

Private Land Conservation in the Face of Climate Change

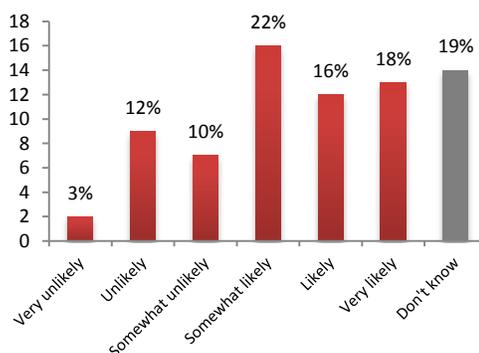
A six-university study
examined 269 conservation easements
held by 63 organizations

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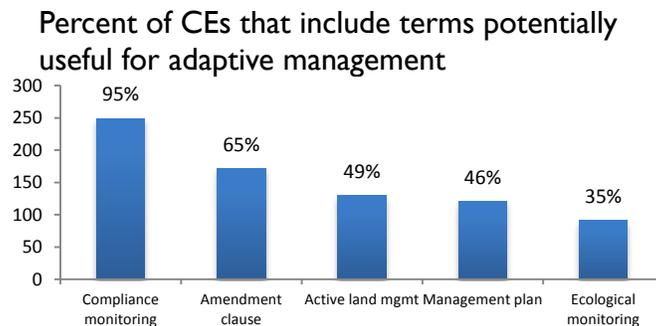
Climate change has significant consequences for the land conservation community. From habitat protection to coastal conservation, climate change is likely to make conservation efforts more difficult. In 2011, researchers from six universities across the country — in California, Colorado, Indiana, New York, South Carolina, and Wisconsin — reached out to the land conservation community to learn how organizations are addressing climate change, if at all, and to assess the effectiveness of conservation easements in the face of a changing climate. Researchers interviewed more than 70 officials from the land conservation community, including both nonprofit land trusts and government conservation agencies, and reviewed more than 250 conservation easements. While perpetual conservation easements have become increasingly popular in the effort to conserve private lands, climate change and other dynamic landscape changes raise questions about their effectiveness and adaptability, and call for careful attention to ensuring conservation outcomes over time.

The Six-State Study found widespread awareness among the participating land-conservation officials of the potential impacts of climate change on private land conservation. Indeed, 88 percent of the participants reported that they were concerned that climate change is likely to affect their region. As shown in the figure below, a third of the participants believed that it is likely or very likely that climate change will negatively affect the goals of their conservation easements. Twenty-two percent stated that climate change *already* was affecting their conservation work.

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



The survey also suggests that many conservation easements are not currently written to allow for effective adaptation. Not surprisingly, only three percent of the easements studied included explicit provisions for climate change in the document. Of more concern, the conservation easements often did not include rights and powers that could be of significant importance in the face of climate change. For example, although 77 percent of interviewees reported that active land management is important to meet their organization’s goals, only 50 percent of the easements gave the conservation organization the right to conduct *any type* of active land management—as shown in the next figure. Only a third of the conservation easements provided for active ecological monitoring.



The results of the study suggest that the following changes could reduce vulnerability and increase adaptive capacity in the face of climate change:

- **Increase understanding and education.** Conservation organizations must do more to inform themselves (as well as staff, board members, and landowners) about the potential effects of climate change on their lands.
- **Shift land acquisition strategies to account for potential climate impacts.** Conservation organizations should evaluate the benefits of protecting new lands, such as migration corridors and species refugia, that could help in climate adaptation, and think twice before acquiring lands that are highly susceptible to climate-induced changes that could undermine the land’s future conservation value.
- **Consider conservation tools other than perpetual easements.** Conservation organizations should consider using tools that provide greater flexibility in either the powers that the organization enjoys over its lands or in the duration of the protection, including fee ownership, option agreements, contractual payments, land-use planning, term easements, moving easements, and annuity easements.
- **Ensure that conservation easement terms permit the holder to successfully adapt to climate change.** In particular, conservation organizations should incorporate climate change into the easement purposes; provide for biophysical monitoring; allow adequate authority to manage for climate risks and stresses; provide for changed conditions; and authorize needed amendments. Management plans may provide an especially useful means of providing for flexibility over time.
- **Provide for more active stewardship of conservation lands.** To ensure that they can adapt effectively to climate change, conservation organizations should develop detailed baseline information when land is acquired, provide for adequate stewardship funds, develop policies to guide ongoing management decisions, and, in the case of easements, develop closer relationships with the owners of the underlying land.