



# ONLINE TRAINING FOREST ADAPTATION PLANNING AND PRACTICES

## Welcome to the course! Here's what you need to know...

You're signed up for the Central Hardwoods and Appalachians Forest Adaptation Planning and Practices online course! We're excited to have you in our class starting January 8, 2019. We look forward to helping you integrate climate change information into your real-world management project. Through this course, you'll be able to:

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

## DETAILS

**Dates:** January 8-February 19, 2019

Seven 1.5-hour sessions

**Weekly, Tuesday, 10:00-11:30am (ET)**

**Web meeting room:** [CLICK HERE](#)

**Phone:** (646) 876-9923

**Meeting ID:** 662 135 064

## Course Time Commitment

To get the most out of this course, we expect you to fully participate. *All participants are expected to attend the seven 1.5 hour class sessions.* We realize that things come up from time to time. If you need to miss a session, please let us know ahead of time and we will make sure you get the slides and other materials from that session. If you anticipate needing to miss more than 2 sessions, you may want to defer participation for another time.

In addition to class time, **there will be up to four hours of homework each week.** The majority of the homework will be for you to develop your climate adaptation plan, but there will be some additional reading assignments as well. The amount of time you spend on homework depends on the complexity of your project and the level of detail you want to put into your adaptation plan.

## Technology and Equipment Needed

Since this is a virtual training, there are some technological requirements. At minimum, you will need high-speed internet access and a phone line. We would also like participants to use a webcam and headset that connects directly to their computer audio if possible. We have found the sound quality is best if you use your

computer audio rather than a phone line. If connecting by phone, a land line will offer better quality than a cell phone. You may also need to disable pop-up blockers or firewalls for accessing the online workbook and webinar software. We are available to help troubleshoot potential issues prior to class.

## Accessibility

If you have a disability and require certain accommodations to fully participate, please let us know before the beginning of the course. We will work with you to ensure your needs are met.

## Education credits

This course is eligible for 21 category 1 Continuing Forestry Education credits by the Society of American Foresters. Let Leslie Brandt ([lbrandt@fs.fed.us](mailto:lbrandt@fs.fed.us)) or Patricia Leopold ([pleopold@mtu.edu](mailto:pleopold@mtu.edu)) know if you will need a certificate.

## Course Format

This course follows a five-step process to develop climate change adaptation projects using the online Adaptation Workbook ([www.adaptationworkbook.org](http://www.adaptationworkbook.org)). The course format will include individual (or group) work time to complete a single step of the adaptation workbook, followed by a group discussion and lecture to review your last step and to get you set up for the next step.

Class will take place every **Tuesday from 10:00-11:30am Eastern (9:00-10:30am Central)**. Our first class is January 8<sup>th</sup> and our last class is February 19<sup>th</sup>.

### CONNECTION DETAILS:

- **Web meeting room:** <https://michigantech.zoom.us/j/662135064>. Please join the first session a bit early; your computer may need to install a small add-on before entering the room.
- **For audio, please choose “Join with Computer Audio” when prompted. If it is not possible to use Computer Audio, please mute your speakers and dial the number below from a land line (preferred) or a mobile phone.**
  - (646) 876-9923
  - 662 135 064

# Course Schedule

## Course Preparation — Complete by January 4

To make sure you're ready to dive into the course during our first session on January 8, we would like you **set up an account at <https://adaptationworkbook.org/> by Friday, January 4**. Instructions for creating an account and linking it to the course are located on *page 7 in this packet*. A single account can be shared among multiple users for group projects.

## Session 1 — January 8, 10-11:30am Eastern

### Topics:

- Icebreaker and introductions
- Course objectives, instructors, and agenda
- Introduction to the Adaptation Workbook online tool
- Developing an adaptation project
- Defining project goals and objectives
- What you need to know for Step 1

### Assignment 1 — Complete by January 14

- Read *Forest Adaptation Resources, 2nd edition*, in particular the **Introduction** (pgs. 1-9) and the **Adaptation Workbook** (Chapter 5, pgs. 74-89).
- Complete step 1 of the Adaptation Workbook (online at <https://adaptationworkbook.org/>).
- Complete the Homework section following Step 1.
- Record a 1 minute (or less) introduction of yourself and your work on Flipgrid (using your phone or device): <https://flipgrid.com/3df15679>

## Session 2 — January 15, 10-11:30am Eastern

### Topics:

- Discussion of Step 1
- Considering climate change impacts and vulnerabilities in your projects
- What you need to know for Step 2

### Assignment 2 — Complete by January 21

- ***Set aside 3-4 hours for completion since this is a more involved step.***
- Complete Step 2 of the Adaptation Workbook: Assess climate impacts and vulnerabilities.
- Complete Homework 2 at the end of Step 2.
- Review regional climate impacts to prepare for Step 2 by watching a recorded presentation (~25min) and/or read a climate report for your specific geographic area:
  - **Regional forest ecosystem vulnerability assessments authored by NIACS** can be found [here](#).
    - The [Central Appalachians Assessment](#) covers eastern Ohio, West Virginia, and western Maryland
    - The [Central Hardwoods Assessment](#) covers southern Missouri, Illinois, and Indiana

- The [Mid-Atlantic Assessment](#) covers Pennsylvania, eastern Maryland, Delaware, New Jersey, and southern New York
- **State-wide Climate Summaries from NOAA** can be found [here](#).
- Additional information on **tree species vulnerability**, and shifts in **heat and hardiness zones**, found here:
  - Find tree species habitat suitability information for the entire Midwest, Northeast and Southeast at the [USFS Tree Atlas tool](#) or select your location-specific information for these areas:
    - [Central Hardwoods regions](#)
    - [Central Appalachians regions](#)
    - [Mid-Atlantic regions](#)
    - [Pennsylvania](#)
  - Explore Shifts in Growing Degree Days, Plant Hardiness Zones, and Heat Zones using this [interactive story map](#) (maps display for the contiguous USA)

### Session 3 — January 22, 10-11:30am Eastern

#### Topics:

- Discussion of Step 2
- Identifying management challenges and opportunities for your project
- Re-considering and revising management goals/objectives in light of climate challenges
- What you need to know for Step 3

#### Assignment 3 — Complete by January 28

- ***Set aside 2-4 hours for completion, as time will vary based upon your project.***
- Complete Step 3 of the Adaptation Workbook: Evaluate objectives considering climate impacts.
- Complete Homework 3 at the end of Step 3.

### Session 4 — January 29, 10-11:30am Eastern

#### Topics:

- Discussion of Step 3
- Adaptation concepts: resisting change, enhancing resilience, and facilitating transitions
- Developing specific actions for climate-change adaptation
- What you need to know for Step 4

#### Assignment 4 — Complete by February 4

- ***Set aside 3-4 hours for completion since this is a more involved step.***
- Read chapter 3, Forest Adaptation Strategies and Approaches, in [Forest Adaptation Resources](#)
- Complete Step 4 of the Adaptation Workbook: Identify adaptation approaches and tactics.
- Complete Homework 4 at the end of Step 4.

### Session 5 — February 5, 10-11:30am Eastern

#### Topics:

- Discussion of Step 4
- Tools for measuring effectiveness of implemented adaptation actions

- Capitalizing on existing data, inventory or monitoring processes/partnerships
- What you need to know for Step 5

#### **Assignment 5 – Complete by February 11**

- ***Set aside 2-3 hours for completion, as time will vary based upon your project.***
- Complete Step 5 of the Adaptation Workbook: Monitor effectiveness of implemented actions.
- Complete Homework 5 at the end of Step 5.
- Optional reading on monitoring:
  - [Janowiak et al. 2017. Assessing Stand-Level Climate Change Risk Using Forest Inventory Data and Species Distribution Models](#)

#### **Session 6 — February 12, 10-11:30am Eastern**

##### ***Topics:***

- Discussion of Step 5
- Completing the Adaptation Workbook
- Tips for talking about climate change with colleagues, stakeholders, and clients

#### **Assignment 6 — Complete by February 18**

- ***Set aside 3-4 hours for completion of this assignment, or potentially more if you have to return to some previous steps.***
- Finish up any loose ends in the Adaptation Workbook.
- Complete Homework 6 within the Adaptation Workbook.
- Summarize your project to share with the course participants as well as your colleagues and partners in a PowerPoint presentation (templates will be provided).
- Optional reading on climate change communication
  - [Moser et al. 2017. Communicating Climate Change Adaptation and Resilience.](#)
  - [Communicating climate change adaptation: A practical guide to values-based communication](#)

#### **Session 7 — February 19, 10-11:30am Eastern**

##### ***Topics:***

- Participant adaptation project presentation
- Next steps for moving toward implementation
- How we can help you in the future
- Course evaluations



## Instructors & Contact Information



**Leslie Brandt**

**Northern Institute of Applied Climate Science & US Forest Service**

Leslie coordinates the Central Hardwoods Climate Change Response Framework in Indiana, Illinois, and Missouri and is currently involved in a climate assessment for the state of Indiana. She has led trainings for the general public and natural resource professionals on climate change impacts and throughout the Midwest and Northeast, and has been recently focused on adapting urban forests to climate change.

651-491-3529 (cell) 651-649-5016 (office)

[LBRANDT@FS.FED.US](mailto:LBRANDT@FS.FED.US)



**Patricia Leopold**

**Northern Institute of Applied Climate Science & Michigan Tech**

Patricia serves as coordinator for the Climate Change Response Framework projects in the Central Appalachians and Mid-Atlantic regions. She has recently assisted the Pennsylvania Department of Conservation and Natural Resources to complete a vulnerability assessment and adaptation plan. Patricia continues to work with partners in both regions to incorporate climate change into planning and management.

906-482-6303 x 1312

[PLEOPOLD@MTU.EDU](mailto:PLEOPOLD@MTU.EDU)

This course is a collaboration among the Northern Institute of Applied Climate Science, the US Forest Service, and the USDA Northern Forests Climate Hub.



United States Department of Agriculture  
Northern Forests Climate Hub



# Setting up Your Account and Course Project

Please set up your Adaptation Workbook account (If you haven't already done so) by Friday, January 4 so that we can make the course features available to you before you start.

- **IMPORTANT! Do not start a course project before getting confirmation from an instructor that you've been added to the course or you may have to start over from the beginning.**
- If you have a small team, use one person's email address to create an account that you can share among the group. You can then take turns working on the course project and decide how to tackle course assignments among your team.

## Creating an Account

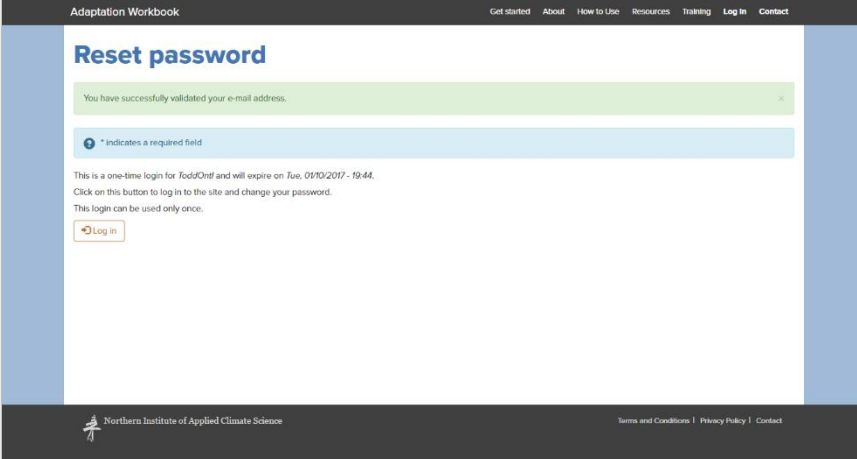
- a. Navigate to [www.AdaptationWorkbook.org](http://www.AdaptationWorkbook.org). Click on "Get Started" to create an account



- b. Create a new account by entering a username, email address, and other information. Be sure to check the terms and conditions/privacy policy check box, as well as the check box allowing us to help you as you go through the workbook. When you have entered all of the information, click "Create new account."

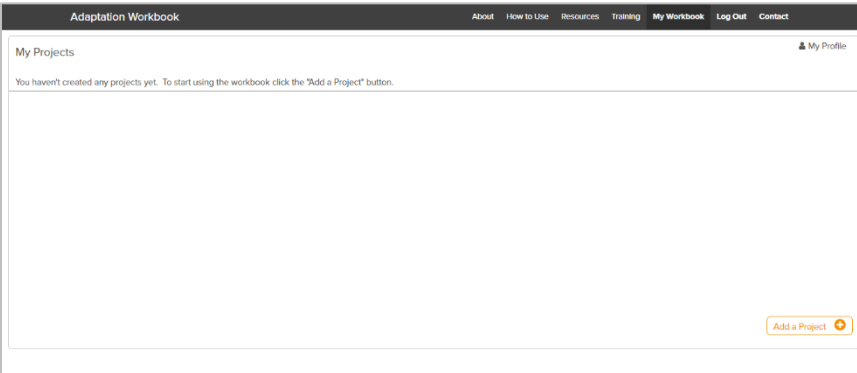
The screenshot shows the "Create new account" form on the Adaptation Workbook website. The form is titled "Create new account" and includes a note: "You are not logged in." with buttons for "I have an account" and "I want to create an account". The form fields include: Username \*, Email address \*, Confirm e-mail address \*, Profile (Your full name \*, Organization), and two checkboxes: "I have read and agree to the Adaptation Workbook terms and conditions and privacy policy." and "It is OK to contact me about my Adaptation Workbook experience or to offer me assistance in my planning process". A red arrow points to the second checkbox. At the bottom, there's a note: "By submitting this form, you accept the Mollom privacy policy." and a "Create new account" button. The footer is identical to the homepage screenshot.

- c. The following screen will direct you to confirm your new account. You will need to check the email of the account that you've linked to the Adaptation Workbook, find a confirmation email (from [info@adaptationworkbook.org](mailto:info@adaptationworkbook.org)), and click the confirmation link. Your confirmation email should arrive within a few hours. Check your spam folder if you don't see it in your inbox!
- d. The link will take you to a one-time login screen that will require you to create a site password. Click "Log in" and create a password on the following screen.



The screenshot shows the 'Reset password' page of the Adaptation Workbook. The page has a dark header with the title 'Adaptation Workbook' and navigation links: 'Get started', 'About', 'How to Use', 'Resources', 'Training', 'Log in', and 'Contact'. The main content area has a light blue background. At the top, there's a green success message: 'You have successfully validated your e-mail address.' Below this is a blue box with an information icon and the text: '\* Indicates a required field'. Further down, there's a message: 'This is a one-time login for FoddiOn! and will expire on Tue, 09/10/2017 - 19:44. Click on this button to log in to the site and change your password. This login can be used only once.' At the bottom of this section is a 'Log in' button with a key icon. The footer contains the logo for the Northern Institute of Applied Climate Science and links for 'Terms and Conditions', 'Privacy Policy', and 'Contact'.

- e. Once logged in, you will see your Workbook dashboard.



The screenshot shows the 'My Projects' dashboard of the Adaptation Workbook. The page has a dark header with the title 'Adaptation Workbook' and navigation links: 'About', 'How to Use', 'Resources', 'Training', 'My Workbook', 'Log Out', and 'Contact'. The main content area has a light gray background. At the top, there's a section titled 'My Projects' with a user profile icon and the text: 'You haven't created any projects yet. To start using the workbook click the "Add a Project" button.' Below this is a large empty box for projects. At the bottom right of this box is an 'Add a Project' button with a plus icon. The footer is not visible in this screenshot.

## IMPORTANT!

Although you can use the Adaptation Workbook in its regular configuration at any time, **you will need to create a course project** to use during the Forest Planning and Practices course in order to access course content and additional materials.

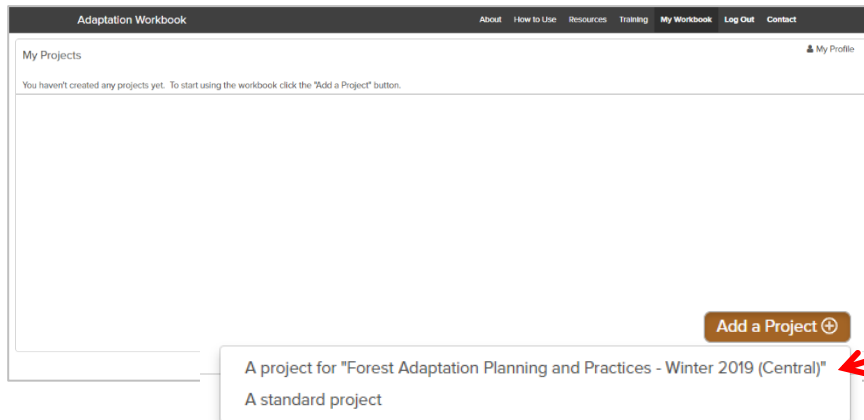
**Before starting a course project, send the email address associated with your Adaptation Workbook account to Leslie Brandt ([lbrandt@fs.fed.us](mailto:lbrandt@fs.fed.us)) with the subject "Add Course Project".**



# Starting a Course Project

After you have been added to the course, you will be able to start a course project.

- a. When you log into the Adaptation Workbook, you will be sent to the project dashboard.
- b. Click on the orange “Add a Project” button and then select “A Project for ‘Forest Adaptation Planning and Practices – Winter 2019 (Central).’”



**IMPORTANT! You must select “A Project for ‘Forest Adaptation Planning and Practices – Winter 2019 (Central).’” to start.**

- c. Place a marker at the approximate location of the project. Note that if you want to maintain privacy, you can select a nearby intersection or town. Some tips for placing the marker are:

- Use the (+) and (-) buttons to zoom in and out.
- Click and hold the map to pan the view.
- A single click will place the marker on the map.
- To move the marker, click and drag it to the desired location.

**Location**

Click on the map to drop a marker that indicates the center of your property or project area. After the marker is placed on the map, you can click and hold to drag the marker to a new location.

**Details**

**Name**  Give your project a short, recognizable name.

**Description**  Provide a short description of the project here. You can add details about whether you're using the Adaptation Workbook to consider only a portion of a single property, an entire property, a collection of properties, or a larger landscape. You also might want to note whether the property has an existing management plan, for example.

**Acres**  How large is your project

**Size**

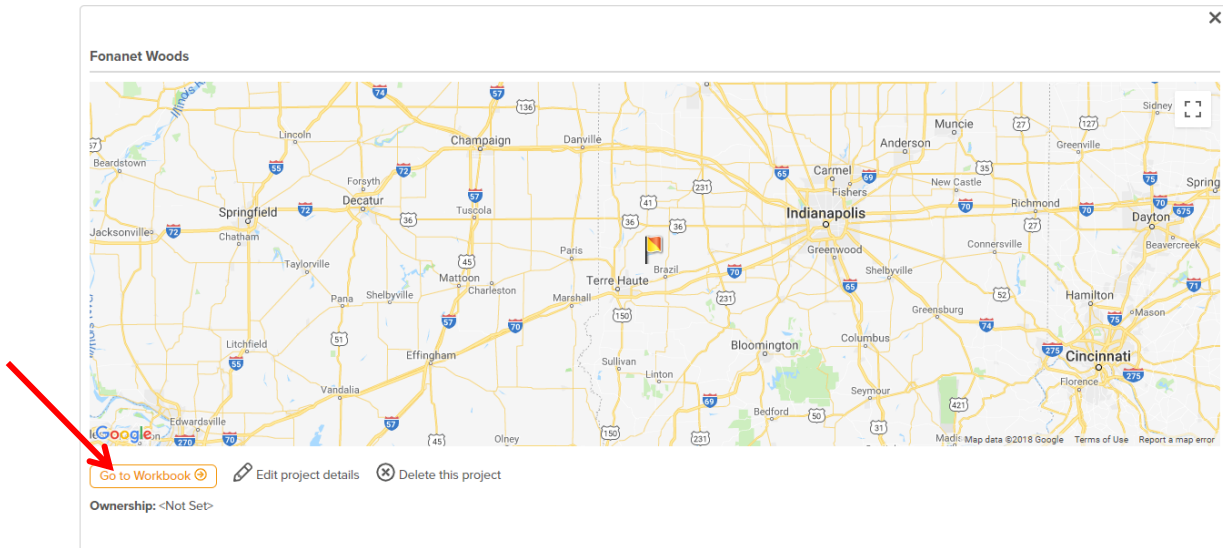
**Ownership**

**Project Type** ☒ Forest ☐ Urban ☐ Agriculture ☐ Forested watershed

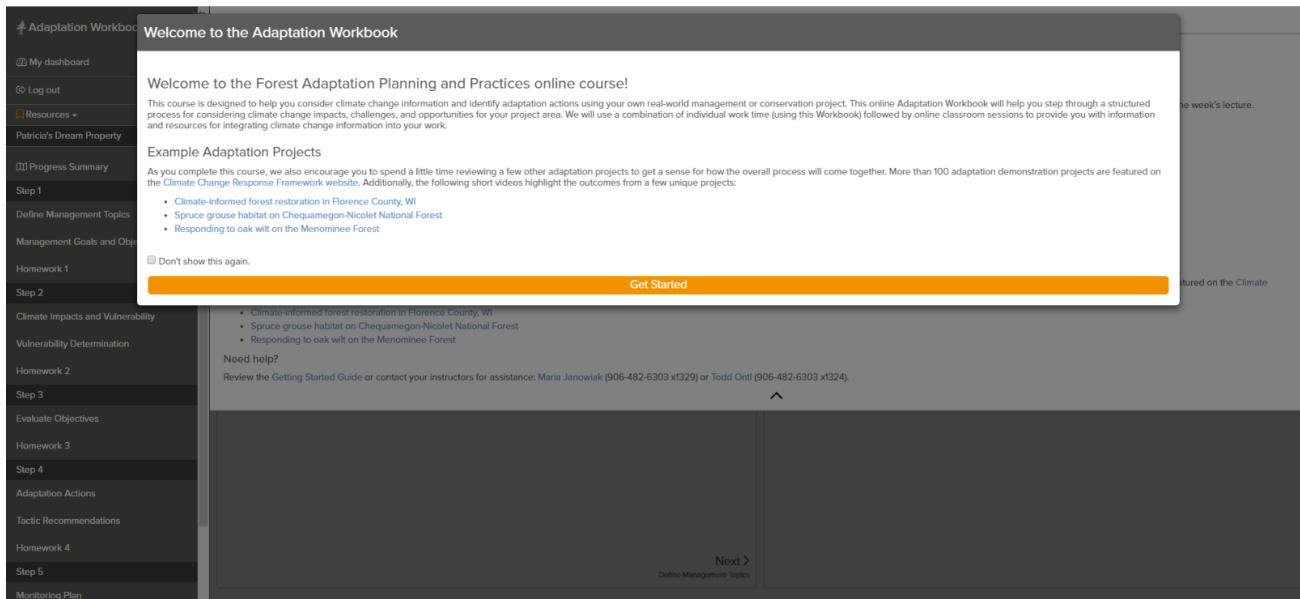
Select “forest”

d. Enter a project name, description, acreage, and ownership. The level of detail that you provide is up to you—this information will be included in the project summary report that you may want to produce upon completion. For “project type” select “forest”.

e. This project will now appear in your dashboard. To begin your project, click “Go to Workbook.”



f. A short dialog will appear with more information about the course. Read the information and click “Get Started.”



**Any questions or issues?**  
**Contact Leslie at [lbrandt@fs.fed.us](mailto:lbrandt@fs.fed.us) or 651-491-3529.**