The Northern Institute of Applied Climate Science and USDA Northern Forests Climate Hub are offering the Forest Adaptation Planning and Practices training as an online course for managers of urban watersheds (7, 1.5 hour sessions).

This unique opportunity provides hands-on training in considering climate change information and identifying adaptation actions for natural resources management professionals whose focus is on maintaining and enhancing hydrology of urban watersheds using forests and other green infrastructure. Participants will receive coaching and feedback on their own real-world climate adaptation project.

PARTICIPANTS WILL BE ABLE TO

- Identify locally-important climate change impacts, challenges, and opportunities
- Develop specific actions to adapt urban ecosystems to changing conditions
- Use the Adaptation Workbook to create their own “climate-informed” projects
- Better communicate with stakeholders about key climate change impacts, challenges, and opportunities
- Access post-training support from NIACS staff during project planning and implementation

DETAILS

DATES
Seven 1.5-hour sessions
Weekly November 6-December 18, 2018

GEOGRAPHIC FOCUS
Information will focus on urban watersheds in the Midwest and Northeast, but applicants from other regions may be accepted if space allows.

REGISTER ONLINE
www.forestadaptation.org/UrbanFAPP-online
There is no registration fee thanks to support from the US Forest Service and USDA Northern Forests Climate Hub.

QUESTIONS?
Contact: Danielle Shannon, dshannon@mtu.edu

NIACS Northern Institute of Applied Climate Science
USDA U.S. DEPARTMENT OF AGRICULTURE
Northern Forests Climate Hub USDA Northern Forests Climate Hub
WHO SHOULD PARTICIPATE?

This training is designed for natural resource professionals working in urban areas in the Midwest and Northeast regions. This includes county and municipal employees, community forestry and urban conservation non-profits, and private consultants working on public, tribal, and private lands. Professionals providing extension, service, or technical assistance to urban watershed managers are also encouraged to participate. Individuals as well as small teams can participate in the course.

We ask participants to bring their own real-world projects. Example projects could include:
- a city or regional plan focused on green infrastructure
- a restoration project in an urban natural area
- an urban development project that incorporates natural landscape features

Examples of Adaptation Demonstration projects that have used the Adaptation Workbook are online at www.forestadaptation.org/demos.

HOW DOES THE ONLINE COURSE WORK?

The seven-week online course draws on a combination of regular webinars and discussions with all participants, as well as independent work time to create adaptation projects. Throughout the course, participants will develop (individually or in small groups) their own climate-informed adaptation project.

- **Seven 1.5-hour web meetings** bring together all course participants to present and discuss key concepts, as well as share insights and questions related to individual projects. We expect participants to attend all sessions, but meetings will be recorded for those who may need to miss a session. The meeting time will be Tuesday mornings. Exact time will be determined based on participant responses.

- **Assignments** will guide participants through the new material, actively engaging them with recorded presentations, the online Adaptation Workbook, and other activities. Participants will be assigned work to complete before each session, which is generally expected to take 2-4 hours to complete.

Interested? Please register online by October 9, 2018

www.forestadaptation.org/UrbanFAPP-online
Registered participants will receive instructions regarding how to prepare for the training in advance of the first meeting session. Prior to the training, participants will be asked to begin identifying a project to be used during the training and provide some additional information to course instructors.

**Session 1 (January 8) — Defining Project Goals and Objectives**
- Course objectives, instructors, and agenda
- Introduction to the Adaptation Workbook tool (tutorial)
- Developing an adaptation project
- Learning from Adaptation Demonstration projects
- **Assignment 1:** Define project goals and objectives (complete in preparation for Session 1)

**Session 2 (January 15) — Understanding and Evaluating Climate Change Vulnerabilities**
- Defining project scope and management goals/objectives
- **Assignment 2:** Assess climate impacts and vulnerabilities.

**Session 3 (January 22) — Evaluating Management Challenges and Opportunities**
- Climate projections and impacts on tree species, ecosystems, and regions
- Prioritizing vulnerabilities of greatest concern for management goals/objectives
- **Assignment 3:** Evaluate objectives considering climate impacts.

**Session 4 (January 29) — Identifying Adaptation Strategies, Approaches and Tactics**
- Re-considering and revising management goals/objectives in light of climate challenges
- Practice articulating climate-adaptive management goals/objectives
- **Assignment 4:** Identify adaptation approaches and tactics.

**Session 5 (February 5) — Monitoring and Evaluating Effectiveness**
- Meeting existing demands while preparing for future conditions
- Developing specific and actionable management plans for climate-change adaptation
- **Assignment 5:** Monitor effectiveness of implemented actions.

**Session 6 (February 12) — Telling your Adaptation Story, Part 1**
- Tools for measuring effectiveness of implemented adaptation actions
- Capitalizing on existing data, inventory or monitoring processes/partnerships
- **Assignment 6:** Complete adaptation project plans.

**Session 7 (February 19) — Telling your Adaptation Story, Part 2**
- Summarizing and pitching adaptation plans to partners, clients, and others
- Next steps for implementation

*International Society of Arboriculture and Society of American Foresters Continuing Forestry Education credits have been requested for this course.*
This training will be led by a team of experienced instructors specializing in climate adaptation:

**Leslie Brandt**, Northern Institute of Applied Climate Science & US Forest Service
Leslie serves as coordinator for the Urban Forestry Climate Change Response Framework, and lead author of the Chicago Wilderness region urban forest vulnerability assessment and synthesis, which served as a pilot for vulnerability assessment of urban trees and forests. She has led trainings for the general public and urban forestry professionals on climate change impacts and adaptation in the Chicago, Cleveland, Boston, Philadelphia, and Twin Cities regions.

**Danielle Shannon**, Northern Institute of Applied Climate Science & Michigan Technological University
Danielle Shannon is the coordinator of the USDA Northern Forests Climate Hub. Danielle connects audiences to forest adaptation resources and experts across the eastern US. Danielle is expanding the suite of NIACS adaptation resources into the field of forest hydrology and the management of forested watersheds.

There is no registration fee thanks to support from the US Forest Service and the USDA Northern Forests Climate Hub.

**Interested individuals or teams should register at:**
[www.forestadaptation.org/UrbanFAPP-online](http://www.forestadaptation.org/UrbanFAPP-online)

**Have more questions?**
Contact Danielle Shannon at dshannon@mtu.edu to learn more about the course and whether it's right for you.