



ESF

State University of New York College of
Environmental Science and Forestry

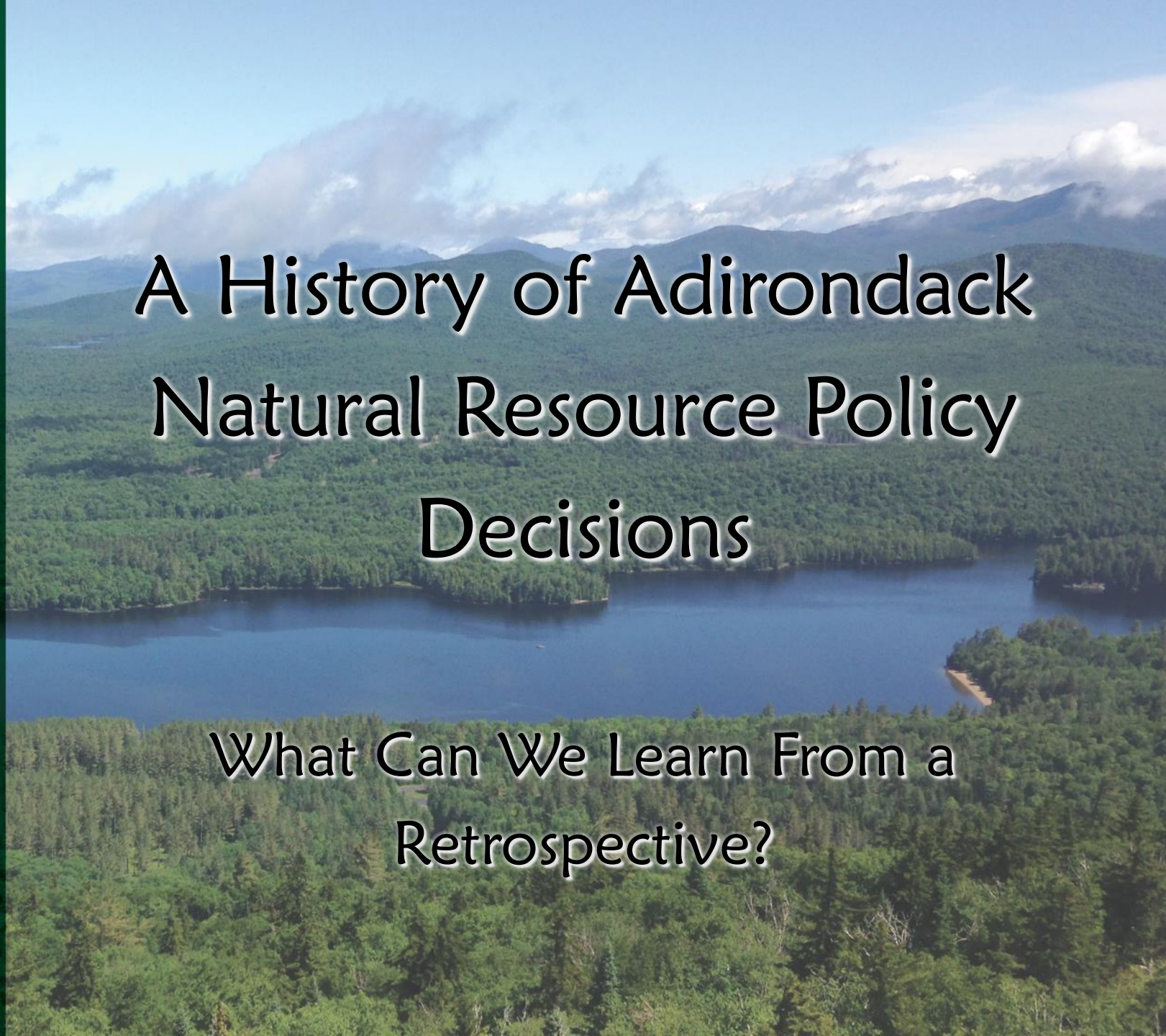
Newcomb Campus



Stacy McNulty
Adirondack
Ecological Center

A History of Adirondack Natural Resource Policy Decisions

What Can We Learn From a Retrospective?



Land Acknowledgment – Where We Stand

Omàmìwininiwag
(Algonquin)

Kanien'keháka
(Mohawk)

Onundagaonoga
(Onondaga)

Wabanaki (I
Confede

Ho-de-no-sau-nee-
ga (Haudenosaunee)

N'dakina (Abenaki
/ Abénaquis)

We have the privilege of speaking today from the ancestral lands of the Mohawk/Akwesasne and the Haudenosaunee Confederacy.

We honor them for their many contributions, including the original philosophy and practice of sustainability and environmental stewardship, and their important contributions to the federal democratic government structure we in the United States value today.

We extend deep gratitude to these original people, and to the other animals, plants and living organisms of these lands.



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Overview

- Role of monitoring in informing policy
 - AEC as example
- Historical data as a tool for exploring policy decisions
 - Select examples
- Concluding thoughts



Adirondack
Ecological
Center at
Huntington
Wildlife
Forest

SUNY ESF
Newcomb
Campus



Adirondack Ecological Center Mission: To provide an understanding of the Adirondack ecosystem through research

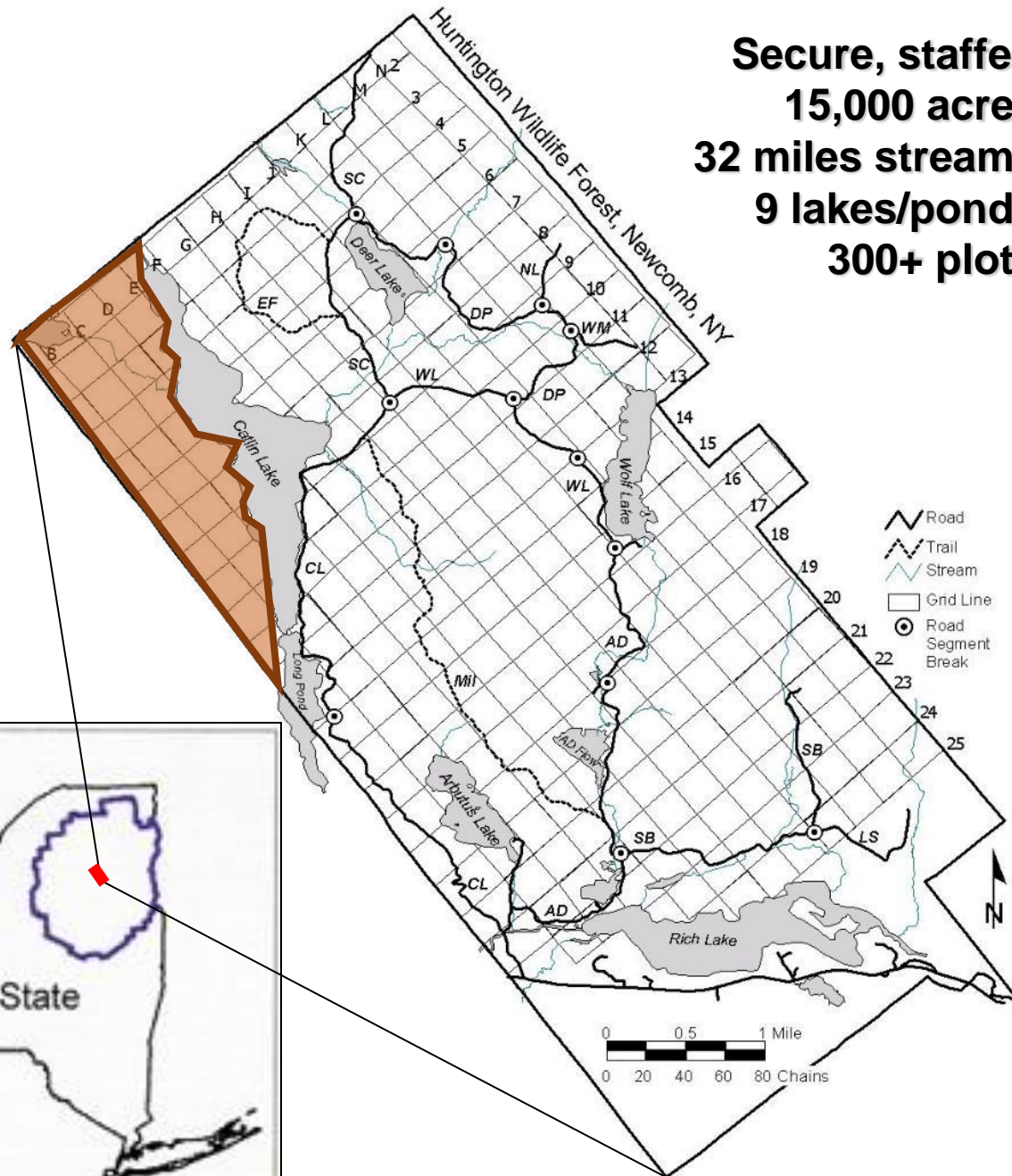


Platform for Student-centered Natural Resource Research, Monitoring & Training



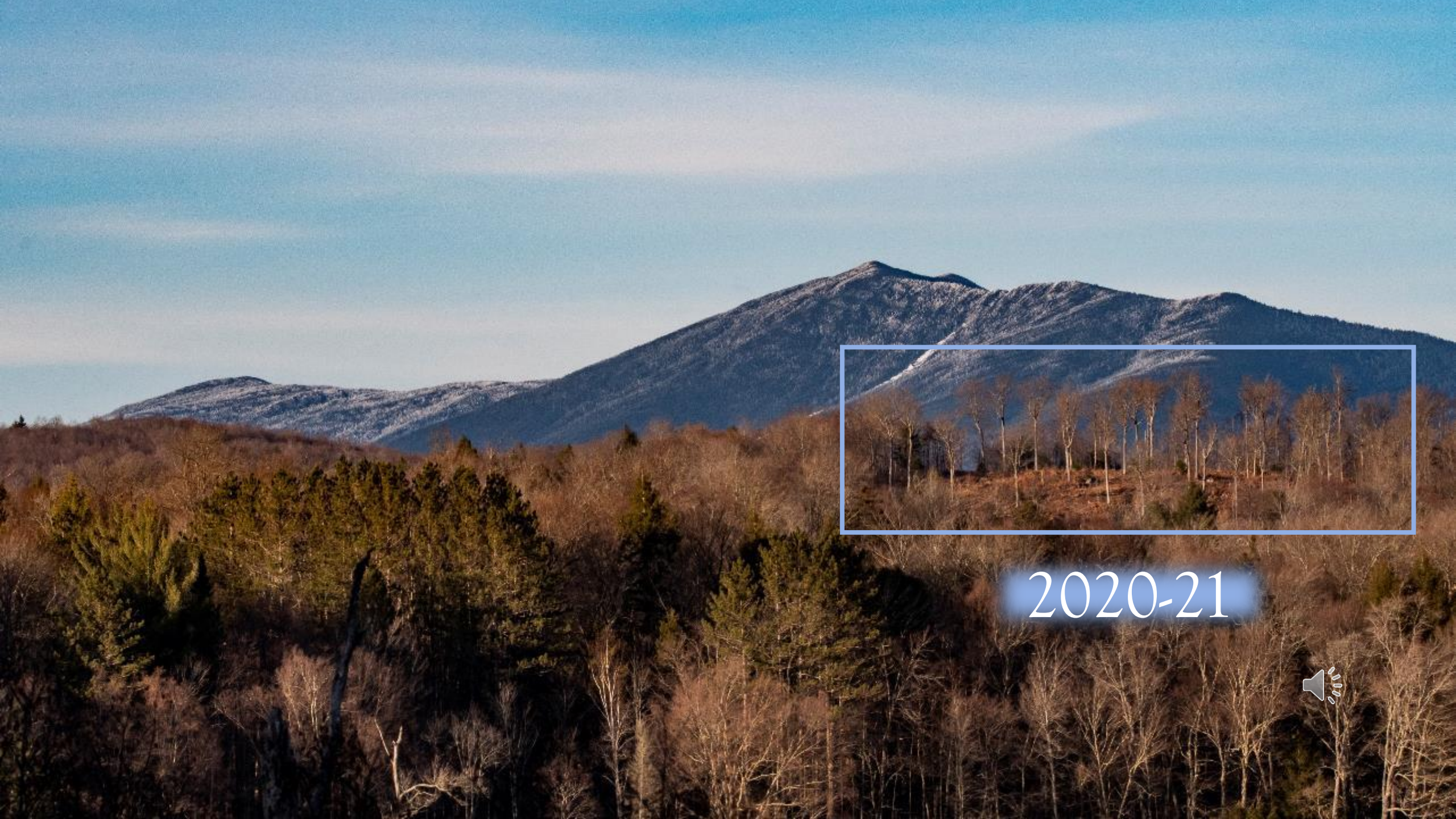
HWF Natural Area

Secure, staffed
15,000 acres
32 miles streams
9 lakes/ponds
300+ plots



- Old growth forest
 - 971 acres (400 ha)
 - Studied since 1932
- Monitoring includes
 - Songbirds
 - Plant dynamics
 - Small mammals
 - Carnivores
 - Tree seed cycles
 - Carbon
 - More





2020-21

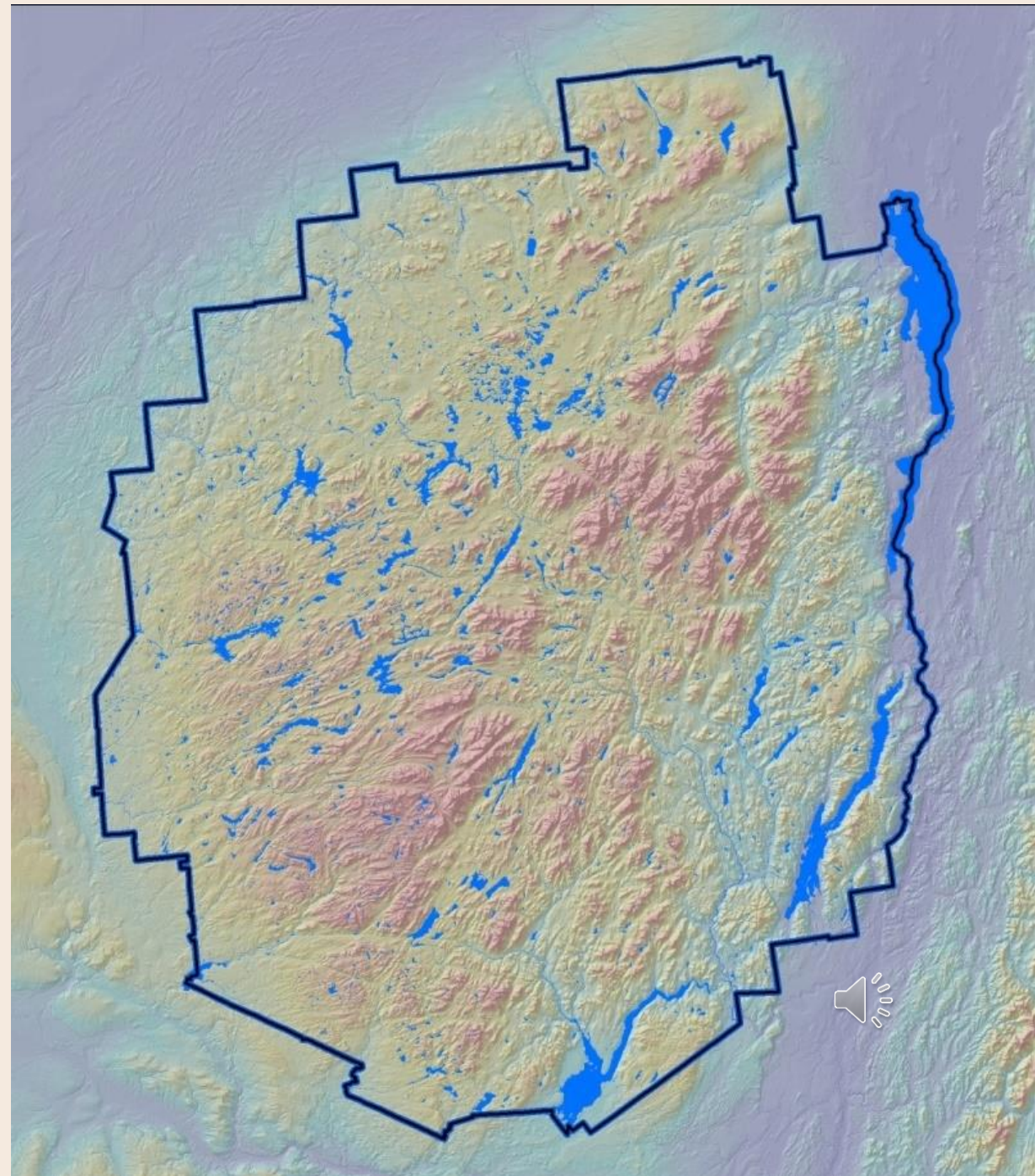


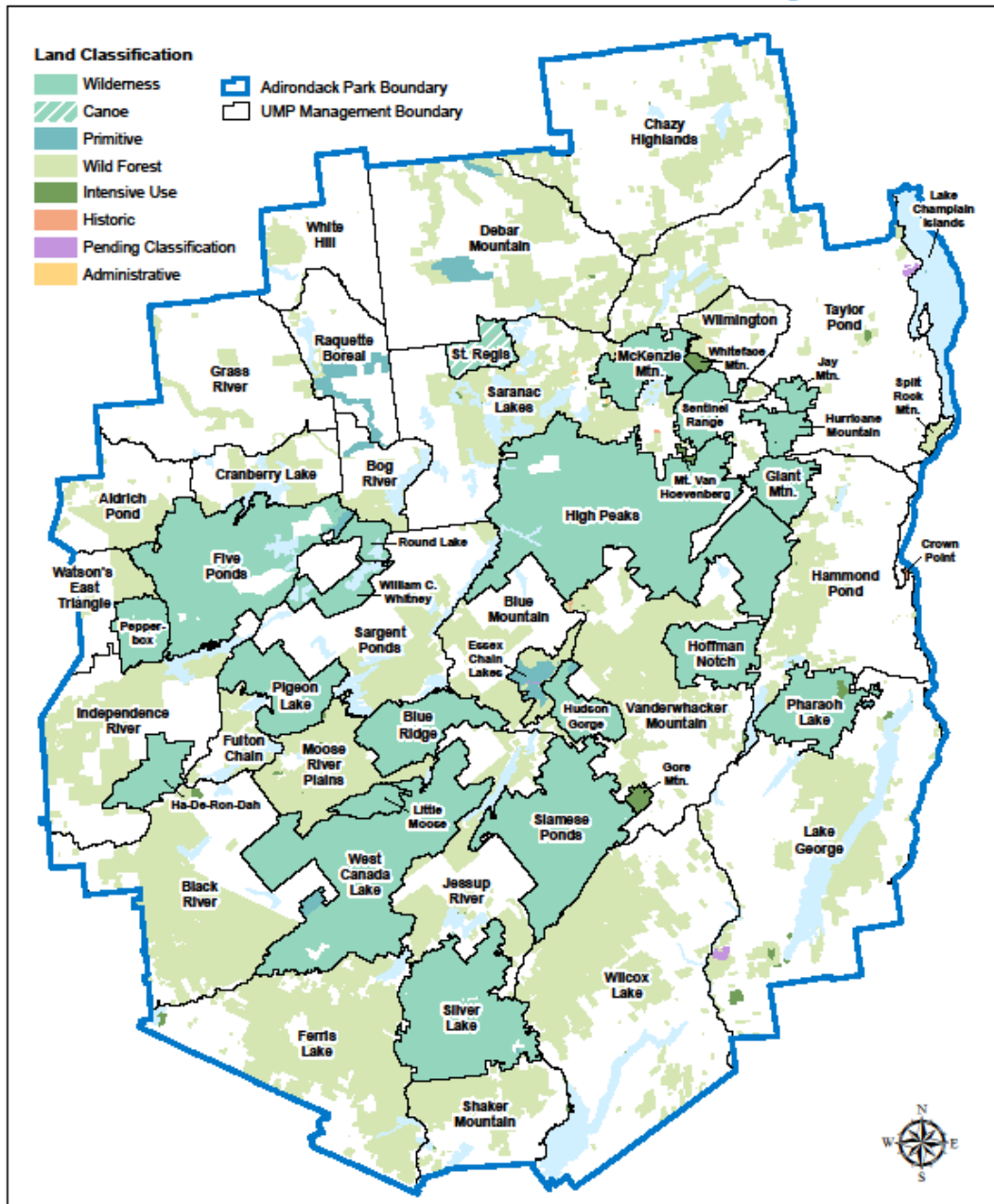
Science in Action: From Field to Policy



The Great Experiment in Conservation

- State park – New York, 1892
 - 2.4 million ha (~6 million acres)
 - Matrix of public and private land
 - Forest Preserve, 1885
- Permanent human settlements
- Millions of seasonal visitors





Forest Preserve as Shared Commons

1894 State Constitution

Article XIV:

“The lands of the State... shall be forever kept as wild forest lands.”

Policy linked to boundary-setting



Rationale

- Framing a language of Common Pool Resources from a private property foundation
 - Commons: natural and cultural resources, shared by many people¹
 - CPRs are
 - 1) difficult to fence off and
 - 2) reduced by use²
- Adirondack Park is a mosaic of public and private land rights involving many entities
 - *Is the park resilient and sustainable, given this governance system?*

¹<https://iasc-commons.org/about-commons/>

²Battersby 2017 PNAS; image credit Dave Cutler



Definitions

- *Sustainability*: development that meets the needs of the present without compromising the ability of future generations to meet their own needs¹
- *Resilience*: a community's social and ecological capacity to withstand and adapt to change while maintaining essential functions (e.g., ecosystem services)²
 - Surprise/novelty
 - Thresholds – punctuated equilibrium
- *Social-Ecological System*: a coherent system of biophysical and social factors that regularly interact in resilient, sustained manner.³ SES:
 - Are dynamic
 - Incorporate multiple scales
 - Have feedback mechanisms between human and natural system components

¹Norton 2015

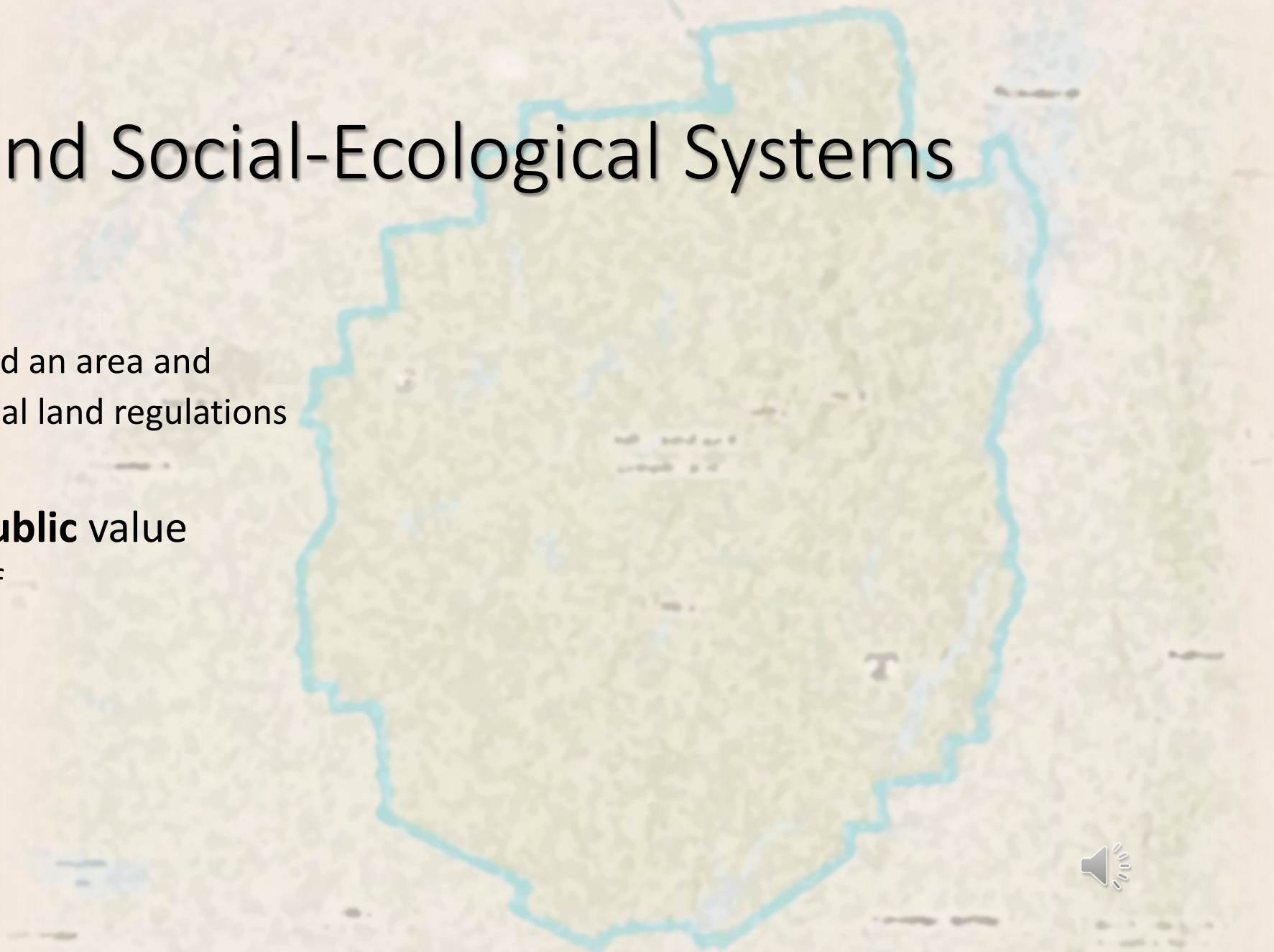
²Holling 1973, Angeler and Allen 2016

³Redman et al. 2004, Everard 2020



Blue Lining and Social-Ecological Systems

- “Blue Lining” a space
 - Drawing a line around an area and imbuing it with special land regulations
- **Private** lands have **public** value
 - Declared by virtue of
 - Park zoning
 - Specific rules



Methods

- Compiled database of events and organizations active 1760-2020
- Typology: categorized each event (n > 3,500) by
 - Scale (town - global)
 - Action type (e.g., protecting resource, developing facilities)
 - Groups involved (e.g., agencies, non-profits)
 - Interaction between groups (e.g., court case, law, advocacy)
- Identified Key Events (n = 130)
- Event frequency, richness, diversity through time

Year	Event_Description	Public, Private	WHO	WHAT	HOW	Scale
1923	Robert Moses engineers the beginning of a statewide parks system to preserve historic and scenic sites and provide recreation sites.	public	OPRHP	recreation	managstate ement	
1923	ACTC is reorganized as the Camp and Trail Club of the Lake Placid Club (Essex Co.)	private	other ngo	recreation	admin	county
1923	Proposed amendment allowing hydropower generation from a dam on the South Branch of Moose River; voters rejected it.	both	voters	energy/ water supply	rule	adk region

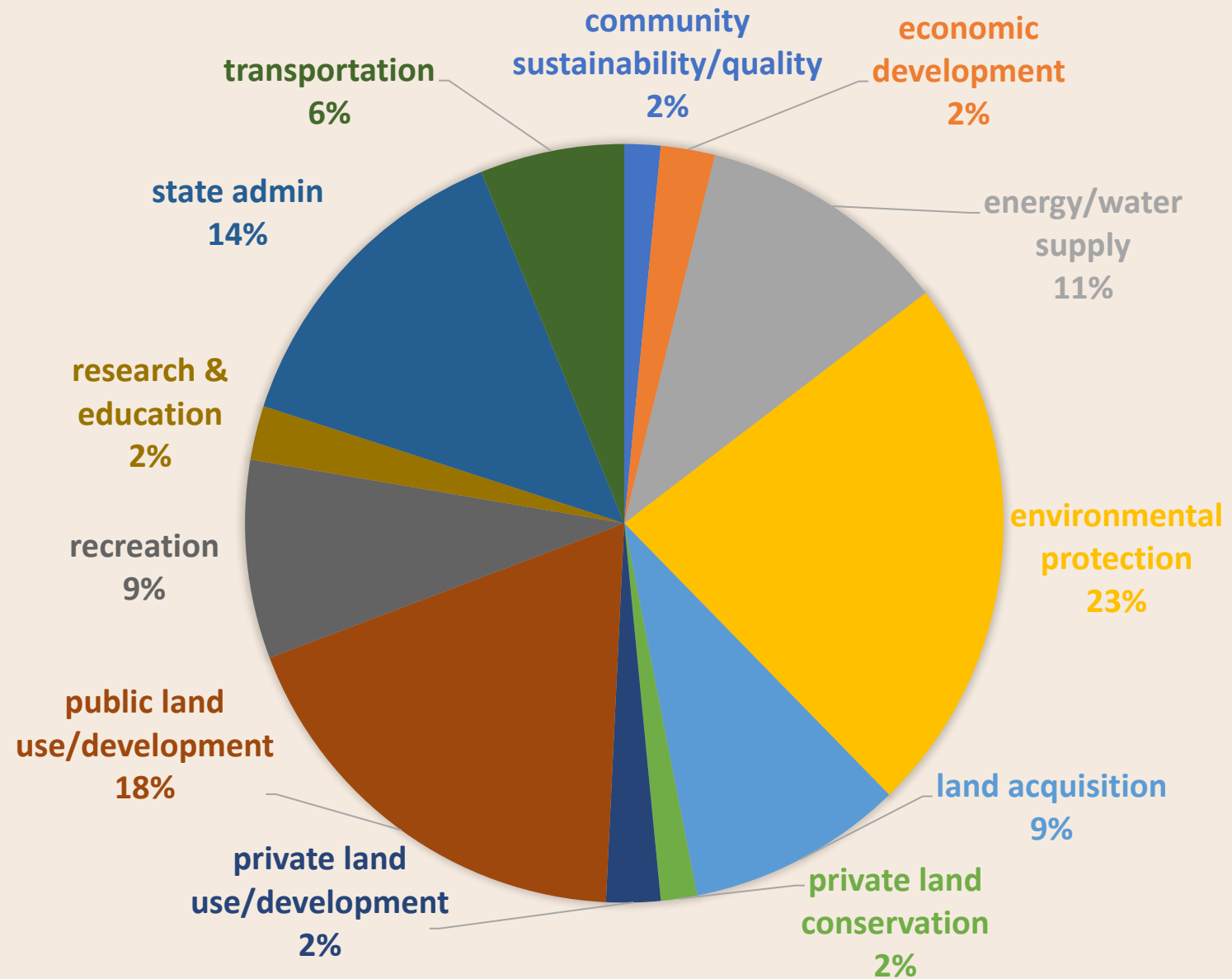


Key Event Examples

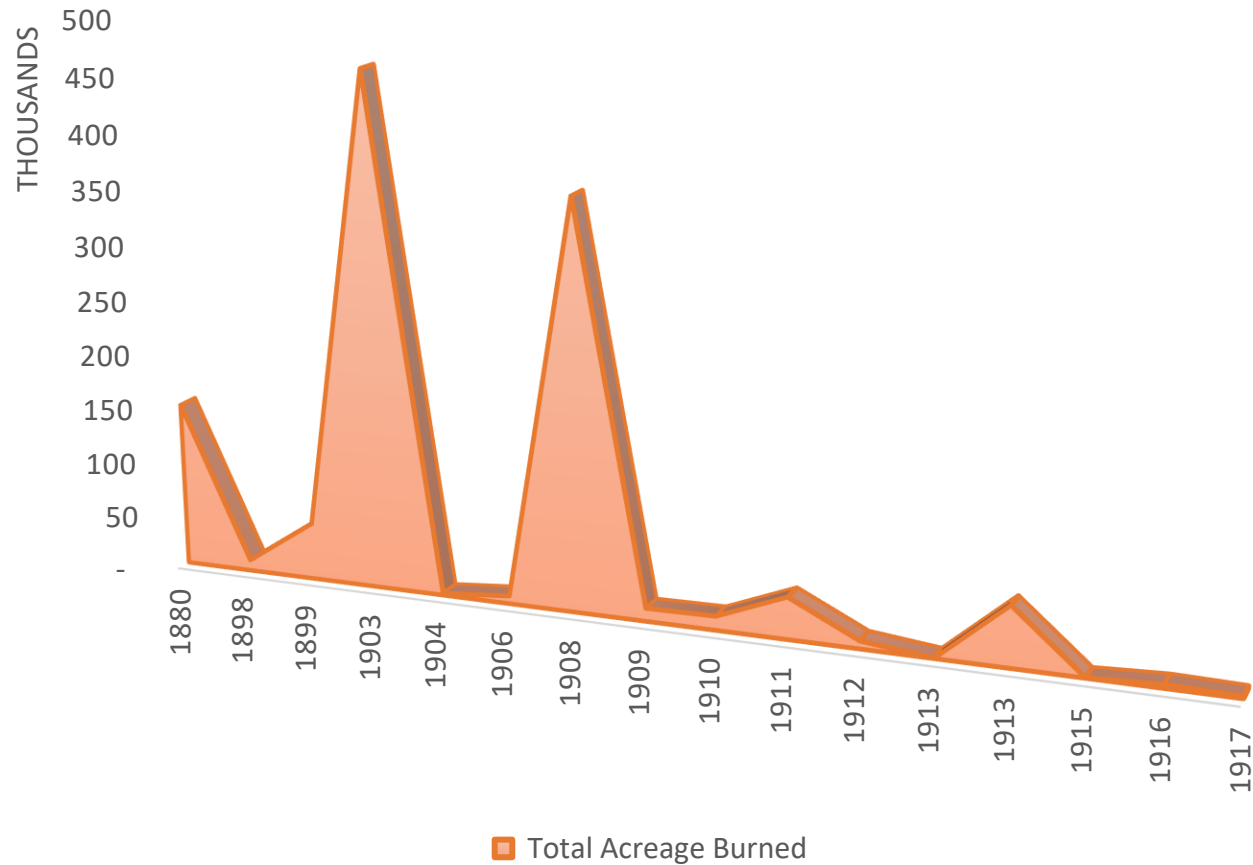
1885	Forest Preserve established (FP)
1892	Adirondack Park established
1930	<i>MacDonald v. AfPA</i> stopped tree cutting on FP for bobsled
1950	Hurricane damaged 400,000 acres; FP logged
1951	Attorney General allowed salvage harvest on FP
1951-1960s	Legislature studied wilderness protection options
1959	Northway I87 highway construction began
1971	Adirondack Park Agency Act passed
1990	<i>Commission on the Adirondacks in the 21st Century</i> report released



Key Event Topics by Frequency, 1760-2020



System Change & Resilience – Fire



FIRE!

Any person who wilfully or negligently sets fire to or assists another to set fire to any wild, waste, or forest lands belonging to the State is guilty of a crime and may be punished by IMPRISONMENT for not more than TEN YEARS or by a FINE of not more than \$2,000.00 or by both.—(Penal Law Sec. 1421)

Camp fires must not be started until all inflammable material has been removed.

Matches must not be dropped until extinguished and broken in half.

All camp, smudge or other fires must be absolutely extinguished before leaving them.

Every person visiting the forests will be held responsible for any damage he may cause.

It is expected everyone will use the same caution in regard to fire as if the forests were his own property.

In case of fire notify the Forest Ranger if you are unable to extinguish it.

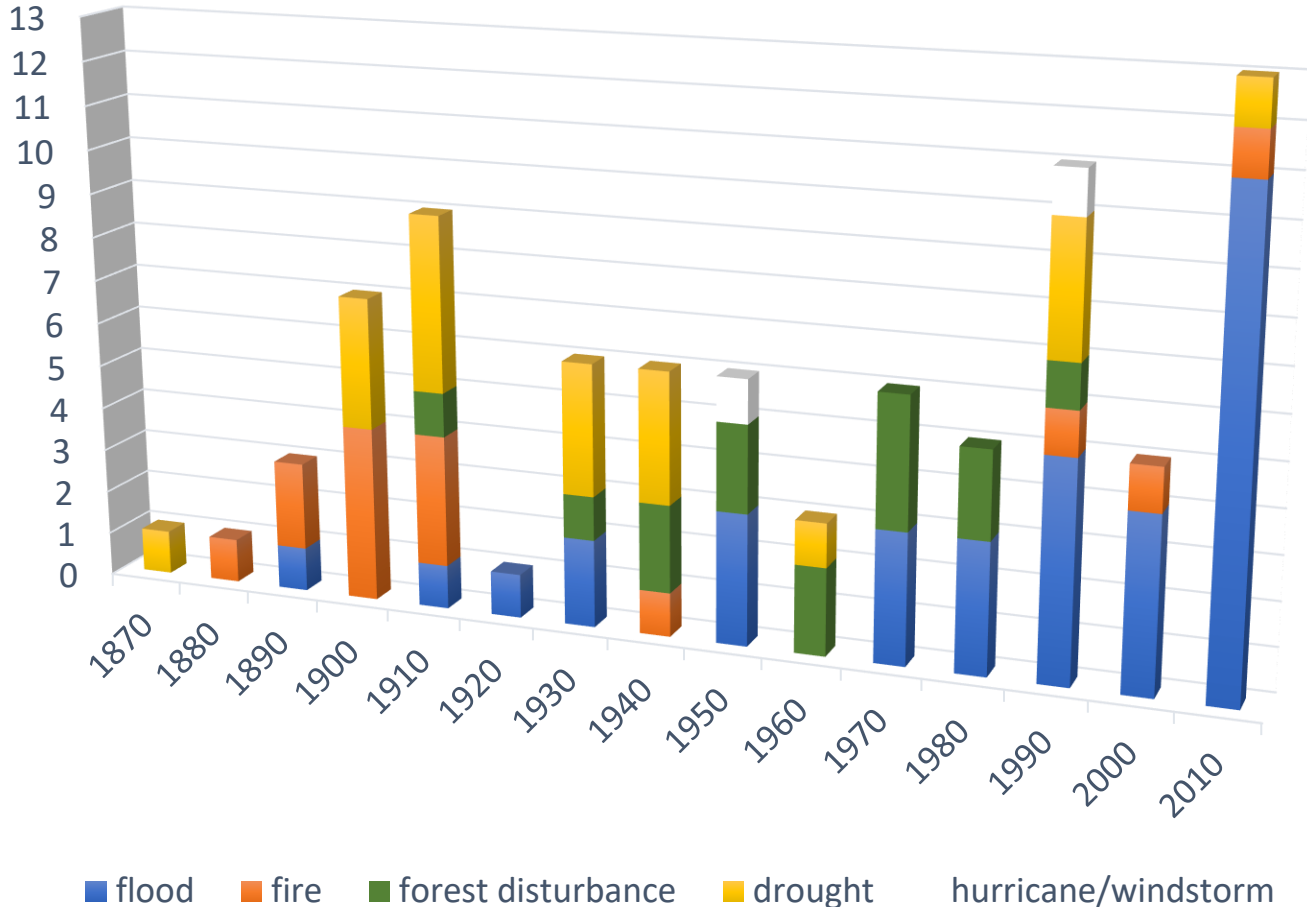
Co-operate with all in the protection of the forest, the fish and the game for the general welfare.

Fires for clearing land, burning logs, brush, stumps or grass must not be started without a written permit from the Forest Ranger.

By order of the CONSERVATION COMMISSION



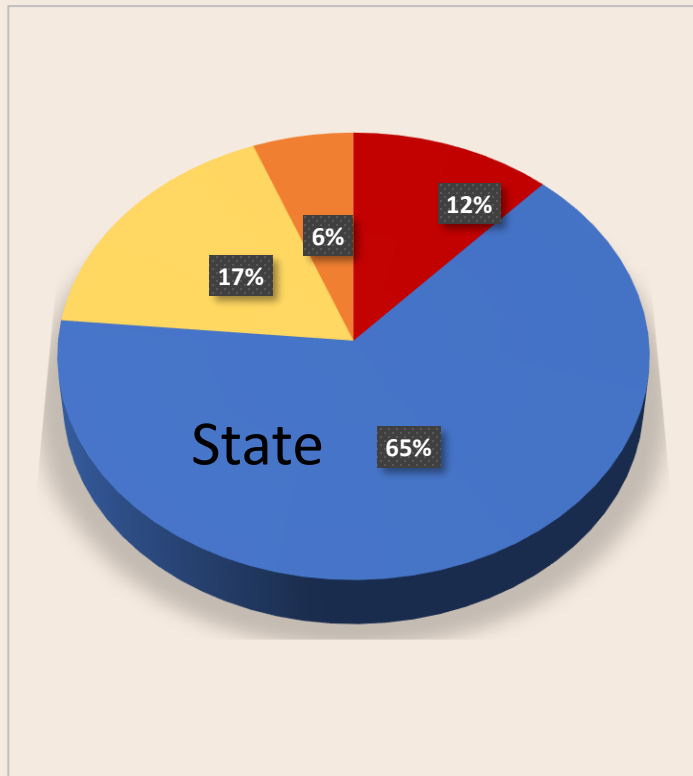
Disturbance Frequency: Fires, Floods, Wind



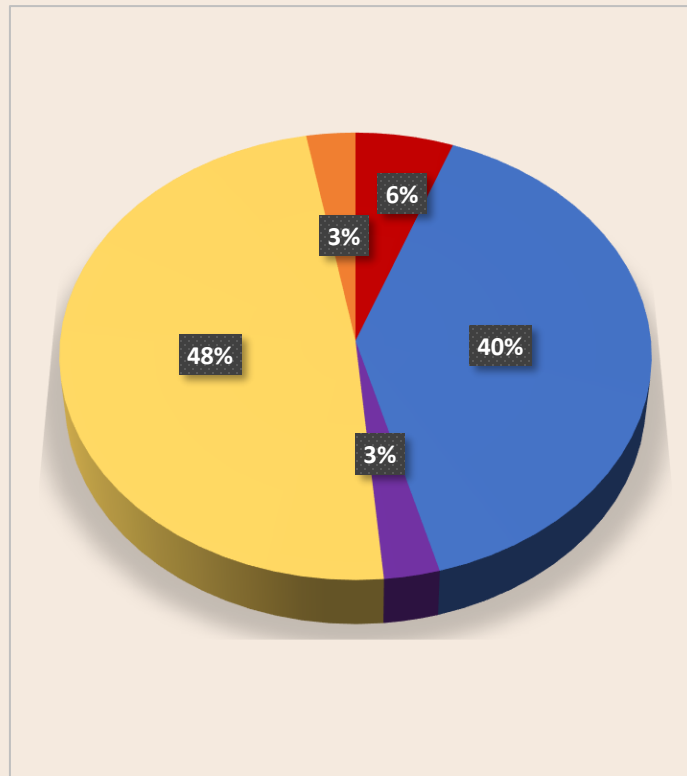
Governance – Who Participates

- Federal Agency
- State - All
- Local Government - Regional
- Education - Public
- NGO - All
- Private Industry
- Private Land Rights

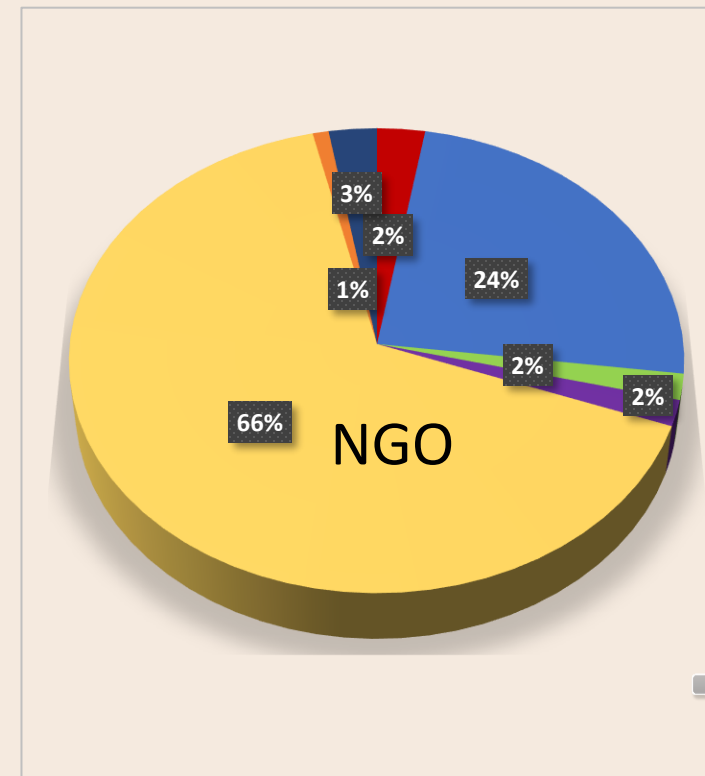
1880



1920



2020



Governance of Public Resources

Year	Event Description	Forest Preserve/Common Pool Resources
1892	Private Preserves & Parks Law	Fish & wildlife protection / Reduced public access
1892	Adirondack Park Enabling Act	Permitted timber sales, camp leases on FOP – Reduced public resources
1894	Amendment	Stopped FP camp leases and island sale Protected public access
1896	State Law	Allowed public access to private waters stocked with fish
1930	Civilian Conservation Corps	Created public recreation facilities / Built trails, ponds impacted wilderness



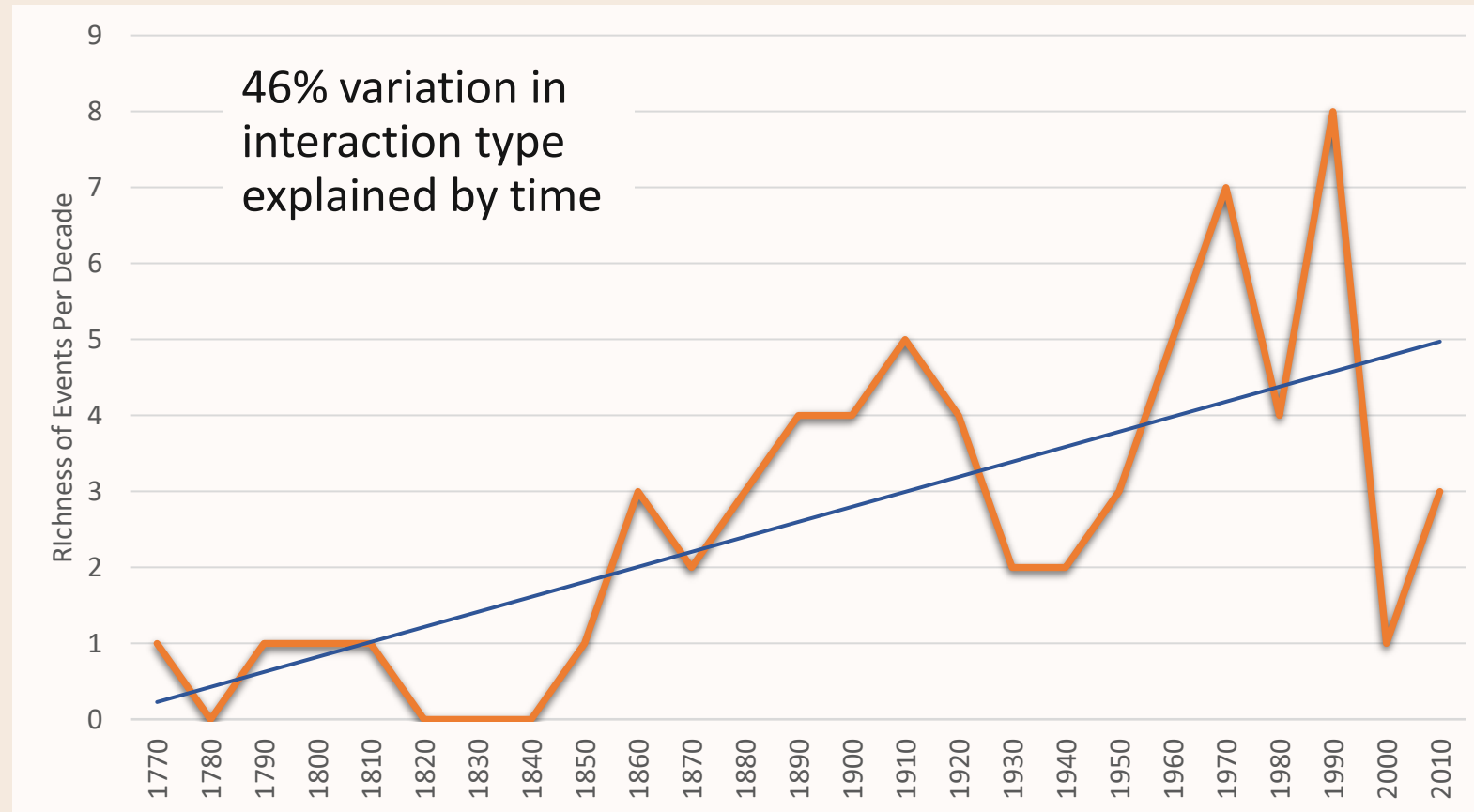
Governance of Public Resources

- Park? Preserve?
- Restrict or promote access?
- Resource extraction or preservation?

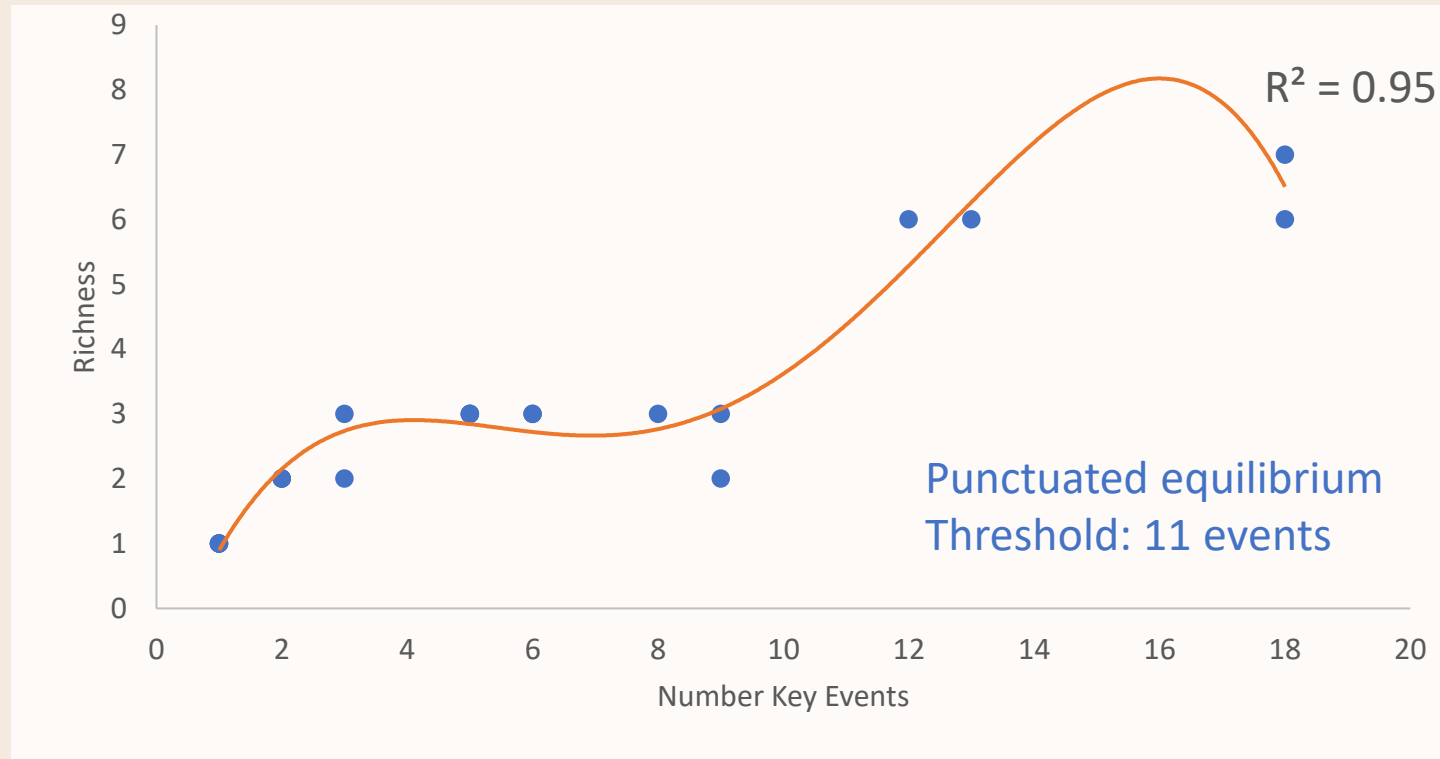
Path dependency



Results – Event Richness over Time

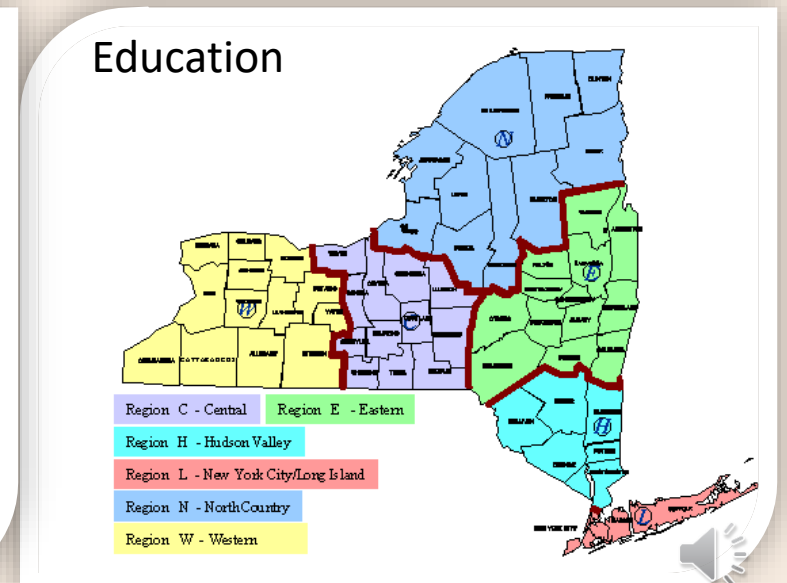
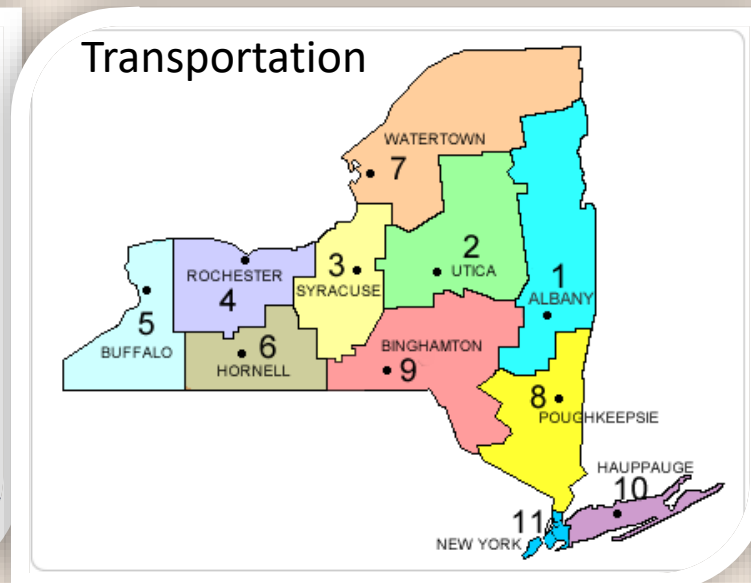
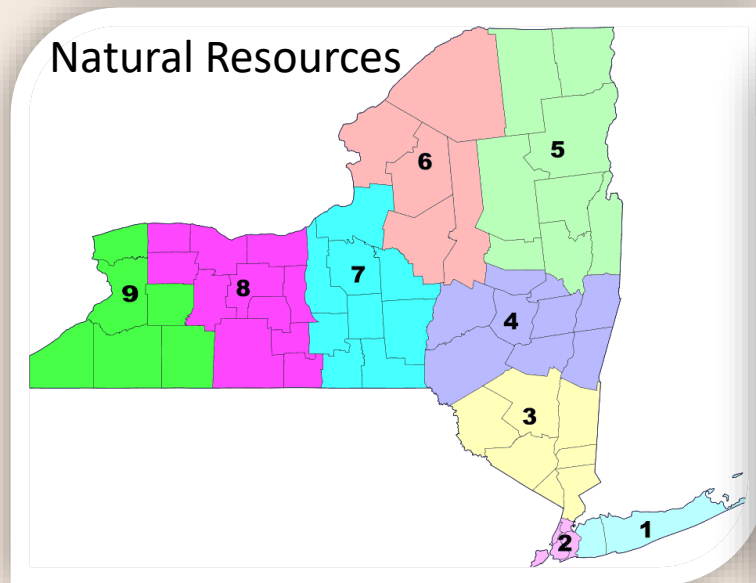


Key Events/Decade and Policy Action Richness



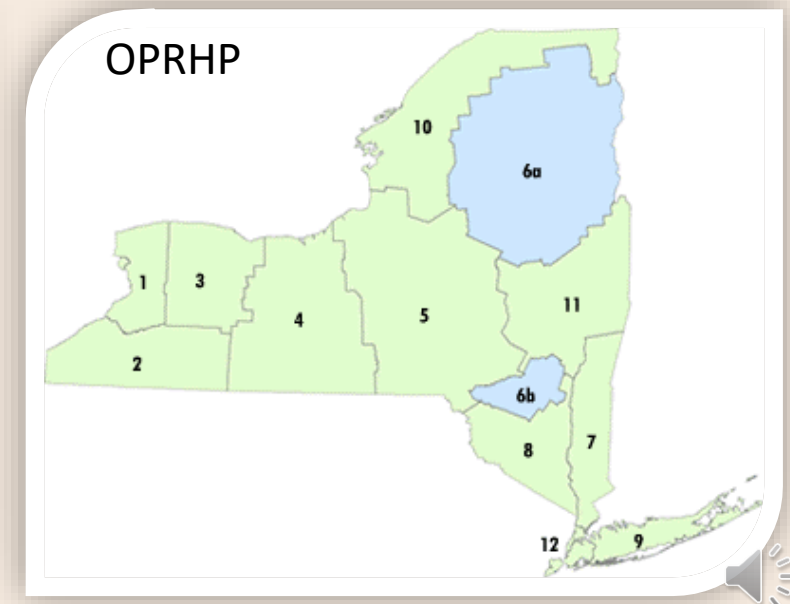
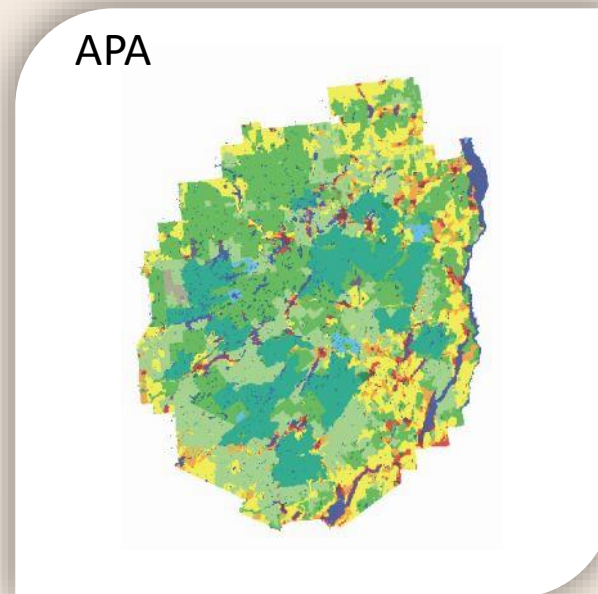
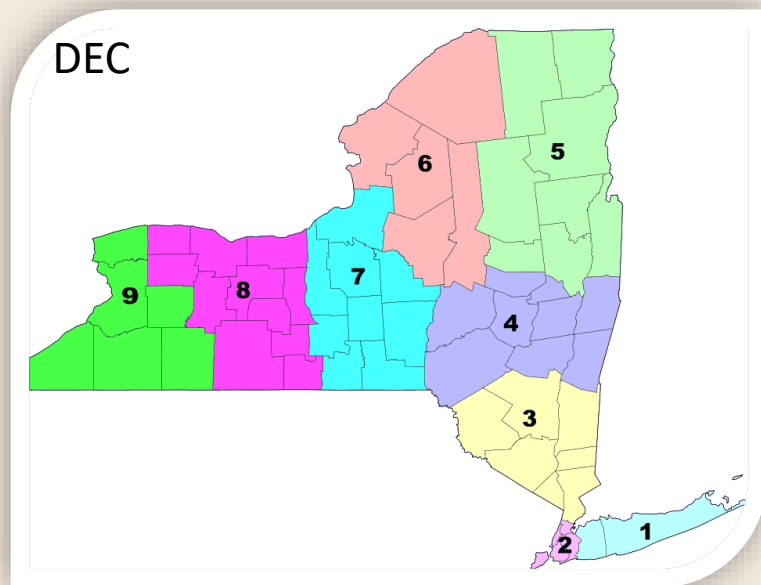
Shared Natural Resource Decision-Making

- Most state agency regions do not correspond to Adirondack Park
- DEC, DOT, counties and other agencies have differing boundaries

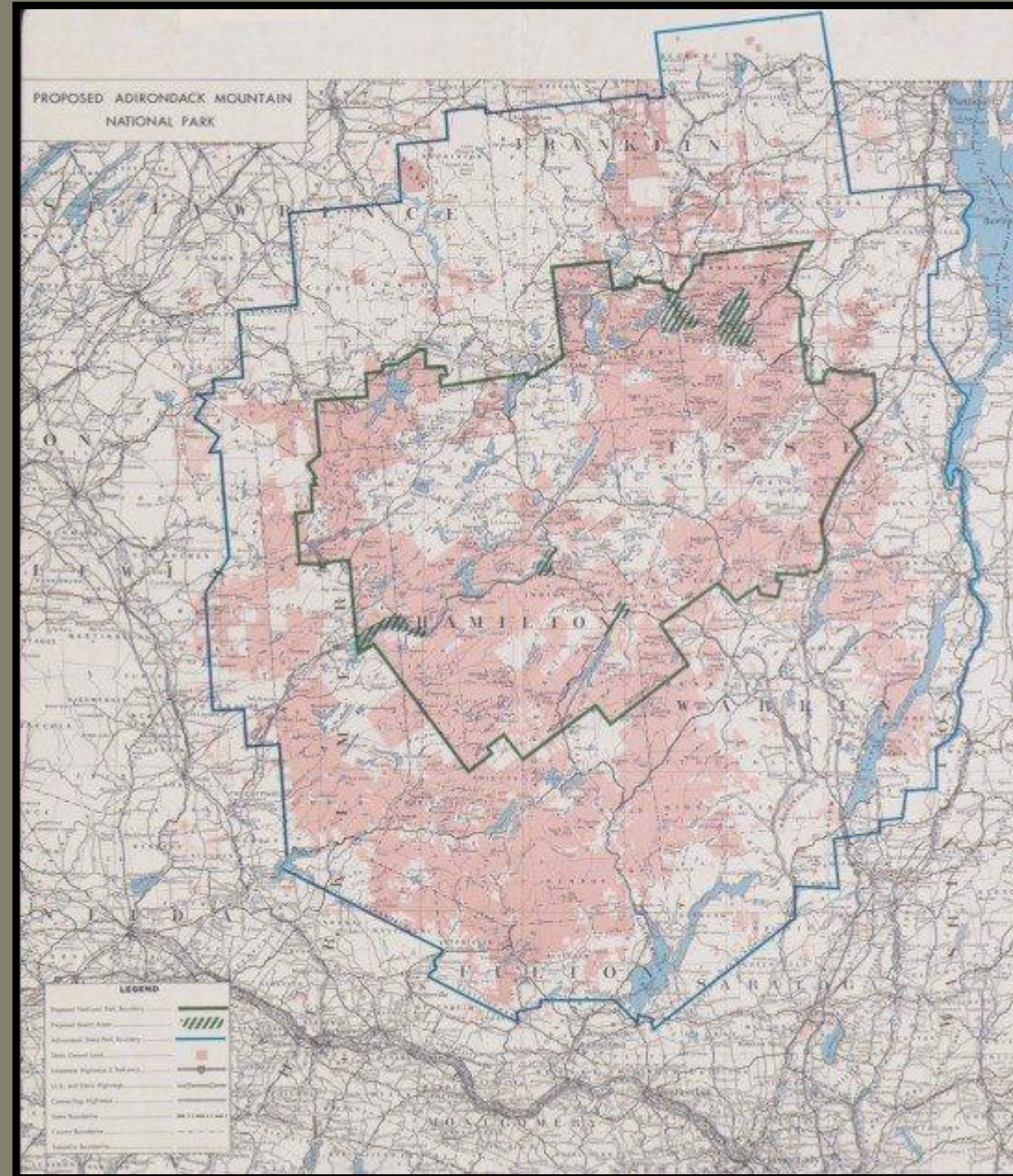


Shared Natural Resource Decision-Making

- NYS Office of Parks, Recreation & Historic Preservation – minimal
- Power center outside the park



1940
Adirondack
National
Recreation
Area



1967
Adirondack
National
Park



Conclusion

- Adirondack Park experienced multiple shocks/surprises (natural and socio-economic)
 - Evidence of thresholds, path dependency, and punctuated equilibrium
- State was the locus of decision-making for Adirondack Park's public and private land policy
 - Sometimes what did NOT happen was as important as what did
- Complex SES – policy solving one problem created others
 - Commons management in a public/private matrix requires repeated revisitation of governance structure



Blue Lining and Social-Ecological Systems

- The Blue Line is a porous boundary
- The Adirondack Commons includes
 - Public Forest Preserve
 - Conservation Easements
 - Private lands - public value
- Resilience does not imply unchanging
- Sustainable human and natural communities
 - May be heterogeneous across the park





FOREVER WILD

Cries from both inside and outside the new park demanded preservation of the remaining forest and its resources. In 1894, two years after the creation of the Adirondack Park, the "forever wild" clause was added to the New York State Constitution. This amendment, now known as Article XIV, prohibited any cutting, harvesting, or selling of timber on state lands in the park.

RECREATION AND HEALTH BENEFITS DISCOVERED

Even as logging intensity increased, another industry emerged in the park – tourism. Visitors flocked to the region from industrial, polluted cities for a wilderness experience, and to enjoy the crisp mountain air for its health benefits. With the help of local guides, they hiked, fished, hunted, and breathed the Adirondacks. Visitors and residents alike began to appreciate the value of a healthy natural ecosystem, as well as a working forest.

INTENSIVE LOGGING IMPACTED WATER AND ECOLOGY

The dense, verdant forest that carpeted the Adirondacks after the glaciers melted seemed endless to the early settlers and loggers, but by 1900 few stands of the native forest had been left. Logging operations left severely denuded, or "dead," that spotted canopy and left large destructive forest fires. Bare forest floors suffered from erosion, runoff and erosion, contributing to poor water quality throughout the watershed. Animal species found themselves hunted and the unregulated, intensive logging was clearly destroying the forest ecosystem and damaging the scenic quality of the landscape.

THE NORTHERN FOREST

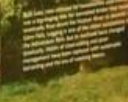
The Adirondack Park is the largest state park in the United States, covering more than 33 million acres. It is a place of natural beauty and scientific interest. The park is home to a wide variety of plants and animals, and it is a place where nature is still in its raw, unspoiled state. The park is a testament to the power of nature and the importance of preserving our natural resources for future generations.

RECREATION AND HEALTH BENEFITS

The Adirondack Park is a place of natural beauty and scientific interest. The park is home to a wide variety of plants and animals, and it is a place where nature is still in its raw, unspoiled state. The park is a testament to the power of nature and the importance of preserving our natural resources for future generations.



Visitors to the Adirondack forest were not limited to those seeking adventure and recreation. Individuals seeking health benefits, such as those who came to the park to breathe the crisp mountain air, found the park a place of natural beauty and scientific interest.





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Thank you!

