



## MEMORANDUM

CWS File #20-110

To: Colorado Water Conservation Board

From: Michelle Hatcher *mdh*, Sira Sartori *ss*

cc: Guy Patterson, Town of Hudson

Date: April 21, 2021

Subject: 50% Progress Report for Town of Hudson Municipal Water Efficiency Plan

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Clear Water Solutions (CWS) is assisting the Town of Hudson (Town of Hudson) with its 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). As discussed in the Scope of Work, this 50% Progress Report includes the following elements:

- The success of meeting previously identified goals and objectives
- Obstacles encountered
- Preliminary findings or accomplishments
- Potential need for revisions to the scope of work and timelines

The Town, in coordination with CWS, has made strong progress towards the completion of the goals and objectives outlined in Tasks 1 through 3 described in the Scope of Work. This includes: profiling the existing water supply system, identifying supply-side limitations and needs, analyzing historical water demands, forecasting future demands, and evaluating the cost/benefit of water efficiency activities. No major obstacles have been encountered in the development of this Plan. The only revision to the Scope of Work is the schedule of tasks which is provided later in this memorandum. A brief overview of some of the preliminary report text and findings<sup>1</sup> from Tasks 1 through 3 are provided in the following paragraphs.

The Town of Hudson is located at the intersection of Interstate 76 and Colorado State Highway 52 in Weld County, Colorado. The Town lies between the eastern Colorado high plains and the Front Range of the Rocky Mountains. Hudson is conveniently located approximately 30 miles northeast of the state capital of Denver. The Town

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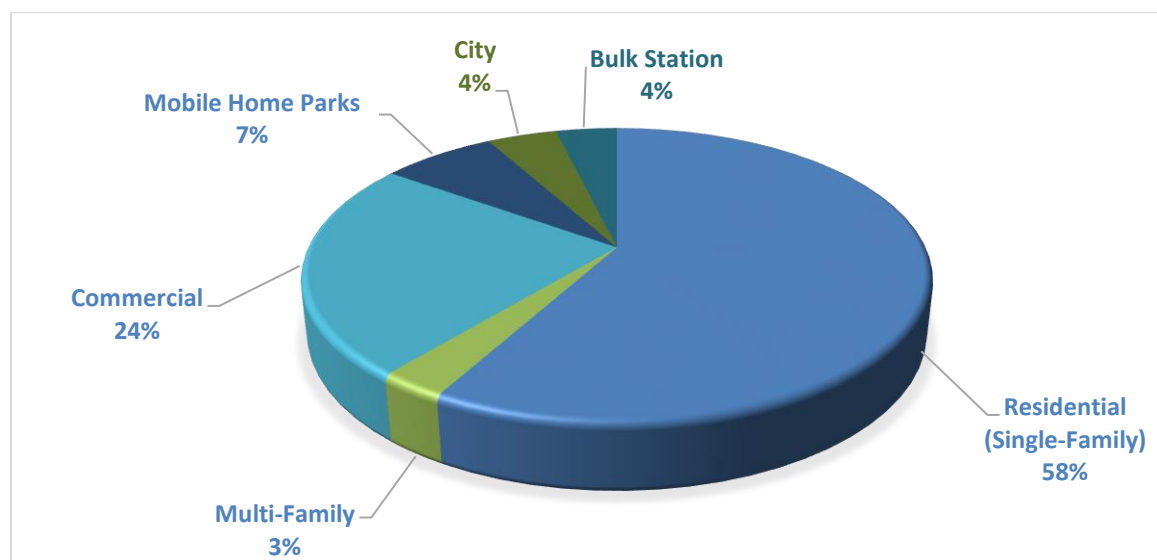
<sup>1</sup> Preliminary findings may be revised in the final Plan.

provides water supplies to residents, commercial businesses and industrial users within the Town limits. The Town's water service area is the same as the Town limits and is approximately 6.4 square miles. The population in 2020 was 1,982 people.

The Town's treated water supplies are from the Colorado-Big Thompson (C-BT) project and groundwater pumped from wells. Hudson's main treated water supply is its C-BT units. Water from the C-BT project originates on the Western Slope of Colorado in the Colorado River basin and is delivered over the Continental Divide into the Big Thompson River. C-BT units are considered a reliable water supply; however, the price to acquire new units has increased drastically in the last few years. Between 2018 and 2020 the price per unit doubled to approximately \$60,000.

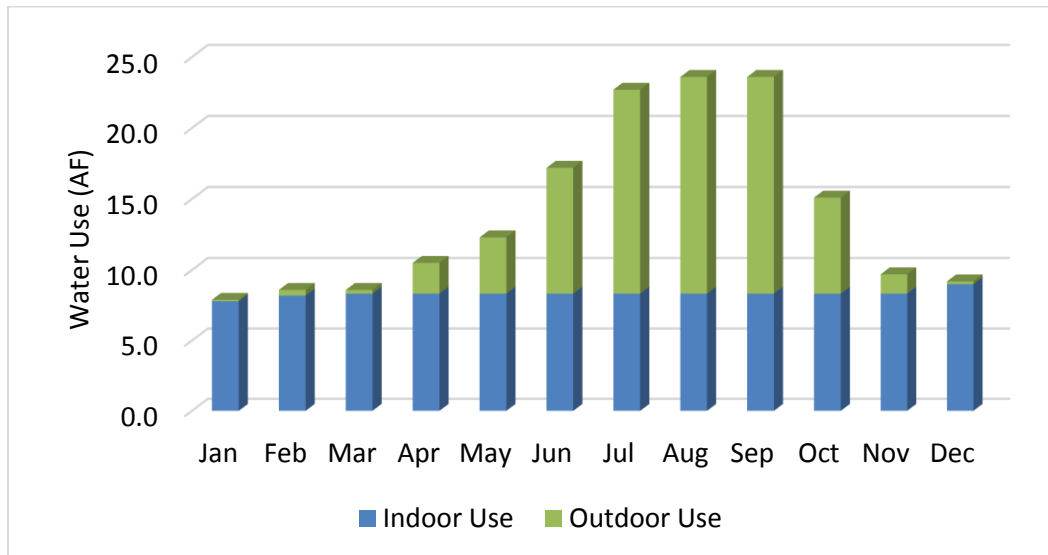
The Town has customer water use data from 2015 through current. The Town's data begins towards the end of 2014 when a new billing system was implemented. Prior to the new system, there is no stored water use data. This Plan will help to record historical data for use in planning. The Town's billing system categorizes billable water use into five categories: 'residential' (single-family), 'multi-family', 'mobile home parks', 'commercial' and 'city'. The 'city' category is water use at the Town's buildings and parks. Billable water use is largely from residential-type categories. The treated water use by customer categories is shown in **Figure 1**.

**Figure 1. Hudson Customer Categories and Percentage of Treated Water Use**



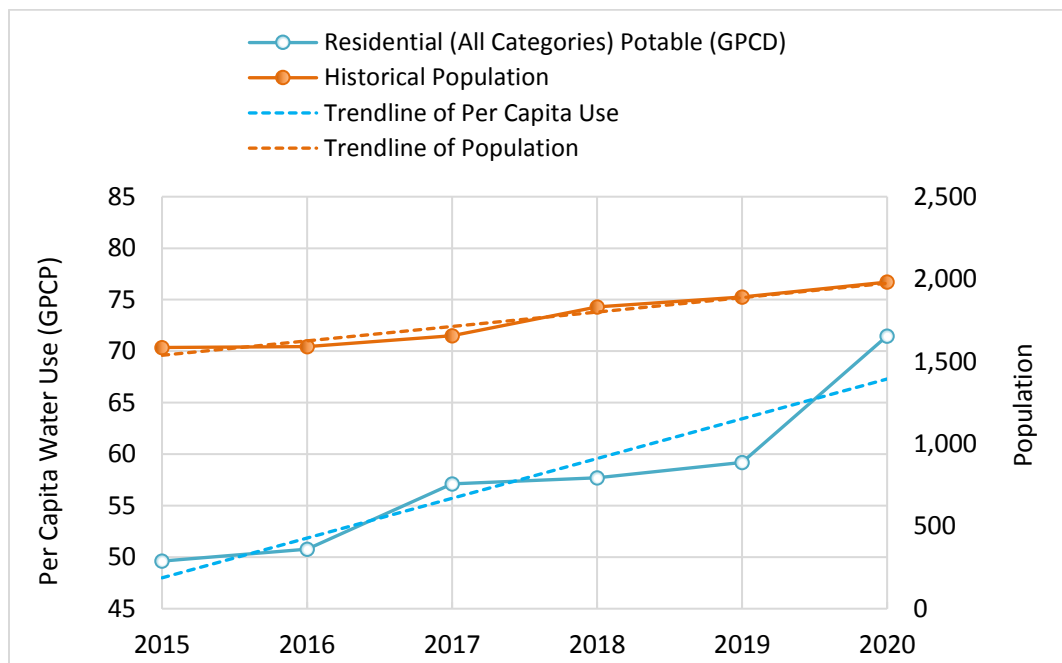
The base use (i.e. indoor demands) are considered the average from December through February usage when there is no outdoor watering. The base use is 8.3 acre-feet per month. Water use greater than the base use from March through November is considered outdoor use. **Figure 2** shows the estimated indoor and outdoor uses for the Town.

**Figure 2. Average Indoor and Outdoor Treated Water Use from 2015 – 2020**



The residential (including single-family, multi-family and mobile home customers) per-capita water use averages 52 gallons per capita per day (GPCD). Since 2015, there has been an upward trend in the residential per capita water use, as shown in **Figure 3**.

**Figure 3. Per-Capita Water Use from 2015 – 2020**



Hudson's water savings goal for this plan is 10% over the 10 year planning horizon. The Town Staff selected 19 water efficiency activities to evaluate in the cost-benefit analysis for consideration. Town staff selected activities from the Foundational, Targeted Technical Assistance and Incentives, Ordinances and Regulations, and Education

categories described in the Guidance Document. The Town has implemented some water efficiency activities in the past such as general monitoring and billing, AMR technology, water master plans/comprehensive plans and tiered water rates. The Town is interesting in evaluating new water efficiency activities focused on education and ordinances for new developments.

The Town will select its final list of activities to include in the Plan at the next meeting between Town Staff and CWS which is anticipated to occur in May. The Town has already conducted two meetings on the Plan which included a kick-off meeting with CWS to collect data and a meeting to discuss potential water efficiency activities. The Plan's scheduled task dates have been slightly modified from the original Scope of Work. **Table 1** provides a table of the Plan timeline.

**Table 1: Plan Timeline**

Task	Date
CWCB approves grant and PO issued	12/11/2020
Kick-off meeting with staff	1/8/2021
Meeting No. 2 - Main topic: Potential Activities	3/10/2021
Meeting No. 3 - Main topic: Review cost/benefit analysis	5/26/2021
Submit draft Plan to staff for review and comment	7/14/2021
Staff provides comment from review	7/28/2021
Submit draft Plan to Town Board for review	8/11/2021
Present draft Plan at Town Board meeting and collect comments	9/20/2021
Notify public of draft Plan in paper and website	9/21/2021
Public review period (60 days)	11/20/2021
Town Board formally adopts final Plan	12/6/2021
CWS submits final Plan to CWCB	12/7/2021
CWCB approves final Plan	up to 90 days

\*Blue is estimated date.