Academic Institutions as Conservation Catalysts



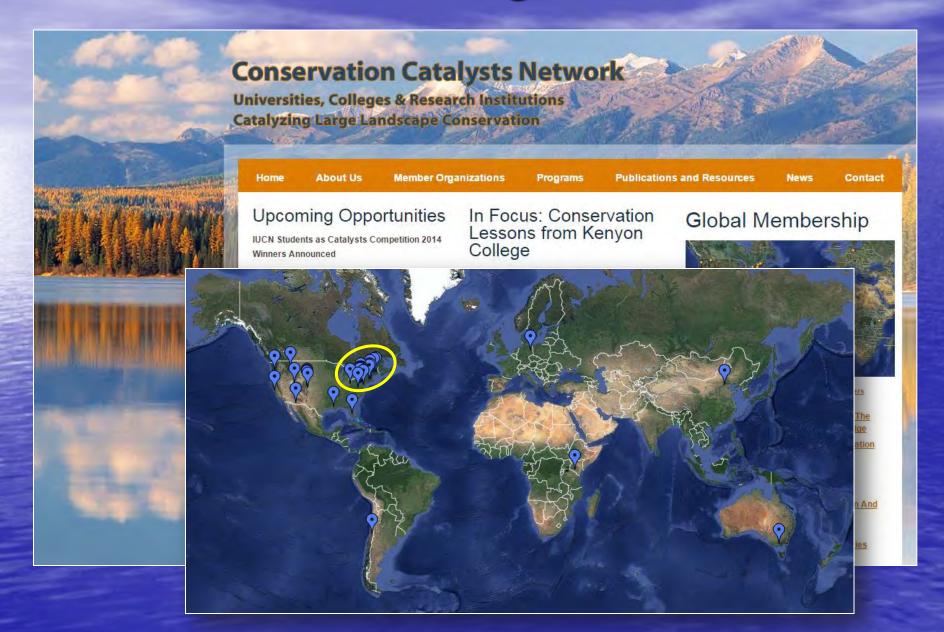
Rob Lilieholm and Jim Levitt University of Maine & Harvard University

Outline

- Some Emerging Networks...
 - Conservation Catalysts & ALPiNE
- Case Study:
 Alternative Futures Modeling in Maine
- Next Steps for ALPiNE...



Some Background...



Academics for Land Protection in New England

• ALPiNE: emerging network that seeks to explore & expand the role that academic institutions in New England play in conserving the natural heritage of the region...

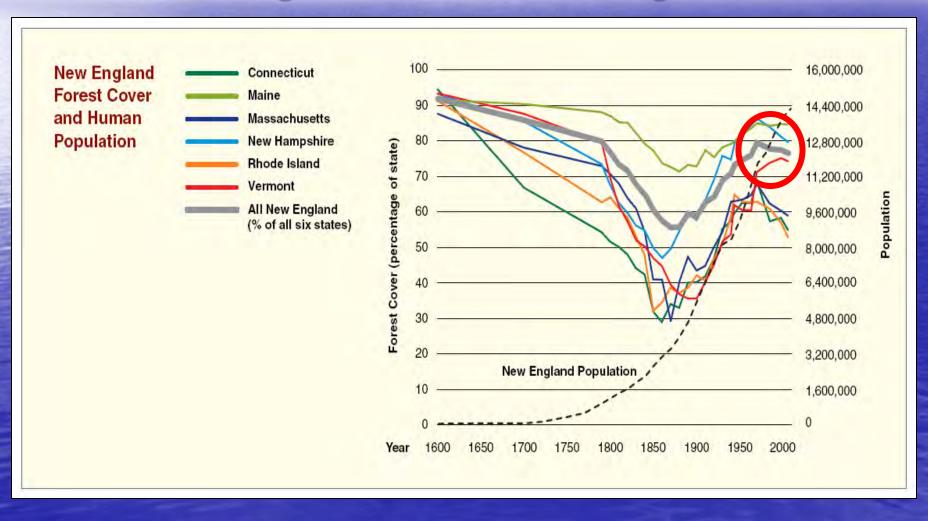
"Connect, collaborate, conserve"

Catalyze the pace & scale of conservation...

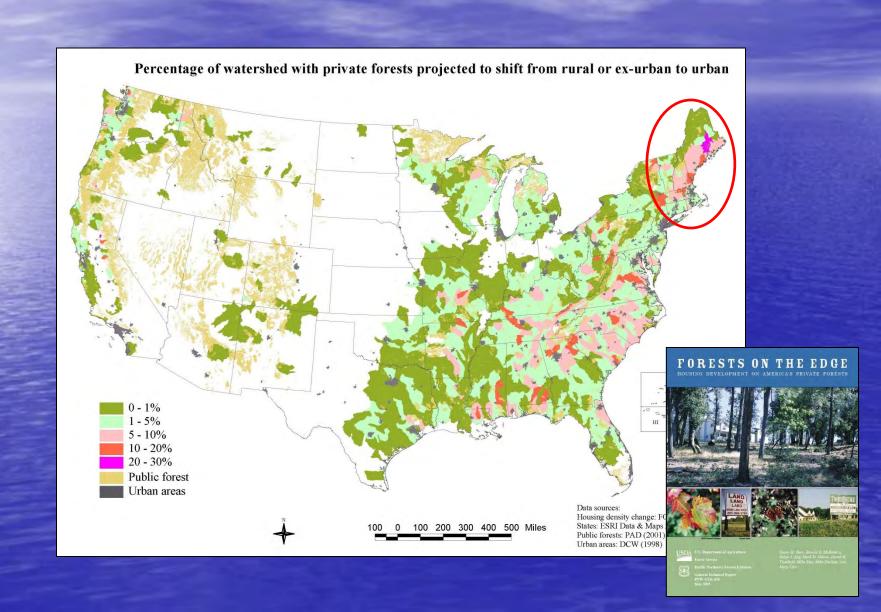


Why ALPiNE?

Across New England, forest cover has begun to decline...



Why ALPiNE?



New England's Assets...

- New England is the birthplace of higher education in the U.S.
 - Harvard (1636), Yale (1701), Brown (1764),
 Dartmouth (1769)
- And the land conservation movement in North America...

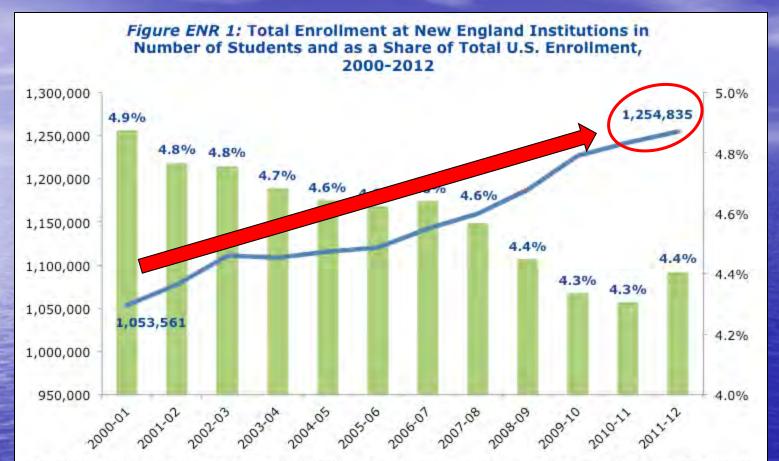


Academic Institutions

State	Colleges & Universities	Community Colleges
Connecticut	27	12
New Hampshire	17	8
Maine	19	8
Massachusetts	91	19
Rhode Island	11	1
Vermont	21	1
Total:	186	49
Grand Total:	235	

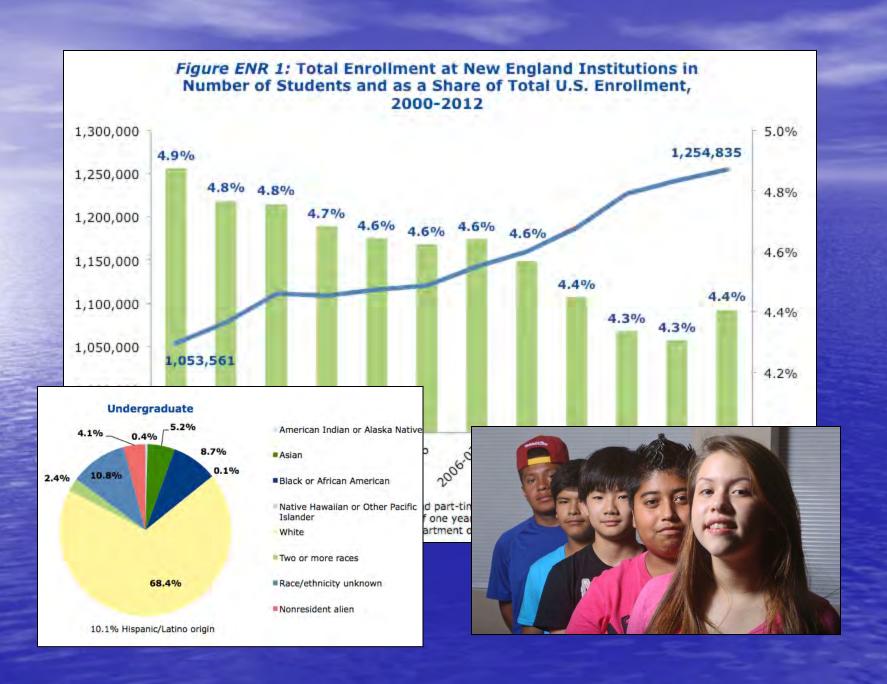
1.2 million full- & part-time students in 2012





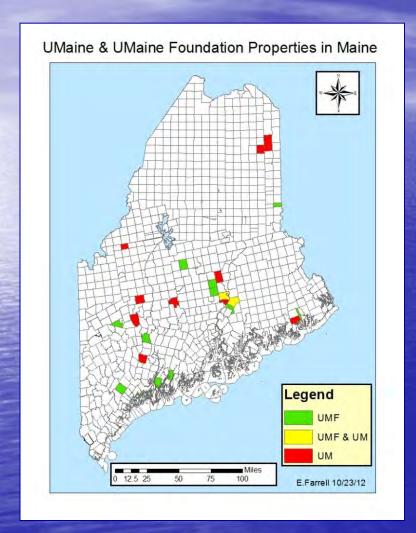
Note: Total enrollment includes an unduplicated headcount of full- and part-time undergraduate, graduate and non-degree students enrolled at Title IV, degree-granting postsecondary institutions between July 1 of one year and June 30 of the next.

Source: New England Board of Higher Education analysis of U.S. Department of Education data.

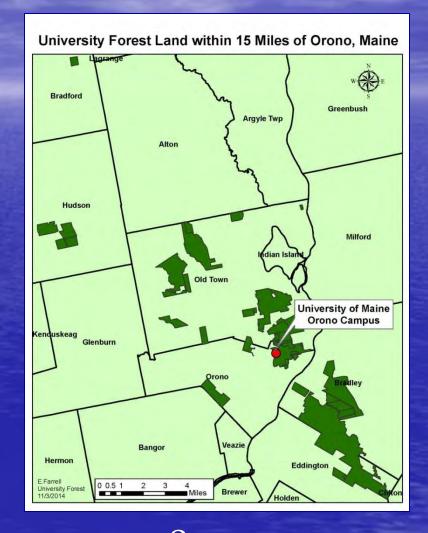




Many Colleges Own & Manage Land







10,830 acres across 30 parcels

Case Study on UMaine's Sustainability Solutions Initiative

- Interdisciplinary Research
- Stakeholder Engagement
- Knowledge-to-Action







Our Study Areas...

- Lower Penobscot River Watershed
 - 2.5 million acres
- Casco Bay Region
 - 1.9 million acres
- 99% private land
- "Working landscapes"
- Strong urban-to-rural gradients



Alternative Futures Modeling

Spatially explicit models that depict future landscapes under various land use policies & "drivers of change" –

- Socio-demographic
- Economic
- Biophysical

Anticipates future landscape conditions by modeling a wide range of alternative scenarios



