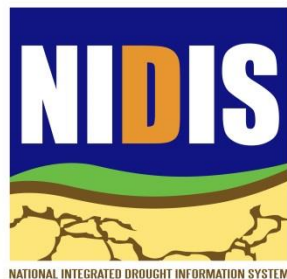


The Coastal Carolinas Drought Early Warning System (DEWS) Program

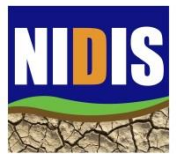
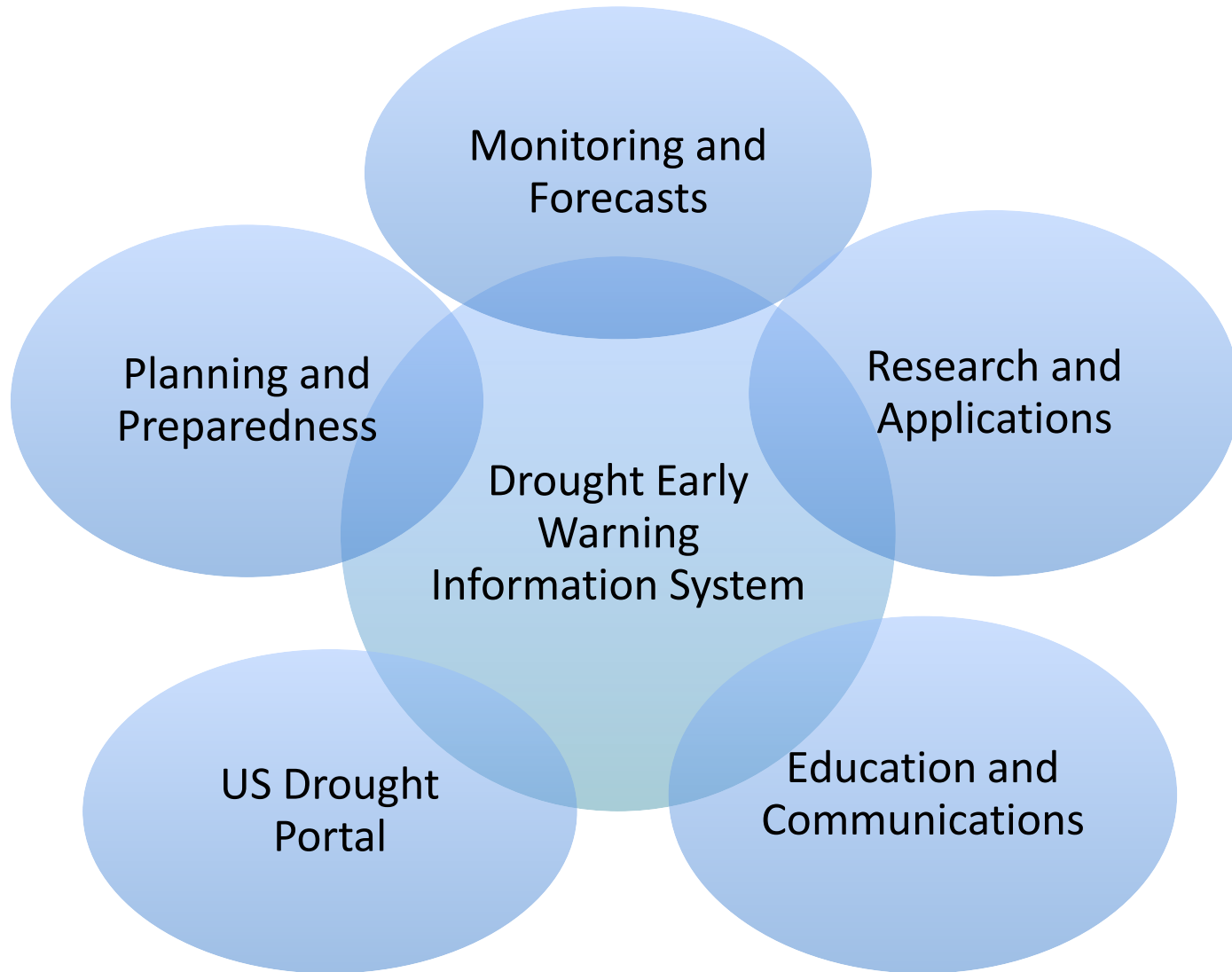
Kirsten Lackstrom

Carolinas Integrated Sciences & Assessments

University of South Carolina

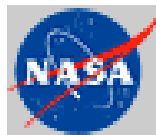


What is Drought Early Warning?

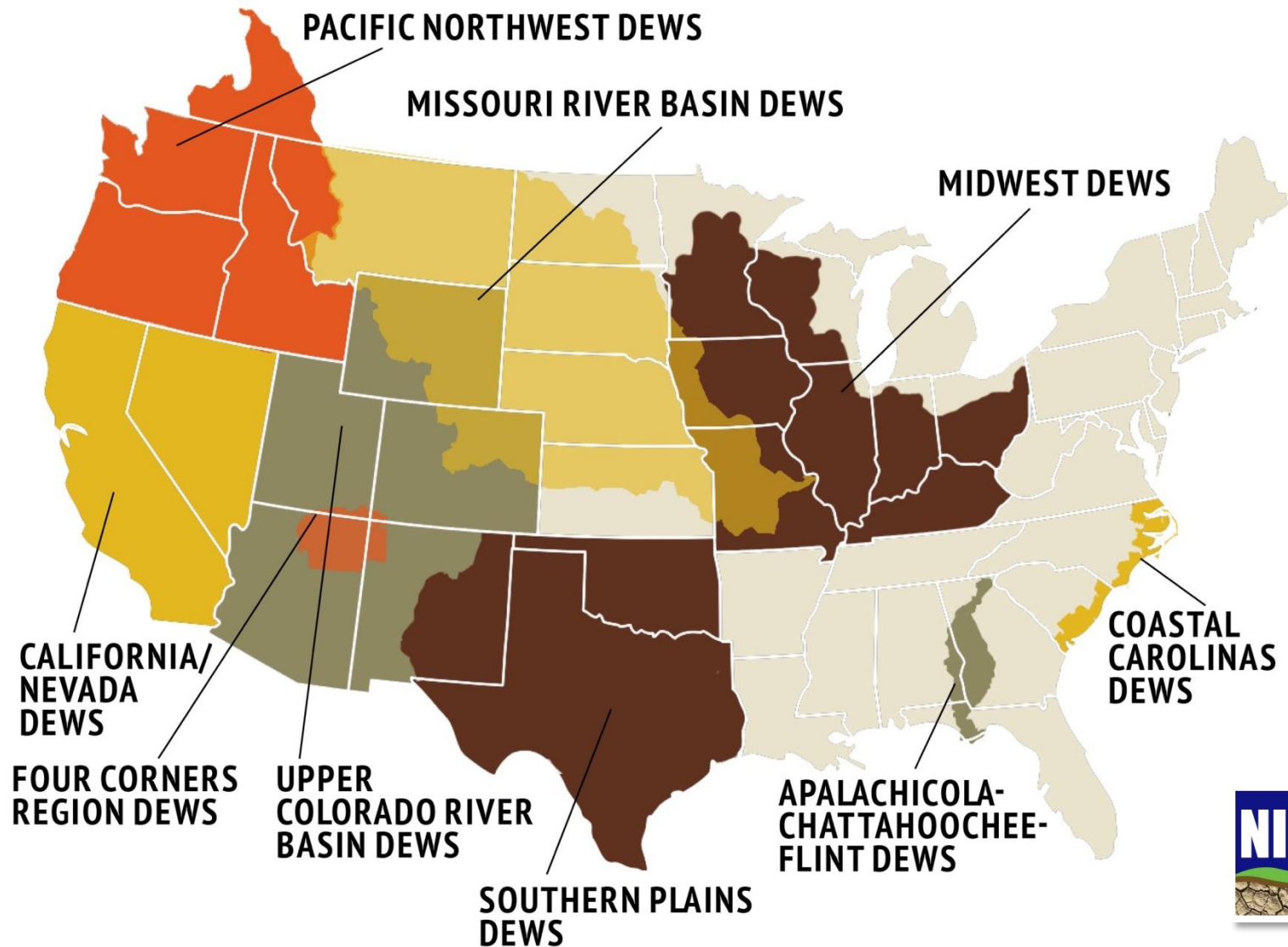


What is the National Integrated Drought Information System (NIDIS)?

- NIDIS is congressionally authorized with specific mandates (Public Laws 109-430 and 113-86)
- Brings together drought information, research, education, policy, and networking

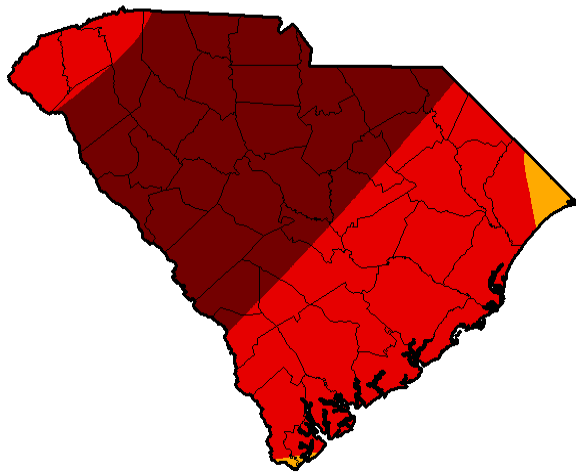


Regional Drought Early Warning Information Systems



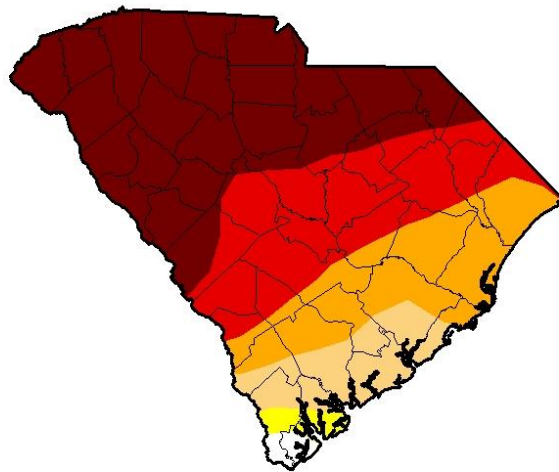
Drought in SC

U.S. Drought Monitor
South Carolina



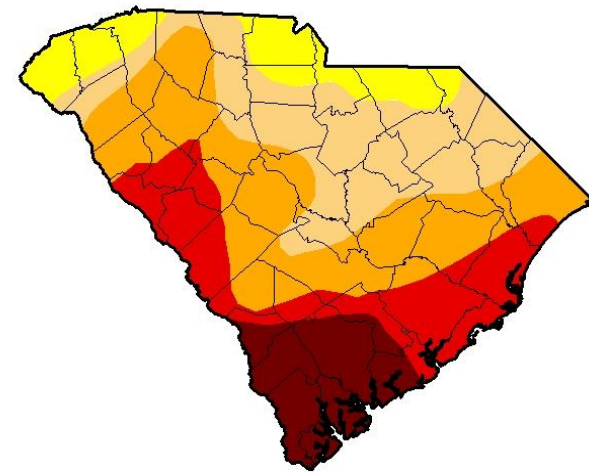
August 20, 2002

U.S. Drought Monitor
South Carolina



December 25, 2007

U.S. Drought Monitor
South Carolina



February 21, 2012

Intensity:



Drought and coastal ecosystems



- “Coastal Drought”
 - Changes in the availability and timing of freshwater to support animals, plants, and habitats
 - Changes to water quality conditions, particularly increasing salinity levels and fluctuations
- Drivers
 - Rainfall
 - Freshwater inflows
 - Tidal regimes

2012 Scoping Workshop



- Wilmington, NC
- Priorities
 - Evaluate and develop drought indicators for coastal ecosystems
 - Facilitate the use of drought forecasts and other products for decision making
 - Improve drought impacts monitoring and reporting

2013-2015 Activities



- Indicators and tools
 - Coastal salinity index (CSI)
 - Ecological indicators of drought
 - Coastal zone fire risk (NC)
 - Blue crab fishery forecast (SC)
- Hydroclimate extremes atlas
 - Duration, frequency, intensity of drought and high rainfall events
- Impacts: CoCoRaHS-condition monitoring project
 - Drought onset and recovery
- Engagement
 - CSI Workshop (2014)
 - Interviews
 - 50+ presentations



2016 Strategic Plan Process

- Develop roadmap for moving forward with the Coastal Carolinas DEWS
- Identify existing and new drought-related activities throughout the region
- 2-year time frame, yet a live document that can be updated
- Continued focus on the coastal Carolinas, other regional concepts and activities encouraged



2016 Strategic Plan Process

- June 2016 planning meeting
- Needs, priorities, activities
 - Communications, coordination, collaboration
 - Water quality impacts
 - Public health involvement
 - Monitoring and application of coastal drought information
 - salinity, soil moisture, fire risks, specific ecosystem impacts
- Fall 2016: writing and review



For more information:

- Coastal Carolinas DEWS
 - <https://www.drought.gov/drought/dews/coastal-carolinas/about-coastal-carolinas>
- Contacts
 - Kirsten Lackstrom, CISA, Lackstro@mailbox.sc.edu
 - Courtney Black, NIDIS, courtney.black@noaa.gov