



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:

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



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



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!



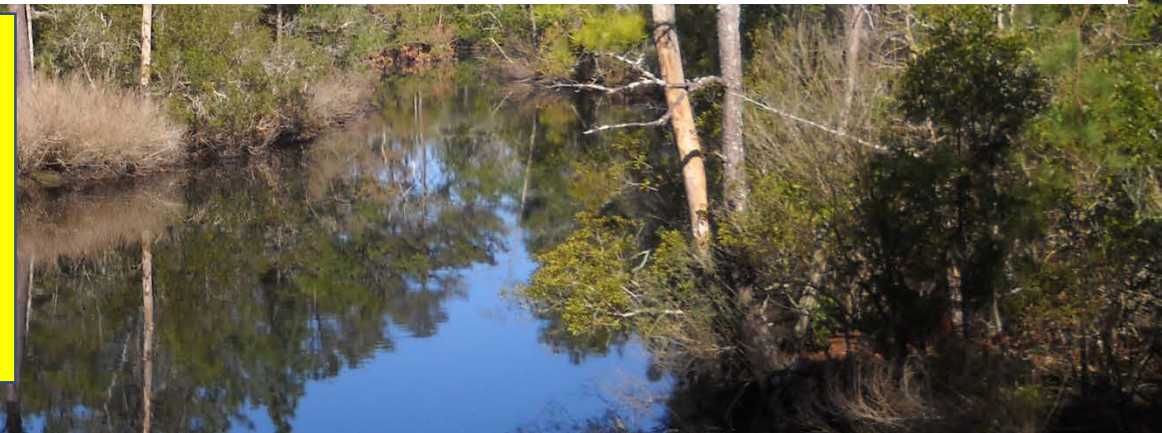
Activity 420

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!





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**



Element 422.b: DR Documentation Difficulty

LOW DEGREE OF DIFFICULTY

- Document where deed-restricted 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

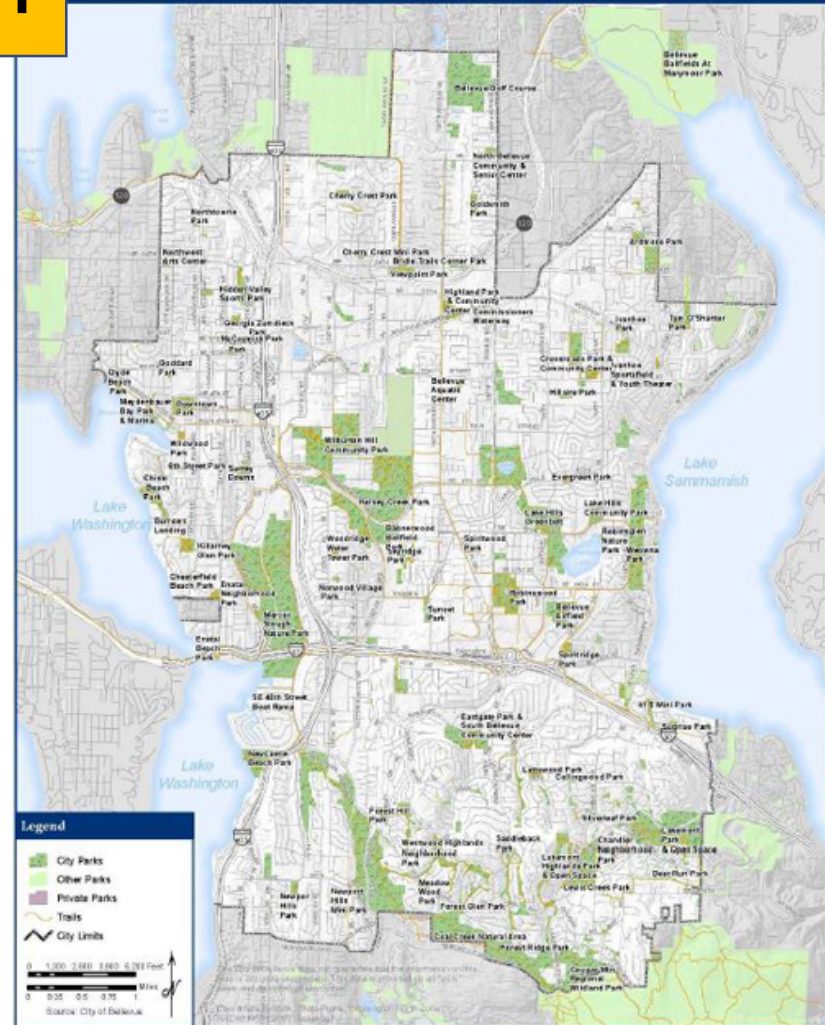


Element 422.c: NFOS Documentation Difficulty

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 re-used

Parks & 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





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

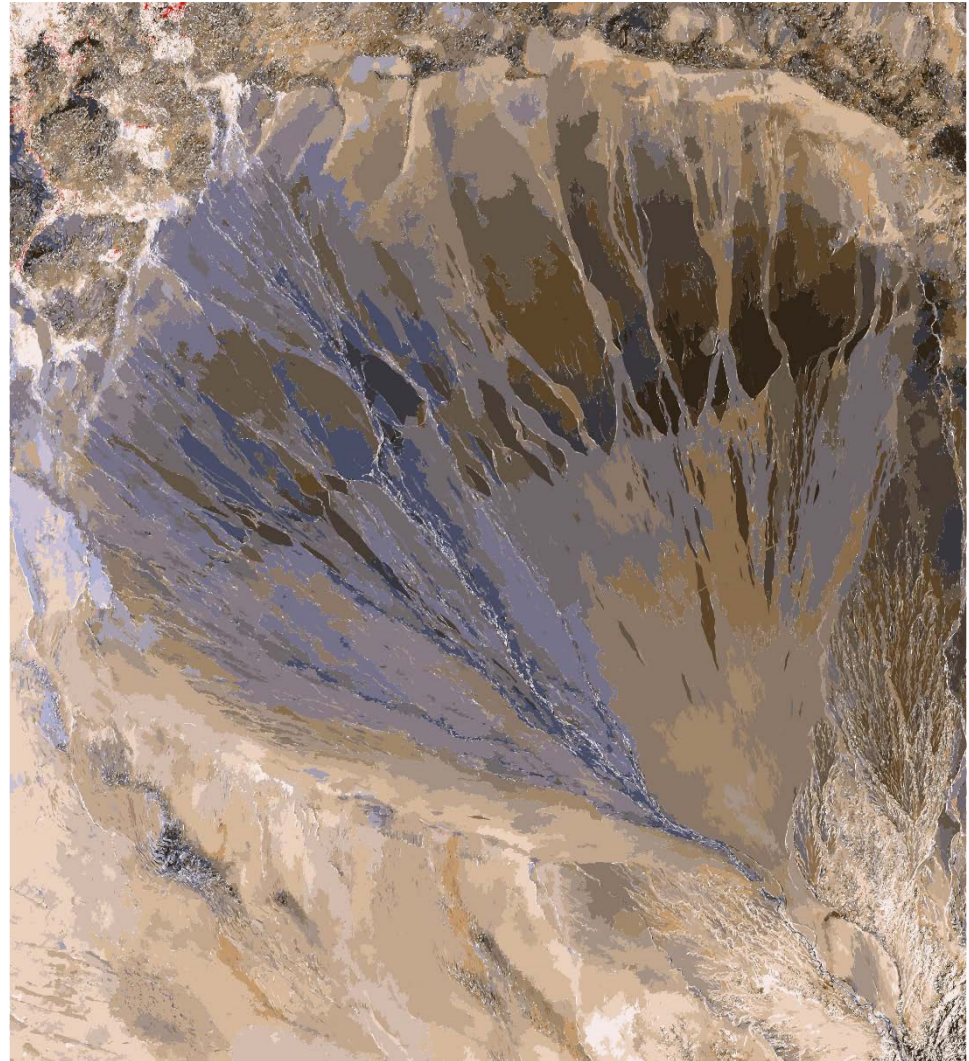
Maximum Credit: 150 points

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 and protects these areas in open space
- Sometimes you need a licensed expert to perform modeling for mapping





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

Maximum Credit: 750 points



422.e: CEOS Documentation Difficulty

LOW DEGREE OF DIFFICULTY

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





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





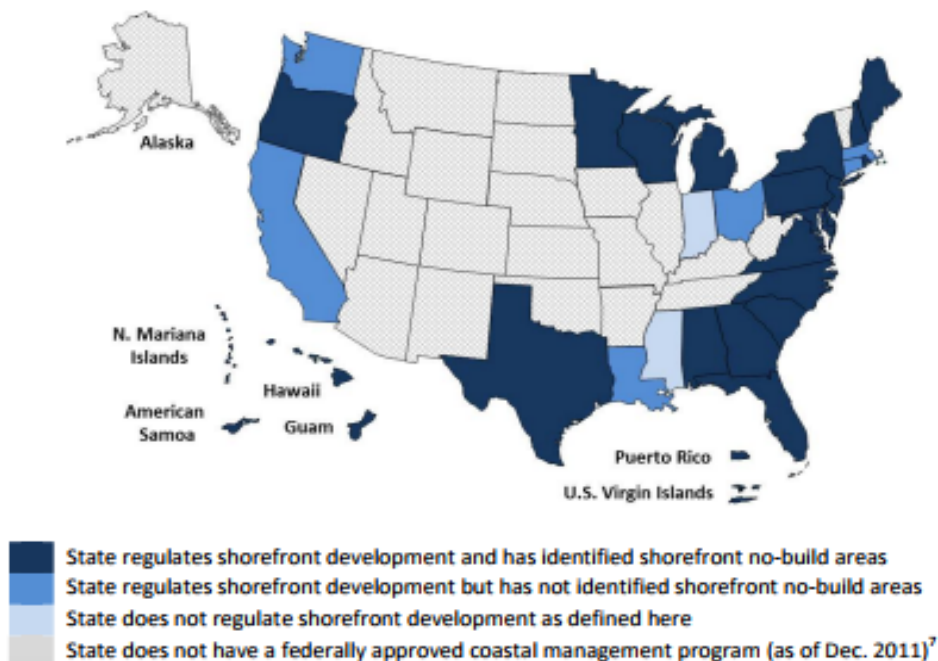
Element 422.e: CEOs

The Good News...

20 coastal states/territories have state-mandated shoreline no-build areas, including most of the Great Lakes 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





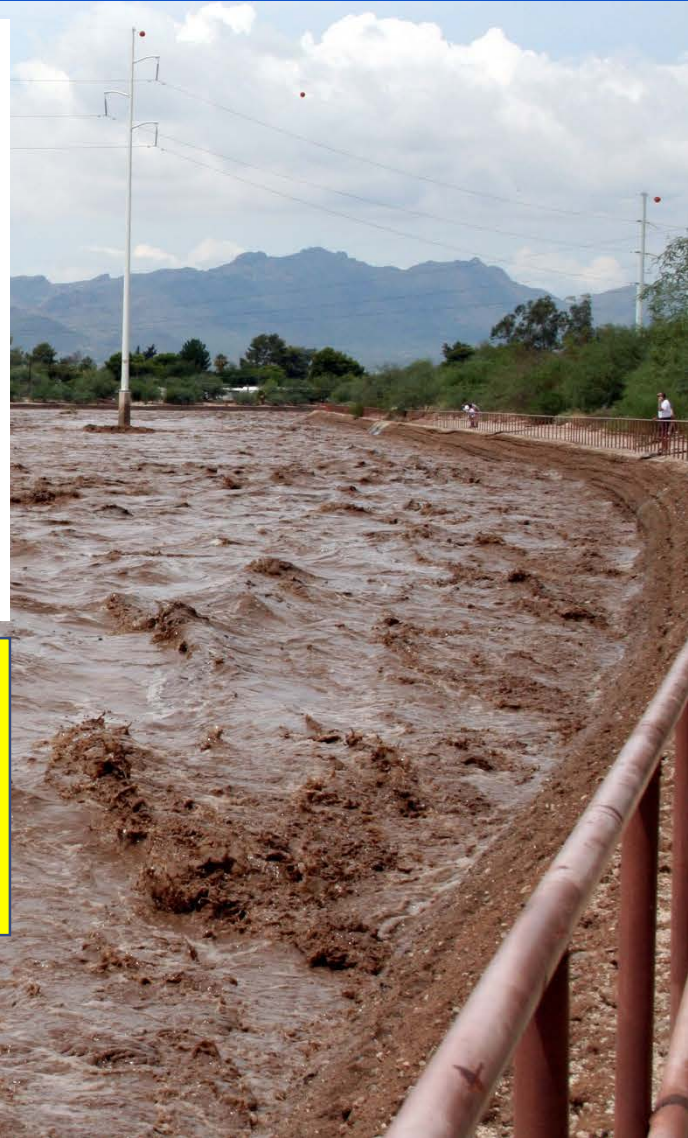
Element 422.f: Open Space Incentives (OSI)

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

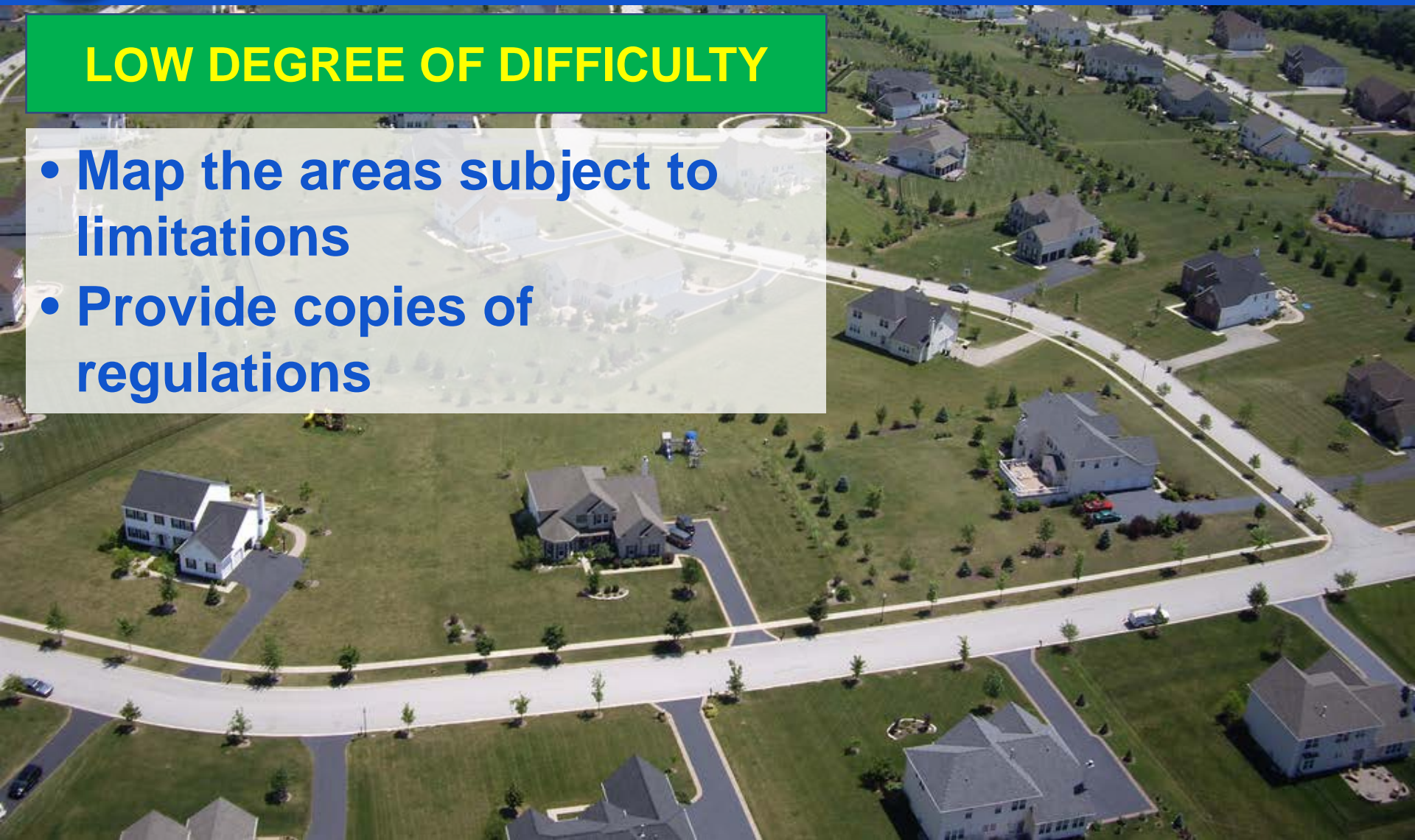




Element 422.f: OSI Documentation Difficulty

LOW DEGREE OF DIFFICULTY

- Map the areas subject to limitations
- Provide copies of regulations





Element 422.f: OSI Implementation Difficulty

MEDIUM DEGREE OF DIFFICULTY

- Some of these regulatory techniques are more-challenging 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

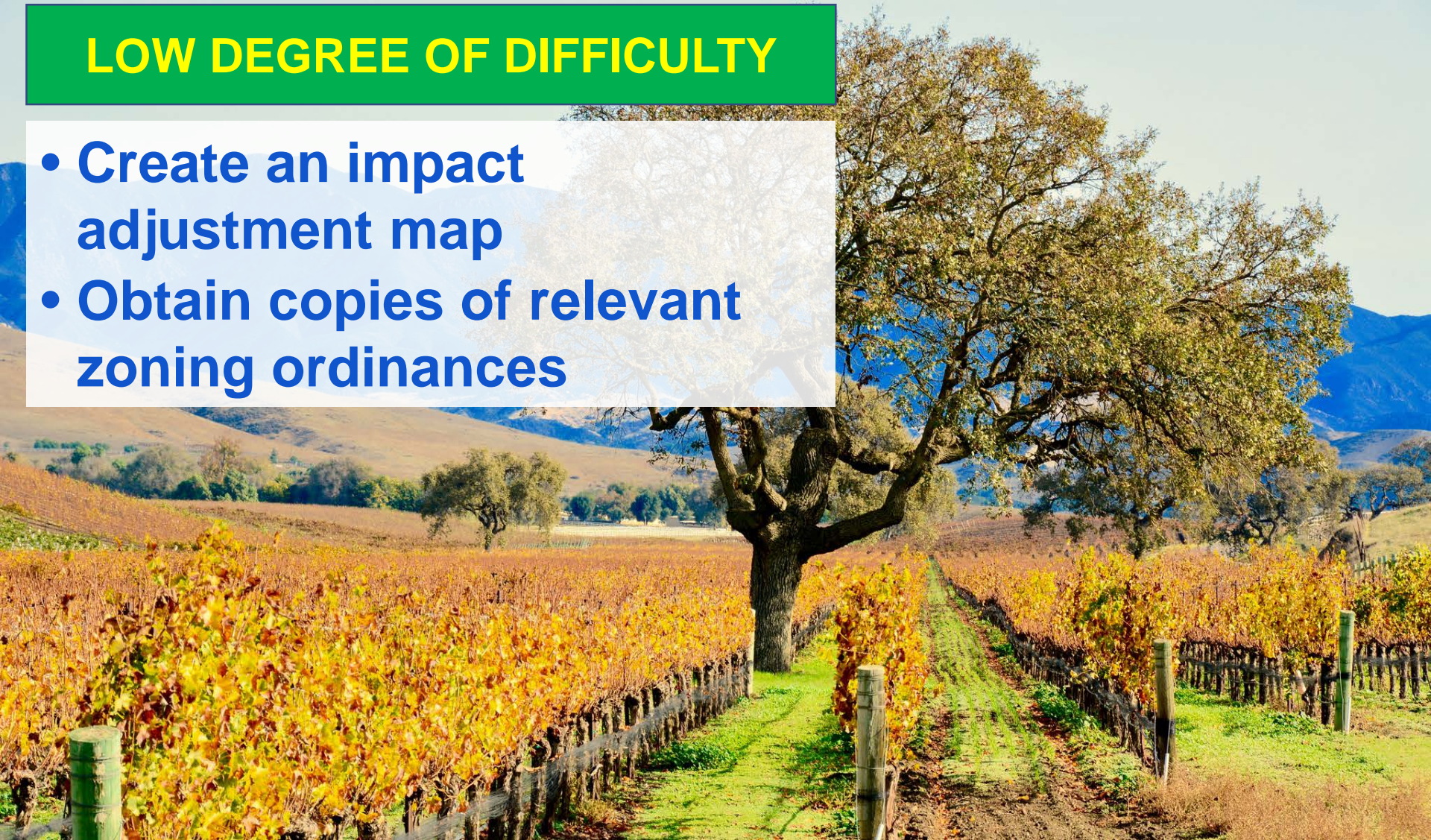
Maximum Credit: 600 points + extra credit in SHOS



Element 422.g: LDZ Documentation Difficulty

LOW DEGREE OF DIFFICULTY

- Create an impact adjustment map
- Obtain copies of relevant zoning ordinances





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.





Questions?

