Chicago Wilderness

Prairies Climate Change Adaptation Workshop 2

Dr. Katherine Moore Powell
Climate Change Ecologist, The Field Museum

FIELD MUSEUM

Chicago Wilderness

Prairies Climate Change Adaptation Workshop 2 - Logistics

WIFI – none, sorry
Location of Restrooms
Parking?

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Prairies Climate Change Adaptation Workshop 2 Agenda

Morning

- Overview of project
- Updates – NCA4
- How seeds become prairies
- CW Prairies Climate Impacts Map

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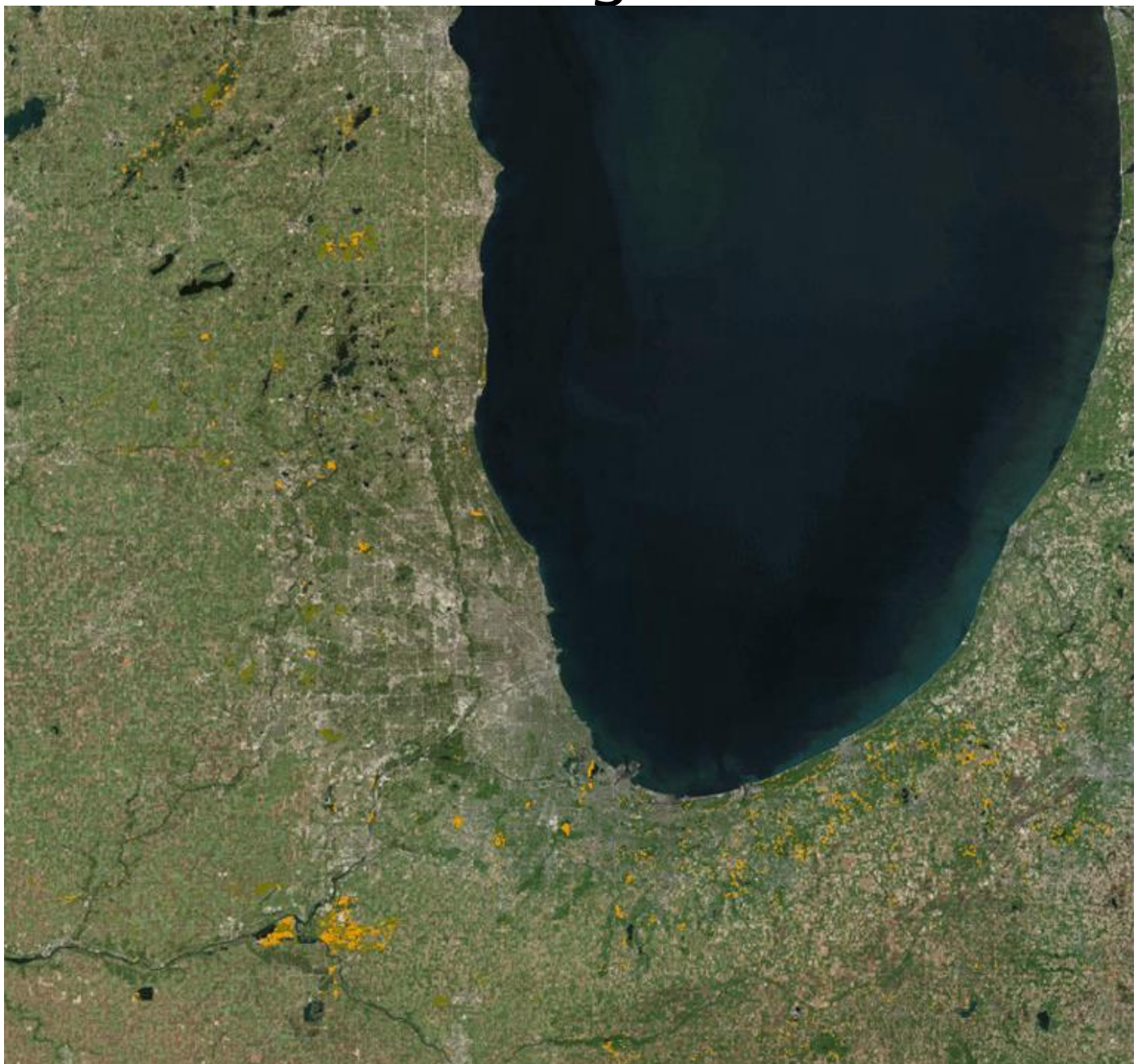
Prairies Climate Change Adaptation Workshop 2 Agenda

Afternoon

- Human climate considerations
- Midewin Tour

Loss of Prairies - Chicago Wilderness Region



Climate Impacts To Prairies in the Midwest

- Increase in temperatures
- Heavier rainfall events
- Shift in seasonal precipitation - more occurring in the spring and winter
- Increase in the concentration of CO_2 favoring cool season grass species?

Climate Change Models and Research

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Regional climate change projections for Chicago and the US Great Lakes

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ABSTRACT

Assessing regional impacts of climate change begins with development of climate projections at relevant temporal and spatial scales. Here, proven statistical downscaling methods are applied to relatively coarse-scale atmosphere–ocean general circulation model (AOGCM) output to improve the simulation and resolution of spatial and temporal variability in temperature and precipitation across the US Great Lakes region. The absolute

GLERL
Great Lakes Environmental Research Laboratory

THE UNIVERSITY of WISCONSIN MADISON

PCCRC
Purdue Climate Change Research Center

Climate Change Vulnerability Assessments

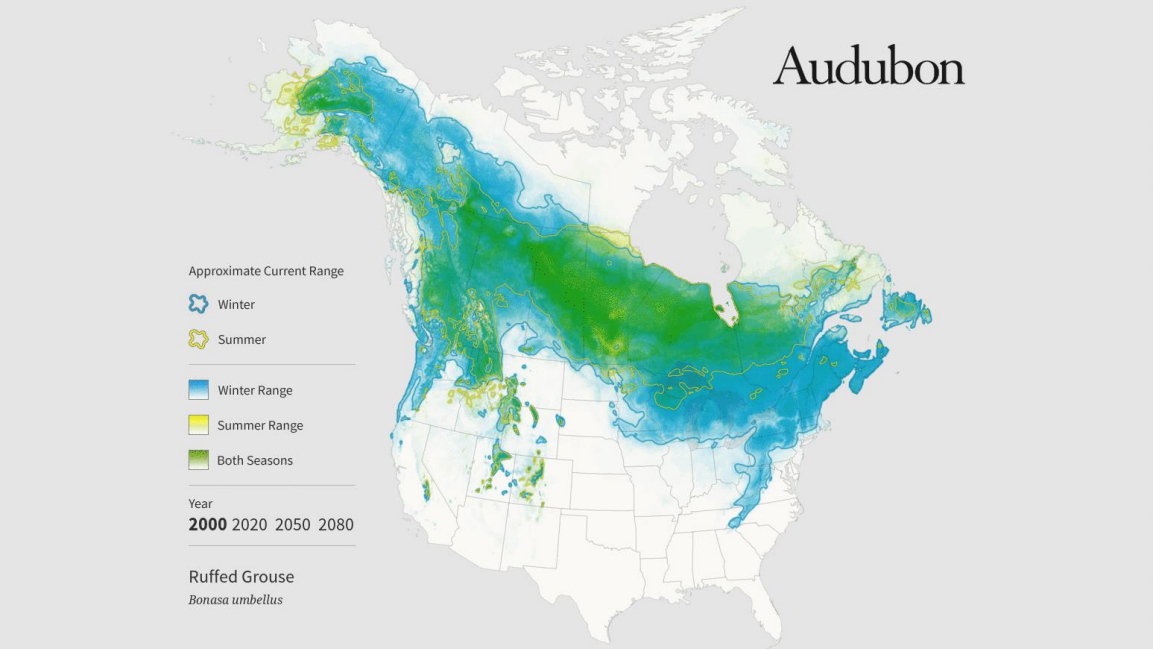
NatureServe

Chicago Wilderness

ClimateACTION

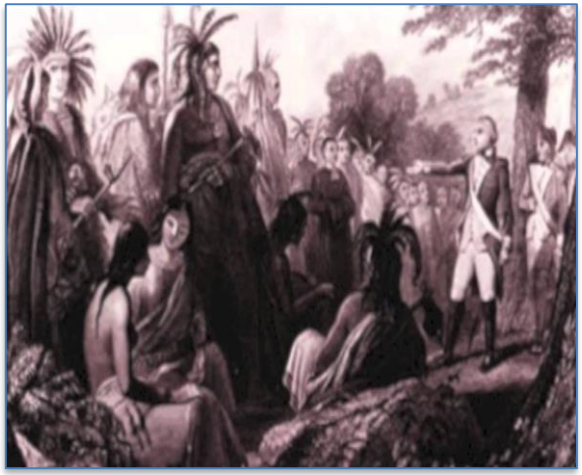
BIODIVERSITY RECOVERY PLAN

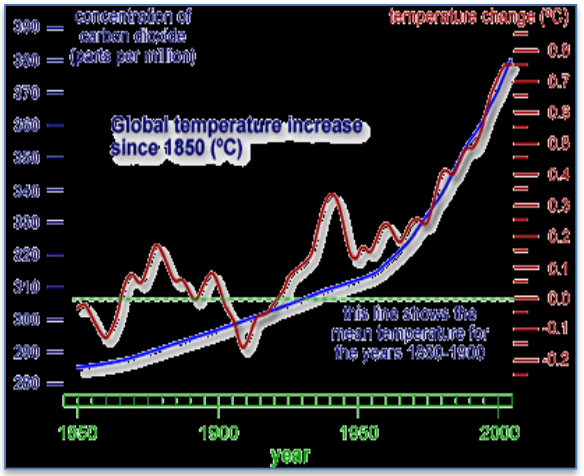
Climate Change Update



History of Prairie and Grassland Conservation in the Chicago Wilderness Region

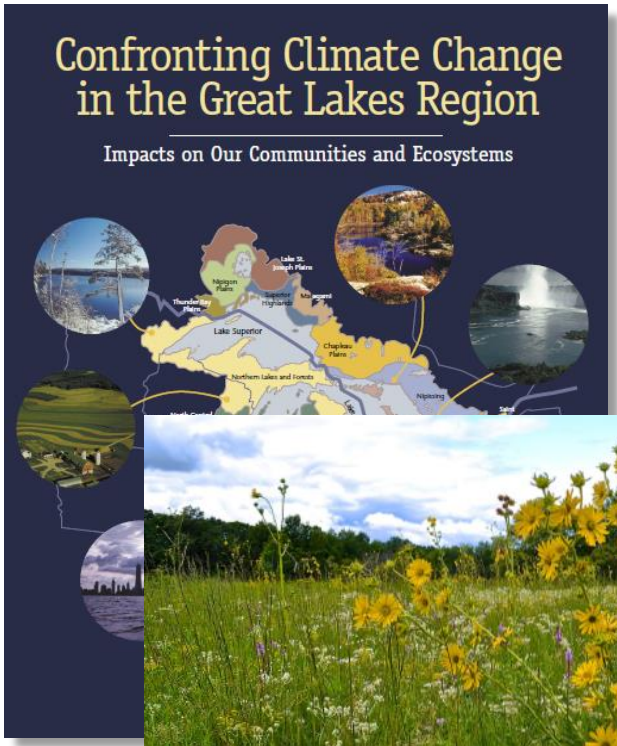
Intersection of Knowledge and Experience

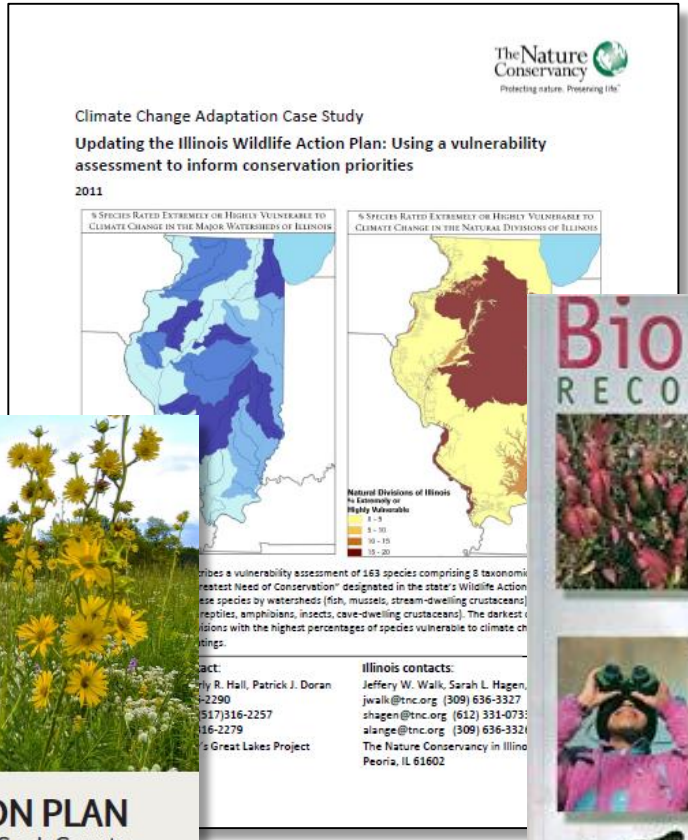




Prairie Adaptation Plan Objectives - 1

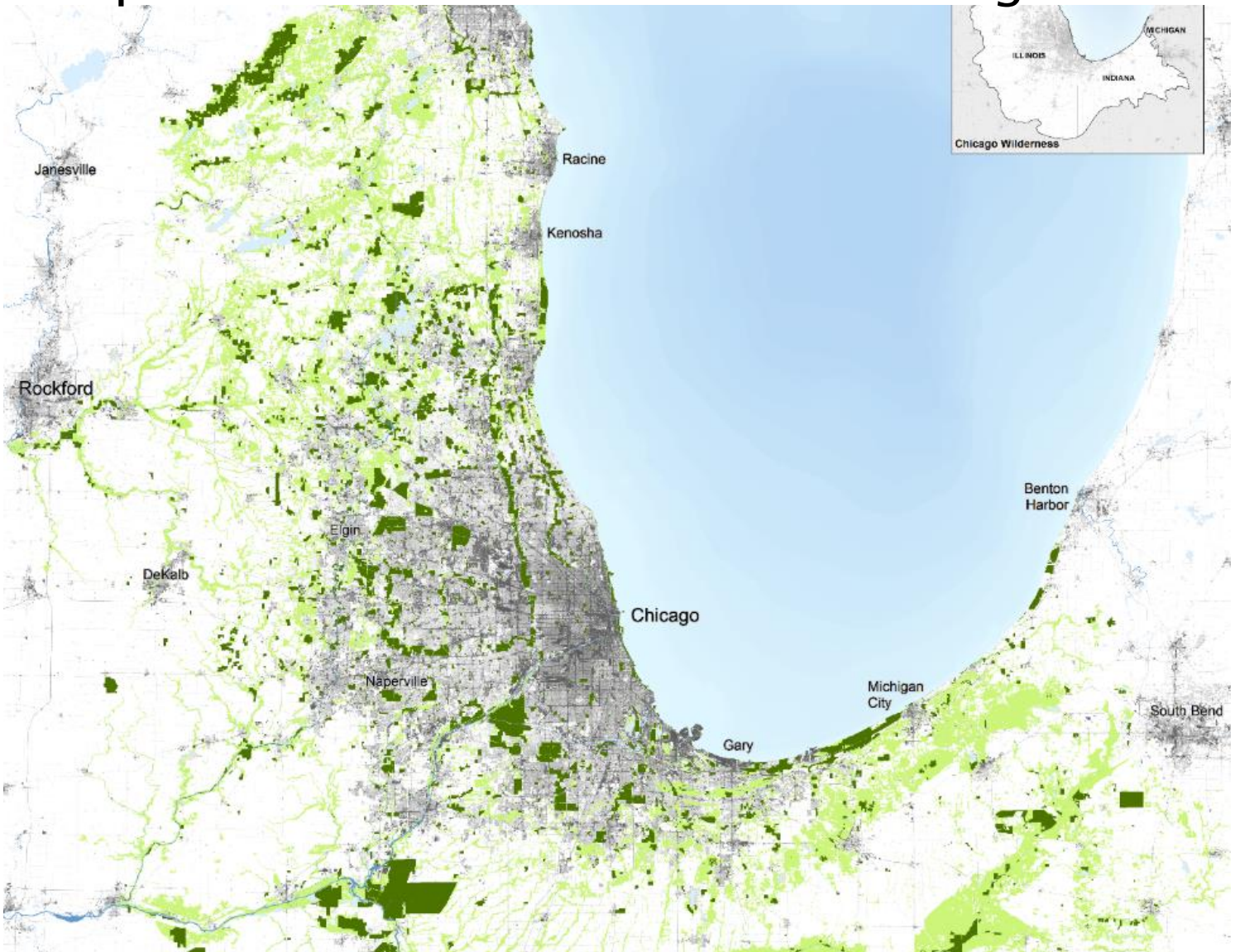
Review climate projections, vulnerability assessments, climate impacts, and adaptation options for prairies





Prairie Adaptation Plan Objectives - 2

Develop strategies to improve connectivity across landscapes that enhance the climate change resilience



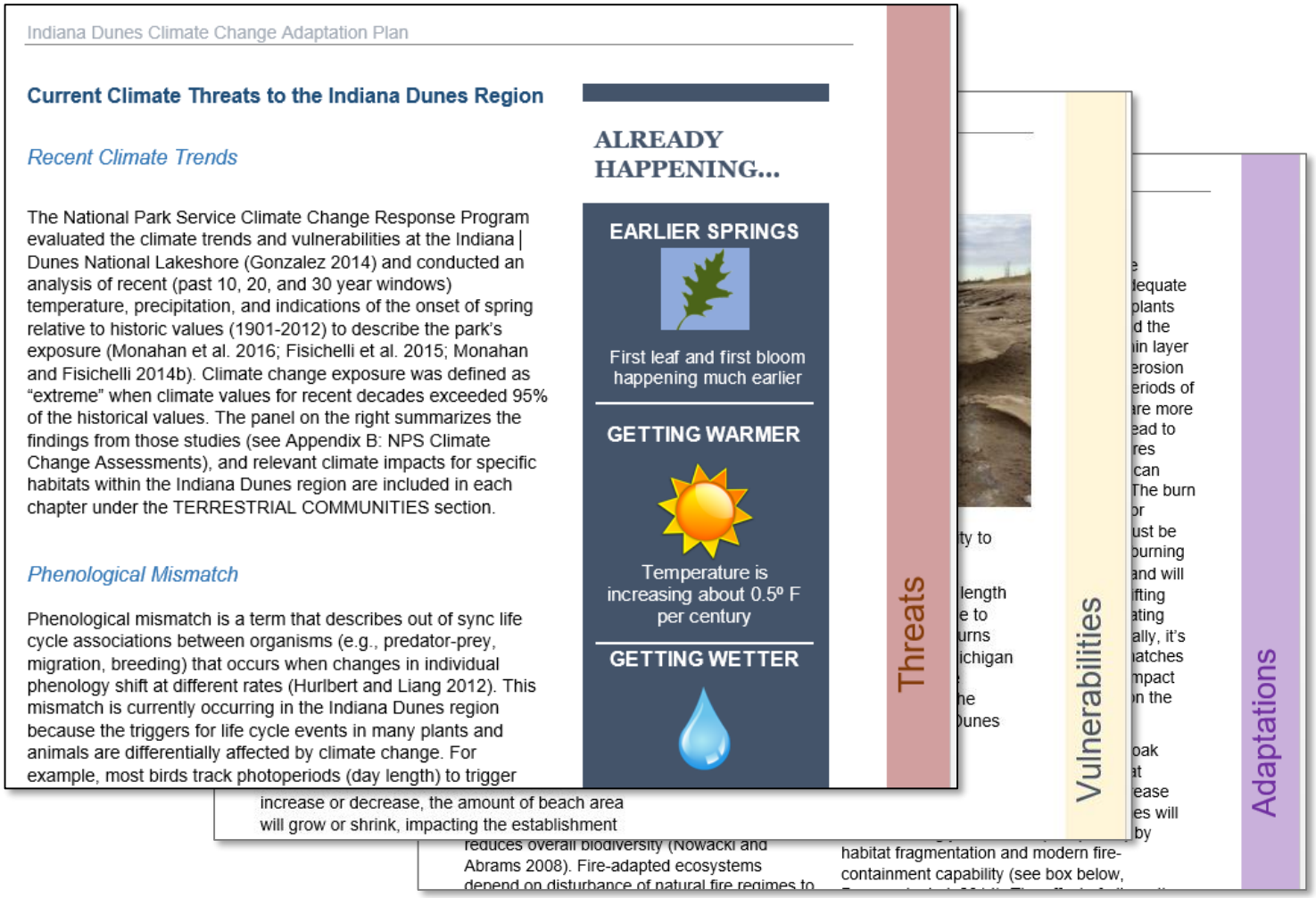
Prairie Adaptation Plan Objectives - 3

Assess the perspective people have of the role prairies play in their communities (e.g., recreation, health, stormwater mitigation, wildlife habitat, other)

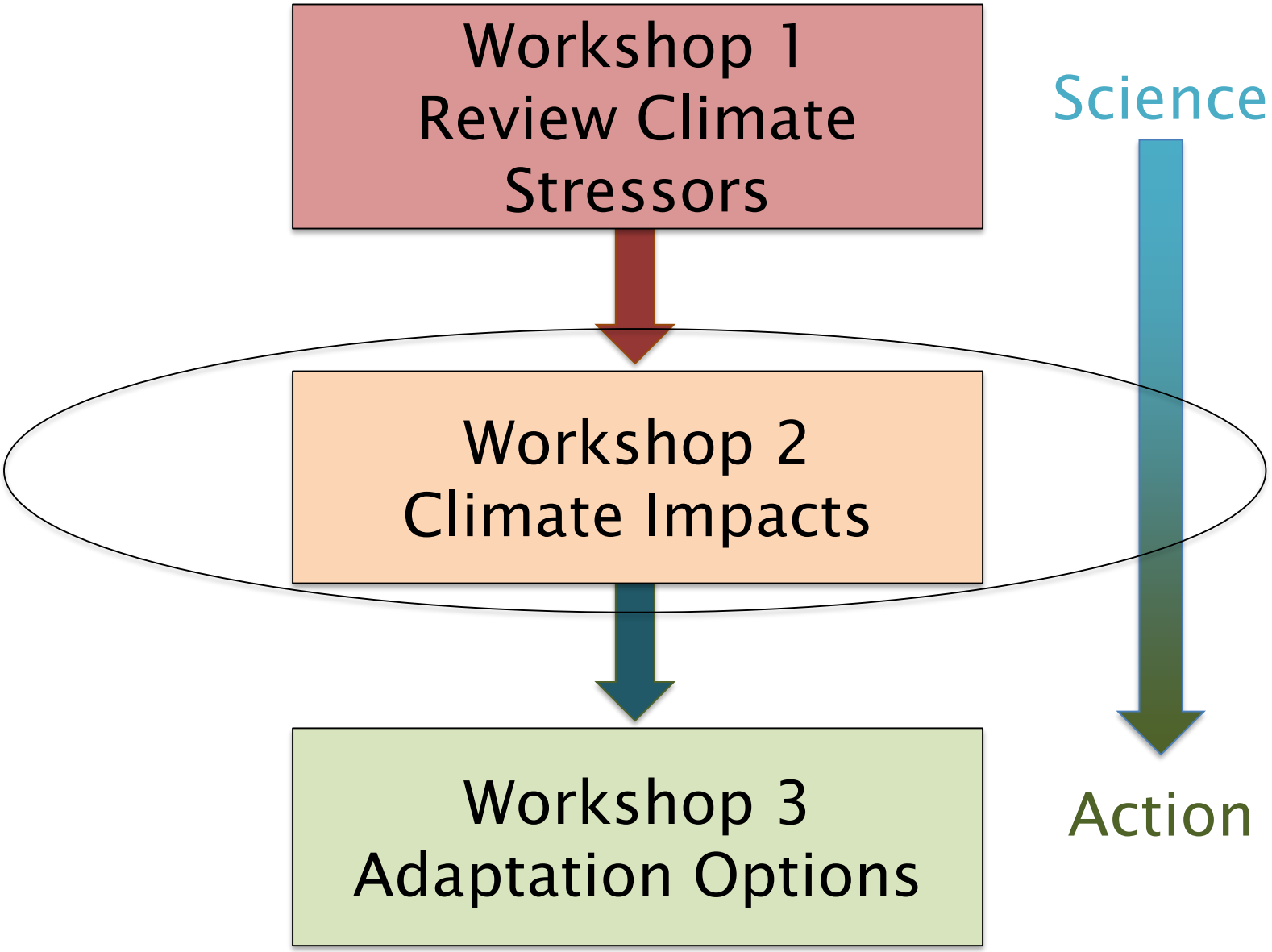
Image from http://www.festascienzafilosofia.it/2015/03/scienza-un-baluardo-di-pace-solidarieta-democrazia/

Prairie Adaptation Plan Objectives - 4

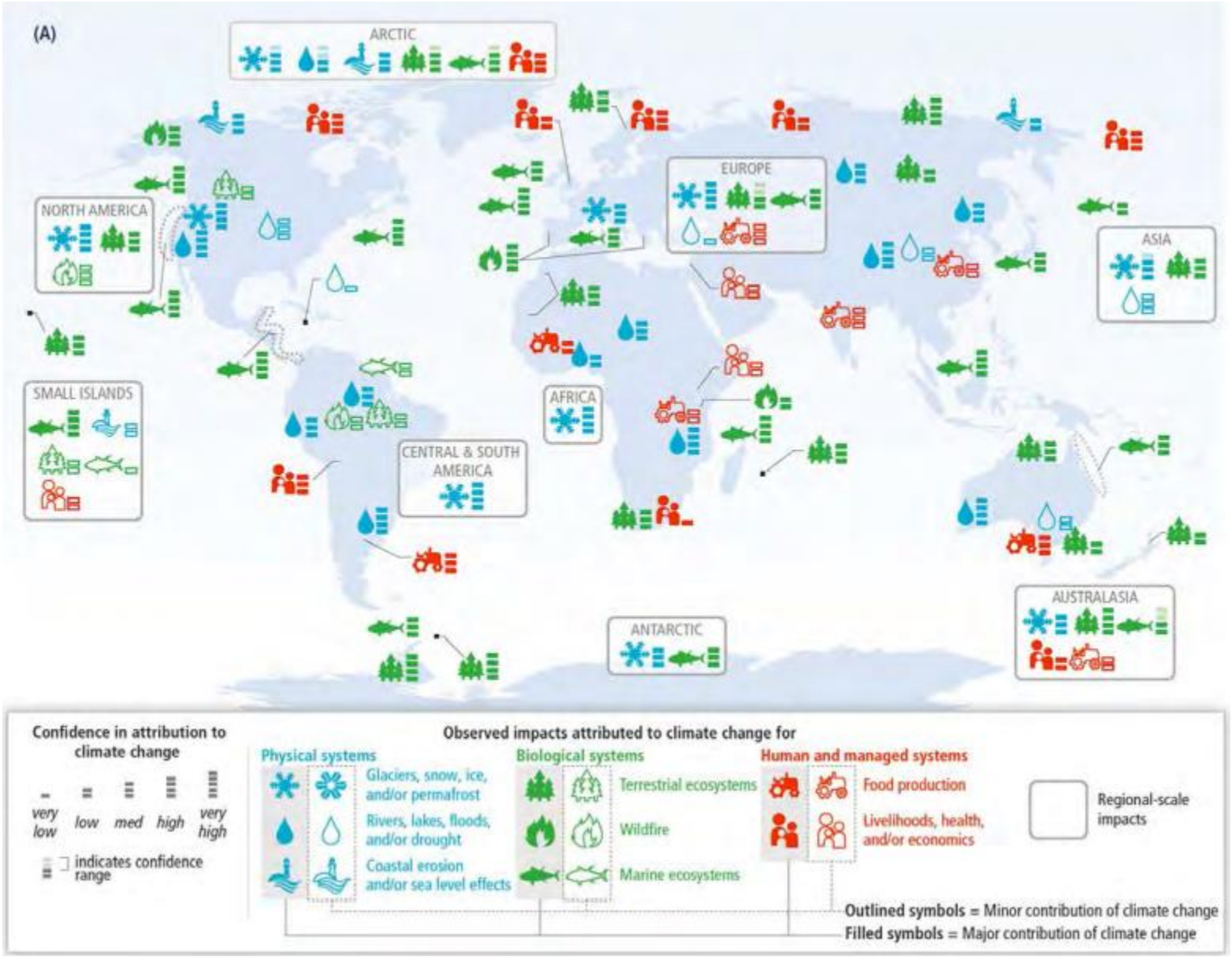
Compose, publish, and distribute a climate change adaptation plan for the range of CW prairie grasslands



CW Prairies Climate Change Adaptation



Create a CW Prairies Climate Impacts Map!



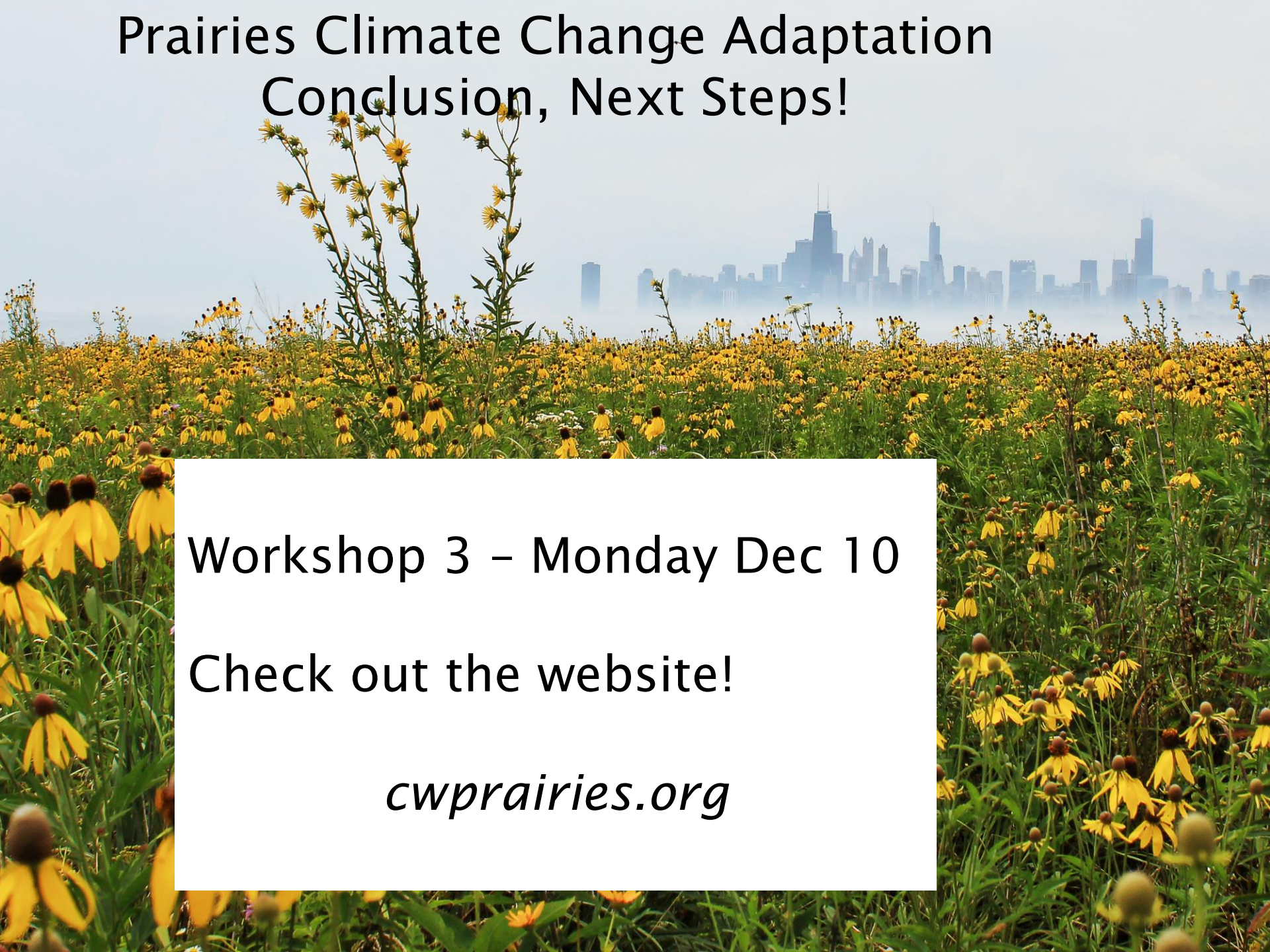
Announcements!?

How do seeds become prairies?

Dr. Rebecca S. Barak

David H. Smith
Conservation
Postdoctoral Fellow
Chicago Botanic Garden

Prairies Climate Change Adaptation
Conclusion, Next Steps!



Workshop 3 – Monday Dec 10

Check out the website!

cwprairies.org