Northern Plains 2017 Drought: Regional Services Response

Lodgepole Complex , courtesy of BLM

Eastern Montana Wheat 2017

North American Drought Monitor Meeting
May 2018
Doug Kluck, NOAA/NCEI, Kansas City, MO
Regional Climate Services Director

AASC AMERICAN ASSOCIATION OF STATE CLIMATOLOGISTS

National Drought Mitigation Center

REGIONAL CLIMATE CENTERS

NOAA

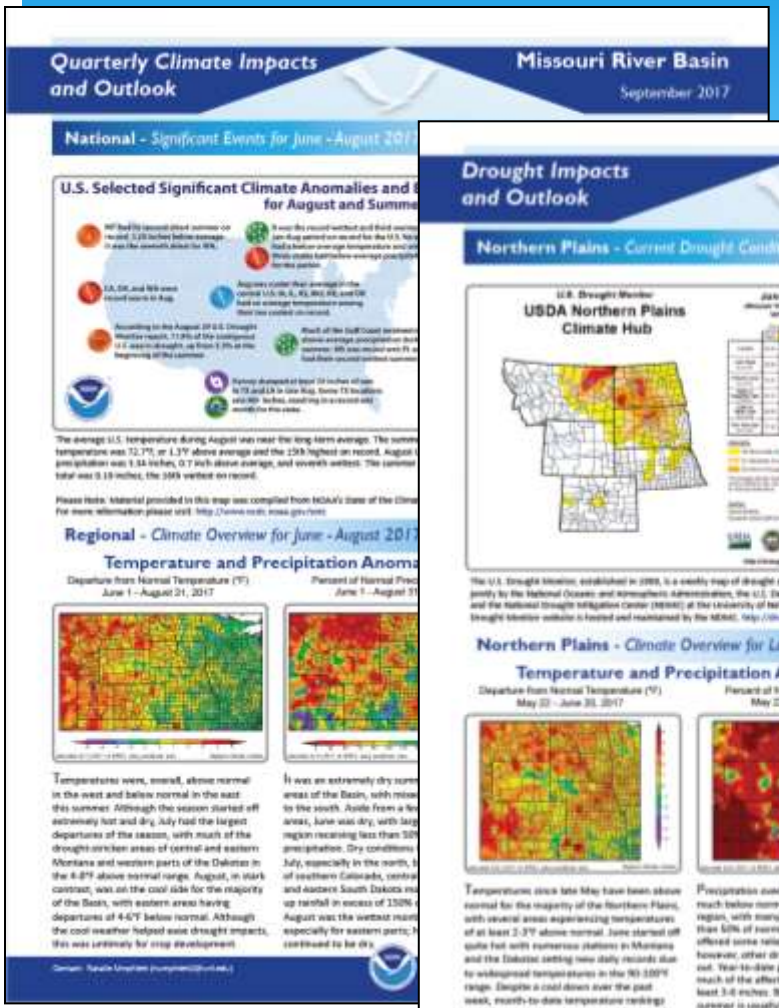
NIDIS

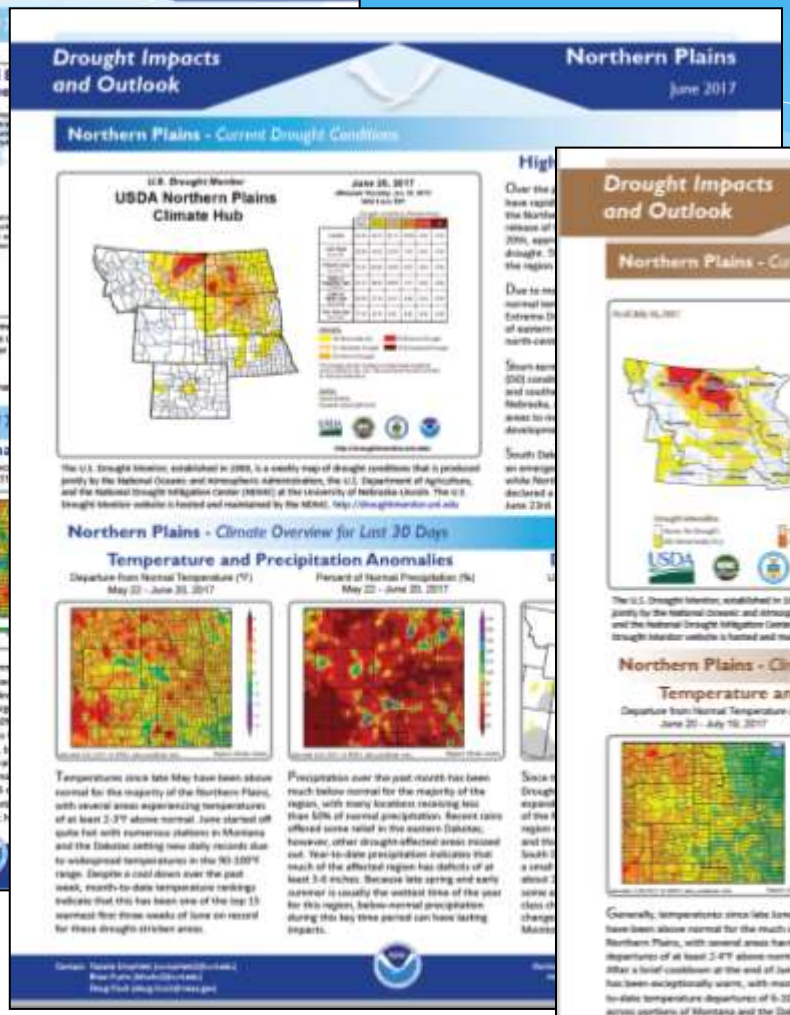
Prior Engagements & Preparation

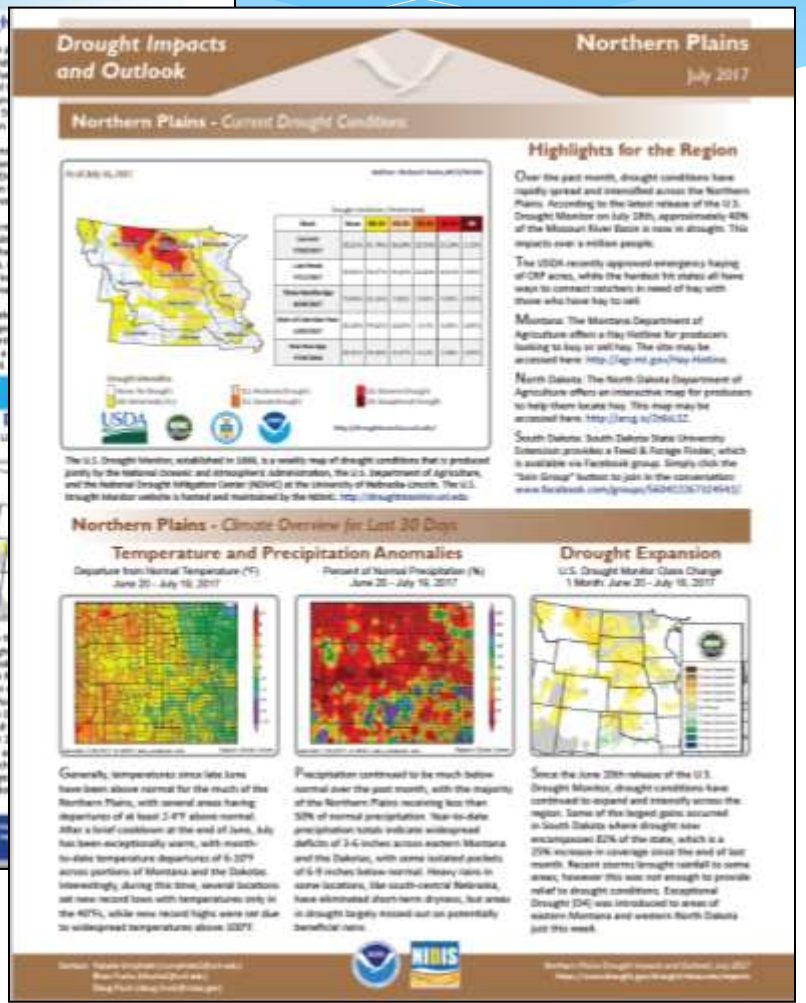
* **Missouri Basin Focus: 2011 to present**
  * **Formal NIDIS Kick-off 2014 – building relationships w/states, feds, tribes, universities, etc…**
  * **Tribal Workshop 2014 (16 tribes)**
  * **Lower and Upper Basin Workshops (early 2017)**
  * **Basin-wide strategic plan (Basin, States, Tribes)**
  * **Flood (2011) and Drought (2012) Assessments and Research**
  * **Great Plains Tribal Water Alliance (GPTWA) Water Resources and Drought Capacity Building**
  * **U.S. Army Corps Spring Constituent Webinars**

NOAA and Partners Response 2017

Sub-Regional Briefs (June & July 2018)



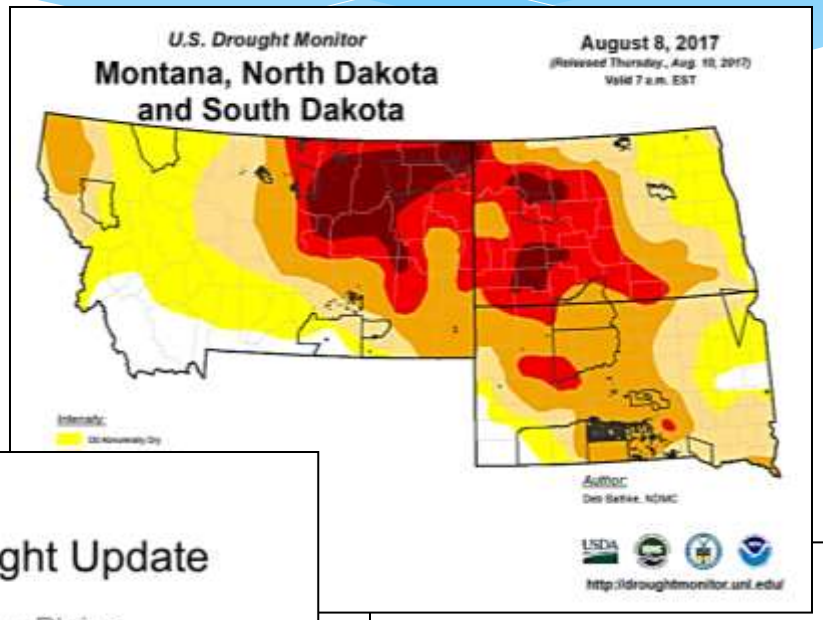


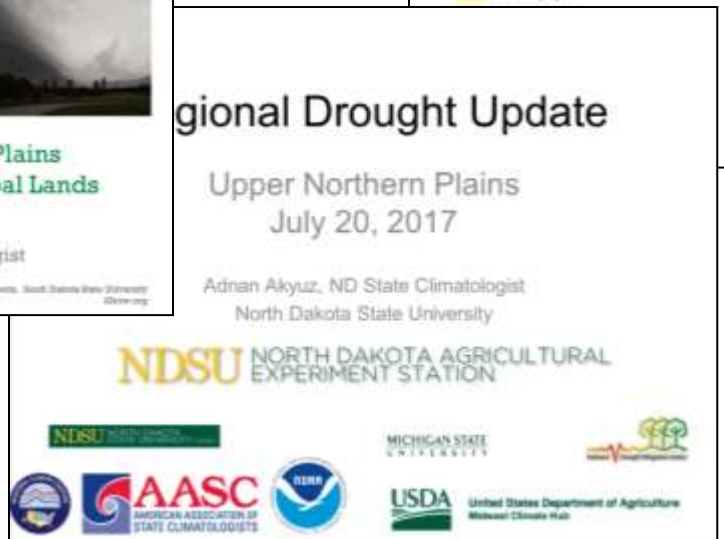


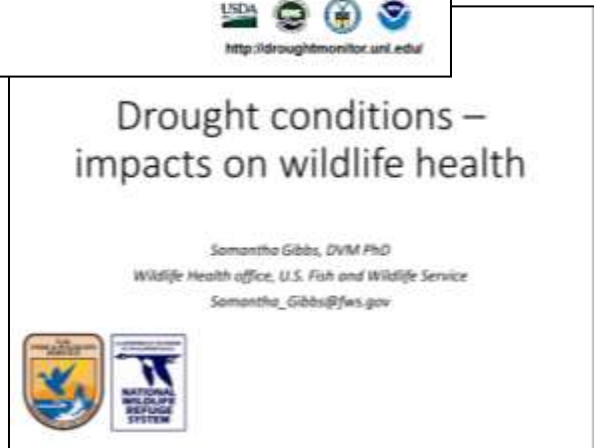
https://www.drought.gov/drought/resources/reports

NOAA and Partners Response 2017

- Regional Webinars (June, July & August)
  - From Monthly to bimonthly
    - Tribally focused Webinar
    - Agriculture & Ecosystems







NOAA Response and Support

* FEMA Drought Task Force
  * ND Request for Disaster Assistance
* Montana State Drought and Climate Summit
  * Advising Drought Monitor protocol
* Risk Management Agency (USDA RMA) & ND Ag.
* NOAA internal drought outlook consistency discussions
  * National + Regional + Local

https://www.drought.gov/drought/calendar/events/north-central-us-monthly-climate-and-drought-summary-and-outlook-april-19-2018

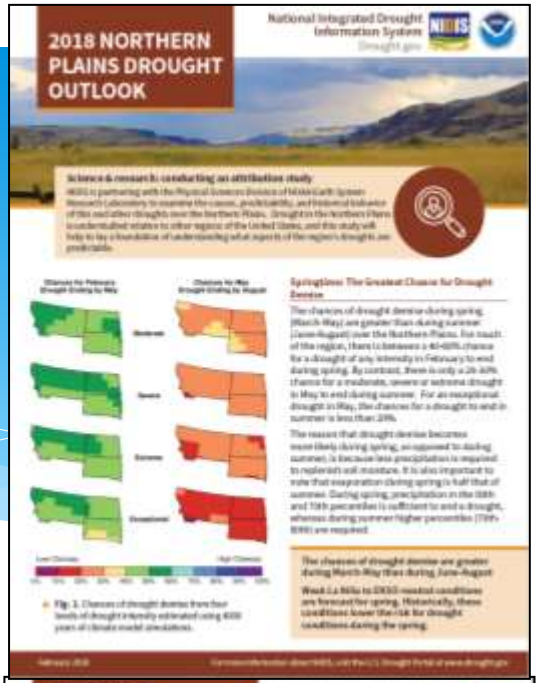
Coming Soon

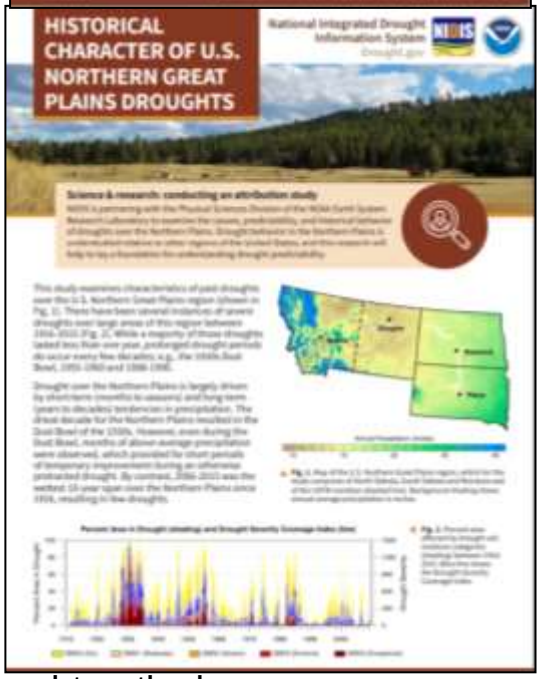
- NIDIS Updated Strategic Plan for the MO Basin
  - State, Tribal & basin wide needs/gaps
- N. Plains Drought Attribution Study
  - Late 2018
- N. Plains Drought Assessment – NOAA + many partners
  - June 2018
- Upper Basin Drought System w/Montana State Climate Office (proposed)
- SD, ND & MT Technical Workshops on Drought and Seasonal Forecasting Tools (proposed)
- RMA – NOAA Data Discussions (ongoing)

- Continuing:
  - Great Plains Tribal Water Alliance: BIA grants for drought resiliency
  - Plains soil moisture and snow water equivalent monitoring

A Bit About Attribution

- Drought was unforeseen
- N. Plains not often impacted so severely
- Less research in this region
- Need
  - What processes led to the drought (20/20 hindsight)
  - Predictability: is there any?
  - Impacts: who and what were? How to minimize..





https://www.drought.gov/drought/documents/2018-experimental-northern-plains-drought-outlook
https://www.drought.gov/drought/documents/historical-character-us-northern-great-plains-droughts

Thank You