

GPTWA and North Central Climate Adaptation Science Center Partnership

{ James Rattling Leaf, *Co-Principal Investigator*
GPTWA - NC CASC



2019 Fall Water Conference

PROTECTING TRIBAL WATER AND LAND:
Vision and Planning to Adapt to a Changing Climate

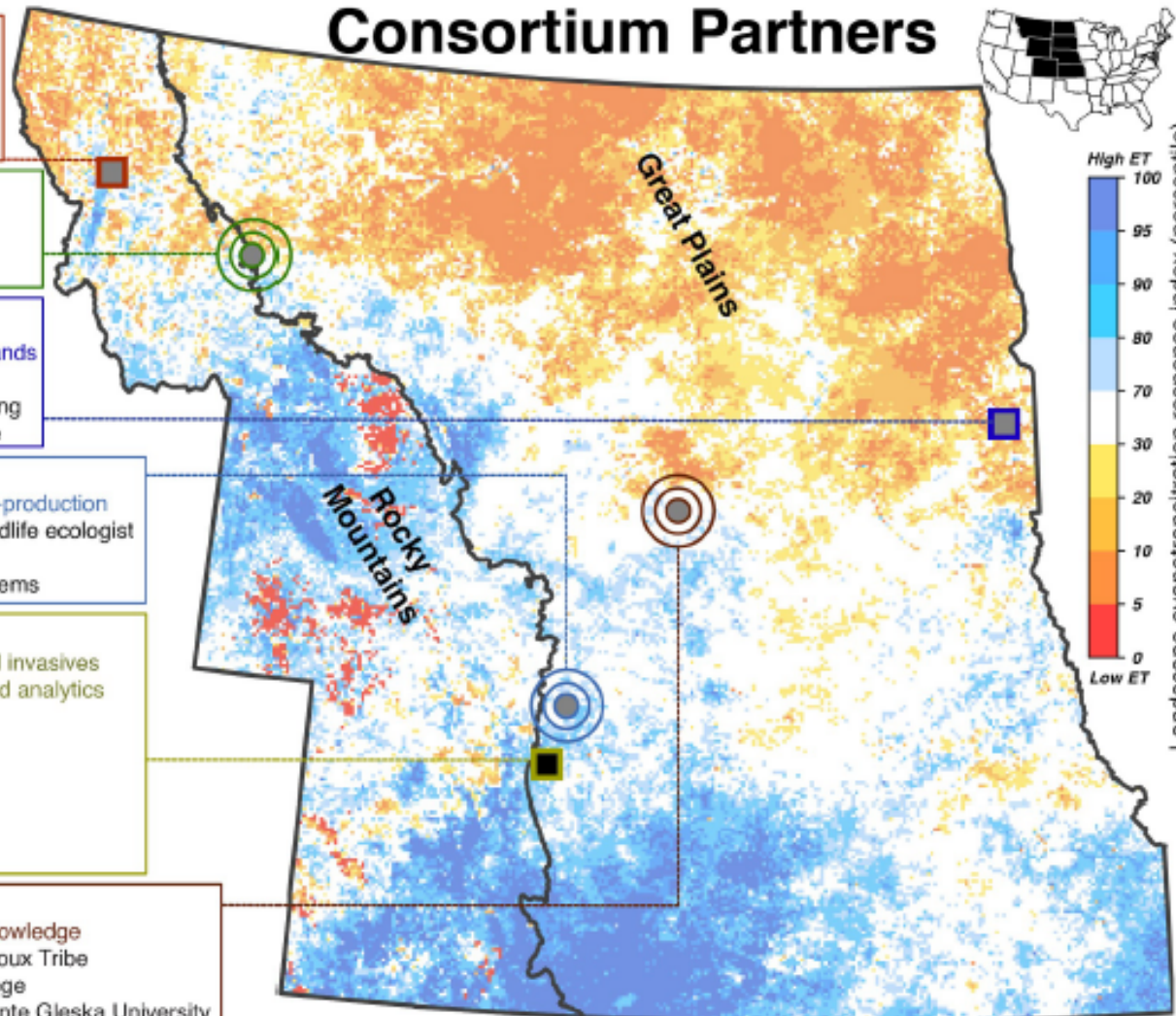
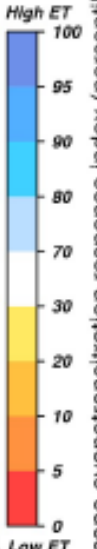
THE VISION

Generating the science to
help resource managers in
the North Central region
adapt to a *changing world*

Consortium Partners



Landscape evapotranspiration response index (percentile)



The University of Montana

Phil Higuera: co-PI; fire and vegetation dynamics
Laurie Yung: natural resource social science
Solomon Dobrowski: climate and species modeling
Brian Chaffin: environmental governance, water resources

Wildlife Conservation Society

Molly Cross: co-PI; climate change adaptation
Sarah Reed: wildlife response to human disturbances
Jon Beckman: wildlife ecology and connectivity science

South Dakota State University

Laura Edwards: co-PI; climate impacts on public/private lands
Geoff Henebry: geospatial sciences
John McMaine: water resources and agricultural engineering
Alexander Smart: natural resource, sustainable agriculture

Conservation Science Partners

Shelley Crausbay: co-PI; plant community ecology and co-production
Brett Dickson: conservation biology and landscape and wildlife ecologist
Dave Theobald: land use change and biodiversity
Clare Aslan: science and decisions in socio-ecological systems

University of Colorado at Boulder

Jennifer Balch: PI & University Director; fire ecology and invasives
Brian Johnson: co-PI & Deputy Director; climate data and analytics
Lisa Dilling: co-PI; co-production and water resources
Bill Travis: co-PI; climate risk and adaptation
Leah Wasser: co-PI; education and training
Imtiaz Rangwala: climate science & scenario planning
Heather Yocum: cultural anthropology, co-production
Max Joseph: data science, disease ecology

Great Plains Tribal Water Alliance

James Rattling Leaf: co-PI; tribal resources, traditional knowledge
Doug Crow Ghost*: water administrator, Standing Rock Sioux Tribe
Jason Tinent*: environmental science, Oglala Lakota College
Victor Douville*: tribal historian & traditional knowledge, Sinte Gleska University
Dana Gehring*: biology, Sinte Gleska University
Chad McNutt*: drought and adaptation consultant

■ Host ■ University Partners ○ NGO Partners

GPTWA *LEADERSHIP* Role

✂ Incorporates Boundary Organization elements such as:

- ✂ Co-Production: Traditional knowledge and Science
- ✂ Collaboration can enhance adaptability, impact and efficiency through resource sharing TRIBAL Partnerships
- ✂ Mediate and Meet TRIBAL partnership demands
- ✂ Link Climate Science to TRIBAL Policy and Decision making

Current Activities

- ‡ Tribal Resource Managers Priority Workshop
- ‡ Grasslands Climate Initiative
- ‡ Climate Science Platform
- ‡ Tribal Climate Leaders Fellowship Program
- ‡ RST-BIA (AG + NR) Climate Resiliency Meeting
- ‡ 2020 Tribal Climate Summit
- ‡ Buffalo Treaty Convention

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