Social Dimensions of Water in Oklahoma

Hank Jenkins-Smith
National Institute for Risk & Resilience

The University of Oklahoma
**Center for Risk & Crisis Management**

Coupled System Dynamics
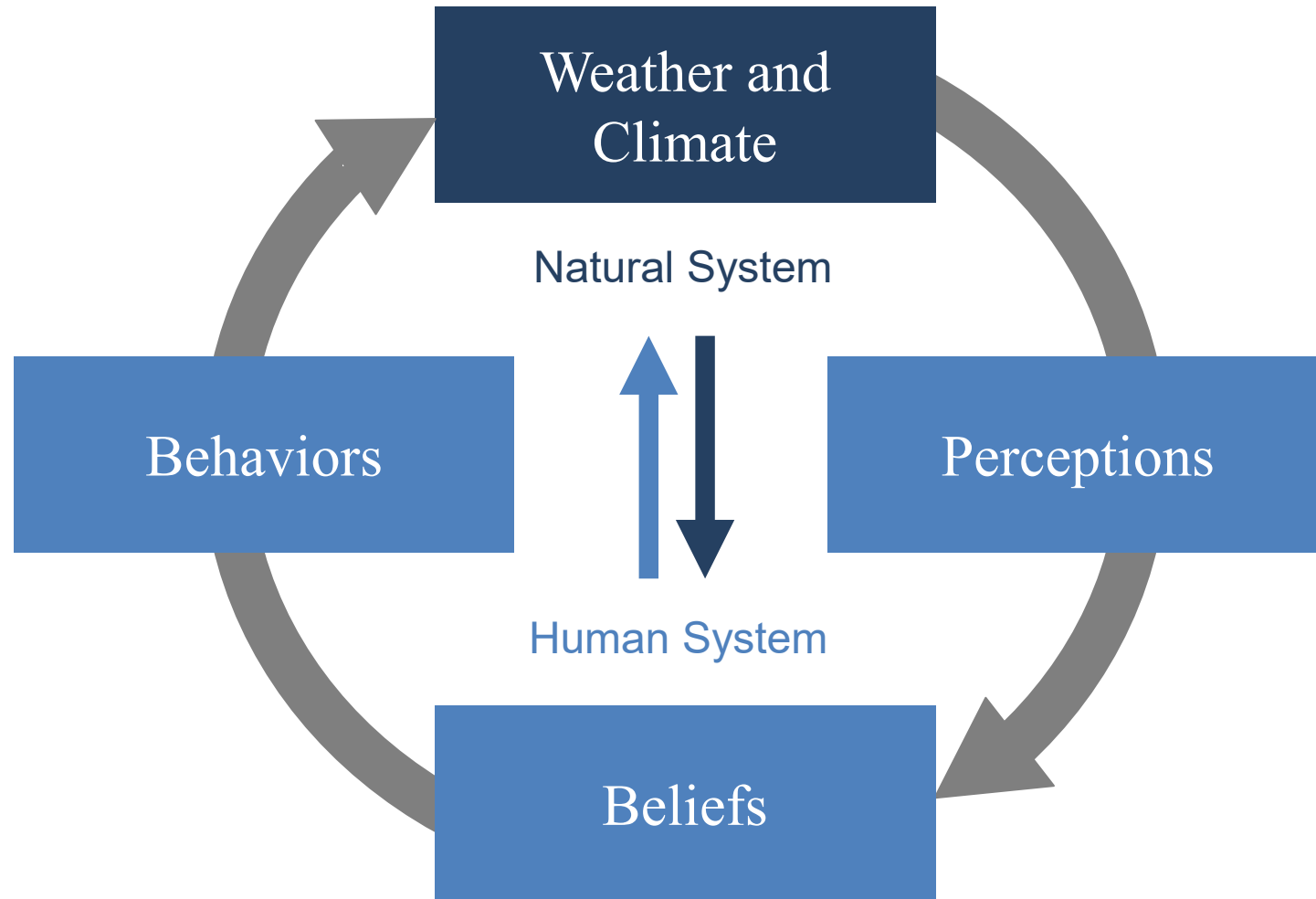
M-SISNet Panel Data

Weather and Climate Data: Oklahoma Mesonet
- Network of 121 environmental monitoring stations that collect and disseminate weather and climate data
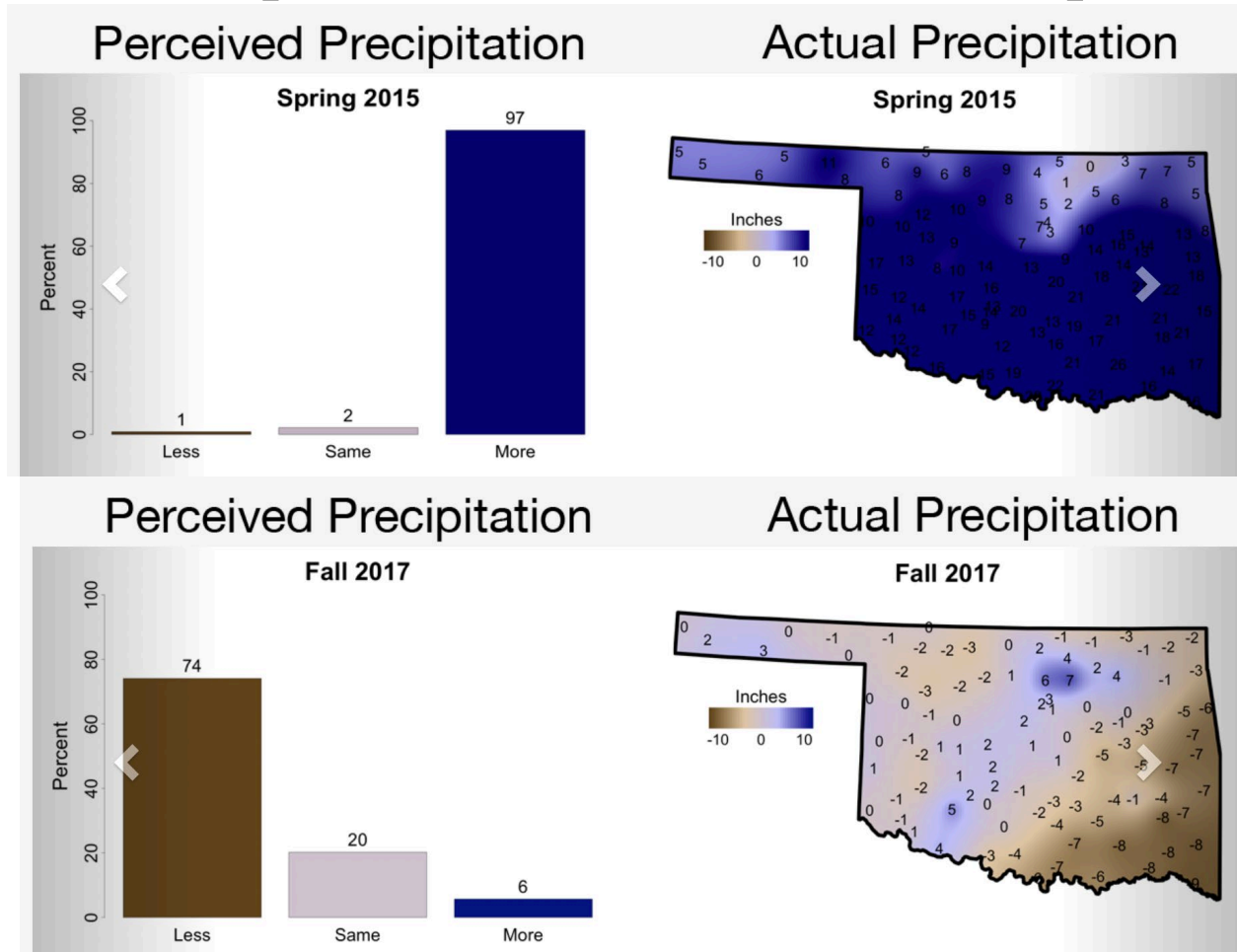
Social Data: Oklahoma M-SISNet
- Network of 2000+ ''social monitoring stations'' (households) that provide data on environmental perceptions, beliefs, and behaviors
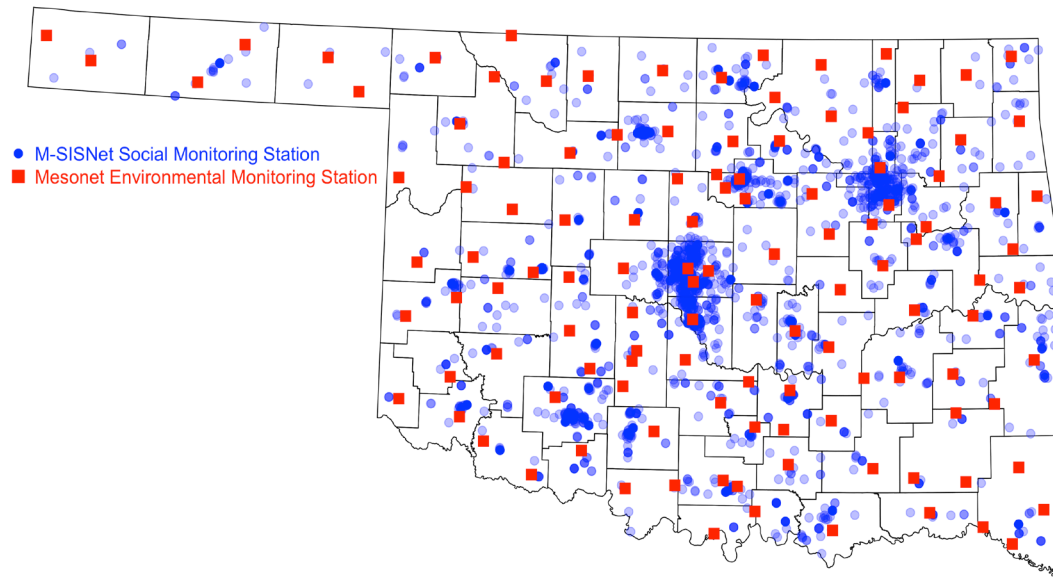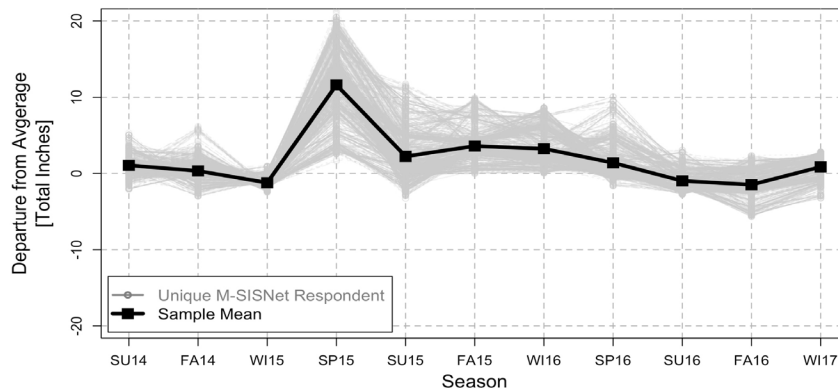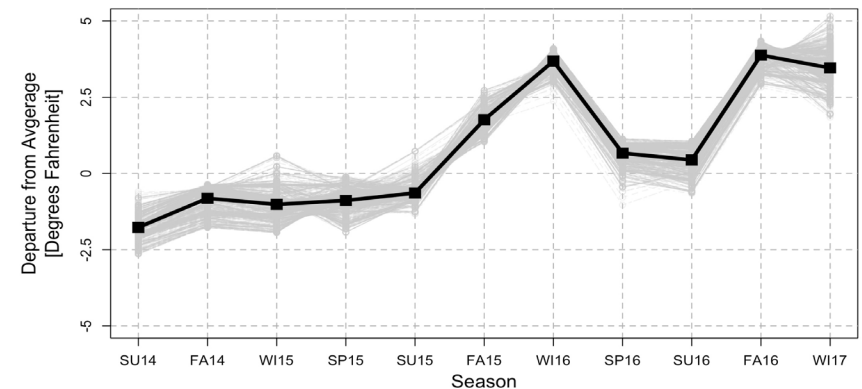
Perceptions of Precipitation

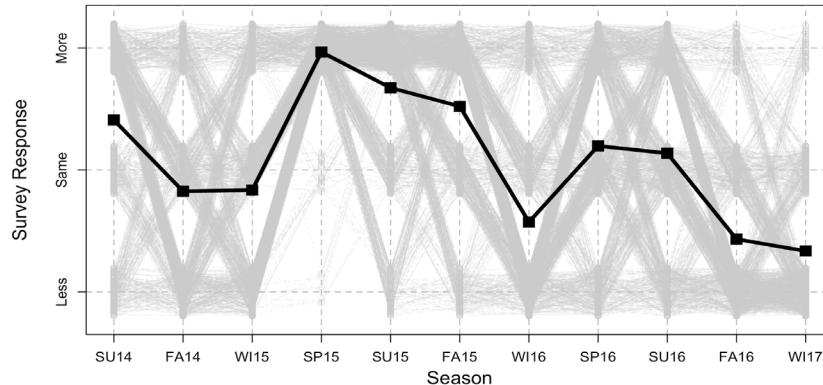# Perceptions of Climate Anomalies Over Time

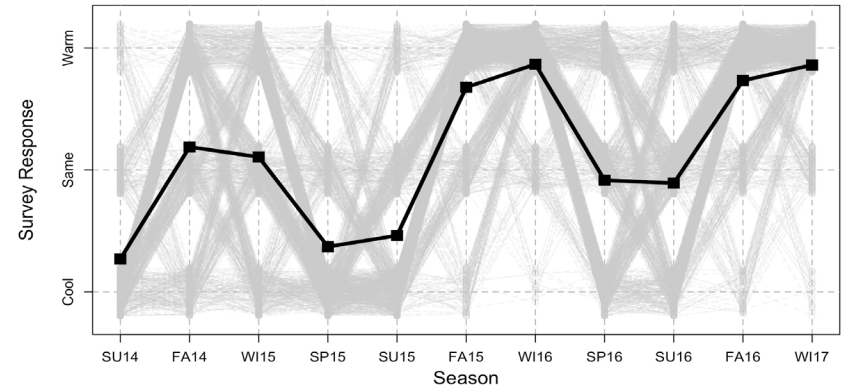(a) Precipitation Anomaly (Mesonet)

(b) Temperature Anomaly (Mesonet)

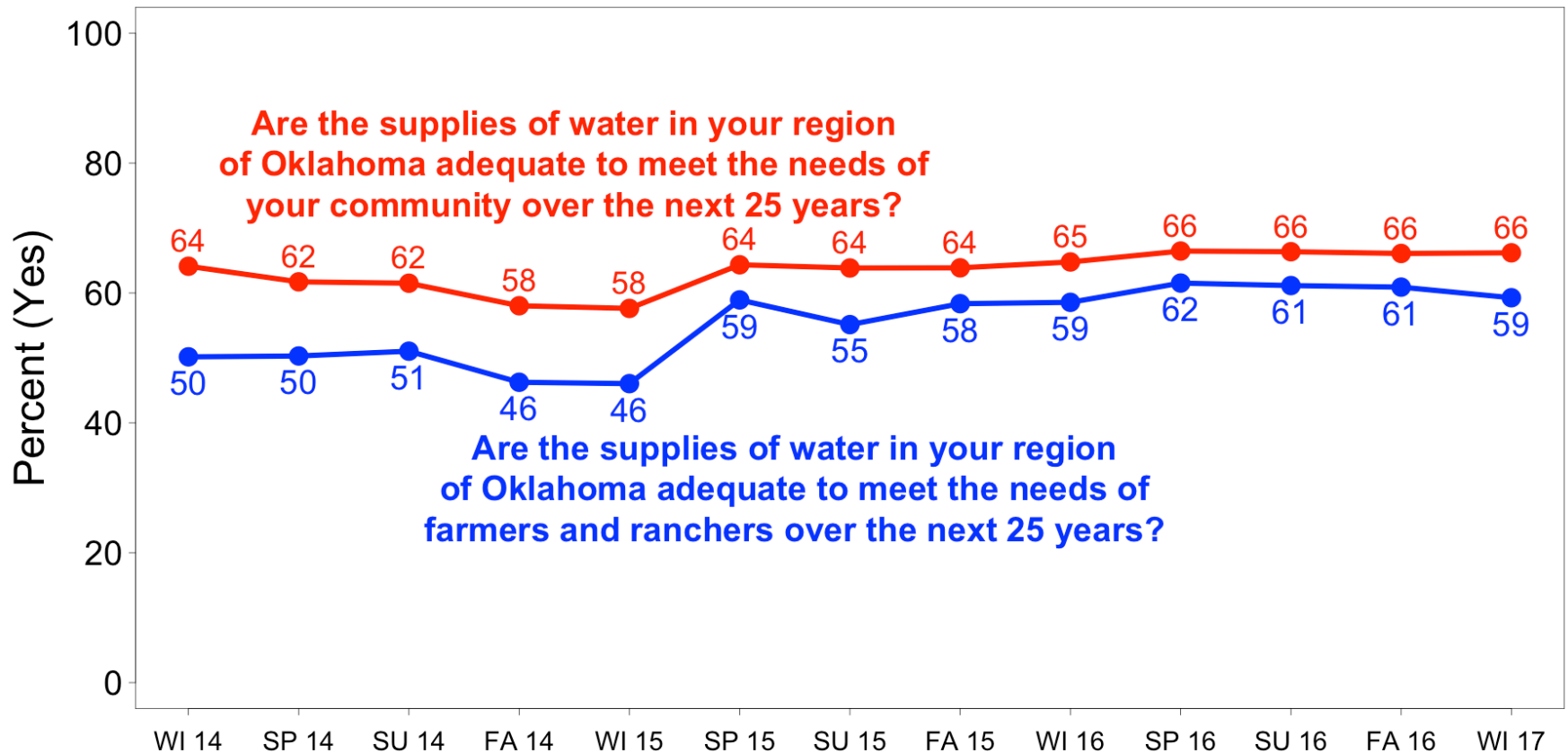(c) Perception of Precipitation Anomaly (M-SISNet)

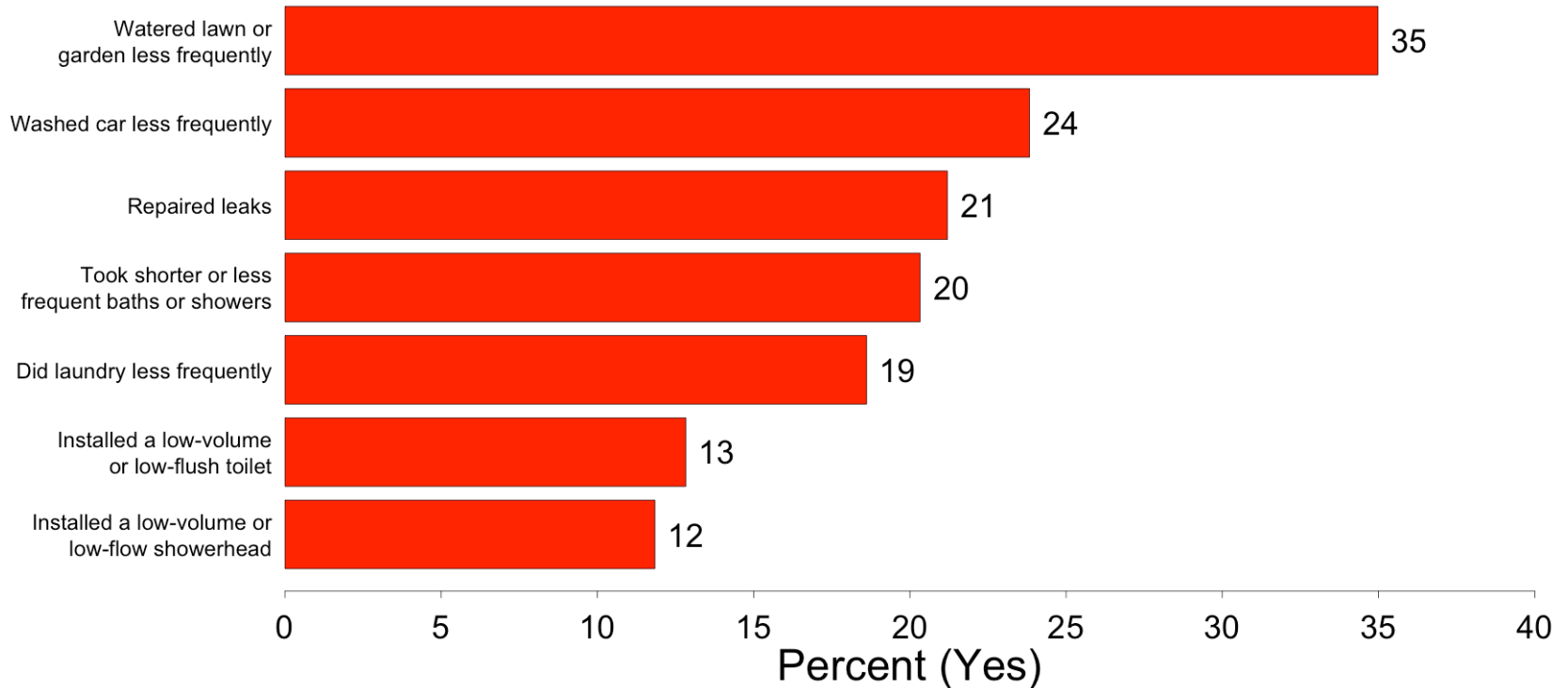(d) Perception of Temperature Anomaly (M-SISNet)

Perceptions of Water Availability

Are the supplies of water in your region of Oklahoma adequate to meet the needs of your community over the next 25 years?

Are the supplies of water in your region of Oklahoma adequate to meet the needs of farmers and ranchers over the next 25 years?

Percent (Yes)

Red line (community): WI 14: 64, SP 14: 62, SU 14: 62, FA 14: 58, WI 15: 58, SP 15: 64, SU 15: 64, FA 15: 64, WI 16: 65, SP 16: 66, SU 16: 66, FA 16: 66, WI 17: 66

Blue line (farmers and ranchers): WI 14: 50, SP 14: 50, SU 14: 51, FA 14: 46, WI 15: 46, SP 15: 59, SU 15: 55, FA 15: 58, WI 16: 59, SP 16: 62, SU 16: 61, FA 16: 61, WI 17: 59
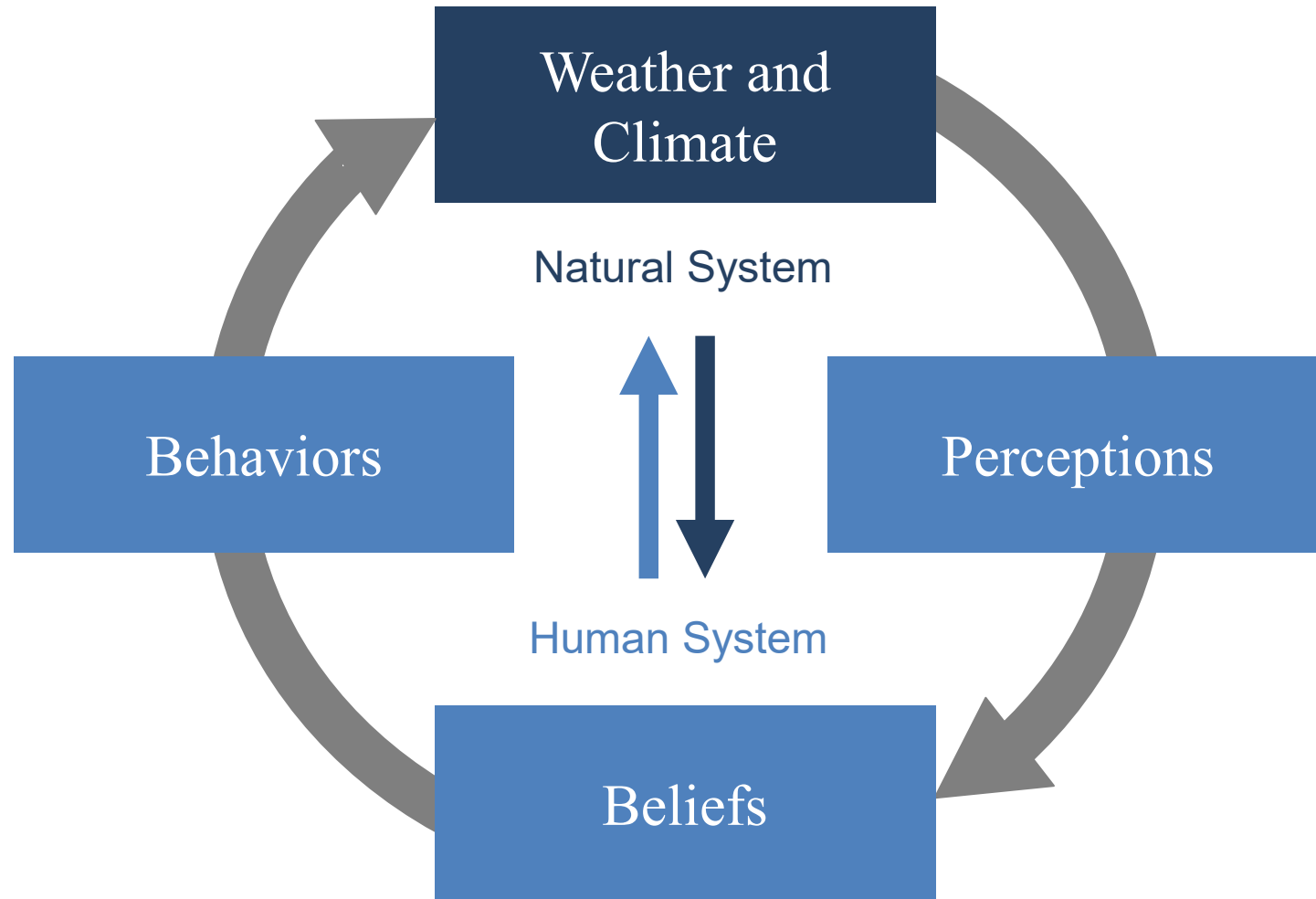
Water Conservation

"Were any of the following steps taken to decrease the amount of water used at your residence this [season]?" [Please check all that apply]
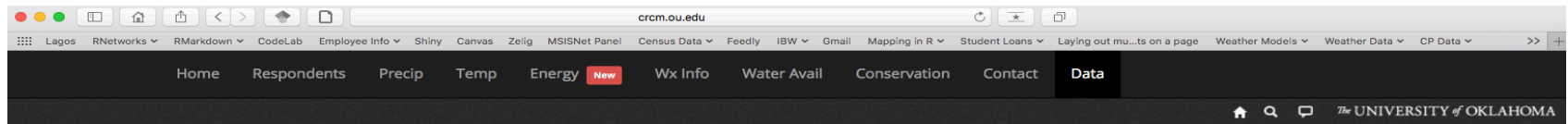

The UNIVERSITY of OKLAHOMA

Coupled System Dynamics

For data go to:
http://crcm.ou.edu/epscor/

Hank Jenkins-Smith
hjsmith@ou.edu

Carol L Silva
clsilva@ou.edu

Kuhika Gupta
kuhikagupta@ou.edu

Joseph Ripberger
jtr@ou.edu

The University of Oklahoma
Center for Risk &
Crisis Management