

# The Conway Science Fellowship

## Request for Detailed Project Proposals

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### Table of Contents

PROGRAM OVERVIEW	1
FUNDING & PAYMENT	3
ELIGIBILITY	3
SELECTION CRITERIA	4
TERMS OF AWARD	5
APPLICATION INSTRUCTIONS	7
KEY DATES	8
Appendix A: Project Description for Social Science and Visitor Use	9
Appendix B: Project Description for Ocean and Coastal Resource Stewardship	12
Appendix C: Project Description for Collaborative Conservation at the Landscape Scale	14
Appendix D: Contact Information Sheet	17

### PROGRAM OVERVIEW

The National Park Service (NPS) and the National Park Foundation invite scholars who are no more than three years beyond receipt of the doctorate to apply for a two-year Conway Science Fellowship, potentially renewable for one additional year.

As the NPS embarks on its second century of park conservation, bureau staff and partners recognize that a major part of their enduring responsibility is to ensure that science - capable of transforming our nation's understanding and appreciation of its natural and cultural heritage - remains key to informing national park management. The pivotal role that scientific research plays in generating the knowledge and data necessary for park management underscores the vital importance of developing and preparing the next generation of conservation scientists. Under the Conway Science Fellowship (Fellowship), and in coordination with NPS staff, postdoctoral researchers will produce innovative scientific products that inform park management, are scalable, and can be implemented with minimal additional resources. Three focal areas of research are envisioned that will address the agency's emerging resource management challenges.

# Conway Science Fellowship Request for Proposals

## Research Topics

The following three broad topics have been selected by the NPS for advanced scientific research:

- **Address Increasing Visitor Use by Integrating Social Science and Resource Stewardship**  
*Creatively integrate visitor use information and park resource data with resource stewardship actions and planning, to ensure inspirational visitor experiences while conserving resource integrity.*
- **Enhance Ocean and Coastal Resource Stewardship**  
*Develop, implement, or advance strategic approaches to high-priority ocean and coastal conservation issues, including engagement of interagency collaboration and local expertise.*
- **Embrace Collaborative Conservation at the Landscape Scale**  
*Use best available science and management practices to identify, develop, and implement landscape scale collaborative conservation; enhance collaboration with partners to protect the full range of resources included under NPS responsibility and as part of our shared natural and cultural resource heritage.*

The Fellows, using national parks as their laboratories, will conduct innovative scientific research to address resource stewardship challenges. The Fellow's research and findings must apply directly to the contemporary and vital challenges facing the long-term conservation of National Park System natural resources. Details on each of the three research areas are further described in the individual Project Descriptions in the appendices of this document.

The Fellowship will be awarded to a sponsoring institution, specifically a faculty or senior scientist mentor who will employ and oversee a qualified postdoctoral researcher to complete the work. After selection, agreements will be executed between the sponsoring institution, the NPS, and the National Park Foundation to set forth responsibilities, deliverables, and milestones. The Conway Science Fellowships, funded through the generous support of National Park Foundation Board member Karen Swett Conway and her husband Brian J Conway, will fund three awards for three distinct projects on topics of high priority to the NPS. Awards are for a two-year term, renewable for one additional year. The final work product shall include practical applications useful in solving resource management challenges faced by the NPS.

Under the guidance of the faculty or senior scientist mentor, postdoctoral candidates are challenged to develop proposals on one of the three research areas more fully described in the Project Descriptions. The NPS has identified a team of subject matter experts (SMEs) for each of the three emphasis areas whose role will be to serve as mentors for the fellows, and facilitate access to park units and/or data. These NPS mentors will work with the sponsoring institution, faculty or senior science mentor, and fellows to ensure that the research and its applications are relevant and meaningful to the NPS and that established benchmarks and milestones are met.

Program funding to selected fellows will begin after execution of an agreement between the sponsoring institution, the NPS, and the National Park Foundation. A minimum deliverable schedule is outlined in

# Conway Science Fellowship Request for Proposals

the Terms of Award section of this document, and the final work product is due within the last year of the agreement.

The NPS will select proposals that will provide the greatest benefit to the NPS.

## FUNDING & PAYMENT

Funds will be awarded by the National Park Foundation to the sponsoring institution for administration of their activities pursuant to the Conway Science Fellowship. The National Park Foundation will provide annual funding not to exceed:

- Annual Fellow Stipend (payable bi-annually upon receipt of invoice from the Sponsoring Institution):
  - Year 1: \$60,000
  - Year 2: \$61,800
  - Year 3: \$63,500
- Annual Faculty Stipend: \$8,000
- Annual Institutional administration, facilities, & management costs: \$8,000
- Annual Project costs \$15,000\*

Funds will be paid no more frequently than bi-annually in response to invoices received from the sponsoring institution to the National Park Foundation and the NPS, and upon verification of quantity and quality of work product submitted. Fellow stipends may be used toward health insurance and living expenses, as needed.

\* Project costs including equipment field work costs, will be reimbursed to Fellow/Faculty teams, details of which will be determined upon final selection of Fellows.

A mid-point meeting will be coordinated by all parties, and additional funds will be provided to encourage attendance.

## ELIGIBILITY

Eligible applicants are faculty or senior science mentors at the sponsoring institution where the fellow will conduct the postdoctoral/fellowship research. Mentors must be permanent staff members at the sponsoring institution. Fellows will be selected by the faculty or senior scientist mentor. The faculty or senior scientist mentor and fellow are encouraged to work together on the project proposal. Fellows will be located at and undertake the project from the sponsoring degree-granting or research institution.

# Conway Science Fellowship Request for Proposals

## **Applicant/Faculty Mentor:**

The applicant is the faculty mentor (tenured, tenure-track) or senior scientist mentor who will provide guidance to the fellow and oversight of the project. Applicants that can provide support to fellows such as health insurance options, computer equipment, work stations, and/or laboratory access will be preferred candidates. The application must be approved by an administrative official at the sponsoring degree-granting or research institution with the authority to approve the research project.

## **Postdoctoral Fellow:**

The fellow selected by the faculty mentor must have achieved their doctoral degree not more than three (3) years prior to the application deadline.

The fellow must be a United States citizen and may be required to pass a security background check for certain access to NPS electronic systems.

The fellow may not have another job concurrently with the Conway Science Fellowship.

## SELECTION CRITERIA

All proposals will be screened for relevance, accuracy, and completeness. Proposals will be evaluated based on the extent to which they meet the following criteria:

**Purpose, Objectives, and Relevance:** Project is well thought out with clear objectives that relate to the overall goals of the Project Descriptions (in the appendices of this document) and mission of the NPS. *Does the project address the program priorities outlined in the Project Description/Scope of Work? Are the objectives clearly defined and attainable without additional funding? How will research/analysis be implemented during the course of this Fellowship and be scalable beyond the completion of the Fellowship? How well are the objectives defined in relation to the NPS mission?*

**Technical Soundness:** Project is technically sound and feasible. The proposal sets forth a clear, logical, and achievable work plan and timeline.

*Is the time frame reasonable for the planned approach to accomplish the objectives? What methods will be used? Are the methods sufficient to accomplish the goals of the project? Do the proposed methods present a novel approach to the research question? Are spatial and temporal scales appropriate for the research topic? How will progress be monitored during the period of the Fellowship; how will methods be identified during and after the proposed project period? Does the plan incorporate a mechanism to assess success?*

**Broader Benefits:** Potential of the project to strengthen natural resource management practices and be transferable for similar research in the future.

# Conway Science Fellowship Request for Proposals

*Will the project advance natural resource management both within and across park boundaries? Does the project include tools and techniques that can be maintained and applied to similar scientific research projects? How will the project methods/results be shared with other parks and partners?*

**Qualifications:** Fellow and faculty or senior scientist mentor are qualified and can demonstrate experience and successes in research.

*Does the applicant have expertise in field research and a demonstrated knowledge of the research topic? Why is this team best positioned, equipped, and academically qualified to conduct this project? What is their depth of experience in such research as demonstrated by scientific publications and completed projects? What evidence demonstrates the ability to achieve reliable results using the proposed methods? How well does the applicant demonstrate that they have applied these methods in similar contexts?*

**Budget and Means:** Resources are in place for the project to be successfully carried out, including but not limited to scholarly, technical, and logistical support of the fellow by the sponsoring institution. *How will the sponsoring institution provide optimum resources (e.g. technology, supplies, staff, etc.) available to the fellow to carry out the proposed research?*

**NPS Budgetary Feasibility:** Can project as currently envisioned be fully implemented with existing funds? *Would future implementation of research scenarios require funding that is not currently available to the NPS? Indicate what you expect to achieve with current funding and what would be needed to continue the project beyond Year 3.*

## TERMS OF AWARD

- In General:
  - Faculty or senior scientist mentors and fellows will be appointed for two years from the date of execution of an agreement between the sponsoring institution, the National Park Foundation, and the NPS; with the possibility for a third year if justified, and provided there was satisfactory completion of Years 1 and 2.
  - All parties to the Fellowship will be required to enter into an agreement outlining roles, responsibilities, and terms and conditions. The parties consist of the 1) National Park Foundation, 2) NPS, and 3) selected sponsoring institution.
  - Awards are made to the sponsoring institution for support of the designated fellow and faculty or senior scientist. An award does not constitute an employer-employee relationship between the National Park Foundation and the recipient.
  - The Fellow will retain the rights (including copyright) to all material that results from their work and they will grant to the NPS and the National Park Foundation an irrevocable, royalty-free, non-exclusive right and license to use, reproduce, make derivative works, display, publish, distribute, and perform any material, including

# Conway Science Fellowship Request for Proposals

without limitation all copyrights or copyrighted material (including any computer software and its documentation and/or databases) developed under this Fellowship. The NPS shall have a royalty-free and irrevocable right to reproduce, publish, or otherwise use the works for public purposes and to authorize others to receive, reproduce, publish, or otherwise use such works for public purposes.

- The Fellowship term will begin upon execution of the Agreement provided by the National Park Foundation for signature by all parties to said agreement.
- The National Park Foundation:
  - Will serve as the Fiduciary Agent for this project.
  - Will draft Grant Agreements for signature.
  - Will coordinate with parties to the Agreement on payment.
  - Will assist with travel logistics for a mid-point conference with parties to the Agreement.
- The National Park Service:
  - Will work to provide Fellowship mentoring and support, and make available NPS resources as needed, such as, but not limited to, research permit assistance, and/or database access.
  - Will orient Fellows in agency resources and scholarship to assist with their research, through an NPS mentor.
  - Will coordinate with the National Park Foundation and the faculty mentor on the review and approval of work products, presentations and demonstrations.
  - Will work to accommodate meeting space when necessary and where feasible.
- The Sponsoring Institution and/or Fellows:
  - Must be associated with a sponsoring institution and a postdoctoral advisor, faculty, or senior scientist capable of mentoring and overseeing the work, and the work product of the Fellow.
  - Will select an appropriate postdoctoral fellow to carry out the research project as described in this document and the applicable Project Description.
  - Must be able to provide resources for the Fellow to carry out the research project. Resources can include, but are not limited to, office space, computer equipment, access to health care plans, laboratory access, library and database access.
  - Will submit invoices for payment to the National Park Foundation and the NPS concurrently.
  - Fellows may need to obtain research permit(s) from the NPS and fulfill all attendant conditions of the park research permit process. The NPS mentors will be available to steward fellows through the permit process. For more information on NPS Scientific Research and Collecting Permits, visit <https://www.nps.gov/nature/request-a-permit.htm>
  - Will ensure compliance with the NPS code of ethics and basic standards of quality to ensure and maximize the objectivity, utility, and integrity of information. Fellows will inform the NPS and coordinate peer review of their final work product which may be

# Conway Science Fellowship Request for Proposals

subject to NPS review, and U.S. Office of Management and Budget, and/or Department of the Interior guidelines prior to dissemination.

- Minimum Deliverable Schedule
  - Bi-annual progress report: A bi-annual progress report must be submitted, beginning 6 months after the effective date of the Agreement, and every 6 months thereafter while the Agreement is in force, except at the end of the fellowship (within three years of the effective date of the Agreement), when the last scheduled bi-annual report may be combined with the final work product, and presentation(s).
  - Faculty or senior scientist mentors and fellows may propose more frequent reporting on milestones and work product deliveries, such as periodic presentations, updates on research design.

## APPLICATION INSTRUCTIONS

Applicants (faculty or senior scientist mentors) for the fellowship must submit the following by the application deadline on **June 30, 2019**.

- Review the full announcement, and applicable Project Description(s).
- Fill out the Contact Information Sheet provided in Appendix D.
- Assemble your application package using the checklist below.
- Send application packages to the email address appropriate for your research topic as described below.

### Document Checklist

Submit the following information in a zipped file to the appropriate email address provided below upon completion of your application proposal. Include the last name of the faculty or senior scientist mentor in the file name of the zipped file.

- Completed Contact Information Sheet (Appendix D)
- Cover Letter and one page project description
- CV/Resumes for both the faculty or senior scientist mentor and the fellow, if available. Include research experience and list of publications and citations most relevant to the research topic for which you are applying.
- Project Proposal. The research proposal should contain the following sections:
  - a. Project Title
  - b. Project description and research objectives (500 word maximum, excluding references)
  - c. Methods (500 word maximum, excluding references)
  - d. Project Budget, not to exceed funding limits set forth in the Funding & Payment section of this document
  - e. Project Timeline, not to exceed three (3) years

# Conway Science Fellowship Request for Proposals

- f. List of project deliverables and timing
- g. Description of administrative arrangements and description of support provided by the sponsoring institution
- h. Request for NPS resources you anticipate needing, such as: park access, [NPS Scientific Research and Collecting Permit\(s\)](#), staff time and/or resources, database access
- Letter of support from the relevant administrator at the sponsoring institution

Send applications and questions to the email address appropriate for your research topic:

- Applications for **Addressing Increasing Visitor Use by Integrating Social Science and Resource Stewardship** please send to:  
[SocialScience@nationalparks.org](mailto:SocialScience@nationalparks.org)
- Applications for **Enhancing Ocean and Coastal Resource Stewardship** please send to:  
[OceanCoastal@nationalparks.org](mailto:OceanCoastal@nationalparks.org)
- Applications for **Embracing Collaborative Conservation at the Landscape Scale** please send to:  
[LandscapeScale@nationalparks.org](mailto:LandscapeScale@nationalparks.org)

## KEY DATES

May 15, 2019	Open Call for applications from sponsoring institutions
June 30, 2019	Application Deadline
On or around August 1, 2019	Notice of Award to applicants
Fall 2019	Agreements executed, NPS mentors assigned, project begins pursuant to the signed agreement(s)
Six (6) month intervals	Project update reports and invoicing



# Conway Science Fellowship Request for Proposals

## Appendix A: Project Description for Social Science and Visitor Use

### Research Project #1: Address Increasing Visitor Use by Integrating Social Science and Natural Resource Stewardship

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The National Park Service (NPS) seeks to obtain meaningful science based solutions to improved stewardship of our national treasures in an era of high and increasing visitation. In the past three years, many parks have experienced unprecedented visitation increases and these trends are projected to continue. This increase has operational, visitor experience, and resource stewardship implications.

#### **Research Project Title**

Address Increasing Visitor Use by Integrating Social Science and Natural Resource Stewardship

#### **Research Purpose**

Creatively integrate visitor use information and park resource data with resource stewardship actions and planning to ensure inspirational visitor experiences without jeopardizing resource integrity.

#### **Description**

This is one of three research projects offered through the Conway Science Fellowship announcement made possible through the generous support of National Park Foundation Board member Karen Swett Conway and her husband Brian J Conway. The NPS faces numerous experiential and natural resource-related challenges in an era of increasing visitor use and changing visitor behaviors. Successful stewardship requires that the NPS be strategic, interdisciplinary, science-based, and inclusive, yet agile and responsive to ensure continued quality visitor experiences. The selected postdoctoral fellow is encouraged to use national parks as their laboratory to conduct innovative social science research to address visitor use management and natural resource stewardship issues, while taking into account diverse stakeholder viewpoints and management context. The research and findings from this effort must apply directly to the contemporary and vital challenges facing the long-term conservation of natural resources protected within the National Park System. Outcomes should provide practical applications and tools for implementation at the field, regional, or national level.

At a broad scale, managers are challenged with limited means by which to document existing visitor use and resource conditions. This includes both descriptive data that can be used to track trends and evaluative data about how visitors perceive the effects of various visitor use levels on their experience. Descriptive data serves as a complementary foundation to document impacts on resources (e.g., human/wildlife conflict, vegetation trampling, soil erosion, etc.). While visitor use/impact relationships are both difficult to establish and require tremendous generalizing across a landscape, data overlays of

# Conway Science Fellowship Request for Proposals

visitor travel patterns with resource impact data can serve as a valuable guide for management actions that fulfills the NPS mission and values.

Parks typically possess a diverse set of data resources that have been collected over time. Available data can vary across parks for a variety of reasons including funding levels, in-house staffing expertise, management perception of visitor use and resource management issues/needs, proximity to research institutions, and other factors. Interested applicants should consider pairing new data with existing data resources to broaden or deepen the value of research results. However, interested applicants should not be limited by available data and can pose primary data collection approaches to obtain necessary information. Proposal evaluation will consider transferability of results and other products to a broad range of park contexts as well as the cost effectiveness of such transferability.

There are a broad range of visitor use topics that could be explored within this Fellowship to provide the benefit of science based solutions and tools. Project areas of interest to the NPS include:

- How are/can advances in technology enhance park manager understanding of the visitor use/resource impact relationship?
- How is social media and other online information influencing visitor behavior and travel patterns in national parks?
- Are visitors and/or other stakeholders willing to trade-off aspects (e.g., probability, freedom and ease of transit, etc.) of access to ensure increases in the quality of experience and resource quality?
- How do reservation and permit systems influence trip planning, visitor and resource management?
- When are allocation schemes (e.g. permits and reservations) successful/unsuccessful in achieving desired experience, resource conditions, and providing reasonable levels of access?
- What roles do shuttle systems provide for management, including the benefits and unintended consequences of mandatory and voluntary shuttle systems?
- Do differences of perspectives/attitudes exist between overnight backcountry users and day users related to park and natural resource management?
- How can big data be used to improve our understanding of visitor travel patterns to and within parks?
- Explore innovative ways of using social science to address increasing visitation and resource protection and stewardship.

Although these issues are of particular interest to the NPS, and research is encouraged for them, proposals that are topically within the broader Research Purpose (above) will also be considered.

NPS preserves, protects, and shares our nation's special places and stories. Employees work in a variety of fields, including, but not limited to science, research, and restoration. We invite applicants to be a

# Conway Science Fellowship Request for Proposals

part of what we do and contribute to our mission and public purpose. To explore recent and ongoing science research in national parks, visit the following websites:

<https://www.nps.gov/subjects/socialscience/index.htm>

<https://www.nps.gov/subjects/parkscience/index.htm>

<https://irma.nps.gov/Stats/>

# Conway Science Fellowship Request for Proposals

## Appendix B: Project Description for Ocean and Coastal Resource Stewardship

### Research Project #2: Enhance Ocean and Coastal Resource Stewardship

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This document serves to describe nationally prioritized issues on which the National Park Service (NPS) seeks to obtain meaningful science-based solutions to improve stewardship of our national submerged and littoral resources in a time of changing oceanic environments and systems.

#### **Research Project Title**

Enhance Ocean and Coastal Resource Stewardship

#### **Research Purpose**

Develop, implement, or advance strategic approaches to high-priority ocean and coastal conservation issues, including engagement of interagency collaboration and local expertise.

#### **Description**

This is one of three research projects offered through the Conway Science Fellowship announcement made possible through the generous support of National Park Foundation Board member Karen Swett Conway and her husband Brian J Conway. The National Park Service (NPS) faces numerous natural resource-related challenges and opportunities. Successful stewardship requires that the NPS be strategic, interdisciplinary, science-based, and inclusive, yet agile and responsive. The selected postdoctoral fellows are encouraged to use national parks as their laboratories to conduct innovative research to advance ocean and coastal resource management and stewardship, while taking into account diverse stakeholder viewpoints. The fellow's research and findings must apply directly to the contemporary and vital challenges facing the long-term conservation of National Park System oceanic and coastal resources. Outcomes should include practical applications and tools for implementation at the field, regional, or national level.

Aquatic Invasive Species, Harmful Algal Blooms, and Coastal Zone Management are highlighted as possible research directions of this fellowship. Issues are identified as critical by the NPS include:

- Marine Invasive Species: The most extensive challenge that Parks face is their lack of existing data to understand the marine invasive species baseline, interpret their status, abundance, ecology, and impacts and predict future invasions. Early detection and a rapid coordinated response are desirable management actions. Possible research ideas include, but are not limited to, the development of eDNA primers for high priority species, the development of methods to limit or stop the spread of a species of concern, or eradicating a marine invasive species that is causing undesirable changes to NPS resources.

# Conway Science Fellowship Request for Proposals

- Harmful Algal Blooms (HAB): In recent years there has been an increase in the number, frequency, and duration of HAB events in U.S. waters, including inside national parks. It is important for park managers to better understand the drivers of HAB events in our parks, and what is needed to keep natural resources and the public safe during an event. We need risk assessment information, early detection (preparedness) and response methods, and methods for Citizen Scientists to help with monitoring for HABs.
- Coastal Zone Management: Coastal parks in the U.S. National Park System preserve some of the most intact and undeveloped sandy beaches, maritime forests, salt marshes, coral reefs, and associated habitats. Predicting future changes in coastal parks (including rates of shoreline change) that would result in changes in the coastal landscape/seascapes, and identifying potential new habitats and recreation areas are desired research directions. Understanding the potential impacts of these changes to park infrastructure, transportation networks, and cultural and natural resources, as well as spatial patterns of coastal change would provide valuable information when planning for future natural and cultural resource, facility, and recreation management of coastal parks.

Although these issues are of particular interest to the NPS, and research is encouraged for them, proposals that are topically within the broader Research Purpose (above) will also be considered.

NPS preserves, protects, and shares our nation's special places and stories. Employees work in a variety of fields, including, but not limited to science, research, and restoration. We invite applicants to be a part of what we do and contribute to our mission and public purpose. To explore recent and ongoing science research in national parks, visit the following websites:

<https://www.nps.gov/subjects/oceans/index.htm>

<https://www.nps.gov/subjects/parkscience/index.htm>

<https://irma.nps.gov/Stats/>

# Conway Science Fellowship Request for Proposals

## Appendix C: Project Description for Collaborative Conservation at the Landscape Scale

### Research Project #3: Embrace Collaborative Conservation at the Landscape Scale

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This document describes the scope on which the National Park Service (NPS) seeks to obtain meaningful, science-based solutions to improve methods and increase the scope of collaborative landscape-scale conservation.

#### **Research Project Title**

Embrace Collaborative Conservation at the Landscape Scale

#### **Research Purpose**

Use best available science and management practices to assist the NPS in identifying, developing, and implementing cooperative landscape and seascape scale conservation; include approaches that enhance collaboration with partners necessary to protect the full range of resources and values of parks as part of our shared natural and cultural resource heritage.

#### **Description**

This is one of three research projects offered through the Conway Science Fellowship announcement made possible through the generous support of National Park Foundation Board member Karen Swett Conway and her husband Brian J Conway. The NPS faces numerous natural resource-related challenges and opportunities. Successful stewardship requires that the NPS be strategic, interdisciplinary, science-based, and inclusive, yet agile and responsive to social and environmental change. The selected postdoctoral fellows are encouraged to use national parks as their laboratories to conduct innovative research to address landscape-scale conservation across and beyond park boundaries. The fellow's research should apply the natural, cultural and social sciences in a cooperative conservation approach involving relevant stakeholder roles and viewpoints. The fellow's research and findings must apply directly to the contemporary and vital challenges facing the long-term conservation of parks within the broader landscapes and seascapes where they are located. Outcomes should provide practical applications and tools for implementation at the field, regional, or national level.

The NPS is dedicated to collaborative conservation and engaged in ongoing efforts to create a multidisciplinary NPS body of expertise on cross-boundary, natural and cultural resource landscape-scale issues. Collaborative Conservation goals include: 1) convening people around critical issues, 2) learning with and teaching existing and new leaders, 3) doing participatory research with communities, and 4) implementing flagship projects with diverse stakeholders that link conservation action with research and education. The NPS routinely leads or participates in landscape conservation initiatives which are

# Conway Science Fellowship Request for Proposals

highlighted and explained in the following publication describing NPS' collaborative approaches to large landscape conservation: <https://www.nps.gov/orgs/1412/upload/Scaling-Up-2014-508.pdf>.

Other examples of collaborative conservation at the landscape scale include:

- The National Trails System offers a network of scenic, historic, and recreation trails that crisscross the country. These corridors provide a large landscape perspective of some of the nation's finest scenery and trace powerful themes in our nation's history—epic crosscountry explorations, cultural traditions, and steps towards democracy and freedom. Information can be found at: <https://www.nps.gov/subjects/nationaltrailssystem/index.htm>
- The National Wild and Scenic Rivers System was created in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Each river segment is administered by either a federal or state agency. Information can be found at: <https://www.rivers.gov/index.php>
- Twenty eight U.S. Biosphere Reserves (UNESCO Man and the Biosphere Program) combine the natural and social sciences, economics and education to improve human livelihoods and promote sustainable development at landscape and seascape scales, and conserve biodiversity in parks and other protected areas. Information can be found at: [www.biospheresmart.org](http://www.biospheresmart.org)

## Conway Science Fellowship Research Project Area Priorities

Fellows are expected to design a project and conduct research to find the best ways to manage threats or leverage opportunities, while considering the following landscape level conservation priorities:

- **Enhance conservation or restoration of ecosystems, habitats, species, cultural and physical resources, and their connectivity through landscape scale efforts.** Specific projects could include preservation or restoration of watersheds, migration corridors, and habitat restoration to strengthen ecological integrity and connectivity, such as facilitation of seasonal movements or adaptations for key species. Projects also could focus on visual resources, air quality related values, and preservation of night skies or natural soundscapes. Projects can be national or international, regional, or local, and sea, air, or land-based depending on the issues and opportunities at broad landscape scales.
- **Achieve greater land, water and air resource stewardship** to address risks of ecosystem degradation and impacts to visitor experiences such as: managing threats from invasive species, improving water quality, preserving scenic views and significant vistas, reducing hazardous conditions (e.g., flood and fire risk), and/or preserving air quality, night skies and soundscapes. Eligible projects can be local or regional and target species, ecosystems, and natural resources, or visitor and public access concerns at broad landscape scales.
- **Increase collaborative conservation** by identifying the ecosystem services and socio-economic benefits provided by National Parks and other protected areas to local and regional stakeholders, and forming relationships and partnerships based on preserving these services and values. These benefits may include sustainable management of water supplies, tourism and recreation, and land

# Conway Science Fellowship Request for Proposals

use, enhancing education, health and spiritual welfare, preserving cultural and historic values, and preserving services such as crop pollination, natural flood and water pollution control, carbon storage and sequestration.

Although these issues are of particular interest to the NPS, and research is encouraged for them, proposals that are topically within the broader Research Purpose (above) will also be considered.

NPS preserves, protects, and shares our nation's special places and stories. Employees work in a variety of fields, including, but not limited to science, research, and restoration. We invite applicants to be a part of what we do and contribute to our mission and public purpose. To explore recent and ongoing science research in national parks, visit the following websites:

<https://www.nps.gov/articles/connected-conservation-101.htm>

<https://www.nps.gov/orgs/1412/landscape-scale-conservation.htm>

<https://www.nps.gov/subjects/parkscience/index.htm>

<https://irma.nps.gov/Stats/>



# Conway Science Fellowship Request for Proposals

## Appendix D: Contact Information Sheet

Please use the form on the following page as a cover sheet for your application.

# Conway Science Fellowship

## Contact Information Form

**Project Title:** .....

**Research Topic:**

### Faculty Mentor

First Name	Last Name	Title
.....		.....
Sponsoring Institution		
.....		
Department		
.....		
Street Address		Telephone
.....		.....
City, State, ZIP Code		E-mail
.....		.....
		Tenured (or tenure-track)?
		Yes No

### Postdoctoral Fellow

The fellow selected by the faculty mentor must have achieved their doctoral degree not more than three (3) years prior to the application deadline.

First Name	Last Name	Year that Doctoral Degree was Achieved
.....		.....
Telephone	E-mail	
.....	.....	

### Administrative Official

The application must be approved by an administrative official at the sponsoring degree-granting or research institution with the authority to approve the research project.

First Name	Last Name	Title
.....		.....
Telephone	E-mail	
.....	.....	
Administrative Official Approval	Submit a letter of support from the administrative official in application package	
Yes      No		