

How to Map Open Space for Community Rating System Credit

Before You Get Started

To complete the open space preservation Activity 420 outlined in the Community Rating System (CRS) manual, you will need to identify maps, geospatial data, or other information to map, calculate, and document credit for preserved open space. This document provides a list of common information sources you may need.

To collect the required information and documentation, you may need the cooperation of municipal departments and other local organizations that acquire and maintain open space in your community. This can include the parks department, land use planning department, floodplain managers, and local and state land trusts.

A key player is a GIS professional, who can help find, catalogue, and analyze the various spatial data sets that will be necessary. If using GIS to map open space for CRS credits, the companion GIS Workflow document provides a list of data sets and recommended data sources.

Note: There are three main components to CRS Activity 420:

- Calculating the area of the community’s regulatory floodplain;
- Identifying parcels that qualify as “preserved open space” and calculating the base points and “extra credit” these parcels can earn; and
- Identifying and calculating credit for areas protected by the community through local regulations (rather than through easement, deed restriction, or ownership).

This “how-to” and accompanying GIS Workflow focus on the first two elements.

Checklist of Information Sources You May Need

The following are potential sources of information, with links where available, to help with identifying and documenting open space preservation credits under CRS Activity 420. Please also refer to the companion GIS Workflow for a checklist of GIS data sets and recommended sources to find the data.

Credit Element	Information Type	Source
All Elements	2017 <i>CRS Coordinators' Manual</i>	FEMA or CRS Resources.org
	Special flood hazard area maps, as shown on the Flood Insurance Rate Map (FIRM) (as basis for all open space calculations)	FEMA Map Service Center
Open Space Preservation	Undeveloped areas and open space	NOAA Coastal Change Analysis Program (C-CAP) Land Cover Atlas
	Lands protected by ownership (fee title) or by conservation easement <i>(Examples: Designated nature reserves, managed open space, park, or preserved private lands)</i>	USGS' Protected Areas of the U.S. Database (PAD-US); Trust for Public Land's Conservation Almanac ; National Conservation Easement Database (NCED); Local land trusts (see locator)
	Parcel data (for information on ownership and land-use classification)	State GIS data portal; State, county, or city planning department or tax assessor's office
	Regulations and ordinances that prohibit fill and structures in the regulatory floodplain (e.g. shoreline, dune, or wetland protections or setbacks)	County or city planning department
Deed Restrictions	Property deed showing restrictive language (could be in a deed of sale, notice of restrictive covenant, easement, or other similar instrument)	County or city land records; Managing agency for state or local parks or preserves; Local land trusts (see locator)
Natural Functions Open Space: NFOS 1	Areas designated as worthy of preservation for their natural functions by a federal or state sensitive-areas program that places development restrictions on designated properties	State natural resource agency <i>(Examples: state preserves, refuges, wilderness areas, etc.)</i>
	Areas designated by a recognized private program as worthy of preservation for their natural functions	The Nature Conservancy Priority Conservation Areas ; NatureServe Surveyor

	Critical habitat designations for threatened or endangered species (federal or state listed)	U.S Fish and Wildlife Service (USFWS) – iPAC website ; NOAA – Protected Resources website State natural heritage programs
	Other fish and wildlife habitats (breeding, feeding, or stopover habitat)	USFWS – iPAC website ; State natural resource agency or natural heritage program
NFOS2	Natural floodplain functions plan (e.g., plan developed under Activity 512.c, habitat conservation plan, habitat protection or restoration plan, green infrastructure plan, comprehensive plan)	State natural resource agency; County or city planning department
NFOS3	Critical habitat for threatened or endangered species or species of concern (federal or state listed)	USFWS – iPAC website ; NOAA – Protected Resources website; State natural heritage programs
NFOS4	Open space corridor or network (e.g., greenways or wildlife corridors)	State or local natural resource or wildlife agency; County or city planning department; State coastal management programs / CELCP plans (NOAA CELCP website – see section on “Plans Incorporated by Reference” within the states’s CELCP plan)
Coastal Erosion Hazards Open Space	Coastal erosion hazard area (if mapped under CRS Activity 412.f)	State coastal management program – for state’s erosion reference feature
	Coastal Shorelines (length and erosion rates)	State coastal management program
Special Flood-related Hazard Areas	Tsunami hazard areas	National Tsunami Hazard Mitigation Program
Zoning or other Regulatory Protections	Areas covered by open space incentives or low-density zoning	County or city planning department
	Natural shoreline protection programs (e.g., shoreline setbacks)	State resource management agency; County or city planning department
	Special flood-hazard regulations (e.g., dune protections, coastal erosion setbacks, or tsunami hazard protections)	State resource management agency; County or city planning department