

City of Norman, OK

Municipal Building Council Chambers 201 West Gray Norman, OK 73069

Master

File Number: R-1314-146

File ID: R-1314-146 Type: Resolution Status: Non-Consent Items Version: 1 Reference: Item No. 28 In Control: City Council **Department:** Utilities Department Cost: File Created: 06/19/2014 File Name: SWSP Portfolio Selection **Final Action:** Title: RESOLUTION NO. A RESOLUTION THE NORMAN R-1314-146: OF UTILITIES AUTHORITY DIRECTING CAROLLO ENGINEERS, INC. TO MOVE FORWARD WITH INCLUSION OF PORTFOLIO IN THE 2060 STRATEGIC WATER SUPPLY PLAN. Notes: ACTION NEEDED: Acting as the Norman Utilities Authority, motion to adopt or reject Resolution No. R-1314-146. ACTION TAKEN: _____ Agenda Date: 06/24/2014 Agenda Number: Attachments: R-1314-146, Ad Hoc Committee and Public Meeting Feedback Project Manager: Ken Komiske Entered by: kathryn.walker@normanok.gov **Effective Date: History of Legislative File** Acting Body: Date: Action: Sent To: Due Date: Return Result: sion: Date:

Text of Legislative File R-1314-146

Body

BACKGROUND:

The Norman Utilities Authority (NUA) is currently unable to supply sufficient potable water to meet peak demands during summer months and is concerned about probable changes affecting both our surface water and groundwater supplies.

On November 21, 2011, the NUA forwarded Request for Proposal (RFP) 1112-35 to engineering consultants for preparation of the 2060 Strategic Water Supply Plan (the 2060 SWSP). This project will update the previous 2040 SWSP adopted in 2001. Proposals were received from seven firms and, after much discussion and deliberation, the proposal review committee selected Carollo Engineers, Inc. of Broomfield, Colorado (Carollo) teamed with TetraTech of Oklahoma City to prepare the 2060 SWSP. On March 13, 2012, the NUA approved Contract K-1112-114 in the amount of \$385,947 with Carollo Engineers, Inc. for preparation of the 2060 SWSP.

The goal of the 2060 SWSP is to strengthen our knowledge of potential short and long-term water supply source(s) for our community and begin implementation of a robust, water supply solution acceptable to the citizens of Norman. The 2060 SWSP will need to consider the findings of the recent update of the Oklahoma Comprehensive Water Plan (OCWP), the Regional Raw Water Supply Study for Central Oklahoma, the possible effects of the pending Garber Wellington Water Management Study, the pending EPA Toxicological

Review of Hexavalent Chromium and the water reuse regulations to be promulgated by the Oklahoma Department of Environmental Quality (ODEQ). The Plan will also need to coordinate with and consider the findings of the Central Oklahoma Master Conservancy District (COMCD) Lake Thunderbird Reuse Study.

DISCUSSION:

The NUA appointed numerous citizens to the 2060 SWSP Ad-Hoc Committee to ensure open and two-way dialogue between Carollo, staff and the community, to make sure the project continued on track and on schedule, to ensure the options and suggestions of the public for potential water supplies are addressed, to assist in evaluation of non-monetary criteria for potential water supply sources, and to understand and be able to communicate the objectives and conclusions of the 2060 SWSP to the public.

Eight meetings were held with the 2060 SWSP Ad-hoc Committee and five public meetings were held for public participation and input. Fourteen different portfolios were developed, investigated and evaluated with public input at these meetings. Each portfolio was developed to provide an annual average supply of 29.1 million gallons per day (MGD) in 2060 and a peak daily supply of 55.4 MGD in 2060.

On June 10, 2014, the NUA reviewed Portfolios 13 and 14, the two most highly rated portfolios from the 2060 SWSP, during a regularly scheduled study session. Following the presentation, the NUA requested staff bring forward an agenda item directing Carollo and staff to begin implementation of a selected portfolio to allow the SWSP to be finalized and eventually adopted by the NUA.

Both portfolios include the following recommendations providing an annual average supply capacity of approximately 16 MGD:

- Continued use of Lake Thunderbird as a raw water supply source with treatment at an improved water treatment facility at the existing site (but with the current allocation reduced from 8.4 to 6.1 MGD based on a pending Bureau of Reclamation yield study);
- Continued use of our current groundwater supply system of 36 wells without treatment (6 MGD) in the short term but with the addition of groundwater treatment (for arsenic and chromium 6) at a centralized facility increasing the capacity to 8.1 MGD by bringing 12 inactive wells back on-line in the future;
- Expanded water conservation practices ultimately resulting in additional water supply of 1 MGD in 2060 through reduced water consumption;
- Additional non-potable reuse ultimately resulting in additional potable water supply of 0.8 MGD in 2060 (and reduced peak summertime demand of about 4.6 MGD by 2060) by expanding the non-potable water distribution system to serve additional irrigation and industrial customers in southern Norman and reducing potable water consumption.

Portfolios 13 and 14 each include an additional water supply capacity of 13.1 MGD for a total of 29.1 MGD in 2060. The portfolios are generally described below:

- Portfolio 13 includes a partnership with Oklahoma City as a co-owner in the construction of transmission improvements to import raw water from southeastern Oklahoma to Lake Stanley Draper. Ultimately, Norman would utilize 13.1 MGD of raw water supply and convey to Norman for treatment and distribution; raw water conveyance and water treatment plant expansions would be required.
- Portfolio 14 includes expanding our groundwater supply system by 2 MGD in the short term but ultimately treating this new supply for arsenic and chromium 6 at a centralized facility with a total capacity of 10.1 MGD. Additionally, indirect potable reuse (IPR) would be implemented over time by adding additional treatment at the Water Reclamation Facility (WRF) and discharging the highly treated effluent into Lake Thunderbird; raw water conveyance and water treatment expansions would be required.

Resolution R-1314-146 provides NUA direction to staff and Carollo regarding the Portfolio to be implemented in the 2060 Strategic Water Supply Plan.

RECOMMENDATION:

Staff recommends approval of Resolution R-1314-146.