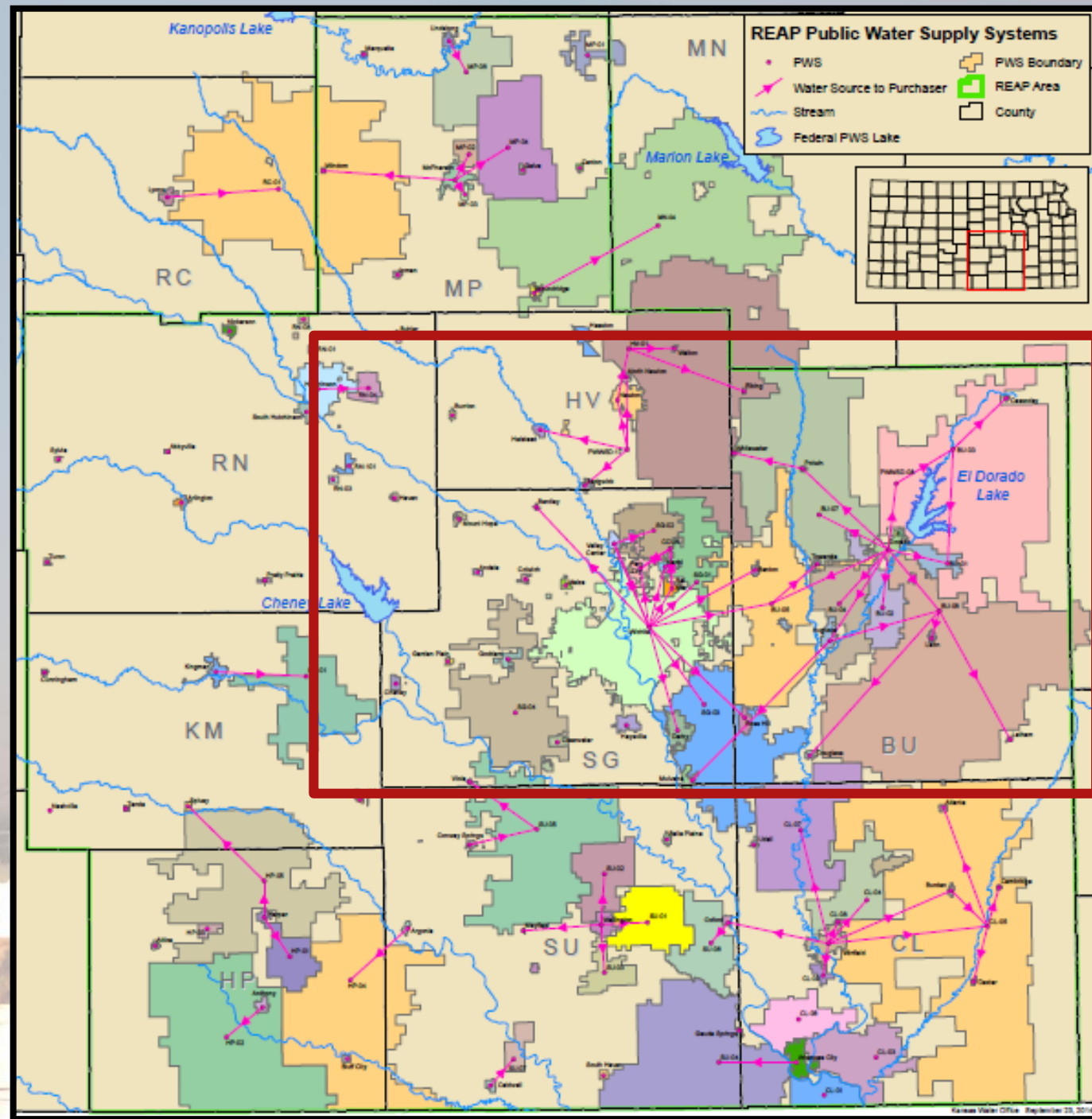


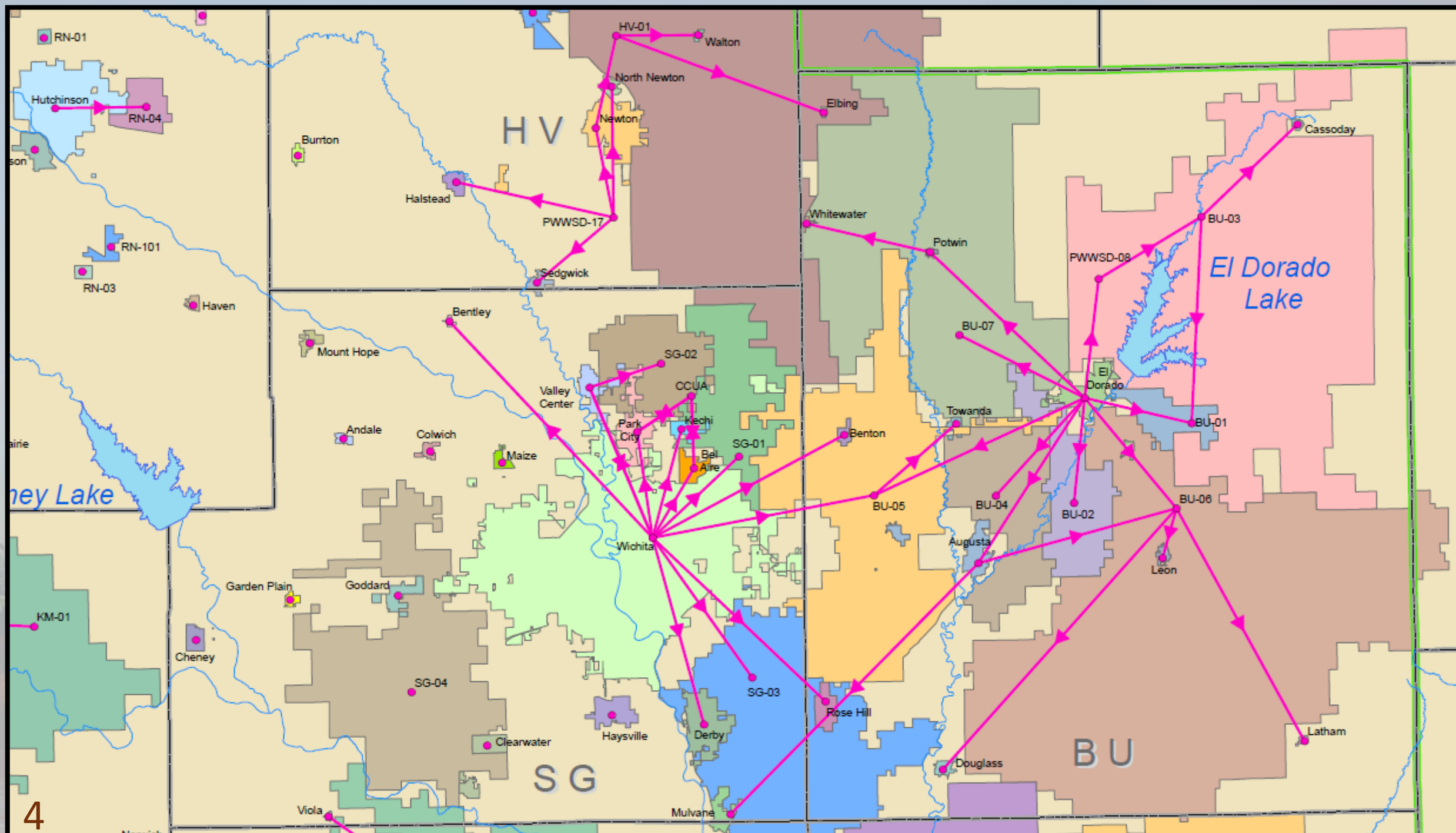
Water Supply in South-central Kansas

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

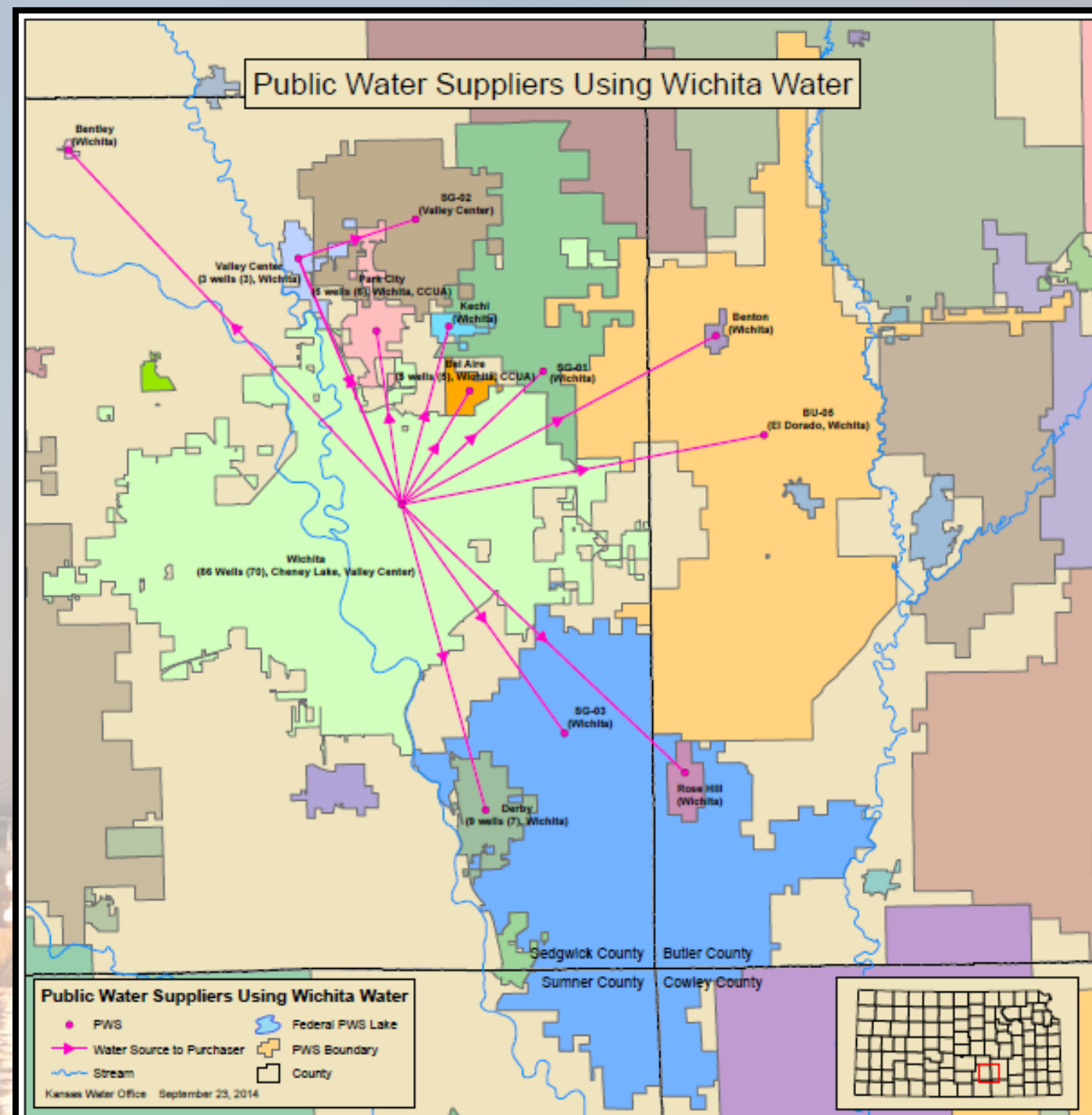


Water Supply Relationships in the REAP Region





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.”

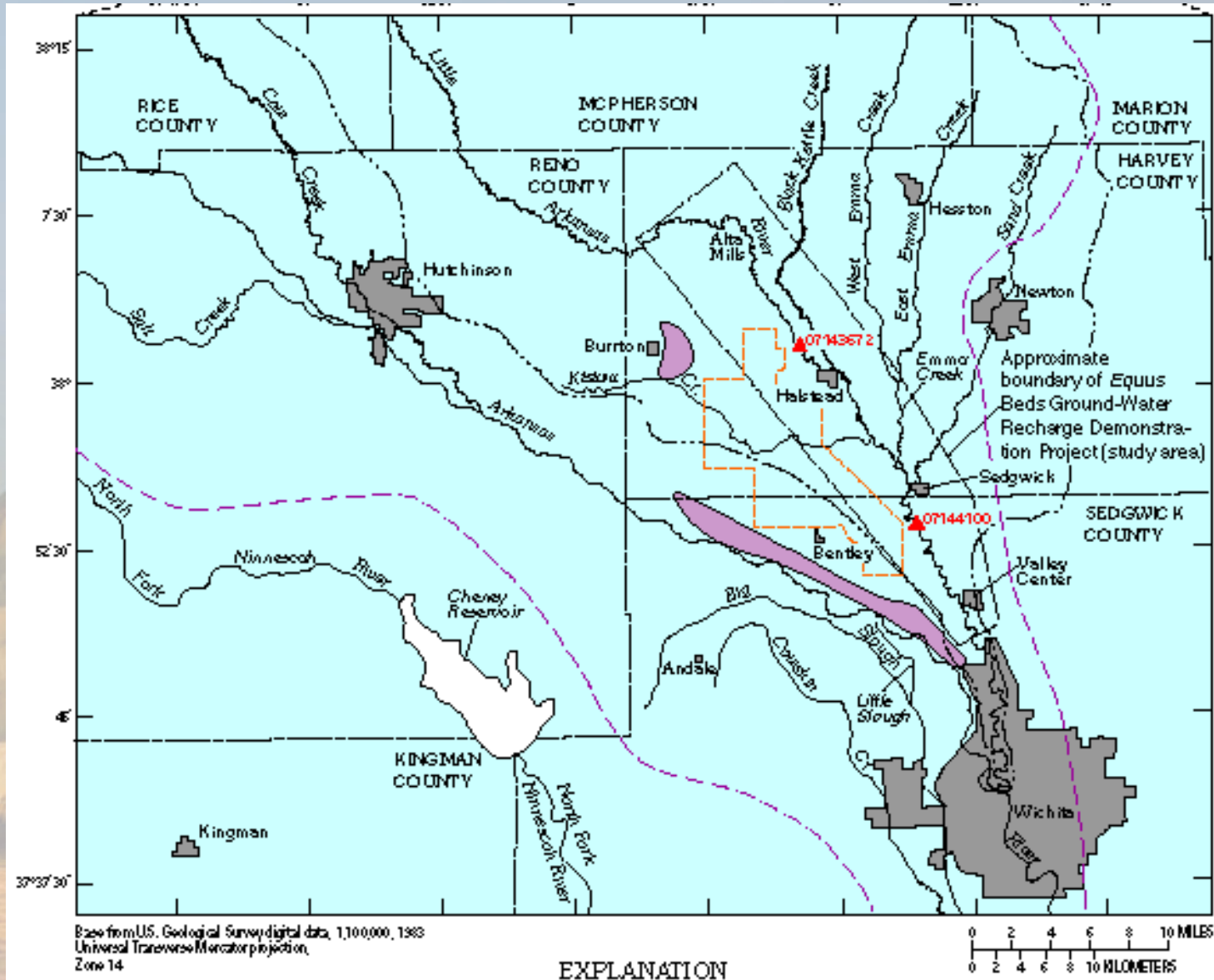
- Mark Twain

Cheney Reservoir

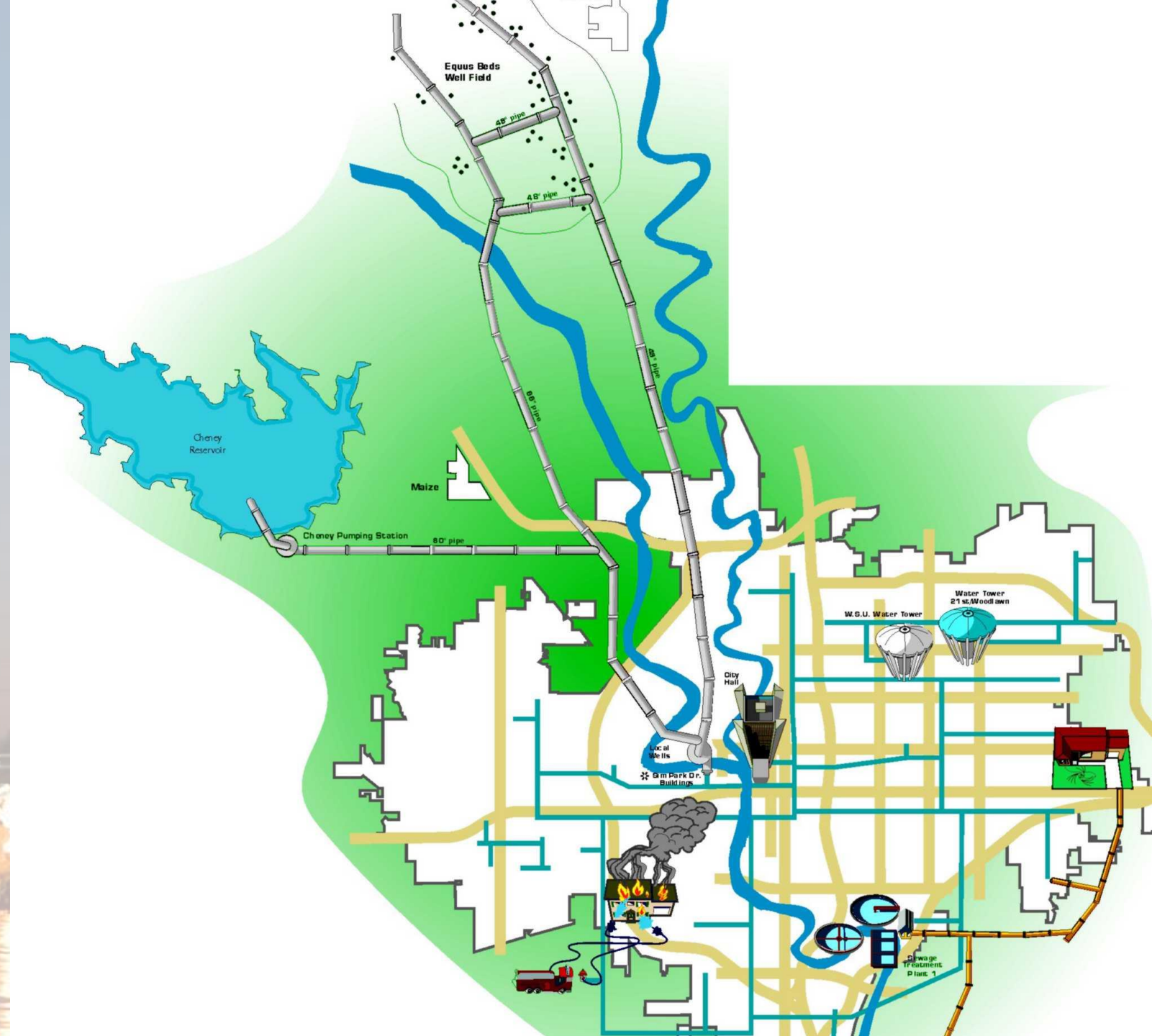




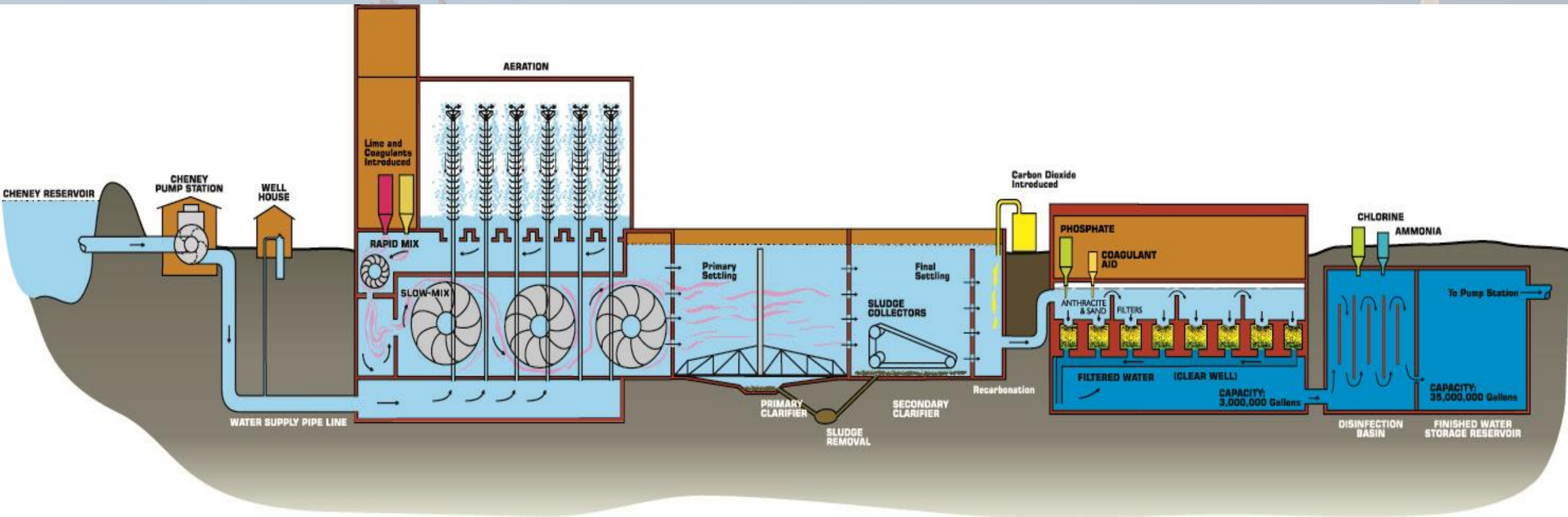
Wichita's Principal Water Resources



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

	Current	Goal
Final Year of 1% Drought Protection	2011	2060
<u>Strategies</u> Combination of new water supply and long-term conservation is necessary		
Add New Water Supply	---	10 MGD
<u>Strategies</u> Secure a cost-effective new water source for the Wichita system		
Annual Water Conservation	---	0.35%
<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

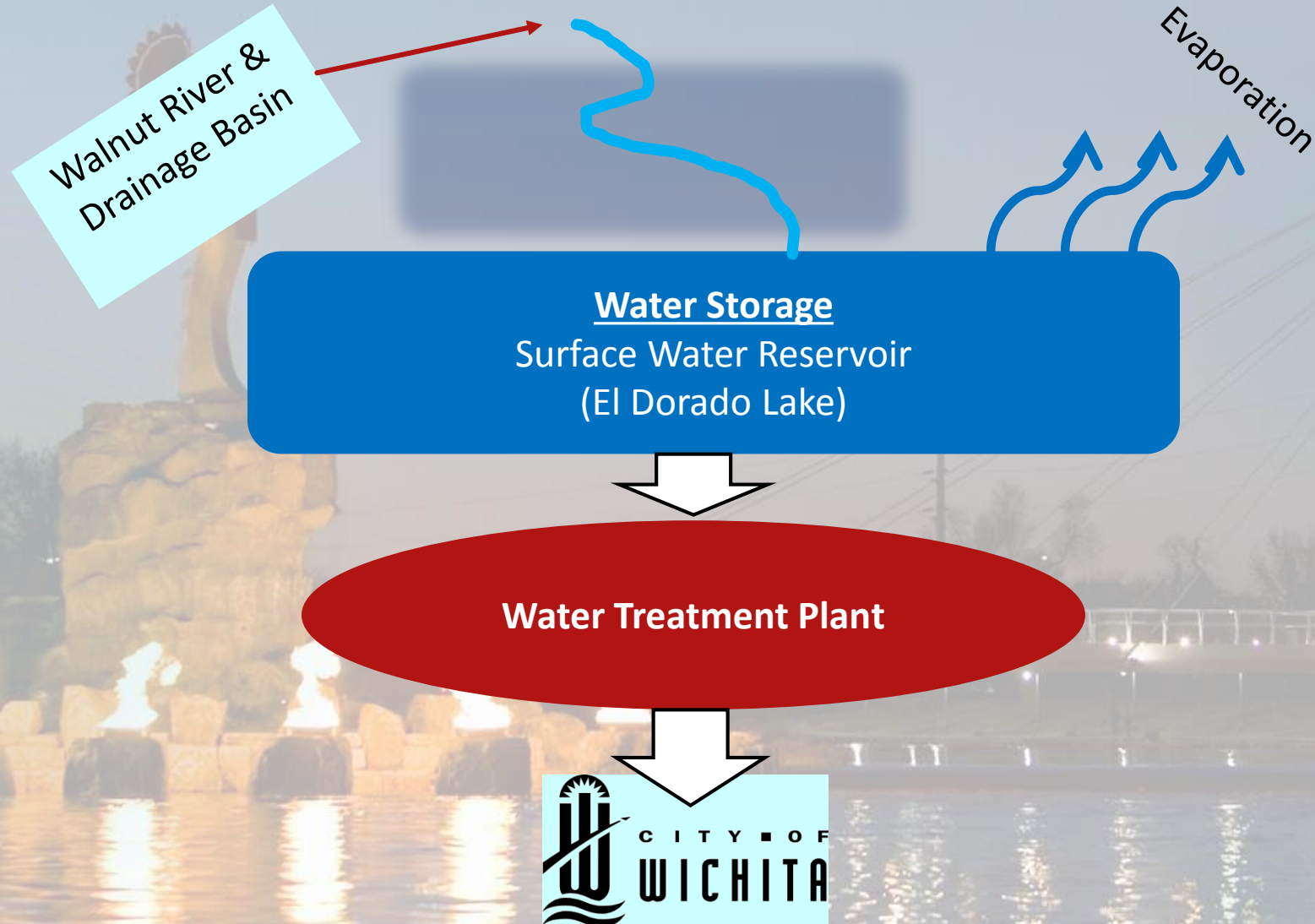
Treated Water from El Dorado

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

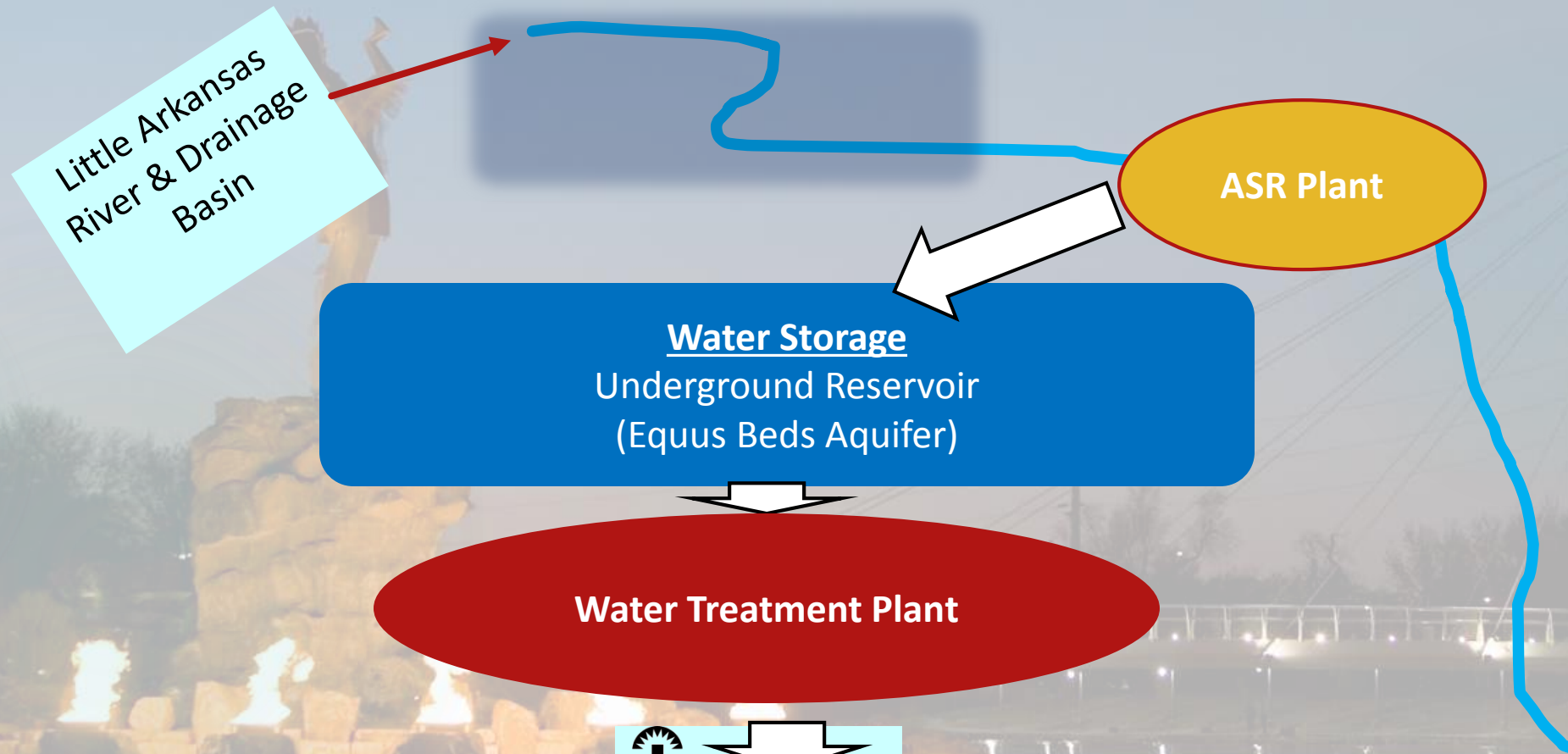
Raw Water from El Dorado

- 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

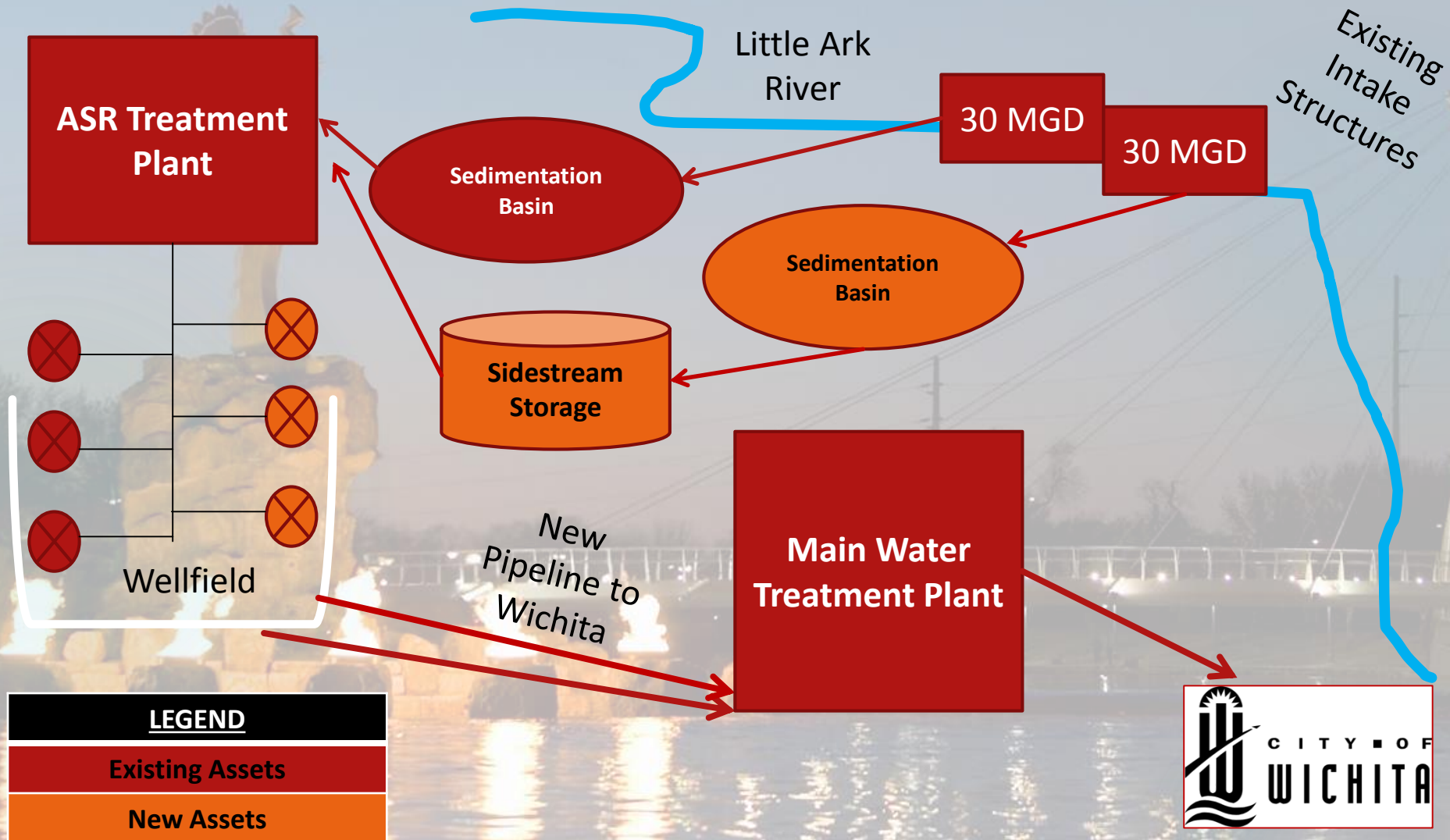


Explanation of Water Supply Options

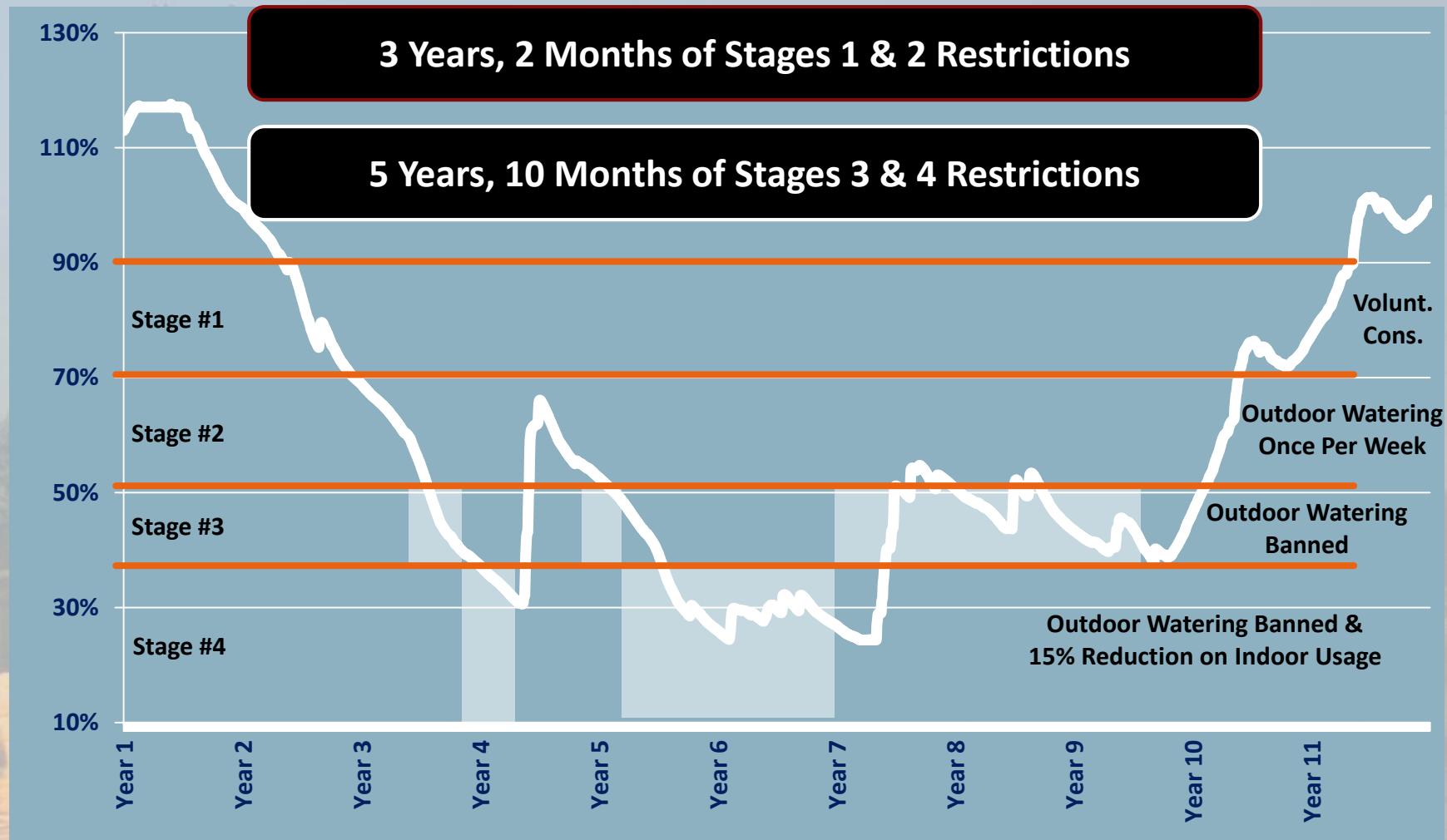
Aquifer Storage & Recovery (ASR) Improvements

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

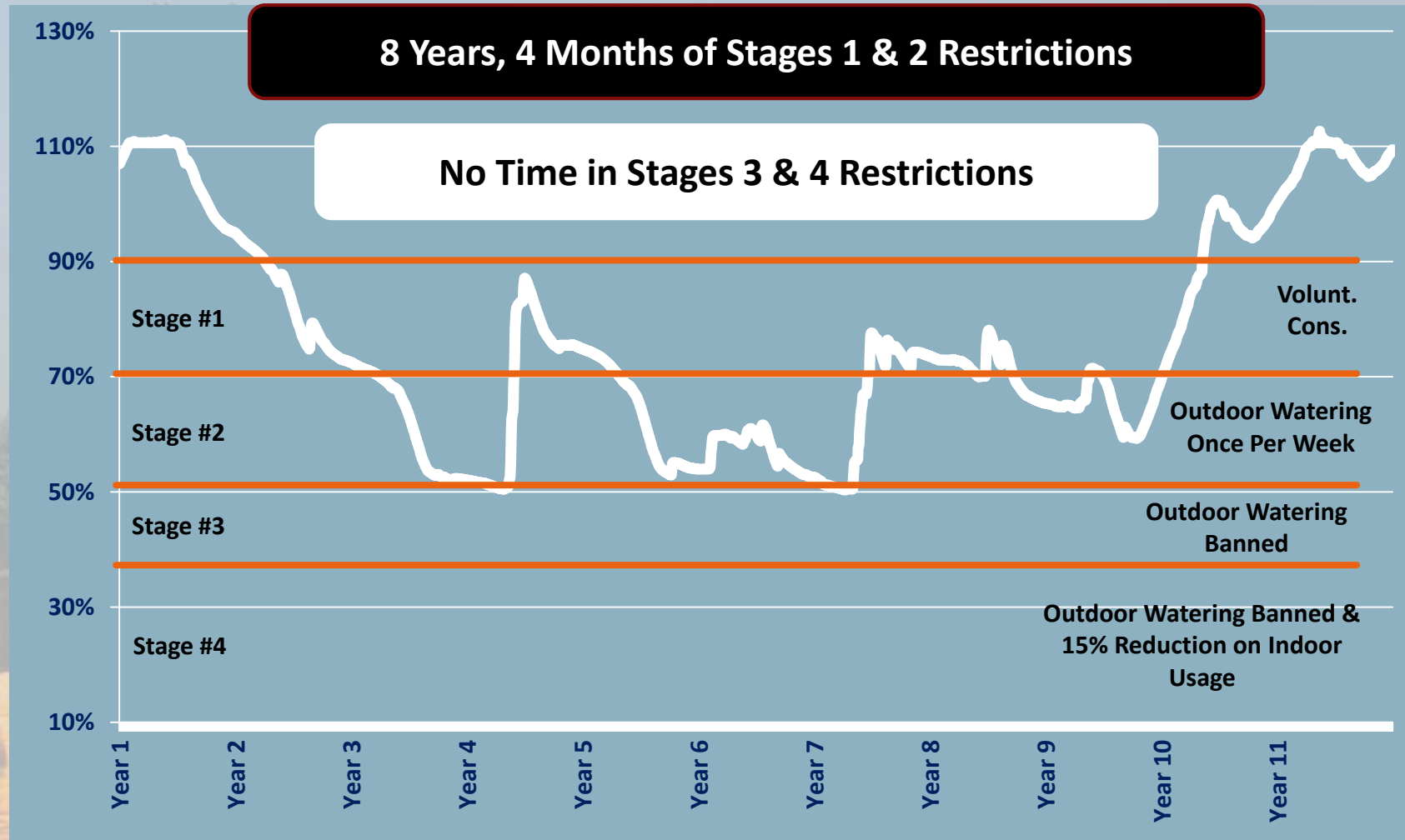
New ASR Improvements



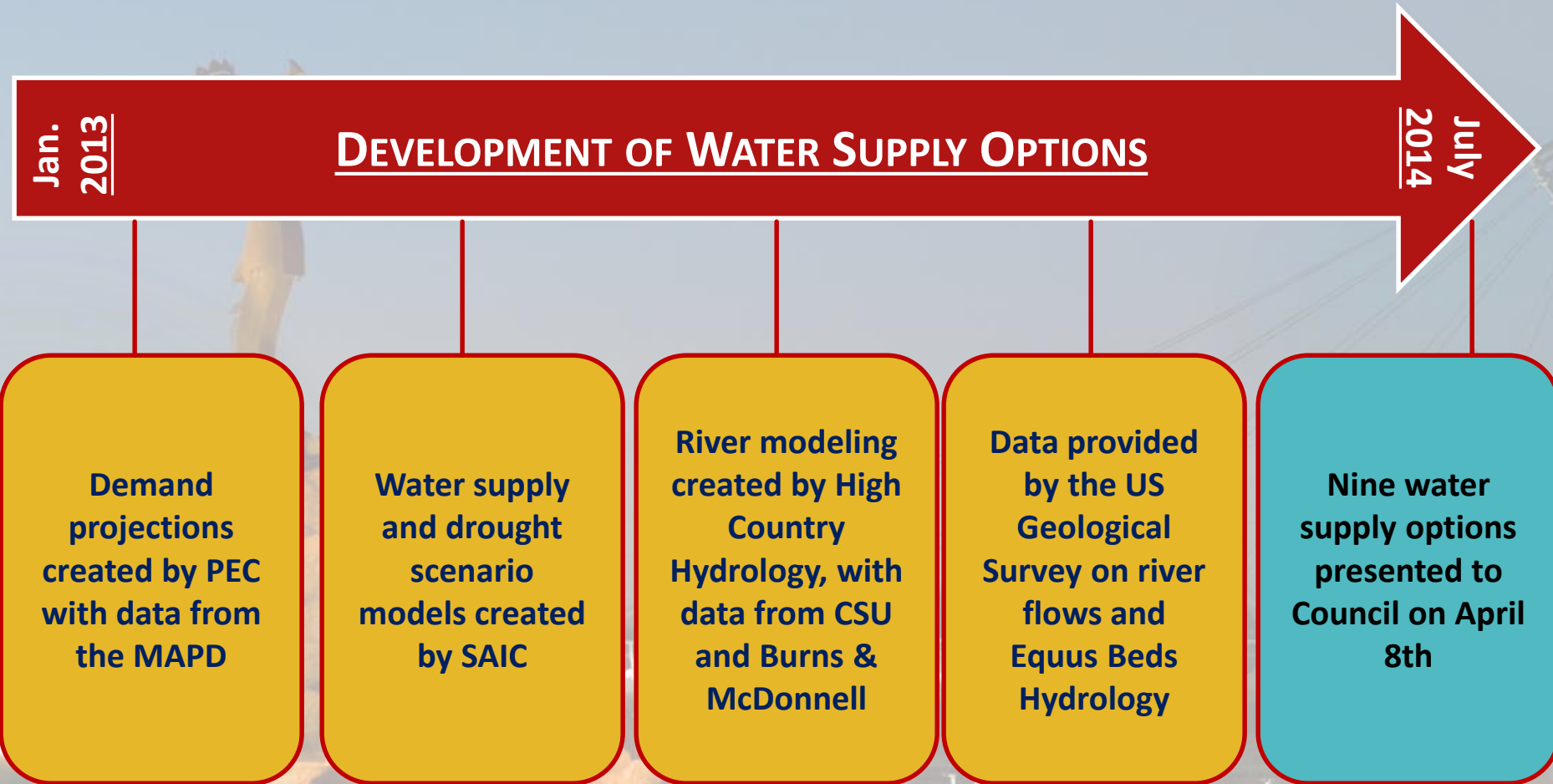
1% Drought Without New Supply



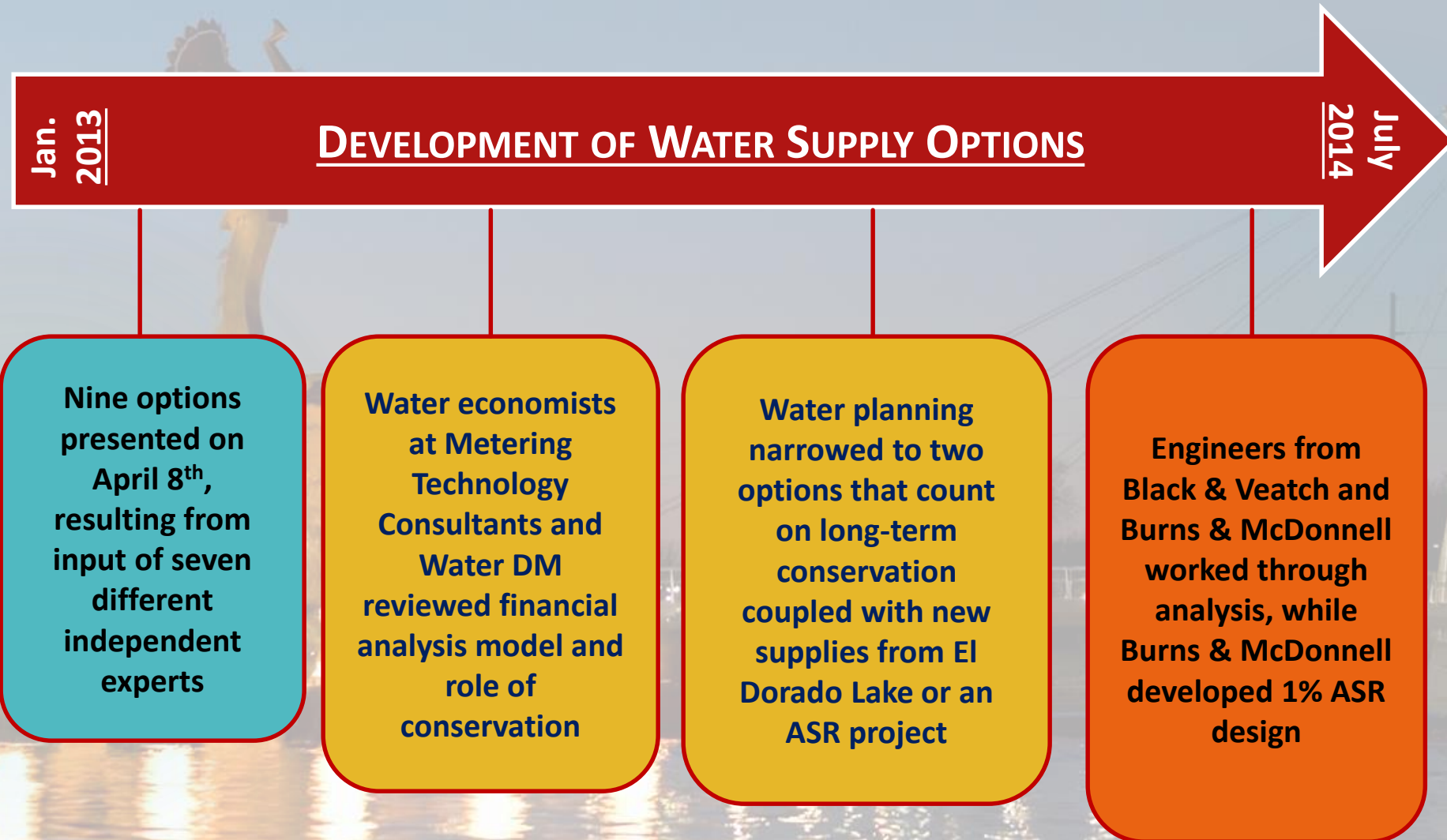
1% Drought – With New Supply



Process Timeline



Process Timeline



Wrap Up

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