



ONLINE TRAINING

FOREST ADAPTATION PLANNING AND PRACTICES

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

You are re signed up for the Forest Adaptation Planning and Practices online course for New England and New York! We're excited to have you in our class. ***This class will start on February 19 and finish on April 2.*** 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

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.

DETAILS

Dates: February 19- April 2, 2019

Seven 1.5-hour sessions

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

Web meeting room: [CLICK HERE](#)

Phone: (646) 876-9923

Meeting ID: 189 914 331

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 Maria Janowiak (maria.janowiak@usda.gov) 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). 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**. We anticipate that first class will start 2-3 weeks after the end of the government shutdown in order to give everyone time to prepare.

CONNECTION DETAILS:

- **Web meeting room:** <https://michigantech.zoom.us/j/189914331>. 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
 - Passcode: 189 914 331

Course Schedule

Course Preparation — Complete before the first session

To make sure you're ready to dive into the course during our first session, we would like you **set up an account at www.adaptationworkbook.org by February 15**. 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 — Tuesday, February 19, 10-11:30am

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 — Due one day before the next session

- 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 www.adaptationworkbook.org/).
- Complete the Homework section following Step 1.
- Record a brief introduction of yourself and your work on Flipgrid (using your computer or phone): <https://flipgrid.com/d548c591>
- Optional: If you want CFE credits, your SAF member and/or state license number to Maria

Session 2 — Tuesday, February 26, 10-11:30am

Topics:

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

Assignment 2 — Due one day before the next session

- **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 [New England and Northern New York Assessment](#) covers the six New England states and the Adirondacks region of New York.
 - 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:
 - [New England and Northern New York regions](#)
 - [Mid-Atlantic regions](#)
 - 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 — Tuesday, March 5, 10-11:30am

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 — Due one day before the next session

- ***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 — Tuesday, March 12, 10-11:30am

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 — Due one day before the next session

- ***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 — Tuesday, March 19, 10-11:30am

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 – Due one day before the next session

- ***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 — Tuesday, March 26, 10-11:30am

Topics:

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

Assignment 6 — Due one day before the next session

- ***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 — Tuesday, April 2, 10-11:30am

Topics:

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

Instructors & Contact Information

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



Maria Janowiak is Deputy Director for the Northern Institute of Applied Climate Science. She coordinates 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. Outside of work, Maria is often found spending time with her bicycles and garden.

Email: mjanowiak02@fs.fed.us Phone: 906-482-6303 x1329

Todd Ontl, USDA Northern Forest Climate Hub & US Forest Service



As a Fellow for the Northern Forests Climate Hub at NIACS, his primary role is to add capacity to the education and outreach efforts of the Climate Change Response Framework while conducting research on understanding forest adaptation decision making of land managers and woodland owners throughout the Midwest and New England. Todd spends his free time woodworking and planting as many fruit trees as his wife allows him to purchase for their property.

Email: tontl@fs.fed.us

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



What if the scheduled times don't work for me?

Reach out to Maria and Todd to learn more about other options. This may include attending an in-person training in 2019 or receiving individualized technical assistance on your project.

What if there's another government shutdown?

Several federal agencies, including the USDA Forest Service, are on a continuing resolution that will keep these agencies funded through February 15, 2019, while agreement is reached on a longer-term budget. In the event that there is another lapse in federal funding that results in the Forest Service being closed on Tuesday, February 19 (the day of the first scheduled session), we will:

- Delay the course one more week, with a start date on Tuesday, February 26. The seven-week course would then end one week later on April 9.
- In the event that the government shuts down and remains closed on Tuesday, February 26, the course would be cancelled for 2019.

Setting up Your Account and Course Project

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

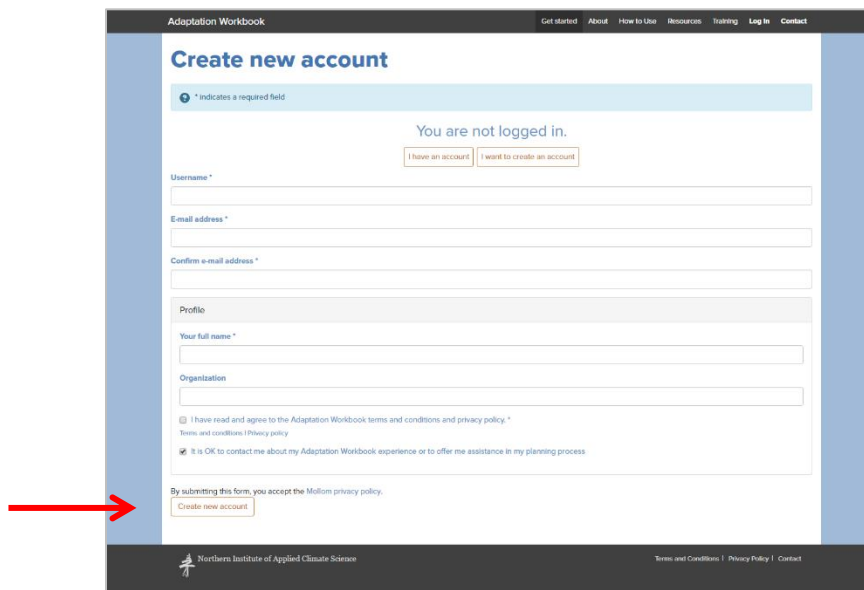
- **IMPORTANT! Do not start a course project before getting confirmation from an instructor that you've been added to the course or you may have to start over from the beginning.**
- If you have a small team, use one person's email address to create an account that you can share among the group. You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

Creating an Account

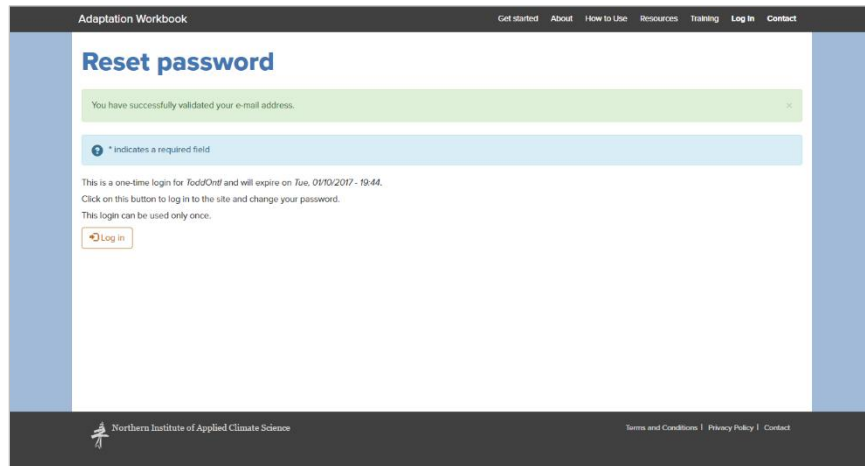
a. Navigate to www.AdaptationWorkbook.org. Click on "Get Started" to create an account



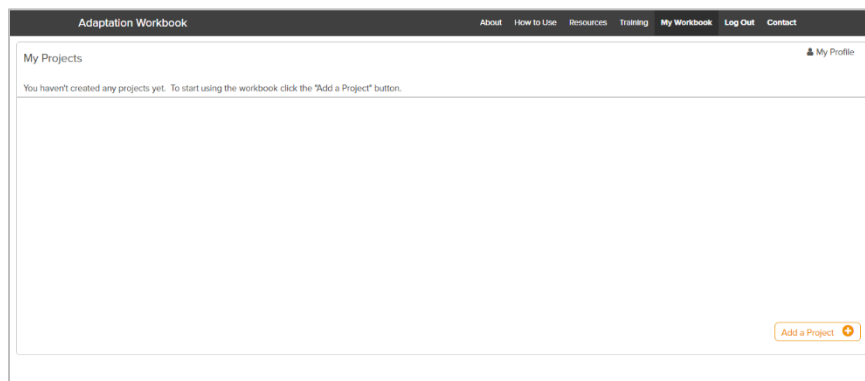
b. Create a new account by entering a username, email address, and other information. Be sure to check the terms and conditions/privacy policy check box, as well as the check box allowing us to help you as you go through the workbook. When you have entered all of the information, click "Create new account."



- 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), 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.



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



IMPORTANT!

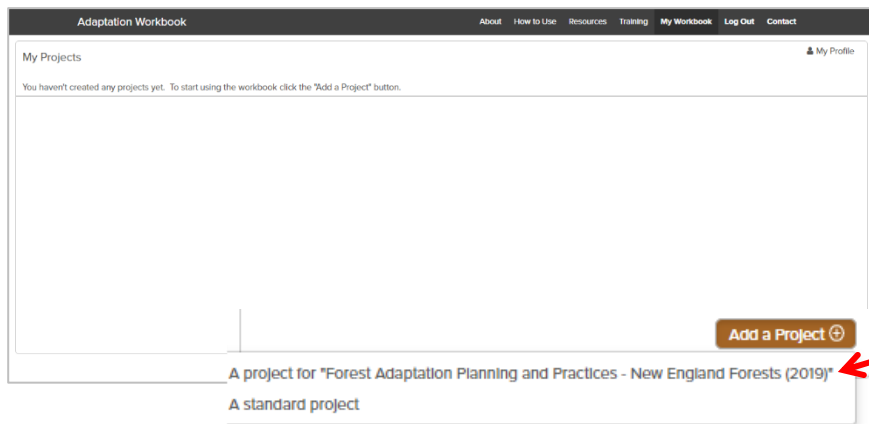
Although you can use the Adaptation Workbook in its regular configuration at any time, **you will need to create a course project** to use during the Forest Planning and Practices course in order to access course content and additional materials.

Before starting a course project, send the email address associated with your Adaptation Workbook account to Maria Janowiak (maria.janowiak@usda.gov) 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.

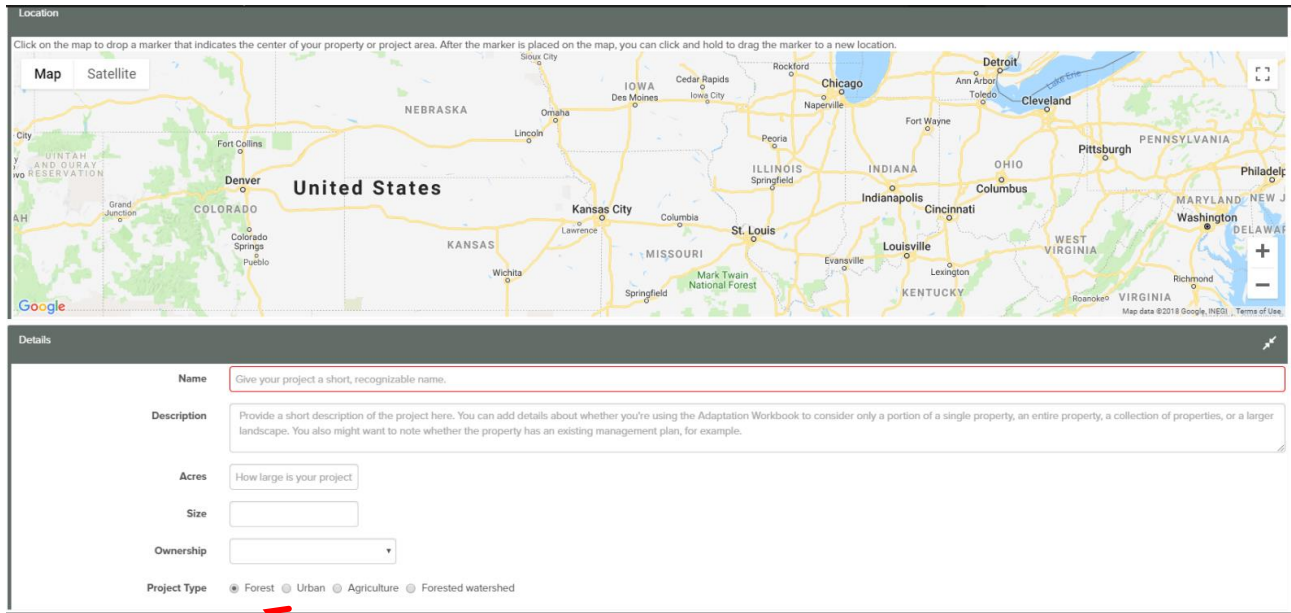
- a. When you log into the Adaptation Workbook, you will be sent to the project dashboard.
- b. Click on the orange “Add a Project” button and then select “A Project for ‘Forest Adaptation Planning and Practices – New England Forests (2019)’”



IMPORTANT! You must select “A Project for ‘Forest Adaptation Planning and Practices – New England Forests (2019)’” 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:

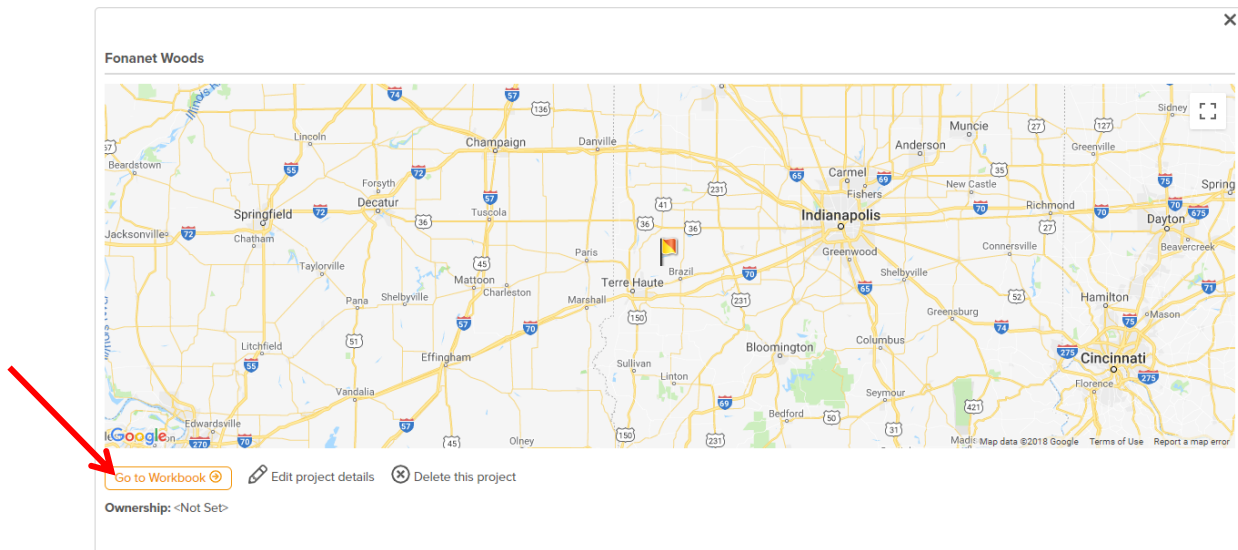
- Use the (+) and (-) buttons to zoom in and out.
- Click and hold the map to pan the view.
- A single click will place the marker on the map.
- To move the marker, click and drag it to the desired location.



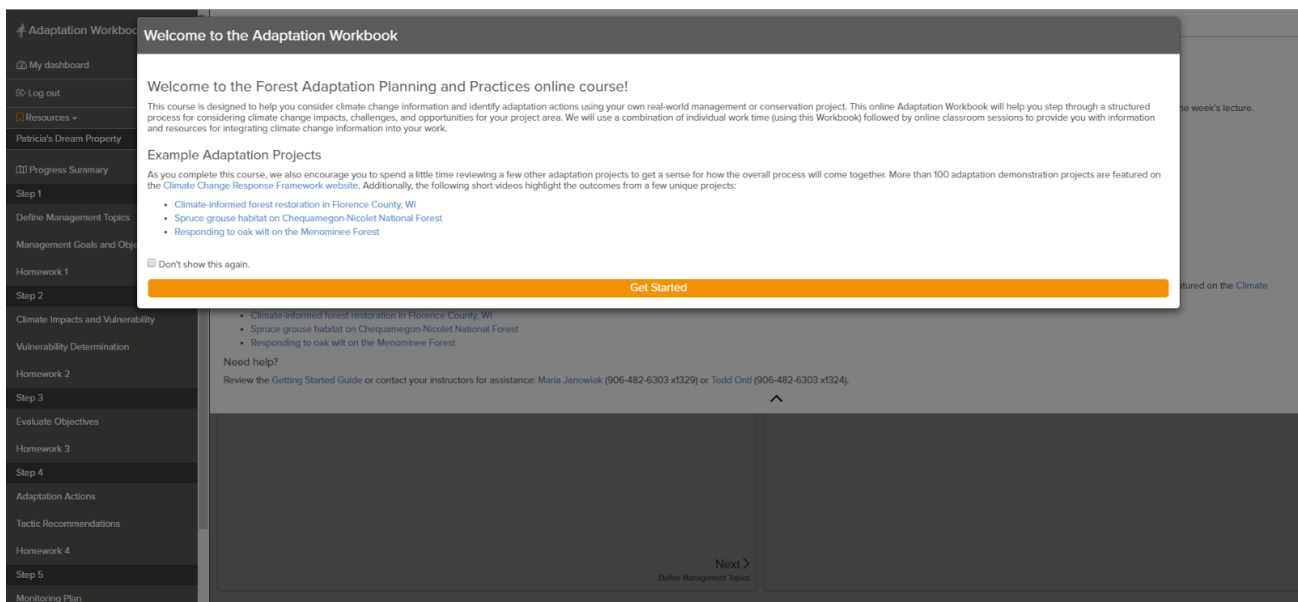
Select “forest”

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 Maria Janowiak at maria.janowiak@usda.gov or 906-482-6303 x1329