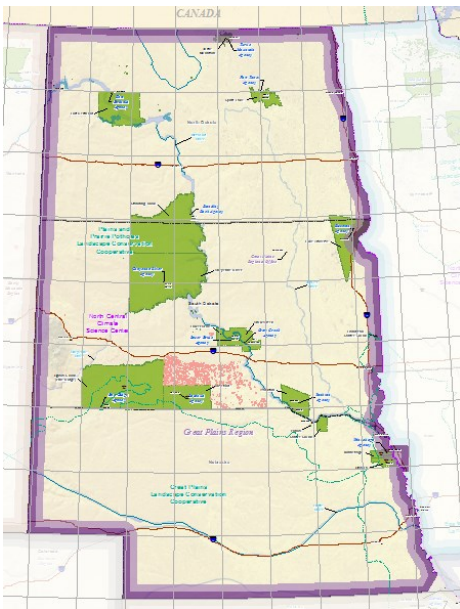


## GREAT PLAINS REGION

In the Great Plains Region, warmer climate and drying conditions are affecting water availability seasonally, though overall dry land cropping has actually increased, displacing forests and riparian habitat. Tribes are working together through intertribal groups and a variety of federal consortia and partners to restore resilient habitats, protect culturally important species, improve agriculture and ranching practices, manage more variable water supplies, and develop climate training.



### CLIMATE IMPACTS

- Extreme Events
- Development Pressures
- Water Resources
- Invasive Species
- Wildlife Sustainability
- Forest & Habitat Preservation

## FUNDED STRATEGIES

Four Sioux Tribes through the Great Plains Tribal Water Alliance (GPTWA) are developing community-based training and adaptation plans with the support of area Tribal College and University students. GPTWA may also manage a BIA Regional Tribal Liaison hosted at the NC CSC.

The Intertribal Buffalo Council developed buffalo vulnerability assessment for their 58 Tribes. The Rosebud Sioux have partnered with Intertribal Council on Utility Policy (I-COUP) to provide a series of 12 webinars on **Applying Indigenuity** - indigenous pathways to Community Preparedness, Resilience and Adaptation Planning - <http://bit.ly/2kP8HPc>

BIA GPL RO Climate POCs and Tribes remain active in the Missouri River Recovery Program to replace lost endangered species habitat, which improves water security and fosters resilience - <http://bit.ly/2nk1DIO>

With support of a multi-agency partnership and membership in ICLEI Local Governments for Sustainability <http://iclei.usa.org>, an Oglala Lakota Plan was crafted <http://www.oglalalakotaplan.org>

Tribes are also active partners with the NOAA Midwest National Integrated Drought Information System (NIDIS) to manage drought risks and impacts in ways that better meet Tribal challenges by planning recharge and water storage projects and developing early drought warning systems <http://bit.ly/2p3lbpc> Workshop: <http://bit.ly/2qyyzm8>

## EXAMPLE PROJECTS

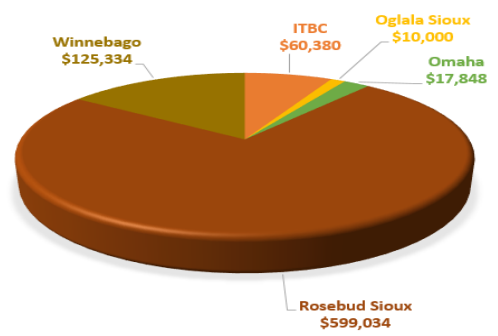
**North Central Climate Science Center Training**  
In 2015, Tribes in the BIA Rocky Mountain and Great Plains Regions - who also partner on Missouri River Basin efforts - held a joint Climate-Smart Conservation Training in Rapid City, South Dakota. A resulting analysis of the event helps others plan related training and discussed issues related to capstones exploring invasive species management and restoration approaches under climate change - <http://bit.ly/2pN96mh>



**Thunder Valley Community Development**  
Oglala Sioux on the Pine Ridge Reservation work closely with the Dept. of Energy, First Nations Development Institute, and other partners through the Thunder Valley Community Development Corporation <http://www.thundervalley.org>. While employing members and catalyzing youth leadership, the partnership is building a wind and solar-powered, multi-use development with homes, a youth shelter, stores & recreation, gardens, and powwow area - <http://bit.ly/2qGRtVf>



### GREAT PLAINS TRIBAL AWARDS





## CLIMATE SCENARIOS

### 2035 and 2060 CMIP5 Climate Projections

From EPA CREAT Projection Map - <http://arcg.is/2cEzv2p>

#### Temperature Scenarios



Hot 2035



Hot 2060



Central 2035



Central 2060



Warm 2035



Warm 2060

#### Precipitation Scenarios



Dry 2035



Dry 2060



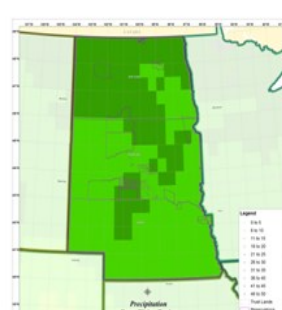
Central 2035



Central 2060



Wet 2035



Wet 2060

## DATA ANALYSIS EXAMPLE

### Fire Historic Data

[http://srf.s.wr.usgs.gov/Fresc\\_ScienceData/](http://srf.s.wr.usgs.gov/Fresc_ScienceData/)

The USGS has compiled a fire historical data throughout the western US from 1870-2007 to compare to new fire regimes to better determine unusual trends to address.

Visit the Fires Science Exchange Network - <http://www.firescience.gov> to obtain information from local experts and scientists working in your area, attend training, share data, and plan and test management strategies together with others facing similar concerns. NASA North American Forest Dynamics consortia is also creating new variation products - <https://go.nasa.gov/2p1TGMS>

