

POSITION ANNOUNCEMENT:

FUTURE PARK LEADERS of EMERGING CHANGE

The National Park Service (NPS) is pleased to support the *Future Park Leaders of Emerging Change* (FPL) program as a pathway for exemplary students in higher education (advanced undergraduate students, graduate students, and recent graduates) 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 NPS efforts on emerging management issues. Successful students may be eligible for non-competitive hire into federal positions for which they qualify following completion of all academic requirements.

IMPLEMENTING THE NPS CULTURAL RESOURCES CLIMATE CHANGE STRATEGY AT THE CHESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK

Chesapeake and Ohio Canal National Historical Park
Hagerstown, Maryland

INTERNSHIP BLURB

Develop a vulnerability matrix to assess the impacts of climate-change on cultural resources in the Chesapeake and Ohio Canal National Historical Park. Work with park staff and management to develop comprehensive planning strategies to address flood, erosion, and other potential hazards and risks posed to the myriad historic and prehistoric sites in the park.

INTERNSHIP PROJECT BACKGROUND

As a park characterized by a man-made water course adjacent to a river, the Chesapeake and Ohio Canal National Historical Park is uniquely situated to address the increasing impacts of climate-related flood events on cultural resources. The FPL intern will work on a preliminary vulnerability matrix for cultural resources on the park, which include historic structures and features, historic and prehistoric archaeological sites, and canal infrastructure. Through fieldwork and guided research, the intern will explore how hazards posed by flooding affect the preservation and maintenance of these resources, and suggest possible management directions to prioritize cultural resource adaptation projects with respect to the four pillars of climate change response: science, adaptation, mitigation, and communication.

The impacts of rising river levels and increasing frequency of high water flood events are emergent management issues that stand to have serious impacts on the C&O Canal, and threaten similar resources nationwide. The C&O Canal is an ideal model for considering, defining, and supporting inquiry

into how park management policies can address climate change impacts on cultural resources. Stewardship of the C&O Canal's cultural and natural resources will rely on our understanding of how to identify and respond to climate-related impacts. The FPL intern will be at the center of the conversation at C&O Canal, leading the park's comprehensive efforts to address flood, erosion, and other potential hazards and risks posed to the myriad historic and prehistoric sites in the park. The project goals will be to identify resources that stand to be most impacted by climate change-related flood events, create a vulnerability matrix to assess these impacts, and to create a set of management policies and recommendations that align with the NPS Cultural Resources Climate Change Strategy. The intended audience for the FPL intern's work will primarily be park staff and management who need to understand impacts in order to devise appropriate policies to protect resources. However, the FPL intern will also work closely with park interpretation and education professionals on communication tools to let the public know what they can do to help.

INTERNSHIP PROJECT DESCRIPTION

The FPL intern will produce fieldwork notes, a draft vulnerability matrix for cultural resources, management recommendations for policy changes to mitigate flood/erosion impacts on cultural resources, a presentation to park staff on the study's findings, and social media and/or educational materials to message the results of the findings to the public.

- **Fieldwork:** The intern will conduct site visits to areas particularly impacted by flooding in the park as well as areas that are potentially vulnerable to flooding. The intern will also conduct site visits to areas where erosion has created resource concerns (e.g. undercutting archaeological sites, failing historic culverts).
- **Vulnerability Matrix:** Working closely with park staff, the intern will assemble cultural resources data, GIS data, and fieldwork data to design a draft vulnerability matrix that identifies resources that are most in danger of being damaged or lost by flooding or erosion.
- **Management Policies:** The intern will work with park staff to devise an action plan stemming from the findings of the vulnerability matrix to mitigate the effects of flooding and erosion on historic and prehistoric sites in the park.
- **Communication:** The intern will prepare at least one presentation to park staff on their project and findings.

QUALIFICATIONS

The C&O Canal National Historical Park seeks FPL Interns with the following skills and experiences:

- Majoring, or bearing a strong interest in, fields related to climate science or sustainability such as biology, chemistry, or environmental science, OR fields such as anthropology (linguistics, physical anthropology, archaeology, or cultural anthropology), sociology, economics, political science, human geography, demography, psychology, sociology, and history.
- Strong writing skills and the ability to digest and synthesize information quickly.
- Strong oral communication skills.

- Flexibility and adaptability to respond to changing conditions and adapt research to follow-up on information revealed during the data-gathering stage.
- Ability to present research findings in public lectures and presentations.
- An interest in the history and mission of the National Park Service.
- Proficiency in Microsoft Office products.

LEADERSHIP DEVELOPMENT

As one of the most highly visited and complex National Park Service units, the C&O Canal is uniquely suited to fostering experience with stakeholder engagement. The Intern would assist in amplifying public understanding and access to the C&O Canal's cultural resources and work to manage resources in the face of increasing impacts from climate change. Mentorship of the Intern would focus on providing them with skills and experience that target their interest and professional development goals within the scope of the project.

The FPL Intern will have frequent opportunities to present research results to Park leadership throughout the internship. The Intern will be afforded opportunities to present research at volunteer gatherings and to work with the Interpretation, Education, and Volunteerism Division on public outreach products. The Park would encourage the Intern to present the research more broadly at local and regional conferences and would support efforts to do so.

The intern will interact broadly with park staff and will be involved in higher-level management discussions on resource protection. The intern will be able to experience a diversity of fieldwork ranging from site inspections, erosion recordation and monitoring, and cultural resource documentation. The intern will work with both natural and cultural resources professional as their project goals will require an understanding of a diversity of park assets. The intern will also coordinate with the National Capital Regional office and may interact with staff from the NPS Washington office.

DATES OF POSITION

May 31, 2018 – August 23, 2018 (dates flexible)

COMPENSATION

This initiative supports one student at \$16/hour for 12 weeks, or 480 hours.

HOUSING

Park housing will be in the historic two-story Weber House, which is located in the Four Locks area of Clear Spring, Maryland. The house is a communal housing unit for park interns and seasonal staff. The

Weber House features private bedrooms for staff and shared bathrooms and a kitchen. Wifi is available. The Weber House is situated approximately 19 miles (23 minutes) from the duty station in Hagerstown, Maryland. General services including restaurants, post office, grocery, shopping, etc. are located 3.3 miles away in the town of Clear Spring, or in Hagerstown.

WORK ENVIRONMENT

The FPL intern will work out of the park's headquarters in Hagerstown, Maryland. The intern will have an individual desk and work station. The intern will be expected to conduct fieldwork on the park, which will involve some manual labor including carrying objects up to 40 lbs, lifting objects over the head, hiking on rough terrain, and variable weather conditions. It is strongly preferred that the intern possess a valid driver's license so that they can drive the park vehicles to the field sites.

CONTACT INFORMATION

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