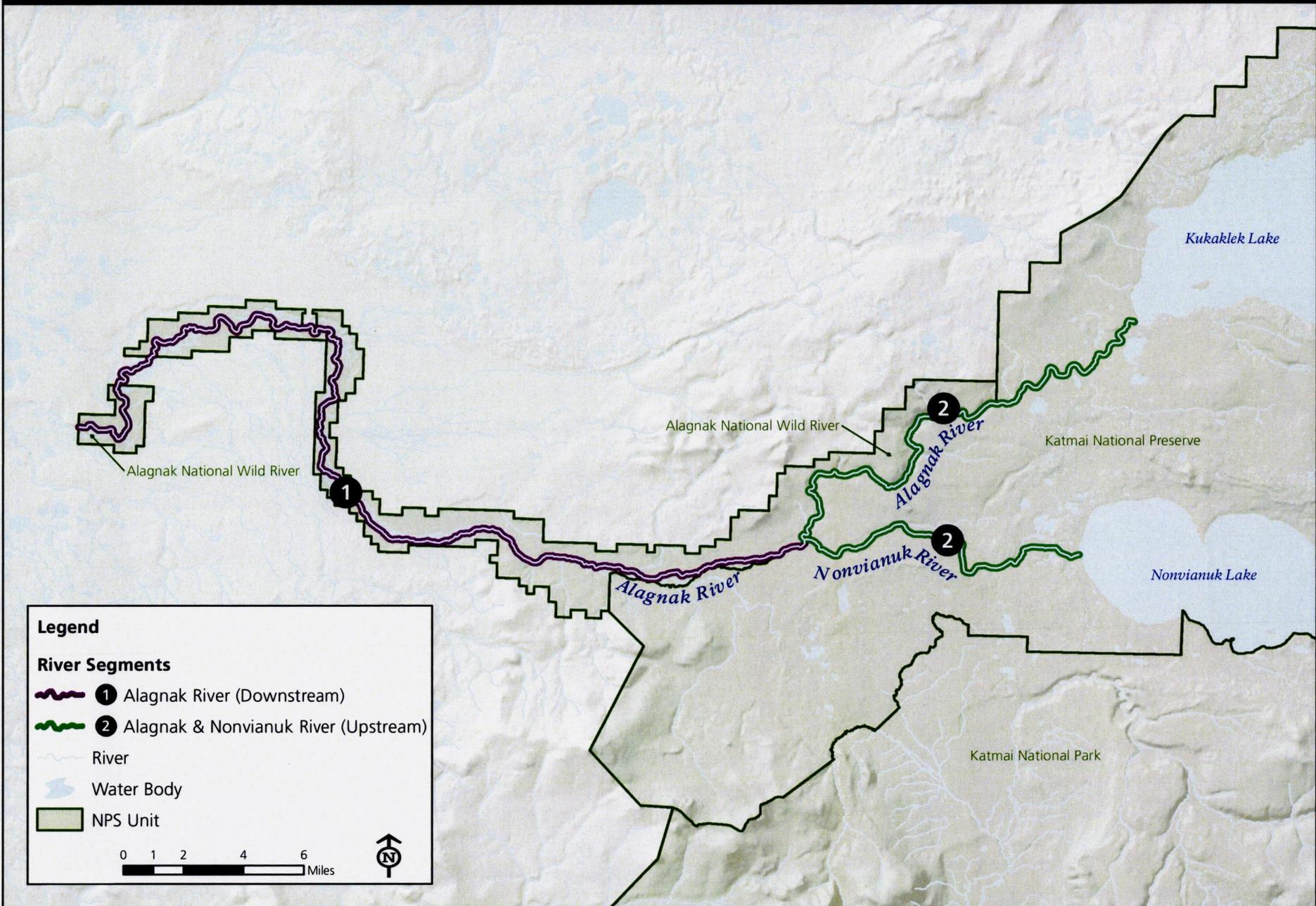
Alagnak Wild River

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Wild and Scenic River Values



Wildlife Values

The Alagnak's wildlife habitat is exemplary of Bristol Bay rivers. The river's channel complexity and gradient provide outstanding and diverse aquatic and riparian habitat for healthy populations of brown bear, shorebirds, waterfowl, moose, and other river-dependent species.

ALAGNAK RIVER AND NONVIANUK RIVER

(Upstream portions above confluence)

The outlets of these two lakes provide important brown bear forage opportunities due to the concentrations of sockeye spawning habitat. River-dependent birds, including American dippers, are probably found throughout the river in this section, but their distribution and abundance is poorly understood. These characteristics create a regionally exemplary river-dependent wildlife resource.



ALAGNAK RIVER

(Downstream portion below confluence with Nonvianuk River)

From the air, the migration of the river's main channel over time is readily apparent. Older channel locations provide high concentrations of riparian habitat, which is important to multiple wildlife species such as moose, waterfowl, shorebirds, beaver, river otter, and bear. The width of this multichannel, braided riparian zone contributes to high populations of river-dependent species such as bald eagle and osprey. The riparian habitat supports highly diverse shorebird and waterfowl assemblages. These characteristics create a regionally exemplary river-dependent wildlife resource.



Scenic ORV

The Alagnak River, originating in Katmai National Preserve's Kukaklek and Nonvianuk Lakes, flows through wild boreal forests and rolling tundra with glimpses of distant peaks. Abundant salmon, moose, brown bear, and birds can be seen along its meandering course. The expansive braided nature of the river is best revealed from the air, which contrasts with the intimate experience of floating the maze of river channels through dense willows and alders. The scenic beauty of the river corridor is enhanced by historic cabins and fish camps that provide an enduring connection to the past.

ALAGNAK RIVER

(Downstream portion below confluence with Nonvianuk River)

The Alagnak River downstream from the confluence with the Nonvianuk River provides exceptional views of meandering braided river channels lined with willows and alders. Salmon are present in large numbers and can easily be viewed through the crystal clear water. The scenery of the river is enhanced by a diversity of wildlife species that include moose, brown bear, and various bird species. The true scenic beauty of the river is best appreciated from the air when arriving by plane. Historic structures, including remnants of cabins and fish camps, can be seen from the river.





Recreational ORV

The Alagnak Wild River represents the best of Bristol Bay sport fishing. The river provides the opportunity to pursue five species of Pacific salmon, rainbow trout, and other favored species such as Arctic grayling, Dolly Varden, and lake trout, during continuous fish runs spread over the entire course of the season. This internationally renowned sport fishery occurs in a remote, pristine fly-in setting and is a popular float trip with visitors.

ALAGNAK RIVER AND NONVIANUK RIVER (Upstream portions above confluence)

The upstream segment reveals a high quality scenic experience and provides rare seasonal opportunities for anglers pursuing fish species such as lake trout and burbot.

ALAGNAK RIVER (Downstream portion below confluence with Nonvianuk River)

The downstream segment of the Alagnak Wild River features the best fishing opportunities in the corridor. All five species of Pacific salmon are found in their greatest abundance, as well as high numbers of rainbow trout. The Braids (a stretch of many channels and islands) represents the greatest amount of fishable water.

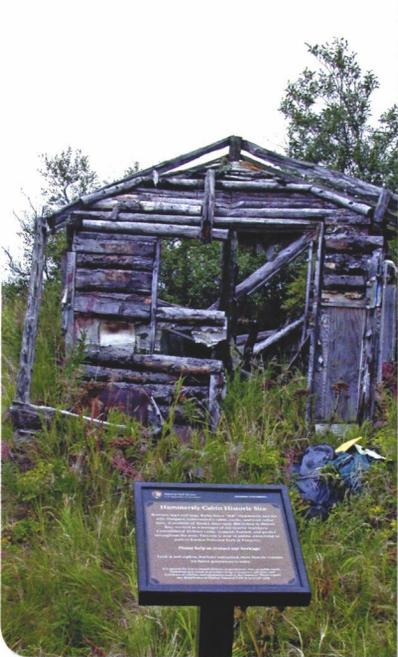
Cultural Values

ALAGNAK RIVER (Broad statement including both upstream and downstream segments)

The Alagnak Wild River corridor sits at a dynamic cultural borderland and has an atypical cultural geography within the Alaska Peninsula. This resource rich riparian area was situated between native cultures, including two Yupik-speaking groups. The close geographical juxtaposition of these different groups ensured that these communities were drawn together at productive riparian sites, sometimes peacefully and sometimes not. The Alagnak probably became a geographical nexus, one of several on the peninsula, where these different communities converged and associated anew, around the time of European contact.

Sites along the Alagnak Wild River corridor show a history of occupation from 9,000 years ago to the present. The archeological sites along the river corridor show almost continuous occupation over the last 2,200 years. One site is listed in the National Register of Historic Places, and 21 other archeological sites have been determined eligible. From the 9,000-year-old sites at the headwaters, to the villages that were occupied at the time of contact, to today's modern use as part of the subsistence economy, the Alagnak Wild River demonstrates the traditional seasonal use of resources available on the river corridor.

The river retains significance to its former occupants and their kin that persisted, despite myriad social, spiritual, cultural, and economic changes. Use of the river continues to be an enduring part of Alaska native peoples' social, cultural, economic, and dietary practices. Families continue to use the river for the harvest of fish and game, due in large part to preferred habitat for populations of moose when compared to other areas in the region.





FREE-FLOWING CONDITION

Section 16(b) of the Wild and Scenic Rivers Act defines free-flowing as “existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.”

The Alagnak and Nonvianuk Rivers drain two large lakes that are at the margin of a mountainous area that forms part of the Aleutian Range. These two lakes produce roughly comparable streamflow. No major tributaries enter the Alagnak downstream from the confluence with the Nonvianuk River. Limited discharge and stage records show that the Alagnak River is snowmelt-dominated, rising from low flows in winter through early June to a summer high flow period in mid-June through early July. Flows decrease following this summer period except for short, rainfall-induced peaks. Ice is present on the river from late September until May. Because no continuous streamflow records exist, the river’s flood frequency and mean annual flow is unknown. Changes to the river’s hydrology since designation could have resulted from climate patterns such as the Pacific Decadal Oscillation or other regional or global climate patterns.

The Alagnak and Nonvianuk Rivers are relatively free from human infrastructure that could impact the free-flowing condition of the river; however, revetments and other bank-protection measures or structures exist at a minimum of four lodges. Docks and associated facilities have been constructed for these lodges along the designated reach of the Alagnak River. Despite the existence of a number of lodges along the river.

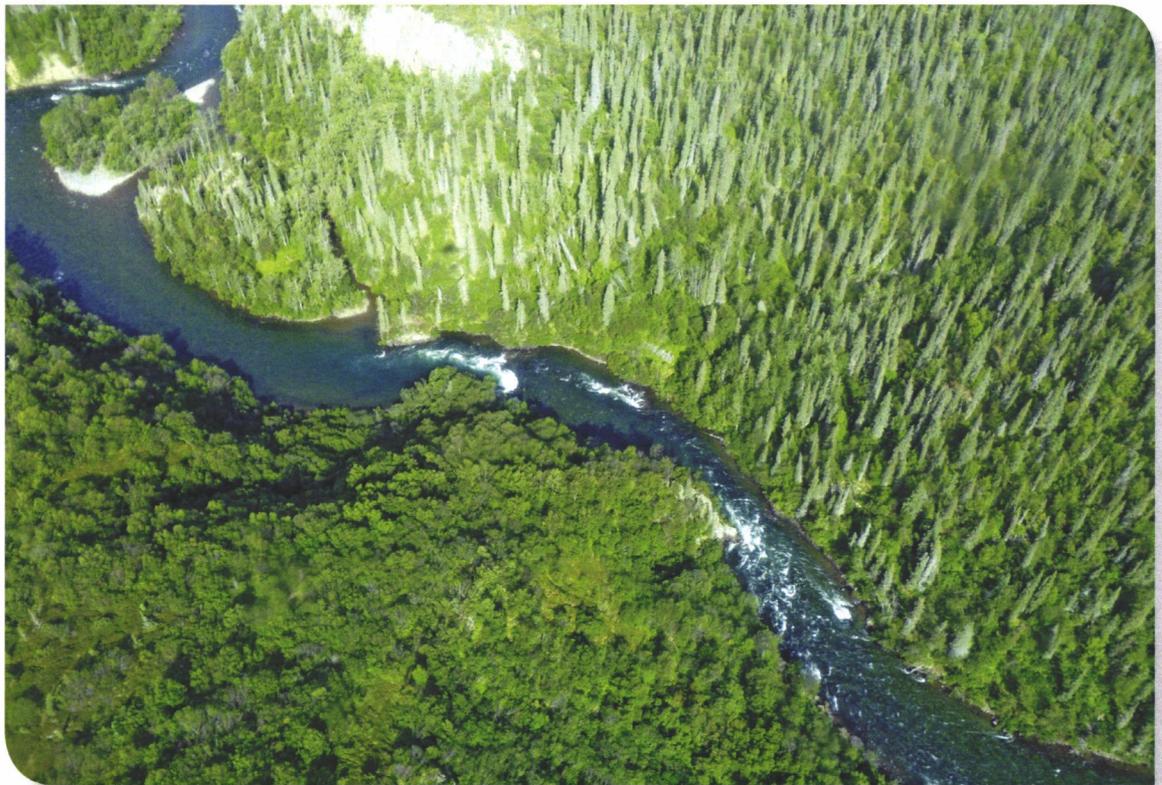




WATER QUALITY

Congress declared its intent to protect the water quality of rivers added to the National Wild and Scenic Rivers System in section 1(b) of the Wild and Scenic Rivers Act. Congress further specified that the river-administering agencies cooperate with the US Environmental Protection Agency (EPA) and state water pollution control agencies to eliminate or diminish water pollution (section 12(c)). The act, however, does not reassign EPA and/or state responsibility for implementation of the Clean Water Act to the river-administering agency.

Originating in Katmai National Preserve, the water quality conditions of the Alagnak and Nonvianuk Rivers are generally considered stable, natural, and of high quality. These water quality conditions are reflective of the largely unaltered setting. Baseline water quality data were collected during US Geological Survey (USGS) studies in 1999 and 2000. The Alagnak River is a nutrient-poor, slightly alkaline waterway with low suspended sediment concentrations. Water chemistry changed little over time or in a downstream direction during the studies. While there are several lodges along the river using septic systems or outhouses, no pervasive human impacts on water chemistry were detected by the studies. No recent USGS data are available for comparison of water quality trends. Private inholdings along the rivers could be further developed, posing potential threats to water quality conditions. Use of motor boats and float planes on the rivers could also result in petrochemical spills.

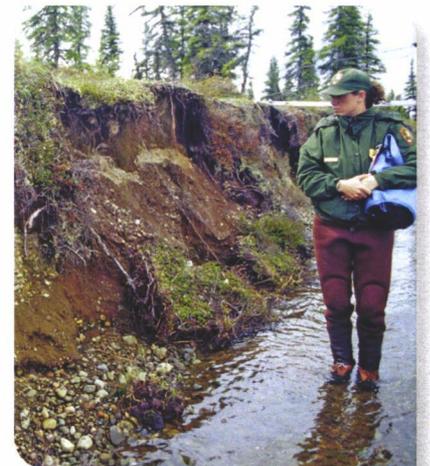




RIVER-RELATED ISSUES

A list of river-related issues facing the Alagnak Wild River has been developed to help river managers identify and prioritize future management efforts. Please note the list of issues is not organized by level of importance.

- Nonnative species, primarily plants (dandelions, pineapple weed), including those occurring on adjacent private lands.
- Private allotments sometimes have multiple owners, making it difficult to coordinate with them on addressing issues, such as trespass by recreationists, cultural resource protection, and potential land acquisitions.
- Atmospheric deposition from large-scale mining developments.
- Recreational carrying capacity.
- Impacts to anadromous fish downstream or outside the watershed such as from oil and gas development and commercial fishing.
- Impacts from large boats / high speeds – manner and access of vessel use (wake).
- Commercial development on private inholdings (lodges).
- Section 7 compliance for in-water structures for docks and bank stabilization.
- Human-caused riverbank erosion.
- Marine safety as it relates to people.
- Trespass on private lands from visitors.
- Vandalism to archeological sites, historic sites, and private cabins.
- Anthropogenic climate change effects to river resources.
- Need for comprehensive river management plan.
- Need to identify sacred sites.
- Need to document oral histories for elders to better understand cultural ties to the river.
- Need to seek cooperation/partnerships with other large land management agencies and owners, such as village corporations, to address issues (improve communications and collaboration).
- General lack of knowledge, familiarity, and awareness of river resources.
- Lack of adequate funding dedicated specifically to manage the river.
- Potential for the spread of diseases affecting fish populations and other species.
- Need to coordinate with Bristol Bay Native Corporation (allotment purchase program).
- Staff and leadership turnover (loss of institutional memory).
- Potential for rights-of-way for power and communication lines.
- Potential for all-terrain vehicle (ATV) use.
- Trash and human waste from visitors.





RIVER-RELATED STAKEHOLDERS

Many individuals, organizations, institutions, and agencies throughout the region have participated in past planning, management, and program efforts with NPS staff for the Alagnak River. The input and involvement from these stakeholders and partners are essential for effective management of the river. This list of stakeholders and partners will continue to be updated over time to ensure that all interested parties have an opportunity to engage in future management efforts.

- Alaska Audubon
- Alaska Volcano Observatory
- Bristol Bay Economic Development Corporation
- Bristol Bay Land Trust
- Bristol Bay Native Association
- Bristol Bay Native Corporation
- commercial use authorization holders
- The Conservation Fund
- Igiugig Corporation
- Katmai service providers
- Lake and Peninsula Borough
- Lake and Peninsula Borough and Bristol Bay Borough School Districts
- Levelock Village Corporation
- local fish and game advisory councils
- lodges
- National Parks Conservation Association
- private landowners
- recreational users
- State of Alaska – Department of Natural Resources, Department of Fish and Game, Alaska Wildlife Troopers, Department of Environmental Conservation, ANILCA Program, Department of Commerce, and Others
- subsistence users – through Bristol Bay RAC (usually)
- traditional village councils – Igiugig, King Salmon, Levelock, Naknek, South Naknek
- Trout Unlimited
- US Army Corps of Engineers
- US Fish and Wildlife Service
- US Geological Survey



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