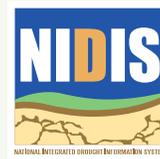


2016 Drought Effects on Farms & Ranches: Preliminary Survey Findings

Tonya Haigh



Why survey?

- Improve understanding of:
 - Drought impacts
 - Use and effectiveness of drought management strategies
 - Use of drought/climate information
 - Barriers to drought preparedness
- Inform a variety of drought monitoring tools

Thank you in advance for sharing information about your experience with the 2016 drought, and your thoughts on drought risk management. Your answers to the first block of questions will help us develop more accurate drought monitoring tools in the future.

1. Did you experience drought conditions in 2016?
 No
 Yes
 I don't know

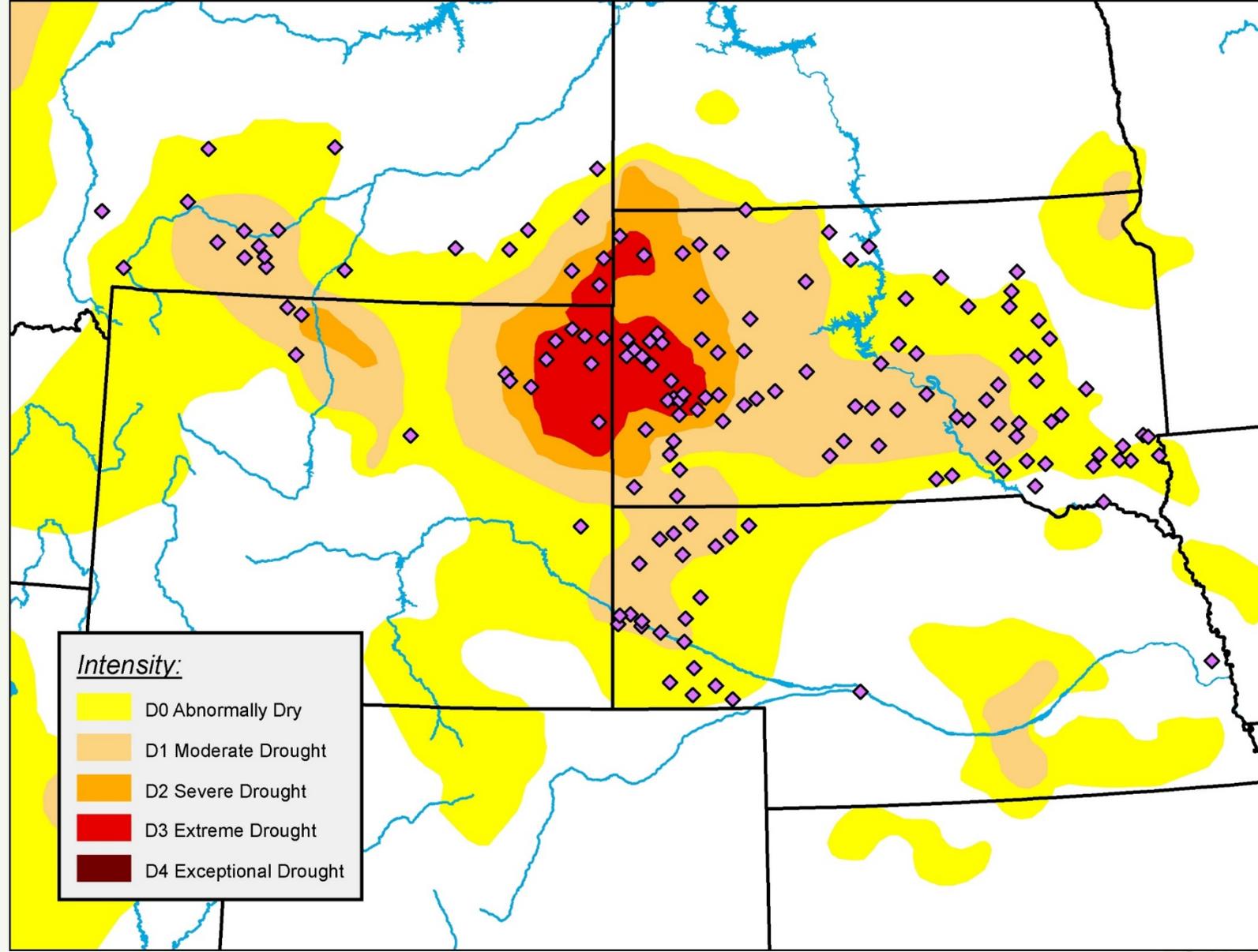
2. Are you currently experiencing drought conditions?
 No
 Yes
 I don't know

3. This question has two parts. First, with regard to drought over the past year, please indicate whether or not each of the following conditions occurred on your land. Then, if the condition occurred, tell us approximately when the condition first occurred during this drought.

	DID IT OCCUR THIS YEAR?			→	WHEN DID IT FIRST OCCUR?	
	NOT APPLICABLE	DID NOT OCCUR	OCCURRED		MONTH	DAY
A. Decreased topsoil moisture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
B. Decreased subsoil moisture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
C. Delayed or lack of plant emergence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
D. Delayed or lack of plant growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
E. Plant stress (crop or pasture)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
F. Plant death (crop or pasture)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
G. Poor grain fill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
H. Deteriorating range conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
I. Decreased forage productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
J. Lowered water levels in ponds, streams, or other water sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
K. Lack of water in ponds, streams, or other water sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
L. Wells unable to keep up with livestock or irrigation needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
M. Fire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
N. Infestations of insects or other pests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		
O. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→		

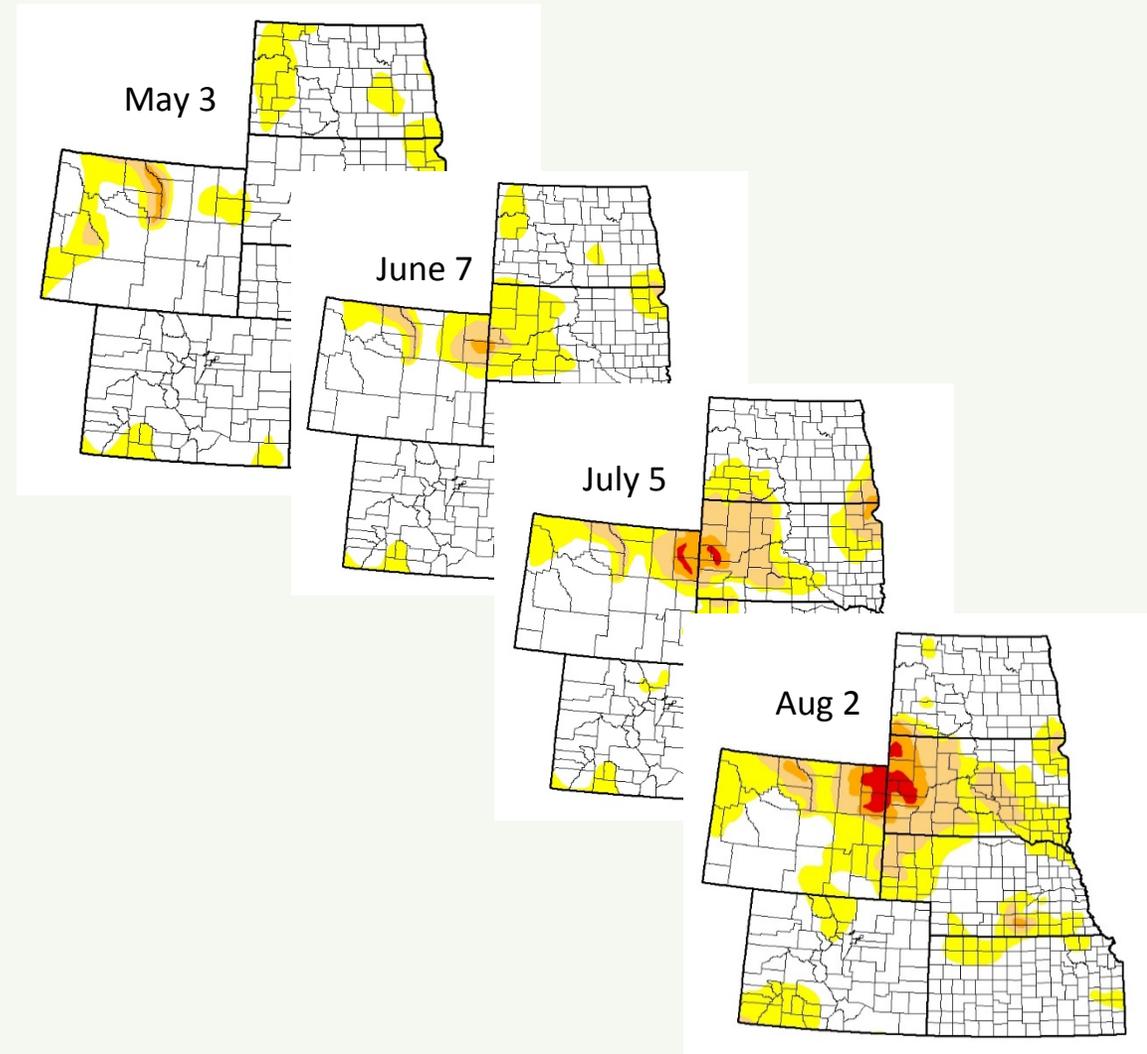
Who was included?

- Agricultural producers experiencing D0 or higher in 2016
- SD, NE, MT, WY
- Sampled from FSA lists
- ~350 eligible responses



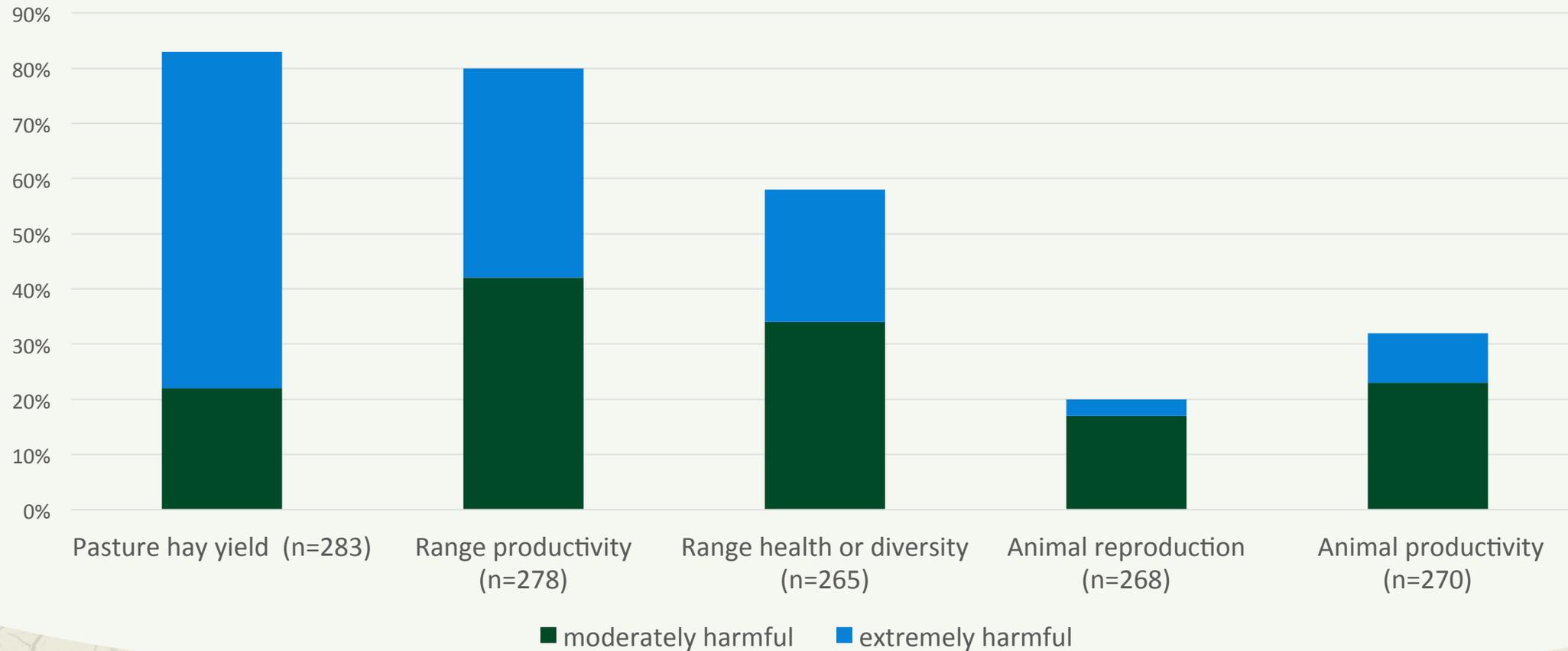
Informing drought monitoring

	OCCURRED		MONTH	DAY
Decreased topsoil moisture (n=331)	94%	→		
Decreased subsoil moisture (n=321)	90%	→		
Delayed or lack of plant emergence (n=320)	64%	→		
Delayed or lack of plant growth (n=322)	86%	→		
Plant stress (crop or pasture) (N=320)	92%	→		
Plant death (crop or pasture) (N=304)	51%	→		
Poor grain fill (n=304)	38%	→		
Deteriorating range conditions (n=321)	86%	→		
Decreased forage productivity (n=318)	86%	→		
Lowered water levels in ponds, streams, or other water sources (n=320)	79%	→		
Lack of water in ponds, streams, or other water sources (n=318)	70%	→		
Wells unable to keep up with livestock or irrigation needs (n=309)	16%	→		
Fire (n=313)	17%	→		
Infestations of insects or other pests (n=307)	25%	→		



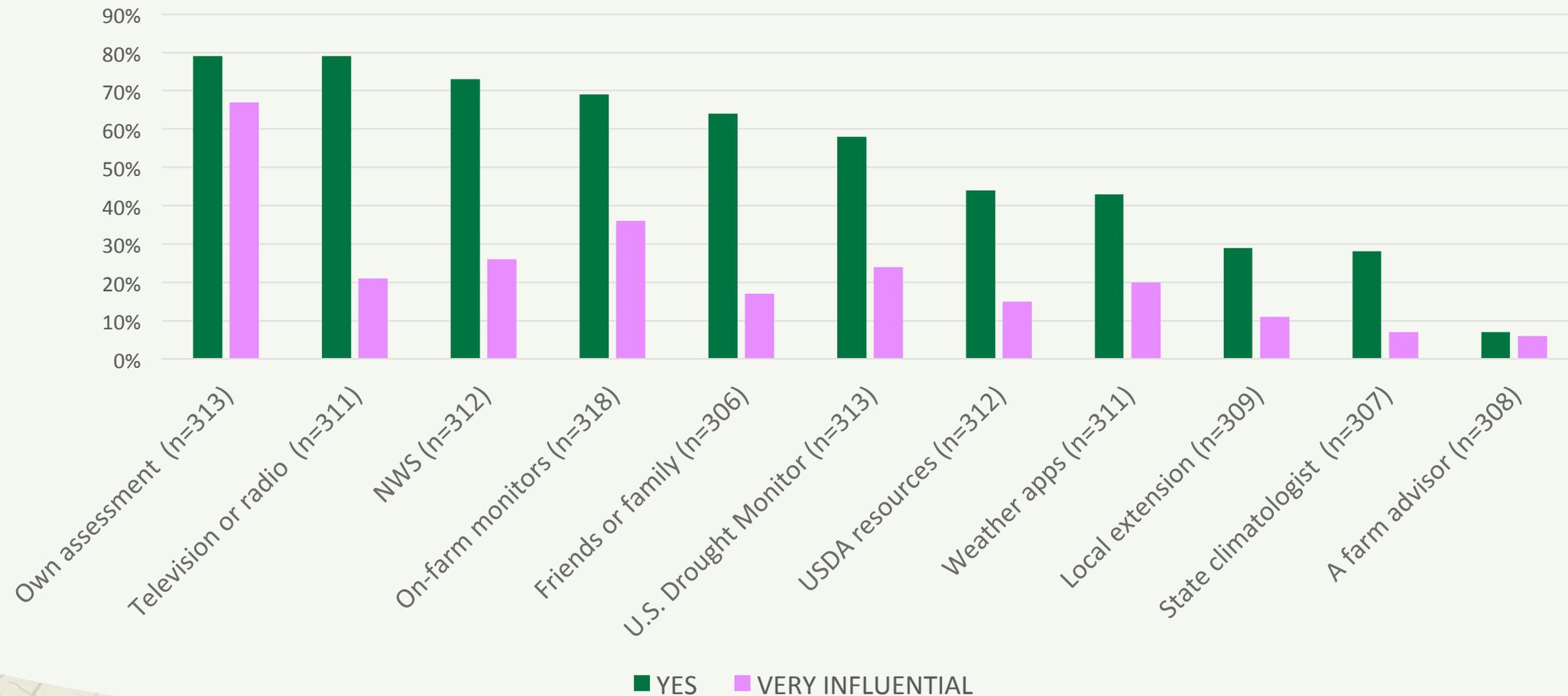
Impacts

Perceived Harm of 2016 Drought



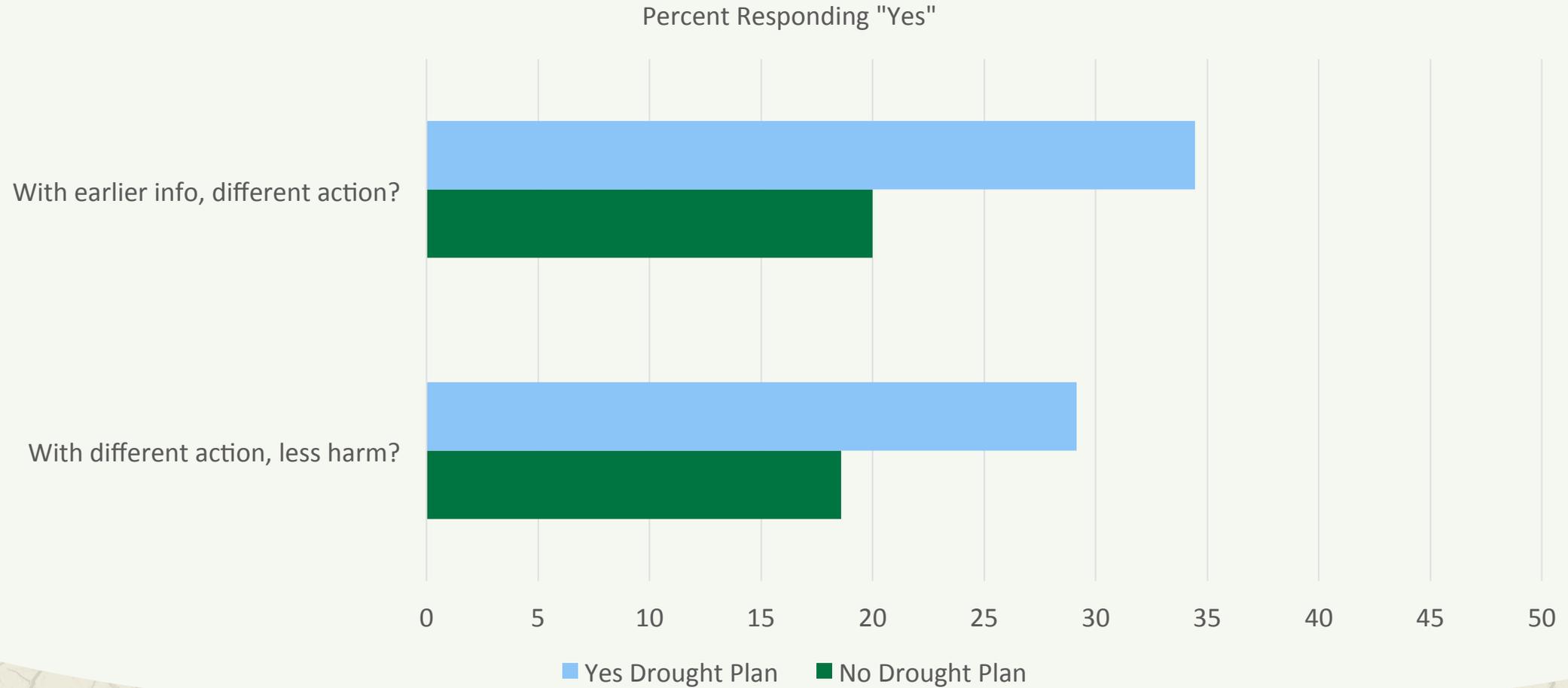
Use of Drought/Climate Information

Use and Influence of Info Sources



■ YES ■ VERY INFLUENTIAL

Value of Drought Planning



More to come...
Please follow up for more info!

Tonya Haigh

thaigh2@unl.edu

Twitter: @TonyaHaigh