

# ADDRESSING CLIMATE CHANGE IN INLAND ECOSYSTEM RESTORATION

2015 Planning Associates

Critical Think Piece

Project and Awards Presentation

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# Relevant Guidance

- EO 13514 – Planning for Sustainability
- EO 13653 – Preparing US for Climate Change
- President's Climate Action Plan
- USACE 2014 Climate Change Adaptation Plan and Report
- EC 2014-10



# Climate Change and Ecosystem Restoration

- Climate
  - ▶ Non-stationarity
  - ▶ Uncertain
- Ecosystems
  - ▶ Resilient
  - ▶ Stable yet dynamic
  - ▶ Interconnected



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# Ecosystem Considerations

- Managed systems
- Non-stationarity
- Throw out classic resource management models
- Connectivity
- Stable vs. dynamic equilibrium
- Correlation of variability ecosystem responses
- Time lag of ecosystem responses



# Ecosystem Resiliency Measures

- Utilization of guilds in ecosystem planning
- Maximize habitat connectivity
- Appropriate use of downscaled climate scenario models
- Robust risk-based monitoring and adaptive management plan
- Minimize non-climate stressors



# Policy and Ecosystem Resiliency

- Identify and prioritize vulnerable ecosystems
- Investigate authority and funding mechanisms to address completed ecosystem restoration
- Reassess monitoring and adaptive management timelines



# Path Forward

Living Web-based Ecosystem Resiliency Framework and/or Guidance

- Ecosystem Restoration Toolbox
- Planning Community Toolbox



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Thank You



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