

Strategic Water Supply Plan Ad Hoc Committee Meeting #3  
Minutes  
October 9, 2012  
Multi-Purpose Room  
12:00 P.M.

Attendance

Ad Hoc Committee Members: Amanda Nairn, Andy Sherrer, Jim Gasaway, Judith Wilkins, Matthew Leal, Roger Frech, Samantha Kahoe, Stephen Tyler Holman

Councilmembers: Mayor Rosenthal, Roger Gallagher

Public: Kate Anders, Jay Cervie, Harold Heiple,

Carollo Project Team: John Rehring, Amber Wooten, Srinu Sundaramoorthy, Ryan Smith

Staff: Ken Komiske, Mark Daniels, Chris Mattingly, Charlie Thomas, John McIntosh, Gay Webb

Introductions and Goal

Mr. John Rehring introduced the Carollo Project team. Mr. Rehring is the Project Manager for Carollo, Amber Wooten is the Carollo Project Engineer, Srinu Sundaramoorthy is the Tetra Tech Project Manager and Ryan Smith is the Tetra Tech Project Engineer. He explained the goal for the workshop today is to obtain feedback on how the individual supply sources were screened.

Project Update

Mr. Rehring reviewed water demand projections and the water supply terminology and process.

- A question was asked about peak day versus annual average. Mr. Rehring replied peak day is approximately 1.9 times the annual average day demand.
- A question was asked about population used for demand estimation. Mr. Rehring stated the study assumes 1500 people added per year.

Water Supply Option Screening

Mr. Rehring provided information regarding existing water sources and new local and regional sources. The purpose of the preliminary screening is to determine which individual water supply options are most viable (relative to each other) and use those in developing portfolios. All are likely technically possible but some are clearly more viable for Norman than others based on their relative costs and other basic characteristics.

The new local supply and regional supply sources were compared using supply availability, reliability, certainty and timeliness and cost effectiveness as the evaluation criteria to identify the most viable individual supply options for further analysis.

The Canadian River Diversions were removed from further study due to high cost and concern with long-term reliability. Lake Thunderbird Spillage and Stormwater Capture were removed from further study due to high costs because of intermittent nature of these supplies and the cost of storage infrastructure. (Note that the groundwater recharge alternative was initially ruled out, but after further discussion at the October 9<sup>th</sup> evening City Council Conference meeting, it was decided to carry this source forward into the portfolio development phase for comparison to the pending results of the Lake Thunderbird augmentation study.)

Based on the results of the preliminary screening, the following sources are recommended for use in the development of water supply portfolios to be evaluated in Phase II of the Strategic Water Supply Plan.

Existing Supplies

- Lake Thunderbird
- Garber-Wellington aquifer wells
- Water conservation

New Local Supplies

- Direct non-potable reuse
- Groundwater recharge (retained for further study by City Council)
- Lake Thunderbird augmentation (pending results of Central Oklahoma Master Conservancy District study)

Regional Supplies

- Purchase bulk treated water from Oklahoma City
- Purchase bulk raw water from Oklahoma City
- New out of basin reservoir
- Kaw Lake

Questions Asked

- Question was asked where a dam would be located on the Canadian River. Mr. Rehring explained the dam could be located on-channel however, this study has evaluated a stream diversion to an off channel reservoir. cursory evaluation shows that a low head dam would have insufficient storage.
- Question about whether any of the sites are more cost effective from property ownership/private property issues/politically effective perspective? Mr. Rehring responded for screening, this study looked at relative infrastructure needs between supply sources. No siting analyses were conducted considering property issues for an off channel reservoir, nor has an on-channel dam been ruled out.

- Question asked about how many acres would be impacted if Lake Thunderbird dam was raised to height necessary to get storage needed. Mr. Rehring answered, the acreage impacted is not known, however the footprint would be significantly larger, primarily along Little River and Blue River upper tributaries to the lake.
- Question about the quantity of wastewater treatment plant effluent flow compared to projected water demands. Mr. Rehring answered the wastewater treatment plant effluent flow used in this study represents the projected build-out of the existing plant, 17 mgd, with an assumed physical and permitted recovery rate of 60 percent.
- Are any states using groundwater recharge? Mr. Rehring replied yes. California and Arizona and several other States have groundwater recharge projects. It can technically be done, but permitting precedence is not in Oklahoma.
- How are costs extrapolated to each water meter? Mr. Rehring responded that the Strategic Water Plan scope does not include estimating rate changes or tap fee changes. They are looking at the most cost effective supplies relative to other supply sources. To look at cost per meters, you need to complete a financial rate analysis.
- Is there an unlimited supply of water from Oklahoma City through 2060? Mr. Rehring answered in terms of planning and permitting, it is much further along than other sources. Everything that Oklahoma City has indicated confirms that they can meet the full 2060 demand of Norman.
- Is this why raw and treated water from Oklahoma City received a 5 for reliability? Mr. Rehring answered, Yes.
- Is there enough geographic separation between new out of basin and Southeast Oklahoma source to get “multi-source benefit”? Mr. Rehring’s response was maybe. You would receive some benefit if you used the same pipeline to bring water to Norman.
- Will our options include tapping into the raw water line that goes to Oklahoma City? Mr. Rehring replied yes.
- How are costs calculated? Mr. Rehring explained the costs are all in today’s dollars. As we go forward, the ability to implement the long-term water supply portfolio in phases will be considered favorably.
- How long before out of basin reservoirs would be built. Mr. Rehring responded that it may be a long time due to challenges with permitting a new reservoir.

Ms. Wilkins distributed an article from the USA Today on cost of water trends nationally.

Paired Comparison

Mr. Rehring explained number eight on the paired comparison worksheet, which the members were asked to rank at the August 6<sup>th</sup> Ad-Hoc meeting, has been revised to include property rights. Members were asked to complete the revised worksheet at the end of the meeting or send the completed form to city staff.

Action Items and Next Steps

Mr. Rehring stated a Council Study Session will be held tonight at 5:30 p.m. to present this information to City Council. The next public meeting will be held Wednesday, October 17 at 7:00 p.m. in the Council Chambers. Public Meeting #3 will explain how we packaged portfolios and Public Meeting #4 will show ranking of portfolios.

The meeting adjourned at 1:05 P.M.

Items submitted for the record:

1. PowerPoint presentation entitled, 2060 Strategic Water Supply Plan Ad Hoc Committee & City Council Study Session, October 9, 2012
2. Carollo Project Memorandum dated October 5, 2012, Preliminary Screening of Supply Sources
3. Carollo Project Revised Memorandum dated August 15, 2012, Revised List of Evaluation Criteria and Proposed Performance Measures