

## ONLINE TRAINING

# ADAPTATION PLANNING AND PRACTICES

The Northern Institute of Applied Climate Science and USDA Northern Forests Climate Hub are offering the [Adaptation Planning and Practices](#) training as an online course for natural resource managers.

This unique opportunity provides hands-on training in considering climate change information and identifying adaptation actions for natural resource management professionals working in forests, urban forests, forested watersheds, and associated natural ecosystems. Participants, working in small teams or individually, will bring their own real-world projects to the course and receive coaching and feedback from a team of climate adaptation specialists.

## PARTICIPANTS WILL BE ABLE TO:

- Identify locally-important climate change impacts, challenges, and opportunities
- Develop specific actions to adapt forests and other ecosystems to changing conditions
- Use the [Adaptation Workbook](#) to create their own “climate-informed” projects
- Better communicate with stakeholders about key climate change impacts, challenges, and opportunities
- Access post-training support from NIACS staff during project planning and implementation

## REGISTER TODAY

### DETAILS

#### DATES & FORMAT

##### Weekly

The seven-week program includes:

- Weekly lectures describing adaptation resources and workbook (30min-1hr)
- Four online discussions focused on participant projects and questions (1hr)

#### GEOGRAPHIC FOCUS

Information will focus on forest ecosystems, urban forests, and forested watersheds in the Midwest and Northeast, but applicants from other regions may be accepted if space allows.

#### REGISTER ONLINE

[forestadaptation.org/online-courses-2020](https://forestadaptation.org/online-courses-2020)

There is no registration fee thanks to support from the US Forest Service and USDA Northern Forests Climate Hub.

#### QUESTIONS?

Contact: Maria Janowiak ([maria.janowiak@usda.gov](mailto:maria.janowiak@usda.gov)) and Danielle Shannon ([dshannon@mtu.edu](mailto:dshannon@mtu.edu))



Northern Forests Climate Hub  
U.S. DEPARTMENT OF AGRICULTURE



## WHO SHOULD PARTICIPATE?

This training is designed for natural resource professionals working in forests and associated ecosystems in rural landscapes, urban communities, and forested watersheds throughout the Midwest and Northeast. This includes foresters, natural resource managers, community foresters, conservation and non-profit organizations, county and municipal employees, and consultants working on public, tribal, and private lands. Professionals providing Extension, service forestry, or technical assistance to foresters and woodland owners are also encouraged to participate. Individuals as well as small teams can participate in the course.

We ask participants to bring their own real-world projects.

Example projects could include:

- a forest management or stewardship plan for a property, parcel or watershed
- a timber sale or harvest plan for a single stand or multiple stands
- a habitat management plan for a wildlife species
- a restoration project in an urban natural area
- an urban development project that incorporates natural landscape features
- Forested watershed management site, or a site with forest best management practices



Examples of Adaptation Demonstration projects that have used the Adaptation Workbook are online at [www.forestadaptation.org/demos](http://www.forestadaptation.org/demos).

## HOW DOES THE ONLINE COURSE WORK?

The seven-week online course draws on a combination of regular webinars and discussions with all participants, as well as independent work time to create adaptation projects. Throughout the course, participants will develop (individually or in small groups) their own climate-informed adaptation project.

- **Adaptation Workbook lectures, weekly web meetings (30 min - 1 hour per week)** – Recorded weekly, lectures present key concepts related to the Adaptation Workbook and provide tips for navigating the online platform. To allow participants more flexibility, lectures will be recorded and posted to YouTube.
- **Discussion groups (1 hour session). A total of four sessions.** Discussion groups bring together course participants to share insights and questions related to individual projects. **We expect participants to attend all sessions.** Discussion meeting times will be scheduled based on the availability of participants.
- **Weekly assignments** will guide participants through the new material and actively engage with them through the lectures, the online [Adaptation Workbook](#), and other activities. Participants will be assigned work to complete before each session, which is generally expected to take a few hours to complete.

**Interested? Please register online**

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# COURSE OUTLINE

Registered participants will receive instructions regarding how to prepare for the training in advance of the first meeting session. Prior to the training, participants are asked to identify a project to be used during the training and provide some additional information to course instructors.

## **Session 1 (week 1) — Course Introduction; Defining Project Goals and Objectives**

- Course objectives, instructors, and agenda
- Defining project scope and management goals/objectives
- *Assignment 1: Define project goals and objectives (refine project goals and objectives)*
- [Discussion session](#) – *Introduce projects and participants in small groups*

## **Session 2 (week 2) — Understanding and Evaluating Climate Change Vulnerabilities**

- Climate projections and impacts on tree species, ecosystems, and regions
- Prioritizing vulnerabilities of greatest concern for management goals/objectives
- *Assignment 2: Assess climate impacts and vulnerabilities.*

## **Session 3 (week 3) — Evaluating Management Challenges and Opportunities**

- Re-considering and revising management goals/objectives in light of climate challenges
- Practice articulating climate-adaptive management goals/objectives
- *Assignment 3: Evaluate objectives considering climate impacts.*
- [Check-in with instructors](#) – *Each project schedules 30 min meeting with course instructors*

## **Session 4 (week 4) — Identifying Adaptation Strategies, Approaches, and Tactics**

- Meeting existing demands while preparing for future conditions
- Adaptation concepts: resisting change, enhancing resilience, and facilitating transitions
- Developing specific actions for climate-change adaptation
- *Assignment 4: Identify adaptation approaches and tactics.*
- [Discussion session](#) – *Share project work (recapping Step 2 and Step 3)*

## **Break (week of 5) — No session**

- Use time to catch up on projects and have office hours with instructors

## **Session 5 (week 6) — Monitoring and Evaluating Effectiveness**

- Tools for measuring effectiveness of implemented adaptation actions
- Capitalizing on existing data, inventory or monitoring processes/partnerships
- *Assignment 5: Monitor effectiveness of implemented actions.*
- [Check-in with instructors](#) – *Each project schedules 30 min meeting with course instructors (optional)*

## **Session 6 (week 7) — Climate Change Communication**

- Tools for measuring effectiveness of implemented adaptation actions
- Capitalizing on existing data, inventory or monitoring processes/partnerships
- *Assignment 6: Complete adaptation projects.*
- [Discussion session](#) – *Share project work (recapping Step 4 and Step 5)*

## **Session 7 (week 8) — Sharing Adaptation Projects**

- [Discussion session](#) – *Share results of course project*

***International Society of Arboriculture and Society of American Foresters Continuing Forestry Education credits have been requested for this course.***

# INSTRUCTORS

*This training will be led by a team of experienced instructors specializing in climate adaptation:*



**Leslie Brandt, Northern Institute of Applied Climate Science & US Forest Service**

Leslie serves as coordinator for the Urban Forestry Climate Change Response Framework, and lead author of the Chicago Wilderness region urban forest vulnerability assessment and synthesis, which served as a pilot for vulnerability assessment of urban trees and forests.



**Maria Janowiak, Northern Institute of Applied Climate Science & US Forest Service**

Maria Janowiak is the coordinator for the New England Climate Change Response Framework, serving the states of New York, Vermont, New Hampshire, Maine, Massachusetts, Connecticut, and Rhode Island. Maria has been working with land managers on issues related to climate change and adaptation since 2007.



**Patricia Leopold, Northern Institute of Applied Climate Science & Michigan Tech**

Patricia Leopold is the coordinator for the Climate Change Response Framework in the Central Appalachians (OH, WV, MD) and the Mid-Atlantic (PA, NY, NJ, DE, MD). Patricia has been working to develop climate change tools and resources with NIACS since 2009.



**Todd Ontl, Northern Institute of Applied Climate Science & Michigan Tech**

Todd is a research scientist with the Northern Institute of Applied Climate Science, and focuses on assisting natural resource managers in integrating climate change adaptation into land management. Todd's areas of interests include applied research in understanding adaptation decision-making and synergies in adaptation and mitigation actions in forest management.



**Danielle Shannon, Northern Institute of Applied Climate Science & Michigan Tech**

Danielle Shannon is the coordinator of the USDA Northern Forests Climate Hub. Danielle connects audiences to forest adaptation resources and experts across the eastern US. Danielle is focused on working with land managers to use NIACS resources on the topic of forest hydrology and the management of forested watersheds and non-forested wetlands.

## REGISTER!

*There is no registration fee thanks to support from the US Forest Service and the USDA Northern Forests Climate Hub.*

**Interested individuals and teams should register at:**

**[forestadaptation.org/online-courses-2020](https://forestadaptation.org/online-courses-2020)**

***Have more questions?***

Contact Maria at [maria.janowiak@usda.gov](mailto:maria.janowiak@usda.gov) or Danielle at [dshannon@mtu.edu](mailto:dshannon@mtu.edu) to learn more about the course and whether it's right for you.