

Using the Tribal Adaptation Menu to Design Adaptation Actions for Natural and Cultural Resources Management



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Partners in Action
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Outline for the Day

- Introduction to the Tribal Adaptation Menu
 - The need for a tribal perspective
 - Developing the Guiding Principles
 - Using the Menus and the Adaptation Workbook in planning for climate change
- *Activity* – Using the Menu to address different management scenarios
- Share your input!

How did we get here?

What are your values?

Authenticity
Achievement
Adventure
Authority
Autonomy
Balance
Beauty
Boldness
Compassion
Challenge
Citizenship
Community
Competency
Contribution
Creativity

Curiosity
Determination
Fairness
Faith
Fame
Challenge
Citizenship
Community
Competency
Contribution
Creativity
Curiosity
Determination
Fairness
Faith
Fame
Friendships
Fun

Growth
Happiness
Honesty
Humor
Influence
Inner Harmony
Justice
Kindness
Knowledge
Leadership
Learning
Love
Loyalty
Meaningful Work
Openness
Optimism

Peace
Pleasure
Poise
Popularity
Recognition
Religion
Reputation
Respect
Responsibility
Security
Self-Respect
Service
Spirituality
Stability
Success
Status
Trustworthiness
Wealth
Wisdom

Comparing Values

BIA- “About Us” and Mission Statement

<https://www.bia.gov/about-us>

- Indian Affairs (IA) is the oldest bureau of the United States Department of the Interior. Established in 1824, IA currently provides services (directly or through contracts, grants, or compacts) to approximately 1.9 million American Indians and Alaska Natives. There are 573 federally recognized American Indian tribes and Alaska Natives in the United States. Bureau of Indian Affairs (BIA) is responsible for the administration and management of 55 million surface acres and 57 million acres of subsurface minerals estates held in trust by the United States for American Indian, Indian tribes, and Alaska Natives. Bureau of Indian Education (BIE) provides education services to approximately 42,000 Indian students. BIA and BIE’s missions are:

The Bureau of Indian Affairs (BIA) mission is to: "... enhance the quality of life, to promote economic opportunity, and to carry out the responsibility to protect and improve the trust assets of American Indians, Indian tribes, and Alaska Natives."

Guiding Principles for Interacting with Tribes and Approaches from a Cultural Perspective- Intention (opening statement)

- This document is intended to empower tribal governments, federal and state agencies, non-governmental organizations (NGOs), and individual landowners to incorporate Anishinaabeg perspectives, specifically from the Great Lakes region, into a climate adaptation framework. We recognize the shortcomings of this document in our attempt to incorporate indigenous concepts, language, and cultural practices; a single document written in English can't fully capture what we intend to express. We hope that the background information, protocols, and perspectives offer users an additional lens with which to view the environment and a more culturally appropriate approach to working with tribal nations.
- ...we feel that the direction and the indigenization of this project is long overdue. As the original and current stewards of this land, Ojibwe and Menominee tribal members who worked on this project felt it important to bring a language of parity between human and non-human beings. English and scientific terminology used in currently accepted land management practices tends to assume human dominance over non-human beings. This approach deviates from an equitable co-existence with our environment, which is typically a foundational understanding in many indigenous cultures. The terms used throughout this document are an attempt to recognize agency and sovereignty of our non-human relations.

*Using Menus and the
Adaptation Workbook
to plan for climate change*

Comparing Values

Forest Adaptation Menu:

Strategy 9: Facilitate community adjustments through species transitions.

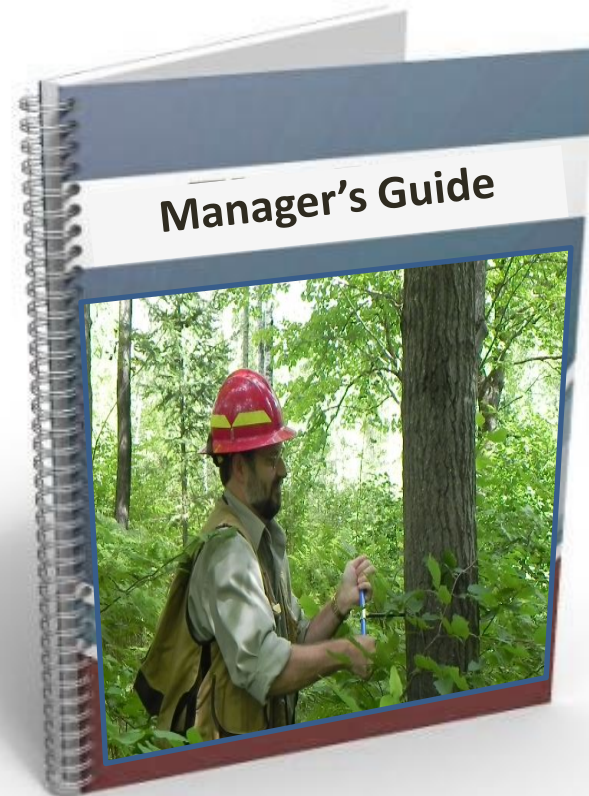
Approach 9.7: Introduce species that are expected to be adapted to future conditions.

Tribal Adaptation Menu:

Strategy 11: Encourage community adjustments and transition while maintaining reciprocity and balance.

Approach 11.4: Seek out and share traditional and cultural knowledge of potential new beings from tribal communities where these beings are native.

Responding to Climate Change



There isn't a single answer

Every landowner is different



Management
goal



Timber



Wildlife



Carbon

Each decision is unique and will vary based upon:

Place: Location & Site Conditions

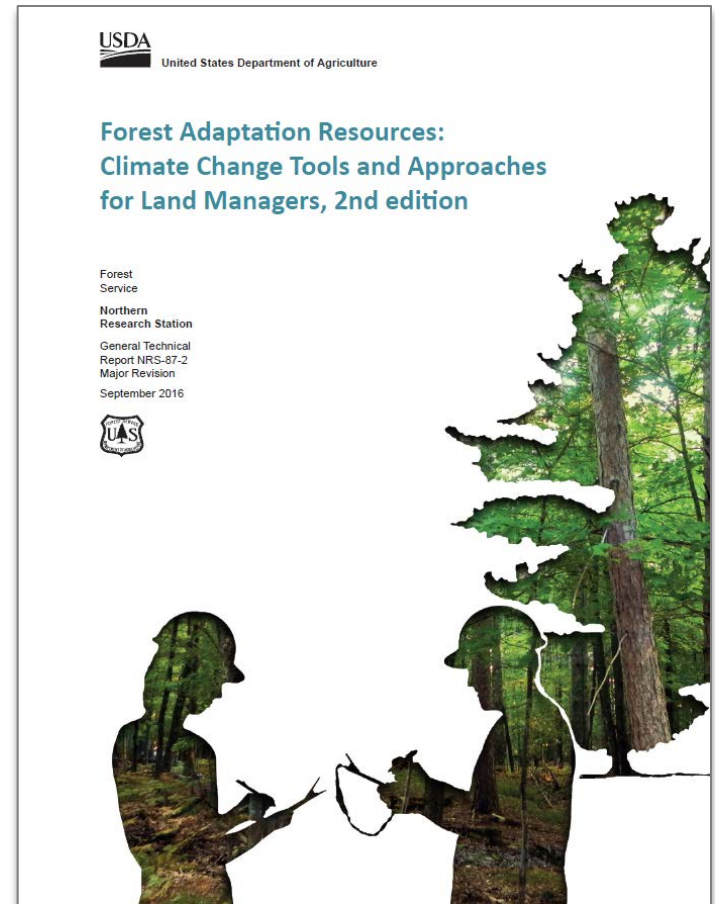
Purpose: Goals & Objectives

People: Values, Culture, & Resources

Practices: Equipment, Procedures, & Methods

Forest Adaptation Resources

- Supports diverse goals and objectives
- Incorporates local knowledge of an area
- Does **not** make recommendations



Forest Adaptation Resources

Strategies & Approaches

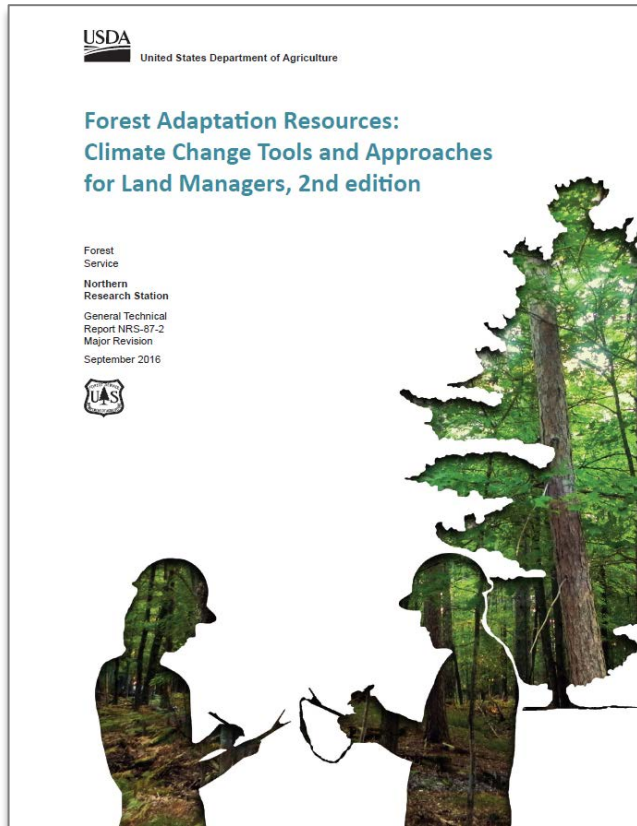
Menu of adaptation actions

Adaptation Workbook

Structured process to integrate climate change considerations into management.

- Workbook approach

Also online: AdaptationWorkbook.org



Swanston et al. 2016 (2nd edition)
www.nrs.fs.fed.us/pubs/52760

Menu of Strategies and Approaches

The **Menu** helps you create **clear rationale** for your actions by connecting them to **broader adaptation ideas**.



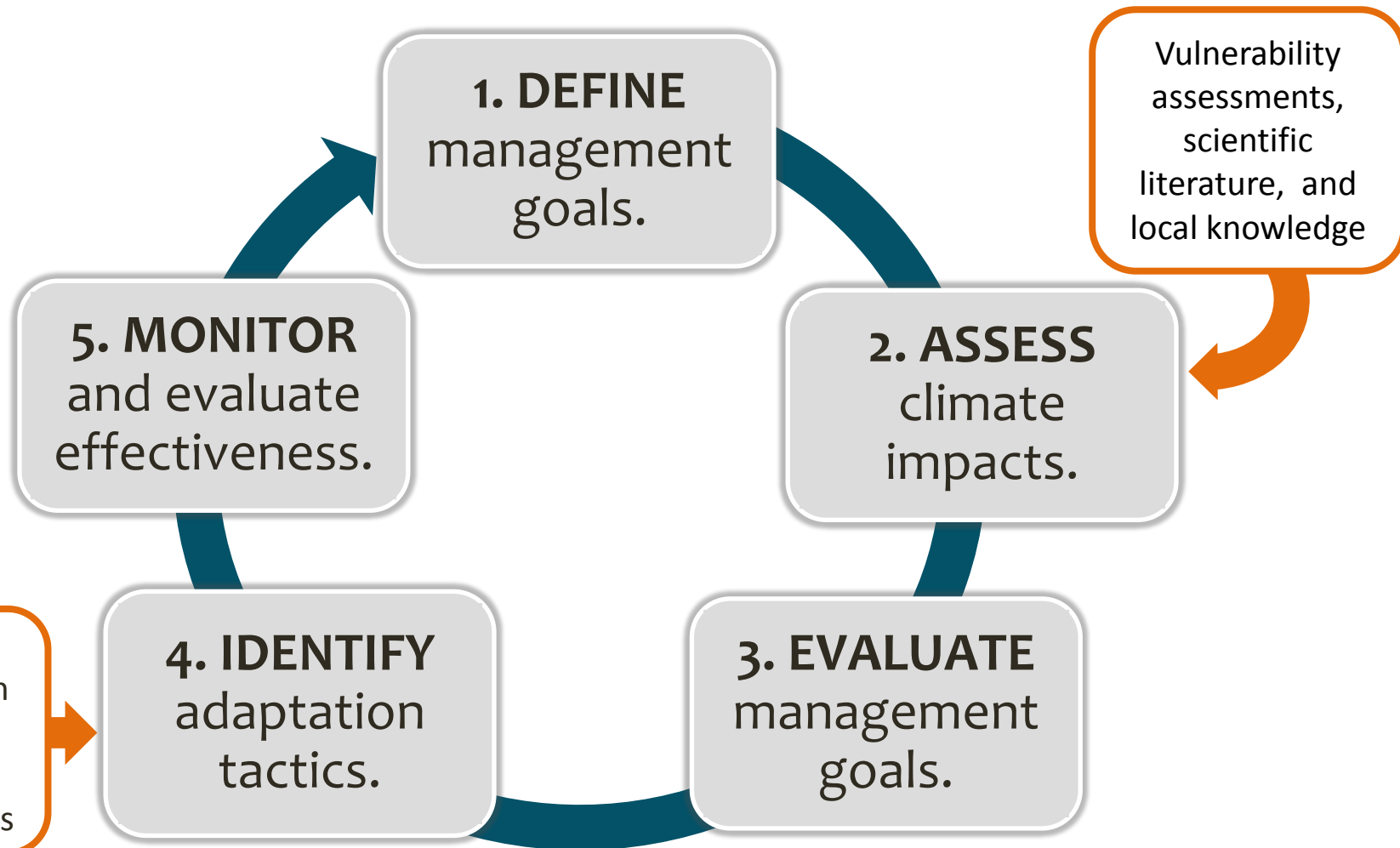
Menu of Strategies and Approaches

Forest Adaptation Menu:

- Assembled from a literature review.
- Reviewed by science and management experts.
- Tested with natural resource managers.

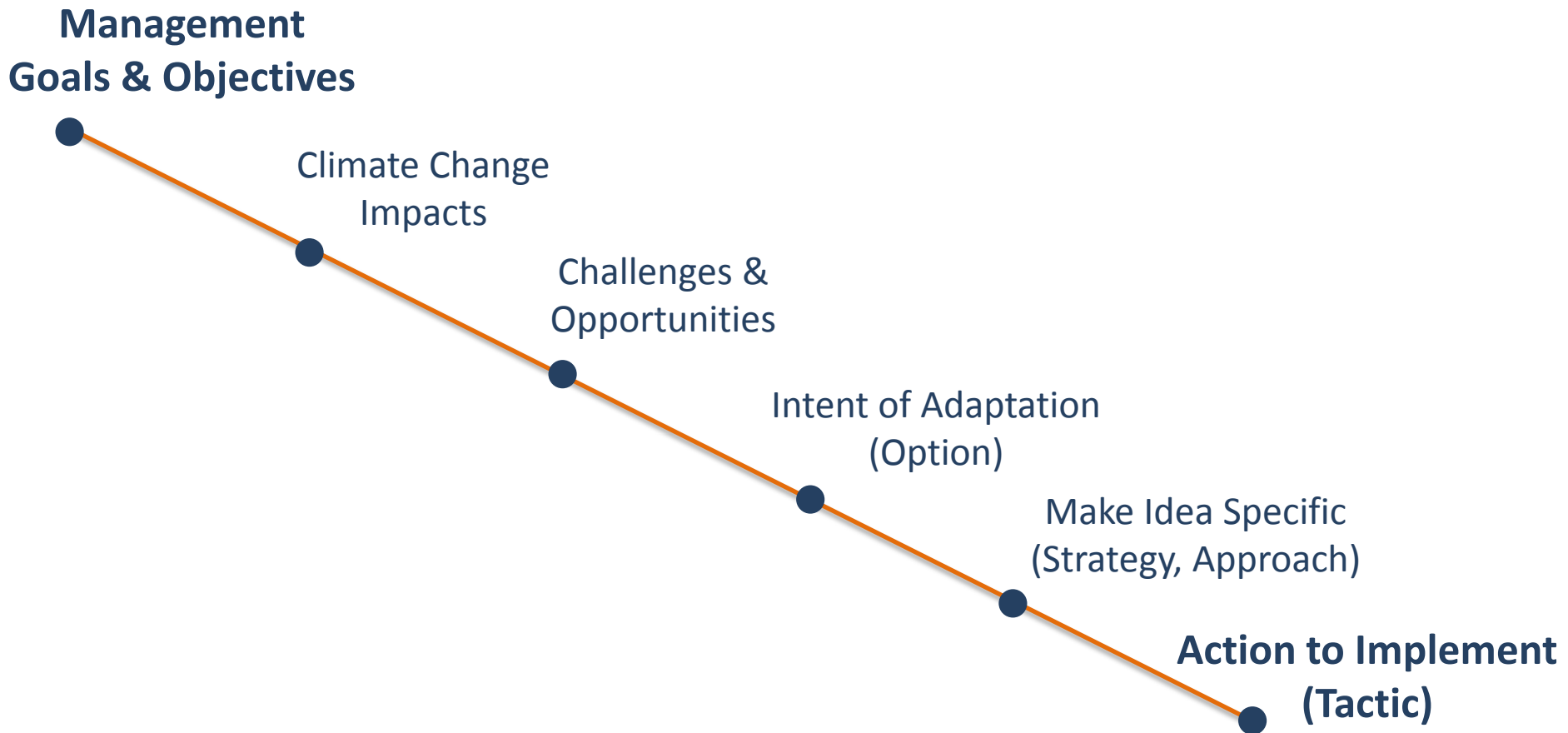


Adaptation Workbook



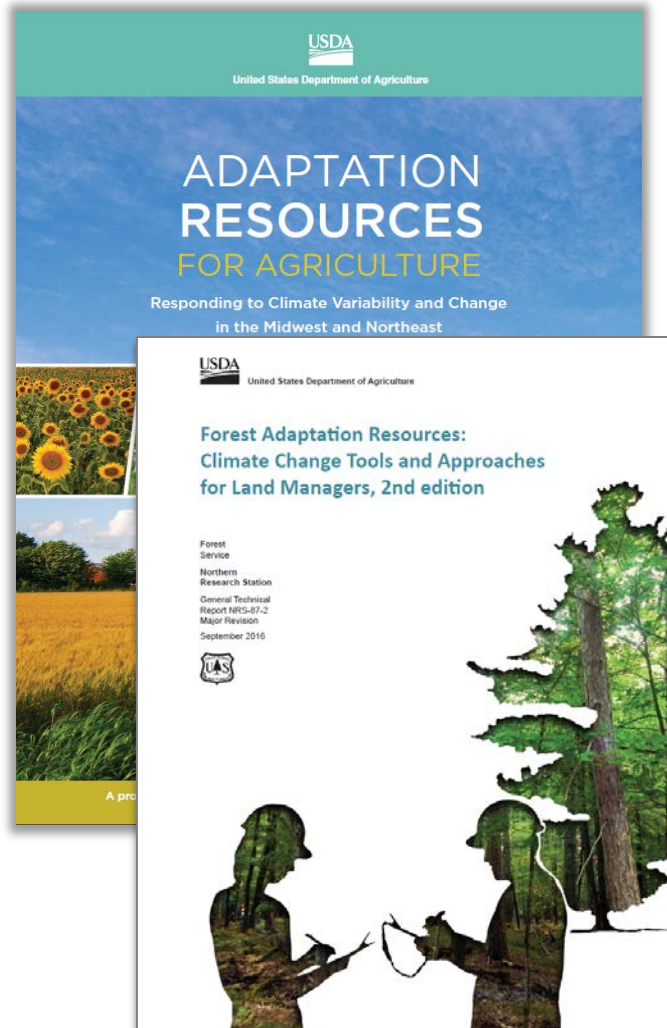
Connecting the Dots

A clear train of thought shows *intentionality*



Forest Adaptation Resources ... and more!

Not just forests! Expanding to more resource areas...



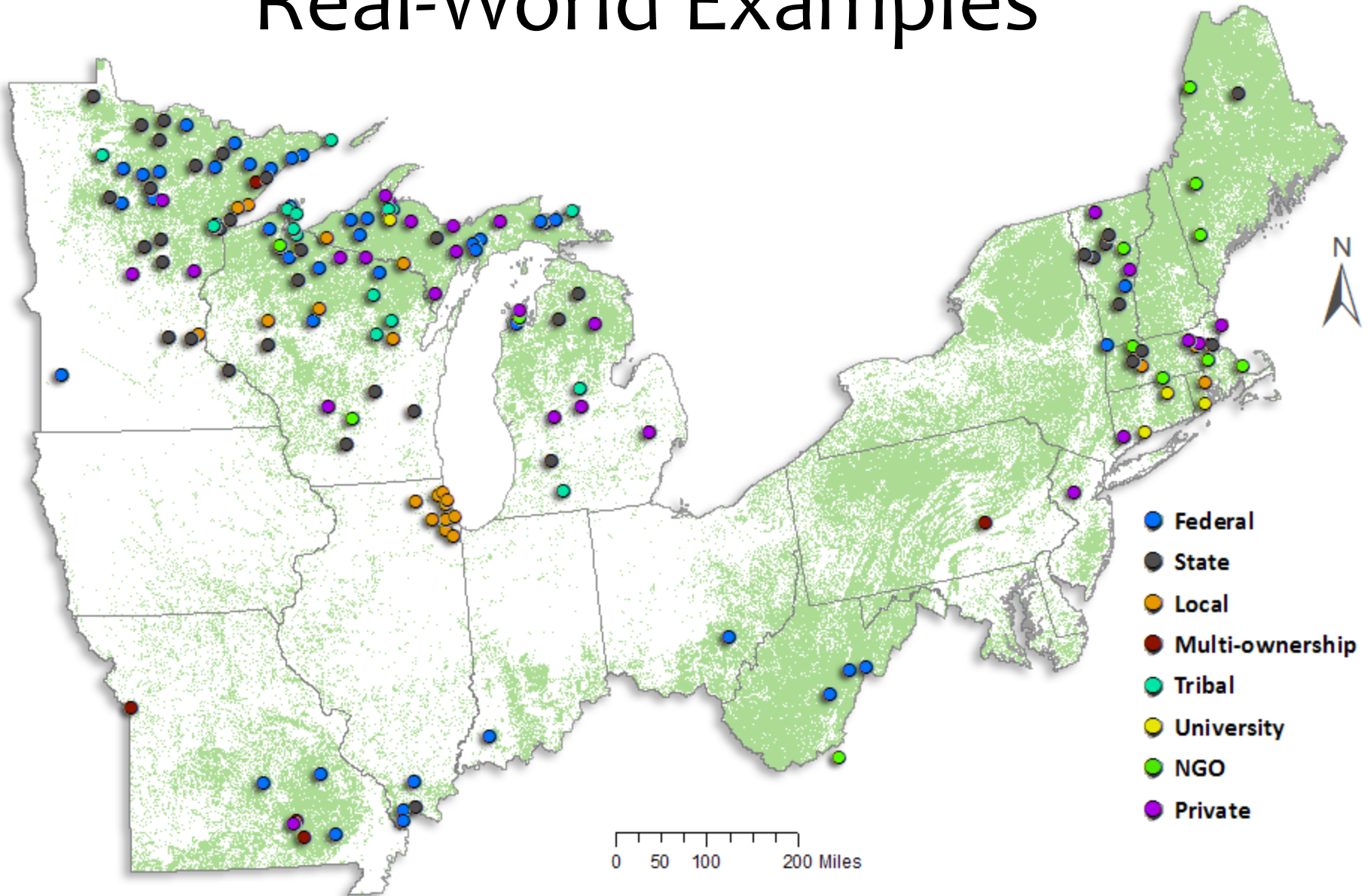
Currently available:

- Forests
- Urban forests
- Agriculture
- Forested watersheds – in publication

In development:

- Tribal Adaptation Menu
- Wildlife
- Carbon management
- Coastal ecosystems

Real-World Examples

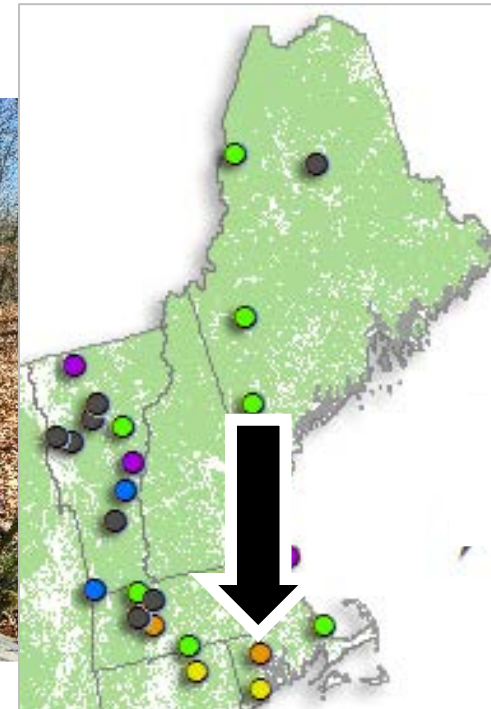


Providence Water

Goals

Water quality

Water quantity



Challenges

- Soil moisture stress
- Variable precipitation
- Forest pests and diseases

Moving forward:

- Promote future-adapted tree species by planting southern species (black oak, pin oak, persimmon, pitch pine, shortleaf pine).
- Minimize impacts from herbivory (enclosure).

Pokagon Band of Potawatomi Wetland Forest Restoration

Goals

Restore paper birch,
ash, northern white
cedar

Challenges

- Drought & wildfire
- Warmer temperatures
- Forest pests and diseases



Moving forward:

- Promote blue ash – not as susceptible to EAB, already present
- Treat existing ash stands through preventative injections
- Protect cedar seedlings with a deer exclosure

**Can we create a menu that
better reflects tribal
perspectives?**

Activity:

Group 1: Forestry

Group 2: Fisheries

Group 3: Manoomin

Discussion and Feedback

- Individual Questionnaire
- Group Questions:
 1. *How applicable was this menu to the scenario that you worked on? Can you envision other situations where it might apply?*
 2. *Were there concepts in the menu that struck you as particularly useful for your work?*
 3. *What needed more explanation or clarification?*

Tribal Adaptation Menu

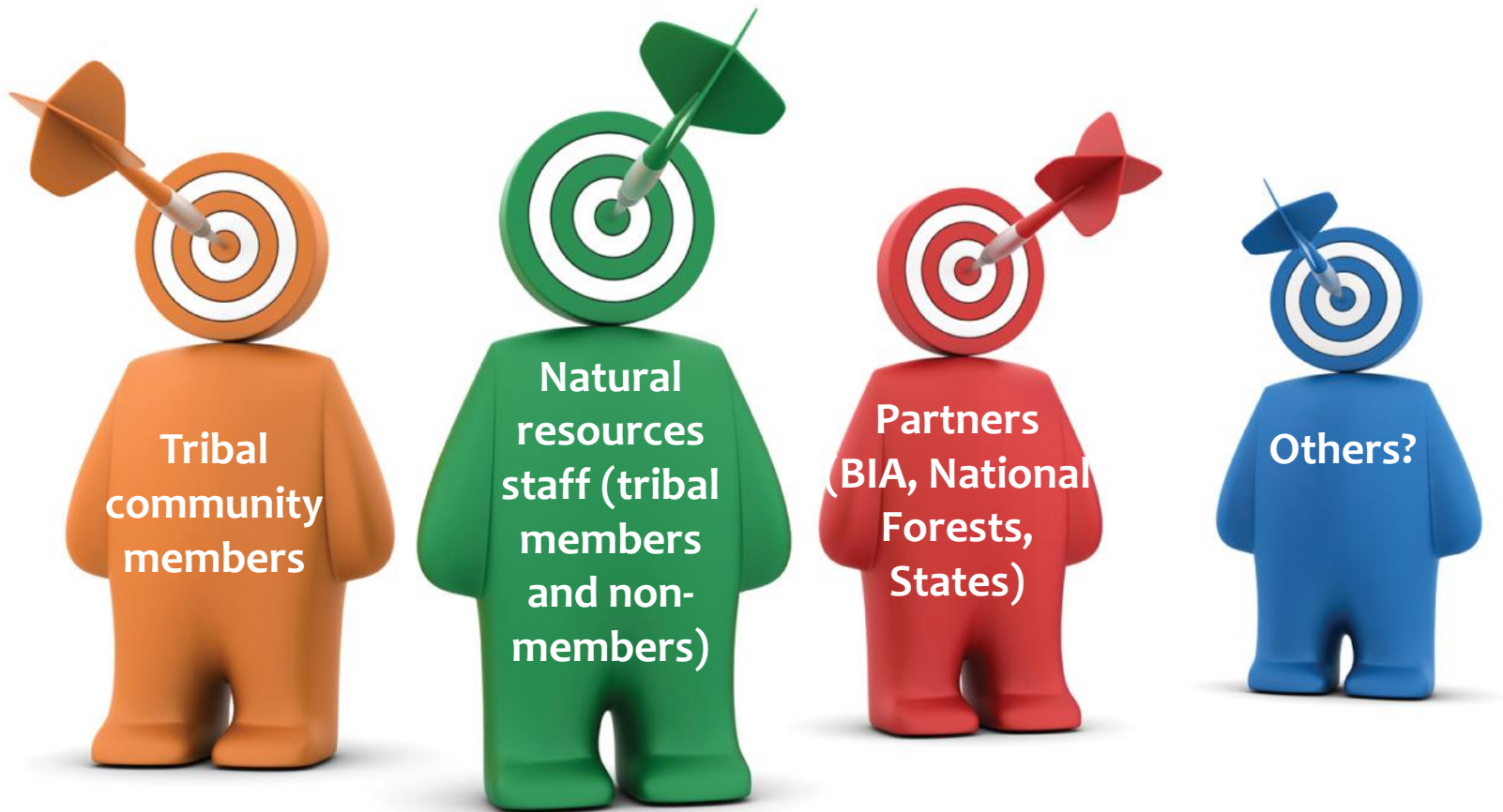
Core team:

- GLIFWC (Kim Stone, Melonee Montano, Hannah Panci)
- 1854 Treaty Authority (Tansey Smith)
- Lac du Flambeau (Patricia Moran)
- Michigan Tech (Jerry Jondreau)
- College of Menominee Nation (Chris Caldwell, Greg Gauthier)
- Red Cliff Tribe (Katy Bresette)
- Northeast Climate Science Center (Sara Smith)
- Inter-Tribal Council of Michigan (Robin Clark)
- NIACS (Stephen Handler, Kristen, Chris Swanston)

Next Steps

Contact: hpanci@glifwc.org

Intended Audience



How is it different?

Guiding Principles:

- Respect
- Reciprocity
- Resources for gathering information



How is it different?

Appropriate Language:

Approach 1.4: ~~Reduce competition for~~ Support specific plants or communities with needed moisture, nutrients, and light.

Approach 2.1: Maintain or improve the ability of forests to ~~resist forest pests and pathogens~~ balance the effects of manidoonsag (little spirits).

Approach 4.3: Establish ~~artificial reserves~~ biological nests for at-risk or displaced species.

Menu of Strategies and Approaches

A **Menu** also helps to sort out issues with scale.

Strategy



Facilitate
community
adjustments
through species
transitions

Approach



Favor or restore
native species that
are expected to be
adapted to future
conditions

Tactic



Use prescribed fire
to encourage
regeneration of
fire-adapted native
species