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September 24, 2018

Ben.wade@state.co.us

Ben Wade
Water Conservation Coordinator
Colorado Water Conservation Board
1313 Sherman St. Room 718
Denver, CO 80203

Re: Town of Olathe Water Efficiency Plan 50 Percent Progress Report

Dear Mr. Wade,

On behalf of the Town of Olathe, Wright Water Engineers, Inc., (WWE) is pleased to present you the 50 percent progress report for the Town of Olathe Water Efficiency Grant – (POGGI PDAA 201800000697).

Task 1 – Profile Existing Water System

On May 11, 2018, two WWE employees met with three Town of Olathe officials (Town Officials) in Olathe for the Water Efficiency Plan (WEP) kickoff meeting. During the kickoff meeting Town Officials provided an overview of the physical characteristics and reliability of the water supply system including age of existing potable water system and history of leak detection surveys of Project 7 delivery system, that supplies non-potable water supply from several canals and laterals surrounding Olathe, and the state of infrastructure from the Moffit Spring Pipeline and East Fork Feeder Pipeline.

Water supply limitations were also discussed as well as the potential of increasing Olathe's allocation of Project 7 water. After the kickoff meeting, WWE had an initial discussion with Tri-County Water Conservancy District (Tri-County) about the potential of Olathe purchasing some of their unused Project 7 water. Tri-County provided WWE with a written estimate of what they describe as "buy-back" water. This considered the cost of water as if purchased in the year 1990 and accounts for the growing cost and modest interest since that time. This estimate will give the Town of Olathe something substantial to discuss at a meeting scheduled later this week.

Task 2 – Profile of Water Demands and Historical Demand Management

During the kickoff meeting Town Officials provided WWE with the current population, and other demographic information for the Town of Olathe and its water users. As noted in the scope of work, WWE has already identified historical water demands for Olathe. WWE is working with Town Officials to break down historical demands by sector through examining metered records. Past and current water demand management activities including the existing water rate structure, review of plumbing code, efficiency of existing appliances, and public outreach efforts such as the

No More Chico Program, were touched on during the kickoff meeting and will be further explored with the help of Town Officials.

WWE has developed a 50-year projected water demand forecast of 734 acre-feet (AF) by the year 2068, based on estimated population growth rate and projected water demand. This 50-year projected water demand is undergoing revision with input from Town Officials as the value appears to be rather inflated.

Task 3 – Integrated Water Supply, Water Efficiency and Land Use Planning and Water Efficiency Benefits and Goals

For land use planning WWE has reviewed the goals set forth in the *Town of Olathe Comprehensive Plan* (Plan), which include:

Minimize sprawl by encouraging growth in serviceable areas, and promoting mixed uses, higher densities, and infill in developed areas. Preserve intact green space throughout the city. Improve connectivity between neighborhoods and retail/service areas, and ensure adequate density for the efficient delivery of urban services and viable commercial areas.

WWE mapped Town parks and agricultural lands within and surrounding Olathe. During the kickoff meeting Town Officials pointed out parks that are irrigated with potable water and parks that are irrigated with non-potable water from irrigation canals. WWE and Olathe officials will look into and perform additional work on land use planning in conjunction with water efficiency and water supply planning.

Water system challenges discussed during the kickoff meeting include, among others, the estimated system loss, aging meters that require manual entry, and calibration of the Project 7 meter that measures water delivered to Olathe. Town officials expressed interest in updating the current service tap meters with new automated meters, as well as meters along the mainlines to improve estimates of system losses. This is outside the scope of the WEP.

WWE is collaborating with Town Officials in developing water efficiency goals. Once the water efficiency goals are established WWE will quantify potential water savings and proceed with Town Officials on selection of water efficiency measures to meet the water efficiency goals. WWE will then modify the forecasted water demands based on projected future water savings resulting from water efficiency activities. This work should be completed by mid-November.

Task 4 – Select Water Efficiency Activities

This task is not yet underway. Once a finalized list of water efficiency measures and goals is developed, the project team proceed with Task 4. This task is scheduled to be completed by mid-December.

Task 5 – Develop Implementation Plan

This task is not yet underway. Once Task 4 is near completion work on Task 5 will begin. This task is scheduled to wrap up by mid-February, 2019.

Task 6 – Public Review and Approval Process

This task is not yet underway. Once Task 5 is near completion work on Task 6 will begin. This task is tentatively scheduled to wrap up by mid-May, 2019.

In addition to compiling information and data from Town Officials noted above, WWE has started writing the WEP and creating maps and tables of relevant information, filling in new information as it is received.

Please let me know if you have any questions or need any further information regarding the current status of the Town of Olathe WEP.

Sincerely,

WRIGHT WATER ENGINEERS, INC.

By 

Ben Von Thaden,
Hydrologist

By 

Carl Mackley, P.E.
Water Resources Engineer

Attachments:

Cc:

Patty Gabriel
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