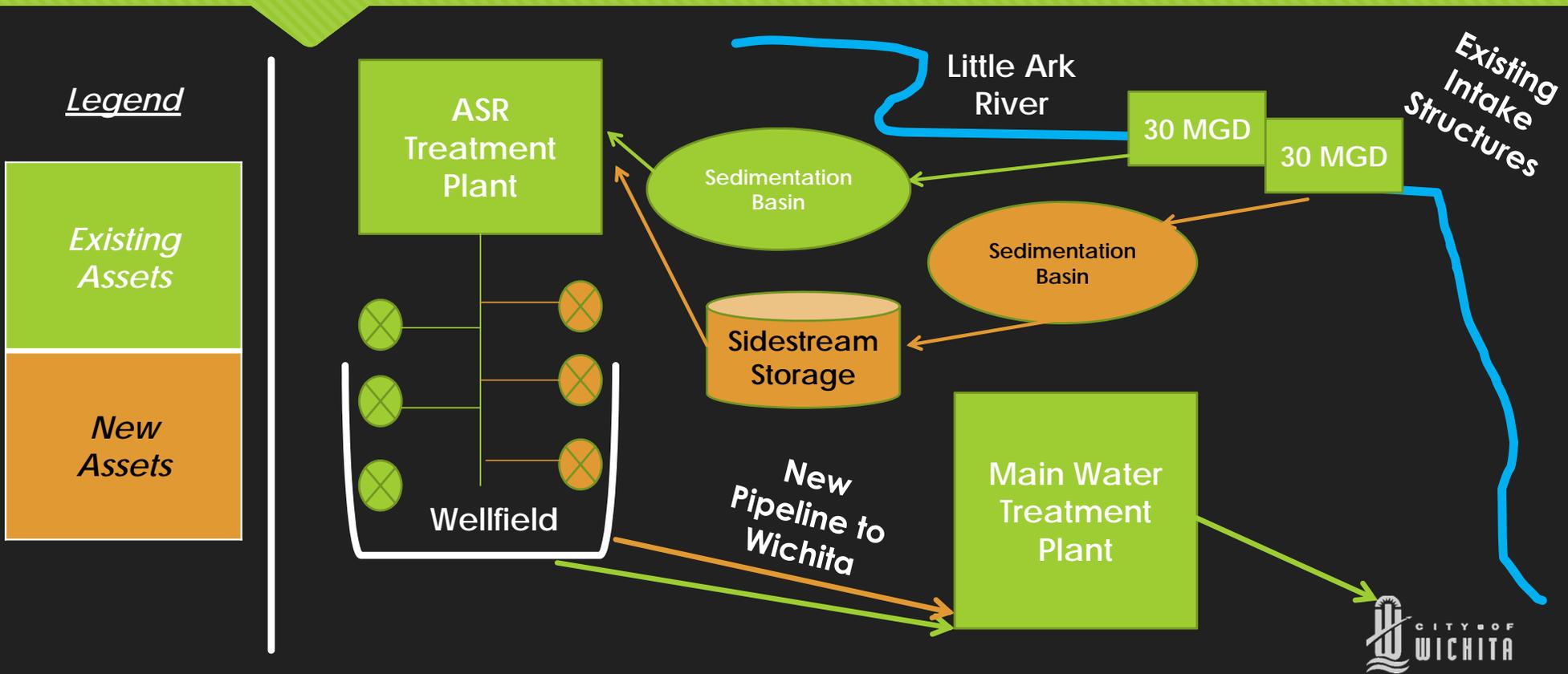


Aquifer Storage & Recovery Public Forum

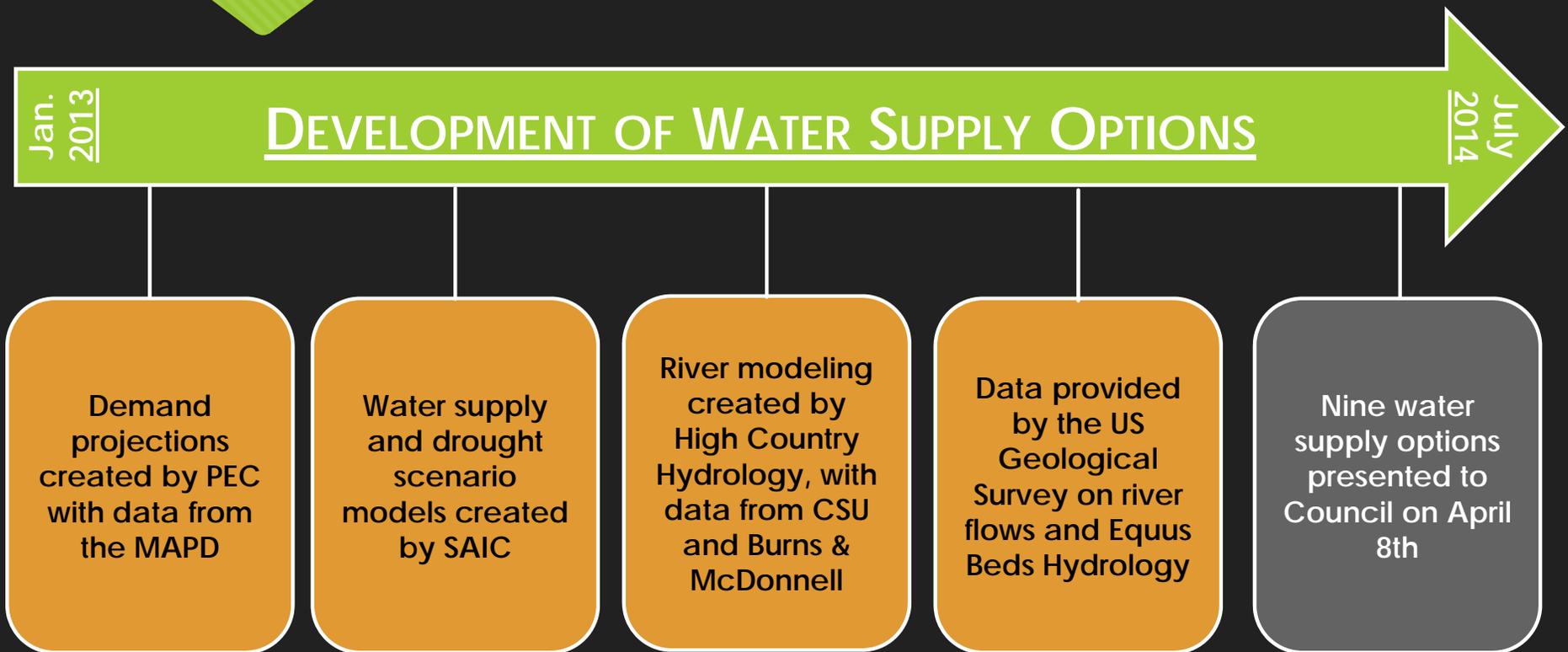
October 23, 2014



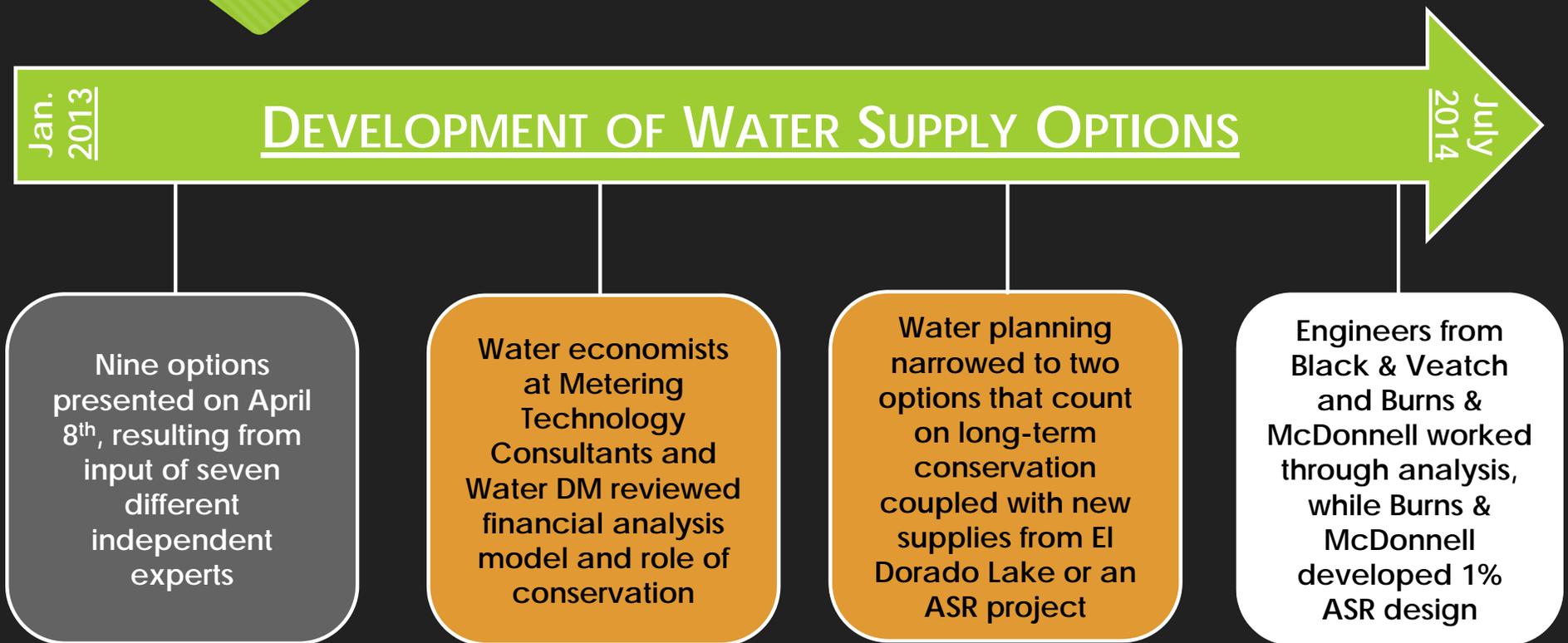
New ASR Improvements



Process Timeline



Process Timeline



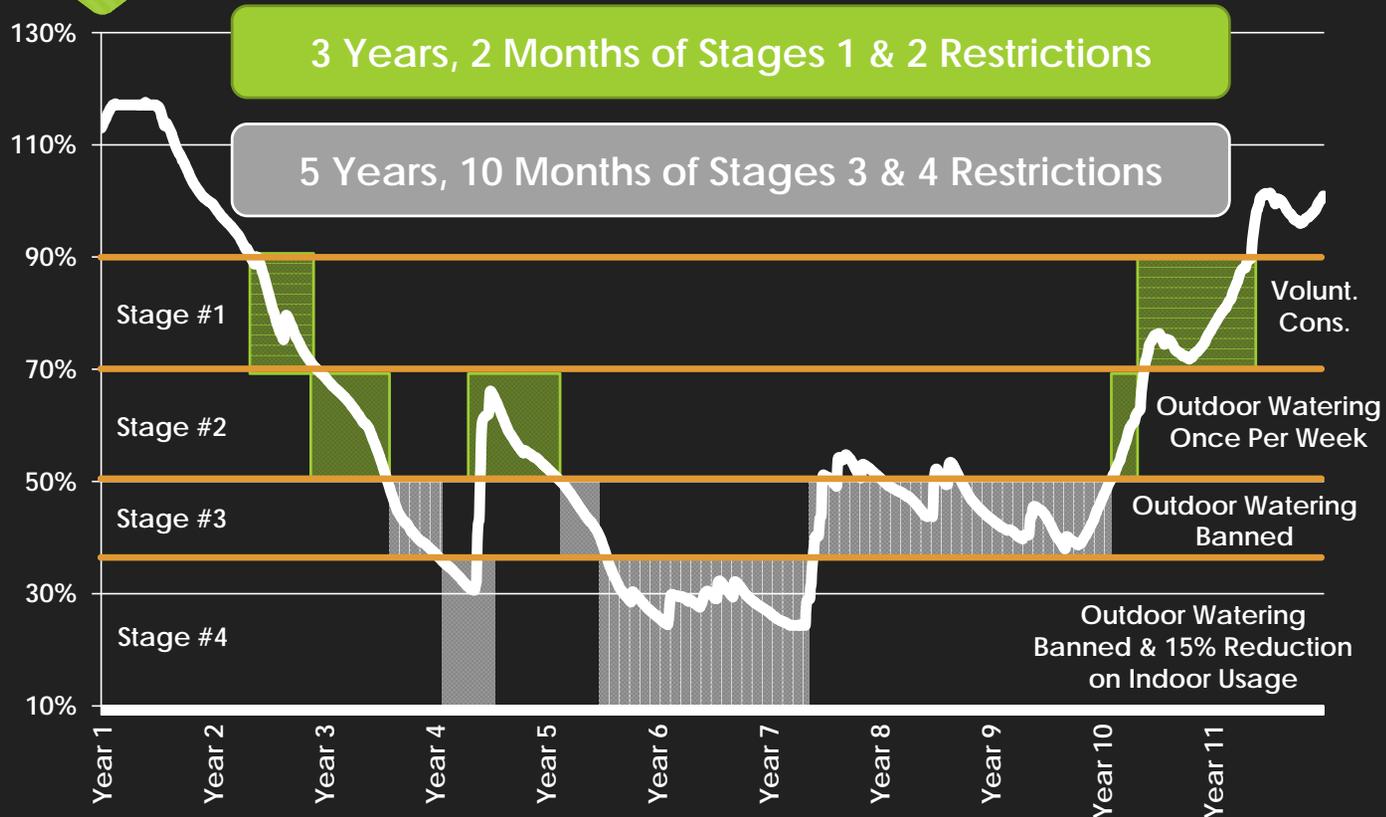
ASR Estimated Cost

One-Time Costs	
Raw Water Facility	\$9,515,921
Sidestream Storage	\$29,784,833
New Wells & Improvements	\$68,221,224
Parallel Pipeline	\$86,579,022
Other Improvements	\$5,899,000
Total Capital Costs	\$200,000,000

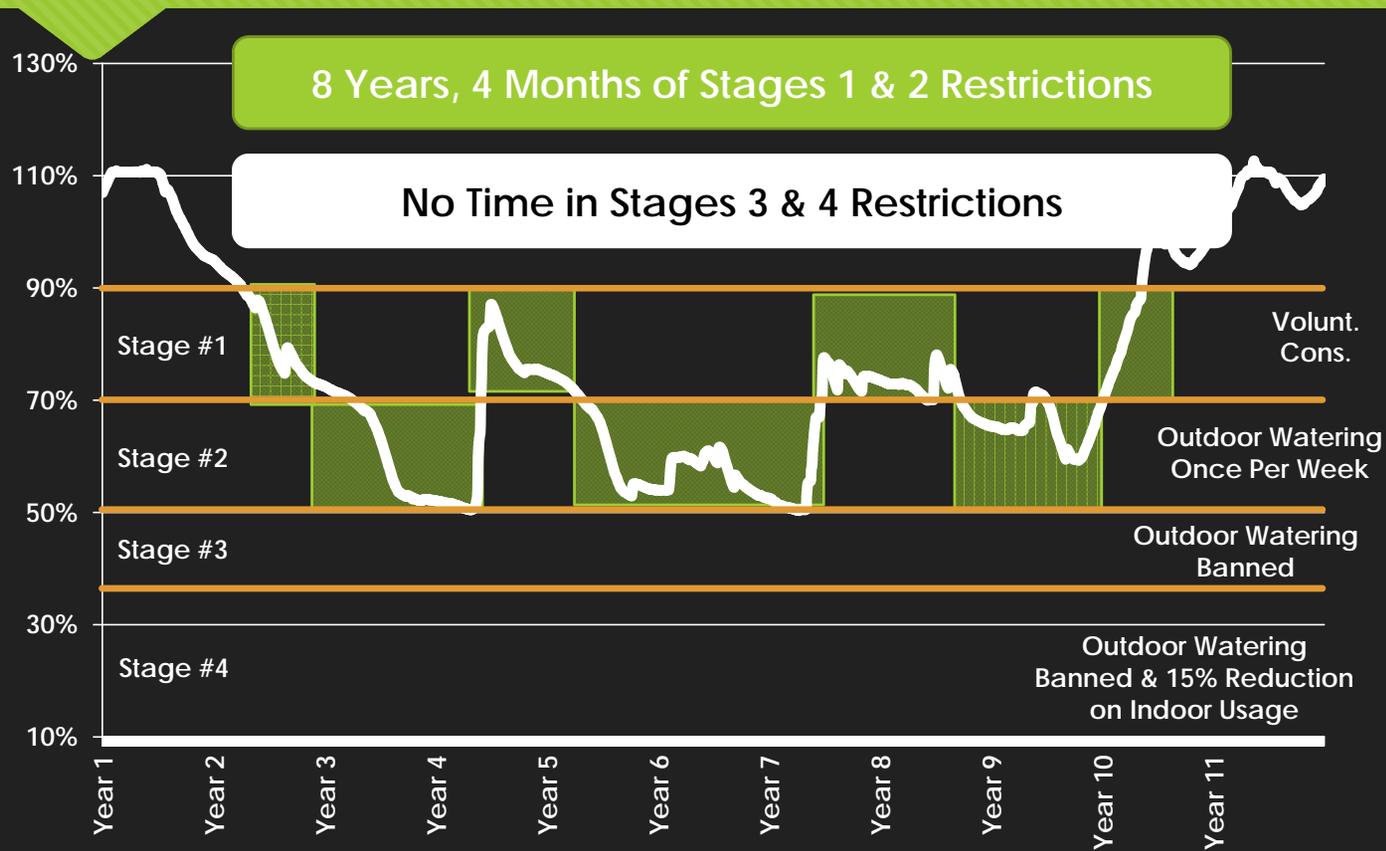
Annual Costs	
Chemicals at ASR & Filter Plant	\$654,895
Electricity at ASR & Filter Plant	\$945,105
Staffing/Renewal & Replacements	\$1,200,000
Total Operating Costs	\$2,800,000

The capital costs shown are preliminary and based on a 1% engineering study. Since final design and scope will determine actual project costs, the proposed sales tax allocation is maintained at \$250 million.

1% Drought Without New Supply



1% Drought With New Supply



El Dorado Results Summary

Assumptions	
Volume of Water Available	10 MGD
Base Purchase Rate	\$1.14
Base Annual Operating Costs	\$0
Sales Tax Revenue	\$200,000,000
Wichita Capital Costs	\$0
El Dorado Capital Costs	\$87,000,000
Rate Inflation	2.68%
Operating Inflation	2.68%

Impact Summary	
Sales Tax Funding	\$200,000,000
Addl. Water Purchase Costs	\$215,764,801
Wichita Operating Costs	\$0
Total Costs	\$415,764,801
Final Year of Pre-Payment	2038
Year Drought Protection Ends Without Conservation	2030
Required Annual Conservation	0.35%

ASR Results Summary

Assumptions	
Volume of Water Available	10 MGD
Base Purchase Rate	\$0.00
Base Annual Operating Costs	\$2,800,000
Sales Tax Revenue	\$200,000,000
Wichita Capital Costs	\$200,000,000
El Dorado Capital Costs	\$0
Rate Inflation	---
Operating Inflation	2.68%

Impact Summary	
Sales Tax Funding	\$200,000,000
Addl. Water Purchase Costs	\$0
Wichita Operating Costs	\$221,230,820
Total Costs	\$421,230,820
Final Year of Pre-Payment	N/A
Year Drought Protection Ends Without Conservation	2030
Required Annual Conservation	0.35%

Original Options

Option	AF Yield	Capital	Cost/AF
1) Bank Storage Wells	30,000	\$501m	\$16,700
2) Bank Storage Wells, then ASR IIB	32,000	\$578m	\$18,063
3) Raw El Dorado to ASR IIB, then Bank Storage Wells	41,000	\$824m	\$20,098
4) Optimized ASR Facilities (ASR IIB)	8,000	\$198m	\$24,750
5) Raw El Dorado to ASR IIB	17,000	\$444m	\$26,118
6) Raw El Dorado to ASR	14,000	\$367m	\$26,214
7) Treated Re-Use to ASR IIB	26,000	\$800m	\$30,769
8) Purple Pipe System	2,500	\$120m	\$48,000
9) Treated El Dorado Water	11,000	\$16m	-----

ASR Preliminary Design

- Independent engineers conducted review of ASR proposal
- Determined viability of the improvements
- Confirmed cost estimates and water yield of 10 MGD
- Available online at [Wichita.gov/salestax](http://wichita.gov/salestax) under "Background Information"

Direct Link

[http://wichita.gov/Government/Departments/CMO/Building%20a%20Better%20Future/Enhanced%20ASR%20Evaluation%20\(Water%20Supply\).pdf](http://wichita.gov/Government/Departments/CMO/Building%20a%20Better%20Future/Enhanced%20ASR%20Evaluation%20(Water%20Supply).pdf)

