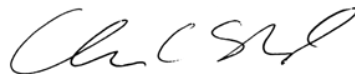


A Proposal to the  
**National Oceanic and Atmospheric Administration Office for Coastal Management**  
**2024 Digital Coast Fellowship Program**

Project Title:  
**Aligning floodplain conservation with the FEMA Community Rating System's existing incentives for  
protection of open space**

Submitted by  
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**The Nature Conservancy**



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## 1. Background and Introduction

The Nature Conservancy (TNC) proposes a 2024 Digital Coast Fellowship focused on the nexus between the FEMA Community Rating System (CRS) and the conservation of floodplains and salt marsh migration corridors. This Digital Coast Fellowship application evolved from projects advanced by current and previous TNC Digital Coast Fellows and directly addresses capacity gaps at TNC as well as opportunities for better alignment with Digital Coast resources. We intend to focus the fellowship on using TNC and Digital Coast Partnership resources related to the CRS and nature-based solutions more broadly to help achieve TNC 2030 conservation goals along the Gulf and Atlantic coasts of the United States while improving the resiliency of coastal communities to climate change.

### CRS and the Digital Coast Partnership

The Community Rating System (CRS) is a voluntary FEMA program that offers (NFIP) federal flood insurance discounts to communities that meet certain criteria related to resiliency. Participating communities are ranked into classes (1-10) based on scoring a specific number of points. For example, if you score at or above 2,500 points you are ranked a class five, which gives residents in that community's flood zone a 25% discount. A specific number of points are allowable for different categories of activities. Some of the CRS creditable activities are nature-based conservation and restoration approaches that TNC is actively engaged in planning and implementing across the United States and TNC has taken an interest in the CRS since at least 2015.

Under Community Rating System Activity 420: Open Space Preservation (OSP), a community can earn CRS credit for preserving open space within the regulatory floodplain. This OSP is achieved through land regulations that prohibit infill and new development in flood-prone areas and protect and enhance the natural functions of floodplains. Several Digital Coast Partner organizations including NOAA provide technical support related to the OSP and this overlap in missions has led to multiple collaborations and funded projects between TNC and the Digital Coast partnership organizations.

One of the major challenges that communities face when trying to obtain points for OSP is the spatial analysis, calculations, and documentation process necessary for FEMA CRS approval. To help address this issue, OCM developed the [NOAA GIS Workflow and Mapping Guide](#) to provide more accessible guidance for community staff on how to identify current and future open space points. TNC staff in multiple business units have used the workflow (some through a Digital Coast Connects project) to increase our own understanding of how open space points are calculated. As a result, there are more than a dozen TNC staff that have technical knowledge about how open space protection points are calculated for CRS and several TNC have collaborated to create a GIS script to help calculate CRS points available for future OSP.

Previous Digital Coast collaboration and fellowships have also led to the creation the [Community Rating System Explorer \(CRS Explorer\)](#). The CRS Explorer is a tool that helps planners visualize where current land protections are likely earning their community CRS points and which other areas may be eligible for future Open Space Preservation (OSP) if protected via acquisition or conservation easements. The tool identifies areas within the floodplain that, if protected, improve the community's CRS score, reduce flood insurance costs, and make their communities more resilient to future flooding.

In particular, the CRS Explorer aids planners in identifying areas that could qualify for Activity 420 Open Space Preservation (OSP) credits if those areas were in a protected status. These Potential Future OSP areas are

places within the impact adjusted special flood hazard area that have natural land uses but are not currently eligible for OSP simply because they are not legally protected from development. With the CRS Explorer, planners, land trusts and conservation organizations can quickly locate future OSP areas and quantify the number of OSP credits that protection would provide. This information can be used to support community planning decisions around green space, wildlife preserves and community parks. The tool can also be used to support the development of a Floodplain Protection Plan and links to multiple Digital Coast partner resources.

The CRS Explorer currently features communities in Texas, Mississippi, Florida, Georgia, South Carolina, and North Carolina. Community interest in better understanding current and potential open space points opportunities has been and continues to be very high amongst local governments who are eager to show return on investment for coastal resilience actions that benefit their residents. Despite high levels of interest, TNC has been limited in our ability to strategically expand the number of communities using and benefitting from the CRS Explorer for several reasons ranging from limited staff capacity to lack of an explicit regional or state strategy linking specific conservation goals to CRS-based approaches.

TNC and NOAA's Office for Coastal Management have been collaborating through the Digital Coast Partnership since 2008. A hallmark of the partnership has been the collective development of online decision support tools and resources such as the CRS Explorer. With this fellowship application, we propose to link our co-developed Digital Coast CRS resources, improve the user experience for communities that are interested in CRS OSP, and more explicitly link the CRS Explorer to TNC's 2030 conservation and people goals along the Gulf and Atlantic coasts.

#### The CRS as a Strategy to Help Achieve TNC's 2030 Goals

Our nation's coastal communities face the interconnected crises of rapid climate change and biodiversity loss. The science indicates that we have years, not decades, to address these threats. In response, TNC has narrowed our organizational focus and committed to our 2030 Goals - our biggest, most ambitious plans—for people and nature. Open space protection is a critical component of multiple 2030 goals and we also have a goal to help 100 million people at severe risk of climate-related emergencies such as floods, fires, and drought use nature-based approaches to adapt to the climate crisis. TNC chapter staff that have been engaged in our CRS efforts to date see value in the previous and ongoing projects, however staff have noted the need for linking the CRS Explorer to specific TNC conservation projects and strategically engaging communities where significant progress can be made towards our 2030 goals. Open space protection that is creditable under CRS has direct connections to TNC's ongoing and planned project portfolios related to conservation of floodplains and marsh migration corridors. The Fellow will explore these types of opportunities to advance new and existing conservation projects using approaches related to CRS engagement and the incentives associated with earning CRS points for land protections. This type of strategic planning and implementation would also help increase the reach of the CRS focused Digital Coast Partnership efforts across more TNC business units in the coastal United States.

## **2. Goals and Objectives**

The overall goal of this fellowship project is to use TNC and Digital Coast resources related to the CRS and nature-based solutions more broadly to help achieve TNC 2030 conservation goals along the Gulf and Atlantic coasts of the United States while improving the resiliency of coastal communities to climate change. The

Fellow will play an integral role in facilitating strategic planning across multiple TNC business units related to the CRS, linking TNC, NOAA and other partner technical expertise, leading the development of an updated coordination and communication strategy related to CRS for TNC and Digital Coast Partners, supporting a TNC land protection project that is strategically aligned with the CRS, and creating content featuring our Digital Coast Partnership resources on TNC and Digital Coast webpages.

The fellow will work with The Nature Conservancy's Coastal Resilience program and advance this approach across the Gulf and Atlantic coasts by collaborating with a matrix of TNC staff at the Chapter, Division and North America level. This fellowship may require the formation of new partnerships with academia, non-governmental organizations and other partners focused on the CRS, floodplains, and protections of marsh migration corridors. Importantly, the fellow will gain many skills ranging from strategic planning to partner coordination to project management resulting in action taken on the ground.

Based on previous success with the 2012, 2016, and 2020 Digital Coast Fellowship Program, the fellowship objectives for 2024 are to mentor, develop, and establish the fellow on a career path with TNC that is in alignment with the Healthy Coastal Ecosystems and Resilient Coastal Communities strategic focus areas of Digital Coast. We intend to provide the Fellow with experience in project management and meeting facilitation, science-based decision making, strategic conservation planning and partner coordination by accomplishing the following goals:

**Goal 1. Support the development of a CRS-based strategy at TNC that links the CRS Explorer and community engagement related to CRS with TNC's 2030 conservation and people goals**

**Objective 1.1. Understand-** By October 2024, review TNC 2030 Goals and TNC conservation planning guidance documents. Convene a working group of TNC staff that have engaged in CRS efforts to understand alignment between their projects and TNC's 2030 goals.

**Objective 1.2. Plan-** By February 2025, facilitate an internal workshop series to consider TNC-CRS strategies at multiple scales ranging from individual chapter to regional or national strategies. Develop a Theory of Change to better understand where CRS engagement can be most impact for TNC 2030 goals.

**Objective 1.3. Implement-** By August 2025, integrate CRS projects into new or existing project and strategy record in TNC's Data Hub in coordination with strategy and project leads

**Goal 2. Coordinate with Digital Coast Partnership organizations on technical support, user resources and communications regarding OSP and the Community Rating System**

**Objective 2.1. Understand-** By November 2024, solicit information from Digital Coast Partners and attend meetings to identify opportunities for additional coordination for technical support and communications (i.e. linking the TNC Future Open Space GIS script with the NOAA GIS workflow, guidance to communities what to do once the Future OSP areas have been identified).

**Objective 2.2. Plan-** By August 2025, facilitate the development of a TNC-Digital Coast Partnership communications plan that clarifies roles and responsibilities of our organizations with respect to CRS OSP.

**Objective 2.3. Implement-** By July 2026, support the implementation of the communications plan and help coordinate TNC staff resources to help address technical coordination opportunities identified in Objective 2.1

**Goal 3. Serve as a Project Coordinator for a TNC land protection project that has been identified through aligning future CRS points with TNC strategies such as floodplain or marsh migration protection (identified in Objective 1)**

**Objective 3.1. Understand-** By November 2024, complete TNC’s Highly Effective Teams (HET) project management training.

**Objective 3.2. Plan-** By May 2025, work with TNC staff to identify a project to support as Project Coordinator for the remainder of the fellowship and apply HET principles to identify roles and responsibilities, break down the work, track actions items, and coordinate project meetings.

**Objective 3.3. Implement-** By July 2026, support the development of project proposals for public and private funding to support due diligence and protections efforts related to the project.

### **3. Milestones and Outcomes**

#### Outcomes

- The Fellow’s unique experience working across a matrixed, global conservation organization provides professional development and networking opportunities that expose the Fellow to future coastal management and conservation career pathways
- Collaboration and technical coordination between TNC and other Digital Coast partners on CRS OSP is increased
- Coastal communities that are interested in protecting open space to reduce flood risk and obtain CRS points can easily understand how to use NOAA and TNC resources simultaneously
- The Nature Conservancy can better understand how the FEMA CRS can be useful at a regional scale for reducing flood risk to communities while also meeting conservation goals
- One new, on the ground conservation project will be initiated by TNC that conserves open space in the floodplains and is likely creditable for CRS points

#### Timeline

**August – November 2024:** Onboarding of Fellow including orientation (in person) and staff meet and greets (virtual). Develop Fellowship workplan and begin TNC trainings for project management. Initiate TNC CRS Workgroup. Engage Digital Coast Partners to better understand CRS resources and areas of further collaboration.

**December– March 2025:** TNC CRS Strategy Development via TNC CRS working group and begin identification of CRS Conservation project for focus during Fellowship.

**April – August 2025:** Support the TNC CRS working group to link to or create CRS strategies and theories of change in the hub. Work with Digital Coast Partners to create a communications plan about CRS OSP and the Digital Coast Partnership. Finalize which conservation project to serve as project coordinator and start work planning the conservation project.

**September- March 2026:** Serve as Project Coordinator for CRS Conservation project. Continue to lead the TNC CRS Working Group and help implement the communications plan.

**April – July 2026:** Continue to support CRS Conservation project team with proposal development and team coordination. Develop case studies about TNC conservation linkages with CRS, share with TNC and Digital Coast Partnership networks, and work with NOAA to integrate documents into the Digital Coast.

#### **4. Project Description**

The main tasks of the project can be broken into three components: TNC-Digital Coast CRS Collaboration and Coordination, TNC CRS Strategic Planning, and CRS Conservation Project Implementation.

**TNC-Digital Coast Collaboration-** This task focuses on improving technical coordination of the various Digital Coast CRS resources and better communicating how the Partnership works together on CRS. The Fellow will attend Digital Coast meetings and interview partners to better understand where improved coordination would be helpful. The Fellow will work with TNC staff to help implement the suggested improvements. The Fellow will also coordinate the development of a Communications plan to better help the public understand Digital Coast resources related to CRS OSP. This is a need that has been previously identified by the Digital Coast partners. The Fellow will also support the implementation of the communications plan.

**TNC CRS Strategic Planning-** TNC business units have all come at the CRS Explorer and community engagement on CRS from somewhat different angles. However, all the TNC leads see value in connecting the CRS OSP efforts to existing TNC conservation strategies now that TNC has narrowed it's focus to the 2030 Conservation Goals. This task will allow the Fellow to become familiar with TNC's 2030 Goals and conservation planning guidance before initiating a TNC CRS working group to understand how different business units frame their CRS efforts and how a regional or national TNC CRS Strategy could be implemented to maximize the number of points communities can receive while at the same maximizing conservation gains. This task will help Digital Coast Partners, including OCM, better understand how TNC will be engaging on CRS more strategically in the future and will help TNC clarify how communities can join the CRS Explorer tool in the future.

**CRS Conservation Implementation-** This task will focus on developing a new project that aligns TNC conservation objectives with a community's or multiple communities' opportunity for future open space points from the CRS program. This project will be identified by the Fellow and the working group and will likely be in the Gulf of Mexico region. The Fellow will be trained in project management principles through TNC's Highly Effective Teams training and then will apply these skills to project coordination including running all team calls, identifying team roles and responsibilities, creating a project workplan, and helping to move the project from idea to implementation.

#### **5. Diversity, Equity, Inclusion, and Justice**

The proposed project seeks to help TNC identify where community engagement surrounding CRS can be helpful for meeting TNC's 2030 conservation goals. In all previous TNC CRS engagement, we have only identified future open space protection opportunities if the communities have indicated they are interested protecting additional open space within their community's floodplain. As we think more closely about developing strategies for land protection and CRS, it will be important to consider if there are any unintended consequences of this land protection to vulnerable populations within the community. TNC is developing resources that address unintended consequences and equity in land protection and we will ensure that the Fellow and project team has access to these resources for inclusion in our planning process.

In addition, in early 2022, TNC's Executive Leadership Team launched a cross-functional, collaborative effort to examine its commitments to diversity, equity, inclusion and justice (DEIJ) and to guide the pathway to greater accountability as an organization. A primary result of these efforts is TNC's new DEIJ Compass. The

DEIJ Compass is a strategic framework for teams and individuals across TNC to embed DEIJ in their work. It contains guidance, sample actions, and a common foundation that teams and individuals can build on as they reflect on their goals and strategies. The DEIJ Compass repeatedly emphasizes “embedding DEIJ” and, instead of separating “DEIJ work”, working to weave diversity, equity, inclusion, and justice into everything we do. The encouraged starting point for doing this and applying the DEIJ Compass is reflecting on individual objectives. The Fellow will be encouraged to incorporate DEIJ Compass principles when developing their Fellowship and professional development objectives and will also have access to TNC’s cultural competency and DEIJ resources through our learning hub.

## **6. Fellow Mentoring**

The 2024 Digital Coast fellow will be mentored by Dr. Christine Shepard, Director of Science for the Gulf of Mexico Program, with support provided Ashby Nix Worley, Coastal Climate Adaptation Director for TNC Georgia. TNC is a matrixed and geographically dispersed organization, and the Fellow will be a part of a team that operates in this manner. Christine has 17 years of TNC experience and has co-developed the Coastal Resilience suite of tools (which includes the CRS Explorer) since its inception in 2008. Her background in conservation planning, GIS, web-mapping tools, program and project management, and community engagement will be an asset to the fellow. Christine works from a home office in the Florida Keys. Although there are no TNC offices in the Florida Keys since the pandemic, the fellow has the option to work from a home office in the keys to allow for in person meeting with Christine. Ashby Nix Worley joined The Nature Conservancy as their Coastal Climate Adaptation Director in 2016, where she works with coastal partners and communities to bring nature-based solutions to help address coastal hazards to build a more resilient Georgia Coast. Ashby is a Certified Floodplain Manager since November 2017 and has extensive experience engaging with communities on coastal resilience and CRS. Ashby works from a TNC office in Darien, Georgia and has office space available if the fellow would like to relocate to coastal Georgia. Ashby works a flexible hybrid schedule and uses the office 1-2 time per week and works remotely the remaining days.

Over the course of the fellowship, other TNC colleagues including Nate Woiwode (Northeastern Division Adaptation Strategy lead), Sarah Murdock (NA Policy), Brian Boutin (North Carolina), Liz Fly (South Carolina), Susan Bates (Virginia), Tom Mohrman (Mississippi), Judy Haner (AL), Jeff DeQuattro (GOM), Bryan Piazza (LA), and Lauren William (TX) will contribute their expertise ranging from planning to on-the-ground implementation across both science and policy realms (with a focus on CRS). In addition, the fellow will be exposed to a suite of domestic and international geographies where the umbrella program ‘Coastal Resilience’ is being applied.

Christine and Ashby will be responsible for facilitating a positive and rewarding experience for the Fellow. A workplan will be jointly developed with the Fellow and TNC staff to identify roles and responsibilities associated with achieving the goals in this proposal. Christine will be responsible for managing the Fellow, providing professional development opportunities within TNC (including project management and DEIJ trainings) and will be the main TNC point of contact for the Digital Coast Fellowship program.

## **7. Office Environment**

At the time of this proposal submittal, TNC staff based in Florida are currently teleworking as TNC Florida closed most offices during the pandemic. As a result, it is unlikely that we will provide the fellow an office space where Dr. Shepard is in the Florida Keys. However, because much of the project scope work is regional

to national in scale, most of the project and Fellowship meetings will take place virtually as team members are located across the United States. We do however value face to face meetings and team building activities, so we have allocated a travel budget for four in person working meetings for the Fellow, Dr. Shepard, Ms. Worley and any additional team members to meet in person (kickoff, check ins, debrief).

We are willing to work with the Fellow to accommodate their relocation preferences or to support them to stay in their existing location. There are multiple TNC staff that engage in CRS projects that are willing to host the fellow in their offices and become an additional co-mentor. There is also an option to relocate to the TNC World Office in Arlington, VA. If the Fellow chooses to relocate to a TNC office, the Fellow will have access to shared printers, office supplies, mailing, necessary trainings, and resources, such as projectors and specialty presentation/design software, in addition to supplies for a home office. Based on previous mentor/mentee experience, we are recommending weekly virtual check-ins between the fellow and the mentor. In addition, the co-mentors will meet quarterly with the Fellow to establish and reevaluate the Fellow's workplan, ensuring the workload is manageable and supports the Fellow's professional goals. The COVID pandemic has allowed both mentors to improve upon managing remote teams and they will work with the Fellow to devise a strategy that works for them, such as the use of project management software like Slack, Google, or Microsoft Platforms. At the beginning of their Fellowship, the mentors will schedule virtual or in-person meetings for the Fellow with co-workers and colleagues. These meetings will give the Fellow the chance to develop a social network and to meet individuals with whom they will be interacting throughout their Fellowship experience. This approach worked well with the Digital Coast Fellow hosted by TNC in 2020. She was remote the entire length of her fellowship and met in person with Dr. Shepard at multiple points throughout the Fellowship period.

## **8. Project Partners**

The design of this proposal will expose the fellow to a wide array of partners:

- Digital Coast Partners who provide technical support related to CRS (NOAA OCM, ASFMP, APA, ULI). The fellow will join the Digital Coast calls throughout the fellowship period.
- There are multiple academic partners who have reached out to TNC to connect with research they are doing on CRS. TNC as had limited to time to connect with these researchers, and we anticipate the fellow will engage with researchers from multiple academic intuitions.
- Land protection agencies and nonprofits including the Partnership for Gulf Coast Land Conservation and the Gulf of Mexico Alliance
- CRS user groups in multiple states.

Partnership development and integration is a key component for activities described in this proposal and the Fellow will gain valuable experience working with partners from multiple sectors, geographies and levels of government (state agencies, FEMA, local governments etc).

## **9. Cost-Share Description**

The Nature Conservancy Gulf of Mexico Program will provide the \$15,000 match required for the Digital Coast Fellowship Program. The non-federal match will come from private foundation funding and general membership support funds and is already being factored into our fiscal year 2025 work planning budget (July 1, 2024 to June 30, 2025). In addition, TNC will provide the Fellow with funding for travel and trainings above what will be provided through the Fellowship match. Travel is anticipated for a TNC GOM All staff retreat as well as multiple in person Fellowship planning, coordination, and project management meetings.



## **10. Strategic Focus Area**

This Fellowship proposal directly addresses the **Healthy Coastal Ecosystems** focus area as the goal of the project is to facilitate the use of nature-based solutions, such as the protection of floodplains and saltmarsh migration corridors, for hazard mitigation and adaptation to climate change. The Fellow will be working in coordination with TNC scientists, conservation practitioners and planners using cutting edge science to develop and implement strategies for restoring and conserving nature to reduce risk. The Fellow will also gain valuable experience learning from and working with other conservation and restoration partner organizations as well as experience communicating how nature plays a role in coastal hazard issues from local to regional scales.

The Fellowship also addresses the **Resilient Coastal Communities** by providing CRS related data, tools, guidance, training, and technical assistance to people working to enhance community resilience. The project will also develop communications products to increase public awareness of coastal hazards and nature-based actions such as open space protection that can be taken to reduce the loss of life and property. The Fellow will become familiar with a variety of Digital Coast tools and resources and build capacity for using these tools in the coastal United States.

Finally, the Fellowship will address **Vibrant and Sustainable Coastal Economies** by developing tools and resources for considering the role of conserving undeveloped open space for hazard mitigation and climate adaptation. The process tools and resources will highlight the additional benefits provided by protected undeveloped floodplains such as potential NFIP policy premium reductions.