



When Permanence Requires Adaptation:

Conservation Easements in Changing Climates and Landscapes

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How do you plan for permanence in a changing world?





Landscape and Climate Change

Climate Change:

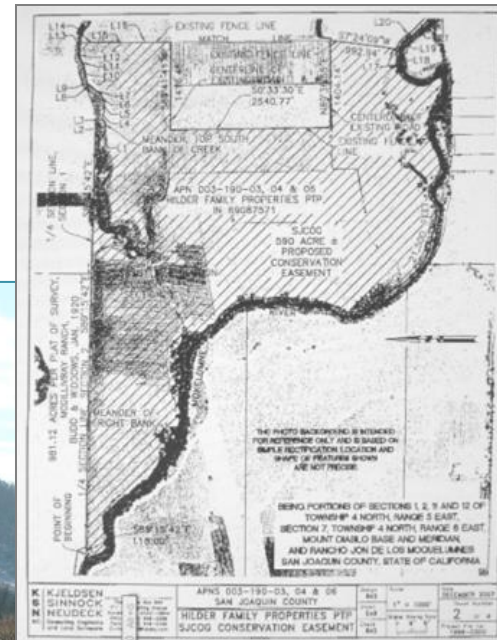
- Warmer/less cold; wetter/drier/more variable
- Sea level rise
- More disturbance events: floods, fires, insects
- Shifts in species ranges
- Impacts on resource users

Landscape Change:

- Residential development and fragmentation
- Afforestation; agricultural intensification
- New landowners
- Invasives, diseases, disturbance regimes

Adaptation $\neq$ flexibility

Conservation easements embody a tension between permanence and change





Defining terms: Adaptation

- Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which **moderates harm or exploits beneficial opportunities** (IPCC)
- Conservation-oriented or principled adaptation moderates harm to the conservation purposes



Arenas for Adaptive Responses

- Where to conserve land
- What tools to use
- Drafting conservation easement terms
- Monitoring
- Developing a decision process for changes over time
- Enforcement and landowner relations
- Building adaptive capacity (staff, budgets, expertise)



When will easements need a process for conservation-oriented adaptation?

- When the purpose cannot be met on the site
- When the rights and restrictions are not sufficient to achieve the conservation purpose
- Examples:
 - Desired plants, fish, wildlife, ecosystems become stressed
 - Ranching isn't economically or environmentally sustainable in drought conditions
 - Sea level rise inundates conserved land
 - Invasive plants alter an oak woodland, but no one is responsible for managing them
 - Landowners request exceptions to easement terms due to unforeseen fires or insect outbreaks

National CE Research

- 6 states and 28 regions
- 60 land trust and govt agency CE holders
- 269 conservation easements
 - Purposes, rights, restrictions, ways to modify
- 73 interviews with staff
 - Goals, monitoring, climate adaptation



National Research Team

California: Stanford University

Colorado: Denver University

Indiana: Indiana University

New York: State University at Buffalo Law (SUNY)

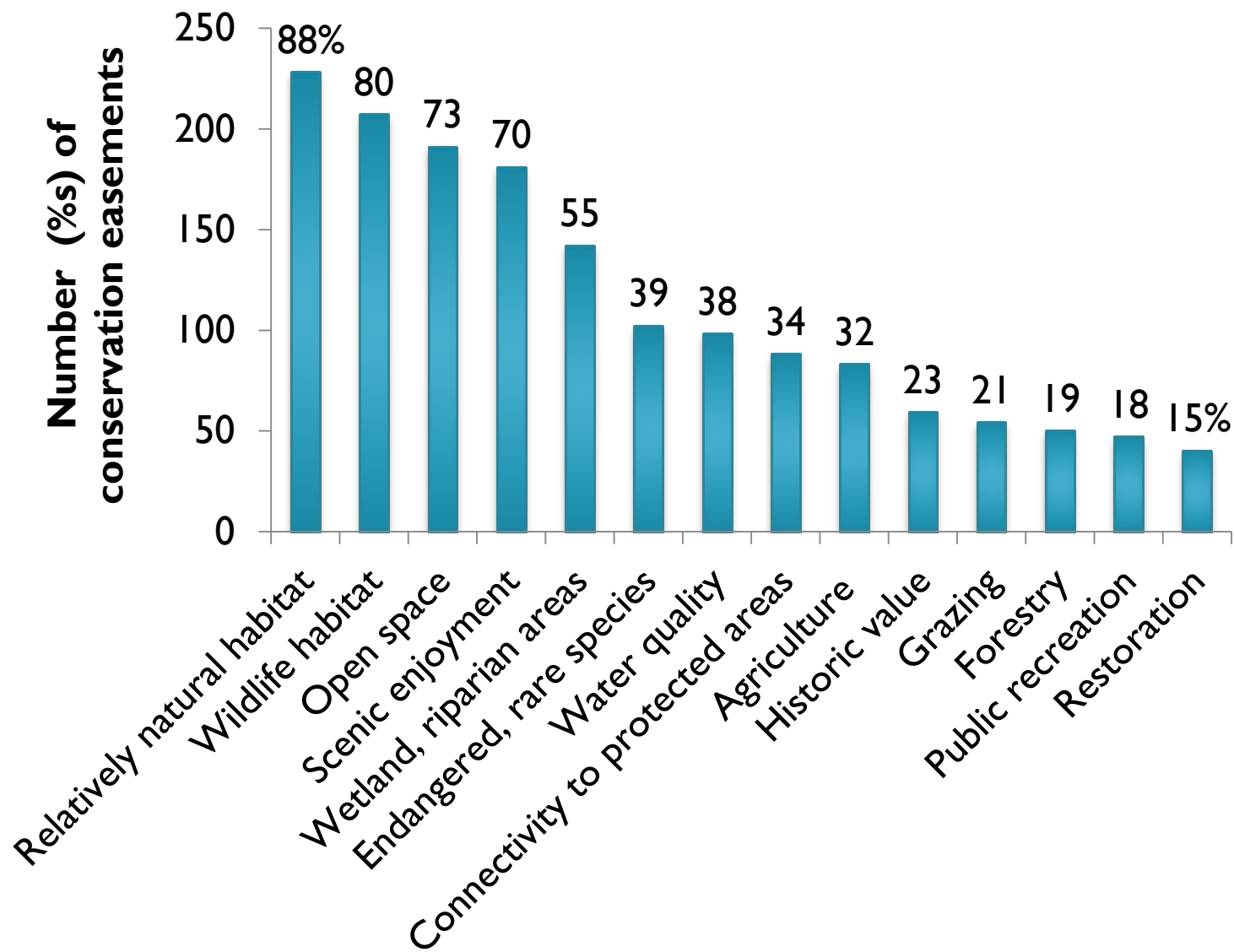
South Carolina: University of South Carolina

Wisconsin: University of Wisconsin - Madison

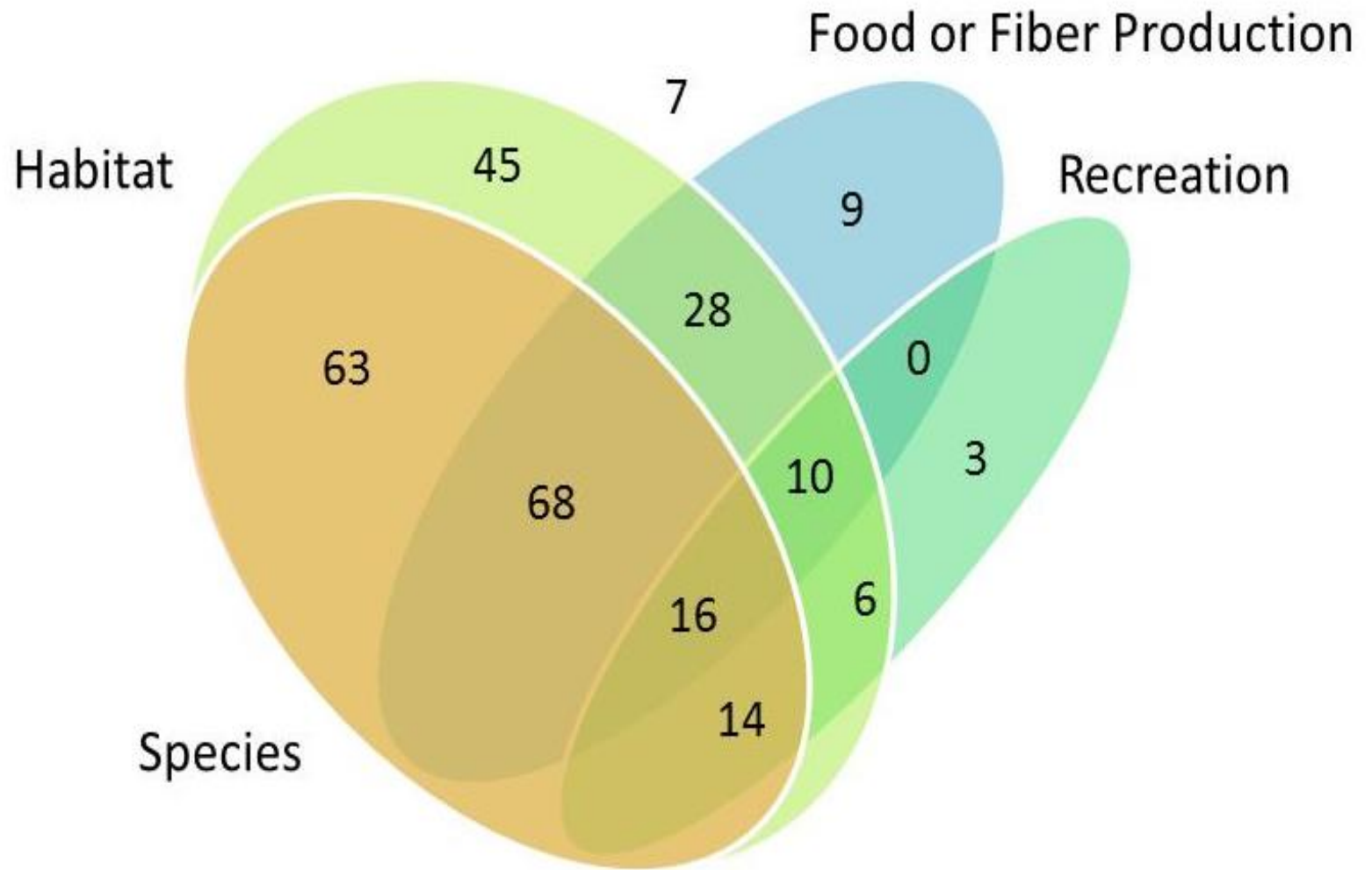
Funding from the Resources Legacy Fund



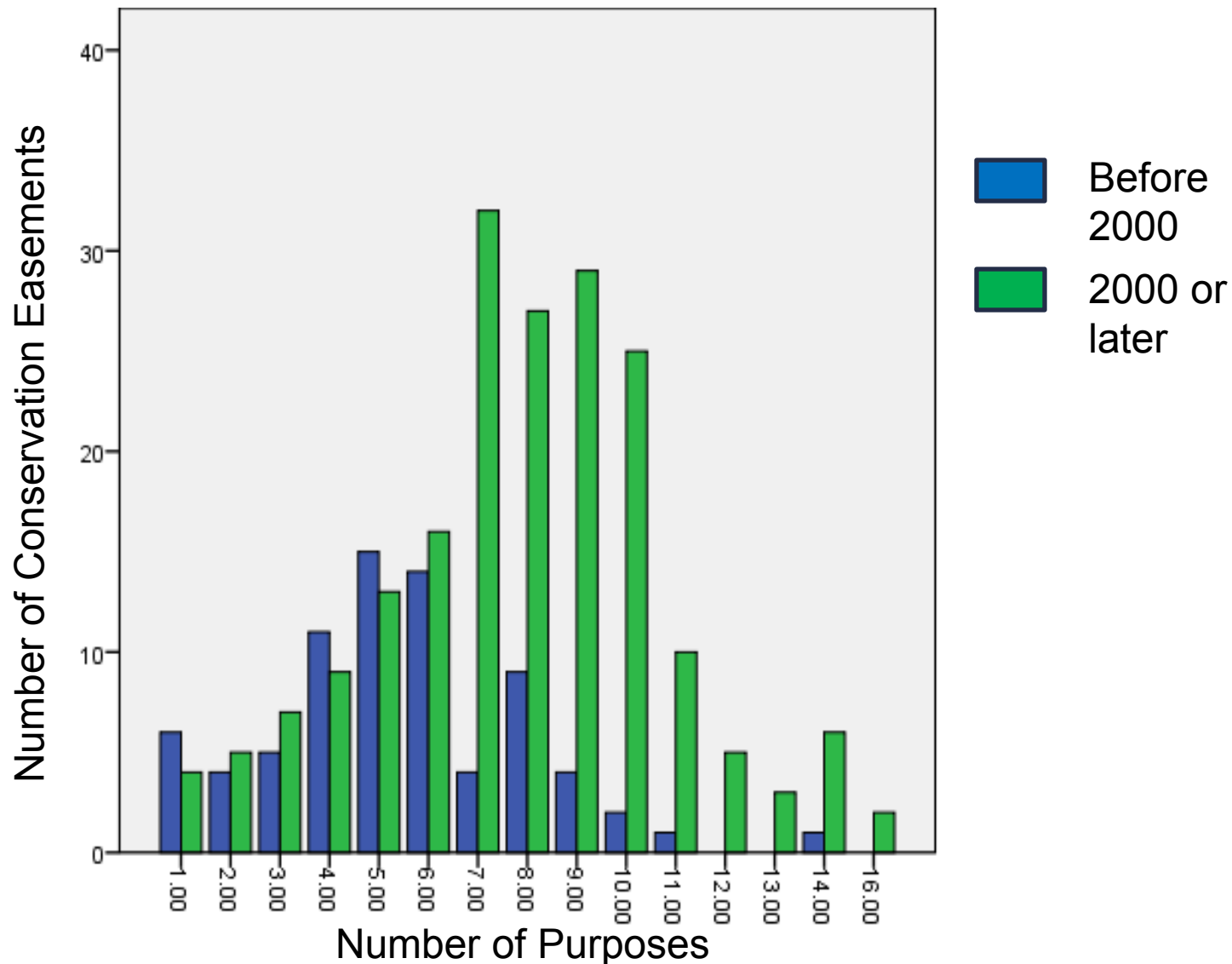
Conservation Easement Purposes (n=269)

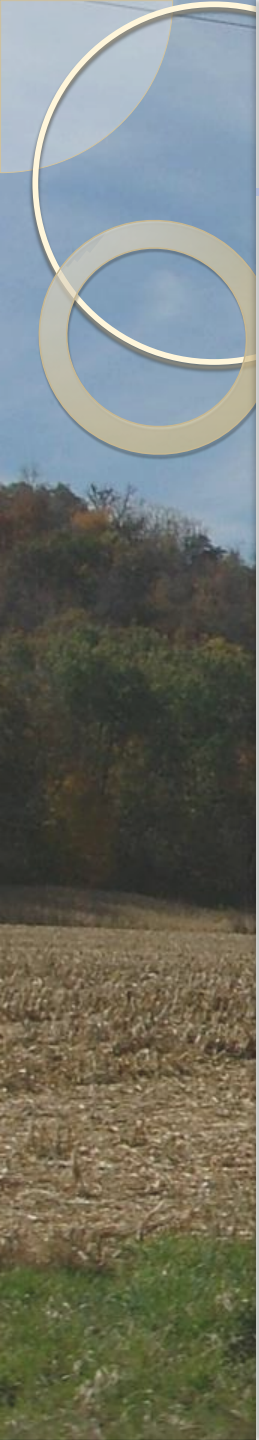


Conservation Easement Purposes (n=269)



Recent Conservation Easements (since 2000) Include More Purposes

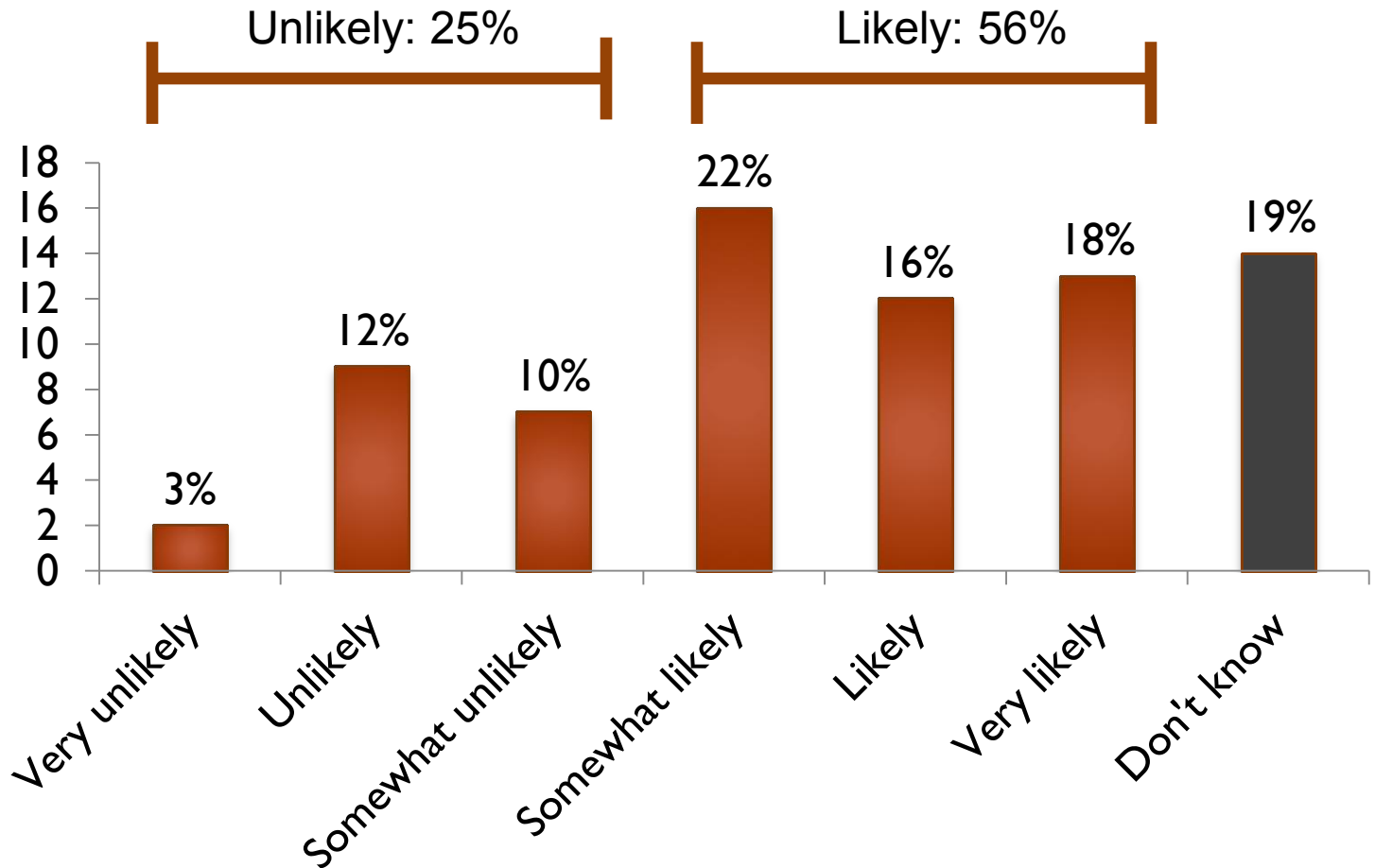




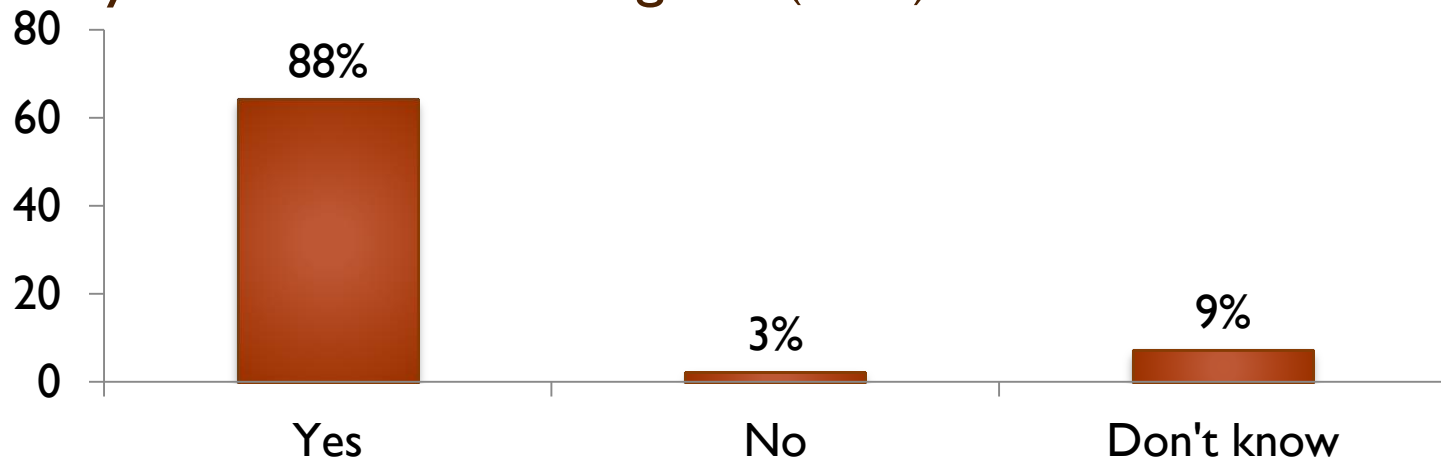
Purposes

- 70% mentioned protection of a specific species or natural community; only 20% specified a dominant purpose
- Broad purposes
 - reduce the vulnerability of the easement to legal challenge
- Specific, clear purposes
 - Provide guidance for adaptation
 - Help resolve disputes if tradeoffs among purposes need to be made
 - Reflect a landowner or organization's intent in some cases

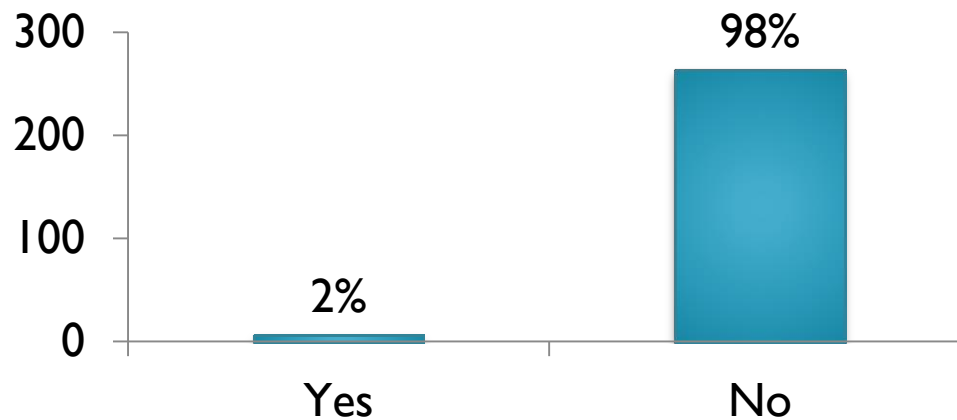
How likely is climate change to negatively impact the conservation goals of your conservation easements?



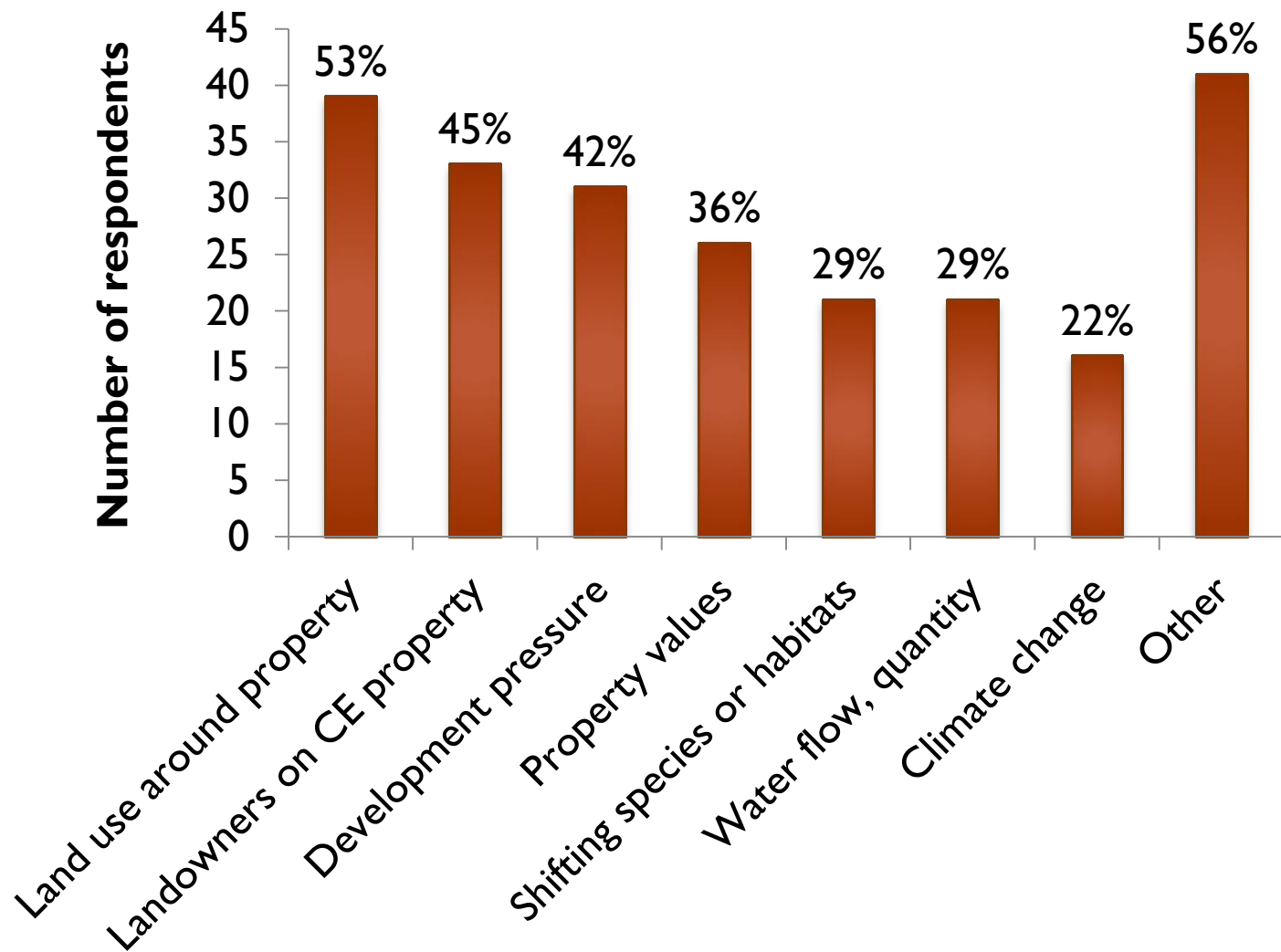
Is your organization concerned that climate change is likely to influence this region? (n=73)



Does the conservation easement include provisions for climate change in the easement document? (n=269)

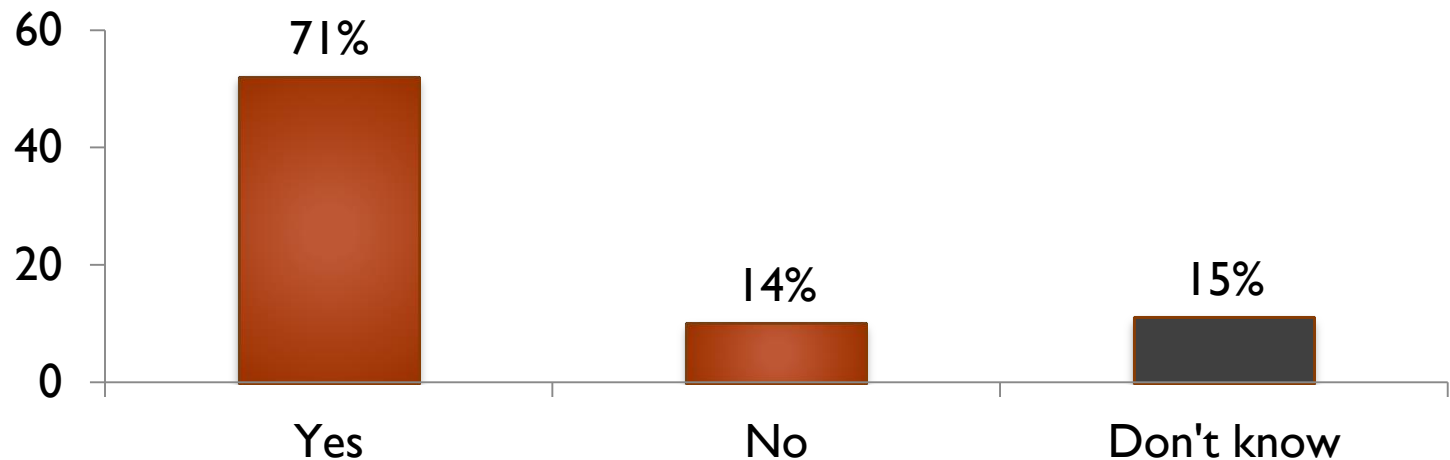


What social or ecological changes do staff perceive as having affected their conservation easements? (n=73)

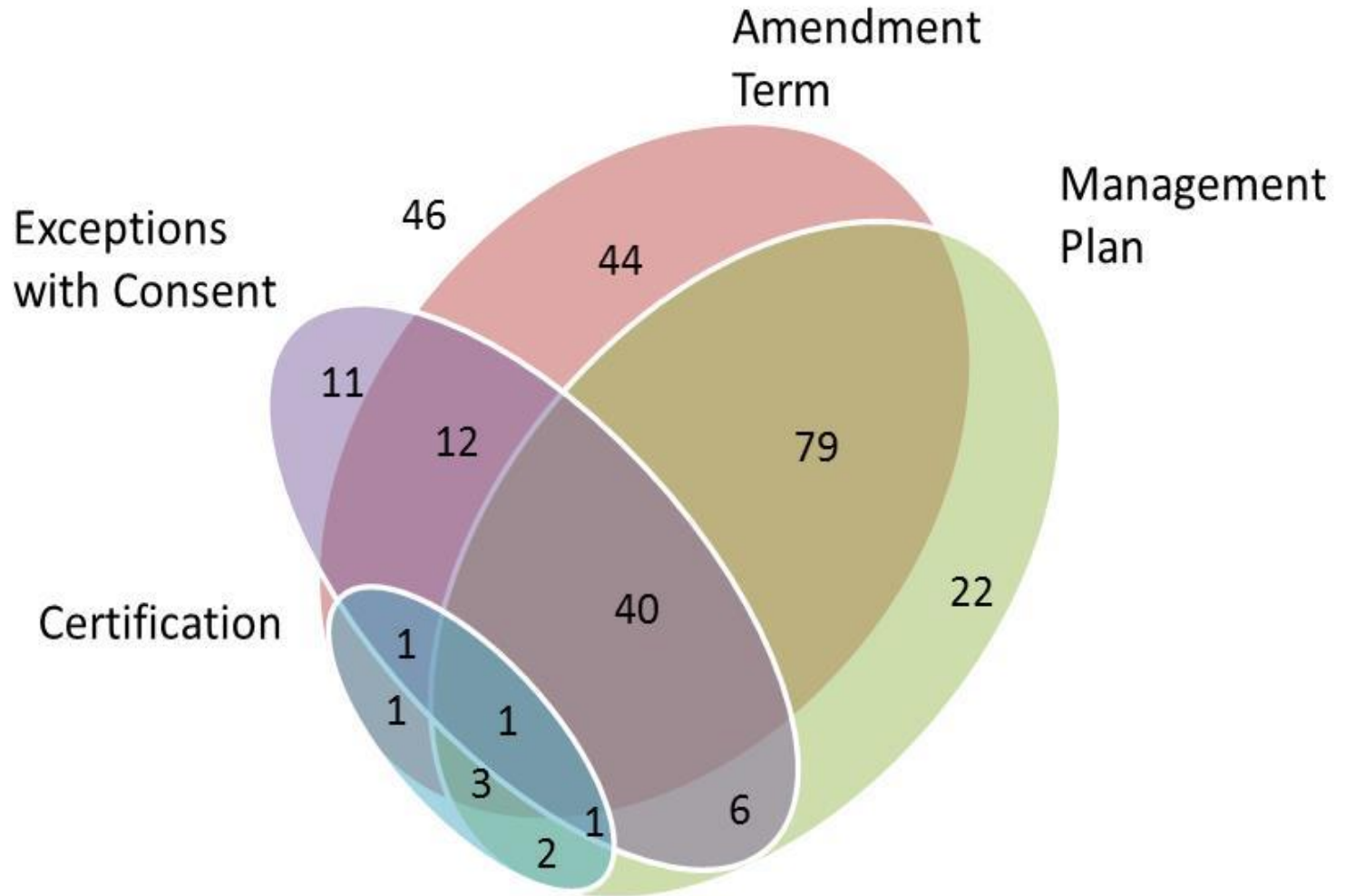


Do your organization's conservation easements have enough flexibility to adapt to changing environmental and climatic conditions?

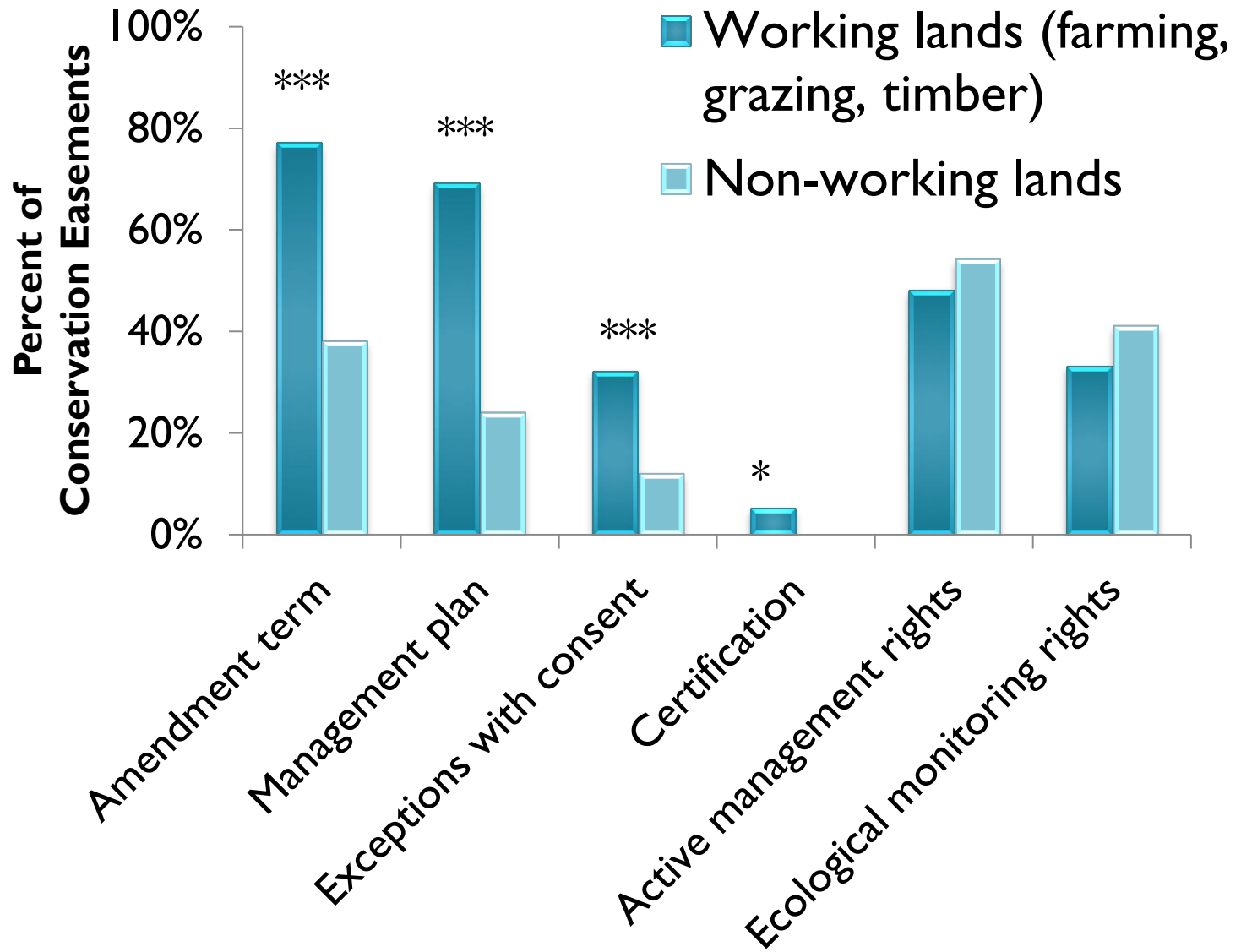
- 71% YES (amendment clause, multiple/ broad conservation values and purposes)
- 14% NO (baseline documentation report assumes static landscapes, no amendment provisions, goals are vulnerable, lack of management plans, etc.)

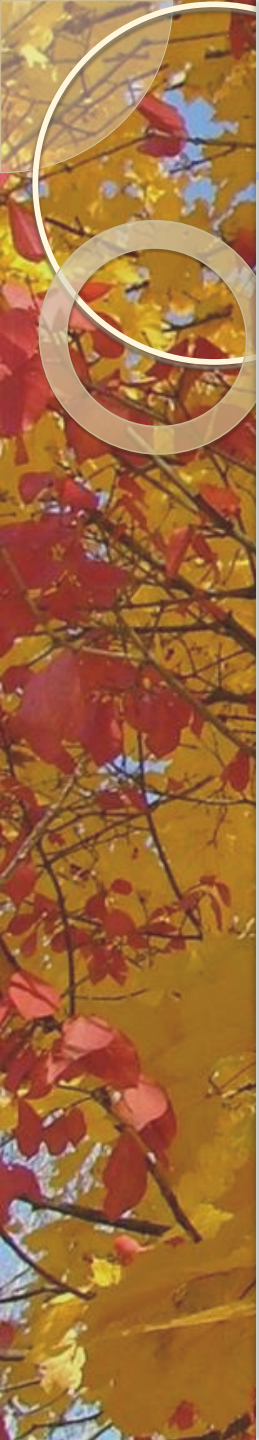


Four options for changing land management over time (n=269)



Working land CEs have more change options





Amendment

66% of CEs had an amendment clause

(arguably an amendment clause in the CE isn't required, depending on state law)

Pros:

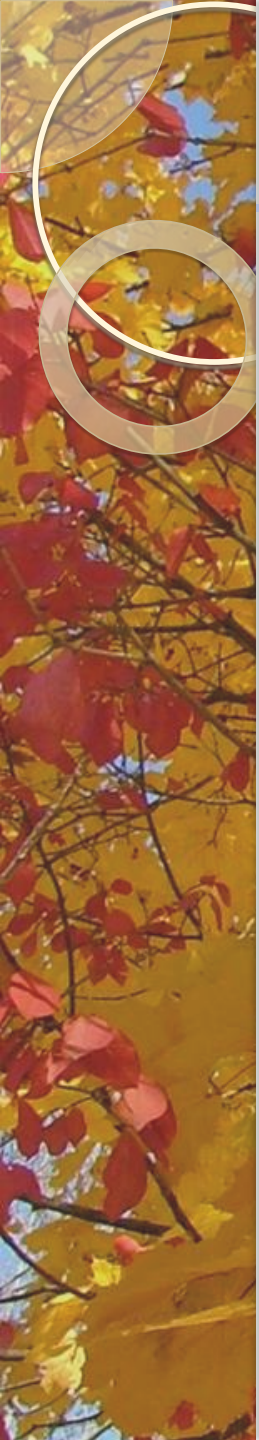
Allows purposes and rights/restrictions to be modified in the future

Cons:

Private benefit/inurement: IRS unhappy with amendment of donated CEs

Requires mutual agreement of holder and landowner

May open up entire CE to amendment



Management Plans

46% of CEs referred to a management plan

Management plans are becoming more common

Pros:

Sets up a process for modifying land management terms periodically

Terms can indicate who has to approve plan (ie certified forester); process if agreement cannot be met

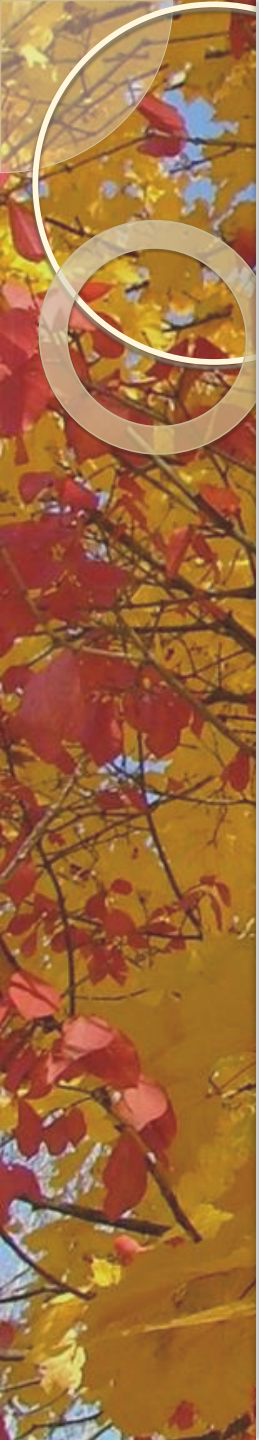
Cons:

If conflict arises, it can be difficult and time-consuming to adjudicate disputes and update plans

Easement terms about plans are often too vague

Financial incentive often provided before plan complete

Lack of public transparency (unless plans are recorded)



Exceptions through discretionary consent

Many CEs state that exceptions to land use restrictions can be made through the discretion of the CE holder

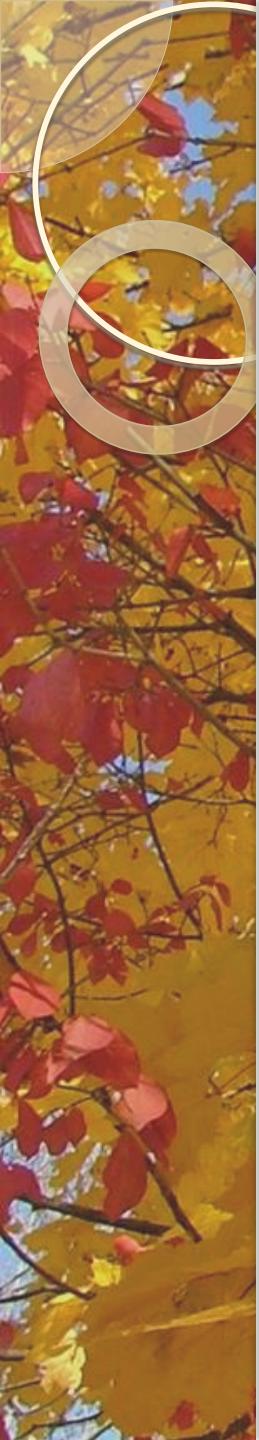
Pros:

Allows CE holder to alter permitted uses

Cons:

Allows CE holder to alter permitted uses in ways that could harm conservation values or increase private gain

May be undocumented and lead to confusion, inconsistencies, or lack of legitimacy



Exceptions through permits

NRCS Wetland Reserve Program CEs restrict all land uses, with sole discretion to issue permits

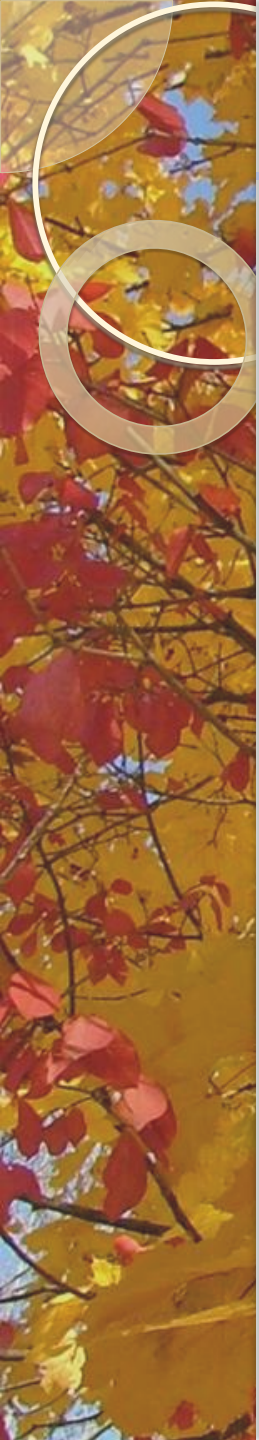
Pros:

provides high CE holder control over the decision process

Permits suggest specific, trackable use rights

Cons:

May not meet landowner needs for working lands



Referencing laws and policies

Many CEs referred to laws or policies as compliance terms, ex:

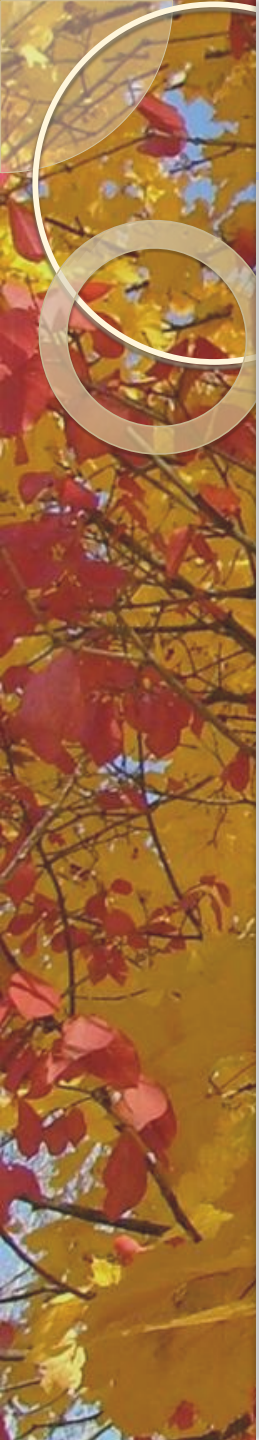
- 3% of CEs required FSC certification
- CE requires adherence to state or federal best management practices for water quality
- Alternate terms for drought conditions, as defined by NRCS

Pros:

Allow mgmt terms to be updated through a public agency process

Cons:

CE holder has to trust source of those standards



Active Land Mgmt by CE Holder

70% of staff said active management was important

50% of CEs granted the holder some right to do active mgmt, but most of these were fairly limited

Pros:

Some goals can only be achieved through active management (oak regeneration, invasives removal, restoration)

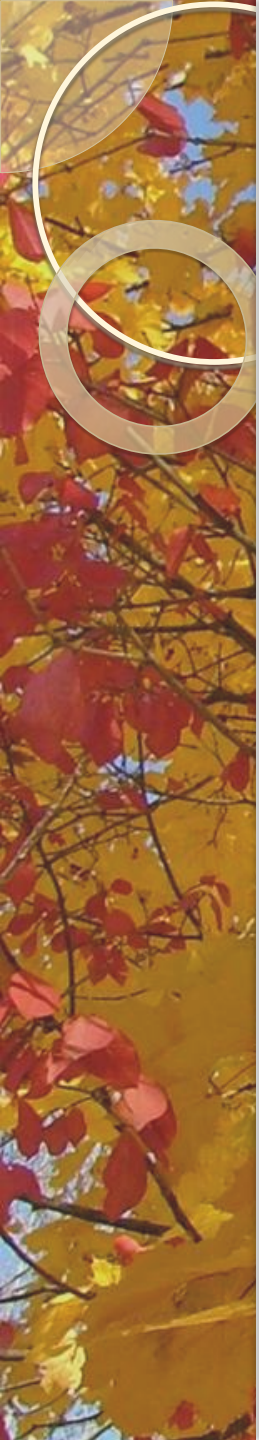
Allows for multiple management options in the future

Cons:

Requires time, trained staff or volunteers

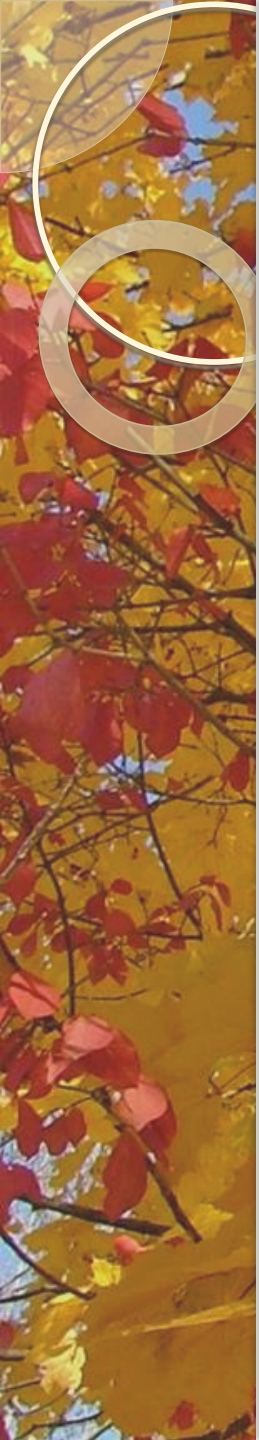
Landowner opinions may be mixed

EX: managing invasives in woodlands and prairies



Enforcement

- Older easements tend to have general purposes and rights. Climate change issues will have little effect on stated purposes or ability to enforce.
- Newer easements tend to be more specific, but few are so specific that there will be problems with enforcement.
- Possible enforcement issues where property is to be preserved “as it presently is” or “in its present natural condition.”
- If you have to reach for a right...does Holder “right to preserve and protect” include right, if needed, to affirmatively manage?



Alternative tools

- Fee simple ownership
- Options
- Contractual payments
- Term conservation easements
- ‘Moving’ conservation easements
- Annuity or endowment easements
- Other options...

SO WHAT CAN BE DONE
TO ENHANCE
PRIVATE LAND
CONSERVATION
IN THE FACE OF
CLIMATE AND
LANDSCAPE CHANGE?



YOUR INSIGHTS...

As we develop these ideas into a series of white papers, what should we understand and prioritize?

What resources or shared lessons would be helpful to your organization?

What research is needed next?



POTENTIAL TOPICS FOR DISCUSSION

- Prioritizing where to work
- Choosing conservation tools
- Anticipating climate vulnerabilities and adaptive measures
- Guidance and requirements for grantee capacity
- Guidance and requirements for CE terms, organizational policies and administration
- Accounting for outcomes
- Congressional roles

What landscape or climatic threats to private land conservation is your agency most concerned about?



Share an adaptation approach that your agency is already using or considering



What barriers to adaptation have you found to be challenging?



How much does your organization rely on conservation easements?





Impacts from climate and landscape change

- Most purposes are written broadly enough that the CE will survive.
- But will important purposes be achieved?
- 56% suggest that climate will negatively impact their CE goals
- 22% perceive climate change as already affecting their CEs



ADAPTING TO CHANGE

- The CE tool is not ideally suited for ongoing management
- CEs vary considerably in the options for changing management over time
- Only 1/3 allowed for ecological monitoring by CE holder

Flexibility $\neq$ adaptive management