City of **Louisville** | Department of Public Works COLORADO - SINCE 1878

August 18, 2014

Ben Wade Colorado Water Conservation Board 1313 Sherman St. Room 721 Denver CO, 80203

Re: Water Efficiency Grant 75% Progress Report Purchase Order Number: PO Number OE PDA 1400000075

Dear Mr. Wade,

Enclosed please find the 75% progress report for the City of Louisville's Water Conservation Plan project prepared in accordance with the requirements of our water efficiency grant award. As of this date a Draft Conservation Plan has been reviewed by the City and the project is approximately 75% complete. This report details the tasks completed through August 11th, 2014. This progress report also identifies issues that have arisen regarding grant implementation, preliminary findings, and discusses the remaining work required for the successful completion of the Water Conservation Plan that will be forwarded to CWCB for review and approval. The City has contracted with CH2M HILL and WaterDM (Sub-consultant to CH2M HILL) to assist with completion of the plan.

Steps Completed

The project began with a Kickoff Meeting on March 5th, 2014, with key City staff members, CH2M HILL and WaterDM. A goal setting workshop was held on April 8th, 2014, and another meeting was held on May 20th to discuss the screening and selection of water efficiency activities. In general the following tasks have been completed:

- Task 1 Profile Existing Water System •
- Task 2 Profile of Water Demands and Historical Demand Management •
- Task 3 Water Efficiency Benefits and Goals
- Task 4 Selection of Water Efficiency Activities •
- Task 5 Implementation and Monitoring Plan
- A majority of Task 7 has also been completed which is preparation of the report. .

Thus far, the City and its contractors have conducted the following key tasks in support of this work:

- Conducted three workshops to identify water demands, water supply infrastructure, current conservation programs, set conservation goals for the City, and selection of water efficiency activities.
- Collection and organization of the Town's monthly water use since 2000 by customer type, including information on non-revenue water, and both potable and non-potable uses.

- Developed the City's future baseline water demand forecast.
- Identified the main goal of applying water conservation measures to keep the water demand forecast below the City's current treatment capacity of 13 MGD.
- Identification of past water conservation efforts.
- Performed screening and selection of water efficiency activities.
- Completed and reviewed a Draft Water Conservation Plan.

Issues and Obstacles

The project is behind schedule, but within budget. Even with the schedule delay there are no issues or obstacles that have been identified that would impact project execution and completion. The only issue to finishing the project within budget would be the potential for an excessive number of comments from the public or from CWCB.

Preliminary Findings and Accomplishments

As stated in the previous progress report, the City of Louisville is planned to reach build out (commercial and residential) by the year 2032, although residential build out will occur first. After characterizing the water system and past water demands, the baseline water demand forecast developed projects a peak day demand approaching 13 million gallons per day (mgd) at build out. This projection includes water demand for a large commercial area that is currently unoccupied, but does not include water savings from passive efficiencies or the planned water efficiency activities. The City's current treatment capacity is 13 mgd. As a result of these future projections, the City's main goal of the conservation plan is to identify projects/programs that would reduce the peak day demand at build out to less than 13 MGD to avoid the need for additional treatment capacity. The demand forecast based on the planned water efficiency activities results in an estimated peak day demand of approximately 12 mgd.

Based on a gradual increase of water savings over time the estimated amount saved since 1999 is approximately 1,000 acre-feet of water. The savings are a result of the City's existing demand management efforts that have included foundational activities, technical assistance, ordinances and regulations, and public education. Many of the existing water saving activities will continue. New water efficiency activities that are recommended as part of the plan include:

- Identify a single person as the water conservation coordinator for the City
- Provide customers with theoretical informational water budgets on the monthly bill for comparison to actual use
- Perform a system-wide water audit in conformance with AWWA Manual M36
- Update the Water Efficiency Plan every 5 to 7 years
- Report water use to CWCB to meet State requirements
- Consider distributing high-efficiency spray nozzles to local restaurants
- Evaluate the installation of rain sensors to control the City's irrigation
- Add Garden in a Box (offered by CRC) to the incentives for local residential customers
- Add indoor water audits for commercial customers (offered by CRC)

- Evaluate adding mandatory time-of-day (or day-of-week) watering restrictions even when not in a drought
- Reach out to local car washes to establish regulations for efficient water use

Steps Remaining

As of August 11th, 2014, the City has reviewed the Draft Water Conservation Plan and provided comments to the consultants. The City and Consultant will be working to complete the Draft Water Conservation Plan for public comment by August 22nd, 2014, allowing the 60-day public comment period to commence, such that the plan can be submitted to CWCB in early November. The Draft Water Conservation Plan will be submitted to the City Council and the public for review and comment. Following this review period the draft will be revised and sent to the CWCB for review. Once the comments from CWCB are addressed the final report will be presented to City Council for approval.

Thank you for the generous support to the City in the development of our Water Conservation Plan. Should you have any questions please do not hesitate to contact me at 303-335-4603.

Respectfully,

Joliette Woodson, PE Project Manager

cc: Holly Werth, CH2M HILL Peter Mayer, Water Demand Management

