



ASSESSMENT OF THE CLIMATE CHANGE RESPONSE FRAMEWORK COURSES: RESULTS FOR THE NORTHERN INSTITUTE OF APPLIED CLIMATE SCIENCE

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We conducted a study investigating the experiences of 35 participants from the Climate Change Response Framework (CCRF) adaptation courses. Through qualitative interviews, we investigated perceptions of adaptation, learning experiences, success stories, and barriers encountered in the employment or enhancement of participants' adaptation planning and implementation strategies within their work. These courses, organized by the Northern Institute of Applied Climate Science (NIACS) in collaboration with the US Department of Agriculture Forest Service, offer valuable insights into adaptation learning processes. By examining participant experiences, we identified effective strategies and pinpointed obstacles hindering the transition from adaptation planning to implementation. The recommendations offered are a reference point for NIACS as they continue to develop resources to support adaptation learning and enhance adaptive capacity within natural resource management and related fields.

Key Findings

Overall, interviewees indicated success of CCRF courses across several indicators. During the first phase of interviews, all 35 interviewees said they would recommend the course they took to others.

Before taking the courses, interviewees had variation in exposure to adaptation as a concept and practice. Many participants (28 out of 35) already had some sense of adaptation as a concept within natural resource management. The course provided participants with the ability to devise new adaptation strategies and actions; 23 out of 35 participants noted this change, especially for participants coming into the course with a limited understanding of adaptation. During the interviews, many participants were asked if they anticipate utilizing any aspect of the training in their future work, and 33 out of 35 participants explicitly indicated that they would carry some element of the course into their future work. Most interviewees had a strong positive impression of the course's information/resources, communication tactics, and organizational framings, such as the adaptation workbook process. In follow-up interviews a year later, 19 out of 29 interviewed indicated they utilized the course's resources, communication tactics, and/or adaptation frameworks.

Nineteen participants out of 21 in Phase 2 indicated that CCRF improved their understanding of adaptation and how to pursue it in their work. Two of the three participants who said CCRF did not really improve their understanding of adaptation said that the course reinforced their existing knowledge. A handful of participants (9) recognized that their actions prior to the course were compatible with adaptation; because of the course, they now understood how to frame adaptation alongside a set of other management goals and activities.

Participants said they face funding, capacity, and internal organizational obstacles to adaptation work within their organizations. Public support was another common barrier mentioned in the interviews. Twenty-four of 26 participants noted that they have generally good support from within their organizations when it comes to adaptation, and a majority said that they had support from at least one group of people they work with. Common conflicts included the perception of the public's lack of information or understanding around the need for adaptation activities or disagreements with climate-skeptic audiences. Participants were asked what barriers they often face within their work, and whether the course addressed those barriers or not; 22 people said the course did not address how to approach their barriers, and 13 participants said that the course fully or somewhat addressed barriers.

Recommendations from the Interviewees and Research Team

- **Increase the course length** to provide more flexibility and time to hear from other participants on their projects and approaches. This recommendation applies to Online Adaptation Planning and Practices Training courses (APPo) and CCRF short course participants.
- **Allocate more time for group interaction** and peer-to-peer learning in the course, at times with a focus on region- or habitat-specific groups. This recommendation responds to the participant's common suggestion to allocate more time to group discussions, which helped provide insight into how others navigate the Adaptation Workbook and approach barriers like time or funding.
- **Check-in and provide refreshers post-course** to grow the network of participants and increase the momentum of embedding adaptation tools into their work.
- **Address areas that need further improvement in the Adaptation Workbook**, such as offering flexibility for participants to utilize it in hard copy or online and consider offering flexibility for the order of operations.
- **Make the course more accessible to wider audiences**, including accommodating participants who learn in different modes and investing in communication tactics to expand the course to different groups of people.
- **Increase the navigability of resources presented**. This can extend to emphasizing the purpose, scope, ecosystem type, co-benefits, and the appropriate geographic region more clearly to respond to the participant's experiences of "information overload" and a lack of time and capacity.
- **Offer resources that are more regionally appropriate or habitat specific**. This can be done by 1) grouping participants based on region or common challenge to facilitate locally minded information exchange, networking, and collaboration; or 2) creating a short course dedicated to a specific region/ecosystem.
- **Encourage participants to apply the Adaptation Workbook process to a non-hypothetical project**—one that is up for consideration of funding, being planned, or about to be implemented within their organization's control. This recommendation responds to barriers, such as the limited number of personnel, funding, and institutional resources faced by participants, and the call for improving the feasibility of adaptation implementation.
- **Include insights on relationships between climate adaptation goals and other management goals** and explore adaptation strategies that can provide co-benefits for goals perceived to be in tension with one another.
- **Discuss the concept of uncertainty in adaptation planning** and provide further insight on monitoring and evaluation strategies, as this helps participants understand what climate-related actions are practical or not, minimizing a sense of uncertainty in the iterative adaptation process.
- **Focus on significant barriers shared by many participants**, particularly funding, capacity, institutional barriers, and political buy-in. These topics can be focal points of group discussions and resources embedded in the Adaptation Workbook to help offer varying perspectives, experiences, and resources to address these challenges.
- **Include exercises for enhancing communication** and engagement strategies tailored to internal or external audiences to promote adaptation efforts.
- **Include diversity, equity, and inclusion trainings, and focus on mindful community engagement tactics as it relates to natural resource management** within the course to strengthen ties between land managers and surrounding local communities to co-steward adaptation strategies.

More Information

Find reports and other publications about this research at:

<https://sites.warnercnr.colostate.edu/courtneyschultz/plpg-practitioner-papers/>

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