WATER SUPPLY

Expenditure Plan

Staff have reviewed three options to provide a long term water supply. These include expanding the Aquifer Storage and Recovery (ASR) system, buying treated water from El Dorado, and buying raw water from El Dorado. Staff recommends the ASR option for a number of reasons. It could reduce the amount of sales tax funding needed. Preliminary engineering estimates indicate the ASR improvements could be constructed for $200 million. However, until final design is completed and project costs can be finalized, a total of $250 million is recommended for the sales tax proposal.

ASR Capital Costs (Preliminary Estimate)	
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**

In addition, the ASR would be a City asset and would not require the purchase of water. The ASR is also a key component to fighting the chloride intrusion into the Equus Beds. Utilizing the ASR would improve the overall efficiency of the project, allowing it to operate closer to design capacity.

Based on a preliminary 1% engineering estimate, the ASR project is now estimated to cost $200 million. This would include $9.5 million for a raw water facility, $29.8 million for a new sidestream storage facility, $68.2 million for new wells and improvements, and $86.6 million for new pipelines. Other improvements would total an estimated $5.9 million.

Outcome Plan

The effectiveness of the ASR expansion can be measured several ways. A new water supply is expected to delay the year (with no conservation) in which drought protection for a 1% drought is provided. This date is projected to be 2030. The yield of the ASR is also measured, with an estimated 10 million gallons per day (MGD) provided.

ASR Metrics	
Yield	10 MGD
Year Drought Protection Ends with No Conservation	2030
Required Annual Conservation for 1% Drought Protection	0.35%
Total Cost from 2015 - 2060	**$421 million**