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NATIONAL PARK SERVICE AND GLOBAL CLIMATE CHANGE

Introduction: The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. NPS protects, restores and maintains natural and cultural resources and associated values. They are managed within the broad ecosystem and global context.

The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

NPS collaborates with federal, state, tribal, international and local governments, private organizations, and businesses to work toward common goals.

NPS incorporates research findings and new technologies to improve work practices, products, and services and shares technical information and expertise with public and private land managers. NPS contributes to knowledge about natural and cultural resources and their associated values: management decisions about resources and visitors are based on adequate scholarly land scientific as well as local knowledge and information.

The National Park Service works to protect and enhance the global environment through the strengthening of management, operation and preservation of critical habitats and outstanding natural and cultural resources. It also shares management responsibilities for preservation and conservation of natural and cultural resources with neighboring international authorities.

Through international cooperation, the NPS continues to strengthen and improve its own capabilities to achieve its domestic mission and extend the benefits of natural and cultural conservation throughout the world.

Purpose: The National Park Service strives to meet its original goals, while filling many other roles as well: guardian of our diverse cultural and recreational resources; environmental advocate; world leader in the parks and preservation community; and pioneer in the drive to protect America's open space. NPS protects, restores and maintains natural and cultural resources and associated values. We manage them within their broader ecosystem context.

NPS contributes to knowledge about natural and cultural resources and their associated values: management decisions about resources and visitors are based on adequate scholarly and scientific information.

Arctic Land Manager: The NPS manages vast acreage of arctic lands and waters, including entire ecosystems, saved by the American people for the benefit of the American people and for worldwide residents. With over 54 million acres of land and more than 20,000 river miles, the NPS is the steward of highly valued landscapes. The NPS has a core commitment to sustain and to restore the natural systems of the planet. The NPS of the 21st century is a principal leader of national and global efforts to preserve biodiversity.

Management: To manage effectively the NPS must be aware of the variety of changes that might be occurring. The NPS is embarking on an Inventory and Monitoring program that will help assess changes in the Arctic. The NPS is willing to host research and be “living laboratories”, research platforms for an accumulating database. The US needs an outreach program that educates and communicates information about contaminants in global climate change in the Arctic. It is essential for the public to be able to make informed decisions to

minimize risks to their families and communities. It is incumbent on all public agencies to provide this type of information crucial to the overall health of our citizens. The NPS is particularly well suited to working with the arctic communities, since many of our employees live there.

Strategic Location: The NPS lands contain headwaters (spawning and rearing areas) for many streams and rivers important to the fisheries of the Yukon River and Bering Sea. The recent salmon disasters have had a profound negative effect on fisheries, on commercial and subsistence users and have international implications. We do not know how loss of biological productivity in the headwaters affects the systems or if Persistent Organic Pollutants (POPs) are affecting reproduction and survival.

Regulatory: The DOI/NPS are part of interdepartmental Federal Subsistence Board that regulates subsistence uses of fish and wildlife on federal lands and waters.

Contaminants: POPs are effectively scavenged from the atmosphere by snow and concentrate in cold environments. The lofty mountaintops and spectacular glaciers on NPS lands are becoming sinks for POPs. Glaciers may be storage areas for POPs that could be released to the aquatic environment in the future. The increases in POPs in the arctic affects subsistence and other (commercial, sport taken) foods such as salmon and wildlife.

Climate Change: The climate shifts experienced this year, with warming in Alaska affecting cooling in the eastern US, need to be investigated. Damages to infrastructure from increased storms and permafrost melt result in increased costs to taxpayers across the country.

Traditional knowledge: Scientific biological data as well as ethnographic accounts would suggest that moose and beaver are new to the Northwest Alaska areas. However, site data from the late 1500s suggest their presence, showing cycles longer than either the ethnographic or scientific data bases have covered.