POSITION ANNOUNCEMENT:

GEORGE MELENDEZ WRIGHT INITIATIVE FOR YOUNG LEADERS IN CLIMATE CHANGE

The National Park Service (NPS) is pleased to announce the *George Melendez Wright Initiative for Young Leaders in Climate Change* (YLCC) to provide a pathway for exemplary students in higher education (graduate students and advanced undergraduate students) to apply their skills and ideas to park-based challenges and solutions. The Initiative offers 12-week paid internships which allow students to gain valuable work experience, explore career options, and develop leadership skills through mentorship and guidance while helping to advance the NPS response to climate change. Successful students may be eligible for non-competitive hire into federal positions for which they qualify following completion of all academic requirements.

Assess Climate Change Vulnerability of Archaeological Resources to Plan for Resilience and Outreach

Klondike Gold Rush National Historical Park, Resource Protection Skagway, Alaska

INTERNSHIP PROJECT BACKGROUND

The archaeological resources at Klondike Gold Rush National Historical Park (KLGO) provide outstanding opportunities for visitors to learn about a significant historical event that transformed the landscape between Alaska and the Yukon. Archaeological resources at KLGO are highly vulnerable to climate change-driven landscape changes, including: glacial outburst floods, earlier snow melt, rising treeline, and increased spring runoff volumes. As the most visited national park in Alaska, with nearly 1 million visitors a year, KLGO is uniquely positioned to tell the story of climate change impacts on our nation's cultural legacy. The park is in need of more information to develop an effective climate change response to threatened cultural resources within park borders and the Canadian portion of international Chilkoot Trail.

INTERNSHIP PROJECT DESCRIPTION

The intern will model areas critically at risk using topographic, geomorphological, and hydrological data within a Geographic Information Systems (GIS) framework. The intern will accompany the archaeology team to conduct inventories at up to five high-risk areas to quantify the degradation of resources and to identify gaps in information.

Repeat photographs will be taken for time series comparisons. The intern will develop a long-term monitoring plan to present to KLGO resource managers for incorporation into the park's Resource Stewardship Strategy. A structured decision-making framework will guide the intern in development of management options to present to park leadership.

The intern will work with KLGO education and Environmental Management Systems (EMS) staff to develop a narrative and select photos for the webpage, resource brief, and youth activities on climate change threats, monitoring efforts by the Southeast Alaska I&M network (SEAN) and U.S. Geological Survey (USGS), and KLGO sustainability efforts. A weekly blog will detail the intern's progress and experiences.

Internship Products

- Park-wide geospatial layer of climate change threats to archaeological resources
- Long-term monitoring strategy to be reviewed by KLGO and Alaska region for incorporation in the Resource Stewardship Strategy to help guide use of scarce funds for mitigation
- Collection of repeat photos for continued monitoring, interpretive materials, and social media
- Webinar posted on North Pacific Landscape Conservation Cooperative (NPLCC) website and presented to NPLCC community stakeholders and managers at Southeast Alaska parks
- Creation of a webpage on "The effect of natural processes on gold rush era artifacts," which fulfills a primary goal in KLGO's Long Range Interpretive Plan
- Resource brief to post on the KLGO website and use in interpretive materials and park social media
- Youth activity work sheet that will foster climate change understanding of threatened cultural resources
- Weekly blog highlighting the intern's learning, experiences, and photos to be shared internally and externally via the park website, NPS web channels, and #FindYourPark campaign

QUALIFICATIONS

The ideal candidate will be a current or prospective graduate student with an undergraduate degree in archaeology, anthropology, or a related field and have a strong background of coursework or applied project experience in GIS and spatial data analysis. Experience completing archaeological survey work including photography, site identification, and utilization of geospatial data is highly desired.

Required competancies from the candidate include the completed or current pursuit of a BA/BS degree including completion of coursework in archaeology, with a preference for applicants who have also completed an archaeological field school; computing skills including proficiency in office productivity suites, GIS, ArcMap, and relational databases. Public speaking skills and ability to be an enthusiastic and inspiring team member.

LEADERSHIP DEVELOPMENT

This internship will provide the opportunity for a student to gain applied experience using research to address management and conservation concerns. The student will be supported by an interdisciplinary team of park staff to produce a collaborative management plan, outreach materials, and a presentation to the NPLCC and Park leadership. The intern will develop skills in archaeological site mannagement, GIS modeling, research design, data collection, adaptation planning, and climate change communication.

The Archaeologist (supervisor) and Natural Resource Manager (lead mentor) will guide the intern in developing a scientifically robust research plan and facilitate networking with climate scientists at the Alaska region, USGS, and SEAN. The intern will learn structured decision-making and adaptation

planning, share information from two National Conservation Training Center courses, and will meet with the supervisors once a week.

The intern will learn how to effectively communicate climate change by participating in the DOI Learn's course "Interpreting Climate Change," working with Interpretive staff, and by developing outreach media. The EMS Chair will mentor the intern in KLGO's greenhouse gas reduction activities, Climate Friendly Park designation, and monitoring efforts.

DATES OF POSITION

The dates of the position are flexible. Ideally the intern will work 480 hours between June 6 and August 26, 2016. However, earlier and later start and end dates can be arranged.

COMPENSATION

This initiative supports one student at \$15/hour for 12 weeks, or 480 hours.

HOUSING

Housing will be provided in shared park housing and will include kitchen and laundry facilities. Skagway is a small remote town in Southeast Alaska. Access to Skagway is available by state ferry and small commuter planes from the state capitol of Juneau, or by road from the Alaska Highway through the Yukon Teritory. Skagway is a community of just under 1,000 individuals year-round which climbs to over 2,700 with seasonal employees during the summer months. It is booming with up to 10,000 daily visitors from all over the world who explore the town of Skagway, the historic townsite of Dyea, and the 33-mile Chilkoot trail. Candidate should have a valid passport for travel into Canada. Numerous recreational opportunities exist from concerts and community events, team sports, hiking, kayaking, fishing, cycling, and more.

WORK ENVIRONMENT

The internship will include office work at park headquarters in the town of Skagway, AK as well as archaeology field work along the international Chilkoot Trail and in the historic Dyea townsite. Office work will include consultations with USGS and SEAN scientists, AK regional office staff, and university research partners from University of Alaska Fairbanks and other universities. Fieldwork will be conducted with at least one other person and generally with the full archaeology team. Fieldwork will require the ability to carry up to 50 pounds over challenging terrain, hike up to 12 miles a day, and the applicant should be comfortable in remote backcountry settings. Mountain weather can be highly variable — even in summer — and can include rain, sleet, snow, wind, and fog. Training in backcountry and bear safety will be provided.

The intern will be part of the Science and Resource Management division, who work together on cultural and natural resource management projects throughout the lands and waters of Klondike Gold Rush National Historical Park. The office includes shared workspace with Cultural and Natural Resources

staff and is one block from the Interpretive and EMS staff offices. The office is within walking distance of park housing.

CONTACT INFORMATION

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