

# Water Conservation Plan

October 15, 2022

## **A. BACKGROUND INFORMATION**

The Hooper Water Improvement District (the District or HWID) was organized under the general laws of the State of Utah pursuant to section 17A-2-301, et seq., Utah code Annotated 1953 as amended.

The Weber County Commission gave final approval for the organization of the Hooper Water Improvement District in August of 1966 to provide culinary water service to the southwest part of unincorporated Weber County to supply culinary water for 350 service connections. In May of 1972, the District boundaries were expanded to include a portion of northwest Davis County that added 150 more connections. Since that time there have been some minor boundary changes due to Annexations or De-Annexations. The District currently has over 152 miles of pipe ranging from 2" to 20" in diameter. Since its organization the District has grown through City expansions, and City incorporations. Hooper Water Improvement District now operates in parts of 4 cities and two counties. Parts of Roy City, West Haven City, Hooper City and other Un-incorporated portions of Weber County, and part of West Point City and other Un-incorporated parts of Davis County are served by the District. When developing its current IFP, the District looked at the possibility of future annexations into the District. The areas that would most likely annex would be the area on the west side of the current district boundary, and have been taken into consideration when planning for current and future water needs.

Any property that annexes into the District will be required to bring water with them to serve the homes built in that new service area. To accomplish this, the Board of Trustees of Hooper Water Improvement District has entered into an agreement with Weber Basin Water Conservancy District to purchase water to supply the newly annexed area. The cost of the water will be paid to the District by the developer as a pass-along Impact fee to Weber Basin Conservancy District.

## **B. WATER SYSTEM PROFILE**

The District currently operates three Wells and has a service connection with Weber Basin Water Conservancy District. The district boundary currently contains approximately 10,685 acres. As of March 2022, the District has 6,343 active connections to the system; 6,251 of which are residential service connections and 92 are industrial/commercial service connections. Wells #1 and #2 produce around 2,200 gallons a minute each and both are treated with chlorine. Well #2 has a filtration plant to reduce the iron and manganese produced from that well. Well #3 will produce 1,500 gallons a minute, but no treatment system is installed at this site, yet. The District has plans to drill four more wells to supply future demands. It is anticipated that each of these wells will produce 1,500 gpm each. Well #1 and Well #2 are currently being used and each

provides approximately 50% of the water to the District. Well #3 is not being used and the Weber Basin Connection is an emergency connection that is very rarely used. (See Exhibit A – Map B3 Proposed Buildout System)

Under our current master plan the district will be able to serve 25,630 Equivalent Residential Connections (ERC's) at build out, which is estimated to be around the year of 2060, once buildout is complete, there will not be additional need for water, so the water available at that point should last into the foreseeable future. If there is any additional ERC they will be required to bring water with them. The same is true for any annexed area into the current District Boundary. To accomplish this, the District has a contract with Weber Basin Water Conservancy District where additional water can be purchased as needed.

In order to better maximize the District's available water, in 2020 the required amount of water to supply each ERC was evaluated and adjusted from what had been the state requirement of 0.45 acre-feet per ERC to 0.41 acre-feet per ERC. This increases the number of ERC's that the District's current water rights can serve. The District will review this requirement and adjust it as needed.

### **C. CONSERVATION ISSUES**

#### *1. Pressurized irrigation is not available to all of the District's residents*

Hooper Water Improvement District has adopted a policy that states where secondary water is available the customer will hook up to the secondary service to use for outdoor watering purposes. All new development needs to have secondary water issues addressed and a secondary water source plan for the development before they will be approved by the Board of Trustees of HWID.

There are four different secondary water systems operating within the HWID boundaries. They are Roy Water Conservancy District, Weber Basin Water Conservancy District, Hooper Irrigation Company and The Davis Weber Canal Company. Between the four companies they provide service to approximately  $\frac{3}{4}$  of the land in our service area. The area that is not covered by the secondary systems is the least populated area, and as development in those areas occurs (mainly the west part of Hooper) the secondary company serving that area will pick up the service for them as per Hooper City Requirement.

#### *2. Water usage and accountability*

In order to be more accurate with its water use HWID has installed new meters at the two wells currently being used to provide water to its customers. In 2015 – 2020 HWID Changed out all residential, industrial and commercial meters with new meters that have a 98% accuracy rating. These meters are read and bills go out monthly based on the amount of water used. This helps the District keep better record of the amount of water produced compared to the amount sold. The District will continually monitor the condition of these meters and begin replacement when the accuracy begins to decline (manufacturer expects a 20-year life span on the meters). HWID

also requires all water being used for flushing lines or for construction to be metered and accounted for, basically, all water other than that used to fight fires.

The new meters that have been installed are capable of tracking water usage and can show usage patterns and periods of high use. They can also show leaks that may be happening at the customer's property. When high usage occurs, District staff notifies the customer and alerts them of a possible leak. District staff also help locate leaks and advise customers on repairs. After the leak has been fixed, the District has a policy that allows District staff, under certain circumstances, to work with the customer on bill adjustments.

When leaks occur on the District's side of the system staff does their best to get them fixed as soon as possible to avoid large water losses. Staff also does its best to calculate how much water was lost due to the leak to help track water loss. The District realizes that some water loss will happen, HWID's GOAL is to keep that loss as low as possible.

When Construction occurs, or lines need to be flushed HWID requires that the water used be metered and accounted for so that waste will be limited to as small an amount as possible. The District has actively been replacing older aging pipes to help alleviate leaks in the system. Hooper Water Improvement District realizes the necessity of providing good clean drinking water to its customers at a fair and reasonable cost. The District also sees the need to preserve and conserve this great resource. HWID has adopted and implemented a rate structure intended to do both. (It is recommended that a small base rate with corresponding higher volume rates be evaluated and considered as it correlates with improved water conservation).

**RATES:**

The Board of trustees re-evaluates the water rates regularly and makes adjustment as needed. The Current rates are as follows:

# Summary of Rates

					<u>Current Rates</u>	<u>Rate Increase</u>
<u>Usage Charge</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Tier 1	\$1.65	\$1.90	\$2.09	\$2.30	\$2.53	\$2.78
Tier 2	\$1.90	\$2.19	\$2.40	\$2.64	\$2.91	\$3.20
Tier 3	\$2.90	\$3.34	\$3.67	\$4.04	\$4.44	\$4.88
Tier 4	\$3.70	\$4.26	\$4.68	\$5.15	\$5.66	\$6.23
Tier 5	\$4.45	\$5.12	\$5.63	\$6.19	\$6.81	\$7.49
<u>Base Meter Charge</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
5/8" Meter (Standard)	\$13.50	\$18.00	\$19.80	\$21.78	\$23.96	\$26.35
1" Meter	\$19.80	\$26.40	\$29.04	\$31.94	\$35.14	\$38.65
1 1/2" Meter	\$24.60	\$32.80	\$36.08	\$39.69	\$43.66	\$48.02
2" Meter	\$33.00	\$44.00	\$48.40	\$53.24	\$58.56	\$64.42
3" Meter	\$41.10	\$54.80	\$60.28	\$66.31	\$72.94	\$80.23

### HWID Usage Limits

<b>Tier 1</b>	1,000	to	8,000
<b>Tier 2</b>	8,001	to	20,000
<b>Tier 3</b>	20,001	to	35,000
<b>Tier 4</b>	35,001	to	50,000
<b>Tier 5</b>	> 50,000		

HOOPER WATER IMPROVEMENT DISTRICT supports the State of Utah in its efforts to conserve water. The District encourages the following watering guidelines:

- No watering between the hours of 10:00am to 6:00pm
- Watering only when needed
- Be wise and not wasteful of the water

## **GOALS:**

As mentioned, the majority of the District is served by secondary water providers for outside watering needs. The District's goal then becomes how to help customers conserve on indoor water use. Some suggestions for indoor conservation are as follows:

1. Provide information on our website concerning conservation for both indoor and outdoor use (more education for customers).
2. Since 2015 the District customers have already reduced their water usage by over 20%, which the state's goal for the District by 2030. We will continue to encourage customers to be wise in their water use as we work towards our goal of 26% water conservation by the year 2040.
3. The state has set a goal for a 20% reduction in water use in the District's area by the year 2030, a 26% reduction by the year 2040, and a 30% reduction by the year 2065.
4. The District encourages replacement of older less efficient plumbing fixtures with water efficient fixtures (toilets, faucets, showerhead and more efficient washing machines and dish-washers).
5. The District promotes developing water conserving habits.
6. HWID continues to work with Cities and secondary water providers to support and implement conservation. (It is recommended that water suppliers work with entities regulating development to implement guidelines that encourage and respond to market demands for smaller lot sizes).
7. We will continue to monitor the water use and make changes to the rates or tier structure as necessary to encourage conservation.

As residential water use has changed over the last few years (2016-2020), the District has experienced a 20.2% reduction in water use per ERC. The total number of gallons produced divided by the number of ERC's is the most accurate way for the District to evaluate water conservation.

The State of Utah has provided population estimates for our District. Based on those estimates, the current population is 19,485. The Gallons Per Customer Per Day (GCPD) is calculated on the delivered water divided by the population. The current GCPD for the District is 70. The GCPD for the District has been between 63 and 76 GCPD for the past 10 years. In 2018 the District began urging customers to make a strong effort to conserve water. Since then the GCPD has dropped from 76 to 70. The GCPD for HWID, which is in the Weber River Drainage, is 200 GCPD by 2030 and 175 by 2065. The District already exceeds each of those goals. The District will continue to provide information and encouragement for its customers to conserve water in any way that they can. While we have already met our goal, conservation will always be a goal for the District.

As per the requirements of this document, the conservation measure for the District is to continue to enforce secondary water use at all new development and to encourage the expansion of the local secondary water providers to all of the people in our District boundary. During the watering months of June through October, the GCPD of the District goes up to 95.

This number is still well below the goal for our area. The District will continue to monitor water use and make corrective actions if and when necessary.

Marvin L Zangg  
Chairman

10-15-2022  
Date

Annexa Lalanga  
Board Member

10-15-2022  
Date

Wayne S. Shaw  
Board Member

10-15-2022  
Date

Kerry J. ...  
Board Member

10-15-22  
Date

Ch. ...  
Board Member

10-15-22  
Date

Notice Information

[Add Notice to Calendar](#)

Notice Title:

Regularly Scheduled Board Meeting

Notice Subject(s):

Local Districts

Notice Type(s):

Notice, Meeting

Event Start Date & Time:

October 11, 2022 05:00 PM

Event End Date & Time:

October 11, 2022 06:00 PM

Description/Agenda:

HOOPER WATER IMPROVEMENT DISTRICT  
NOTICE

The regular meeting of the Board of Trustees of the Hooper Water Improvement District will be held on Tuesday, October 11, 2022 at 5:00 p.m. at the District Office 5555 W. 5500 S. in Hooper, Utah

\*If you would like to participate electronically, please notify the District 24 hours prior to the meeting\*