



**MISSISSIPPI STATE**  
UNIVERSITY™

## Introduction

Drought conditions plagued portions of the Memphis County Warning Area (CWA) during the Fall of 2016, increasing office awareness to the infrequency of “ground truth” crop and pasture reports from our partners in agriculture. In collaboration between the Memphis Weather Forecast Office (WFO) and the meteorology department of Mississippi State University (MSU), the idea for a mobile application capable of recording observations for drought condition reporting was born.

### WHAT IS DRI?

Drought Reporting & Information – an easy-to-use, interactive method of reporting drought conditions to NOAA (National Weather Service) and editors of the U.S. Drought Monitor product

A collaborative effort between the agriculture and weather/climate communities

Created by the meteorology department of MSU, with input from the Memphis WFO

### REPORTED VIA DRI

- **Location (will use mobile geolocation)**
- **Photograph**
- **Categorization (1 of 5)**
- **Have conditions improved, stayed the same, or worsened?**
- **Narrative (Observer’s general assessment)**

### WHO IS REPORTING?

Skilled members of the agriculture community with the best knowledge of conditions in their area (primarily farmers and agriculture extension agents)

Initial introduction and testing of web-based application limited to counties across the state of Mississippi, with all users required to complete training on best reporting practices and drought categorization descriptors

### THE BENEFITS OF DRI

Has the ability to enhance drought forecasting, monitoring, and response through improvements to reliability and efficiency of drought reports

Reports archived into a database accessible by the National Weather Service, state climatologists, and ultimately authors of the U.S. Drought Monitor product

The ability to push drought information (Drought Information Statements, rainfall forecasts, etc) to users as a means of sharing intel and soliciting input reports to the application

**DRI**  
**DROUGHT REPORTING & INFORMATION**  
MOBILE APPLICATION  
**USE IN DROUGHT REPORTING**



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### FUTURE WORK

**Complete beta testing and initiate full roll out of current web application to other farmers and agriculture extension agents**

**Potential migration from web to mobile app**

**Expand on the drought information push from the app**

**Rollout of DRI to other states and CWAs**

**Potential for national adoption and use as trusted and reliable means of drought condition reporting**