



Northern Forests Climate Hub
U.S. DEPARTMENT OF AGRICULTURE



Adaptation Planning and Practices for Water Supply Reservoir Forests in the Mid-Atlantic

January 30-31, 2020



September 24- Agenda

- 9:00 Welcome and Introductions
- 9:30 Maryland's Climate Variability & Change
- 10:00 Climate Change Effects on Forest Systems
- **10:45 Break**
- 11:00 Controlling Invasive Species & Climate Change
- 11:30 Climate Change Effects on Carbon
- **12:15 Lunch (on your own)**
- 1:00 Adapting Reservoir Forests to Climate Change
- 1:30 Adapting Silviculture for Climate Change
- 3:30 Real-world Examples of Forest Adaptation
- 4:00 Adjourn

Northern Institute of Applied Climate Science

(aka
NIACS)

**Chartered by USDA Forest Service, universities,
non-profit and tribal conservation organizations**

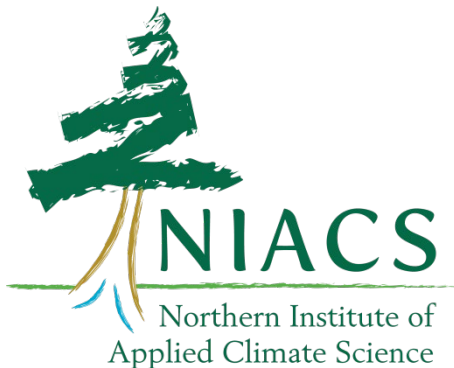
Climate and carbon services

- Climate impacts modeling
- Vulnerability assessment
- Climate adaptation
- Carbon biogeochemistry
- Carbon management

20 staff members

(Forest Service/universities)

- 9 climate outreach specialists
- 6 research scientists
- 2 web specialists
- 3 GIS/lab specialists



Michigan
Technological
University



UNIVERSITY OF MINNESOTA



The
UNIVERSITY
of VERMONT



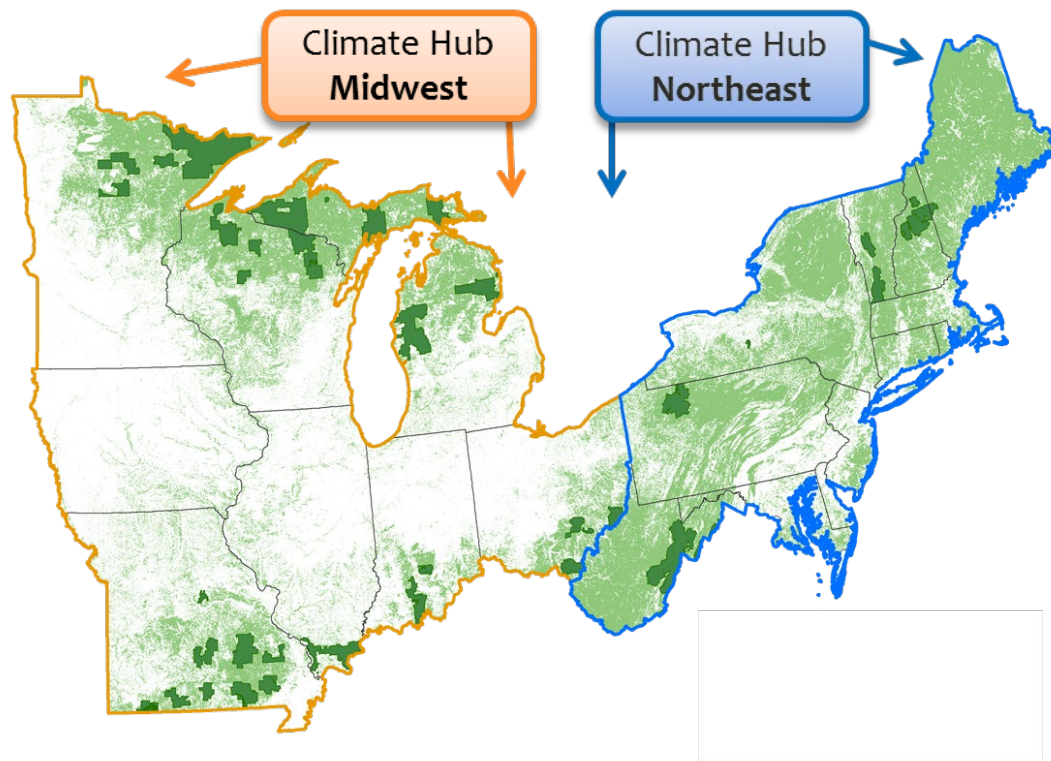
USDA Northern Forests Climate Hub

- “Specialty Hub” - forestry
 - Support 2 Regional Hubs
- 20 states in NE/MW
 - 42% forested
 - 41% of US population
 - >70% privately owned
- Climate Services
 - Assessment
 - Practical resources
 - Technical assistance
- Operated by NIACS



Northern Forests Climate Hub

U.S. DEPARTMENT OF AGRICULTURE



Climate Change Response Framework

Structured, process oriented, works on multiple scales

Components

Partnerships

Vulnerability
Assessment

Forest Adaptation
Resources

Adaptation
Demonstrations

Mid-
Atlantic

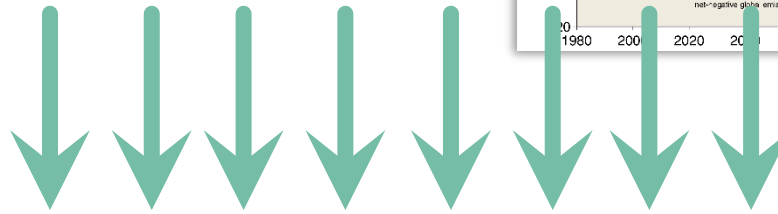
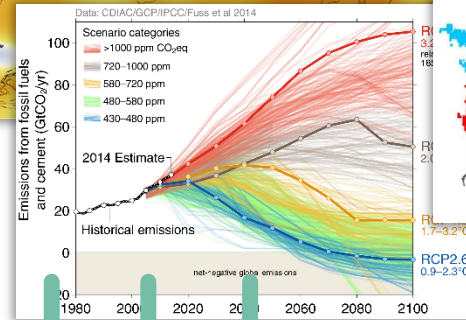
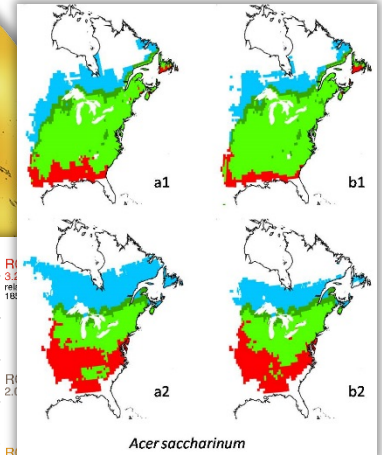
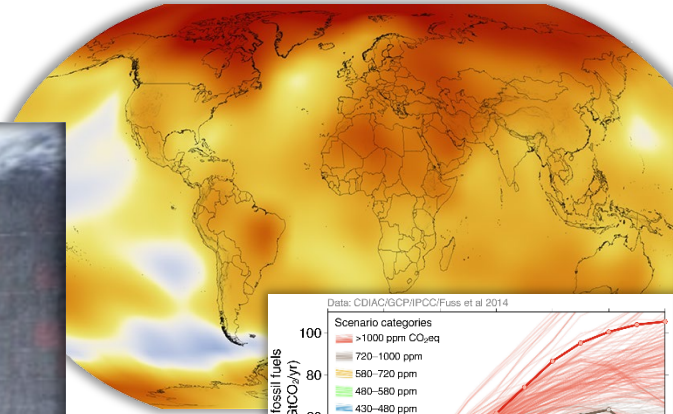


Forestadaptation.org

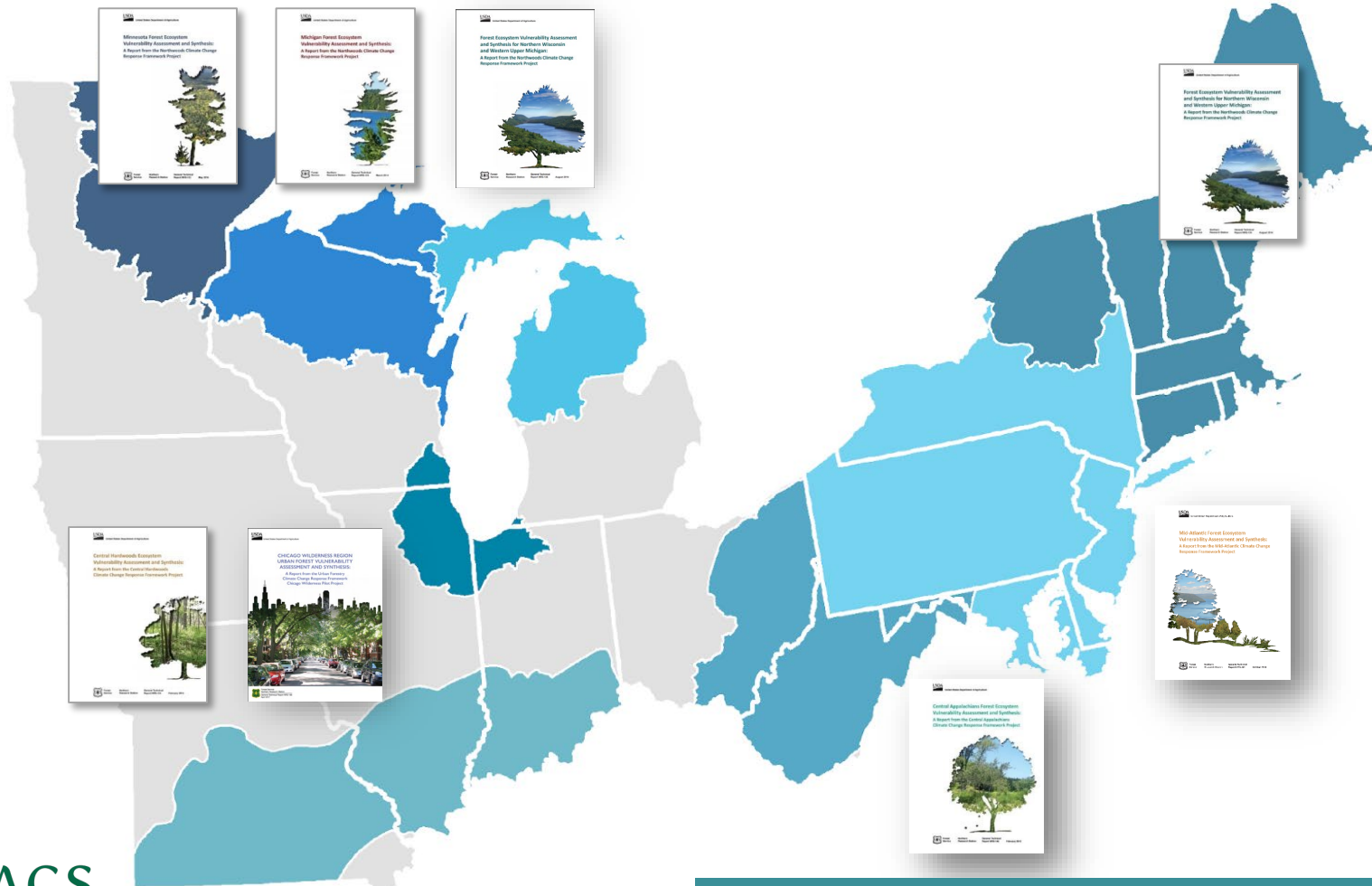
Climate Change Information



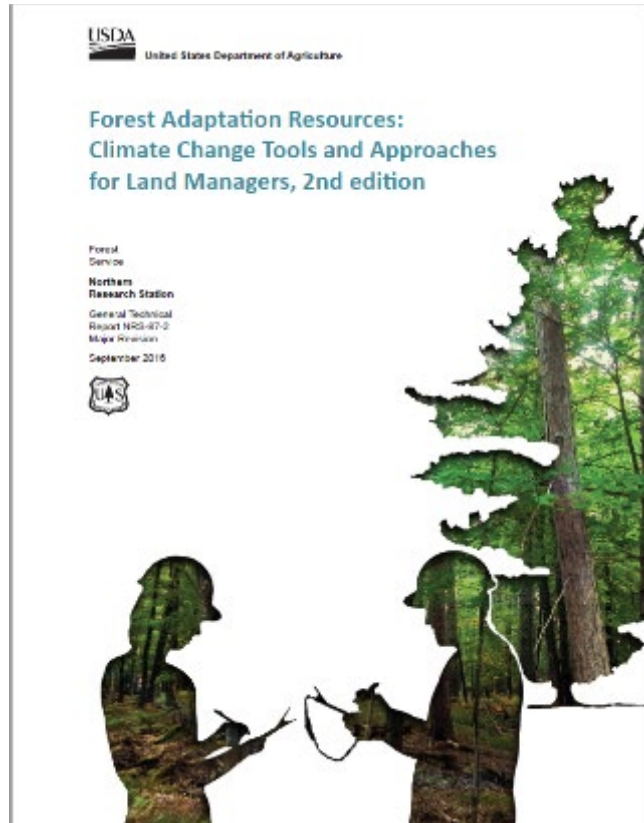
Climate Change Information



Climate Change Vulnerability Assessments



Forest Adaptation Resources



Swanston and Janowiak 2016;
www.nrs.fs.fed.us/pubs/52760

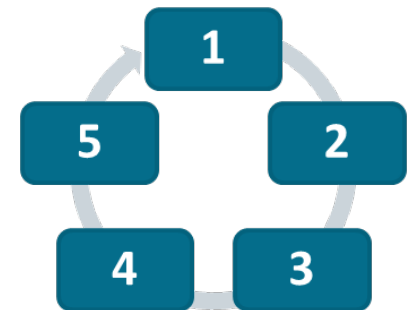
Strategies & Approaches

Menu of adaptation actions



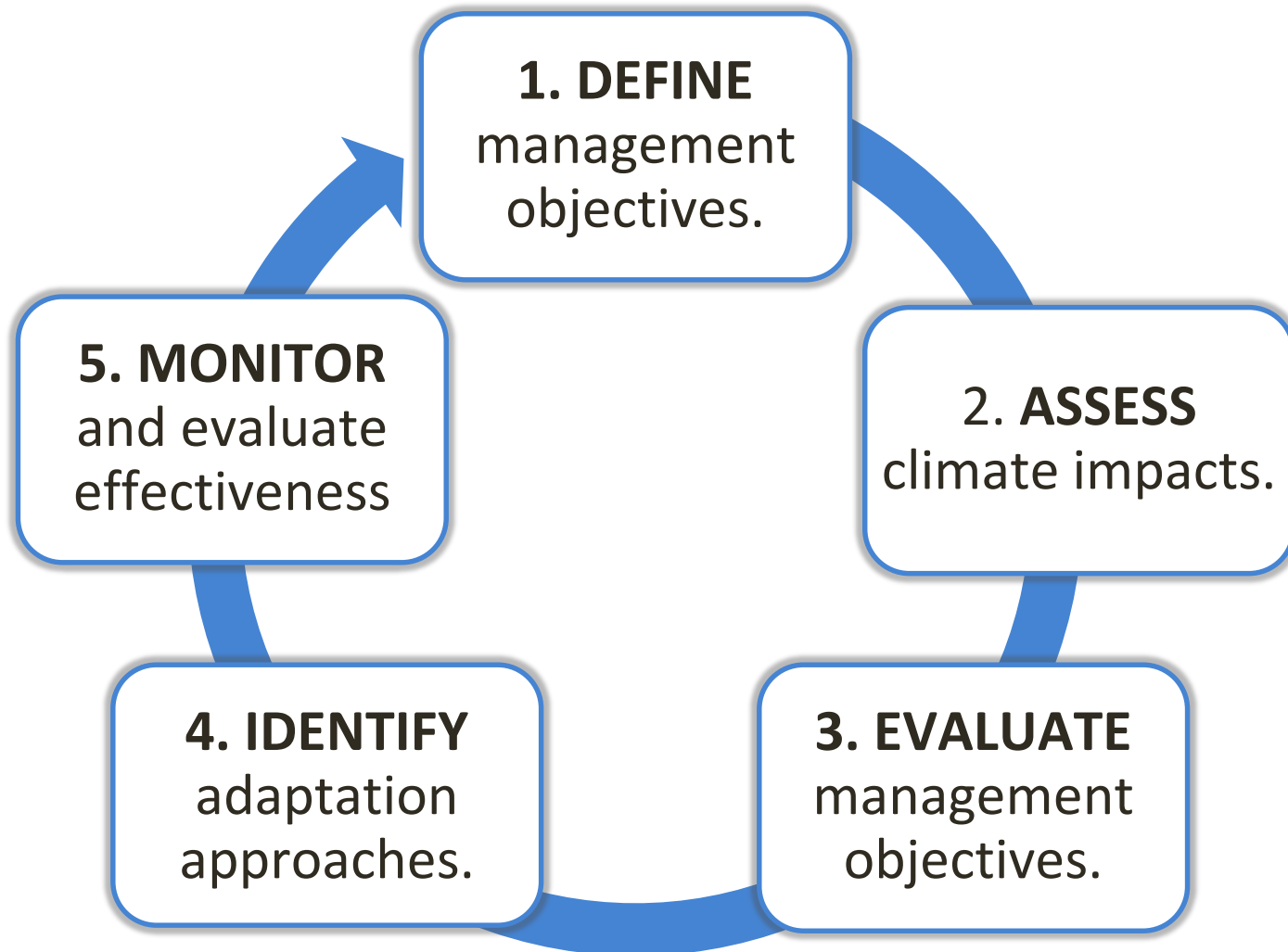
Adaptation Workbook

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



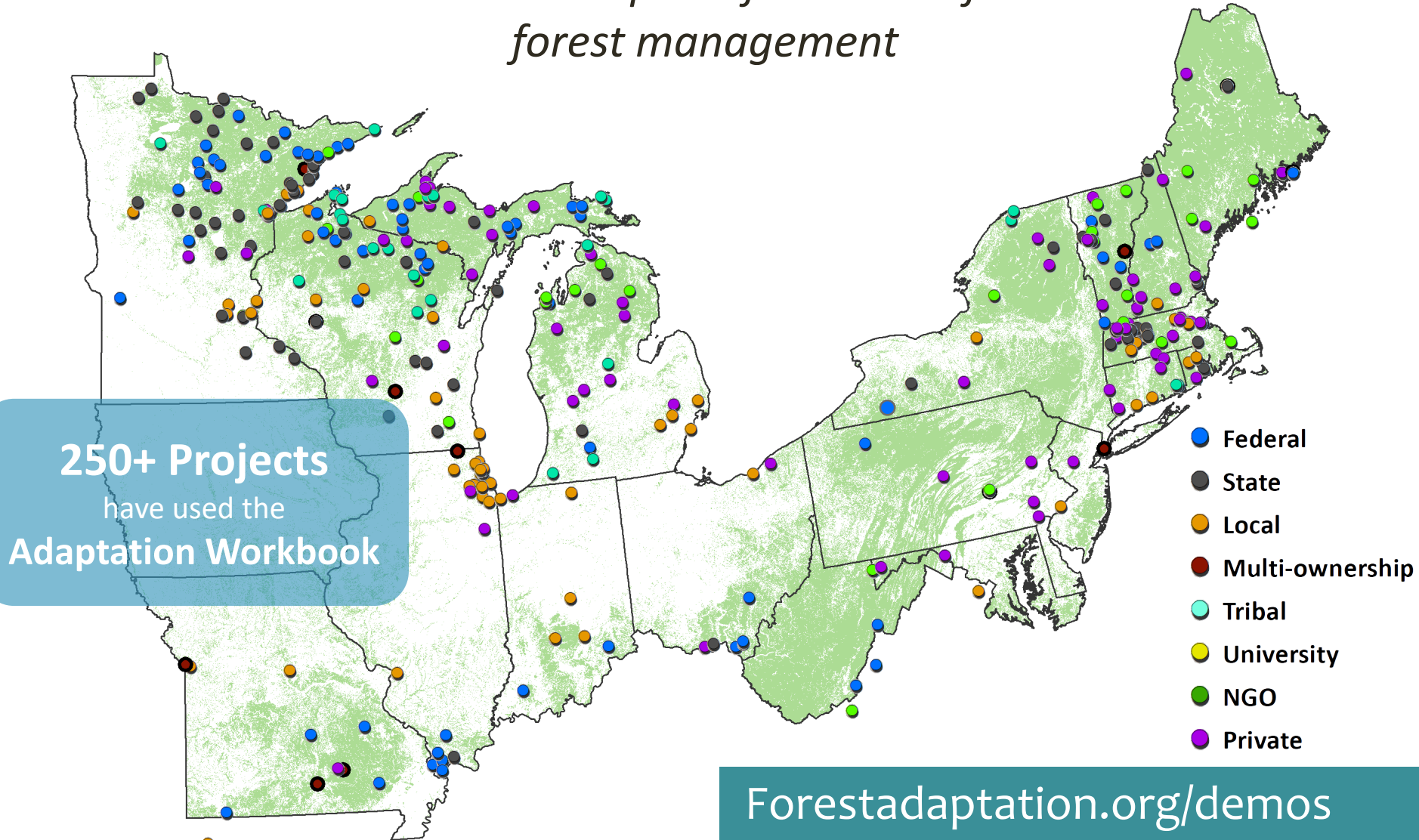
www.AdaptationWorkbook.org

Adaptation Workbook



Adaptation Demonstrations

*Real-world examples of climate-informed
forest management*



Join Us Online

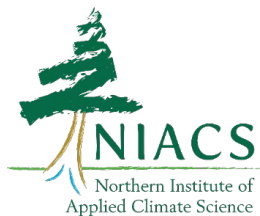
- Create custom adaptation plans
- Regional or topical focus

In-person - 1-2 day interactive workshop

Pennsylvania
Fall 2019

Online - Self-guided, flexible

- Distance learning courses



Winter
2019



www.AdaptationWorkbook.org