Date: 5 April, 2013

Documentation of Waiver to Park Regulation(s)
Glacier Bay National Park and Preserve

1. **Project Leader:** Chris Sergeant

2. **Title or position:** Ecologist

3. **Affiliation, mailing address, phone number, and e-mail:**
Southeast Alaska (I&M) Network
National Park Service
3100 National Park Road
Juneau, AK 99801

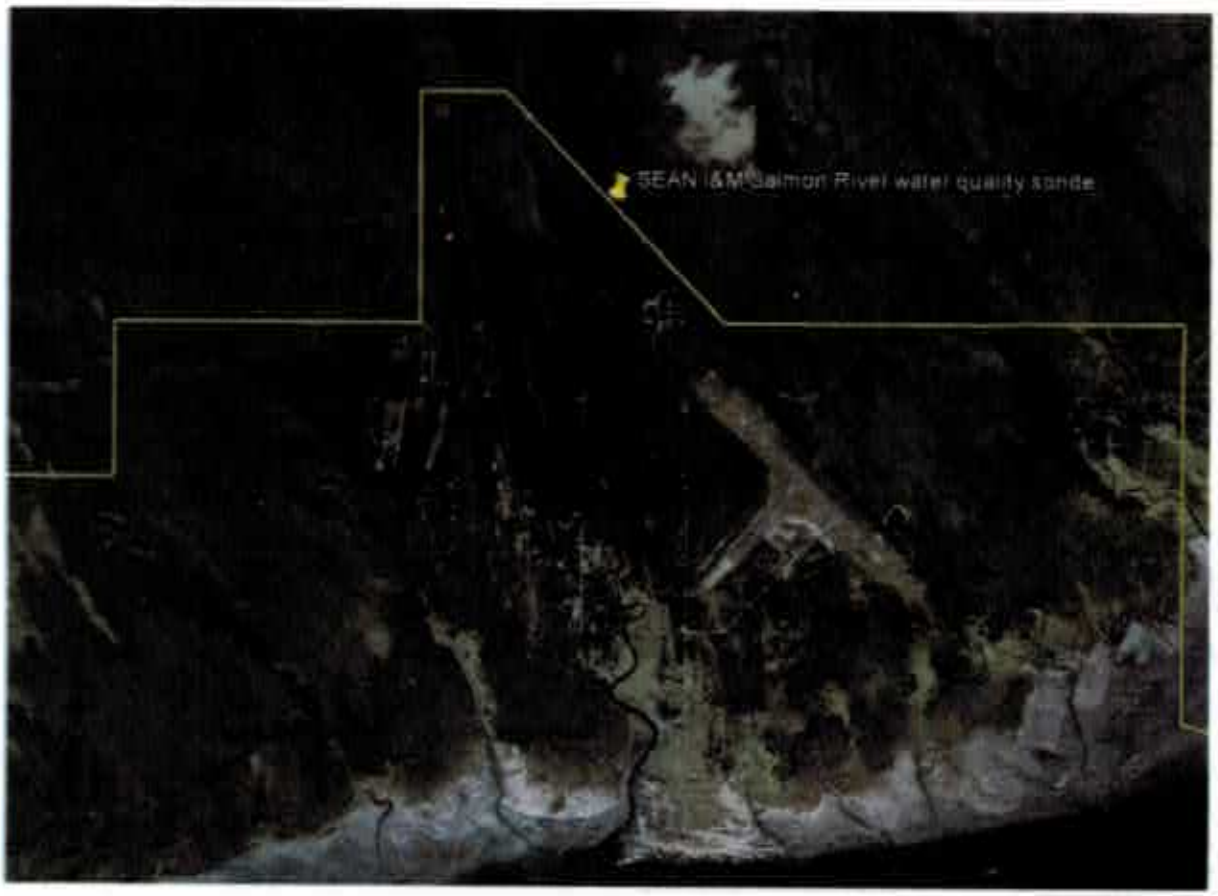
4. **Project Title:** Freshwater Water Quality Monitoring in the Salmon River

*** This Waiver accompanies Scientific Research and Collecting Permit #GLBA-2013-SCI-0003 ***

5. **Project Description:**
Freshwater water quality is critical to understanding and tracking the health of aquatic and terrestrial ecosystems. Park managers in the Southeast Alaska Network (SEAN) are concerned with potential threats to water quality from climate change, visitor impacts, and atmospheric contaminants. Current and historical water quality data for SEAN parks are limited. The principal objective of this monitoring program is to collect continuous data on core water quality parameters in order to describe seasonal and annual variation and long-term trends. These data will inform management decisions, assist researchers, and help determine compliance with state and federal regulations intended to protect freshwater water quality.

Each year, from approximately May 1 through October 31, water temperature, specific conductance, pH, and dissolved oxygen data are collected hourly from one river in each SEAN park unit; in Glacier Bay National Park, the study river is the Salmon River. The Salmon River is 32.7 km long within an 11,552 ha watershed that collects most of its water from Excursion Ridge. The lowermost portion of the river (river km 0.0 to 9.0) is outside of NPS boundaries, flows through land held by the State of Alaska land, then through lands conveyed to the City of Gustavus and then through private property until finally emptying into Icy Strait. The current

water quality monitoring site is located on the river left bank at approximately river km 9.0, several meters upstream of the NPS boundary and within congressionally designated wilderness.



6. Exemptions from federal or state statute(s), regulation(s), or Natural Resource Management Guideline(s) (NPS 77), and rationale for exemptions:

In order to accomplish project core objectives, a water quality sonde (instrument capable of autonomously measuring and storing continuous measurements of several water quality parameters) must be deployed at a location affording representative conditions, and where the NPS has maximum control over the effects of any future development. Key among the program requirements is that the location must be protected and secure over the very long term (long-term monitoring principles include the presumption that conditions are consistently monitored over timespans of many decades to centuries, without the need to move monitoring locations). It has been determined that the most effective way to guarantee the success of the long-term monitoring program is to site the sonde location within the park (also within designated wilderness), protected from any potential future management and land use activities of state, local, and private landowners.

With this form, the project leader is granted exemption from:

- **Section 4(c) of the Wilderness Act of 1964 – prohibition of installations within designated wilderness.**

Section 4(c) states, in part, that:

> "… except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and **no structure or installation** [emphasis added] within any such area."

It has been determined that exemption of the water quality sonde from the Section 4(c) prohibition is necessary for the administration of the area for the purpose of the Wilderness Act (specifically, to preserve the Natural element of Wilderness Character). From April 15 through October 31 of each year for which a valid Scientific Research and Collecting Permit is in effect, in the manner and for the specific purposes (and at the location) described above, the project leader is authorized to temporarily deploy a water quality sonde within designated wilderness. Between October 31 and April 15, all components of the installation will be completely removed from designated wilderness (no storage onsite). Moreover, the installation itself will be deployed in such a way to have as little impact to wilderness resources and values (including visibility) as possible.

7. Study Dates and Locations:

The water quality sonde will be annually deployed at the location and within the dates and under the conditions described above.

8. Waiver approval (valid) dates:

April 15 - October 31, for all years in which the project has a valid Scientific Research and Collecting Permit.

WAIVER RECOMMENDED BY _____, 4/8/13
Research Coordinator — Date

WAIVER REVIEWED BY _____, 4/8/13
Chief, Resource Management — Date

WAIVER APPROVED BY _____, April 9, 2013
Superintendent — Date