

# FOREST ADAPTATION PLANNING AND PRACTICES

~ ONLINE COURSE ~

## Session 1: Introduction to the Online Course and Adaptation Workbook

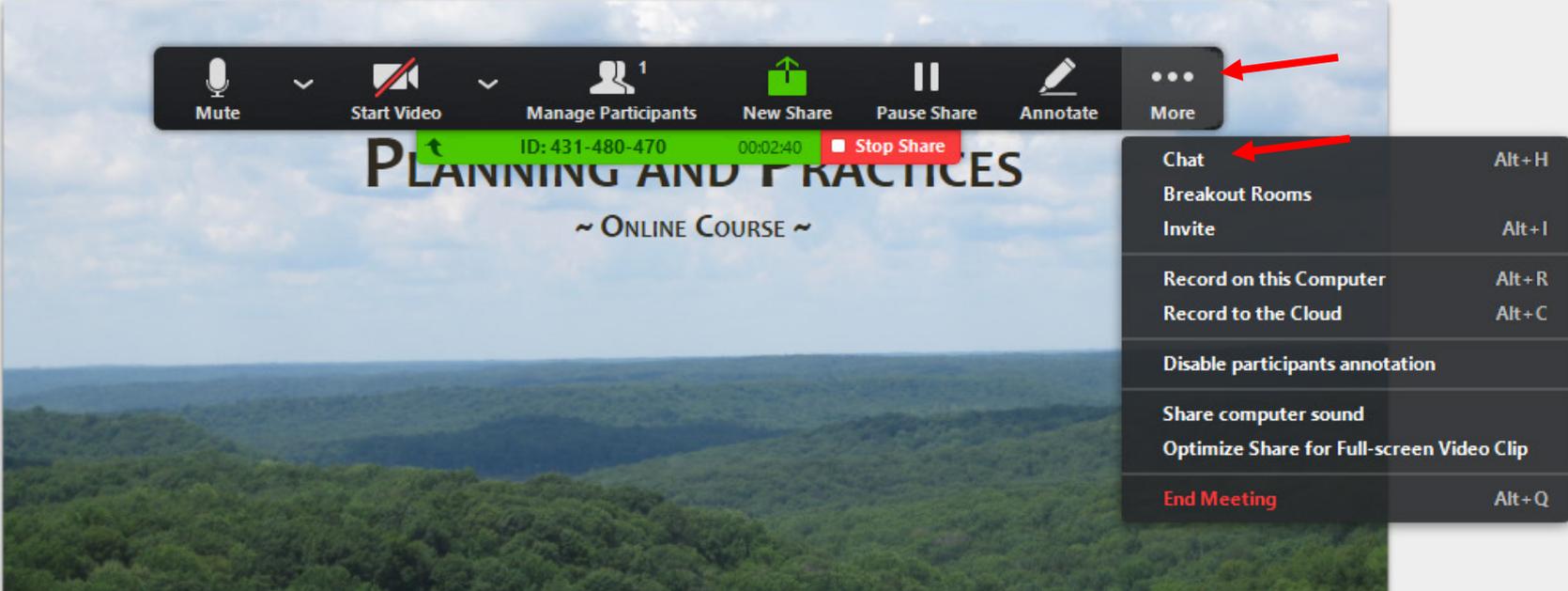
Tuesday, January 22, 2019

### 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



The screenshot shows a Zoom meeting interface. At the top, there is a toolbar with icons for Mute, Start Video, Manage Participants, New Share, Pause Share, and Annotate. A red arrow points to the 'More' button (three dots) in the toolbar. Below the toolbar, a green bar displays the meeting ID 'ID: 431-480-470' and a red 'Stop Share' button. The background of the meeting is a landscape with green hills and a blue sky. A blue banner at the bottom of the meeting area contains the following text:

**Session 1: Introduction to the Online Course and  
Adaptation Workbook**  
Tuesday, January 22, 2019

The 'More' menu is open, showing a list of options with red arrows pointing to the 'Chat' option and the 'More' button. The options are:

- Chat (Alt+H)
- Breakout Rooms
- Invite (Alt+I)
- Record on this Computer (Alt+R)
- Record to the Cloud (Alt+C)
- Disable participants annotation
- Share computer sound
- Optimize Share for Full-screen Video Clip
- End Meeting (Alt+Q)

## Web session etiquette:

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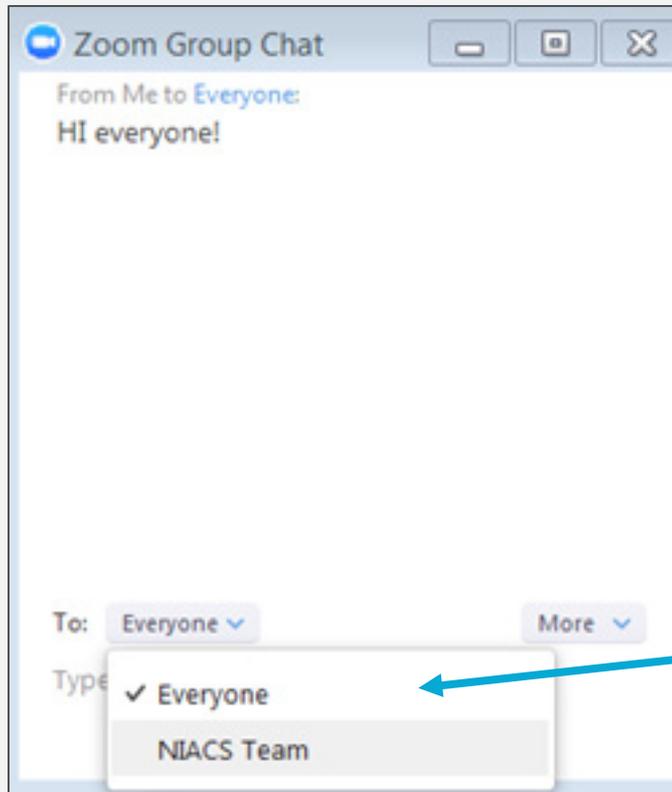
# What you should see:

The image shows a Zoom meeting interface. At the top, a control bar includes icons for Mute, Stop Video, Manage Participants (1), New Share, Pause Share, Annotate, and More. Below this, a green bar displays the meeting ID: 431-480-470 and a red 'Stop Share' button. The main content area features a slide with a background image of a forest. The slide text reads: 'PLANNING AND PRACTICES ~ ONLINE COURSE ~', 'Session 1: Introduction to the Online Course and Adaptation Workbook', and 'Tuesday, January 22, 2019'. On the right, a video thumbnail shows two women, labeled 'NIACS Team'. Below the video is a 'Zoom Group Chat' window with the message: 'From Me to Everyone: Welcome!'. The chat window also shows 'To: Everyone' and a 'More' dropdown. At the bottom left, a section titled 'Web session etiquette:' lists two bullet points: 'Mute your phone/microphone unless you are speaking to the group.' and 'If using the phone, turn off your computer speakers to avoid feedback and terrible noises.' To the right of the text are icons for a muted microphone and a speaker with a red prohibition sign over it.

**Web session etiquette:**

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# 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:



Michigan  
Technological  
University



The  
UNIVERSITY  
of VERMONT



ncasi

[www.nrs.fs.fed.us/niacs](http://www.nrs.fs.fed.us/niacs)

# Welcome!



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Northern Institute of Applied Climate Science  
US Forest Service

[www.forestadaptation.org](http://www.forestadaptation.org)



# Welcome!

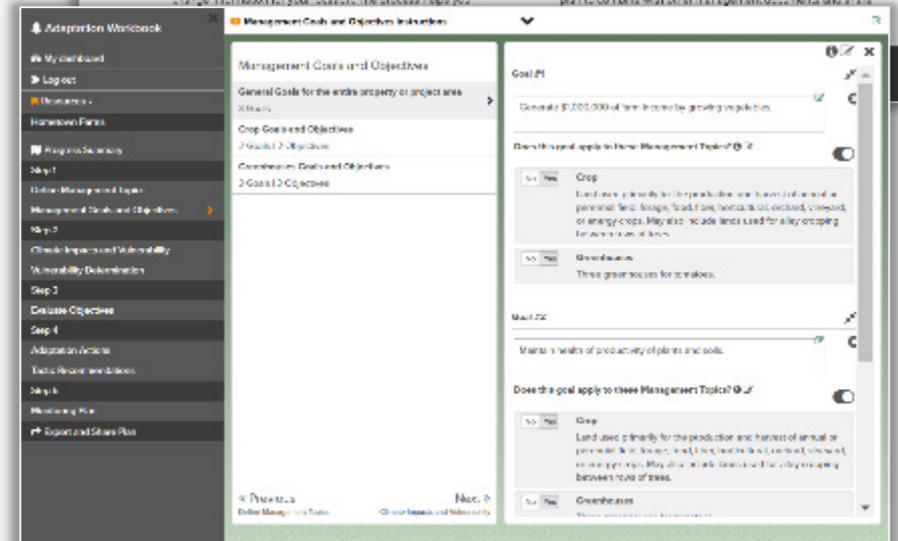
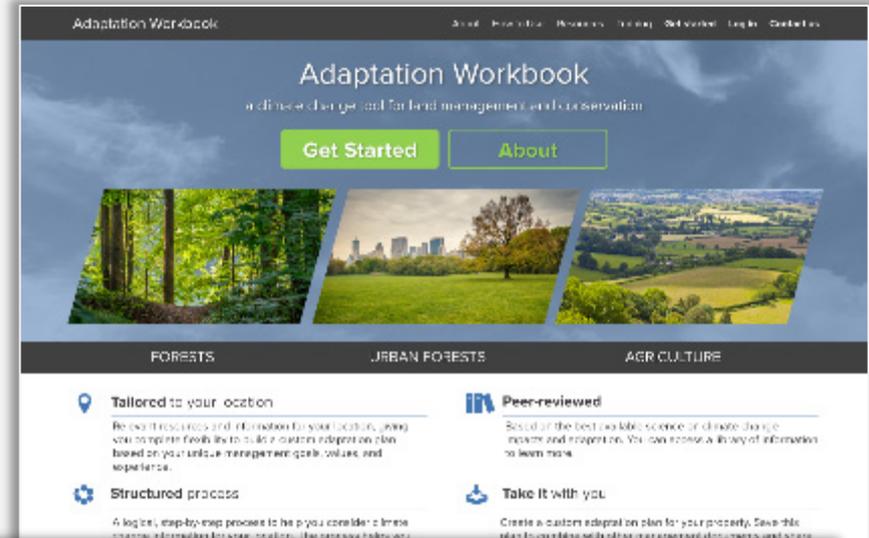
Introduce yourselves!

- Name
- Organization
- Location



# Today's Agenda

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



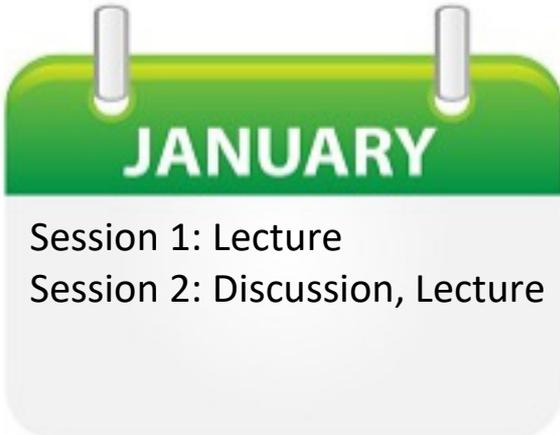
# Course Objectives

## **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.



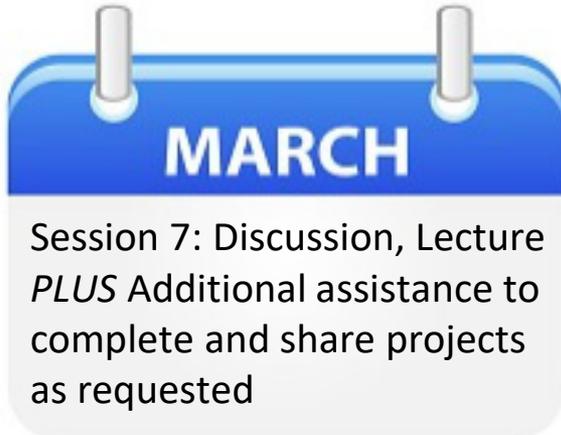
## JANUARY

Session 1: Lecture  
Session 2: Discussion, Lecture



## FEBRUARY

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



## MARCH

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!

The screenshot displays the 'Adaptation Workbook' interface. On the left is a dark sidebar with a navigation menu. The main content area is titled 'Homework 1' and contains several sections:

- Homework 1**
- What is your project, and what are the management goals and objectives for your project area? (Summarize in a short paragraph)**  
A text input field with a placeholder: "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:**
- A table with 5 columns: a statement, and four radio buttons labeled 'Low' and 'High'.
- The topic(s) I'm most interested in learning from this online training is (are)...**  
A text input field with a placeholder: "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)...**  
A text input field with a placeholder: "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.**  
A text input field with a placeholder: "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."
- Navigation: « Previous (Management Goals and Objectives) and Next » (Climate Impacts and Vulnerability)

**Adaptation Workbook** sidebar menu items: My dashboard, Log out, Resources, Chicago project, Progress Summary, Step 1 (Define Management Topics, Management Goals and Objectives, Homework 1, Step 2), Step 2 (Climate Impacts and Vulnerability, Vulnerability Determination, Homework 2), Step 3 (Evaluate Objectives, Homework 3), Step 4 (Adaptation Actions, Tactic Recommendations).

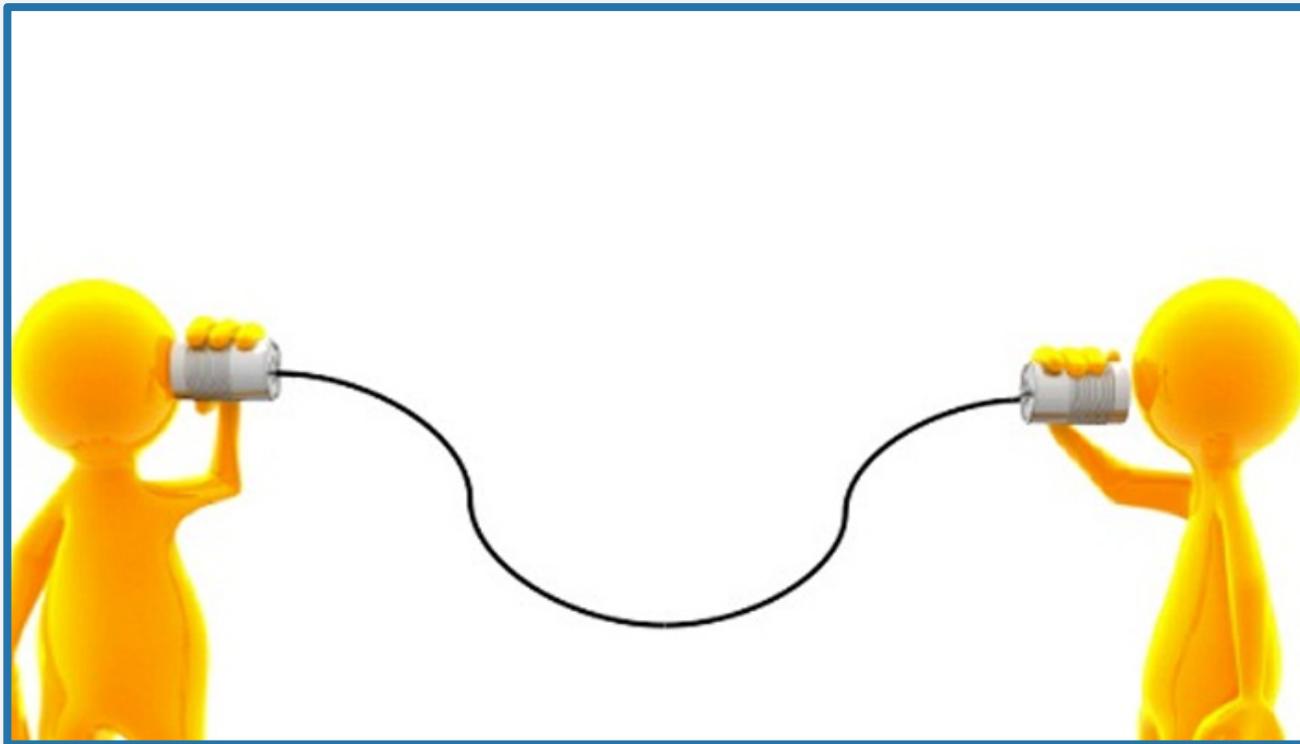
# Course Expectations

- 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

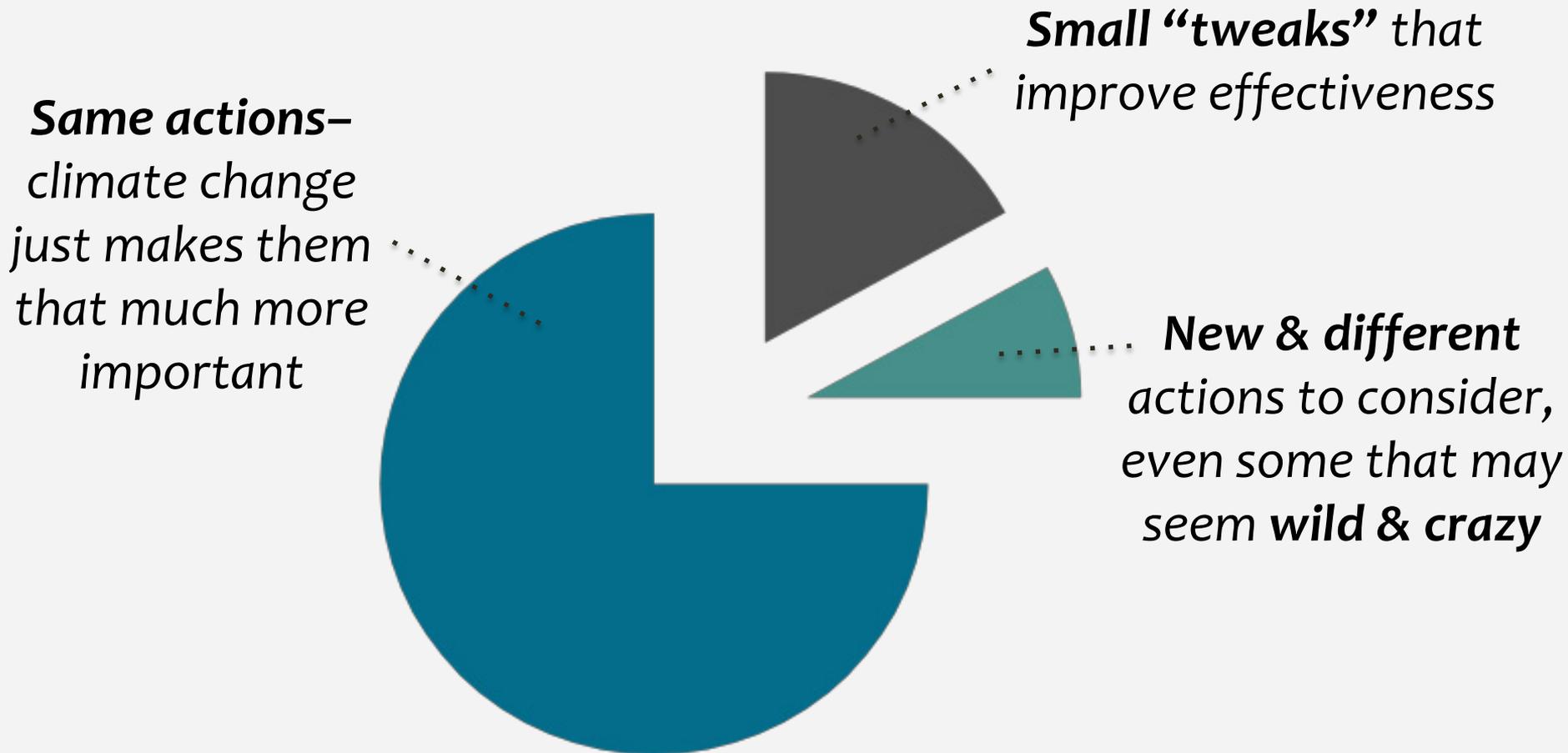


QUESTIONS?

# Defining “Adaptation”

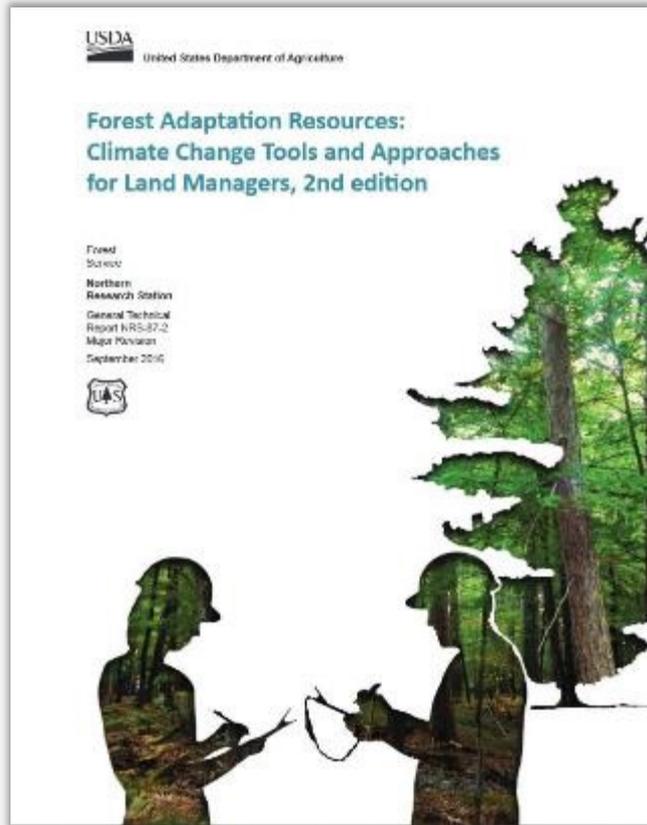
*Adaptation actions are designed to specifically address climate change impacts and vulnerabilities in order to meet climate-informed goals and objectives.*

# Adaptation Actions Can Be...



*\*individual results will vary*

# Forest Adaptation Resources



Swanston et al. 2016;  
[www.nrs.fs.fed.us/pubs/52760](http://www.nrs.fs.fed.us/pubs/52760)

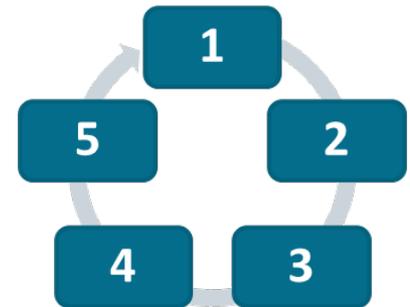
## Strategies & Approaches

Menu of adaptation actions

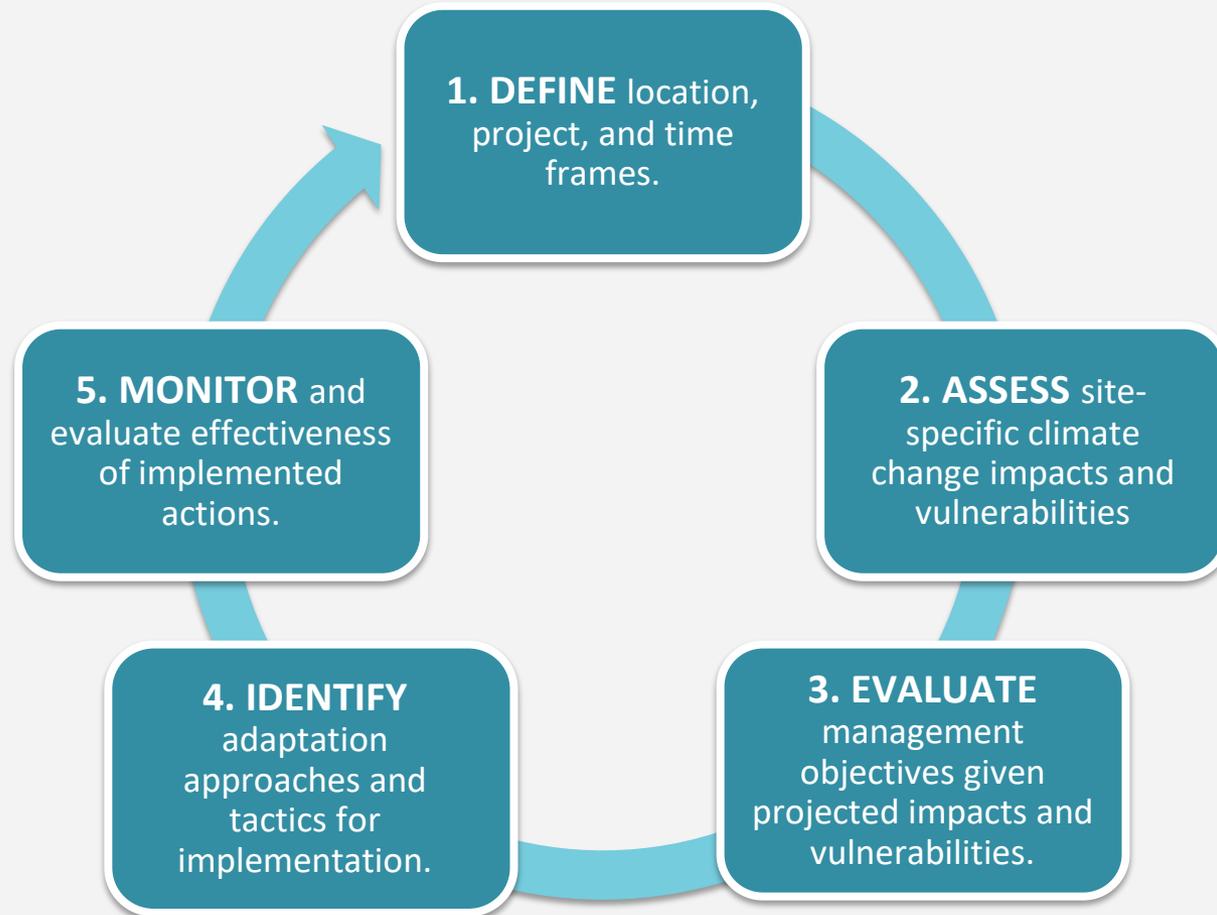


## Adaptation Workbook

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

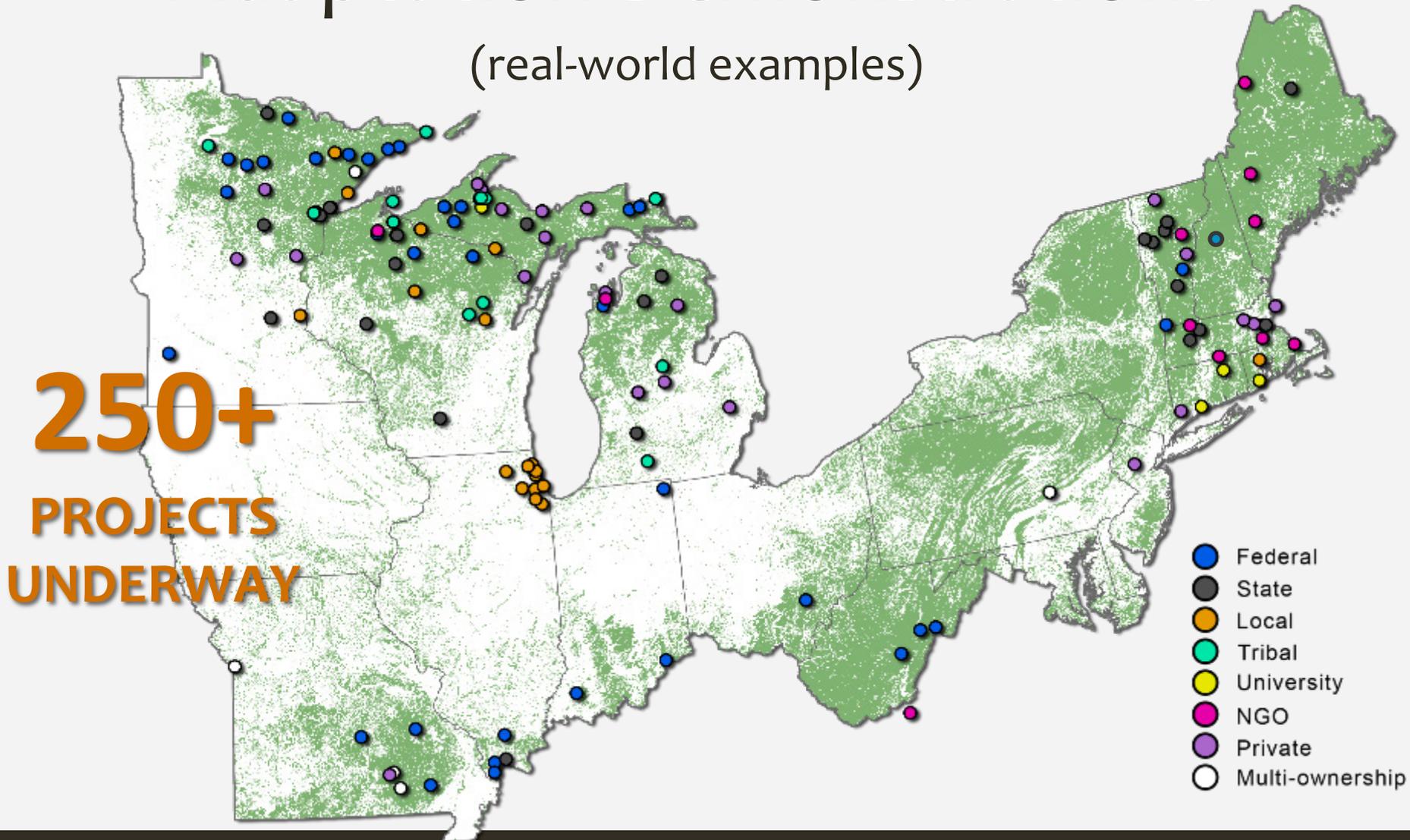


# Adaptation Workbook Process



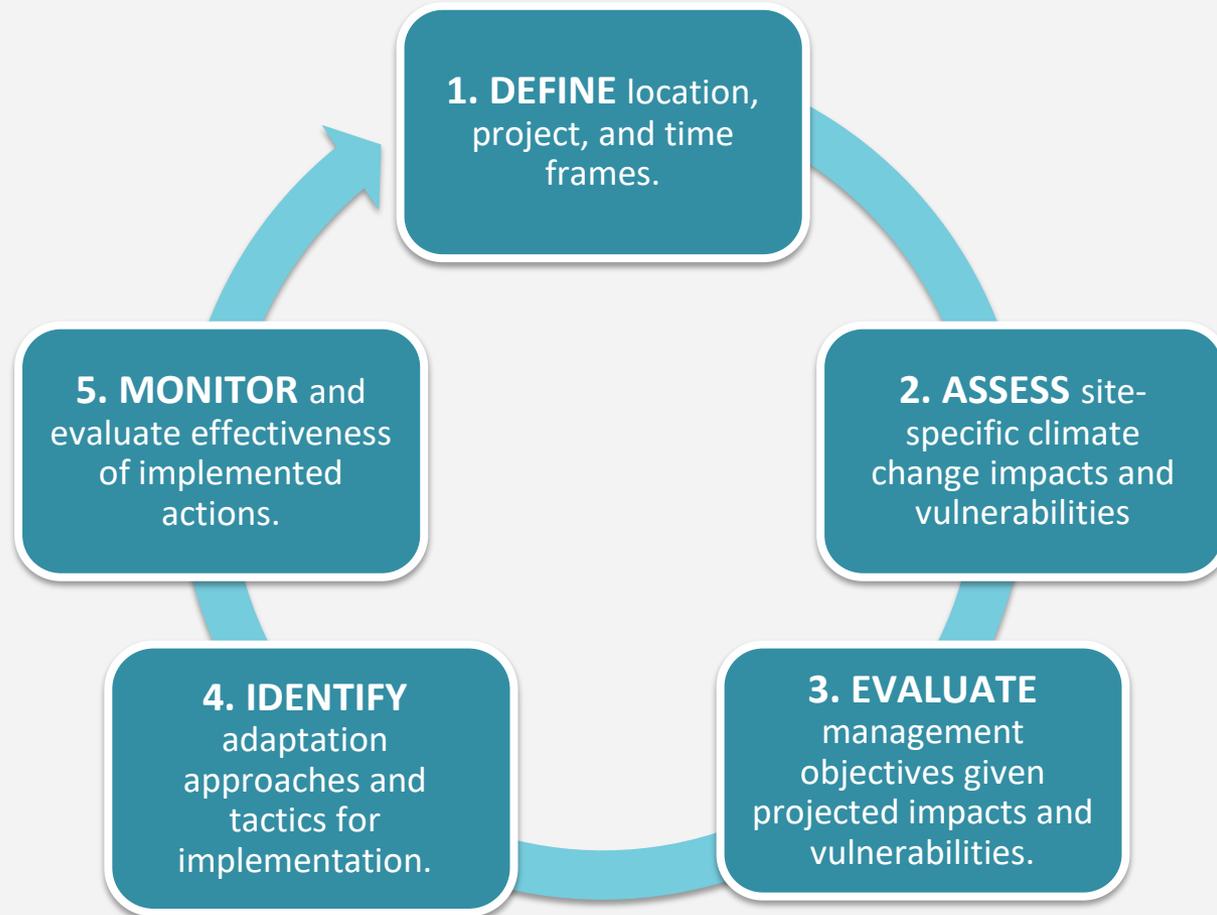
# Adaptation Demonstrations

(real-world examples)



[www.forestadaptation.org/demos](http://www.forestadaptation.org/demos)

# Adaptation Workbook Process



QUESTIONS?

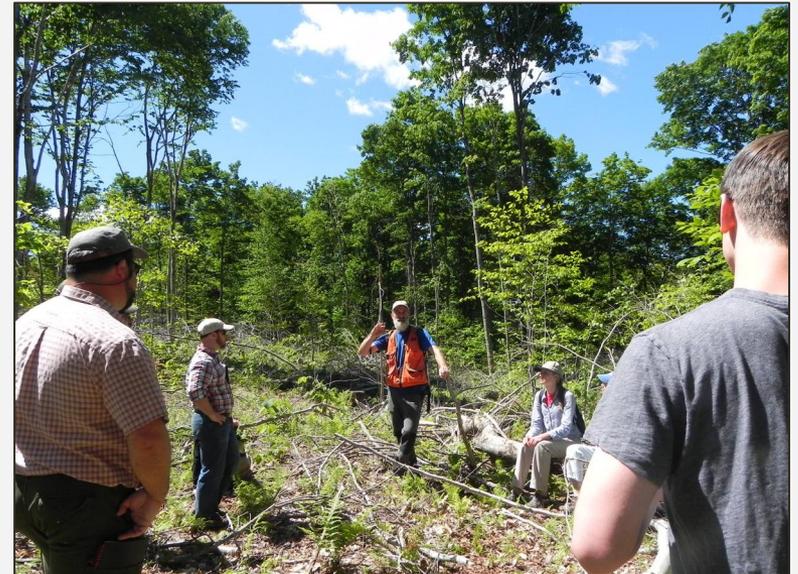
## **Step 1:** DEFINE location, project, and time frames.

### **Key Question:**

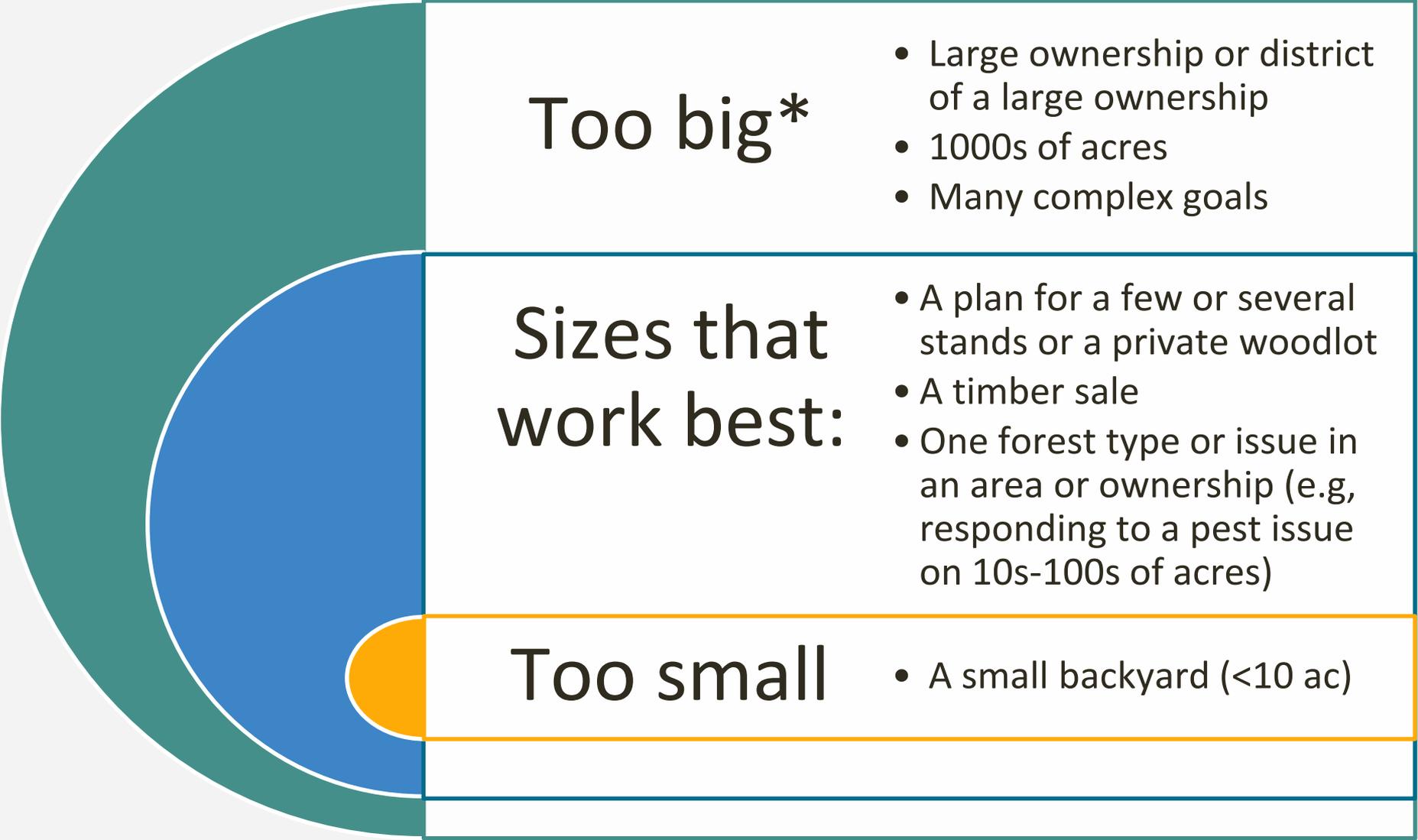
- Where are you working?
- What are your management goals and objectives for this area?

# 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.



## Too big\*

- Large ownership or district of a large ownership
- 1000s of acres
- Many complex goals

## Sizes that work best:

- A plan for a few or several stands or a private woodlot
- A timber sale
- One forest type or issue in an area or ownership (e.g, responding to a pest issue on 10s-100s of acres)

## Too small

- A small backyard (<10 ac)

\*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

**S**pecific

**M**easurable

**A**chievable

**R**elevant

**T**ime bound

## **Step 1.2:** Define management goals & objectives.

### **Example:**

<b>Management Goal</b>	<b>Management Objective</b>	<b>Time Frame</b>
▪ <b>Increase species diversity</b>	▪ 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
▪ <b>Increase canopy cover</b>	▪ Increase % canopy from 20% to 30%	20 years
▪ <b>Reduce invasive species cover</b>	▪ Reduce area covered by invasive buckthorn from 10% to no more than 5%	10 years
▪ <b>Improve water quality</b>	▪ 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

The screenshot shows the homepage of the Adaptation Workbook. At the top, a dark navigation bar contains the site name and menu items. The main header features the title and subtitle, followed by two prominent buttons. Below this are three image-based sections for Forests, Urban Forests, and Agriculture. The lower half of the page lists four key features: tailored location, peer-reviewed content, a structured process, and the ability to take the plan with you. The footer includes the organization's name and contact information.

Adaptation Workbook

About How to Use LMS Resources Training My Workbook Log Out Contact

## Adaptation Workbook

a climate change tool for land management and conservation

[Use Workbook](#) [About](#)



**FORESTS** **URBAN FORESTS** **AGRICULTURE**

 **Tailored to your location**  
Relevant resources and information for your location, giving you complete flexibility to build a custom adaptation plan based on your unique management goals, values, and experience.

 **Peer-reviewed**  
Based on the best available science on climate change impacts and adaptation. You can access a library of information to learn more.

 **Structured process**  
A logical, step-by-step process to help you consider climate change information for your location. The process helps you capture your thinking and align your goals to adaptation actions.

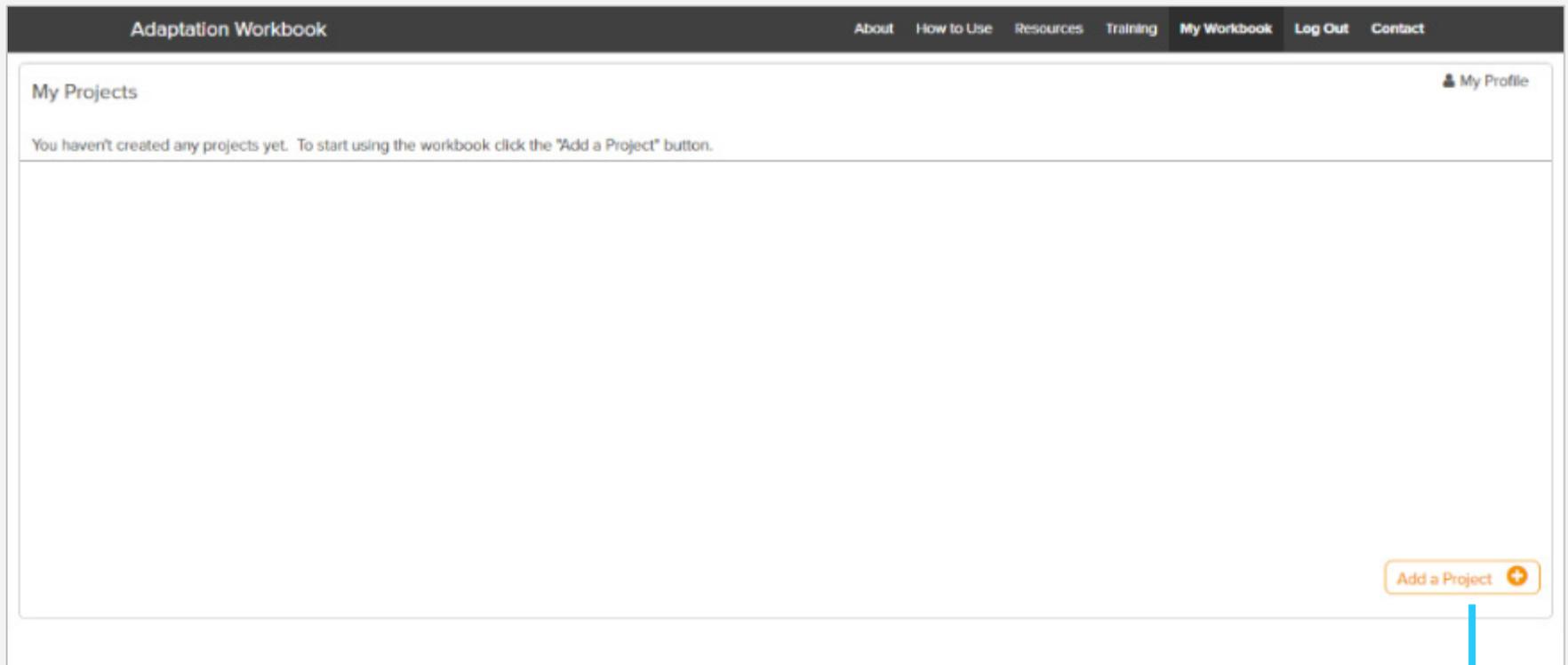
 **Take it with you**  
Create a custom adaptation plan. Save this plan to combine with other management documents and share with your colleagues.

 Northern Institute of Applied Climate Science

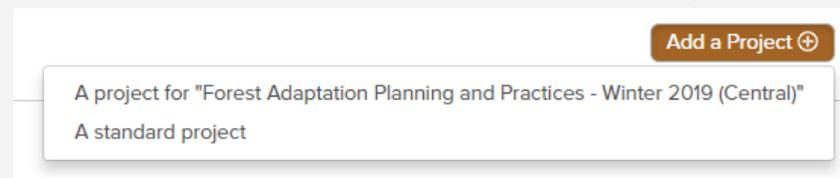
Terms and Conditions | Privacy Policy | Contact

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

## Project Dashboard:



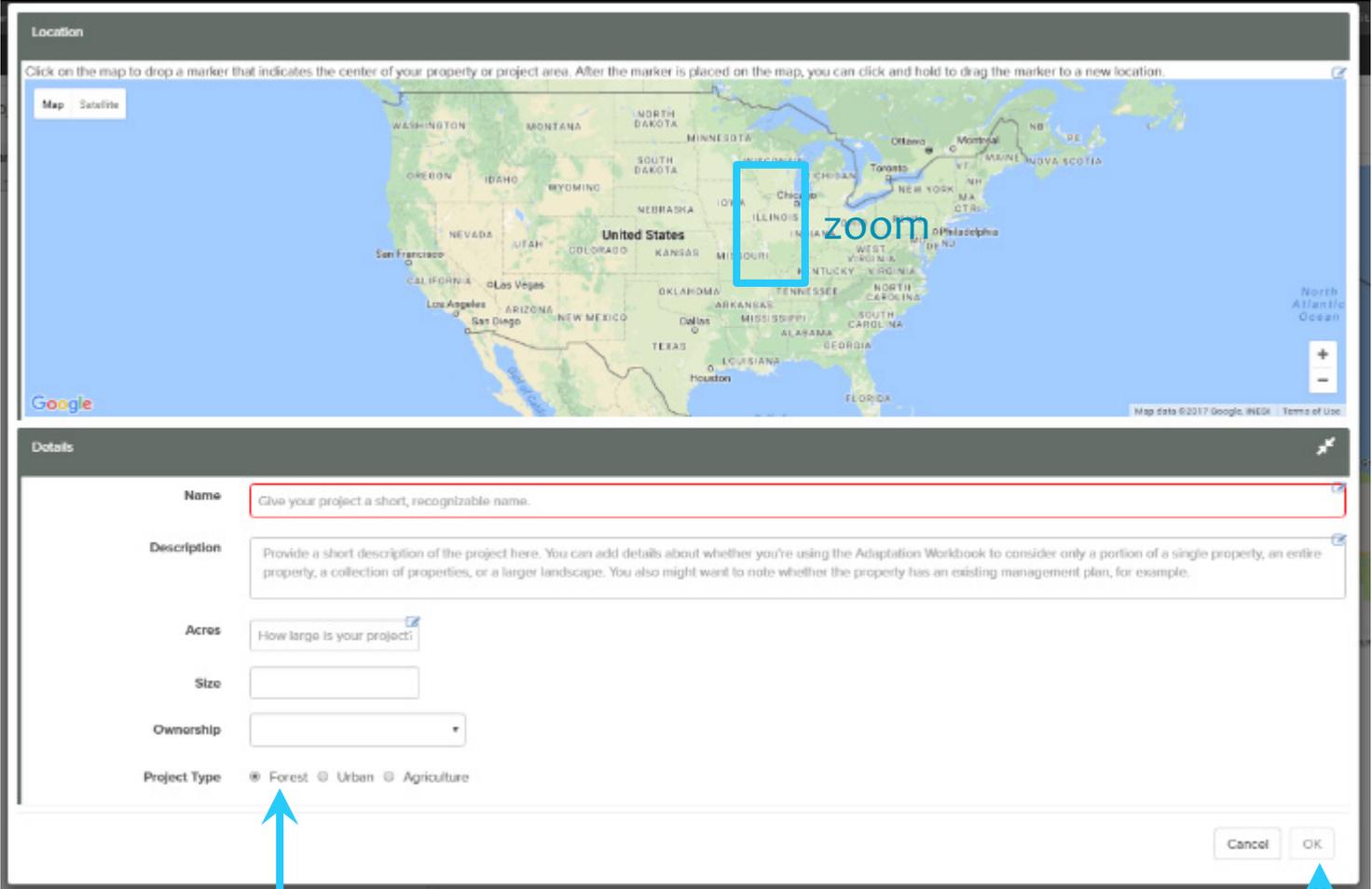
Be sure to select: **A Project for  
“Forest Adaptation Planning and  
Practices – Winter 2019 (Central)”**



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

## Location:

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



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.

Map Satellite

United States

zoom

Details

Name

Description

Acres

Size

Ownership

Project Type  Forest  Urban  Agriculture

Cancel OK

# Workbook Dashboard

## My Projects

 My Profile

### Buffam Brook Community Forest

Created January 5, 2018 | Last edited January 5, 2018

### Sugar Hills Demonstration Project

Created January 28, 2015 | Last edited September 7, 2017

### Kucera Farm

Created January 4, 2017 | Last edited September 7, 2017

### Adaptation Workbook Tutorial

Created January 26, 2017 | Last edited January 27, 2017

### Menominee Oak Wilt Project

Created January 28, 2015 | Last edited January 25, 2017

### Lambert Restoration Project

Created January 28, 2015 | Last edited November 30, 2016

### Iowa

Created October 20, 2016 | Last edited October 20, 2016

### Jerktail Mountain

Created January 28, 2015 | Last edited February 6, 2017

Add a Project 

## Buffam Brook Community Forest



[Go to Workbook](#) 

 Edit project details

 View course materials

 Delete this project

Ownership: Municipal Acres: 161

Kestrel Land Trust: Buffam Brook Community Forest The Town of Pelham Conservation Commission and Kestrel Land Trust are developing a forest stewardship plan for a new community forest, integrating climate change into forest management activities.

Start Workbook

Course Materials

# Welcome screen

## Welcome to the Adaptation Workbook

### Welcome to the Forest Adaptation Planning and Practices online course!

This course is designed to help you consider climate change information and identify adaptation actions using your own real-world management or conservation project. This online Adaptation Workbook will help you step through a structured process for considering climate change impacts, challenges, and opportunities for your project area. We will use a combination of individual work time (using this Workbook) followed by online classroom sessions to provide you with information and resources for integrating climate change information into your work.

### Example Adaptation Projects

As you complete this course, we also encourage you to spend a little time reviewing a few other adaptation projects to get a sense for how the overall process will come together. More than 100 adaptation demonstration projects are featured on the [Climate Change Response Framework website](#). Additionally, the following short videos highlight the outcomes from a few unique projects:

- [Climate-informed forest restoration in Florence County, WI](#)
- [Spruce grouse habitat on Chequamegon-Nicolet National Forest](#)
- [Responding to oak wilt on the Menominee Forest](#)

Don't show this again.

Get Started

- [Climate-informed forest restoration in Florence County, WI](#)
- [Spruce grouse habitat on Chequamegon-Nicolet National Forest](#)
- [Responding to oak wilt on the Menominee Forest](#)

### Need help?

Contact your instructors for assistance: [Maria Janowiak](#) (906-482-6303 x29) or [Todd Ontl](#) (906-482-6303 x24). Alternatively, you can also consult the [Getting Started Guide](#).



Next »

Define Management Topics

# Progress Summary Page

The image shows a web interface for a course. On the left is a dark sidebar with navigation links. The main content area is white and contains course information. A blue arrow points to a small upward-pointing triangle icon at the bottom of the main content area, with the text 'Click to collapse' next to it.

**Adaptation Workbook**

- My dashboard
- Log out
- Resources ▾
- Buffam Brook Community Forest
- 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

**Progress Summary instructions** ▾

**Course agenda and notes**

### Class Sessions

Class sessions are held weekly on Fridays at 1:00-2:30pm Eastern using an online Adobe Connect meeting room.  
**URL:** <https://usfs.adobeconnect.com/forestadaptation/>  
**Phone:** 888-844-9904, access code: 6657648

- Session 1 (January 20) — Introduction to the Online Course and Adaptation Workbook — [Session 1 slides](#) now available!
- Session 2 (January 27) — Understanding and Evaluating Climate Change Vulnerabilities — [Session 2 slides](#) now available!
- Session 3 (February 3) — Evaluating Management Challenges and Opportunities — [Session 3 slides](#) now available!
- Session 4 (February 10) — Identifying Adaptation Strategies, Approaches and Tactics — [Session 4 slides](#) now available!
- Session 5 (February 17) — Monitoring and Evaluating Effectiveness
- Session 6 (February 24) — Telling your Adaptation Story, Part 1
- Session 7 (March 3) — Telling your Adaptation Story, Part 2

Course participants are expected to attend all class sessions. Contact an instructor if you have any potential conflicts.

### Example Adaptation Projects

As you complete this course, we encourage you to spend a little time reviewing a few other adaptation projects to get a sense for how the overall process will come together. More than 100 adaptation demonstration projects are featured on the [Climate Change Response Framework website](#). Additionally, the following short videos highlight the outcomes from a few unique projects:

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Next »  
Define Management Topics

Click to collapse

# Progress Summary Page

**Adaptation Workbook**

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  - Homework 2
- Step 3
  - Evaluate Objectives
  - Homework 3
- Step 4
  - Adaptation Actions
- Tactic Recommendations

**Progress Summary instructions** ▾

**Course agenda and notes** ▾ [Click to expand](#)

### Progress summary for Buffam Brook Community Forest

**Step 1. DEFINE areas of interest, management goals and objectives.** ⚠

0 Management Topics | 0 Goals

**Step 2. ASSESS climate change impacts and vulnerabilities for the area of interest.**

Identified 20 Potential Climate Impacts | Determined 0 of 0 vulnerabilities

**Step 3. EVALUATE management objectives given projected impacts and vulnerabilities.** ⚠

0 of 0 objectives evaluated

**Step 4. IDENTIFY adaptation approaches and tactics for implementation.** ⚠

0 tactics apply to 0 objectives

**Step 5. MONITOR and evaluate effectiveness of implemented actions.** ⚠

0 of 0 objectives have monitoring variables

Next »  
Define Management Topics

#### Define Management Topics

⚠ 0 Management Topics

#### Management Goals and Objectives

⚠ 0 Goals

#### Management Topic

# Progress Summary Page

Left Panel

Minimize  
left panel

Middle Panel

Right Panel

The screenshot shows a web application interface for a 'Progress Summary' page. The left panel is a dark sidebar with navigation items: 'Adaptation Workbook', 'My dashboard', 'Log out', 'Resources', 'Buffam Brook Community Forest', 'Progress Summary' (highlighted with an orange arrow), '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', and 'Adaptation Actions'. A blue circle highlights a minimize icon in the top left of the main content area. The main content area is divided into three sections: 'Progress Summary instructions', 'Course agenda and notes', and a list of steps. The 'Course agenda and notes' section contains a list of steps for 'Buffam Brook Community Forest'. The right panel contains three sections: 'Define Management Topics', 'Management Goals and Objectives', and 'Management Topic'. A blue arrow points from the 'Define Management Topics' link in the left panel to the 'Define Management Topics' section in the right panel. A blue box highlights a 'Next >>' button with the text 'Define Management Topics' below it. A blue arrow points from the text 'Go to step 1.' to this button.

Adaptation Workbook

My dashboard

Log out

Resources ▾

Buffam Brook Community Forest

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

Progress Summary instructions

Course agenda and notes

Progress summary for Buffam Brook Community Forest

Step 1. DEFINE areas of interest, management goals and objectives. 0 Management Topics | 0 Goals

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Step 5. MONITOR and evaluate effectiveness of implemented actions. 0 of 0 objectives have monitoring variables

Define Management Topics 0 Management Topics

Management Goals and Objectives 0 Goals

Management Topic

Go to step 1.

Next >>  
Define Management Topics

# Step 1.1: Define management topics.

- Adaptation Workbook
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- Step 1
  - Define Management Topics >
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- Step 3
  - Evaluate Objectives
  - Homework 3
- Step 4

## Step 1.1: Define your forest types or management topics

The Adaptation Workbook is designed to help you consider how climate change might influence your unique management goals and objectives. To help you organize your information, Step 1.1 asks you to create some general categories, such as forest types, ecosystems, or custom management topics. In Step 1.2, you will set specific goals and objectives for each category.

The Workbook may have suggested several possible forest types or ecosystems for you based your property location. You can keep or remove any of these pre-defined categories, depending on what vegetation occurs on your property.

If there are different management topics that are important to your goals, or if your property includes ecosystems, habitats, or other features that are not included in the pre-defined forest types, **you can create your own categories by selecting the "custom" option at the bottom of the page.** Create any categories you like, as long as they have distinct management goals and objectives you want to consider throughout the rest of the Workbook.

For example:

You might create categories like "White Spruce Plantations" or "Grouse Habitat Improvement" or "Pioneer Creek Riparian Area."

 [Define Management Topics Resources](#)

-  Hover to learn more about a particular item
-  Expand/collapse a section
-  Click to add a comment or specific information about your project area



« Previous

Next »

# Step 1.1: Define management topics.

**Adaptation Workbook**

- My dashboard
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- Evaluate Objectives
- Homework 3
- Step 4
- Adaptation Actions

**Define Management Topics instructions** ▾

**Step 1 Course Materials**

The first class session will be on **January 20 at 1:00-2:30 pm**. Before then, you may want to:

- Select a forest or natural resource management project to use for the training.
- Assemble relevant materials and information your project (maps, inventory information, fact sheets, management plans, easement documents, etc.) for use during the course.
- Peruse the *Forest Adaptation Resources, 2nd edition*, in particular the **Introduction** (pgs. 1-9) and the **Adaptation Workbook** (Chapter 5, pgs. 74-89).

**Review Session 1 slides**

Prior to Session 2, complete the following by **Thursday, January 26 at 5:00 pm**:

- Step 1 of the Adaptation Workbook
- Homework section following Step 1
- Review regional climate impacts to prepare for Step 2 by watching a [recorded presentation](#) or reading the report [Changing Climate, Changing Forests](#).

If you encounter technical issues with the Workbook or have suggestions for improvements, send us an email using [this link](#).

Transition hardwood ⓘ +

Add a custom Forest Type or Management Topic +

« Previous Progress Summary Management Goals and Objectives Next »

Step 1 course materials

# 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

The screenshot shows the 'Define Management Topics' section of the Adaptation Workbook. The left sidebar contains navigation options: Adaptation Workbook, My dashboard, Log out, Resources, Buffam Brook Community Forest, Progress Summary, Step 1 (selected), Define Management Topics (highlighted), Management Goals and Objectives, Homework 1, Step 2, Climate Impacts and Vulnerability, Vulnerability Determination, and Homework 2. The main content area is titled 'Define Management Topics instructions' and 'Step 1 Course Materials'. Below this, there is a section 'Define Forest Types or Management Topics' with a list of pre-loaded options: Northern hardwood, Central hardwood-pine, Lowland and riparian forest, Low-elevation spruce-fir, Lowland mixed conifer, Montane spruce-fir, Pitch pine-scrub oak, and Transition hardwood. Each option has a plus sign to its right. At the bottom of the list is a button 'Add a custom Forest Type or Management Topic'. To the right of the list is a text input field labeled 'My property or project area'. Two blue arrows point to the plus signs and the text box with explanatory text.

← Forest types are pre-loaded for your convenience. These come with climate change information for use in later steps. Click “+” to use them.

← Or, you can create your own forest types or 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

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

Custom Management Topic 

Title

Describe your custom land-use category or management topic here. You can attach supporting documents or references using the Add a Link button below. 

[Add a link !\[\]\(e0f8ac65b1d1ee9db08facc1456818ec\_img.jpg\)](#)

[Save](#)

# Step 1.2: Define management goals & objectives.

Adaptation Workbook

My dashboard

Log out

Resources ▾

Buffam Brook Community Forest

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

Management Goals and Objectives instructions ▾

Step 1 course materials ▾

Management Goals and Objectives

General Goals for the entire property or project area 1 Goals

Transition hardwood Goals and Objectives 1 Goals | 0 Objectives ⚠

Invasive species issues Goals and Objectives 0 Goals | 0 Objectives ⚠

Add Another Goal/Objective Set +

General goals

Goals for specific forest types or management topics

« Previous Define Management

Next » Homework 1

# Step 1.2: Define management goals & objectives.

**Adaptation Workbook**

- My dashboard
- Log out
- Resources ▾
- Buffam Brook Community Forest
- 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

**Management Goals and Objectives instructions** ▾

**Step 1 course materials** ▾

**Management Goals and Objectives**

- General Goals for the entire property or project area** > 1 Goals
- Transition hardwood Goals and Objectives** ⚠ 1 Goals | 0 Objectives
- Invasive species issues Goals and Objectives** ⚠ 0 Goals | 0 Objectives

**Goal #1**

Identify and pursue opportunities for a working forest providing a sustainable wood supply.

Does this goal apply to these Forest Types or Management Topics?

**Transition hardwood**

These forests are transitional between central hardwood and northern hardwood forests. Common species may include sugar maple, yellow birch, American beech, eastern hemlock, white pine, red maple, and red oak.

No  Yes

**Invasive species issues**

Property-wide consideration of invasive species issues.

No  Yes

**Add Another Goal** +

« Previous Define Management      Next » Homework 1

Property-wide goals can be applied to forest types or management topics

# Step 1.2: Define management goals & objectives.

**Adaptation Workbook**

- My dashboard
- Log out
- Resources ▾
- Buffam Brook Community Forest
- 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

**Management Goals and Objectives instructions** ▾

**Step 1 course materials** ▾

**Management Goals and Objectives**

- General Goals for the entire property or project area  
4 Goals
- Transition hardwood Goals and Objectives** >  
4 Goals | 1 Objectives
- Invasive species issues Goals and Objectives** ⚠  
1 Goals | 0 Objectives

**Goal #1**

**Goal #2**

Enhance wildlife habitat

**Add objective** → **Add Objective for this Goal** +

**Goal #3**

Create opportunities for forest-based experiential learning and forestry education for the community

**Add Objective for this Goal** +

**Goal #4**

Provide public access for recreational benefits such as hiking and cross-country skiing on designated trails, as well as hunting and fishing

**Add more goals** → **Add Another Goal/Objective Set** +

« Previous Define Management      Next » Homework 1

# Step 1.2: Define management goals & objectives.

**Adaptation Workbook**

- My dashboard
- Log out
- Resources ▾
- Buffam Brook Community Forest
- 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

**Management Goals and Objectives instructions**

**Step 1 course materials**

- Management Goals and Objectives**  
General Goals for the entire property or project area  
4 Goals
- Transition hardwood Goals and Objectives** >  
4 Goals | 2 Objectives
- Invasive species issues Goals and Objectives** ⚠  
1 Goals | 0 Objectives

**Goal #2**

Enhance wildlife habitat

**Objective**

statements of measurable, planned results. There may be multiple objectives for a single goal.

Time Frame

**Goal #3**

Create opportunities for forest-based experiential learning and forestry education for the community

Add Objective for this Goal +

**Goal #4**

Provide public access for recreational benefits such as hiking and cross-country skiing on designated trails, as well as hunting and fishing

Add Objective for this Goal +

Add Another Goal/Objective Set +

« Previous Define Management      Next » Homework 1

# 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
- 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.	<input type="radio"/>				
I can explain how climate change may affect my ability to achieve management objectives.	<input type="radio"/>				
I can identify viable climate change adaptation strategies that can be applied to my local area.	<input type="radio"/>				
I can translate broad adaptation strategies to actionable adaptation tactics in my local area.	<input type="radio"/>				
I can identify monitoring metrics to assess the effectiveness of my management tactics.	<input type="radio"/>				

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.

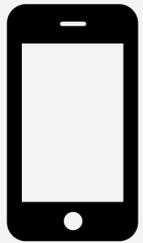
The logo for Flipgrid, featuring the word "FLIPGRID." in white, bold, uppercase letters on a bright green background. The background is a stylized arrow pointing to the right, with a darker green shadow underneath it.

**FLIPGRID.**

# Using Flipgrid (3 options)

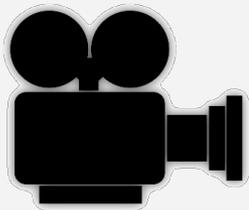


Internet browser+webcam (no downloads required)  
Chrome and Firefox work best. Internet Explorer and Safari work with flash plug in.



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

