

Principles of Adaptation: A GLISA Perspective

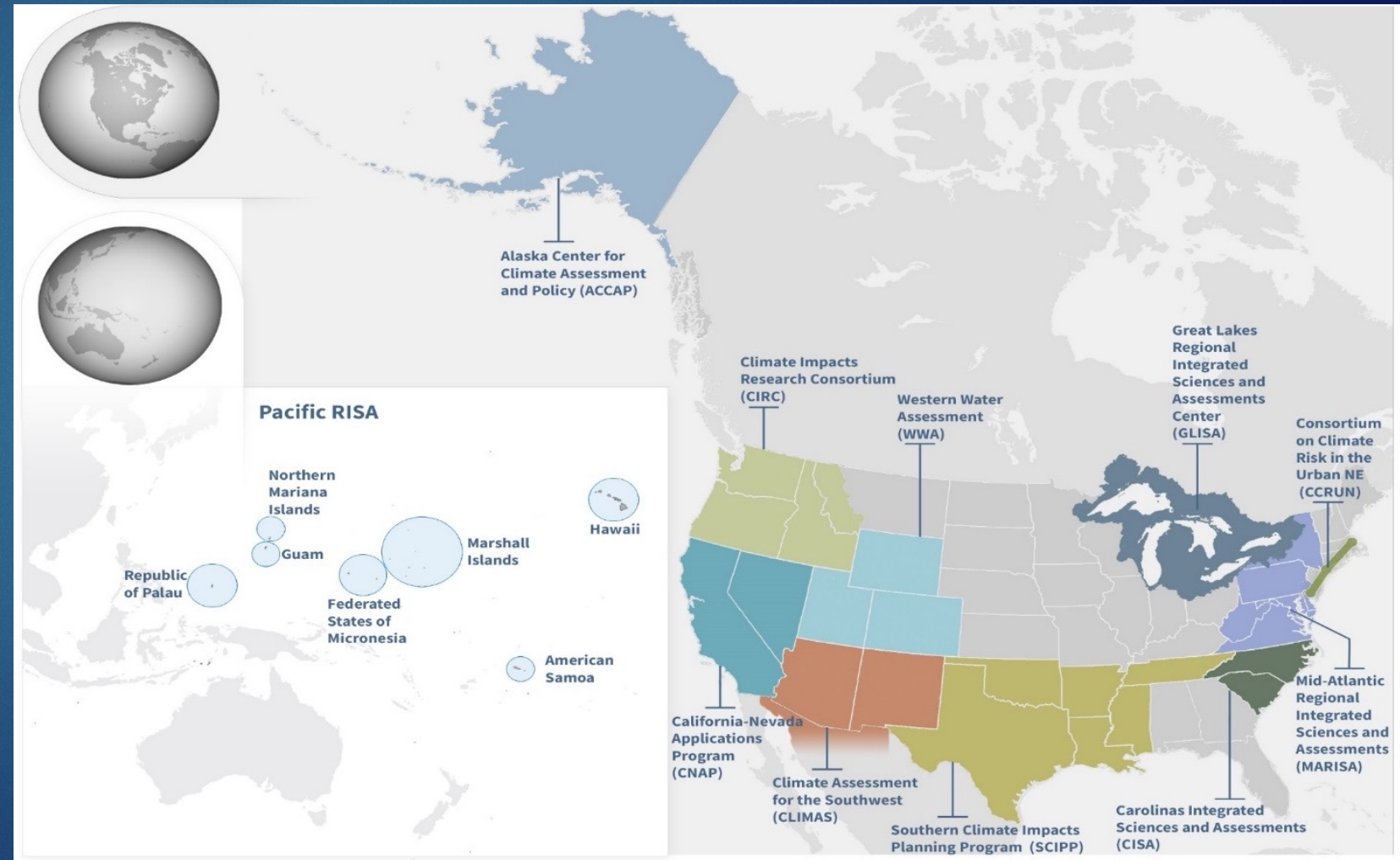
OMAR GATES
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Land Acknowledgement

- ▶ The lands of the Anishinaabe, The Council of Three Fires
 - ▶ Ojibwe
 - ▶ Odawa
 - ▶ Bodwéwadmī/Potawatomi
- ▶ Meškawahki•aša•hina (Fox)
- ▶ Peoria
- ▶ Wyandot

NOAA Regional Integrated Sciences and Assessments (RISA)

Regional teams that help the nation to prepare for and adapt to climate variability and change



Great Lakes Integrated Sciences & Assessments

GLISA
A NOAA RISA TEAM



GLISA's Approach

Research



GLISA
A NOAA RISA TEAM

Integration
Collaboration
Extension

Service



- Interpret *existing* information and data for stakeholders
- Provide *locally* relevant climate synthesis:
 - What has happened?
 - What could happen?
 - What are the impacts?

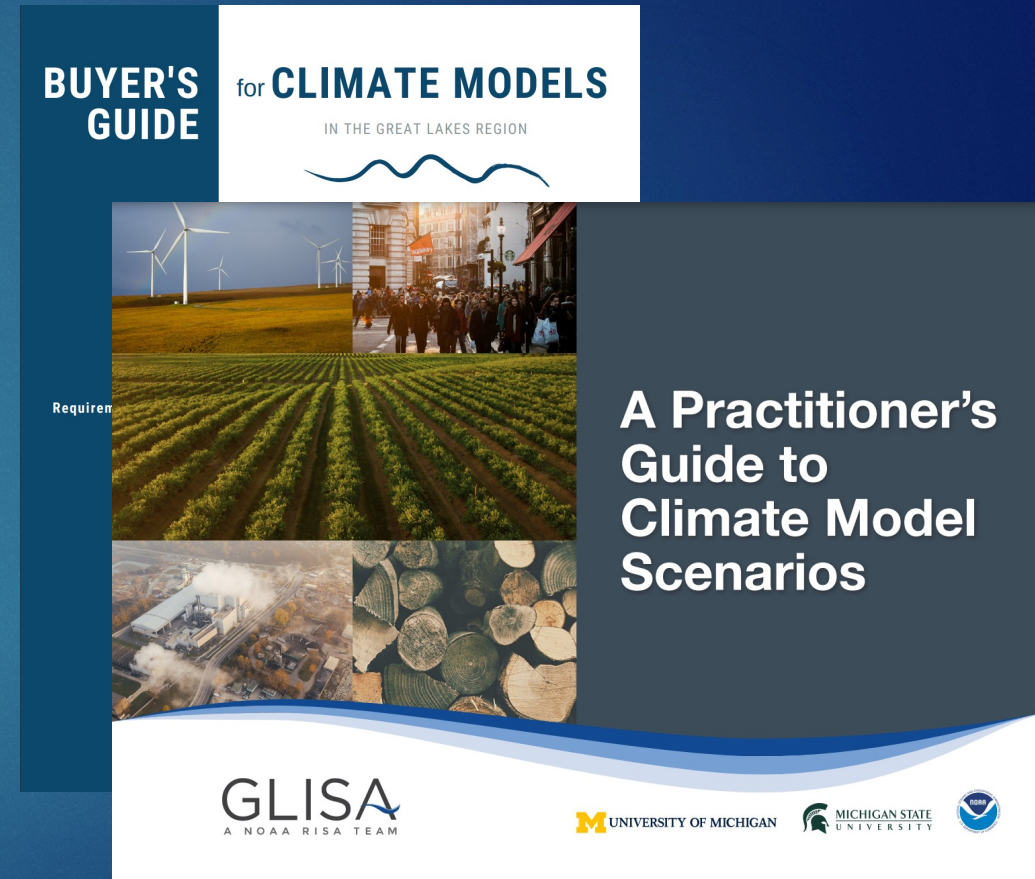
Use Best Available Science and Knowledge

- ▶ Many products and services for adaptation in the Great Lakes region
 - ▶ Great Lakes Climatologies
 - ▶ Station Climatologies
 - ▶ Sustained Assessment of the Great Lakes
 - ▶ Annual Climate Trends and Impacts Summary
 - ▶ Practitioners' Guides
- ▶ Localization documents based on area of interest
 - ▶ Work with the Inter-Tribal Council of Michigan (ITC-MI)
 - ▶ 4 Ecoregions focus on their vulnerability assessment



Use Projections about Future Conditions

- ▶ Best Practices for GLISA:
 - ▶ Provide a range of model projections rather than averages
 - ▶ Connect the projections to past observational trends
 - ▶ Use local knowledge to fill in gaps
- ▶ GLISA utilizes various Global Climate Models (GCMs) and Regional Climate Models (RCMs)
 - ▶ Great Lakes Ensemble
 - ▶ University of Wisconsin-Madison Regional Climate Model Version 4 (UW-RegCM4)
- ▶ The Lac du Flambeau Tribe Climate Resilience work used GLISA's projection data and information
 - ▶ Climate Vulnerability Assessment
 - ▶ FEMA Hazard Mitigation Plan



Ensure Fairness in Decision Making and Avoiding Harm

- ▶ Best Practices for GLISA
 - ▶ Two-way communication with communities and organizations
 - ▶ Establish expectations at the beginning of the process
- ▶ Working with the Lac Du Flambeau Tribal Council and Tribal Climate Resilience Planning (TCRP) Committee
 - ▶ The Tribe decided the most important issues and culturally-significant species
 - ▶ Guided GLISA staff in providing relevant climate data and information



Courtesy of Lac du
Flambeau TCRP

Summary

- ▶ **GLISA strives to provide usable and relevant information for climate adaptation in the Great Lakes region**
 - ▶ Summary documents and resources
 - ▶ Guidance on climate models and their implementation
- ▶ **Engagement with communities and organizations helps framing and addressing climate impacts**
 - ▶ Communities and grass-root organizations can be the leaders in finding equitable solutions
- ▶ **Meet people where they are knowledge-wise**
 - ▶ Better to provide useful information tailored to the communities' needs
 - ▶ Ensures that all voices and perspectives are considered

For More Information

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