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## MEMORANDUM

CWS File #14-190

To: Ben Wade, CWCB

From: Nathan Alburn *NSA*, Michelle Hatcher *MH*

cc: Leann Koons – NWCWD

Date: September 12, 2016

Subject: 50% Progress Report for North Weld County Water District Municipal Water Efficiency Plan Update

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Clear Water Solutions (CWS) is currently assisting North Weld County Water District (District or NWCWD) with updating their Municipal Water Efficiency Plan (Plan) in accordance with State regulations following the Guidance Document (dated July 2012) produced by the Colorado Water Conservation Board (CWCB). The Guidance Document outlines six steps in the water conservation planning process. To date, CWS and the District have made strong progress towards the completion of Steps 1-3 which includes initial discussions with District Staff on water efficiency activities.

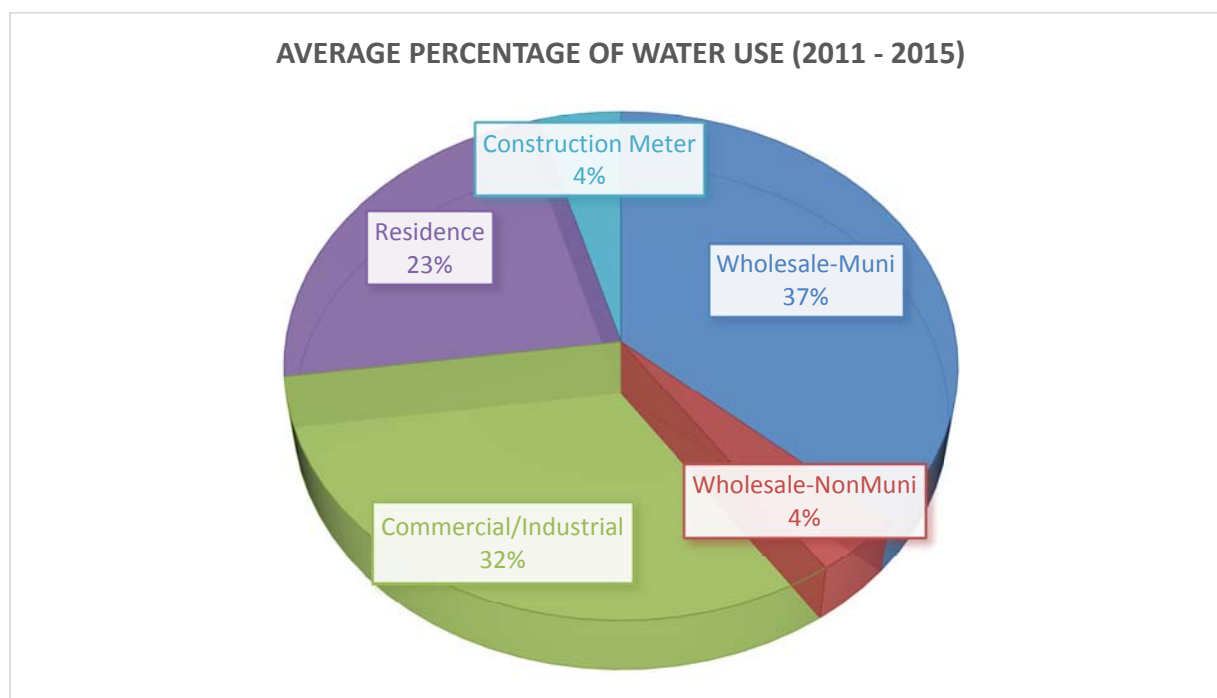
NWCWD delivered 8,746 acre-feet of treated water in 2015 to an estimated service area population of 42,821. The District receives its treated water from the Soldier Canyon Filter Plant, which is jointly owned by the Tri-Districts: NWCWD, Fort Collins-Loveland Water District, and East Larimer County Water District. Water is delivered to the plant from Horsetooth Reservoir which is part of the Colorado-Big Thompson Project. The District can also bring water to the plant through the jointly owned Pleasant Valley Pipeline. The District then distributes its portion of the treated water to its customers through over 650 miles of pipeline.

NWCWD's service area is approximately 325 square miles and is contained for the most part within the western portion of Weld County. The District serves a very unique make-up of customers. A large portion of the population of the District resides within ten smaller municipalities and communities. Most of these communities are served by master meters and are responsible for their own water supply planning and acquisition. The other large segment of water use comes from commercial and industrial (C&I) users. The largest portion of those C&I users consist of more than 20 dairies and feedlots that are located within the District borders. The remaining customers are the rural residents spread throughout the District. Essentially, the District breaks its customers into five main categories:

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- Wholesale-Muni: Master meters
- Wholesale-NonMuni: Those customers served by a master meter that do not fall into the category of a municipality.
- Commercial/Industrial: Various C&I customers; dairies and feedlots are included within this category.
- Residence: Rural residents not served within the master-metered areas.
- Construction: Temporary water for construction purposes: This category varies a great deal from year to year.

The District also monitors its Fire Meters, but these meters only total around one acre-foot per year. As new residential areas are being developed, NWCWD is also adding non-potable systems; this category, however, makes up a very small percentage of the overall water delivered at this time. The following figure breaks out the potable water usage per customer category as a percentage of a five year average (2011 – 2015). As more data is processed and analyzed, these percentages may shift some, but this gives a general overall picture of the District's water usage.



Prior to and through their current Plan, the District has established the following water efficiency activities (please see the table below). This list may be updated and clarified as further discussions occur.

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<b>Historical and Current Water Efficiency Activities</b>	
<b>Foundational Activities</b>	
Automatic Meter Reading (AMR) Installation and Operations	
Meter Testing and Replacement	
Meter Upgrades	
Frequency of Meter Reading/Billing. Meters are capable of recording multiple readings per day.	
Tracking Water Use by Customer Type	
Upgraded Billing System to Track Use by Sufficient Customer Types	
Tracking Water Use for Large Customers	
Volumetric Billing	
Water Rate Adjustments – currently in progress of analyzing water rates	
Inclining/Tiered Rates	
Recycling WTP filter backwash	
Tap Fees with Water Use Efficiency Incentives	
<b>Incentives and Educational Activities</b>	
Give-aways: Residential water conservation kits	
Bill Stuffers, Newsletters	
Water Fairs, Classroom Education Participation	
Web Pages, Interactive Websites, Social Networking (Facebook, Twitter)	

CWS and the District's Staff are currently working to determine the water savings evident from implementation of these activities. NWCWD has an overall goal of a 10% water savings. The District and CWS have done an initial screening and are also in the process of determining water efficiency activities for the Plan update. The next step includes performing a feasibility and cost/benefit analysis of the selected activities for further evaluation by the District's Staff.

To date our budget estimates for each step have been fairly accurate. Currently we are behind our last estimated schedule. We have created and hope to stay on the new schedule included below.

<b>Tasks</b>	<b>Date</b>
Grant application submitted to CWCB	
Updates made as per CWCB	4/11/2016
CWCB approves grant and PO issued	4/25/2016
Kick-off meeting with staff	5/23/2016
2 <sup>nd</sup> Meeting - Activities	9/2/2016
Submit 50% Progress Report to CWCB	9/12/2016

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<b>Future Tasks</b>	<b>Date</b>
<i>3<sup>rd</sup> Meeting (Review cost/benefit analysis, go over CWCB worksheet details, fill in gaps (data, information, etc.))</i>	<i>TBD</i>
<i>Submit 75% Progress Report to CWCB</i>	<i>10/24/2016</i>
<i>Submit draft Plan to staff for review and comment</i>	<i>12/19/2016</i>
<i>Staff provides comments from review</i>	<i>1/11/2017</i>
<i>Submit draft Plan to Board for review</i>	<i>1/23/2017</i>
<i>Present draft Plan at Board meeting and collect comments</i>	<i>2/13/2017</i>
<i>Notify public of draft Plan in paper and website</i>	<i>2/17/2017</i>
<i>Public review period (60 days)</i>	<i>4/21/2017</i>
<i>NWCWD provides public input comments to CWS</i>	<i>4/24/2017</i>
<i>CWS incorporates public comments</i>	<i>5/1/2017</i>
<i>Board formally adopts final Plan</i>	<i>5/8/2017</i>
<i>CWS submits final Plan to CWCB</i>	<i>5/11/2017</i>
<i>CWCB approves final Plan</i>	<i>up to 90 days</i>