

New app identifies open space within the floodplain to reduce flood risk and insurance premiums

Over the last few years, the federal government has implemented changes to overhaul the National Flood Insurance Program (NFIP); and flood maps are being updated. This means there is a potential for communities' flood insurance premiums to change in the near future. At the same time climate change is increasing coastal communities' risk to more frequent and intense storms, sea level rise and flooding.

Individuals can enroll in the NFIP to protect themselves financially from flood events, but how do entire communities reduce their flood risk?

#### COMMUNITY APPROACH

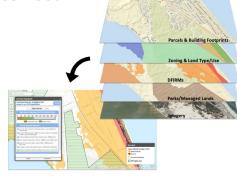
Preserving open space allows the land to retain its natural function in the floodplain, storing floodwaters and reducing flashiness, as well as provide benefits to the ecosystem and water quality.

Open space also provides benefits to communities.

Many coastal communities incorporate open space preservation in their community planning for social benefit and economic benefit through the Community Rating System, which reduces flood insurance premiums.

# **COMMUNITY ACTION**

Educate residentsMap and regulate flood areas

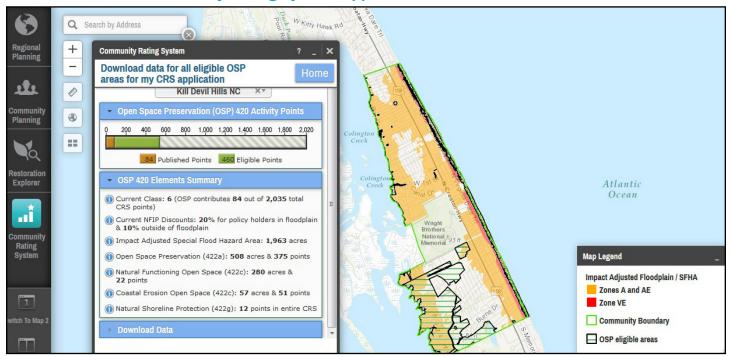


CRS Explorer analyzes data sets to determine areas that currently qualify for OSP credit and calculates the points those areas provide.



The **Community Rating System Explorer** (CRS Explorer) is an app that helps planners identify areas that are eligible for Open Space Preservation (OSP) credits in FEMA's Community Rating System (CRS). This tool provides exportable information to support the application process and allows communities to interactively explore their data to identify future open space which would further reduce flood risk and premiums.

### **Screenshot of the Community Rating System App on the Coastal Resilience tool**



#### **APP IN ACTION**

To assist planners with identifying land that qualifies for credit in the Federal Emergency Management Agency (FEMA) CRS, The Nature Conservancy developed North Carolina's Community Rating System Explorer (CRS Explorer) application. The CRS Explorer app is part of the Coastal Resilience decision support system, a suite of web-based tools to help communities explore where nature can reduce risk.

The CRS Explorer app combines local planning data with high level mapping tools and calculations. The app provides planners with exportable maps and information necessary for the CRS application. It also allows planners to interactively

explore areas that aren't currently eligible for credit in this federal program, but could be in the future if they are legally protected from development.

Planners can overlay additional data, like habitat assessments or flooding frequency, to further make the case to protect these areas and support community planning decisions.

The CRS Explorer app allows planners to prioritize nature-based solutions like open space preservation to reduce their community's flood risk.

Preserved open space provides cost savings and becomes a natural asset for community resilience and well-being.

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## **KEY POINTS**

- CRS Explorer is a stakeholder driven app designed for planners and FEMA Insurance Services Officers
- Provides preprocessed analyses and maps that save time for planners
- Allows for an in-depth analysis, which could reduce NFIP rates for the greater community
- Its functionality allows the app to be easily applied to other geopgraphies that have parcel data
- In Dare County, the app identified an average of 546 points that were not being credited

### **EXPLORE MORE**

To explore the CRS Explorer app for North Carolina, please visit: maps.coastalresilience.org/northcarolina
For CRS Explorer app FAQs, please visit: coastalresilience.org/project/community-rating-system-explorer



In a Congressionally-mandated independent study by the National Institute of Building Sciences, it was concluded that every \$1 the FEMA spends on hazard mitigation saves Americans an average of \$4.

Here is the general page on the CRS Explorer. <a href="http://coastalresilience.org/project/community-rating-system-explorer/">http://coastalresilience.org/project/community-rating-system-explorer/</a>

Here is a guided demo that directs you through the Explorer. <a href="http://media.coastalresilience.org/NC/CRS">http://media.coastalresilience.org/NC/CRS</a> Explorer TryMe/index.html

And here is the Explorer loaded with a few communities in NC. <a href="http://maps.coastalresilience.org/northcarolina/">http://maps.coastalresilience.org/northcarolina/</a>

Lastly, this is the recording. The link should take you to a Box folder for our coastal resilience webinars. Once you select the Webinar Recordings.docx (top item), it will allow you to open a word doc with 3 links to recordings. Select the 3<sup>rd</sup> webinar on Community Rating System. Once you are in the webinar, forward to minute 33:00 or so to begin the presentation from our NC pilot project. At minute 41:00 the developer demos the tool for a few minutes and discusses the efficiencies in work flow that the tool also minimizes. At minute 48 they go back to NC and talk to the Planning staff from Dare County on how it's worked for them. Additionally there is a note on considerations that go into developing the tool. Lastly, around minute 54 there is a NOAA tool discussed that is still in development but will allow communities to build this tool themselves (or something similar). https://tnc.box.com/s/wgf4dw6y71dyvqlm74039im7zxpefzxg