Regional Conservation Priorities
CES 301/302
Meet the Class
Agenda

- Overview
- Regional Investigation
- Co-Occurrence
  - Conservation Priorities
  - Linking Lands
- Next Steps
- Acknowledgements
CES 301/302

- Third Year Project
- 18 Credits
- Yearlong analysis of a local environmental problem
- Group focus
Overview: The Class

- Made up of 6 Juniors and 1 Senior
- Some of the project components:
  - General study of land conservation
  - Environmental policy
  - Natural history
  - Analyzing/creating environmental impact statements
  - Easement monitoring for ASLPT
  - Geographic information system (GIS) skills
Ausbon Sargent Land Preservation Trust

- 12 towns
- Total acres in region = 273,401
- Total acres protected = 3,446
- Private non-profit organization
- Mission: “to help preserve the rural landscape of the Kearsarge/Sunapee region by working with local governments and private landowners to develop conservation easements”
The Project

- Goal of project: Identify regional conservation priorities in the ASLPT region
NH Everlasting

- Initiative of the Society for the Protection of New Hampshire Forests (SPNHF) to guide conservation in New Hampshire.

- Adopted by ASLPT
NH Everlasting

SPNHF’s main goal is to “conserve one million acres of our most significant natural lands within the next 25 years.”

5 Objectives:
- 25%
- Active forest
- Habitat
- Water
- Agricultural lands
Regional Investigation

To gather information on the 12 towns in the ASLPT region.

– 12 questions were asked for each town.
– Each question was answered through maps, charts, graphs, and text explanations.
– This information assisted us in determining conservation priorities for the ASLPT.
Regional Maps

Water Resources
ASLPT Region

Legend
- Aquifers
- Lakes and Ponds
- Rivers and Streams
- Intermittent Streams
- Roads
- Town Boundaries

Scenic Views
ASLPT Region

Legend
- Scenic Views
- Visibility of Views
- Highways
- Roads
- Rivers and Streams
- Lakes and Ponds

Elevation (Feet)
- 350 - 650
- 651 - 950
- 951 - 1,250
- 1,251 - 1,500
- 1,501 - 1,800
- 1,801 - 2,100
- 2,101 - 2,350
- 2,351 - 2,650
- 2,651 - 2,950
- Town Boundaries
Co-occurrence

- Mapping method that involves overlaying a number of map layers, and seeing where features from different map layers overlap or “co-occur.”
- Areas with greater numbers of co-occurrences appear darker on the map, allowing the areas with the greatest number of co-occurrences to be targeted.
Co-occurrence methodology

Based on input from ASLPT, the students in the Third Year Project came up with the following co-occurrence layers and values:
Co-occurrence methodology

- Public Drinking Water- (4) The features of this layer have an impact on all residents.
- Ecologically Important Lands- (5,4,3,2,1) These features were weighted due to the amount of variation within the composite.
- Unfragmented Lands- (5,4,3,2,1) This layer was weighted based on parcel size.
- Agriculture- (5) This layer was given a high ranking because of the scarcity of farms in the area.
- Scenic Resources- (1) This layer was given a low ranking because the definition of a scenic view is very subjective.
Public Drinking Resources
ASLPT Region

- Public water supplies and facilities
- Favorable gravel well analysis sites
- Buffered third order and higher streams
- Wellhead protection areas
- Forest Continuity Index (FCI)
- Interior habitat
- Steep/south facing slopes
- Corridors
Legend
Unfragmented Lands (Acres)
- 1-19
- 20-99
- 100-499
- 500-2500
- >2,500 (Undeveloped)
Conserved Lands
Lakes and Ponds
Town Boundaries

Unfragmented Lands
ASLPT Region
Scenic Views
ASLPT Region

Legend
- Scenic Views
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- Town Boundaries

0 5 10 Miles
Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of State Planning (OSP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OSP nor CSRC make any claim as to the validity or to any implied uses of these data.

Legend
- Linking Lands
- Conservation Priorities
- Town Boundaries
- Conserved Lands

Number of Occurrences
- 1.00 - 3.00
- 3.01 - 6.00
- 6.01 - 8.00
- 8.01 - 10.00
- 10.01 - 17.00
Limitations

- Not parcel specific
- Data/Definitions
  - Scenic views
  - Ag lands
  - Managed forests
- Time
- First step in identifying conservation priorities
Next Steps

Accessing the Report

- Complete copies of the report will be issued to the twelve towns in the region.
- ASLPT
- CSC Library
- Website

http://www.colby-sawyer.edu/academic/ces
Next Steps

Regional planning & Master Plans

- Many of the towns in the ASLPT are currently in the process of updating their master plans.

- The documents we have created this year can be used to inform the design of the master plans that are yet to be created.
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Questions