



## USDA Midwest Regional Climate Hub

# Climate Change and Midwest Agriculture: Impacts, Challenges, & Opportunities

The USDA Midwest Regional Climate Hub is hosting a training to highlight information, resources, and strategies that can help producers prepare for and respond to changing weather and climate.

### Purpose

This training is designed to provide information and resources to increase the ability of producers to respond to climate variability and change. This session will:

- Describe regional and local effects of climate variability and change on Midwest agriculture
- Present strategies for greenhouse gas mitigation in agriculture, using the USDA building blocks as a framework
- Introduce concepts, strategies, resources, and examples to help producers adapt to climate variability and change
- Apply the Adaptation Workbook and companion list of adaptation strategies and approaches to integrate climate change into real-world management projects
- Identify needs among partners and stakeholders to inform future Climate Hub activities

**Date:** March 1-2, 2016

**Location:** Fluno Center at UW-Madison, 601 University Avenue, Madison, WI

### Who should participate?

Professionals working with agricultural producers, including:

- NRCS resource/soil conservationists
- Cooperative extension professionals
- State & federal agency staff
- Soil & water conservation district staff
- Agricultural consultants
- Technical service providers

**Questions?** Contact [Maria Janowiak](#) with questions about the event or [Jerry Hatfield](#) with questions about the Midwest Hub.



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## Climate Change and Midwest Agriculture: Impacts, Challenges, & Opportunities

**March 1, 2016**

- 7:00 Breakfast
- 8:30 **Welcome & Introduction**
- 9:00 **Climate Change in the Midwest**  
*Dan Vimont, University of Wisconsin-Madison*
- 9:45 Break
- 10:00 **Climate Change Effects on Agriculture in the Midwest**  
*Jerry Hatfield, USDA Agricultural Research Service*
- 11:00 **Climate Change Effects on Agriculture: Considerations for Producers**
- 12:00 Lunch
- 1:00 **Role of Agriculture and Forestry in Mitigating Greenhouse Gases: USDA's Building Blocks**  
*Joel Larson, USDA Climate Change Program Office, Office of the Chief Economist*
- 1:30 **On-Farm Greenhouse Gas Mitigation Practices**  
*Julie Doll, Michigan State University*
- 2:00 **Resources and Options for Adapting to Climate Variability and Change**  
*Maria Janowiak, Northern Institute of Applied Climate Science and USDA Forest Service*
- 2:30 **Adapting Farm Practices to Climate Change: A Real-World Example**  
*Dan Dostie, USDA Natural Resources Conservation Service*
- 3:00 Break
- 3:15 **Project Introductions/Begin Adaptation Workbook**
- 5:00 Adjourn



### Learn more about the USDA Midwest Regional Climate Hub

The USDA Midwest Regional Climate Hub encompasses Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin, which include some of the most extensive and intensive agricultural systems in the world.

As one of seven regional Hubs serving the entire country, the Midwest Hub is working across a range of crop, livestock, and other agricultural production systems to assemble the available information into tools and practices that can increase the resilience of these systems to weather variability and climate change.

Learn more at: [www.climatehubs.oce.usda.gov/midwest](http://www.climatehubs.oce.usda.gov/midwest)

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## Climate Change and Midwest Agriculture: Impacts, Challenges, & Opportunities

**March 2, 2016**

7:00 Breakfast

**8:30 Introduction/Climate Change Impacts on Projects**

Describe projects, including climate change impacts identified during the pre-work.  
Identify additional climate change impacts relevant to the project locations.  
Complete Adaptation Workbook Step #2.

9:30 Break

**9:45 Challenges and Opportunities for Meeting Management Objectives**

Identify challenges and opportunities relevant to the project management objectives.  
Evaluate whether it is feasible to achieve management objectives.  
Complete Adaptation Workbook Step #3.

**11:00 Identifying Agricultural Adaptation Approaches and Tactics**

Select potential adaptation actions from the menu of Adaptation Strategies and Approaches.  
Evaluate potential adaptation tactics as part of Adaptation Workbook Step #4.

12:00 Lunch

**1:00 Identifying Agricultural Adaptation Approaches and Tactics (continued)**

Select potential adaptation actions from the menu of Adaptation Strategies and Approaches.  
Evaluate potential adaptation tactics as part of Adaptation Workbook Step #4.

**2:30 Identifying Metrics for Monitoring and Evaluating Effectiveness**

Identify metrics to evaluate the effectiveness of adaptation actions as part of Workbook Step #5  
Complete Adaptation Workbook Step #5

3:15 Break

**3:30 Discussion of Adaptation Workbook/Resources and Next Steps**

5:00 Adjourn

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### Adaptation in Action

It is becoming increasingly important to consider the potential management challenges and opportunities associated with a changing and uncertain climate. During this active, hands-on training, participants will incorporate climate change considerations and identify actions for adaptation into real-world management projects.

During the training, participants will use the Adaptation Workbook and a companion list of adaptation strategies and approaches that are being developed by the USDA Climate Hubs in the Midwest and Northeast. Together, these adaptation resources are designed to help users consider climate-related impacts, challenges, and opportunities and identify actions to adapt to changing conditions. These resources build on lessons learned in developing more than 150 real-world adaptation projects related to natural resource management and habitat conservation, while also presenting new information and ideas specific to the agriculture sector.

### Sign me up!

Interested in attending?

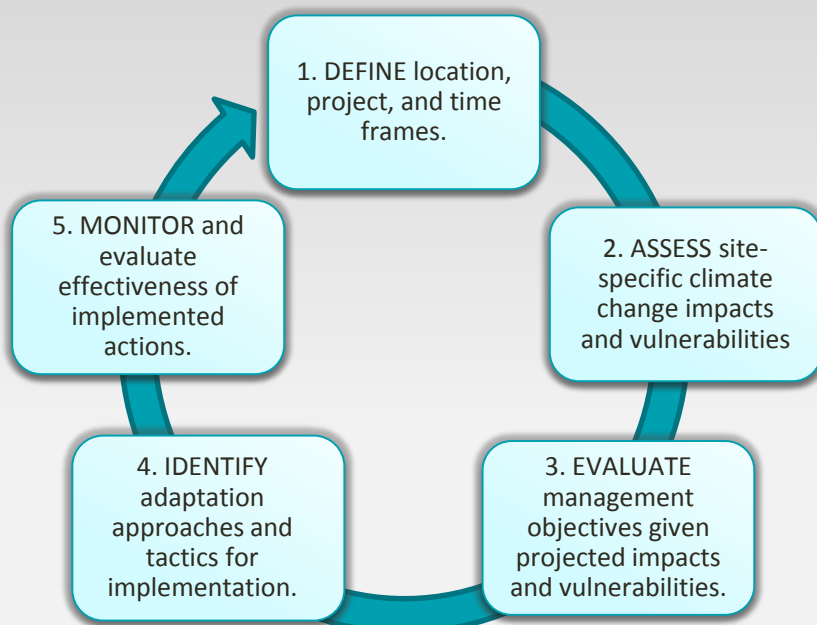
Register online at [www.tinyurl.com/midwest-hub](http://www.tinyurl.com/midwest-hub).

There is no registration fee for this event, which is funded by the USDA Climate Hubs.

Due to the hands-on nature of this course, training registration will be limited to 40 participants.

**You may have noticed that this isn't your average training.** Participants are encouraged to bring a "project" to the training based on their everyday work. Small teams will be assembled and use the Adaptation Workbook to consider how weather variability and climate change may create challenges and opportunities for the project, as well as identify actions to adapt to changing conditions. The training organizers may follow up with you about your project idea, or to help place you with an appropriate project team if you are not bringing a project.

A limited amount of travel assistance is available to USDA participants working with agricultural producers. If applicable, you can request travel assistance during registration.



### The Adaptation Workbook

The Adaptation Workbook provides a flexible, structured approach for integrating climate change considerations into agricultural planning and activities.

This training will introduce the Adaptation Workbook and a companion list of adaptation strategies and approaches. Participants will learn to use these resources in real-world projects and provide feedback to inform the final product currently in development.