

Activity 420

Open Space Preservation

Links Between Open Space and Flood Losses

- Highfield and Brody 2012, 2013
- 450 CRS Communities
- Participating between
 1999-2009
- 1 point increase in CRS under Activity 420 = savings of \$1,052-\$3,532 per year

See pages 420-1 to 420-3 of CRS Coordinator's Manual!



Background on Activity 420

Maximum total credit available: 2,020 points

Objectives:

 Prevent flood damage by keeping flood-prone lands free of development
 Protect and enhance the natural functions of floodplains

CRS Green Guide, 2017



Overview of Elements

422.a: Open Space Preservation (OSP) - up to 1,450 points for keeping land vacant through ownership or regulations

422.b: Deed Restrictions (DR) - up to 50 points extra credit for legal restrictions that ensure that parcels credited for OSP will never be developed

422.c: Natural Functions Open Space (NFOS) - up to 350 points extra credit for OSP-credited parcels that are preserved in or restored to their natural state



Overview of Elements

422.d: Special Flood-Related Hazards Open Space (SHOS) - up to 150 points if the OSP-credited parcels are subject to one of the special flood-related hazards or if areas of special flood-related hazard are covered by low-density zoning regulations

422.e: Coastal Erosion Open Space (CEOS) - up to 750 points if the OSP-credited parcels are subject to coastal erosion

CRS Green Guide, 2017



Overview of Elements

422.f: Open Space Incentives (OSI) - up to 250 points for local requirements and incentives that keep flood-prone portions of new development open

422.g: Low Density Zoning (LZ) - up to 600 points for zoning districts that require lot sizes of 5 acres or larger

422.h: Natural Shoreline Protection (NSP) - up to 120 points for programs that protect natural channels and shorelines

Activity 420 Calculation Details

Impact Adjustment

Area Preserved in Regulatory Floodplain Total Area of the SFHA

**Regulatory floodplain can be BIGGER than the SFHA, so your ratio *could be* more than 1. **Some activities have a maximum and minimum Impact Adjustment Ratio.

Impact adjustment maps are required!

CRS Green Guide, 2017

Image Credit: Ben Alexander, Town of Kitty Hawk

Activity 420 Stackable Credits Available

- **Potential to double count?**
- 420.a: Open Space Preservation 8 elements
- 422.b: Deed Restrictions 5 elements
- 422.c: Natural Functions Open Space 4 elements
- 422.d: Special Flood-Related Hazards Open Space -TBD
- 422.e: Coastal Erosion Open Space 3 elements
- 422.h: Natural Shoreline Protection No

Check the Green Guide and CRS Manual for guidance at calculation details!



CRS Green Guide, 2017

Element 422.a: Open Space Preservation (OSP)

Requirements:

- Parcel must be in the community's regulatory floodplain
 - Flood Insurance Rate Map (FIRM)
 - OR outside FIRM-identified floodplain where community enforces development
- Parcel must be "open space"
- The parcel must be "preserved" as open space.

Maximum Credit: 1,450 points

Parcel must be "Open Space"

Six types of properties that do not count:

- 1. Properties omitted from counting toward the 400 series of the CRS
- 2. Impervious surfaces
- 3. Areas with buildings on them
- 4. Parcels on which fill or other encroachments may be placed
- 5. Utility and maintenance rights of way.
- 6. Publicly-owned property that isn't intended for open space.

Open Space: no buildings, storage, filling, significant pavement, or other encroachment to flood flows





"Preserved"

- Public land City, county, state parks, beaches, and forest preserves
- Private lands maintained for open space purposes church retreat areas, hunting club lands, Audubon Society preserves, Boy or Girl Scout camping areas
- Open space areas subject to land development regulations that prohibit buildings and filling



Caveat: owner of property MUST state in writing that they will be KEPT in open space



Element 422.a: OSP Documentation Difficulty

TIP: These tasks can be completed easily with the help of a GIS professional and through a review of the community's records and/or ordinances

LOW DEGREE OF DIFFICULTY

- Document where open spaces are within the floodplain (map)
- Provide basic background information on the parcels of land being credited (e.g. copy of deed, copy of a plan)
- Demonstrate that these parcels will be preserved as open space (copy of comprehensive plan, ordinance, etc.)

Element 422.a: OSP Implementation Difficulty

MEDIUM DEGREE OF DIFFICULTY

- Urban areas may be limited by open space available
- May need to purchase homes, lots, or commercial properties and restore them for additional credit
- Land trusts, NGOs, and other agencies may be critical for financial assistance
- It is easier to avoid development/preserve open space than converting to open space



Element 422.b: Deed Restrictions (DR)

Maximum total credit available: 50 points

Requirements: All areas must first qualify for Open Space Preservation Language must be attached to deed of the parcel that prohibits new buildings

CRS Green Guide, 2017



Element 422.b: DR Documentation Difficulty

LOW DEGREE OF DIFFICULTY

- Document where deedrestricted Open Space is located (map)
- Provide ISO/CRS
 Specialist with copies of deed restrictions



Element 422.b: DR Implementation Difficulty

HIGH DEGREE OF DIFFICULTY

Legal restrictions must be imposed on parcels in the floodplain already preserved as open space **Requires a lot of education** and outreach to work with private landowners to willingly relinquish right to develop their land Restrictions do not need to be universally adopted or mandated -- but you will have to perform outreach.



Element 422.c: Natural Functions Open Space (NFOS)

Requirements:

- All NFOS areas must first qualify for Open Space Preservation credit
- Credit for the first sub-element is required for rest of credits
- Property must stay in natural state or otherwise managed to keep its designation
 Areas need to be marked on your Activity 420 Impact Adjustment Map

Maximum Credit: 350 points

CRS Green Guide, 2017

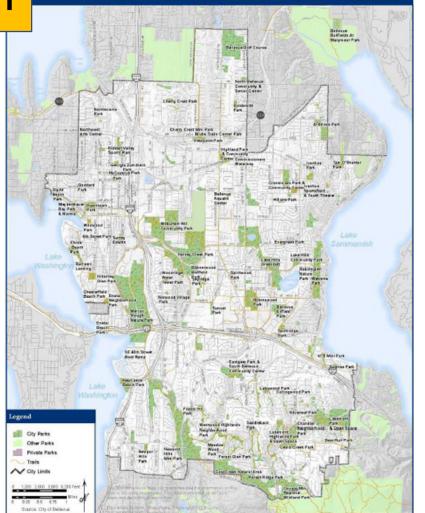
Image Credit: Ben Alexander, Town of Kitty Hawk



Element 422.c: NFOS Documentation Difficulty

MEDIUM DEGREE OF DIFFICULTY

- Need a qualified professional document the NBF of the lands
- Filling out and organizing paperwork could be time intensive for larger communities
- May need to hire additional personnel or contractors
- Documentation can be reused



arks & Open Space System



Element 422.c: NFOS Implementation Difficulty

MEDIUM DEGREE OF DIFFICULTY

- Communities do not necessarily to acquire additional land
- Restoration initiatives can
 be time consuming

CRS Green Guide, 2017

mage Credit: John Tiscorina, 2016

Slide 19

Element 422.d: Special Flood-Related Hazards Open Space (SHOS)

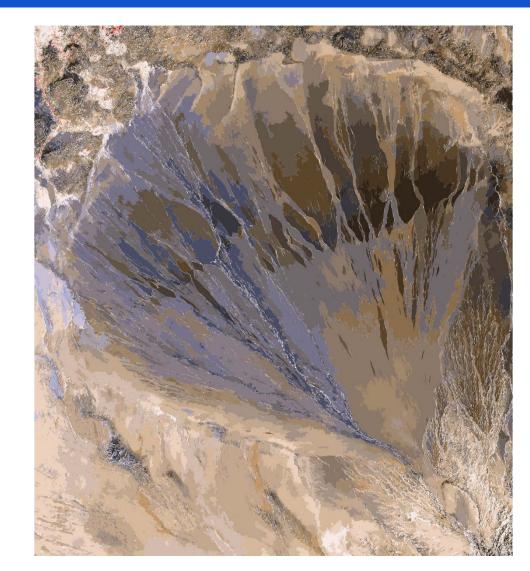
Maximum Credit: 150 points

Requirements:

- Area must qualify for open space credit
- Area must be included in a special hazard map
- Area must be subject to regulations under Activity 430

Includes:

- Uncertain flow paths
- Closed basin lakes
- Ice jams
- Land subsidence
- Mudflows





Element 422.d: SHOS Documentation Difficulty

LOW DEGREE OF DIFFICULTY

Copies of ordinances
Create an impact adjustment map for each flood-related hazard area
Show overlap between flood-related hazard and the flood





Element 422.d: SHOS Implementation Difficulty

HIGH DEGREE OF DIFFICULTY

A community must develop and adopt a map that identifies <u>and</u> protects these areas in open space
Sometimes you need a licensed expert to perform modeling for mapping

CRS Green Guide, 2017 Image Credit: Dennis Dixon, CFM Pierce County Public Works – Surface Water Mgmt, Pierce County, Washington. Slide

Element 422.e: Coastal Erosion Open Space (CEOS)

Requirements:

- The area must be seaward of an area that is eroding at a rate greater than or equal to 1.5 feet per year.
- The area must qualify for OSP credit.
- The community must earn pre-requisite points in Activity 412.f, 442.d, and 432.n

CRS Green Guide, 2017

nage Credit: Photos by Clark via Flickr Commons

aximum Credit: 750 poin



LOW DEGREE OF DIFFICULTY

- Copies of relevant ordinances
- Impact adjustment map for areas vulnerable to coastal erosion
- Evidence that community meets additional prerequisites

CRS Green Guide, 2017

Image Credit: James Willamor via Flickr Commons.



Element 422.e: CEOS Implementation Difficulty

HIGH DEGREE OF DIFFICULTY

 You need to be doing additional mapping under Activity 410 - Mapping for Coastal Erosion
 You need expert-level data about erosion rates



Element 422.e: CEOS The Good News...

20 coastal states/territories have state-mandated shoreline no-build areas, including Rhode Island and many other New England States!

Look at the NOAA Report, titled "Protecting the Public Interest through the National Coastal Zoning Management Program"

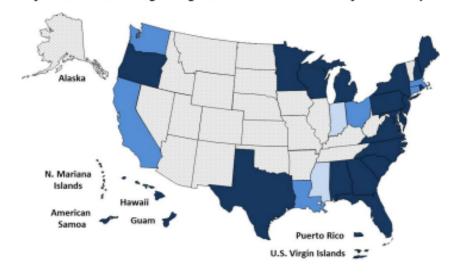


Figure 1: Role of Coastal States in Regulating Ocean and Great Lake Shorefront Development

State regulates shorefront development and has identified shorefront no-build areas State regulates shorefront development but has not identified shorefront no-build areas State does not regulate shorefront development as defined here State does not have a federally approved coastal management program (as of Dec. 2011)⁷

Element 422.f: Open Space Incentives (OSI)

Regulatory and Planning Tools:

- Regulatory and Planning Tools:
- Planned Unit Developments
- Transfer of Development Rights
- Cluster Development
- Tax Incentives

See CRS Manual pages 420-21 to 420-25 for information on various requirements

Maximum Credit: 250 points

CRS Green Guide, 2017



Element 422.f: OSI Documentation Difficulty

LOW DEGREE OF DIFFICULTY

Map the areas subject to limitations
Provide copies of regulations

CRS Green Guide, 2017

Image Credit: Stewie811 via the Flickr Commons



Element 422.f: OSI Implementation Difficulty

MEDIUM DEGREE OF DIFFICULTY

- Some of these regulatory techniques are morechallenging to implement or alter
- Time and effort required to educate developers

Element 422.g: Low Density Zoning (LDZ)

Requirements:

- Lots must be at least 5 acres in size (lots larger than 10 acres credited at 10 acres)
- Lands cannot be credited for 422.a: OSP
- Community zoning ordinance that identifies different development criteria and densities for different areas

Maximum Credit: 600 points + extra credit in SHOS

CRS Green Guide, 2017

Image Credit: hattiesburgmemory via Flickr Commons

Element 422.g: LDZ Documentation Difficulty

LOW DEGREE OF DIFFICULTY

Create an impact adjustment map
Obtain copies of relevant zoning ordinances

CRS Green Guide, 2017

mage Credit: Harold Litwiler via Flickr Commons



Element 422.g: LDZ Implementation Difficulty

LOW DEGREE OF DIFFICULTY

 Many communities who get credit are rural in nature with low densities

Element 422.h: Natural Shoreline Protection (NSP)

Requirements:

Regulation/program must prohibit

- Rip-rap, armoring, alternations, dredging, removal of vegetation, filling on channels and channel banks
- Filling or other alterations to beach (including beach nourishment projects), alterations to sand dunes, construction of seawalls, bulkheads, armoring or other shoreline stabilization structures on shorelines of lake

Maximum Credit: 120 points



Element 422.h: NSP Documentation Difficulty

MEDIUM DEGREE OF DIFFICULTY

- Impact adjustment map
 - Copies of relevant ordinances
 - Records of a project or program that restored shorelines
 - Policy or plan that protects areas in future

Element 422.h: NSP Implementation Difficulty

MEDIUM DEGREE OF DIFFICULTY

May face opposition from developers and homeowners
Requires education and outreach

Activity 420 Tips for Success

Take credit for what you're doing!

- 1) Find creative ways to take credit for private lands that are being preserved as open space.
- 2) Work with local land trusts, landowners, and conservation groups to identify properties that meet certain requirements for various elements.
- 3) Use existing planning mechanisms when possible.
- 4) Contact experts you don't always have to pay a contractor.



Activity 420 Tips for Success

5) Be patient and purposeful.6) Create funding sources.7) Public outreach is key.



Image Credit: Village of South Elgin, Illinois





Questions?

CRS Green Guide, 2017

Image Credit: Andy Arthur via Flickr Commons.

Slide 38