

Pinyon & Juniper Adaptation & Management Workshop Agenda

Thursday, October 12, 2023 from 9 a.m. – 5 p.m. MT

Friday, October 13, 2023 from 8 a.m. – 12 p.m. MT

Homewood Suites by Hilton, 1521 Oakridge Dr, Fort Collins, CO 80525

<https://forestadaptation.org/learn/pinyon-and-juniper-adaptation-and-management>

Adaptation Workshop Purpose & Objectives:

There is an increasing need to consider the effects of climate change on ecosystems and identify management actions that respond to these changes. This workshop will support participants that manage pinyon and juniper in ecosystems on the Colorado Plateau in determining which climate impacts are of greatest concern to them, and identify management opportunities for adapting to change.

Workshop participants will:

- Review regional and local effects of climate change on pinyon-juniper ecosystems
- Explore resources and tools that can be used to integrate climate change into pinyon-juniper management
- Identify challenges and opportunities for land managers related to pinyon and juniper
- Test a new decision support and prioritization tool for pinyon and juniper treatments under future climate on the Colorado Plateau
- Develop actionable steps to adapt pinyon and juniper management approaches to changing climate regimes

Agenda

SESSION 1 – Thursday, October 12, 9 a.m. – 5 p.m. MT

- 9:00 am** **Welcome / Introductions** (Nichole Barger, University of Colorado & Mandy Slate, Ohio State University) (*light breakfast snack will be provided*)
- 9:45 am** **Adaptation Workbook Overview** (Courtney Peterson, Colorado State University)
- 10:00 am** **Pinyon-Juniper Woodland Dynamics: Expansion, Contraction, & Thickening** (Nichole Barger, University of Colorado)
- 10:30 am** **BREAK**
- 10:45 am** **Adaptation Workbook Step 1: Define Area of Interest, Goals and Objectives, and Timeframes.**
- Introduce scenarios for breakout group discussions.
- 11:15 am** **Climate Change Vulnerability Projections for the CO Plateau** (Adam Noel & Michael Duniway, USGS)
- Future projections for climate-driven pinyon-juniper species shifts
 - Ecological site changes based on climate and where we are expecting to see these changes on the ground
- 11:45 am** **Q&A and Group Discussion on Future Climate Projections**

12:00 pm **Lunch** (*provided*)

1:00 pm **Adaptation Workbook Step 2: Assess Climate Change Impacts**

- Consider how climate change might affect PJ management in the Colorado Plateau. Select the top (5) climate change impacts that will be most important in your specific project area outlined in the scenario. Include a few notes on how these impacts will influence your specific site.
- Breakout group work time:
 - What are the priority climate impacts based on your scenario?
 - How might climate change play out differently for your location than elsewhere in the region?

1:40 pm **Adaptation Workbook Step 2: Group Vulnerability Determination**

2:00 pm **Adaptation Workbook Step 3: Challenges/Opportunities for Meeting Management Objectives**

- Describe how the climate impacts discussed in Step 2 may create challenges or opportunities for project objectives.
- Breakout group work:
 - Discuss the feasibility of the Goals and Objectives for your scenario location.
 - Does climate change significantly reduce the feasibility of any objectives? Do some objectives need to change?

2:45 pm **Break**

3:00 pm **Continue Adaptation Workbook Step 3**

- Large group discussion of feasibility - how would you rate the feasibility of achieving your management goals and objectives over the short vs. long-term based on climate change projections?

3:30 pm **Presentation on the Pinyon and Juniper Management Adaptation Menu – What it is and How to Use it as a Tool** (Courtney Peterson, Colorado State University & Jesse Gray, University of Colorado)

4:00 pm **Adaptation Workbook Step 4: Identify Adaptation Approaches and Tactics for PJ Ecosystems Utilizing the PJ Menu**

- Select potential adaptation actions from the PJ menu of Adaptation Strategies and Approaches and evaluate potential adaptation tactics.
- What actions can help address climate change impacts and challenges, while also achieving your project goals and objectives? Consider a variety of actions, including:
 - **Things you already do** that are even more important because of climate change.
 - **Small tweaks or enhancements** that improve upon what you are already doing.
 - **Major changes**, or wild and crazy ideas, from the current way of doing things.
- Adaptation Strategies & Approaches are designed to help you bridge the gap between big, fuzzy concepts and real on-the-ground actions. What are some ways to incorporate climate change adaptation into your project?

4:55 pm **Wrap-Up and Logistics for Friday**

5:00 pm **Adjourn for the Day – Join us for a Happy Hour at 6 pm** (Ottopint)

SESSION 2 – Friday, October 13, 8 a.m. – 12 p.m. MT

- 8:00 am** **Welcome Back and Reflections from Day 1** (*light breakfast snack will be provided*)
- 8:15 am** **PJ Adaptation Menu Discussion** (Mandy Slate, Ohio State University)
- Group Discussion:
 - What are some examples of tactics you discussed in your groups?
 - Of the tactics that you did not select, do you think that you might implement these in the future? If so, when? Why?
 - Did you think of an action that wasn't captured by one of the Strategies or Approaches?
 - Overall, were the strategies you selected geared toward resisting climate change, directing change to align with future conditions, or accepting change?
 - Do the strategies you selected help reduce the biggest impacts you identified?
 - Do the strategies you selected help enhance your adaptive capacity?
 - Do your strategies address the challenges you identified, capitalize on opportunities, and help you meet your goals and objectives?
- 9:30 am** **BREAK**
- 9:45 am** **Feedback on the PJ Adaptation Menu** (Mandy Slate, Ohio State University)
- Group Discussion:
 - What did you really like? What worked well (Adaptation Workbook process and the menu)?
 - What could use improvement? Are there missing topics in the menu?
 - Does the scope of this menu seem appropriate?
 - In what situations do you think it would be most useful to use this menu?
- 10:30 am** **Multi-Agency Panel Presentation on Monitoring Protocols (NPS, BLM, USFS)** (Facilitated by Michael Duniway, USGS)
- 10:55** **Adaptation Workbook Step 5: Identifying Metrics for Monitoring and Evaluating Effectiveness**
- How will you know if your adaptation actions are effective? What monitoring will be necessary to guide future decisions?
 - Provide an example of something you could monitor to evaluate whether your project actions helped to both achieve your goals and increase your area's ability to adapt to changing conditions.
- 11:15 am** **Group Discussion - How Do We Start Moving Climate Adaptation Efforts Forward and opportunities for coordination, learning, or shared resources?** (Facilitated by Nichole Barger, University of Colorado and Mandy Slate, Ohio State University)
- Research or management priorities following this workshop?
 - Where are there opportunities for coordination, learning, or shared resources?
 - How do we scale this effort beyond this group? How does this get carried forward and sustained?
- 11:50 am** **Wrap-Up/Next Steps Following this Workshop** (Nichole and Mandy)
- 12:00 pm** **Adjourn**