

 SCIENTIFIC RESEARCH AND COLLECTING PERMIT Grants permission in accordance with the attached general and special conditions United States Department of the Interior National Park Service Sitka	Study#: SITK-00021 Permit#: SITK-2021-SCI-0001 Start Date: Apr 26, 2021 Expiration Date: Dec 01, 2021 Coop Agreement#: Optional Park Code:
--	--

Name of principal investigator: Name: Dr Deborah Goodwin Phone: 907-364-2624 Email: deborah_goodwin@nps.gov		
Name of institution represented: National Park Service, Southeast Alaska Network		
Additional investigators or key field assistants: Name: Thomas Ziomek Phone: 907-364-2607 Email: thomas_ziomek@nps.gov Name: Courtney Amundson Phone: 612-655-0218 Email: courtney_amundson@nps.gov		
Study Title: Installation and maintenance of a water quality and streamflow monitoring site in the Indian River		
Purpose of study: The primary objectives of the Southeast Alaska Inventory and Monitoring Network's (SEAN) Indian River monitoring program are to: track the status and trends of four water quality parameters (temperature, specific conductance, dissolved oxygen, pH) during the ice-free season; describe the timing and magnitude of seasonal variation in each parameter; evaluate whether relevant state and/or federal water quality standards are met or exceeded; and track the status and trend of seasonal and annual streamflow while financially supporting U.S. Geological Survey (USGS) year-round stream gage operations. River water quality and streamflow are important indicators of Southeast Alaska aquatic and terrestrial ecosystem health. Co-located data collection permits evaluation of the inherent links between discharge and chemical characteristics, particularly the frequency and impacts of extreme runoff events and peak summer low flow periods. Resulting data provide insight to river system dynamics in a mixed-use watershed undergoing development while providing a robust baseline for other current and future research projects. This study will install and maintain a small, automated water quality monitoring unit in one location along the Indian River, continuing the SEAN's ongoing monitoring effort upstream of and adjacent to Sitka National Historical Park. Initially established in May 2010, a continuous water quality sonde has recorded hourly river conditions from at least early May through late October each year since. The SEAN holds permits from the Alaska Department of Fish and Game and the Alaska Department of Natural Resources for the Indian River sonde, both received in 2010 and without expiration date. An Interagency Agreement between the USGS and NPS/SEAN is in place for the Indian River with the City and Borough of Sitka an additional partner. This cost sharing agreement was established in 2016 to streamline gage coordination; in 2021, it was extended for another five-year period to fiscal year 2025. Through these arrangements, the SEAN partially funds station operation and maintenance, providing streamflow data (river stage and discharge volume) for resource monitoring and flood warning. The USGS remains responsible for all field and data tasks as well as serving real-time measurements on the National Water Information System (NWIS). The SEAN peer-reviewed Water Quality Monitoring Protocol was published in 2013 (https://irma.nps.gov/DataStore/Reference/Profile/2194522); during 2021, portions of the protocol will be revised to reflect an upgraded equipment suite and the shift to data archiving in the NPS Water Resources Division Aquarius database.		
Subject/Discipline: Water Quality		
Locations authorized: The water quality and streamflow monitoring site is located on the river right bank of the Indian River at approximately river km 0.8, 60 m meters upstream of the NPS boundary and 50m upstream from the Sawmill Creek Road (S-933) bridge. Lat 57.052797N, Lon -135.317486W		
Transportation method to research site(s): Accessed by foot, walking from the Sawmill Creek Bridge		
Collection of the following specimens or materials, quantities, and any limitations on collecting: No field collections, other than data collected by logger, permitted.		

Name of repository for specimens or sample materials if applicable:

NPS General Conditions for Scientific Research and Collecting Permit (available at the RPRS HELP page) apply to this permit. The following specific conditions or restrictions, and any attached conditions, also apply to this permit:

Summary of permitted field methods and activities:

Annually, one water quality monitoring sonde will be installed in the Indian River from approximately 15 April through 15 November. Existing infrastructure consists of a 4 inch diameter by 4 foot long black ABS pipe bolted to a bedrock outcrop alongside the USGS stream gage. The SEAN sonde will be checked monthly during the sampling season to ensure it continues to operate properly; as needed, sensors will be cleaned and recalibrated. Courtney Amundson, SEAN staff member and project co-investigator, will be responsible for sonde maintenance. During the offseason, instrumentation is removed but the pipe remains in place.

Year-round streamflow monitoring at station 15087700 ("Indian River at Sitka") is managed by the USGS Alaska Science Center hydrologists. The USGS retains all responsibility for gaging station and satellite telemetry operations, maintenance, field measurements of discharge, and data analysis and publication. The gage measures river stage and water temperature every 15 minutes. Data are transmitted to the USGS by GOES satellite telemetry every hour. Leveraging a routinely verified site-specific rating curve, continuous streamflow (discharge in cubic feet per second) values are computed from the river stage readings.

All water quality and streamflow field and data analysis methods follow standard methods described in peer-reviewed protocols.

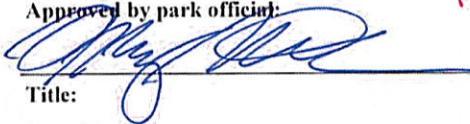
Recommended by park staff (name and title):

Jessica Purins, Integrated Permit Manager

Reviewed by Collections Manager:

Yes ☒ No ☐

Approved by park official:



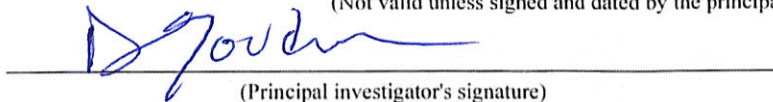
Date Approved:

4/26/21

Title:

Superintendent

I Agree To All Conditions And Restrictions Of this Permit As Specified
(Not valid unless signed and dated by the principal investigator)


(Principal investigator's signature)

26 APRIL 2021
(Date)

THIS PERMIT AND ATTACHED CONDITIONS AND RESTRICTIONS MUST BE CARRIED AT ALL TIMES WHILE CONDUCTING RESEARCH ACTIVITIES IN THE DESIGNATED PARK(S)



GENERAL CONDITIONS For SCIENTIFIC RESEARCH AND COLLECTING PERMIT

United States Department of the Interior
National Park Service

1. **Authority** - The permittee is granted privileges covered under this permit subject to the supervision of the superintendent or a designee, and shall comply with all applicable laws and regulations of the National Park System area and other federal and state laws. A National Park Service (NPS) representative may accompany the permittee in the field to ensure compliance with regulations.
2. **Responsibility** - The permittee is responsible for ensuring that all persons working on the project adhere to permit conditions and applicable NPS regulations.
3. **False information** - The permittee is prohibited from giving false information that is used to issue this permit. To do so will be considered a breach of conditions and be grounds for revocation of this permit and other applicable penalties.
4. **Assignment** - This permit may not be transferred or assigned. Additional investigators and field assistants are to be coordinated by the person(s) named in the permit and should carry a copy of the permit while they are working in the park. The principal investigator shall notify the park's Research and Collecting Permit Office when there are desired changes in the approved study protocols or methods, changes in the affiliation or status of the principal investigator, or modification of the name of any project member.
5. **Revocation** - This permit may be terminated for breach of any condition. The permittee may consult with the appropriate NPS Regional Science Advisor to clarify issues resulting in a revoked permit and the potential for reinstatement by the park superintendent or a designee.
6. **Collection of specimens (including materials)** - No specimens (including materials) may be collected unless authorized on the Scientific Research and Collecting permit.

The general conditions for specimen collections are:

- Collection of archeological materials without a valid Federal Archeology Permit is prohibited.
- Collection of federally listed threatened or endangered species without a valid U.S. Fish and Wildlife Service endangered species permit is prohibited.
- Collection methods shall not attract undue attention or cause unapproved damage, depletion, or disturbance to the environment and other park resources, such as historic sites.
- New specimens must be reported to the NPS annually or more frequently if required by the park issuing the permit. Minimum information for annual reporting includes specimen classification, number of specimens collected, location collected, specimen status (e.g., herbarium sheet, preserved in alcohol / formalin, tanned and mounted, dried and boxed, etc.), and current location.
- Collected specimens that are not consumed in analysis or discarded after scientific analysis remain federal property. The NPS reserves the right to designate the repositories of all specimens removed from the park and to approve or restrict reassignment of specimens from one repository to another. Because specimens are Federal property, they shall not be destroyed or discarded without prior NPS authorization.
- Each specimen (or groups of specimens labeled as a group) that is retained permanently must bear NPS labels and must be accessioned and cataloged in the NPS National Catalog. Unless exempted by additional park - specific stipulations, the permittee will complete the labels and catalog records and will provide accession information. It is the permittee's responsibility to contact the park for cataloging instructions and specimen labels as well as instructions on repository designation for the specimens.
- Collected specimens may be used for scientific or educational purposes only, and shall be dedicated to public benefit and be accessible to the public in accordance with NPS policies and procedures.
- Any specimens collected under this permit, any components of any specimens (including but not limited to natural organisms, enzymes or other bioactive molecules, genetic materials, or seeds), and research results derived from collected specimens are to be used for

scientific or educational purposes only, and may not be used for commercial or other revenue - generating purposes unless the permittee has entered into a Cooperative Research And Development Agreement (CRADA) or other approved benefit - sharing agreement with the NPS. The sale of collected research specimens or other unauthorized transfers to third parties is prohibited. Furthermore, if the permittee sells or otherwise transfers collected specimens, any components thereof, or any products or research results developed from such specimens or their components without a CRADA or other approved benefit-sharing agreement with NPS, permittee will pay the NPS a royalty rate of twenty percent (20 %) of gross revenue from such sales or other revenues. In addition to such royalty, the NPS may seek other damages to which the NPS may be entitled including but not limited to injunctive relief against the permittee.

7. Reports - - The permittee is required to submit an Investigator's Annual Report and copies of final reports, publications, and other materials resulting from the study. Instructions for how and when to submit an annual report will be provided by NPS staff. Park research coordinators will analyze study proposals to determine whether copies of field notes, databases, maps, photos, and / or other materials may also be requested. The permittee is responsible for the content of reports and data provided to the National Park Service

8. Confidentiality - - The permittee agrees to keep the specific location of sensitive park resources confidential. Sensitive resources include threatened species, endangered species, and rare species, archeological sites, caves, fossil sites, minerals, commercially valuable resources, and sacred ceremonial sites.

9. Methods of travel - Travel within the park is restricted to only those methods that are available to the general public unless otherwise specified in additional stipulations associated with this permit.

10. Other permits - The permittee must obtain all other required permit(s) to conduct the specified project.

11. Insurance - If liability insurance is required by the NPS for this project, then documentation must be provided that it has been obtained and is current in all respects before this permit is considered valid.

12. Mechanized equipment - No use of mechanized equipment in designated, proposed, or potential wilderness areas is allowed unless authorized by the superintendent or a designee in additional specific conditions associated with this permit.

13. NPS participation - The permittee should not anticipate assistance from the NPS unless specific arrangements are made and documented in either an additional stipulation attached to this permit or in other separate written agreements.

14. Permanent markers and field equipment - The permittee is required to remove all markers or equipment from the field after the completion of the study or prior to the expiration date of this permit. The superintendent or a designee may modify this requirement through additional park specific conditions that may be attached to this permit. Additional conditions regarding the positioning and identification of markers and field equipment may be issued by staff at individual parks.

15. Access to park and restricted areas - Approval for any activity is contingent on the park being open and staffed for required operations. No entry into restricted areas is allowed unless authorized in additional park specific stipulations attached to this permit.

16. Notification - The permittee is required to contact the park's Research and Collecting Permit Office (or other offices if indicated in the stipulations associated with this permit) prior to initiating any fieldwork authorized by this permit. Ideally this contact should occur at least one week prior to the initial visit to the park.

17. Expiration date - Permits expire on the date listed. Nothing in this permit shall be construed as granting any exclusive research privileges or automatic right to continue, extend, or renew this or any other line of research under new permit(s).

18. Other stipulations - This permit includes by reference all stipulations listed in the application materials or in additional attachments to this permit provided by the superintendent or a designee. Breach of any of the terms of this permit will be grounds for revocation of this permit and denial of future permits.