



## CITY OF NORMAN, OK STAFF REPORT

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**MEETING DATE:** 09/13/2022

**REQUESTER:** Ken Giannone, PE

**PRESENTER:** Ken Giannone, PE, Capital Projects Engineer

**ITEM TITLE:** CONSIDERATION OF ADOPTION, REJECTION, AMENDMENT AND/OR POSTPONEMENT OF RESOLUTION R-2223-23: A RESOLUTION OF THE NORMAN UTILITIES AUTHORITY AUTHORIZING THE CHAIRMAN TO ACCEPT A WATERSMART APPLIED SCIENCE GRANT FROM BUREAU OF RECLAMATION FOR LAKE THUNDERBIRD PREDICTIVE LAKE OPTIMIZATION TOOL.

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### **BACKGROUND:**

In March 2012, the Norman Utilities Authority (NUA) approved Contract K-1112-114 for Carollo Engineers to prepare the 2060 Strategic Water Supply Plan (the 2060 SWSP). The goal of the 2060 SWSP was 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.

In 2013, the 2060 SWSP Ad-Hoc Committee was created in order to ensure open and two-way dialogue with the community, to ensure the suggestions of the public were addressed, and to ensure that objectives and conclusions of the 2060 SWSP were clearly communicated to the public. Eight meetings were held with the 2060 SWSP Ad-hoc Committee and six public meetings were held for public participation and input in order to determine the portfolio of recommendations identified in the report that would be implemented. Ultimately, Resolution R-1314-146 was approved by the NUA on June 24, 2014. The approved portfolio had six (6) recommendations including the following:

“Implementation of indirect potable reuse (IPR) 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.”

Since that time, NUA has served on a working committee with numerous other stakeholders in the State of Oklahoma to advise Oklahoma Department of Environmental Quality (ODEQ) in promulgating and updating regulations for IPR. ODEQ’s initial regulations for IPR were finalized effective September 15, 2018. These regulations formalized a six (6)-step process a utility must complete in order to receive ODEQ permits for IPR, and, since that time, NUA has been working

diligently toward completing each of the required steps.

One of the steps required by ODEQ in order to be granted approval for an IPR program is the submission and approval an Engineering Report. One critical aspect of the Engineering Report is a discussion of potential impacts of an IPR program on the public and the environment and how those impacts will be mitigated. NUA staff and NUA consultant, Garver Engineering, have, therefore, identified the creation of a Predictive Lake Optimization Tool (PLOT) for Lake Thunderbird as a critical need for mitigating impacts to the public or the environment associated with any future IPR program. A PLOT uses precipitation, climatological and lake-specific data and trends to create a model that identifies the best times and rates for IPR augmentation flows to a particular lake (which, in the NUA's case, is Lake Thunderbird) that will, in turn, optimize lake yield and conjunctive groundwater use as well as mitigate drought risks and their potential impact on the lake and its stakeholders.

## **DISCUSSION:**

The United States Bureau of Reclamation (BOR) offers WaterSMART (Sustain and Manage America's Resources for Tomorrow) Applied Science Grants to "organizations with water delivery authority" like NUA. These grants are offered to assist such organizations "to develop hydrologic information and water management tools and improve modeling and forecasting capabilities". Based on information regarding NUA's proposed PLOT project for Lake Thunderbird that was provided to BOR by NUA and NUA's consultant, Garver Engineering (Garver), BOR has approved an Applied Science Grant for NUA to complete a PLOT for Lake Thunderbird in collaboration with the National Water Research Institute. This grant will cover 50% of NUA's costs for creating the Lake Thunderbird PLOT up to \$148,339. BOR's terms and conditions for the grant are outlined in Assistance Agreement R22AP00241.

As also outlined in the Assistance Agreement, the total cost for the Lake Thunderbird PLOT project is estimated to be \$296,678. Upon approval, the full amount of the estimated project cost of \$296,678 will be transferred from the Water Fund and encumbered for this project. Per the Assistance Agreement and as outlined above, BOR will then reimburse 50% of project cost to a maximum of \$148,339.

New BOR Policy dictates that, instead of the grantee executing an Assistance Agreement in accordance with grantee's legally mandated process for contract approval, the grantee instead indicates acceptance of the Assistance Agreement and all terms and conditions therein simply by commencing the work described in the agreement and drawing down funds allocated by the agreement. For this reason, Resolution No. R-2223-23 is being offered to the Norman Utilities Authority requesting their approval of BOR Assistance Agreement No. R22AP00241 so that NUA staff may commence work and commence drawdown of grant funds as per the agreement.

## **RECOMMENDATION:**

Approval of Resolution R-2223-23, which will authorize Director of NUA and his designees to commence work on the Lake Thunderbird PLOT project with a total estimated budget of \$296,678, and to drawdown Applied Science Grant funds not to exceed \$148,339 as provided in BOR Assistance Agreement No. R22AP00241 as well as to incur expenses associated with NUA's share of project funding.