

# Republican River Basin Drought Scenario Exercise

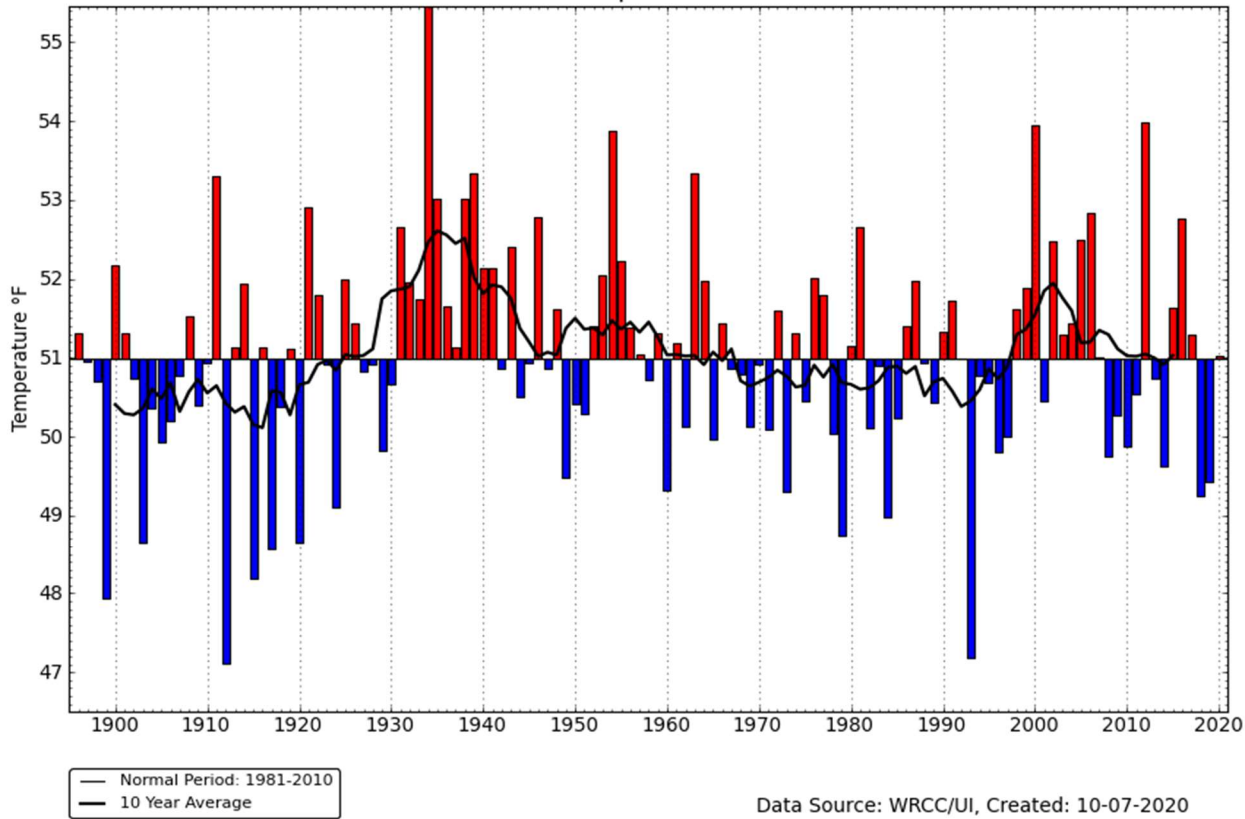
-9<sup>TH</sup> November, 2020-

Mwape Andrew



# Republican River Basin- NE

Mean Temperature, 12-Months Ending in September  
Republican

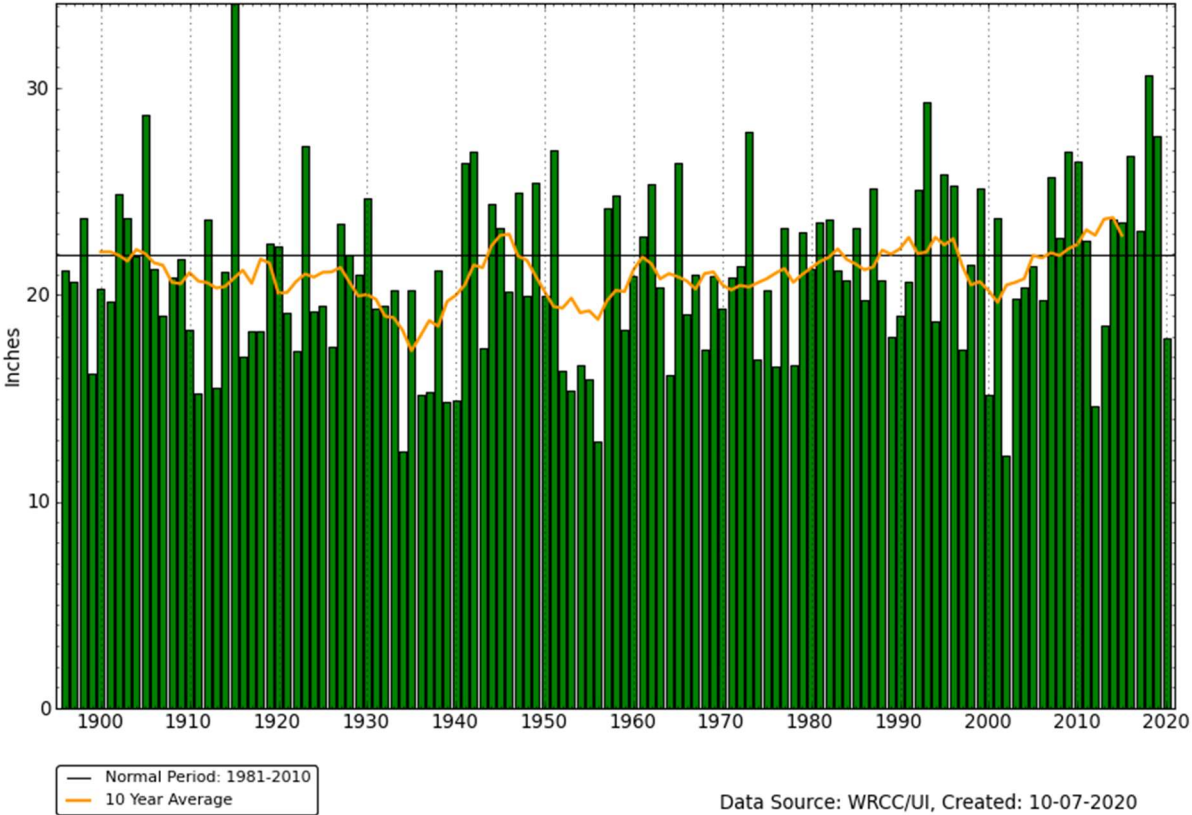


Data Source: WRCC/UI, Created: 10-07-2020



# Republican River Basin- NE

Precipitation, 12-Months Ending in September  
Republican



Data Source: WRCC/UI, Created: 10-07-2020



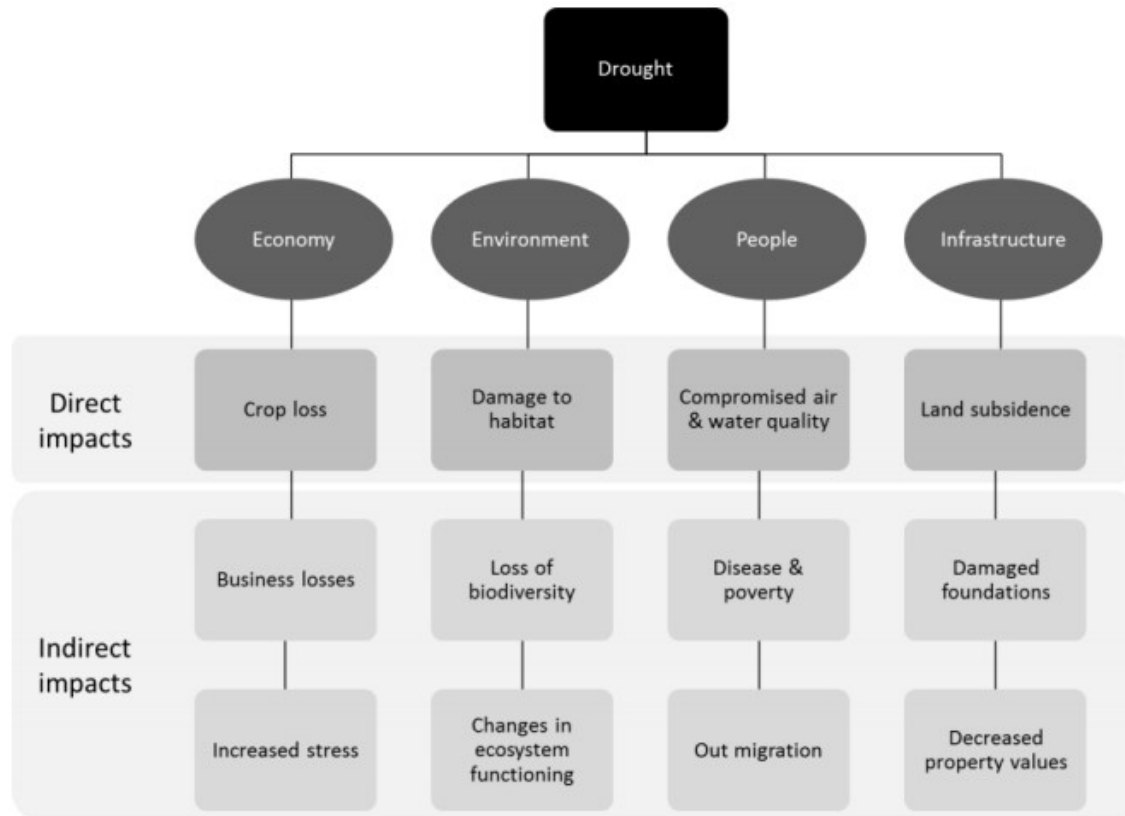
## Why Plan for Drought?

“It does not do to leave a live dragon out of your calculations, if you live near him.”

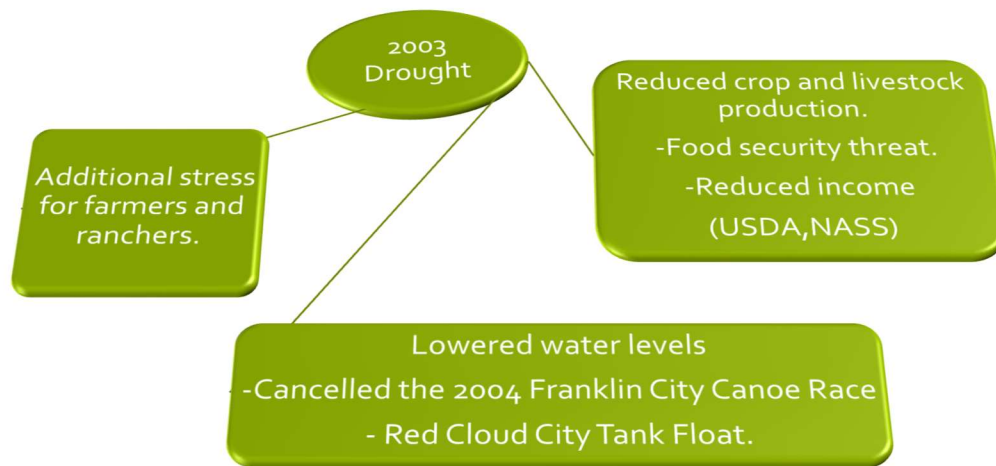
— J.R.R. Tolkien,



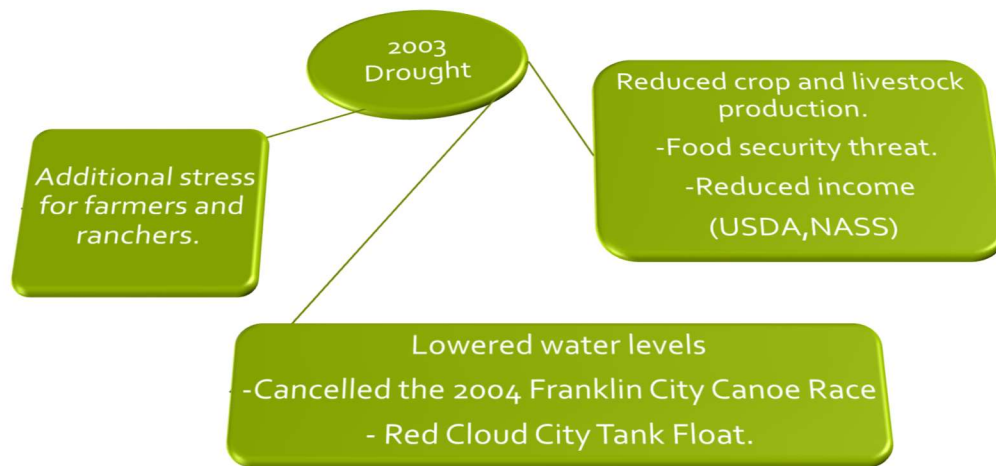
# Why Plan for Drought?



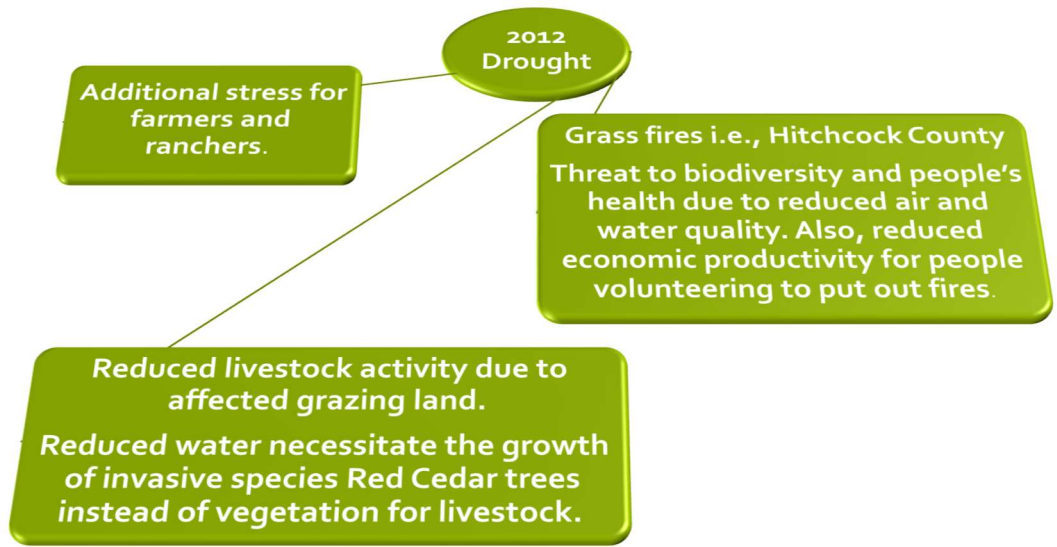
# Why Plan for Drought?



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# Why Plan for Drought?

A collaborative, diverse water value dialog is extremely important to ensure societal readiness for drought induced water shortages **certain to occur in the future.**

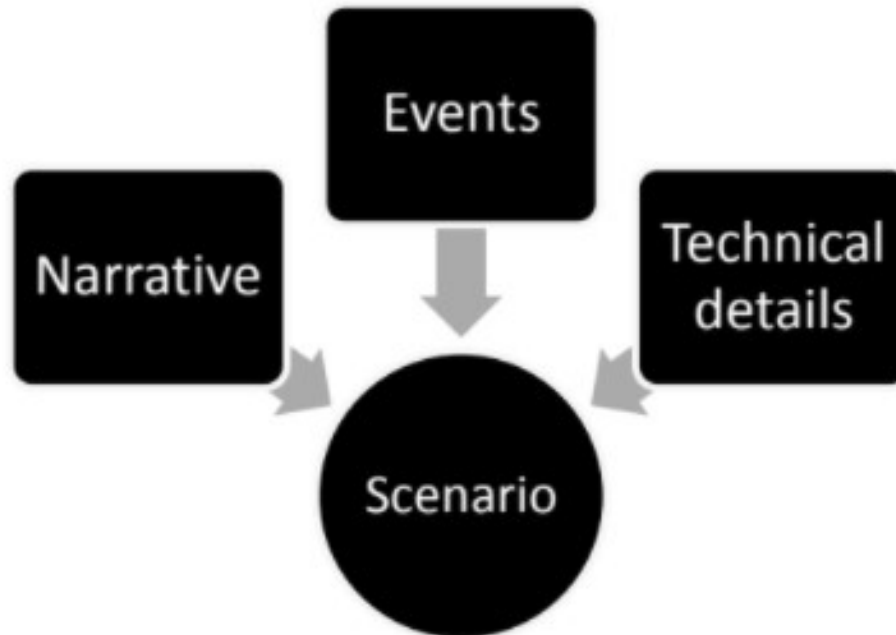


# Scenario Based Drought Planning Exercise?

- Innovative way to engage community leaders, decision-makers, government staff, and stakeholders in **collaborative discussions** of planning and policy oriented issues.
- People come together to plan and manage activities for a hypothetical drought.
- Stimulate creative thinking for **mitigation, response, and adaptation strategies**; learn about differing views and perspectives of drought; **identify gaps and vulnerabilities; foster better communication and relationships among stakeholders; clarify agency/organizational roles and responsibilities; test and improve coordination among organizations involved in drought response; and practice making drought management decisions and using operational tools.**



# Scenario Based Drought Planning Exercise- Components



# Scenario Based Drought Planning Exercise

Types: (According to NDMC):

1. Discussion based scenario exercise- Participant engagement
  - 1.1. Workshop
  - 1.2. Games
  - 1.3. Table top
  
- 2.0. Operational based scenario exercise- Realistic
  - 2.1. Functional



# Scenario Based Drought Planning Exercise

## 1. Discussion based scenario exercise-

Workshop and Game exercises maximize tapping into participants' competitive and collaborative energies by dividing them into teams with assigned roles for each player, and judging each team's response to a hypothetical drought.

### 1.1. Workshop:

- Develop a component of a drought plan.
- Build a specific product, such as a list of planning resources.
- Identify and prioritize uncertainties in water resources planning.
- Find solutions or create a consensus vision in response to planning challenges and opportunities.



# Scenario Based Drought Planning Exercise

## 1. Discussion based scenario exercise

### 1.2. Game:

- Promote team building.
- Increase knowledge about the complexities of water resources management.
- Improve cross-sectoral communication and collaboration.
- Learn about the values and viewpoints of stakeholders with competing interests.
- Generate innovative mitigation, adaptation, and response strategies.
- Simulate or evaluate the costs and benefits of different courses of action.



# Scenario Based Drought Planning Exercise

## 1. Discussion based scenario exercise- Participant engagement

### 1.3. Table top: Ideal for an already existing plan.

- Test a drought plan.
- Familiarize participants with the drought plan.
- Review the effectiveness of the plan.
- Discover gaps in resources.
- Improve coordination among stakeholders.



# Scenario Based Drought Planning Exercise

## 2. Operational based scenario exercise

### 2.1. Functional:

- Mostly used in emergency management activities.
- More precise and realistic.
- More complex.
- Assess the adequacy of plans, policies, and procedures.
- More costly.





# Exercise Options

Considerations		Workshop	Game	Tabletop	Functional
Outcomes	Identification of problems and/or mitigation and response actions	X	X		
	Education or training	X	X	X	X
	Consensus building	X	X	X	
	Collaboration or coordination	X	X	X	X
	Plan evaluation and modification			X	X
Resources	Low to medium	X	X	X	
	Medium to high		X		
	High		X		X
Participation	General stakeholders	X	X	X	
	Agency or organizational staff			X	X

## Exercise Options

Considerations		Workshop	Game	Tabletop	Functional
Planning stage	Developing	X	X		
	Existing			X	X
Interaction with experts	Significant	X		X	
	Limited		X		X
Learning format	Thinking and discussing	X	X	X	
	Doing				X
Realism and atmosphere	Less realistic and more relaxed	X	X	X	
	More realistic and tense				X

## References:

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**Thank you!**

**Questions? Concerns?**

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