Forest Adaptation Planning and Practices

~ Online Course ~

Session 1: Introduction to the Online Course and Adaptation Workbook

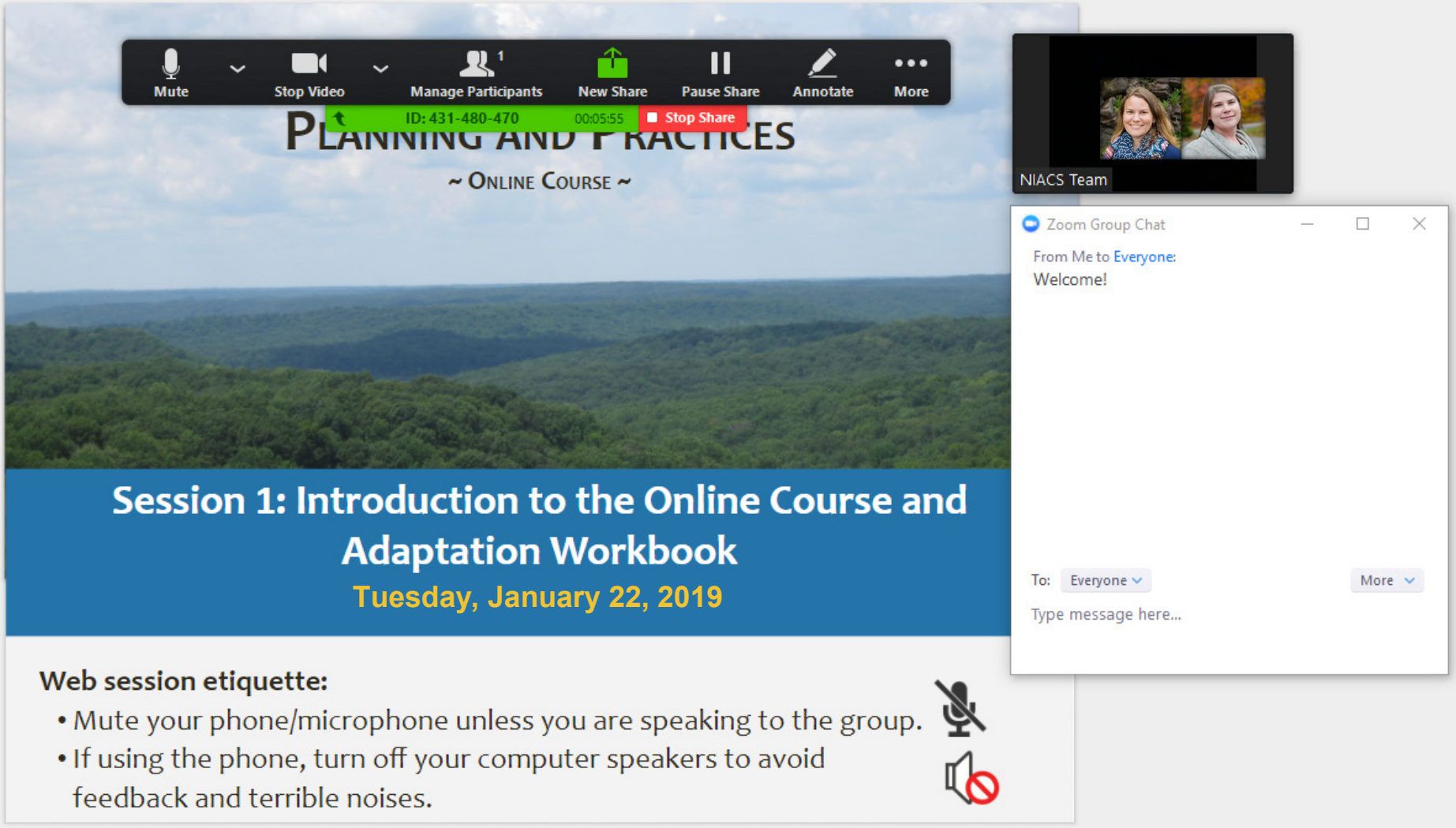
Tuesday, January 22, 2019

Web session etiquette:

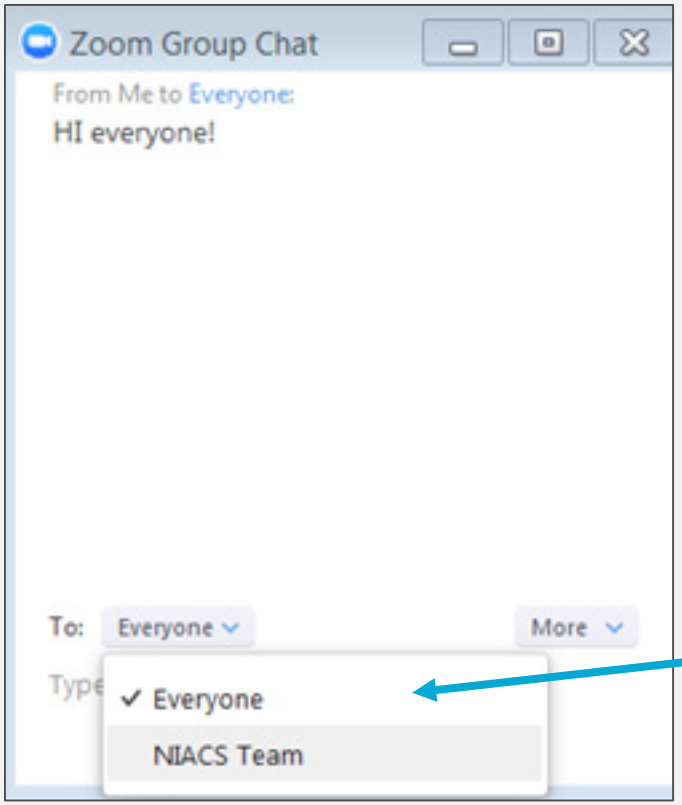
- Mute your phone/microphone unless you are speaking to the group.
- If using the phone, turn off your computer speakers to avoid feedback and terrible noises.

Add A Chat Box

What you should see:



Sending Chats



Try it: send a chat to "Everyone" by typing your Name and organization

Northern Institute of Applied Climate Science

Climate

Carbon

Provides **practical** information, resources, & technical assistance related to forests and climate change

Regional multi-institutional partnership among:

www.nrs.fs.fed.us/niacs

Welcome!

Danielle Shannon

dshannon@mtu.edu

Northern Institute of Applied Climate Science

Michigan Technological University

www.forestadaptation.org

Patricia Leopold

pleopold@mtu.edu

Northern Institute of Applied Climate Science

Michigan Technological University

www.forestadaptation.org

Leslie Brandt

lbrandt@fs.fed.us

Northern Institute of Applied Climate Science

US Forest Service

www.forestadaptation.org

NIACS
Northern Institute of Applied Climate Science

USDA
United States Department of Agriculture
Northern Forests Climate Hub

FOREST SERVICE
US
DEPARTMENT OF AGRICULTURE

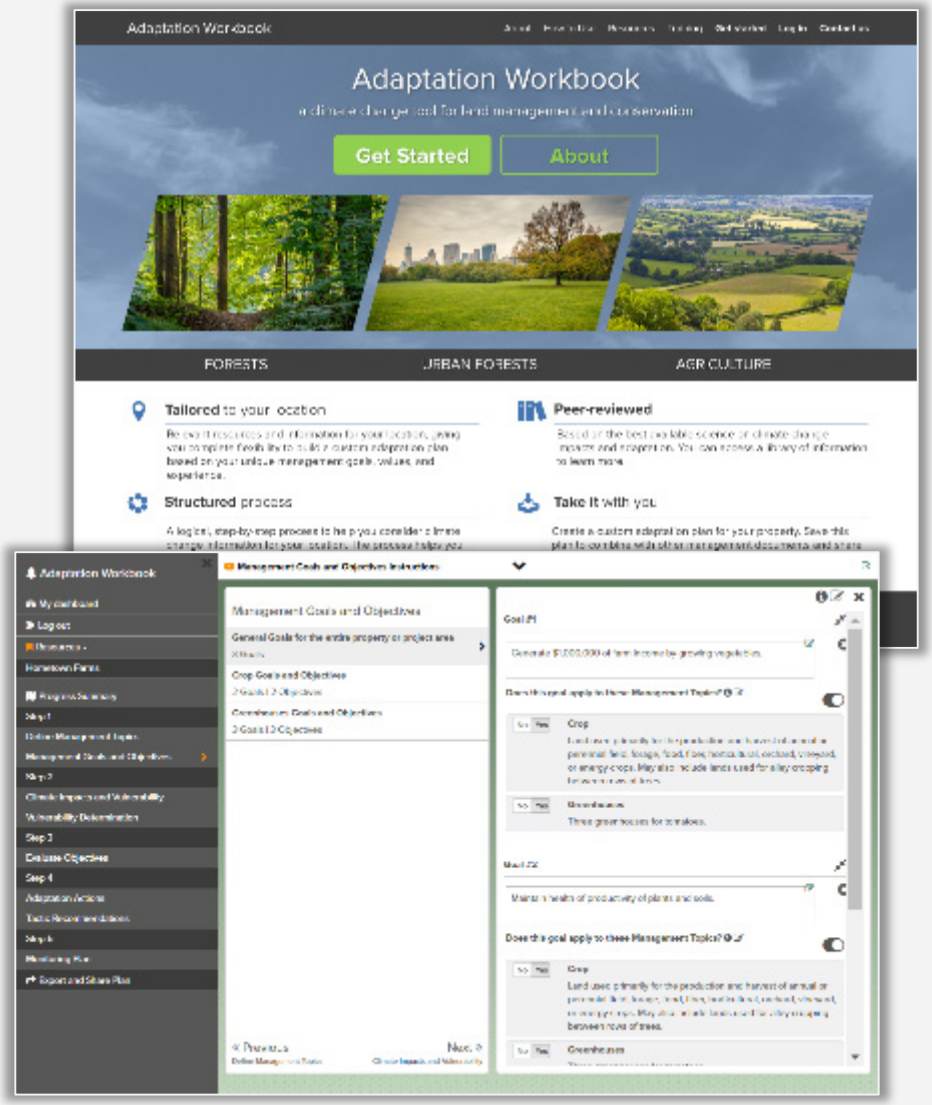
Welcome!

Introduce yourselves!

- Name
- Organization
- Location

Today's Agenda

- Welcome, introductions & overview
- Step 1 introduction & assignment
- Adaptation Workbook tour/demonstration
- Discussion: Share your project ideas



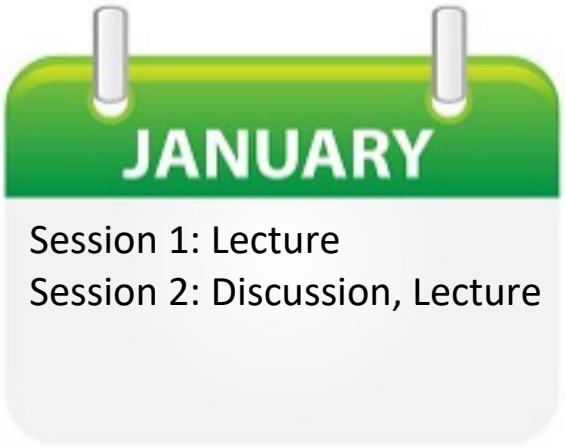
Course Objectives

Integrate climate change considerations into real-world projects for forest management and conservation

- Identify local climate change impacts, challenges, and opportunities
- Develop specific actions to adapt to changing conditions
- Create your own “climate-informed” projects
- Better communicate with stakeholders
- Plus: Access post-training support from NIACS staff during project planning and implementation

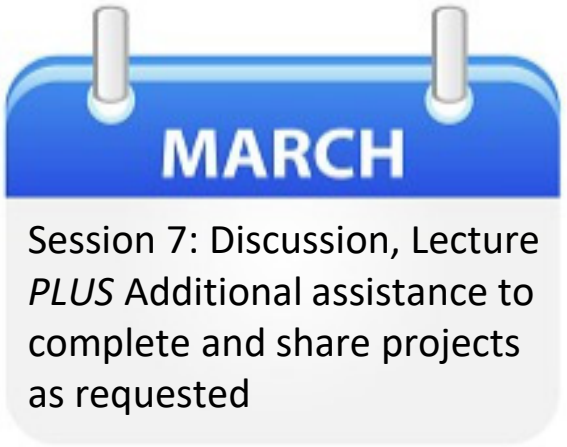
Course Expectations

- Attend all 7 lecture sessions and all 6 discussion sessions
  - Let us know as soon as possible if you must miss a course
  - Try to have at least one person from your project at each session
  - You will only receive CFEs for classes you attend.



Session 1: Lecture
Session 2: Discussion, Lecture

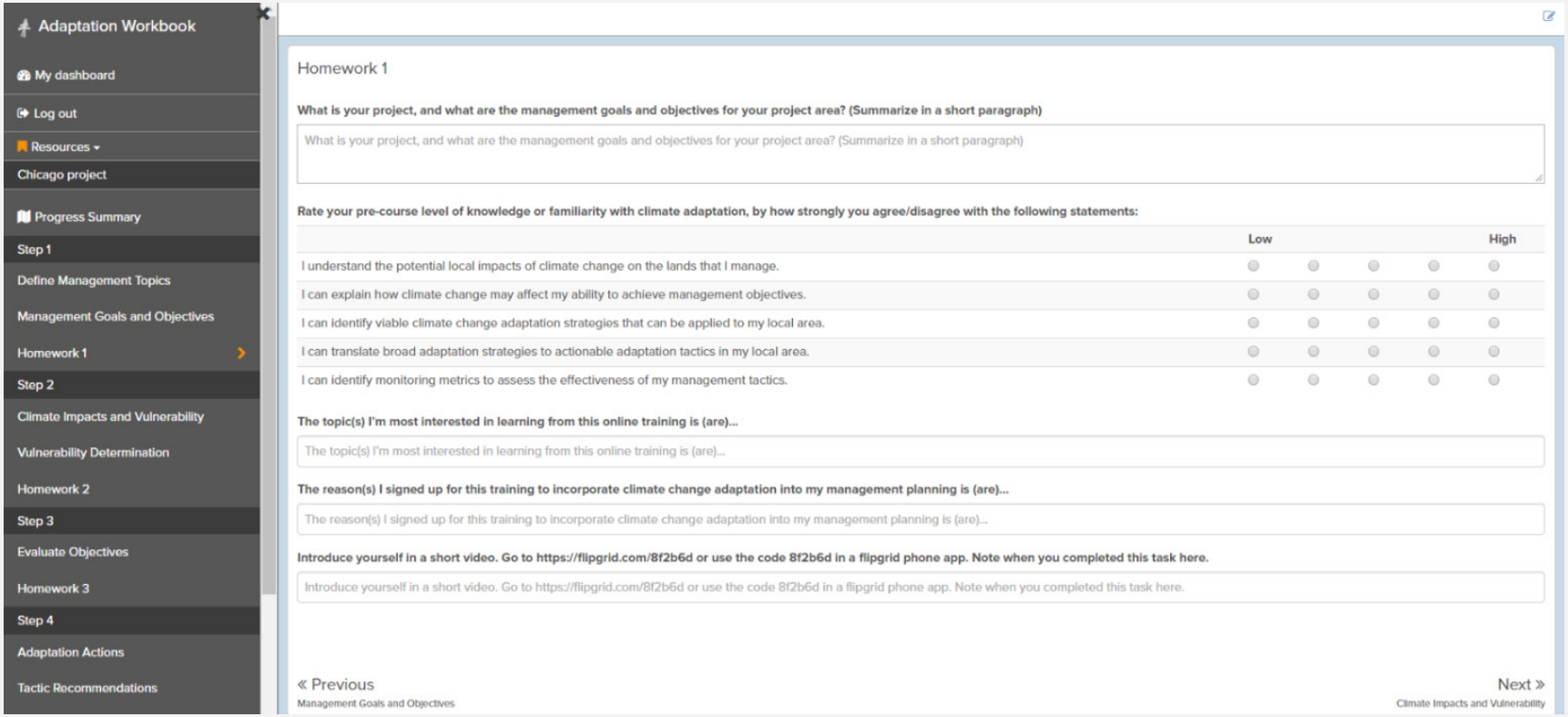
Session 3: Discussion, Lecture
Session 4: Discussion, Lecture
Session 5: Discussion, Lecture
Session 6: Discussion, Lecture



Session 7: Discussion, Lecture
PLUS Additional assistance to complete and share projects as requested

Course Expectations

- Complete all homework by the deadline: **Sunday** night before the next class
  - If you know you'll be busy later on, work ahead!

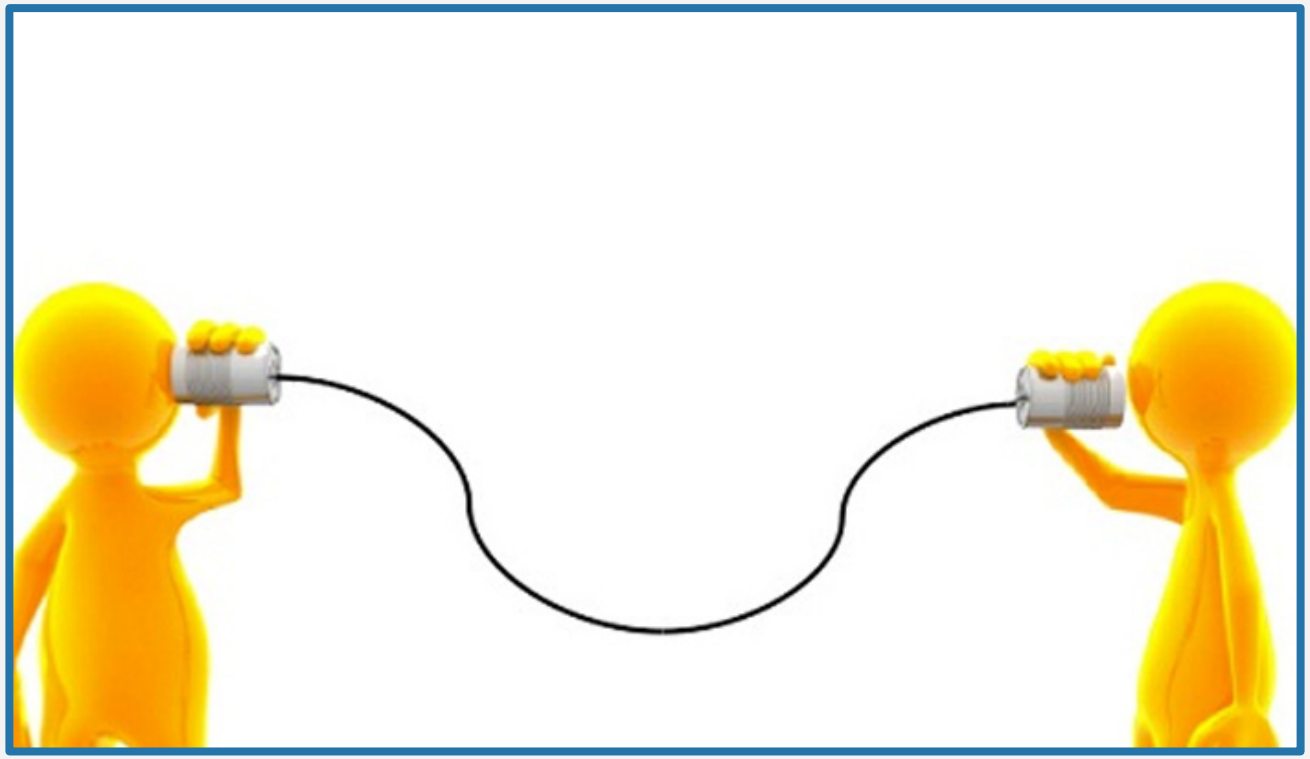


Course Expectations

- Be fully engaged in the course
  - close your email
  - mute your cell phone
  - shut your door or put up a sign that says “I’m in class” at your cube

Course Expectations

- Collaborate with your classmates
- Share your ideas and struggles



Questions?

Defining “Adaptation”

Adaptation actions are designed to specifically address climate change impacts and vulnerabilities in order to meet climate-informed goals and objectives.

Adaptation Actions Can Be…

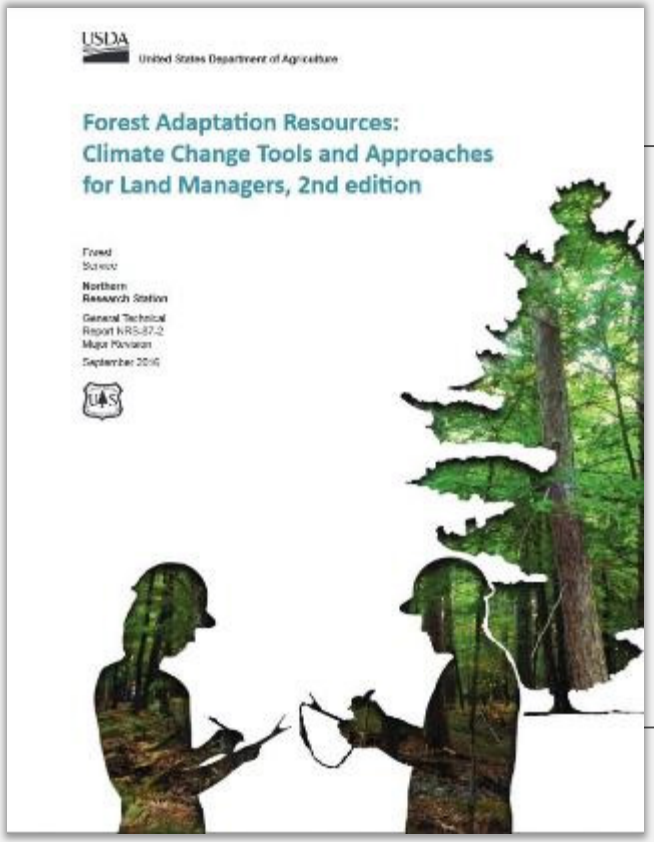
Small "tweaks" *that improve effectiveness*

Same actions– *climate change just makes them that much more important*

New & different *actions to consider, even some that may seem* ***wild & crazy***

**individual results will vary*

Forest Adaptation Resources



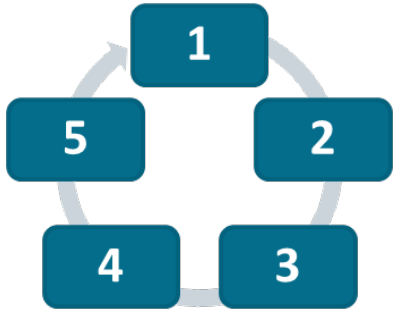
Swanston et al. 2016;
www.nrs.fs.fed.us/pubs/52760

Strategies & Approaches

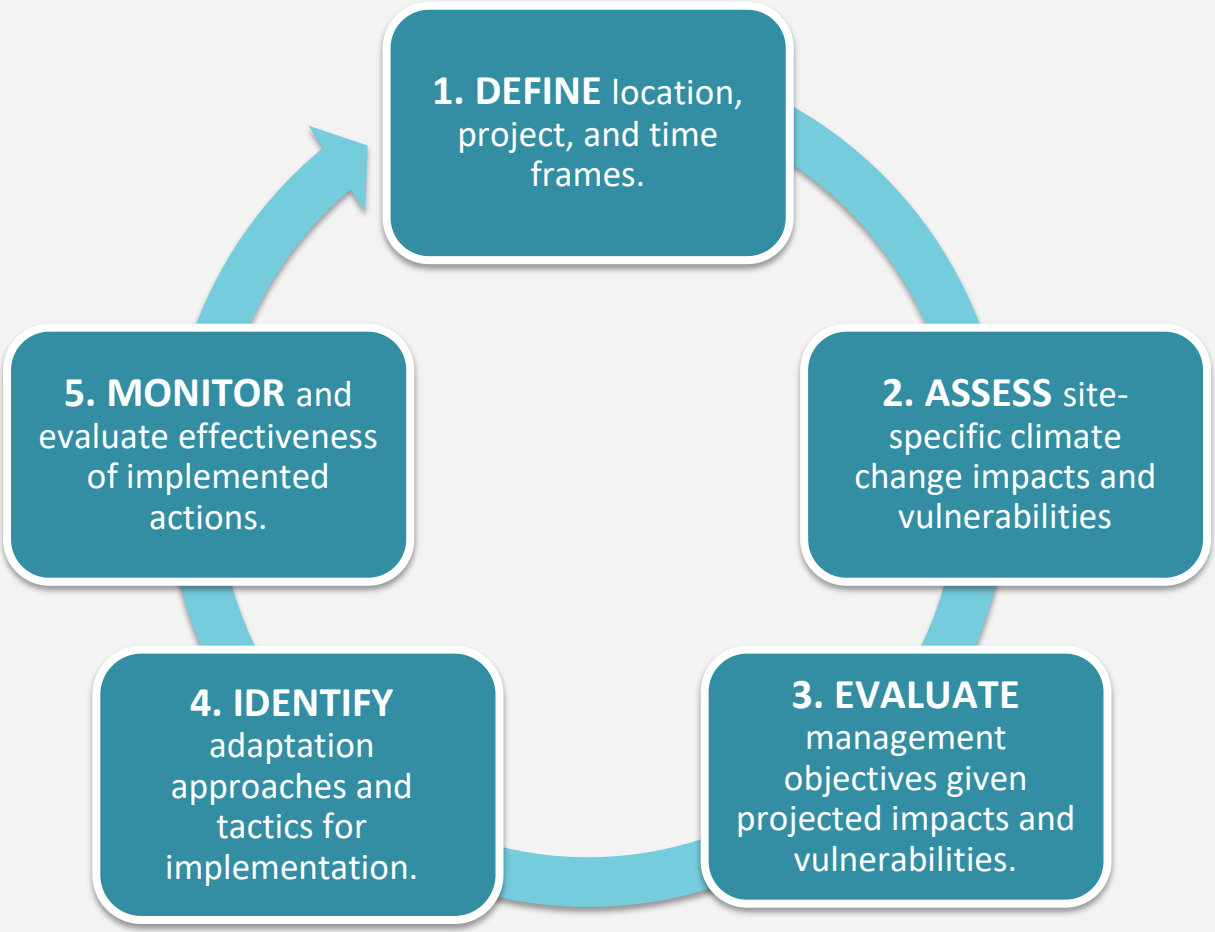
Menu of adaptation actions

Adaptation Workbook

- Structured process to integrate climate change considerations into management
- Workbook approach



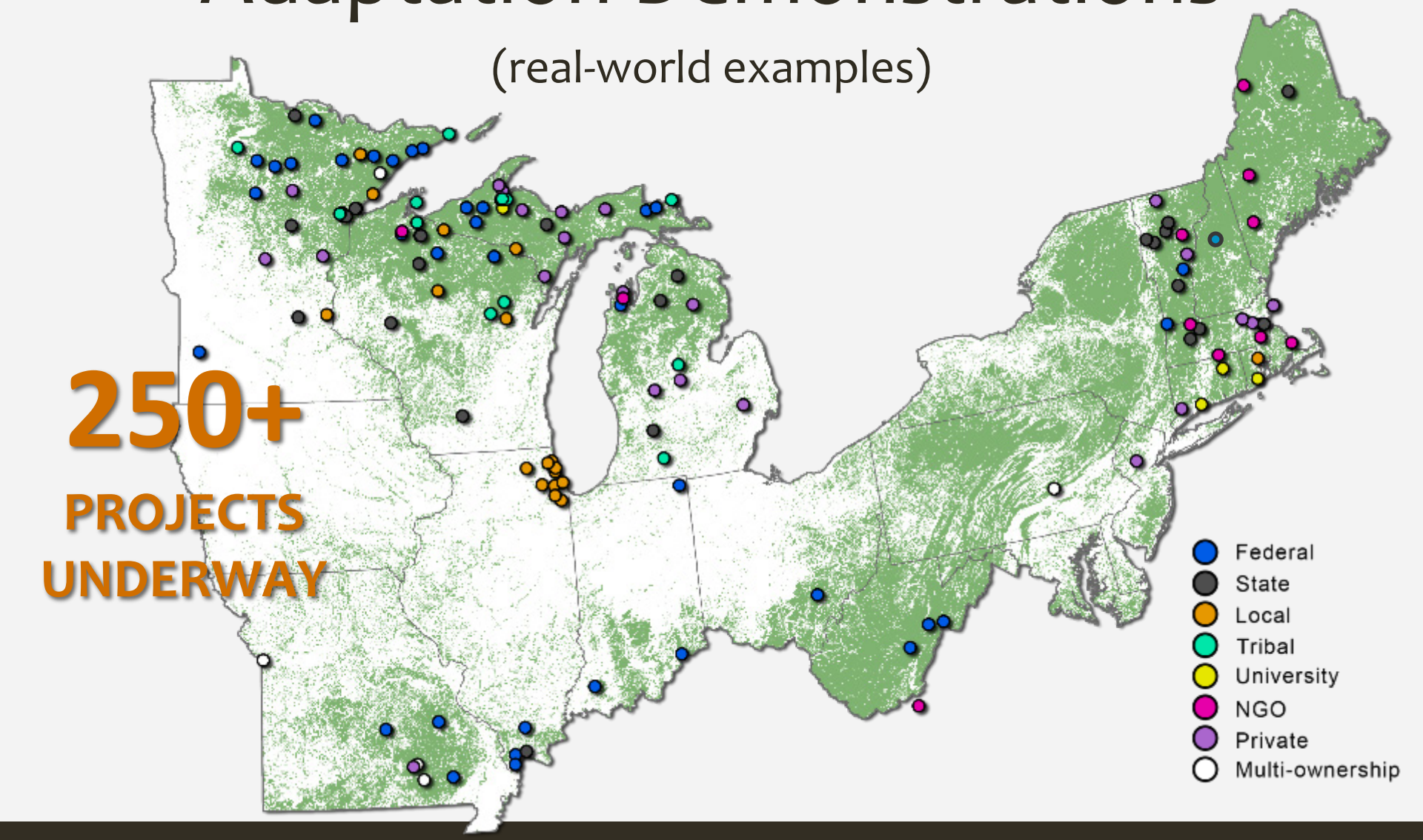
Adaptation Workbook Process



www.nrs.fs.fed.us/pubs/52760

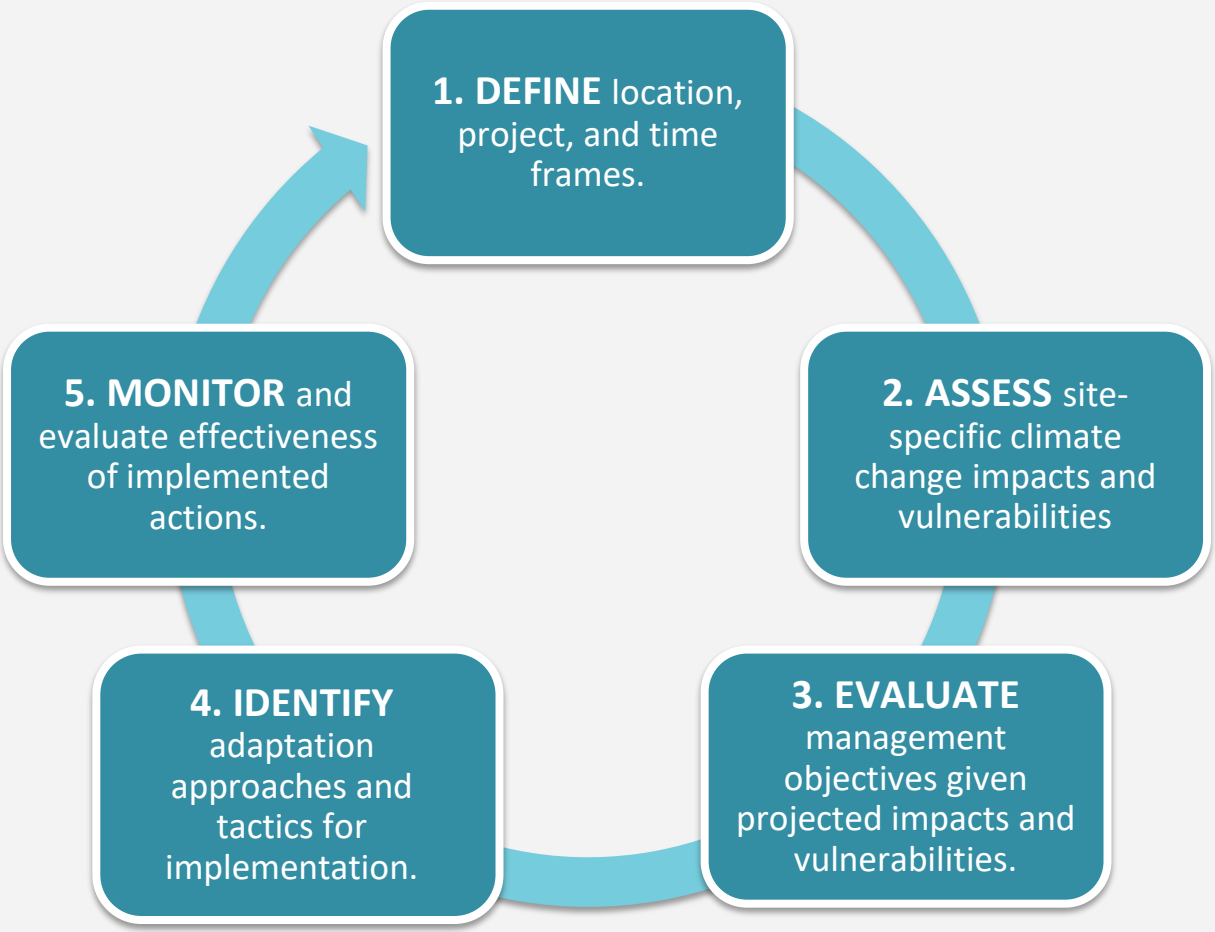
Adaptation Demonstrations

(real-world examples)



www.forestadaptation.org/demos

Adaptation Workbook Process



www.nrs.fs.fed.us/pubs/52760

Questions?

Step 1: DEFINE location, project, and time frames.

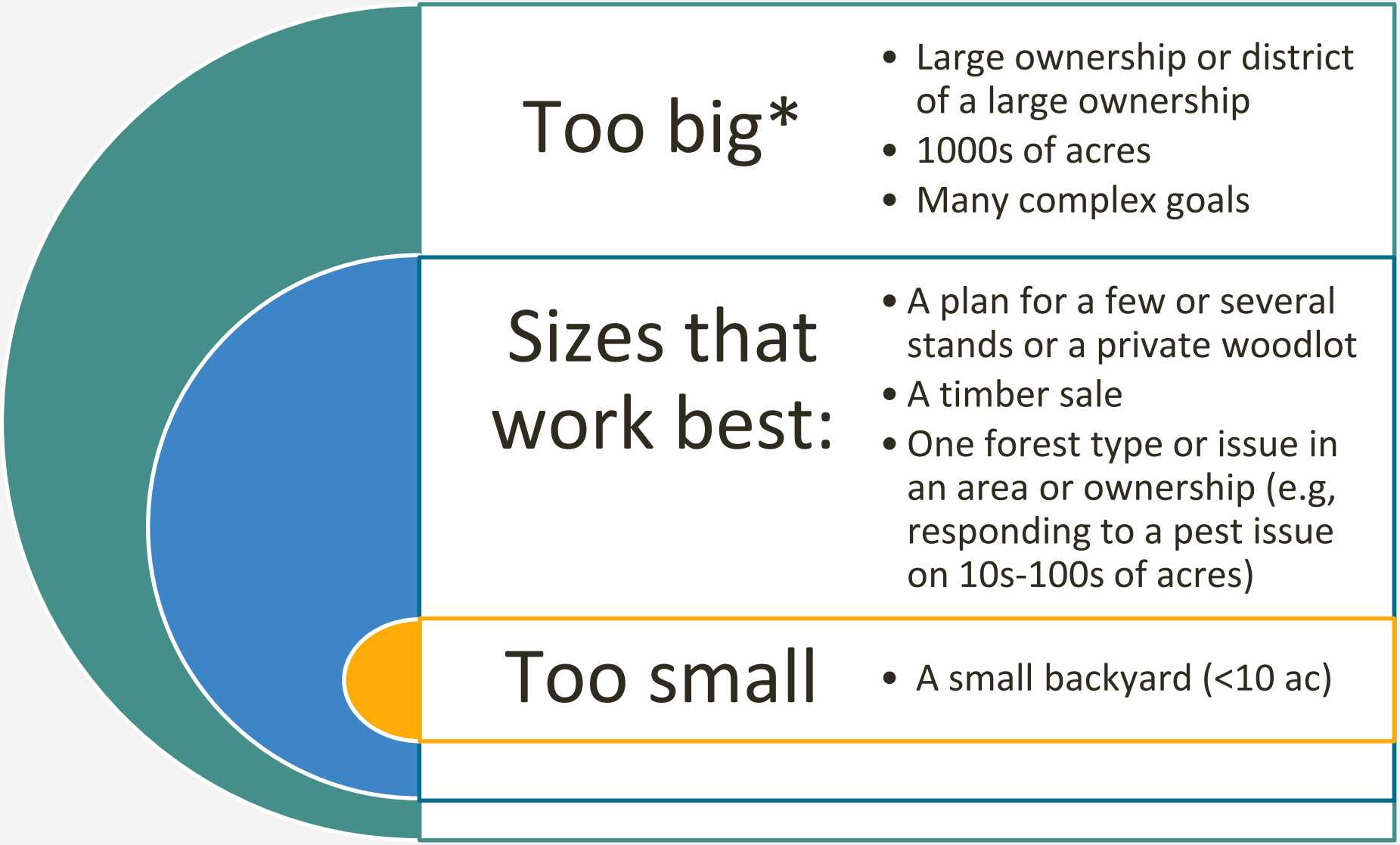
Key Question:

- Where are you working?
- What are your management goals and objectives for this area?

Step 1: DEFINE location, project, and time frames.

- Real-world project:
- A project that you're currently working on:
  - On your desk (and on your mind)
  - Something that will need additional consideration

Step 1: DEFINE location, project, and time frames.



*These projects are too big to complete within this time available within this course, but the Adaptation Workbook process can be applied at larger scales with more time and some additional assistance. Ask us for details…

Step 1.1: Define management topics.

Forest Type or Management Topic – Land uses or management topics that are relevant to your project area.

Pre-defined Forest Types

- Based on the same definitions used in the vulnerability assessment

Custom Forest Types or Management Topic

- Forest type not shown
- Management topic: e.g., “Wood turtle habitat" or “Areas affected by hemlock woolly adelgid" or “invasive species."

Step 1.2: Define management goals & objectives.

Management Goal—broad, general statements, usually not quantifiable, that express a desired state or process to be achieved

- Have at least 1 goal for each forest type/management topic.

Step 1.2: Define management goals & objectives.

Management Objective—concise statements of measurable planned results that correspond to pre-established goals in achieving a desired outcome

- You can have multiple objectives for each goal or 1 objective for each goal
- Try to have at least 3 and no more than 12 objectives for your whole project.

Objectives Should be SMART

Specific

Measurable

Achievable

Relevant

Time bound

Step 1.2: Define management goals & objectives.

Example:

Management Goal	**Management Objective**	**Time Frame**
▪ **Increase species diversity**	▪ Have no more than 20 percent of a family, 10 percent of a genus and 5 percent of a species across all street trees	25 years
▪ **Increase canopy cover**	▪ Increase % canopy from 20% to 30%	20 years
▪ **Reduce invasive species cover**	▪ Reduce area covered by invasive buckthorn from 10% to no more than 5%	10 years
▪ **Improve water quality**	▪ Stabilizing 50 feet of eroding banks	5 years

Things to Keep in mind

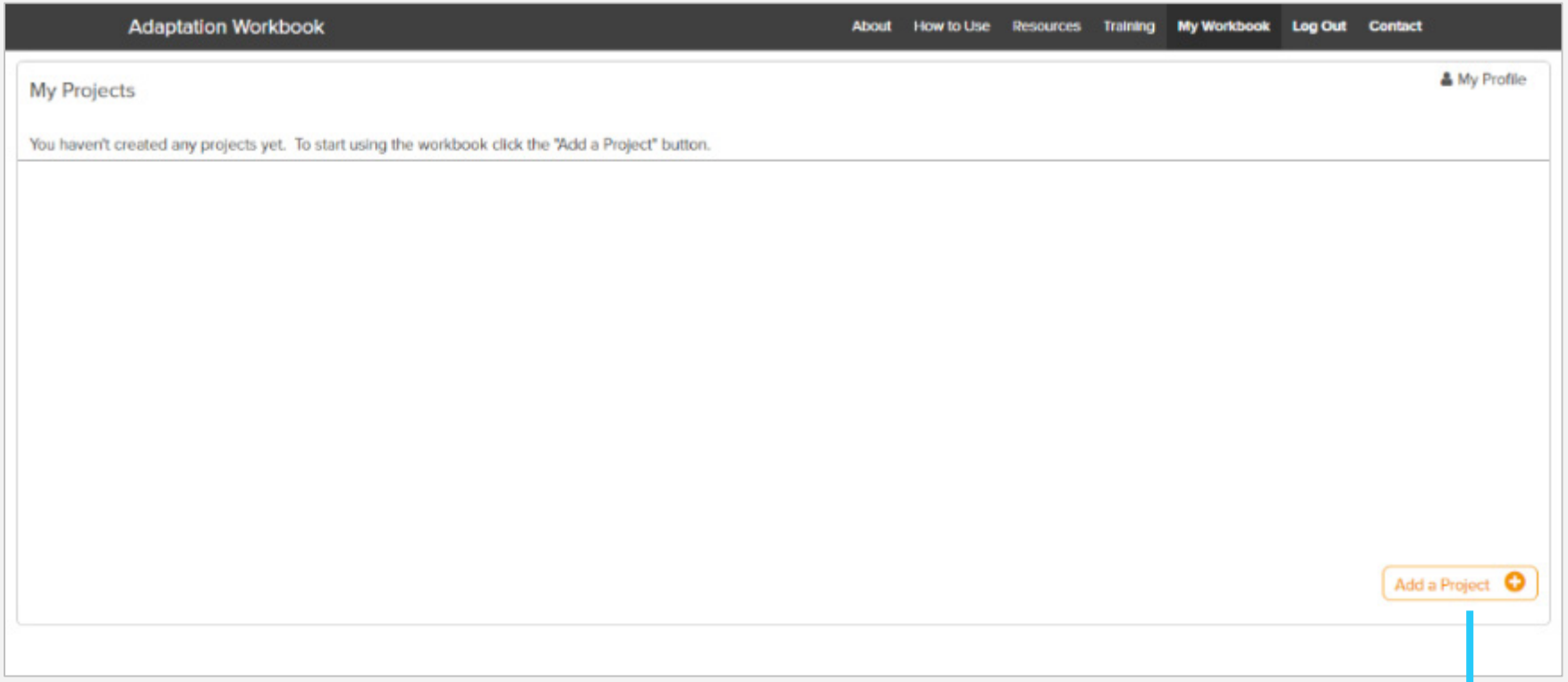
- If possible, use goals/objectives you ALREADY have.
- These DO NOT need to be related to climate change (that comes later)
- Goals/objectives can be area-wide or specific to a particular topic or land use.
- The more specific your objectives are, the better.

Questions?

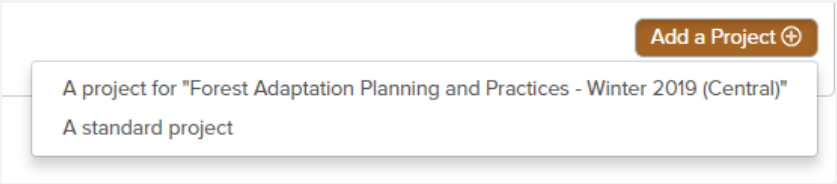
Workbook Tutorial

Step 1: DEFINE location, project, and time frames.

Project Dashboard:



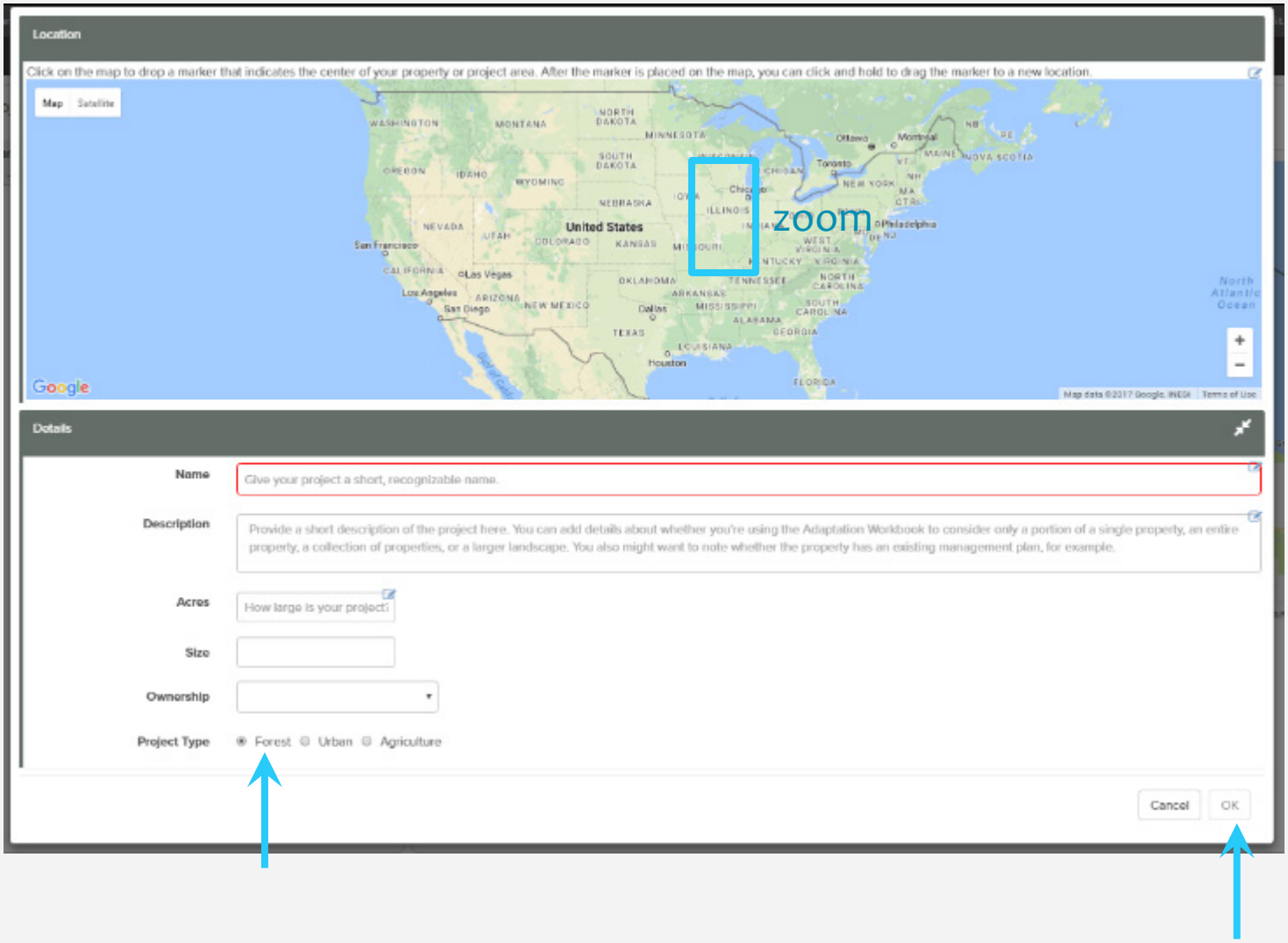
Be sure to select: **A Project for "Forest Adaptation Planning and Practices – Winter 2019 (Central)"**



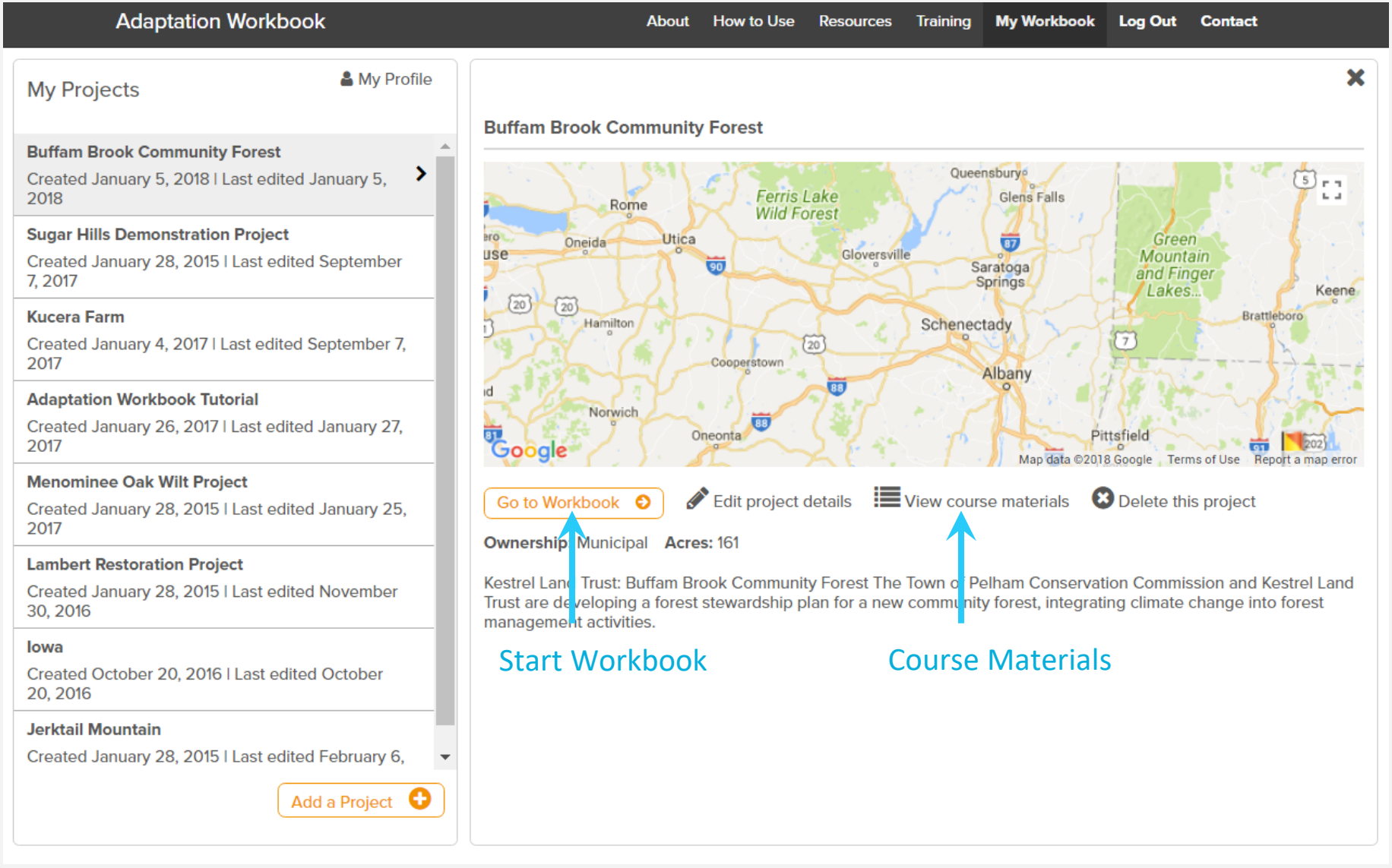
Step 1: DEFINE location, project, and time frames.

Location:

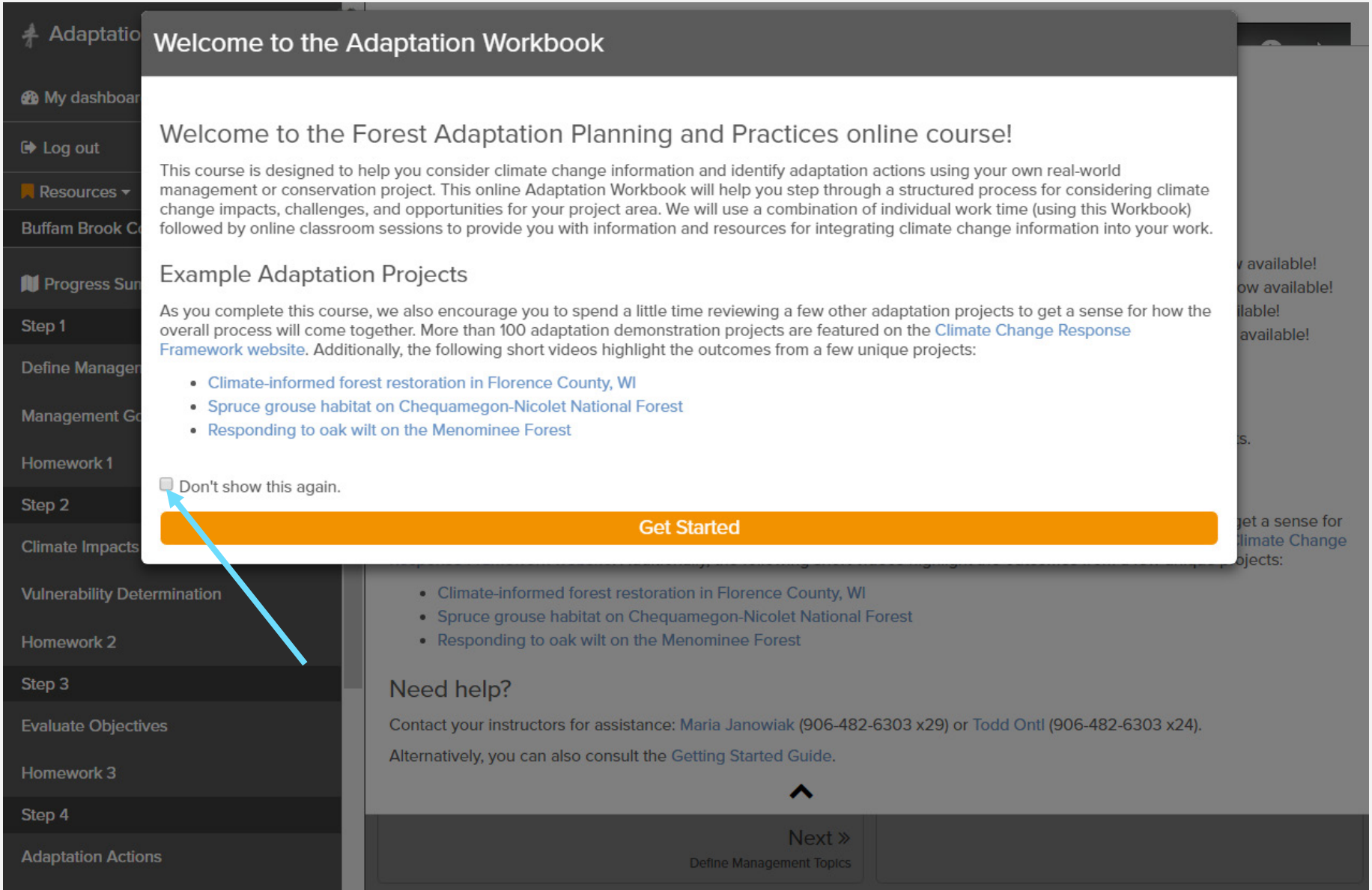
- Click to drop a pin
- Click and hold to drag it into position



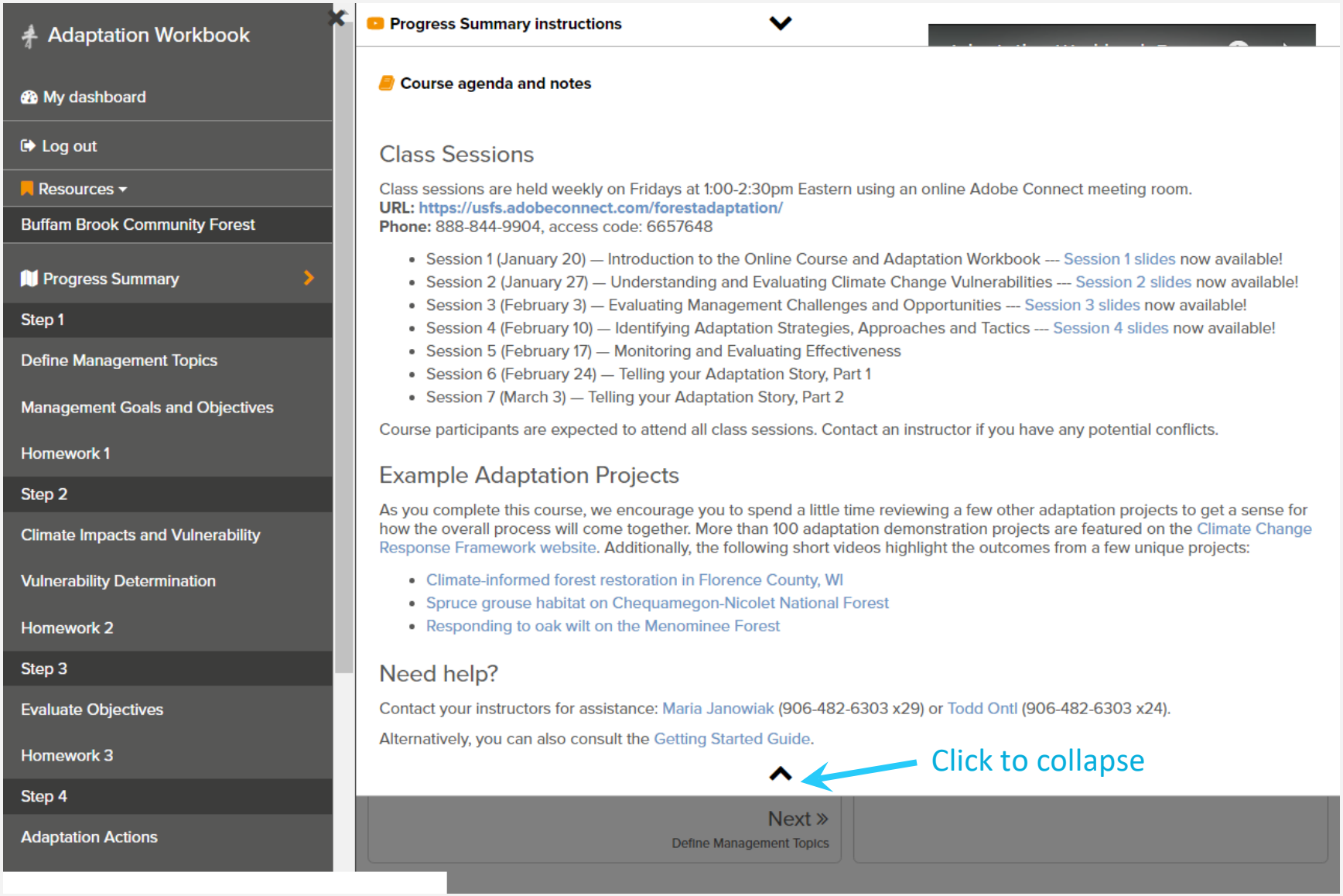
Workbook Dashboard



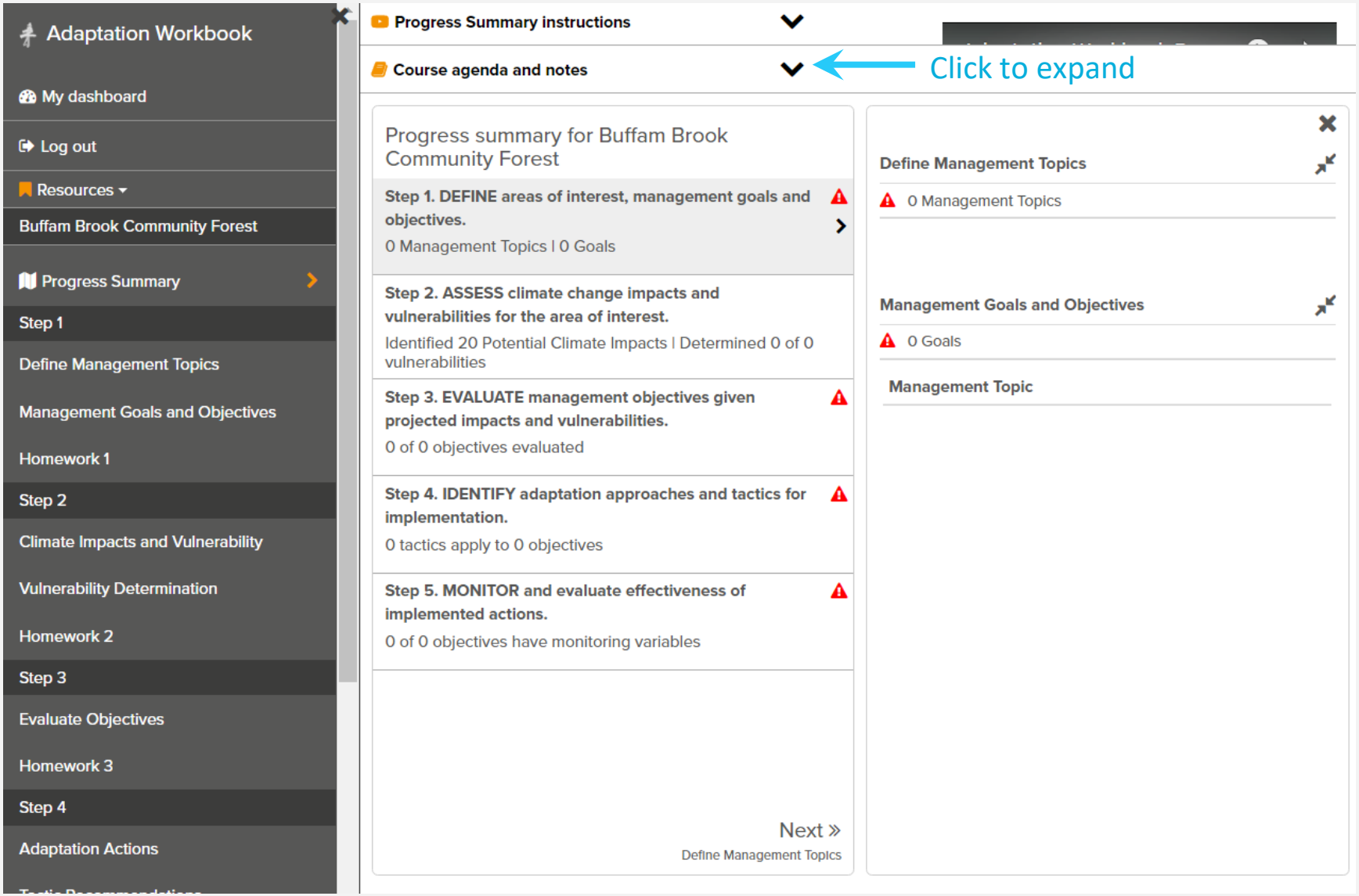
Welcome screen



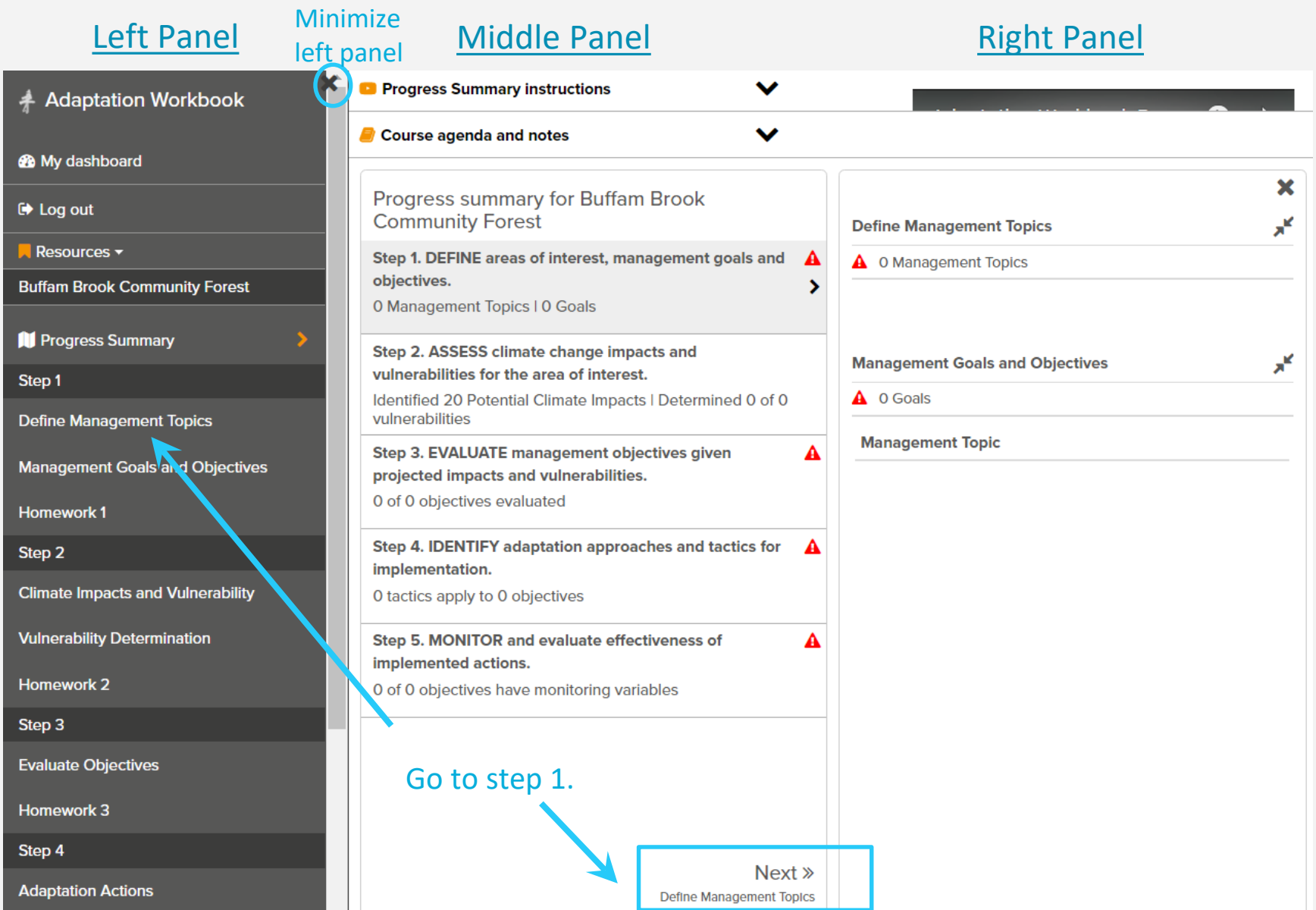
Progress Summary Page



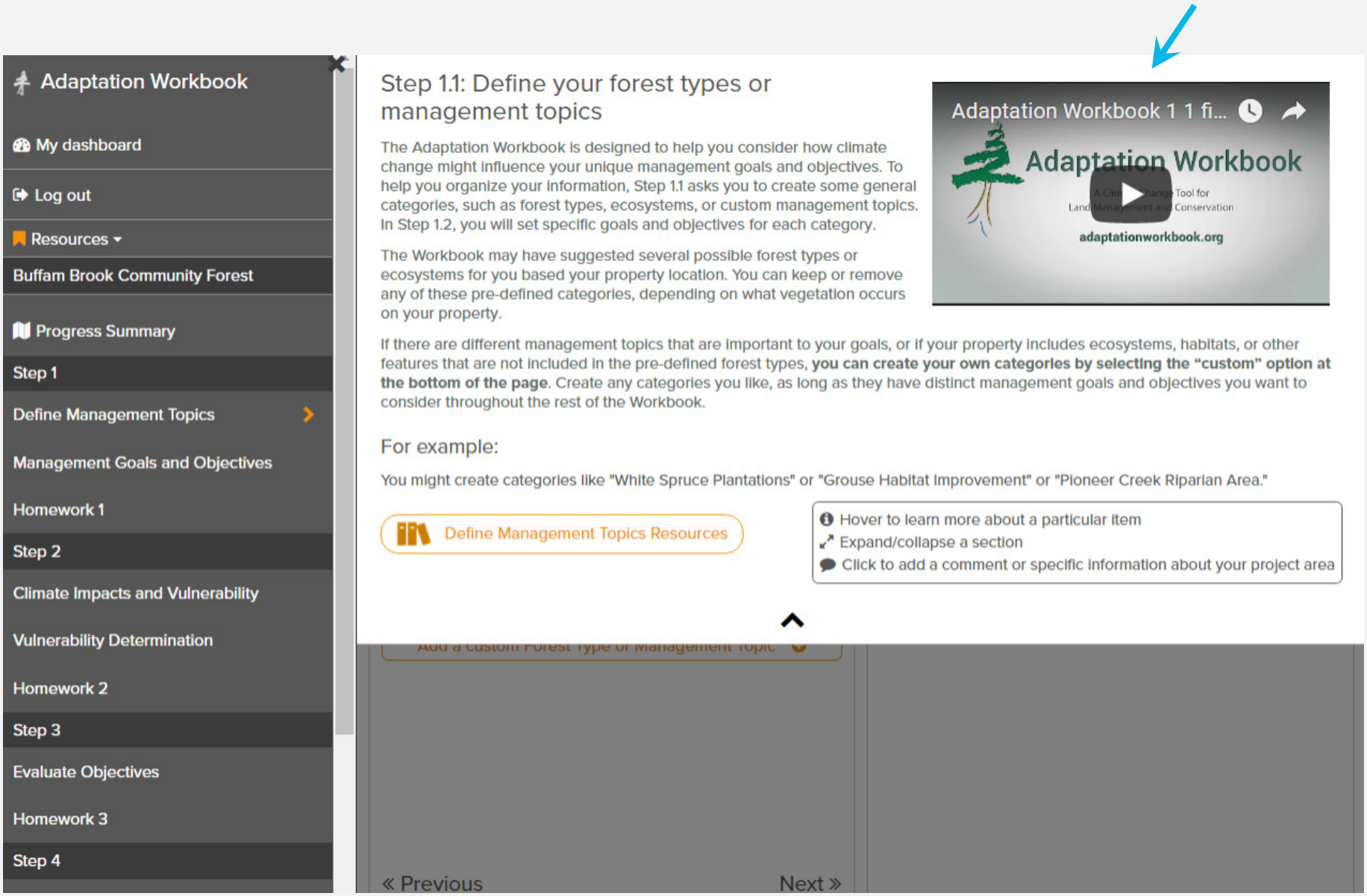
Progress Summary Page



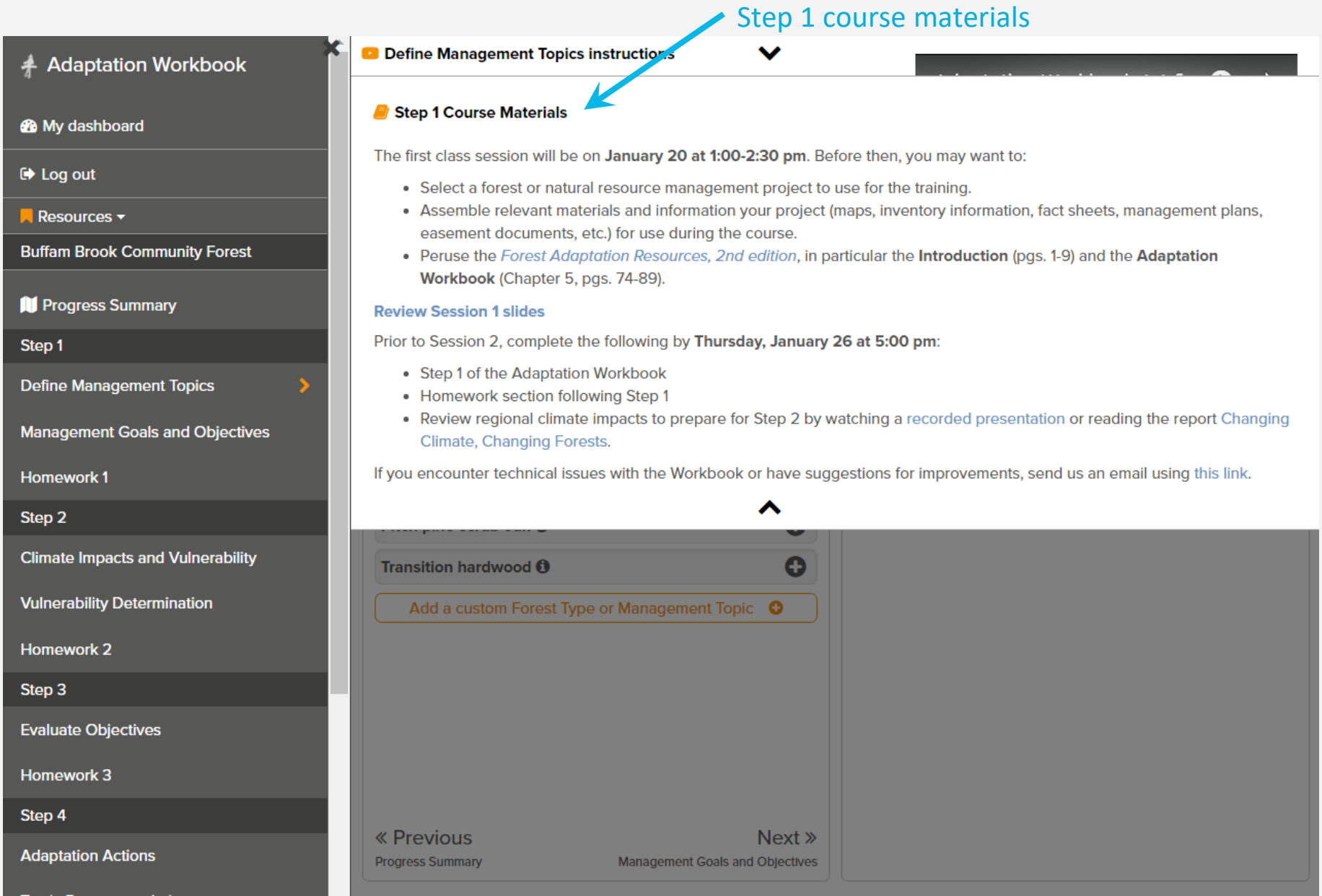
Progress Summary Page



Step 1.1: Define management topics.



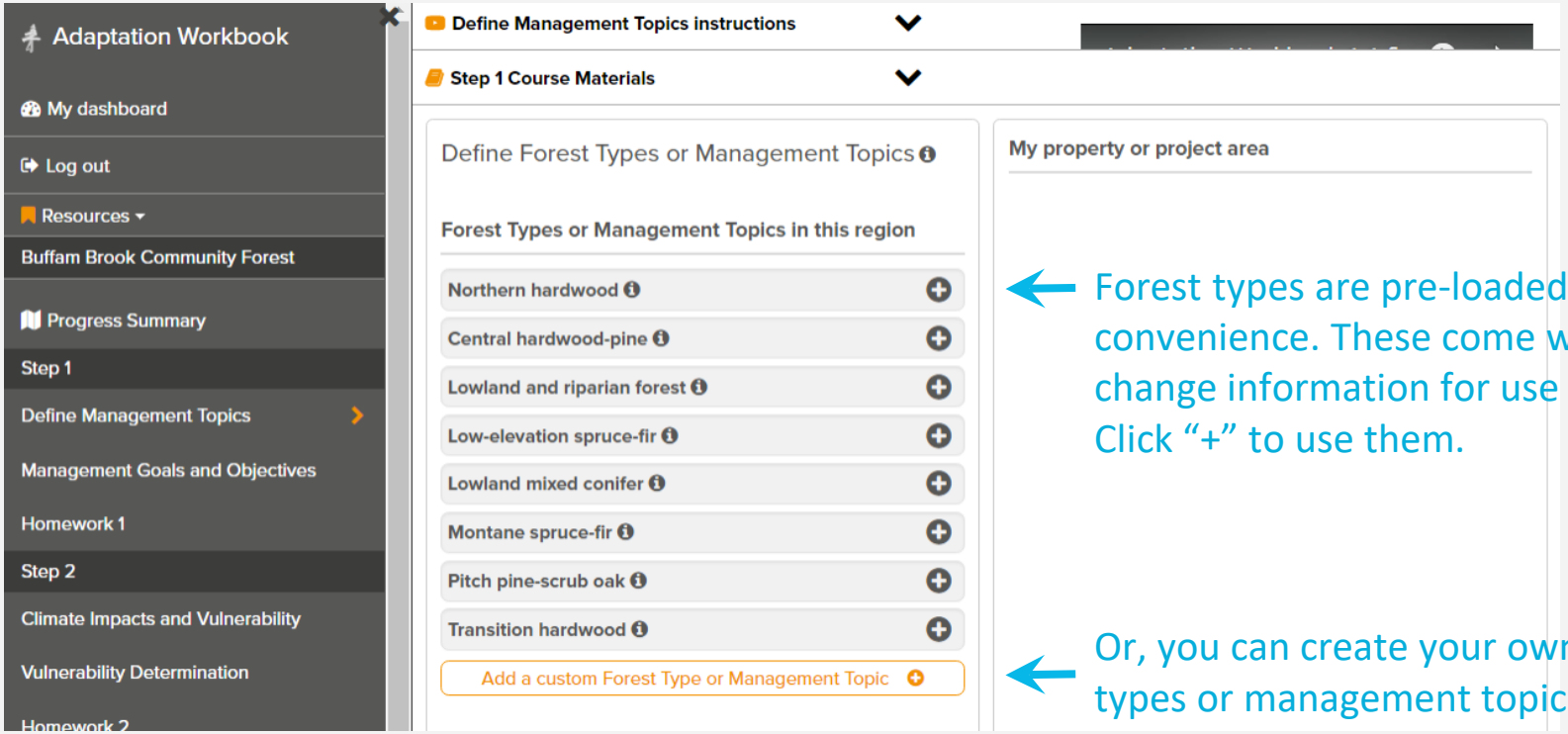
Step 1.1: Define management topics.



Step 1.1: Define management topics.

Describe how your project is organized:

- Forest type: Northern hardwood, Pitch pine-Scrub oak
- Management topics: wildlife habitat, HWA response

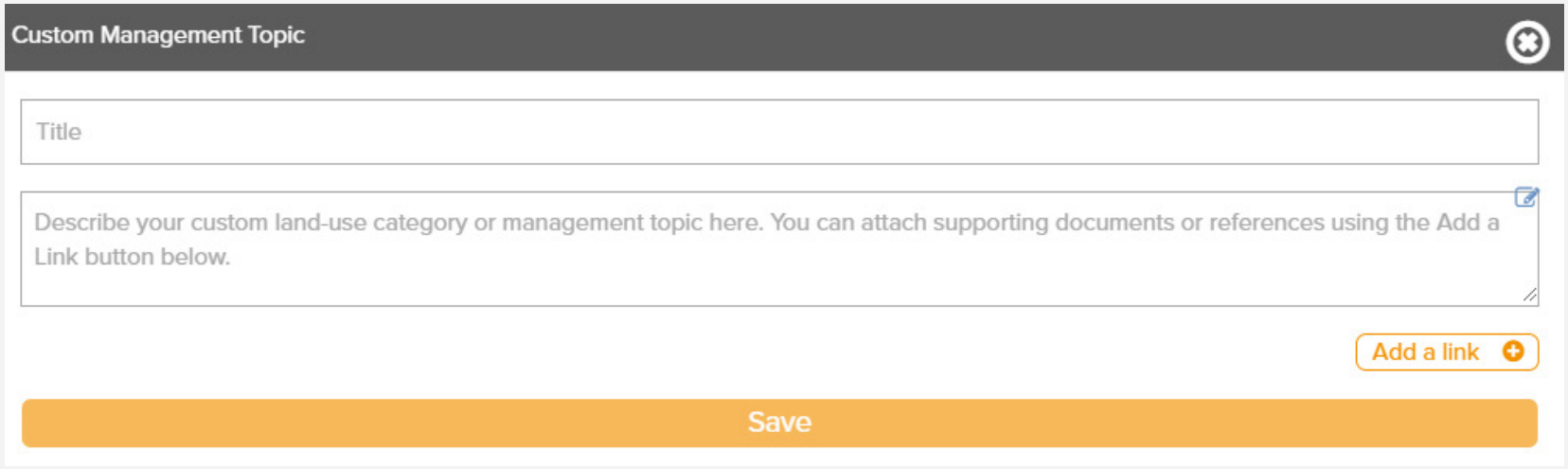


Step 1.1: Define management topics.

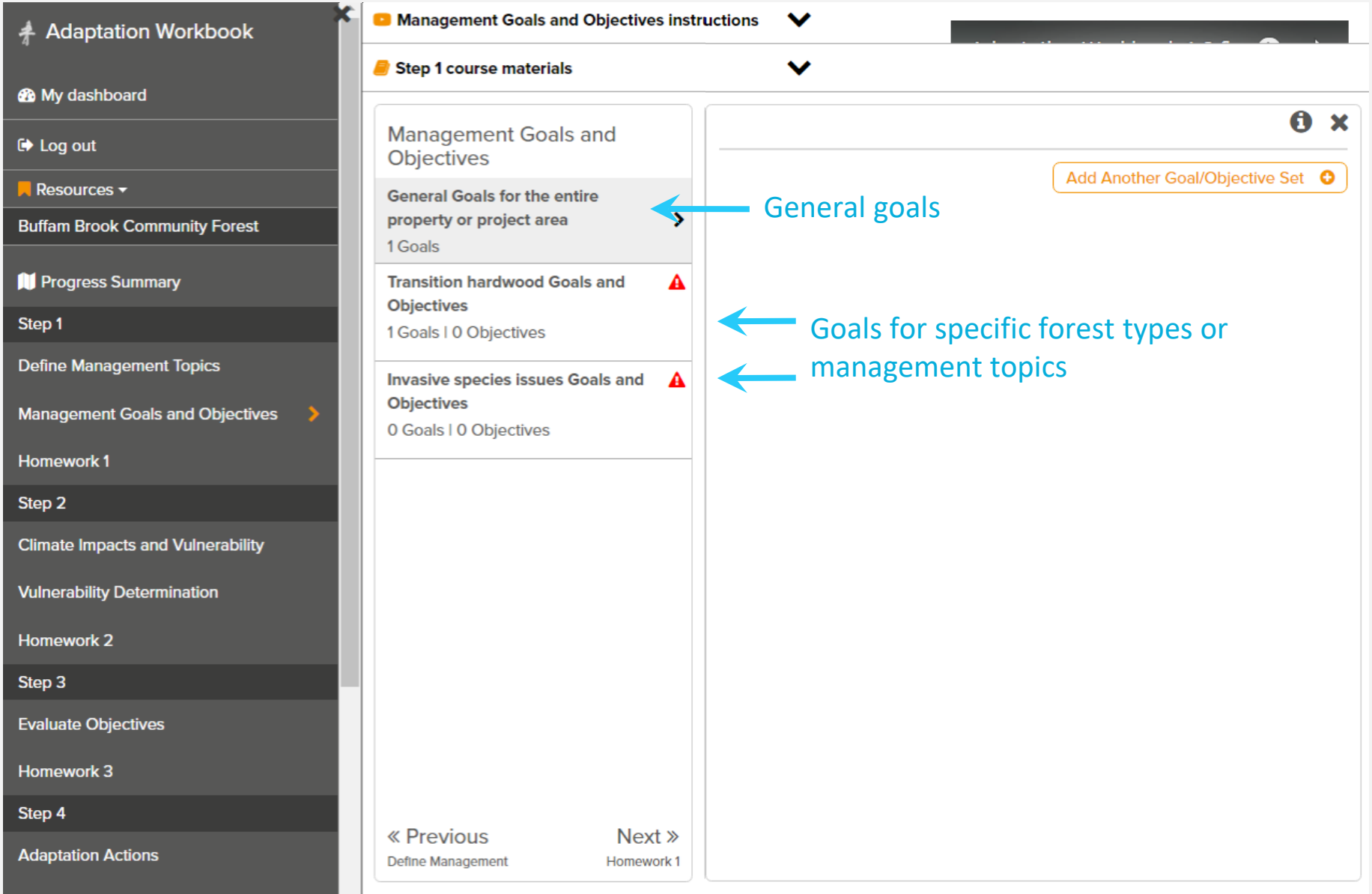
Describe how your project is organized:

- Forest type: Northern hardwood, Pitch pine-Scrub oak
- Management topics: wildlife habitat, HWA response

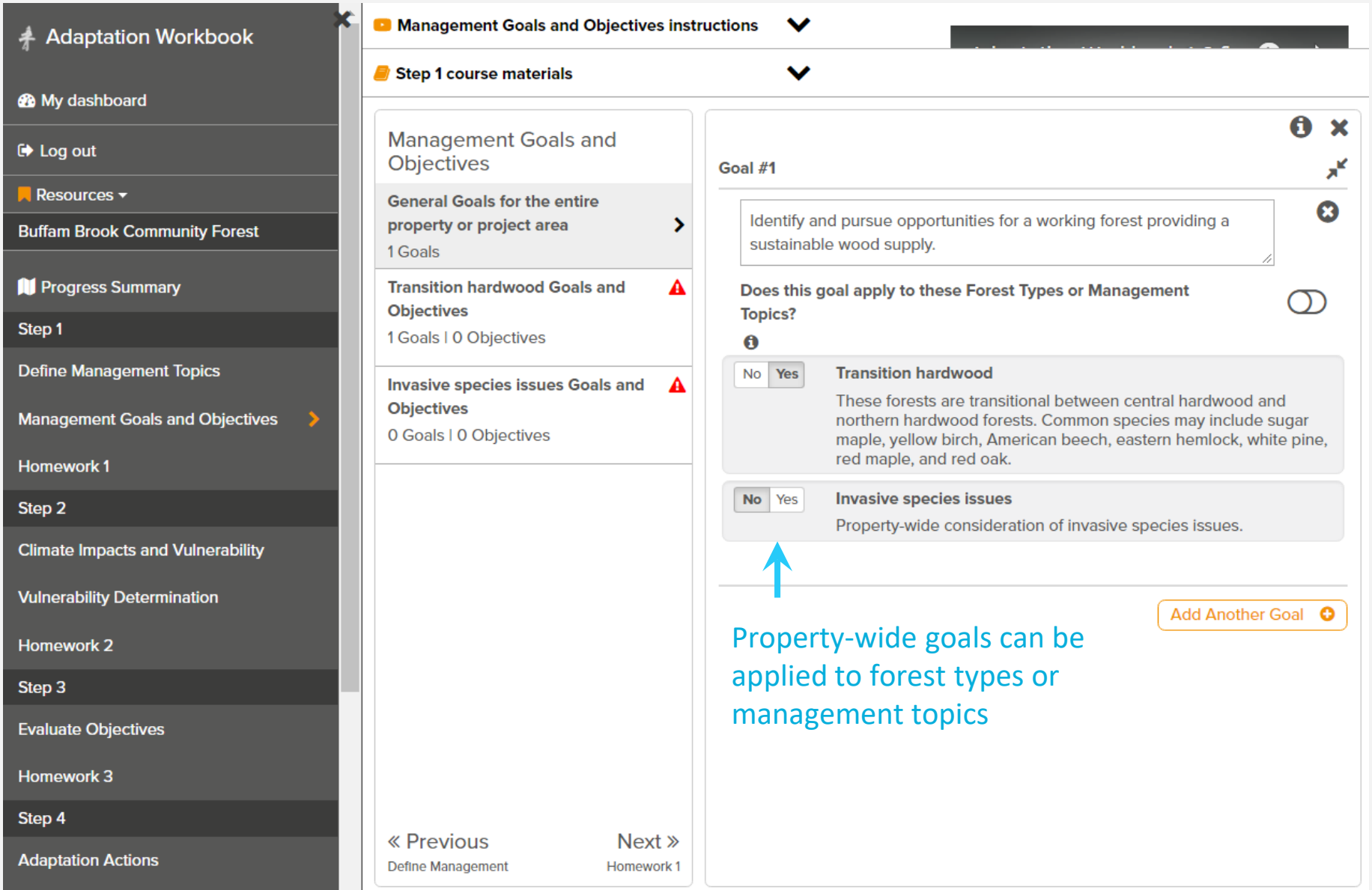
Add a custom **Forest Type or Management Topic**



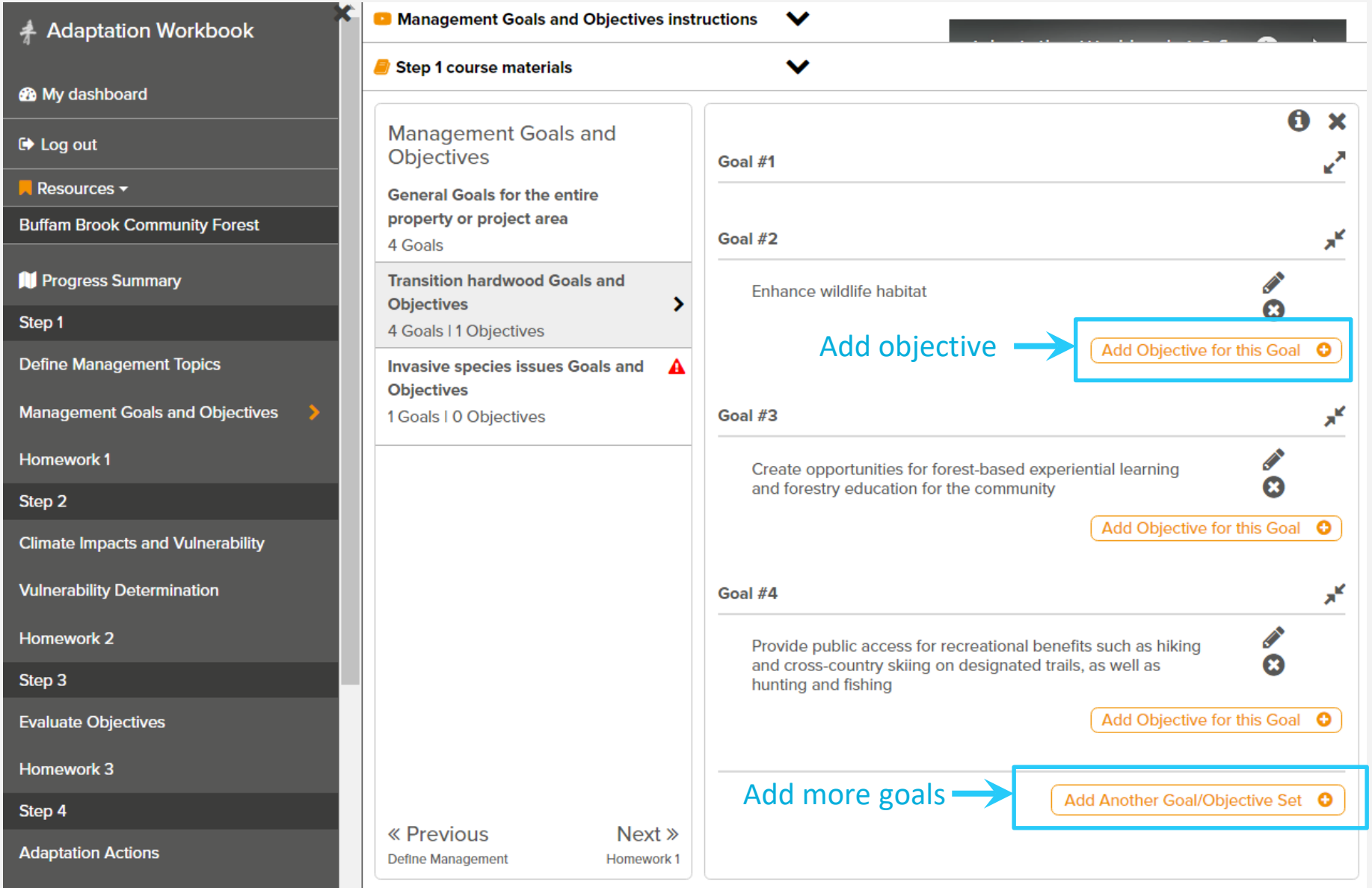
Step 1.2: Define management goals & objectives.



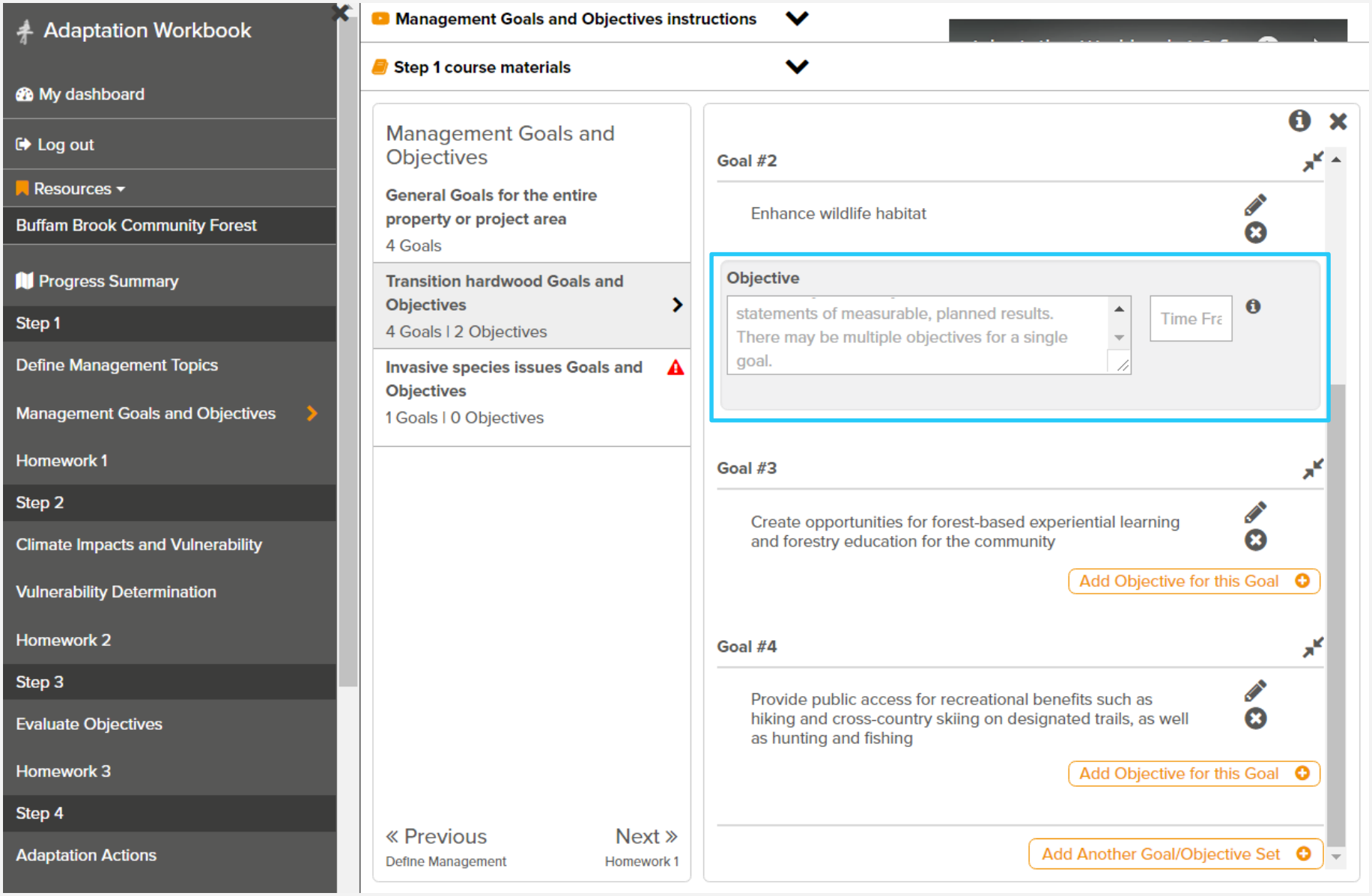
Step 1.2: Define management goals & objectives.



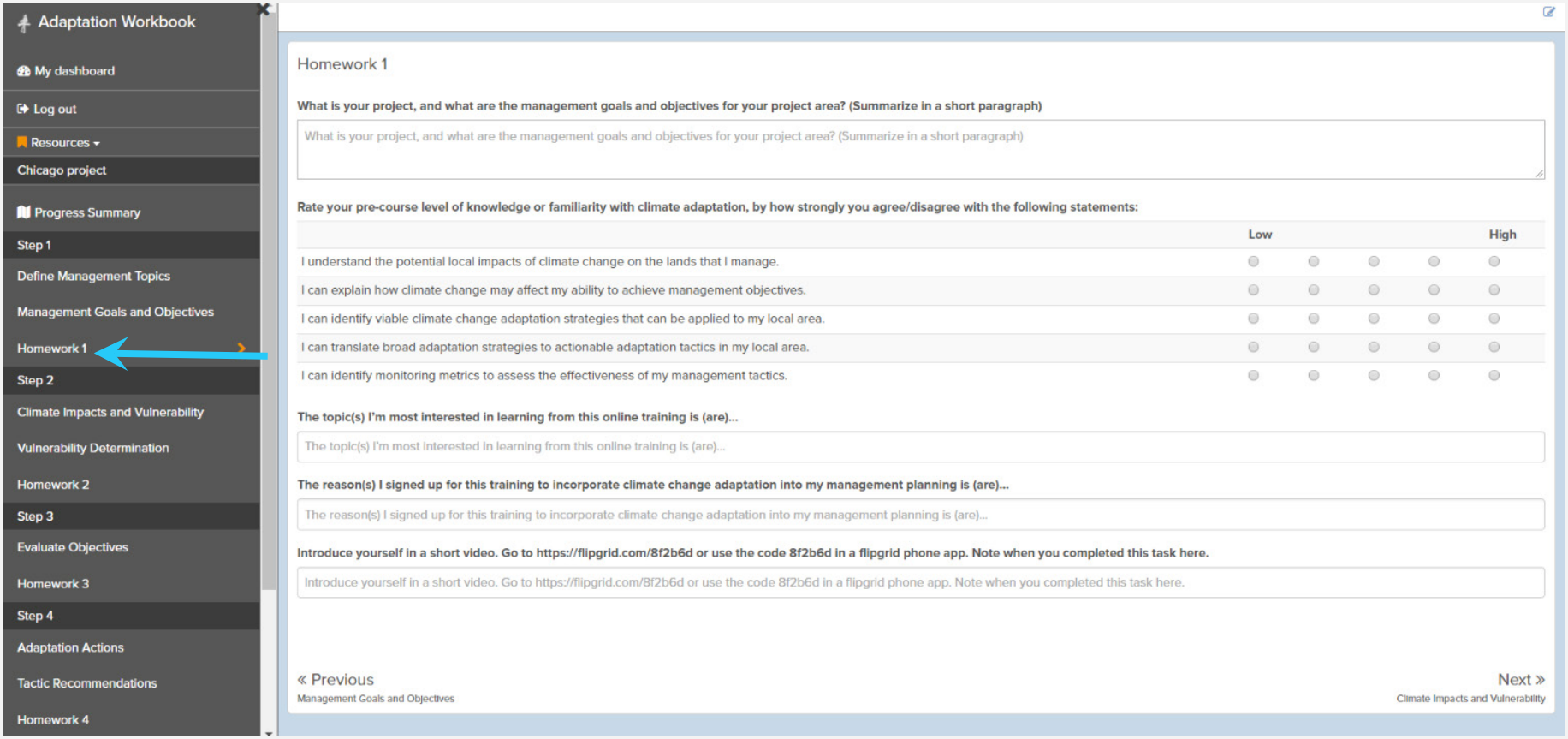
Step 1.2: Define management goals & objectives.



Step 1.2: Define management goals & objectives.



Homework 1


Adaptation Workbook
My dashboard
Log out
Resources
Chicago project
Progress Summary
Step 1
Define Management Topics
Management Goals and Objectives
Homework 1
Step 2
Climate Impacts and Vulnerability
Vulnerability Determination
Homework 2
Step 3
Evaluate Objectives
Homework 3
Step 4
Adaptation Actions
Tactic Recommendations
Homework 4
Homework 1
What is your project, and what are the management goals and objectives for your project area? (Summarize in a short paragraph)
What is your project, and what are the management goals and objectives for your project area? (Summarize in a short paragraph)
Rate your pre-course level of knowledge or familiarity with climate adaptation, by how strongly you agree/disagree with the following statements:
Low
High
I understand the potential local impacts of climate change on the lands that I manage.
I can explain how climate change may affect my ability to achieve management objectives.
I can identify viable climate change adaptation strategies that can be applied to my local area.
I can translate broad adaptation strategies to actionable adaptation tactics in my local area.
I can identify monitoring metrics to assess the effectiveness of my management tactics.
The topic(s) I'm most interested in learning from this online training is (are)...
The topic(s) I'm most interested in learning from this online training is (are)...
The reason(s) I signed up for this training to incorporate climate change adaptation into my management planning is (are)...
The reason(s) I signed up for this training to incorporate climate change adaptation into my management planning is (are)...
Introduce yourself in a short video. Go to https://flipgrid.com/8f2b6d or use the code 8f2b6d in a flipgrid phone app. Note when you completed this task here.
Introduce yourself in a short video. Go to https://flipgrid.com/8f2b6d or use the code 8f2b6d in a flipgrid phone app. Note when you completed this task here.
« Previous
Management Goals and Objectives
Next »
Climate Impacts and Vulnerability

Questions?

Assignment for next time:

Complete by Sunday, January 27th

Record your intro on Flipgrid: **https://flipgrid.com/3df15679**

1. Complete Step 1 of the Adaptation Workbook
2. Complete the Homework section following Step 1
3. Be prepared to introduce your project in< 3 minutes in our next discussion

Optional: CFE credits – email Patricia your SAF and/or state forestry license number

Getting to Know You

Between now and the next course, go to:

https://flipgrid.com/3df15679

Password: **NIACS2019**

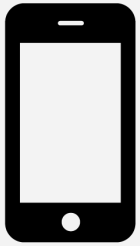
Introduce yourself – 1 min max!

- Name, Organization, Position
- What you hope to get out of this course
- Anything else about you that you'd like to share.

Using Flipgrid (3 options)

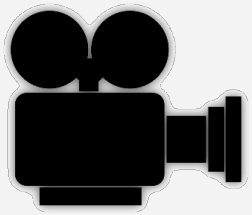
Internet browser+webcam (no downloads required)

Chrome and Firefox work best. Internet Explorer and Safari work with flash plug in.



On your phone.

Download flipgrid app for IOS or android



Record on any device as a an MP4, MOV, or WEBM video file and upload on the web.

Looking Ahead

NEXT CLASS: Tuesday, January 29th

- Come to the discussion session ready to talk about your project (1 person per project)
- Lecture section will introduce step 2

Questions?

Discussion: Project Ideas

Do you have an idea for a project?

- Location, size, and ownership
- Primary management goals & objectives