Summary from the Climate Adaptation and Manager Needs Discussion Session March 9 2021 USFS Region 3 and the Ecological Restoration Institute

Threats

- Managers are seeing significant disturbance events with no analogues, and increases in system extremes (e.g. drought and flood, beetle kill).
- Managers are recognizing the interactions and feedbacks between disturbance events, changing weather patterns, and further ecosystem impacts and changes.

## Challenges

- Concerns about meeting multiple demands with compounding stressors and having the capacity to meet all needs
- Conversations about climate adaptation are missing key parties (e.g. representatives from across resource areas). This results in missed opportunities to share successes and failures or learn from other's experiences. There is a need for more cross-resource conversations.
- Managers are not sure how to manage uncertainty and risk how are novel approaches explained to the public? Where is the support from leadership for novel approaches?

## Needs

- A data & information clearinghouse, where information has been vetted as best available science, along with guidance on how to use data. Similarly, a toolbox with explanations of appropriate use.
- Spatial information on vulnerability and expected areas of refugia.
- Guidance on appropriate management actions and desired conditions.
- Guidance on applying climate information into analysis, planning, and adaptive management.
- Guidance on prioritization.
- Buy-in and support from leadership and synthesis of agency direction.

Highlights from the workshop evaluation

- A wide range of internal and external partners were suggested when we asked who should be involved in adaptation efforts, including—universities, tribal nations, USFS research stations, USFS Climate Hubs, other federal land management agencies, state and local land management agencies, NGOs, community partners, and grassroots organizations.
- Attendees appreciated the workshops we've had so far and desire additional discussion and training.
- Attendees think it's important for leadership to provide direction on climate adaptation.
- One attendee asked, "How to assess project scale adaptation needs, ensure consistency with individual forest plans, or integrate forest plan monitoring questions that can assess the need for changes to allow for some passive assemblage of novel communities?"
- Another attendee asked, "How are we working on translating planning and research to on-theground implementation and integration into everyday business at the District, SO, RO, WO levels regardless of where a person sits and their agency role?"