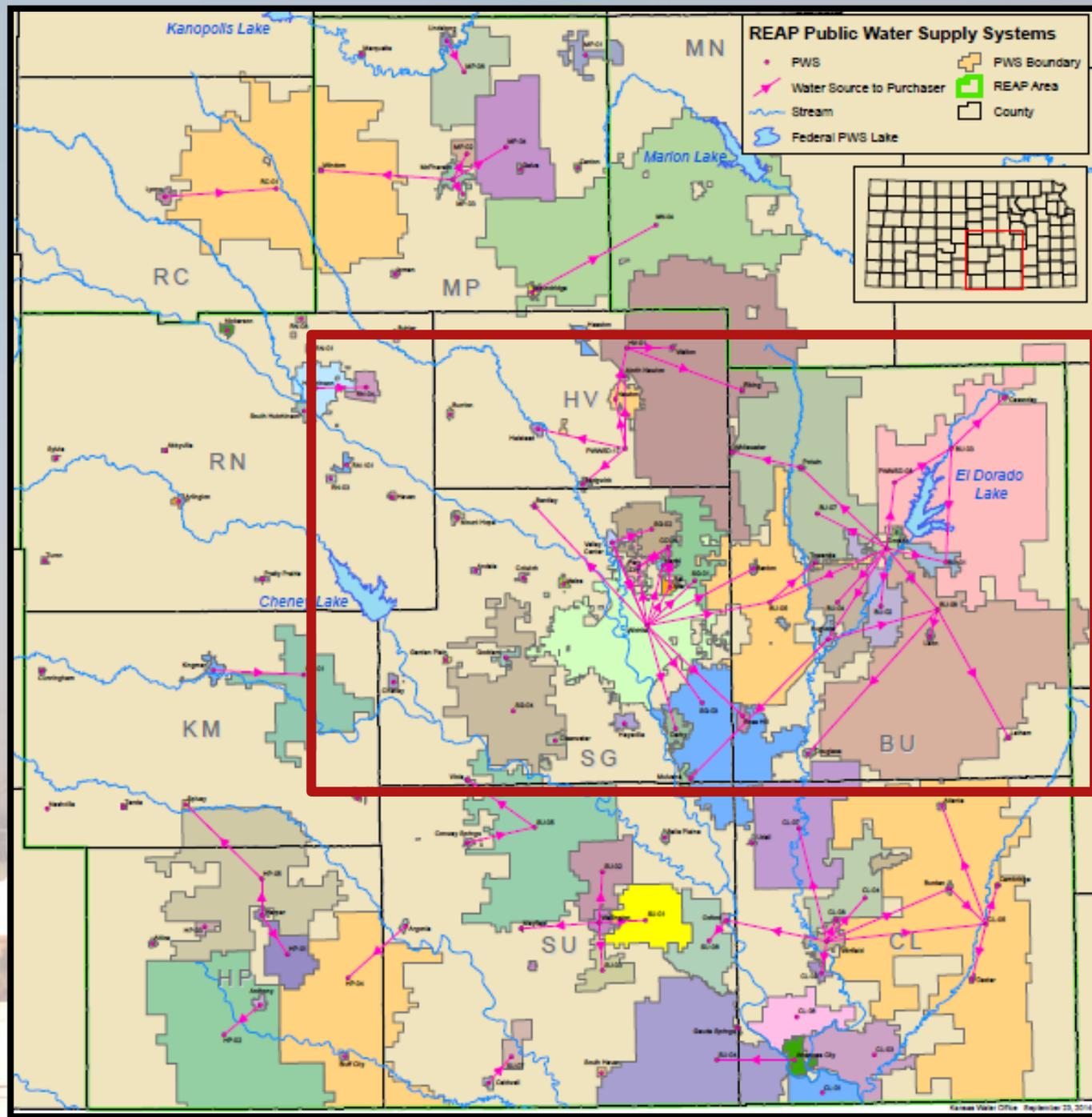


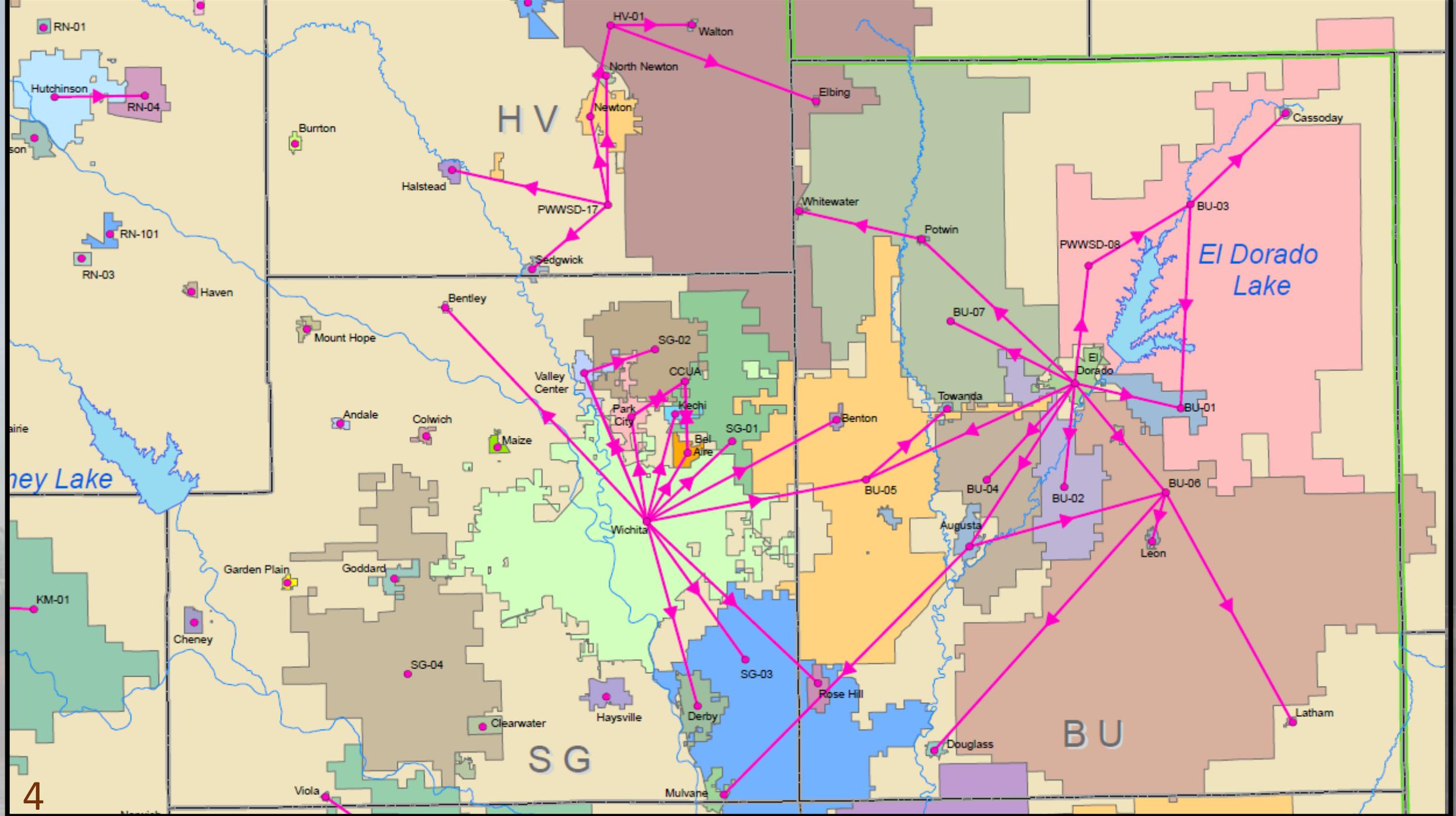
# Water Supply in South-central Kansas

JOSEPH T. PAJOR, DEPUTY DIRECTOR, PUBLIC WORKS & UTILITIES  
CITY OF WICHITA, KANSAS

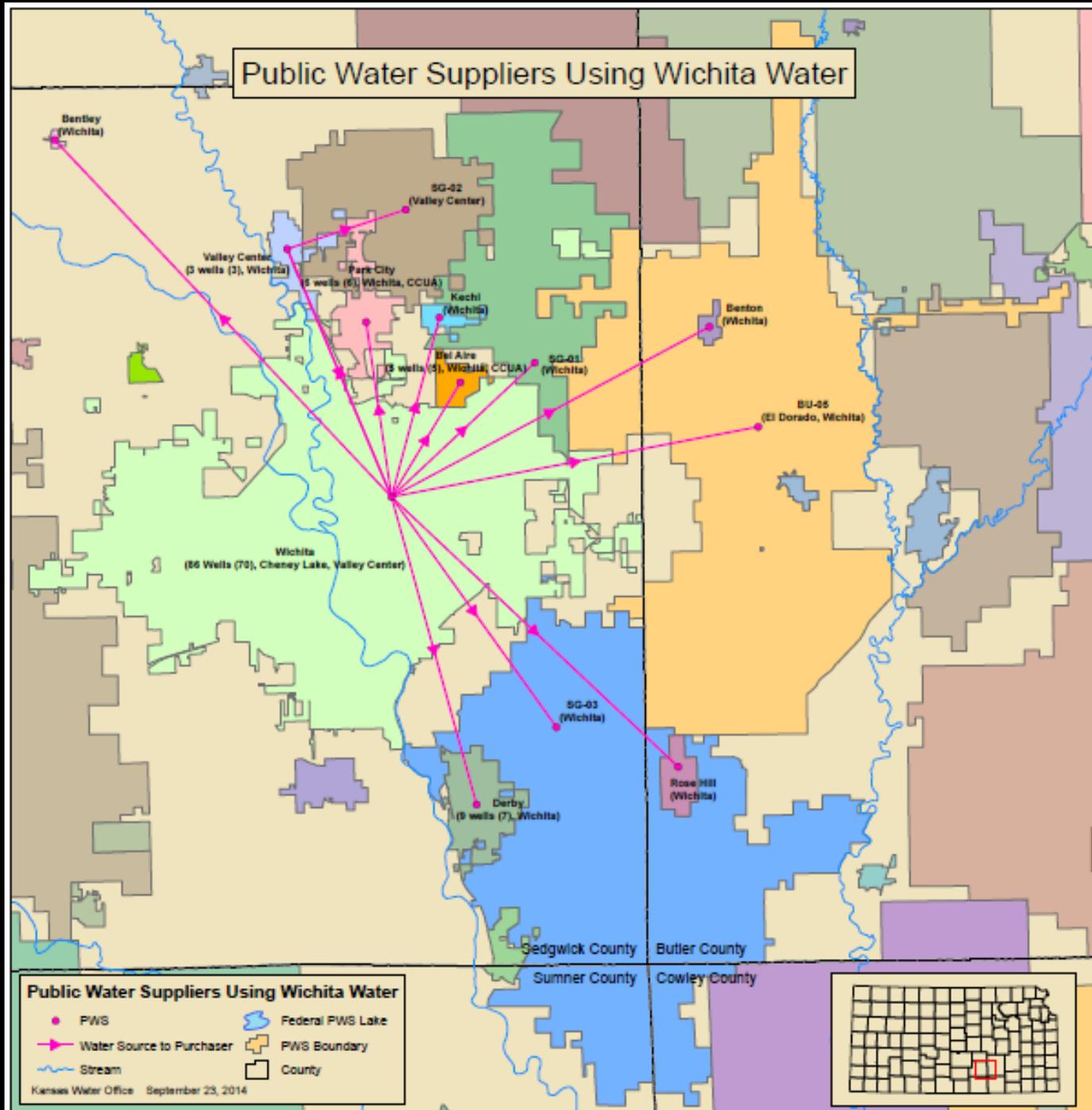


# Water Supply Relationships in the REAP Region





# City of Wichita Wholesale Customers



**You Are Here**



# The Royal Gorge Bridge

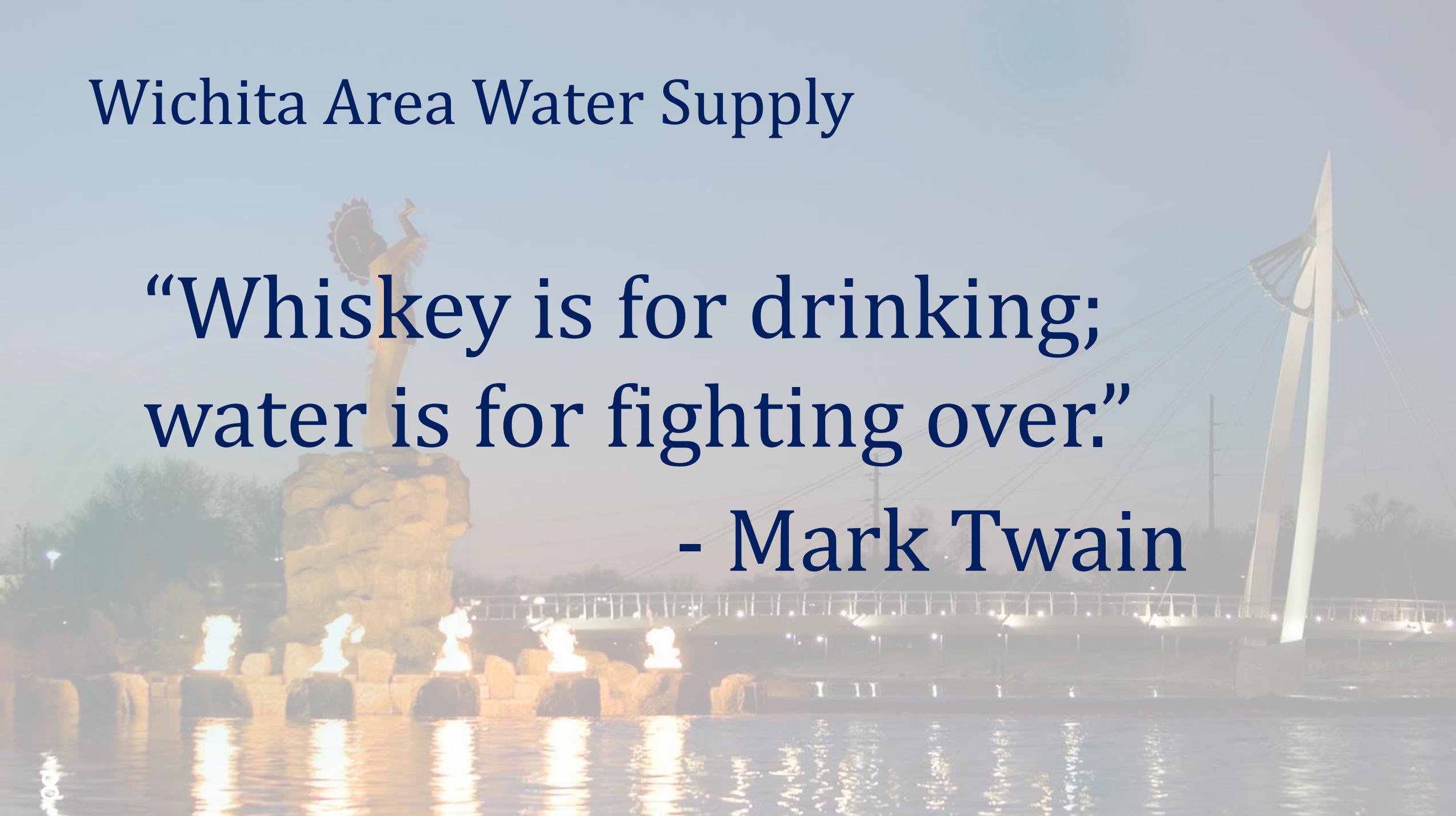


# Port of Catoosa in Tulsa, OK



195 feet long, 35 feet wide

# Wichita Area Water Supply



“Whiskey is for drinking;  
water is for fighting over.”

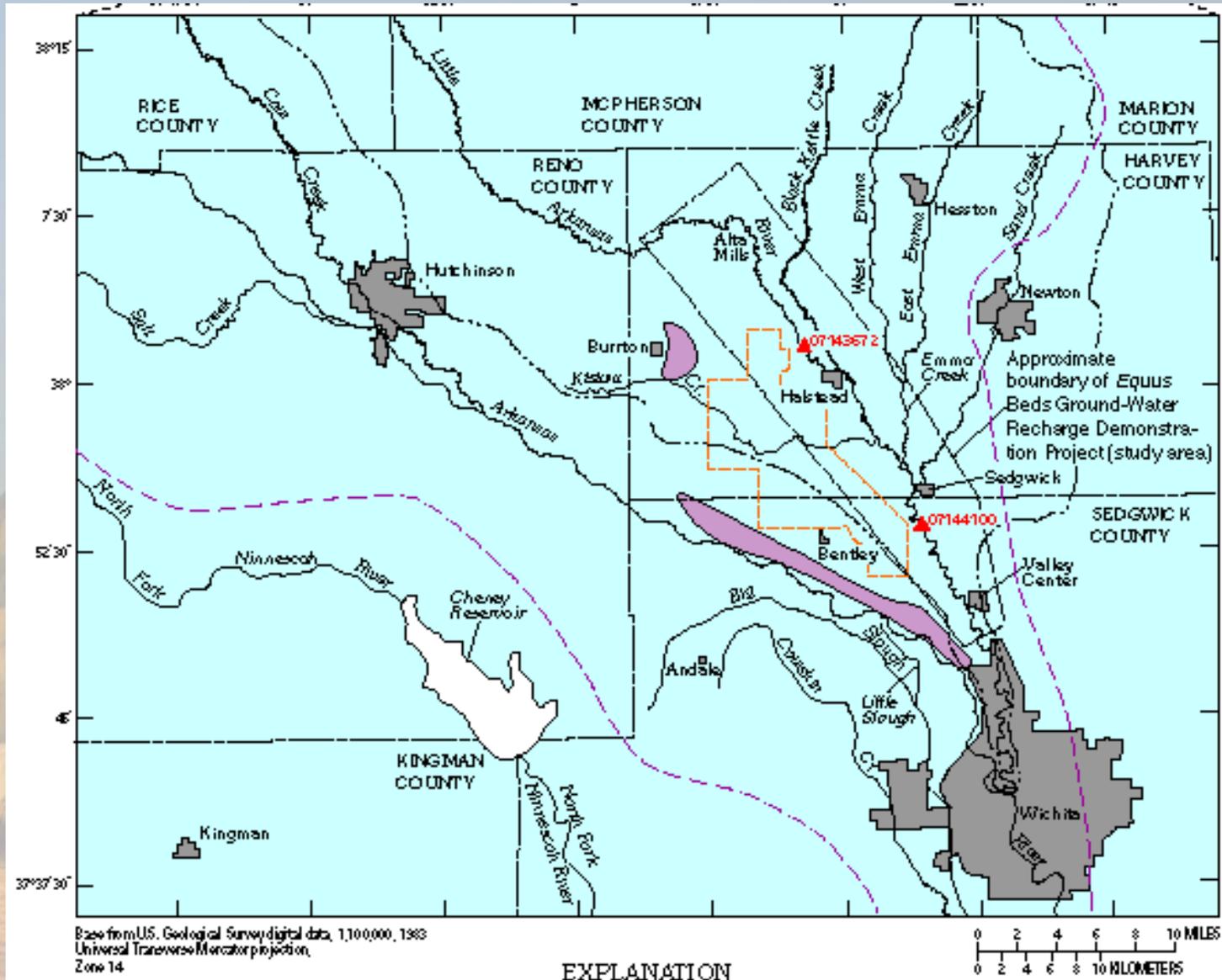
- Mark Twain

# Cheney Reservoir

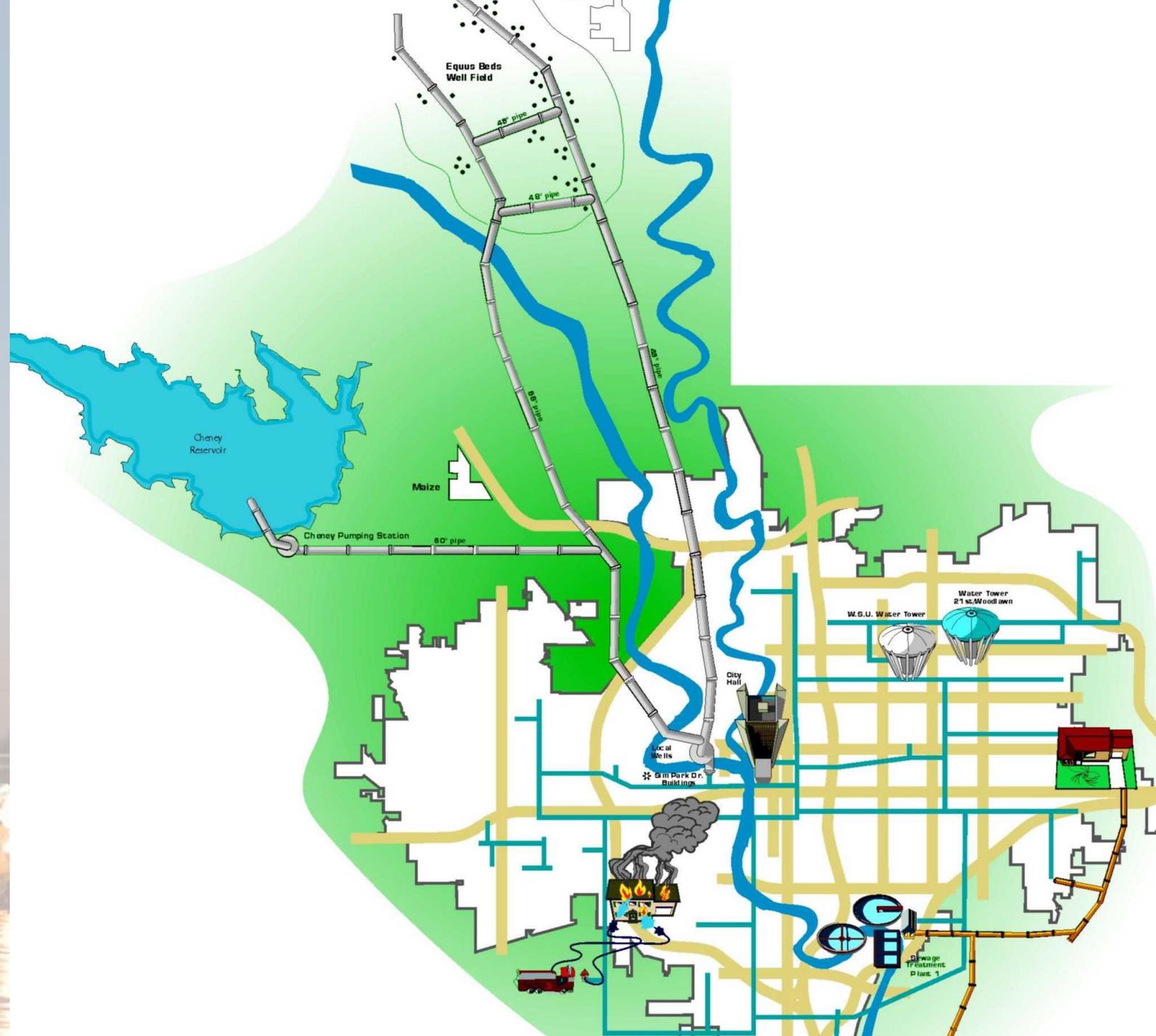




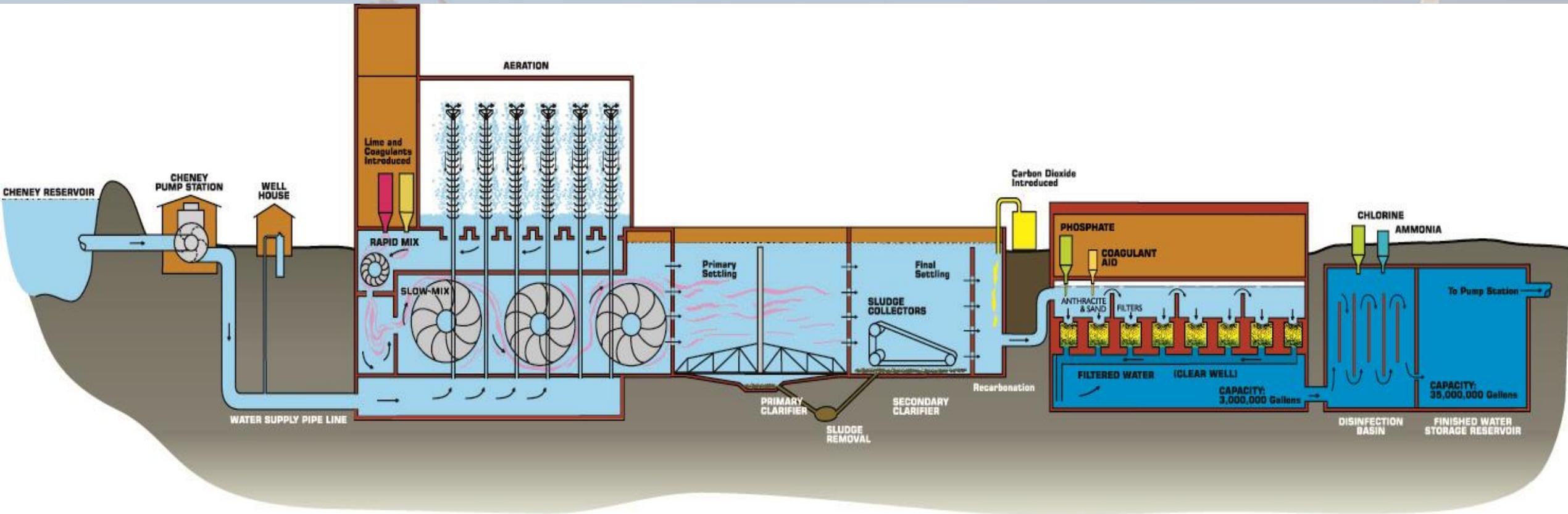
# Wichita's Principal Water Resources



# Wichita Water Supply



# Water Treatment Process:



# Wichita Area Water Supply Planning

“Everyone has a plan 'till they get punched in the mouth.”

- Mike Tyson

# Water Supply Objectives and Strategies

	<b>Current</b>	<b>Goal</b>
<b>Final Year of 1% Drought Protection</b>	<b>2011</b>	<b>2060</b>
<u>Strategies</u> Combination of new water supply and long-term conservation is necessary		
<b>Add New Water Supply</b>	<b>---</b>	<b>10 MGD</b>
<u>Strategies</u> Secure a cost-effective new water source for the Wichita system		
<b>Annual Water Conservation</b>	<b>---</b>	<b>0.35%</b>
<u>Strategies</u> Rebate programs, landscaping incentives, private well usage, targeted re-use, etc.		

# Water Supply Issues

- Based on growth and consumption projections, current supplies will not be adequate through the planning horizon (2060).
- Current supplies would require significant quality of life disruptions in the event of a 1% drought.
- Funding a supply option, coupled with moderate conservation, will provide 1% drought protection, and provide adequate supplies through 2060.

# Explanation of Water Supply Options

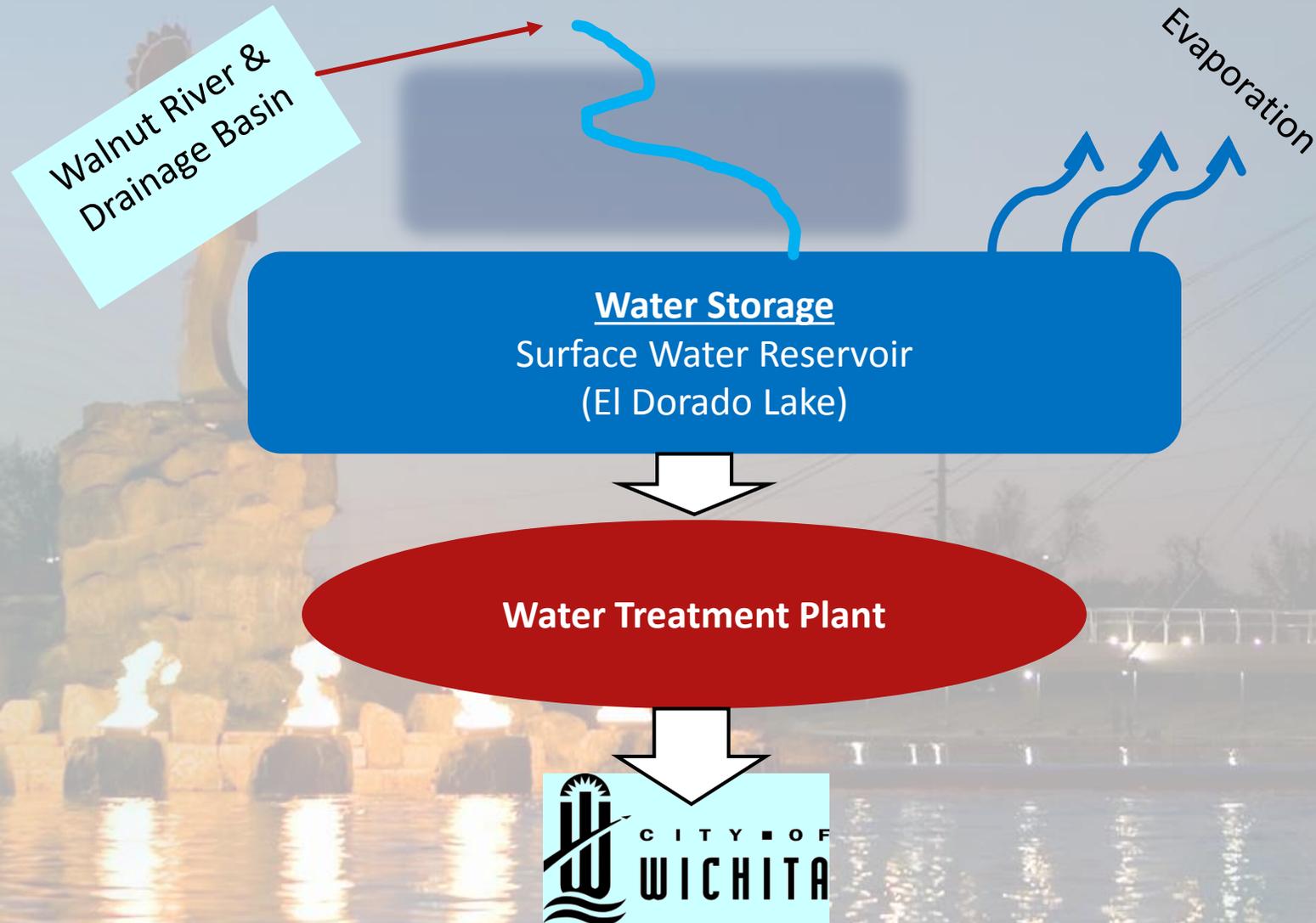
## Treated Water from El Dorado

- Drinking water would be sent from El Dorado Lake to a northeast pump station.
- Pre-payment of water would end between 2021 and 2024.

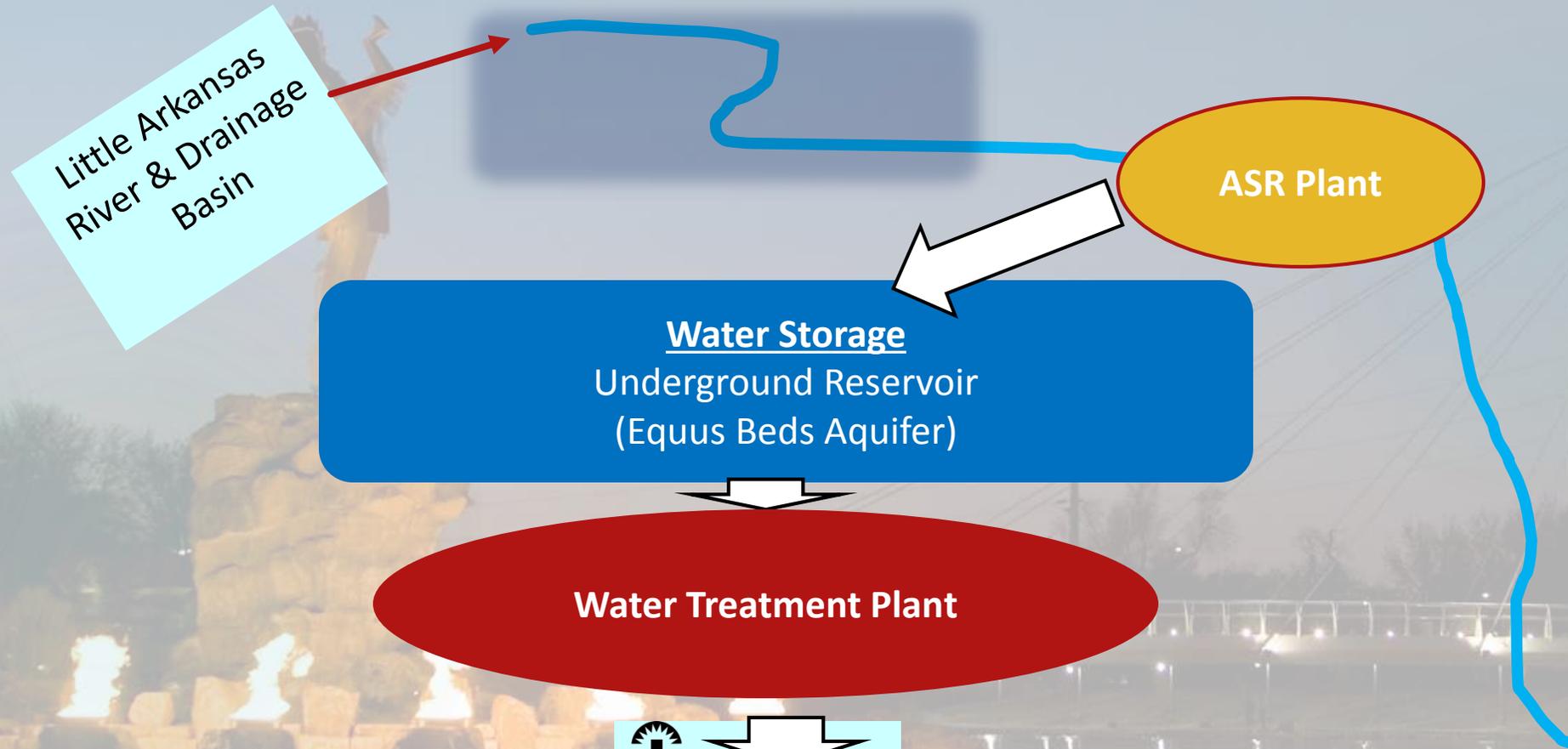
## Raw Water from El Dorado

- Untreated water would be delivered from El Dorado to the City of Wichita main treatment plant.
- Water would be pre-paid until 2051.

# El Dorado Supply Option Diagram



# ASR Water Supply Option Diagram

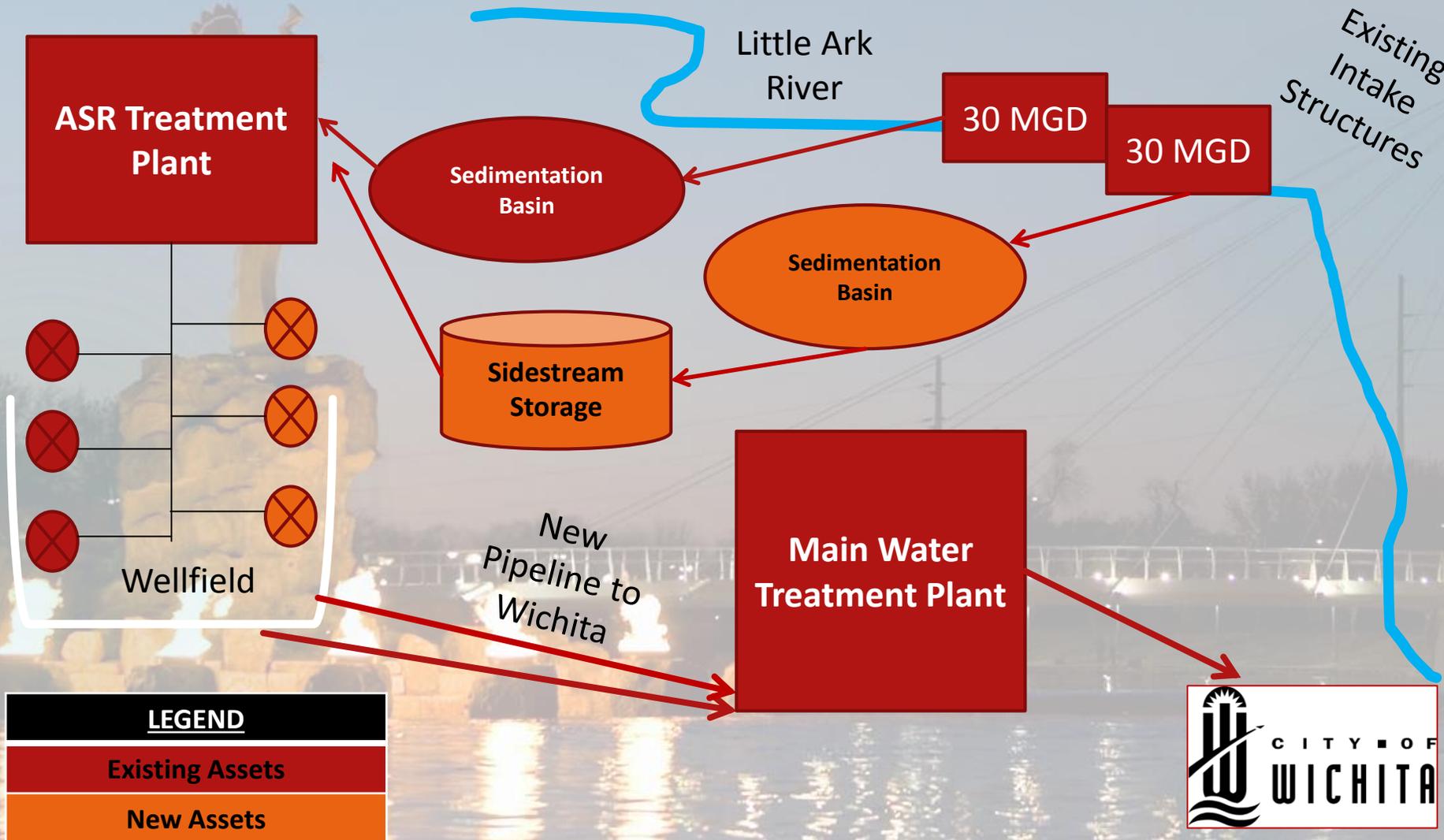


# Explanation of Water Supply Options

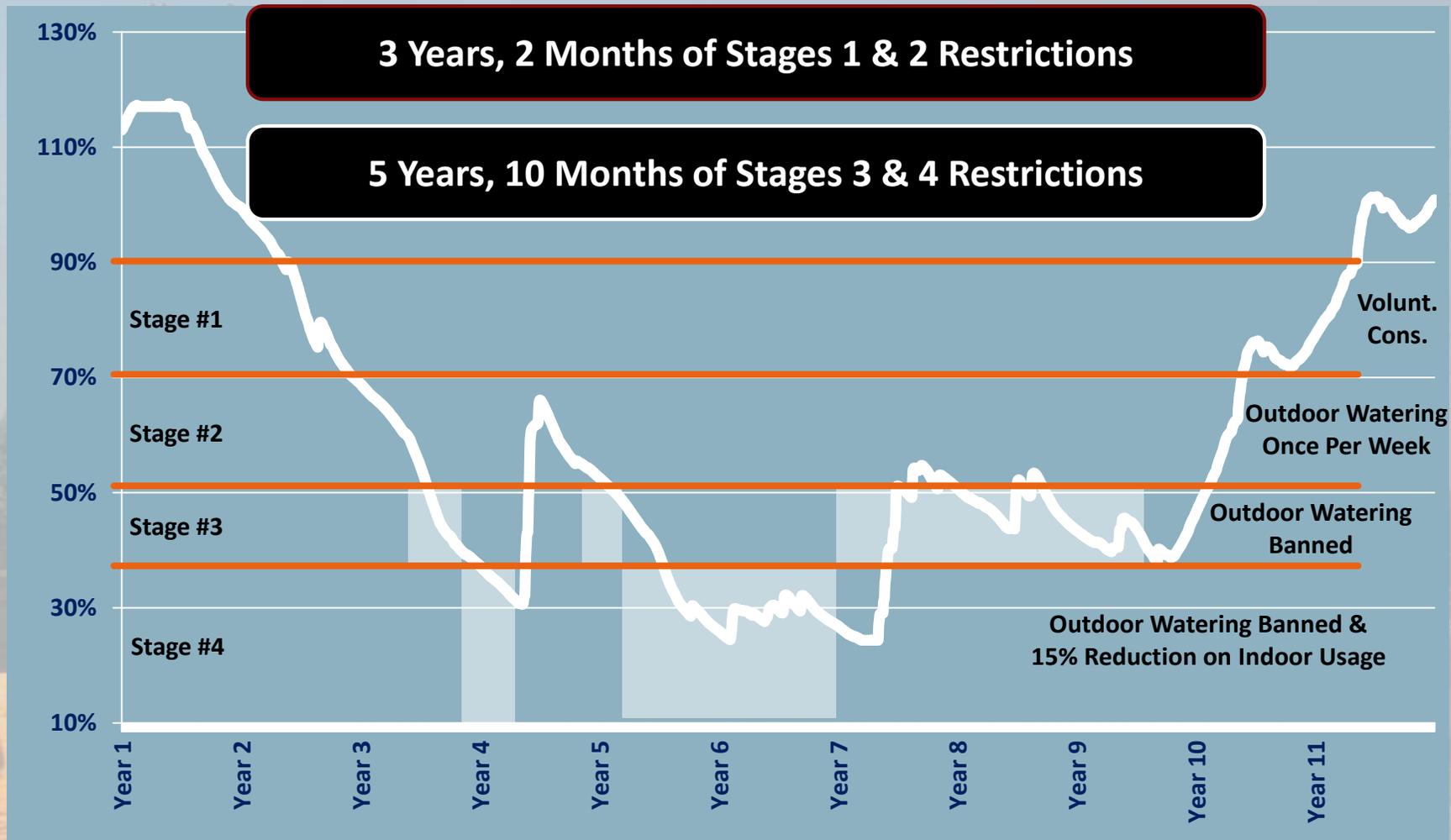
## Aquifer Storage & Recovery (ASR) Improvements

- Drills additional wells and constructs a sidestream storage reservoir.
- Allows the availability of more water to be pumped through the existing treatment plant.

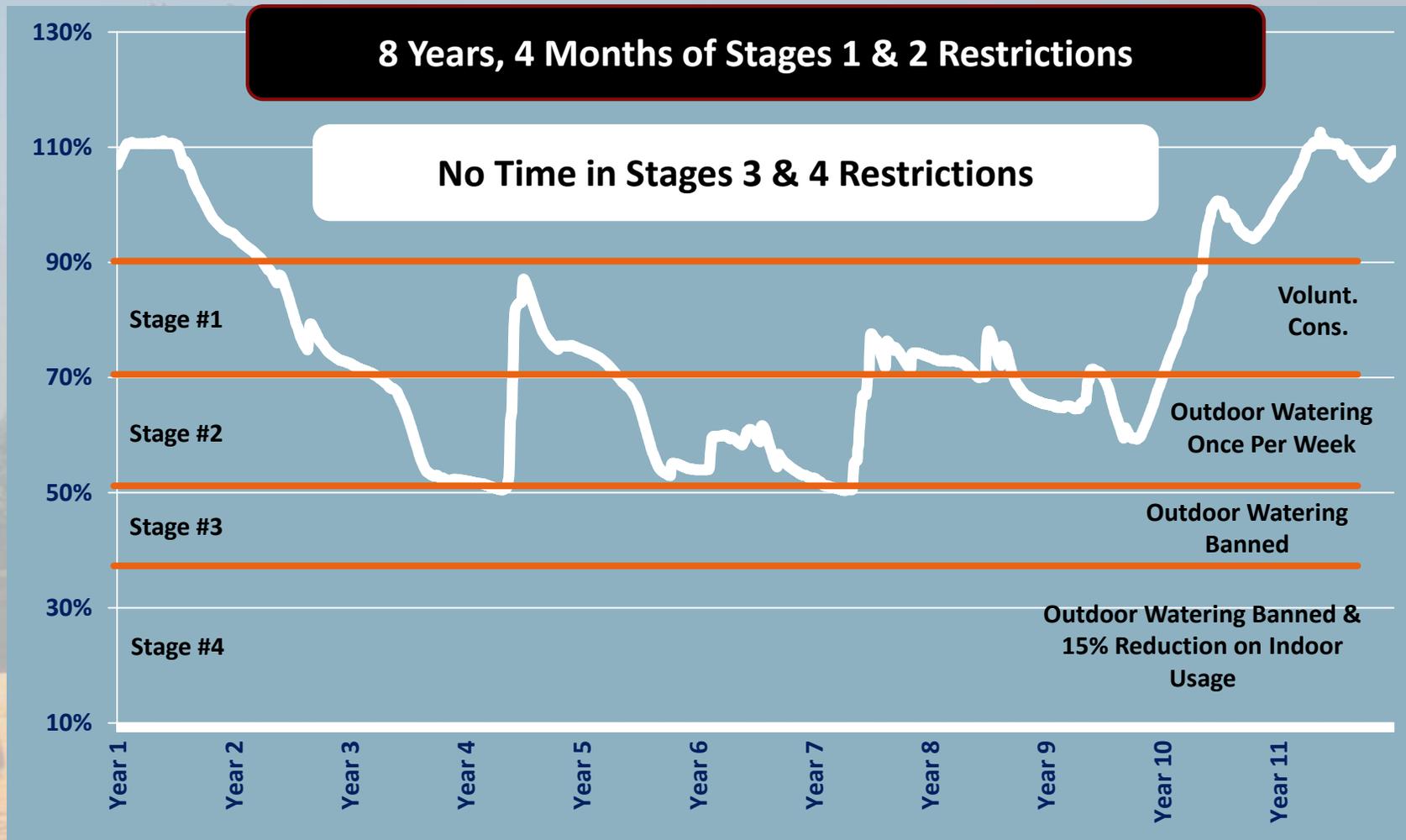
# New ASR Improvements



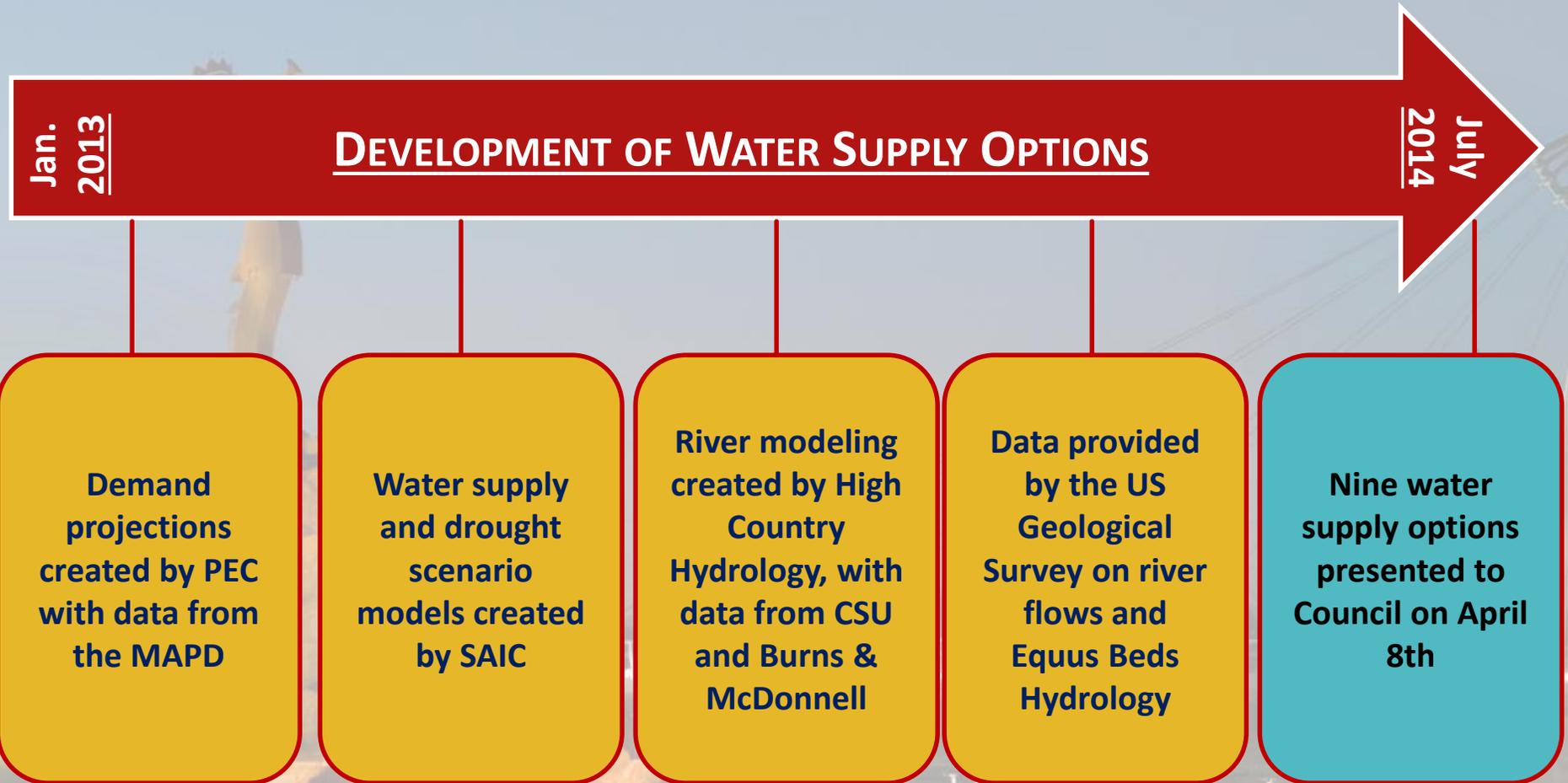
# 1% Drought Without New Supply



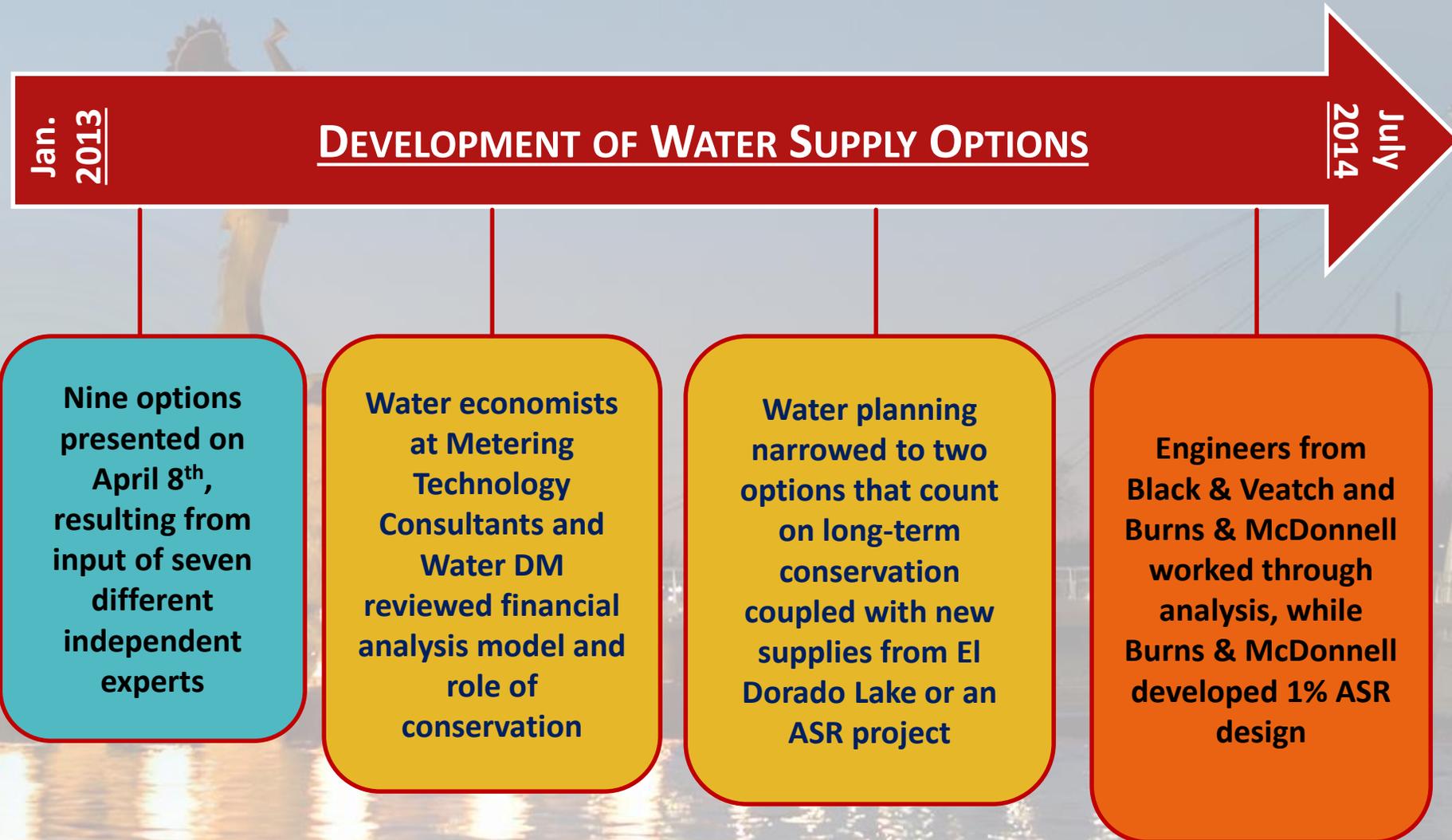
# 1% Drought – With New Supply



# Process Timeline



# Process Timeline



# Wrap Up

- “In Conclusion,....”
  - - The two most popular words a speaker can utter together