**PREPARED FOR:**

HERRIMAN CITY

**PREPARED BY:**

BOWEN COLLINS & ASSOCIATES

HERRIMAN CITY

NOVEMBER 2024

# HERRIMAN CITY 2024 WATER CONSERVATION PLAN

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**November 2024**

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## INTRODUCTION

Attitudes toward water supplies are changing. Water is no longer considered to have an endless supply, but is valued as a limited commodity that needs to be managed carefully. With this shift in attitude, conservation is becoming a larger part of water suppliers' plans to meet future water needs in Utah. Many water suppliers throughout the country have adopted conservation programs. Benefits experienced as a result of these programs include:

- Using existing water supplies more efficiently.
- Maximizing utilization of existing water conveyance, treatment and distribution facilities.
- Delaying or deferring expensive construction of capital improvement projects.
- Reducing the need for additional water supplies.

Herriman City has adopted water conservation as a key element in its long-term plan to serve its customers. As a result, the City has already reduced per capita water use by 18% since 2010. However, the City recognizes that per capita water use may return to higher levels without continued emphasis on the importance of conservation. Since sustained additional water conservation will be an important component in the City's plans for future water use, this water conservation plan evaluates the City's current conservation program, establishes the City's new conservation goal and discusses additional measures that will result in the increased conservation of water.

## HERRIMAN CITY WATER SYSTEM SERVICE AREA

Figure 1 shows the Herriman City corporate boundaries, water system service boundaries and the City's general plan for land use. For the most part, the system serves all development within the incorporated area of Herriman City. Herriman City also serves some of the demands of the High Country Estate subdivisions (Phases I and II which are not part of Herriman City) as a wholesale supply to the subdivisions.

Shown in City General Plan, but Annexed by South Jordan

Olympia

High Country Estates I

High Country Estates II

Riverton

Herriman

Bluffdale

CAMP WILLIAMS ARMY NATIONAL GUARD

SALT LAKE COUNTY
UTAH COUNTY

## Legend

**Service Area**

- Herriman Area
- Olympia Area

**General Plan Land Use**

**Future Land Use**

- Civic/Community
- Educational Village/Campus
- Employment Campus/Business Park
- Forest Residential/Recreational Resort
- General Retail
- Hillside/Agricultural Residential
- Mixed Neighborhood Two/Towne Center
- Mixed Use Neighborhood One
- Mountain/Canyon Residential
- Neighborhood Commercial/Node
- Neighborhood Residential One
- Neighborhood Residential Two
- Office Mixed Use
- Open Space
- Parks/Plazas
- Roads/Infrastructure/ROW
- Utilities/Support Services
- High Country Estates

NORTH:

SCALE: 0 2,000 4,000 Feet

# SERVICE AREAS

HERRIMAN CITY
WATER CONSERVATION PLAN

BOWEN COLLINS & ASSOCIATES

FIGURE NO. 1

P:\Herriman\217-21-03 - Water Master Plan Update\4.0 GIS\WC-Fig1-ServiceArea.mxd amckinnon 10/21/2024

## HISTORIC POPULATION AND FUTURE GROWTH

Herriman City is located within Salt Lake County near the south west end of the county boundary. Since the City's establishment in 1999, Herriman has significantly developed and grown with an estimated existing water system service area population of 68,861 people in 2024.

While Herriman City has experienced large amounts of growth in the past, substantial future growth through new development is expected. The historic and projected population estimates for Herriman City water system service area are shown in Table 1. Population projections from the years 2000-2065 have been obtained from the City's Water Master Plan prepared by Bowen Collins and Associates (BC&A).

**Table 1**
**Historic and Projected Water Service Area Population[1]**

| Year | Herriman City Water System Residential Population |
|---|---|
| 2000 | 1,523 |
| 2005 | 12,393 |
| 2010 | 21,785 |
| 2020 | 55,144 |
| 2024 | 68,861 |
| 2025 | 73,089 |
| 2030 | 92,854 |
| 2034 | 105,655 |
| 2035 | 108,342 |
| 2040 | 118,820 |
| 2045 | 125,221 |
| 2050 | 128,892 |
| 2055 | 130,921 |
| 2060 | 132,020 |
| 2065 | 132,608 |

[1] Historic and projected population values have been taken from those developed for the City's Water Master Plan.

## EXISTING WATER USERS (MUNICIPAL & INDUSTRIAL CONNECTIONS)

To quantify the amount of water that can reasonably be conserved in Herriman City, a cursory analysis of current water use patterns has been performed. Usage among different classes of customers for the year 2023 is presented in Table 2.

### Culinary Water Usage

Roughly 98 percent of the culinary meters in Herriman City are residential connections, accounting for 87 percent of the total culinary water use. Hence, residential water use represents the largest single area for potential conservation. Herriman City also has a small number of culinary commercial connections. While comprising approximately 2 percent of the total number of meters, commercial customers accounted for 4 percent of Herriman City's culinary water use. In addition, roughly 1 percent of the total culinary meters in Herriman City are institutional connections, accounting for approximately 8 percent of total water use. Thus, commercial and institutional accounts should not be overlooked as potential contributors to future conservation efforts. The City has one industrial connection that makes up only 0.1% of demand.

### Secondary Water Usage

Secondary water connections accounted for 15 percent of total water connections in Herriman City and approximately 8 percent of combined culinary and secondary water use.

**Table 2**
**2023 Water Usage by Connection Type[1]**

| Customer Class | Accounts | % of Connections | Annual Water Use (acer-ft) | % of Total Water Use |
|---|---|---|---|---|
| Residential | 14,718 | 97.5% | 6,680.7 | 87.2% |
| Commercial | 215 | 1.4% | 318.1 | 4.2% |
| Industrial | 1 | 0.0% | 8.0 | 0.1% |
| Institutional | 157 | 1.0% | 651.9 | 8.5% |
| **Total Culinary** | **15,091** | **100.0%** | **7,658.7** | **100.0%** |
| **Secondary** | | | | |
| Residential | 2,643 | 98.4% | 516.5 | 79.6% |
| Commercial | 19 | 0.7% | 16.6 | 2.6% |
| Industrial | 0 | 0.0% | 0.0 | 0.0% |
| Institutional | 23 | 0.9% | 115.8 | 17.8% |
| **Total Secondary** | **2,685** | **100.0%** | **648.9** | **100.0%** |
| **Total Culinary & Secondary** | **17,776** | **100.0%** | **8,307.6** | **100.0%** |

[1] Water usage by connection type data obtained from Herriman City's billing software and may not match reports to the State of Utah exactly.

## CURRENT AND FUTURE WATER SUPPLY

The following section summarizes Herriman City's current and future water supply as documented in Herriman City's Water Master Plan (BC&A). The existing supply for Herriman City is summarized in Table 3 below.

**Table 3**
**Estimated Production – Herriman City Average Year[1]**

| Supply Category | Estimated Production (acre-ft) |
|---|---|
| Existing Wells (Potable) | 3,915 |
| Purchased From Jordan Valley Water Conservancy District | 5,975 |
| Purchased from Bluffdale City (temporary arrangement) | 11.3 |
| Arnold Hollow Springs | 88.1 |
| Welby Jacob Canal (Secondary) | 804 |
| Existing Wells (Secondary) | 176 |
| **Total** | **10,969** |

### Future Supply

While the specific details regarding future source capacity are currently in evaluation, the majority of the City's future culinary demand is intended to be supplied by water purchased from Jordan Valley Water Conservancy District (JVWCD). The City's secondary system will be limited to areas with existing secondary infrastructure. Depending on development patterns in the City, the City may continue to purchase Welby Jacobs water to offset limits on JVWCD water supply based on JVWCD water budget per acre. The available water budget from JVWCD is only 1.35 acre-ft/acre for developing areas. The City will need to make up the difference between proposed development demands and this water availability budget through either donated water or additional costs. This emphasizes the need for conservation in the City.

## HISTORIC WATER PRODUCTION, SALES AND SYSTEM LOSS

### Historic Per Capita Water Production and Consumption

It is important to note that some of the production and consumption data since the year 2010 may not be as reliable as 2010 data. So even though the State of Utah conservation goal is based on 2015 data, the year 2010 data will be used as the baseline year for the purposes of this report because of high confidence in the population count and relative reliable data from the culinary water system. In 2012, the City began portions of its secondary water system. Although the City has meters on its secondary water system, the data reliability of some of its data acquisition systems was not as robust as for the culinary system (especially in 2015).

Historic water use in gallons per resident from 2010 to 2023 is summarized in Table 4. Table 4 also shows per capita water sales and per capita water production in Herriman for the same period. Per capita water use was quantified using available water production records and water sales records from the Division of Water Rights and population estimates.

As shown in Table 4, total metered water sales vary from a high of 192 gpcd in 2010 to a low of 158.1 gpcd in 2018.

Total per capita water production varies from a high of 192 gallons per capita per day (gpcd) in 2010 to a low of 147 gpcd in 2018. However, based on these numbers, system losses in the Herriman City water system are actually negative values. As a result, it does not appear that the production numbers are accurate enough to make any reliable conclusions regarding source production or system losses.

**Table 4**
**Historic Per Capita Water Production, Sales and System Loss[1]**

| Year | Herriman City Population | Historic Water Production (acre-ft)[1] | Per Capita Production (gpcd) | Historic Culinary Water Sales (acre-ft) | Per Capita Culinary Water Use (gpcd) | Historic Secondary Water Sales (acre-ft) | Per Capita Secondary Water Use (gpcd) | Total Historic Water Sales (acre-ft) | Total Per Capita Use (gpcd) | Total System Loss | Total System Loss % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000[2] | 1,523 | 431 | 252.3 | 150 | 88.1 | - | - | 150 | 88.1 | 280 | 65% |
| 2010 | 21,785 | 4,676 | 191.6 | 4,704 | 192.8 | - | - | 4,704 | 192.8 | -28 | -1% |
| 2011 | 25,922 | 2,984 | 102.8 | 5,629 | 193.9 | - | - | 5629 | 193.9 | -2645 | -89% |
| 2012 | 27,331 | 4,066 | 132.8 | 6,032 | 197 | - | - | 6,032 | 197 | -1966 | -48% |
| 2013 | 29,531 | 5,615 | 169.7 | 5,818 | 175.9 | - | - | 5818 | 175.9 | -203 | -4% |
| 2014 | 31,984 | 5,519 | 154 | 5,861 | 163.6 | - | - | 5,861 | 163.6 | -343 | -6% |
| 2015 | 34,801 | 5,914 | 151.7 | 6,430 | 164.9 | - | - | 6430 | 164.9 | -516 | -9% |
| 2016 | 38,811 | 5,320 | 122.4 | 6,377 | 146.7 | - | - | 6,377 | 146.7 | -1058 | -20% |
| 2017 | 44,465 | 6,942 | 139.4 | 7,582 | 152.2 | - | - | 7582 | 152.2 | -640 | -9% |
| 2018 | 51,681 | 8,515 | 147.1 | 8,028 | 138.7 | 1128 | 19.5 | 9,156 | 158.1 | -641 | -8% |
| 2019 | 51,348 | 8,695 | 151.2 | 7,443 | 129.4 | 654 | 11.4 | 8,098 | 140.8 | 597 | 7% |
| 2020 | 55,144 | 12,164 | 196.9 | 9,000 | 145.7 | 863 | 14.0 | 9,863 | 159.7 | 2,301 | 19% |
| 2021 | 58,198 | 10,844 | 166.3 | 8,635 | 132.5 | 1061 | 16.3 | 9,696 | 148.7 | 1,148 | 11% |
| 2022 | 60,385 | 11,637 | 172.0 | 8,502 | 125.7 | 932 | 13.8 | 9,434 | 139.5 | 2,203 | 19% |
| 2023 | 64,615 | 10,969 | 151.5 | 8,693 | 120.1 | 1018 | 14.1 | 9,711 | 134.2 | 1,258 | 11% |

[1] Historic water sales and production data are values on record from the Utah Division of Water Rights.
[2] Year 2000 data is considered to be unreliable.

## CURRENT PER CAPITA WATER USE

A thorough analysis of Herriman's current residential, commercial, industrial and institutional water use was completed. Estimated water use by type for the year 2023 is summarized in Table 5. Per capita water use for the year 2023 was estimated using the approximate population of 64,615 people for the year 2023 and monthly metered sales data provided by Herriman City.

**Residential Use** – Indoor residential water use was quantified using the average metered sales of residential users during the winter months. It is estimated that 48 percent of residential culinary water is used indoors while 52 percent is used outdoors.

**Industrial Use** – The City has one existing industrial user. Industrial use in July is 5 times higher than in the winter, but this may not be a direct result of outdoor irrigation as industrial and cooling uses can also increase in the summer. The additional cooling, manufacturing use, or outdoor use from April to October represents approximately 50 percent of total annual use.

**Commercial and Institutional Use–**Indoor water use for commercial and institutional users was quantified using the average metered sales of each user class during the winter months. On average it is estimated that 26 percent of culinary water is used indoors by commercial / institutional users while 74 percent is used outdoors.

**Secondary Water –** Approximately 14 gpcd of secondary water is used to water residential, commercial and institutional landscapes. This statistic is a little misleading because it spreads secondary water use across residents that do not have access to secondary water. Residential secondary water users used on average 0.20 acre-ft per connection.

**Table 5**
**2023 Per Capita Water Use By Type**

| User Type | Indoor Use (gpcd) | Outdoor Culinary Use (gpcd) | Outdoor Secondary Use (gpcd) | Total Use (gpcd) |
|---|---|---|---|---|
| Residential | 41.4 | 44.0 | - | 85.4 |
| Industrial | 0.05 | 0.06 | - | 0.11 |
| Commercial / Institutional | 8.6 | 15.8 | - | 24.4 |
| **Total** | **50.0** | **59.9** | **15.6** | **125.5** |

## CONSERVATION GOAL WITH MILESTONES

The State of Utah has adopted water conservation goals on a State-wide basis on a regional basis. The goal for Salt Lake County uses a 2015 baseline of water demand. For Herriman City, 2015 does not represent the most useful year to begin as a baseline for conservation. Because the City was still in the process of phasing in use of its secondary water system, data irregularities due to the secondary water system makes this year less useful. Data from the year 2010 is considered more reliable because the City had not yet begun using secondary water. Herriman City will match the conservation goal for the County, but use a 2010 baseline for conservation goals with an added 5 percent conservation assuming 1 percent conservation per year from 2010.

Water production and metered water sales records show that efforts made by the City's staff and residents have been effective in achieving a significant amount of conservation as the City has

substantiality grown and developed. Herriman's average daily per capita water use in 2010 was 192.8 gallons. Through conservation efforts, that number has been reduced to 151.5 gallons per capita per day in 2023. However, it's worth noting that per capita use was 196.9 gpcd in 2020 (a historically warm and dry year). Per capita water use is greatly reduced from where it was in 2010 and is already ahead of milestones associated with the State conservation goals.

To date, conservation efforts have primarily focused on education and pricing to motivate the voluntary efforts of customers to conserve. While the observed results are positive, there are still additional conservation measures that can further reduce water use. Herriman City personnel understand that additional conservation in the City is possible and are committed to making further progress in this area. However, to continue the trend of increasing conservation in the City, it is likely that a more aggressive effort and level of investment will be required.

**Draft Regional Conservation Goals –** Based on data collected regarding conservation potential throughout the State, the Draft Regional Conservation Goals identified for the Salt Lake Region recommend reducing year 2015 per capita water use by 11 percent by the year 2030. As stated above, Herriman City will be using year 2010 as a baseline for conservation goals and add 5 percent to the Salt Lake Regional goal. For example, the City's conservation goal for 2030 is 162 gpcd which is a 5 percent higher conservation amount than the regional goal. The City's target goals have been summarized in Table 6.

**Table 6**
**Conservation Goal Through 2065**

| Year | City Target Percent Conservation | Salt Lake Region Target Percent Conservation | Herriman City Target Per Capita Use (gpcd)* |
|---|---|---|---|
| 2010 | 0.00% | -- | 192.8 |
| 2015 | 5.00% | 0.00% | 183.2 |
| 2020 | 8.67% | 3.67% | 176.1 |
| 2025 | 12.33% | 7.33% | 169.0 |
| 2030 | 16.00% | 11.00% | 162.0 |
| 2040 | 20.00% | 15.00% | 154.2 |
| 2065 | 24.00% | 19.00% | 146.5 |

* The City has been using production to establish this conservation target. The State of Utah conservation goal is based on water sales.

Herriman City's per capita target for conservation is already well ahead of the State of Utah's goal for the Salt Lake Region which begins at 210 gpcd in 2015 based on water sales or 247 gpcd if estimated based on water production and the average 15 percent system loss for the State.

## CONSERVATION GOAL RELATIVE TO LAND USE

In addition to the measurable goals for conservation, the City has also adopted landscape water efficiency standards that will lead to significant conservation from historic production. Table 7 identifies Herriman City zoning types within the City and the associated outdoor water use estimates based on the City's water efficiency standards. Table 8 identifies Herriman City zoning types within the City and the total water use anticipated in 2024 based on land use type. Indoor use is anticipated to reduce every year following the City's conservation goal.

**Table 7**
**Zone Type Outdoor Water Use Targets**

| Zone Type | 2010 Outdoor Water Use (acre-ft/year*) | Maximum Outdoor Use Estimate (acre-ft/year*) | Percent Reduction |
|---|---|---|---|
| Roads/Infrastructure/ROW | 0.000 | 0.000 | 0% |
| Open Space | 0.000 | 0.000 | 0% |
| Utilities/Support Services | 0.061 | 0.036 | 40% |
| Parks/Plazas | 2.763 | 2.298 | 17% |
| Mountain/Canyon Residential | 0.014 | 0.012 | 16% |
| Forest Residential/Recreational Resort | 0.028 | 0.023 | 16% |
| Civic/Community | 2.456 | 1.540 | 37% |
| Hillside/Agricultural Residential | 0.935 | 0.715 | 24% |
| Neighborhood Residential One | 1.376 | 1.046 | 24% |
| Neighborhood Commercial/Node | 0.614 | 0.273 | 56% |
| Office Mixed Use | 0.614 | 0.273 | 56% |
| Employment Campus/Business Park | 0.461 | 0.273 | 41% |
| General Retail | 0.461 | 0.273 | 41% |
| Neighborhood Residential Two | 1.102 | 0.837 | 24% |
| Mixed Use Neighborhood One | 1.087 | 0.821 | 24% |
| Mixed Neighborhood Two/Towne Center | 0.614 | 0.469 | 24% |
| Educational Village/Campus | 1.300 | 1.008 | 22% |

*per gross acre

**Table 8**
**Zone Type Water Use Targets**

| Zone Type | Total Area (acres) | 2024 Indoor Water Use (acre-ft/year*) | Maximum Outdoor Use Estimate (acre-ft/year*) | 2024 Total Water Use (acre-ft/year*) |
|---|---|---|---|---|
| Roads/Infrastructure/ROW | 449 | 0.000 | 0 | 0.000 |
| Open Space | 3,052 | 0.000 | 0 | 0.000 |
| Utilities/Support Services | 707 | 0.000 | 0.036 | 0.036 |
| Parks/Plazas | 591 | 0.000 | 2.298 | 2.298 |
| Mountain/Canyon Residential | 4,573 | 0.064 | 0.012 | 0.076 |
| Forest Residential/Recreational Resort | 503 | 0.088 | 0.023 | 0.111 |
| Civic/Community | 416 | 0.230 | 1.54 | 1.770 |
| Hillside/Agricultural Residential | 932 | 0.295 | 0.715 | 1.010 |
| Neighborhood Residential One | 2,989 | 0.825 | 1.046 | 1.871 |
| Neighborhood Commercial/Node | 210 | 0.888 | 0.273 | 1.161 |
| Office Mixed Use | 50 | 1.077 | 0.273 | 1.350 |
| Employment Campus/Business Park | 657 | 1.122 | 0.273 | 1.395 |
| General Retail | 372 | 1.143 | 0.273 | 1.416 |
| Neighborhood Residential Two | 1,394 | 1.758 | 0.837 | 2.595 |
| Mixed Use Neighborhood One | 570 | 2.638 | 0.821 | 3.459 |
| Mixed Neighborhood Two/Towne Center | 378 | 3.517 | 0.469 | 3.986 |
| Educational Village/Campus | 88 | 3.884 | 1.008 | 4.892 |

*per gross acre

## PROJECTED WATER SUPPLY AND DEMAND

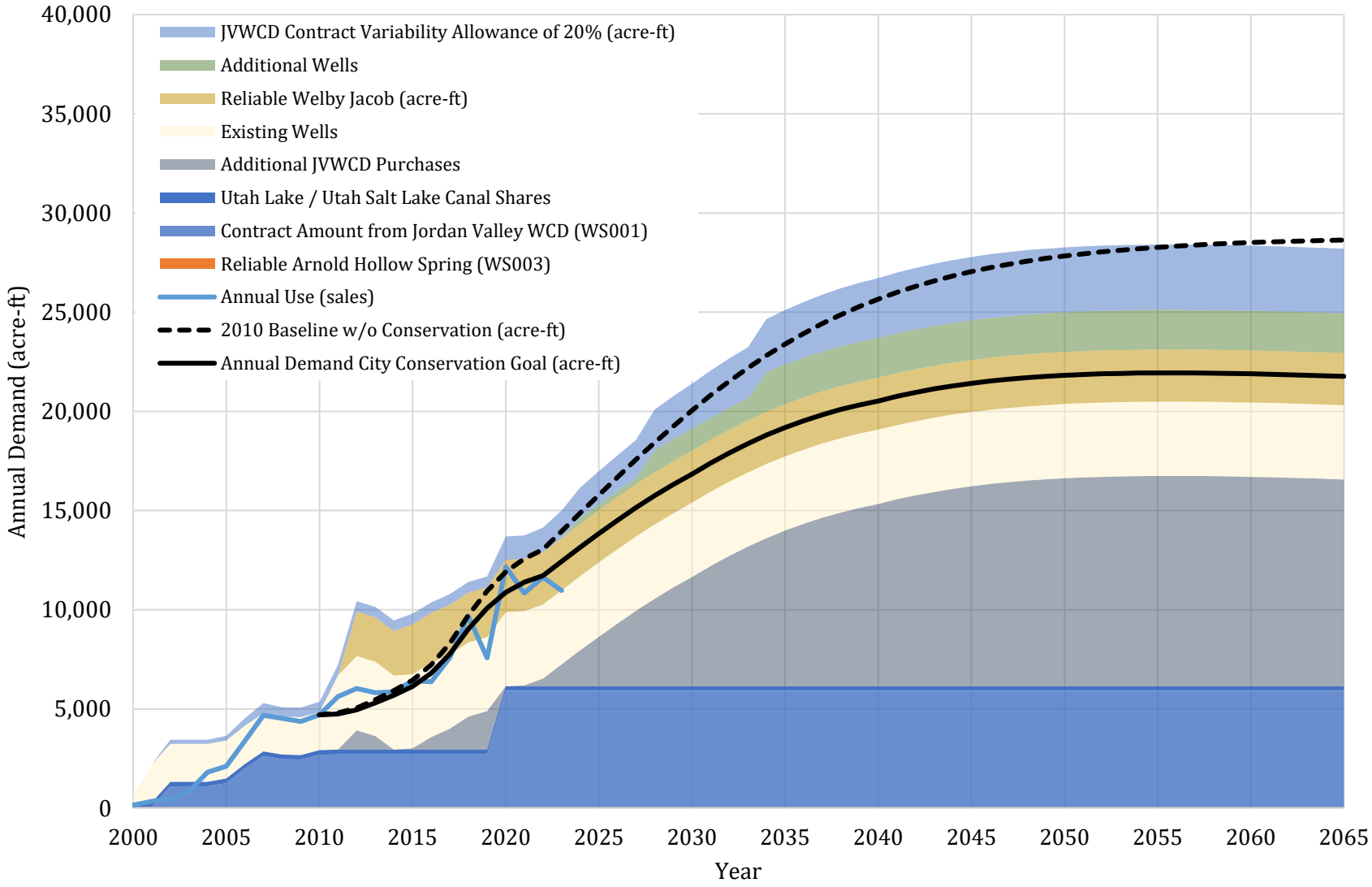
To adequately represent the implications of the City's water conservation goals, a comparison of projected demands (based on total system production requirements) and available supplies must be made. Table 9 shows the projected water production requirements for the City with conservation and the projected production requirements if no conservation occurs. Perhaps most importantly, Table 9 also compares projected demands against the existing available water supply. This same information is shown graphically in Figure 2.

**Table 9**
**Projected Water Production Requirements[1]**

| Year | Estimated Herriman City Population | Projected Production Requirements Without Conservation (acre-ft) | Projected Production Requirements with Conservation (acre-ft) | Total Supply (acre-ft) | Estimated New Supply Development Which Can Be Delayed Through Conservation (acre-ft) |
|---|---|---|---|---|---|
| 2010 | 21,785 | 4,704 | 4,704 | 6,292 | 0 |
| 2020 | 55,144 | 11,908 | 10,876 | 12,164 | 0 |
| 2025 | 73,089 | 15,783 | 13,836 | 12,164 | 1,947 |
| 2030 | 92,854 | 20,051 | 16,843 | 12,164 | 3,208 |
| 2035 | 108,342 | 23,395 | 19,184 | 12,164 | 4,211 |
| 2040 | 118,820 | 25,658 | 20,526 | 12,164 | 5,132 |
| 2045 | 125,221 | 27,040 | 21,416 | 12,164 | 5,624 |
| 2050 | 128,892 | 27,833 | 21,821 | 12,164 | 6,012 |
| 2055 | 130,921 | 28,271 | 21,938 | 12,164 | 6,333 |
| 2060 | 132,020 | 28,508 | 21,894 | 12,164 | 6,614 |
| 2065 | 132,608 | 28,635 | 21,763 | 12,164 | 6,872 |

[1] Herriman City Water Master Plan.

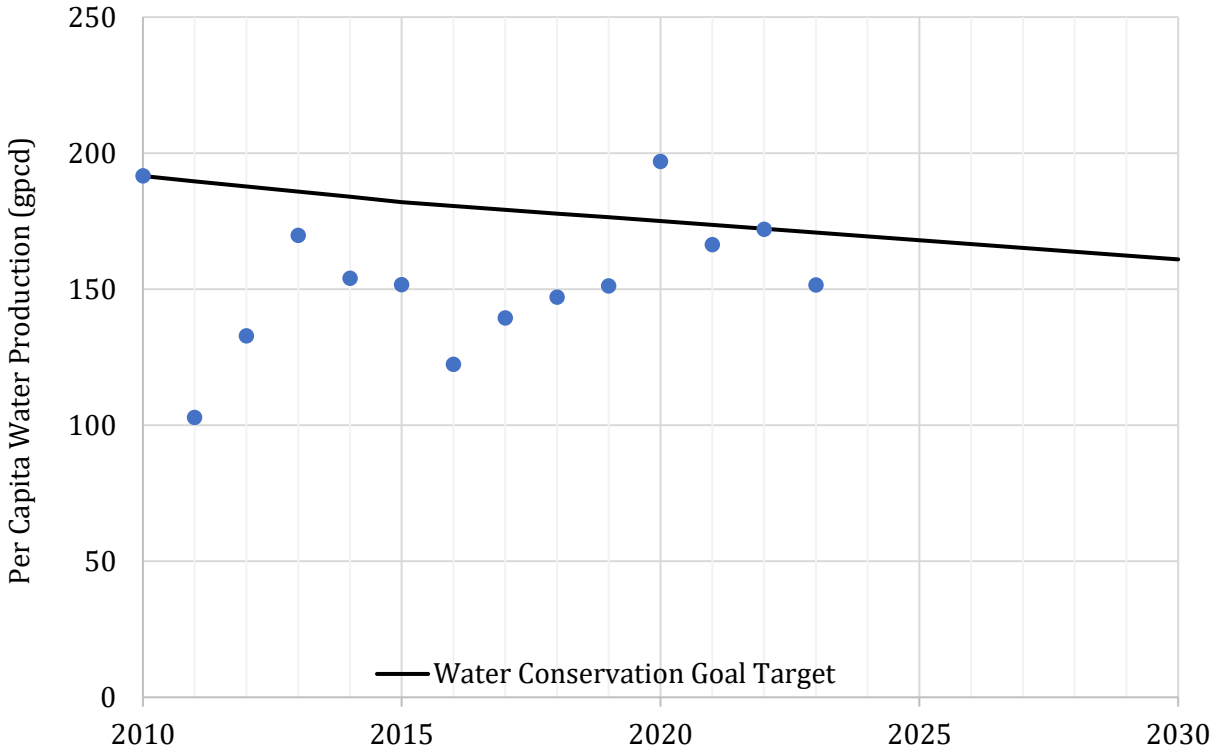
***Figure 2: Per Capita Demand Projections & Conservation Goals***



## MEASURING SAVINGS FROM CONSERVATION

Figure 3 graphically show historic annual per capita culinary water use for the period from 2010 through 2023. Figure 3 graphically shows the annual percent reduction from 2010 average water use.

***Figure 3: Historic Per Capita Water Use***




As can be seen in the figure, the City's per capita use is trending downward. For 2023, Herriman per capita demand was 21% less than in 2010. However, 2022 demand matched the City's conservation goal exactly. Moving forward, the City will need to figure out how to both reduce long-term water use trends and how to sustain these reductions during hot and dry years.

## WATER METERING AND REPLACEMENT SCHEDULE

Currently, all culinary water connections in the Herriman City water system service area are metered and read on an monthly basis. Including meters at every culinary and secondary water service connection was an important part of the City's conservation plan. In addition, the City has a goal of replacing water meters every 15 – 20 years as needed to maintain meter and reporting accuracy.

The City recently switched to an automated metering infrastructure (AMI) system that is read remotely and has leak detection capabilities (all meters installed after 2011 read usage every 15-minutes). This allows City personnel to notify residents on a monthly basis if a leak is detected. All new meters in the City will have this capability.

## CURRENT RATES

To encourage conservation, the City has implemented a tiered water rate structure for both culinary and secondary water (full water rate schedule is attached as Appendix A). All water connections are charged a monthly base rate based on the meter size with no monthly water allowance included in the base rate. Each tier in the structure charges a higher rate based on the quantity of water being used.

## CURRENT CONSERVATION PRACTICES

As part of its overall water supply plan, Herriman City has been very aggressive in implementing several conservation measures to reduce water usage. The City's water system is well maintained and operated. The City has been proactive in implementing and maintaining many programs to ensure that the water system meets high operating standards. Each of these programs is discussed in detail below.

**Aggressive System Maintenance and Operations Program –** Herriman City will continue to maintain and improve its existing water system maintenance and operations program as outlined below:

- ***Mainline Replacement Program***: Since the City's infrastructure is relativity new a mainline replacement program has yet not been established. However, based on expected design life of the Herriman City water system, the City should expect to replace the pipes in its water system distribution network every 100-years.
- ***Advanced Metering Infrastructure (AMI)***: All retail meters within the City are AMI. AMI technology automatically collects status data, diagnostic and consumption from water meters. That AMI data is transferred to a central database for analyzing, billing and troubleshooting. The AMI system allows the City to monitor demands on a daily basis and provide frequent feedback to users on their water use habits.
- ***Meter Leak Detection*** – All meters installed since 2011 can log water use every 15 minutes and can detect fixture leaks at connections. This data is used to notify users of leaks in household fixtures.

**SCADA Control System –** The City currently utilizes Supervisory Control and Data Acquisition as a critical component of operating and understanding the City's water system. The City is continuing to look for areas where additional improvements will increase overall system operating and reporting efficiency.

**Secondary Water System** – The City has a significant amount of secondary pipes in pressure zones 1 to 4. As part of the secondary system, meter boxes and setters are installed so that secondary water can be tracked and paid for by volume.

**Rain Sensors Installed in Parks –** The City has been installing rain sensors at all new City parks and open spaces and intends to install rain sensors at existing parks and open spaces as budget allows. These devices can detect rainfall events and send messages to the central control computer, indicating how much precipitation has been received at the site and can terminate a watering cycle when the precipitation makes irrigation unnecessary.

**Open Space & Parks** – The City meters water use at all parks and open spaces and evaluates use at larger parks on an annual basis to determine if any changes to irrigation patterns are warranted.

**Tiered Water Rates** – To encourage conservation, the City has implemented a tiered water rate structure for culinary and secondary water. The goal is to reduce peak system demands and reduce the waste of water on outdoor landscaping uses.

**Public Awareness/Public Education Programs –** Over the years a significant amount of water reduction has been achieved through increased awareness and water conservation education. The following is a list of ongoing public awareness and educational programs which the City will continue to utilize and implement:

- ***Consumer Confidence Report –*** Each year, water conservation information is included in the consumer confidence report. This report is sent to all Herriman City customers and is posted on the City's web site. The report also includes information on the City's water sources, water quality information, and conservation tips.
- ***Flyers –*** Occasionally, flyers are sent to all consumers in their monthly water bills giving information on water conservation and tips on methods to conserve water both indoor and outdoor. Flyers are also located in the City offices giving facts and tips on water conservation.
- ***Education Programs –*** The City participates with JVWCD in the "Slow the Flow" educational program and encourages the use of water wise plumbing fixtures, landscaping plans, and irrigation systems. A link to educational programs offered by JVWCD is included on the City's website.
- ***Public Education Efforts –*** Herriman City currently supports many water conservation programs. Herriman City plans to remain active in public education on water conservation to sustain a long-term reduction in water use.
- ***Water Wise Landscaping –*** Many of the City's landscapes consist of water wise landscaping. The increased use of water wise landscaping and the installation of rain sensors has helped the City conserve water and demonstrate outdoor water conserving practices.

**City Ordinances Regarding Water Conservation –** The City adopted the JVWCD model landscape efficiency standard in December 2020. The ordinance requires new commercial and multifamily developments, as well as new City-owned properties, to submit landscape and irrigation plans during the development review process. The plans are required to be designed by certified professionals in both landscape and irrigation systems. The landscaped areas of the new developments are required to meet certain irrigation system efficiency standards once installation is completed. In addition, water conserving plants are required for areas with steep slopes. The developments are required to pass a water audit once the irrigation systems have been installed.

- ***Water Conservation Plan –*** The City updates its Water Conservation Plan at least every five years and adopts it by Ordinance.
- ***Annual Meter Leak Audit –*** The City has been participating in a water audit program with its meter supplier. This program helps water suppliers quantify system water loss and associated revenue losses.
- ***Rain Barrel Program –*** The City provides rain barrels to City residents at cost to reduce water system demand.
- ***Utah Water Savers –*** Because of the City's adopted water efficiency landscape standards, the City qualifies to be full participants in the Utah Water Savers program. This program offers up to $3/square foot of removed grass, $100 for WaterSense smart controllers, and $150 for old toilet replacements.

## NEW CONSERVATION PRACTICES PLANNED FOR IMPLEMENTATION

There are several new conservation practices that the City has either recently started to implement or will implement in the next few years. Table 10 summarizes the implementation schedule, estimated costs and potential partners of the new practices.

**Customer Portal for Water Use Monitoring –** The City is working on developing a new customer web-portal to allow data collected through the AMI system to be viewed to allow customers to review their water use, set monthly parameters, and compare their water usage with surrounding residents.

**Non-Functional Turf Identification for City Property –** The City will identify non-functional turf on City owned properties and create a schedule to convert the areas to waterwise landscaping.

**Leak Detection Program –** The City is investigating leak detection technology. The City plans to meet with at least two vendors in the next year to review options for identifying leaks on services and/or from mains.

**Large Water User Audits –** The City will conduct audits on large industrial, commercial, and residential users to identify the source of demand and potentially identify ways to conserve additional water. As part of these audits, the City will identify the efficacy of water efficiency standards and what other options can be used to reduce water use.

**Table 10**
**Implementation Schedule, Estimated Costs & Measurement of Progress**

| New Conservation Practices | Implementation Timeline | Estimated Cost | Measurement of Progress |
|---|---|---|---|
| Water Conservation Plan | Complete by Year End 2024 | $15,000 | Completion of Report |
| Public Education Efforts | Ongoing | $63,000/yr | Completion of any of the associated tasks recommended (See New Conservation Practices) |
| Customer Portal for Water Use Monitoring | Complete by Year End 2025 | $10,000 | Available Portal |
| Rain Barrel Program | Ongoing | $4,600/yr | Complete any of the associated tasks recommended (See New Conservation Practices) |
| Water Conservation Coordinator | Ongoing | $72,000/yr | Completed audit score and record |
| Non-functional Turf Identification | Complete by Year End 2025 | $0 | Map & Schedule Developed |
| Turf Replacement Project Design | Complete by Year End 2025 | $30,000 | Completion of Design |
| Turf Replacement (73,000 sf) – Herriman Main St Center Median | Complete by Year End 2026 | $876,000 | Measure area of replacement |
| Leak Detection technology Investigation | Complete 2025 | $0 | Meet with at least two vendors |
| Large Water User Audits | Ongoing | $0 | Audit top 10 water users and report findings and recommendations |

## WATER CONSERVATION COORDINATOR AND COMMITTEES

### Water Conservation Coordinator

The City has designated William Szwarc as the City's Water Conservation Coordinator. The coordinator is responsible for all City conservation efforts including the Public Education Program, the Water Conservation Workshop, distributing City conservation information at City events, enforcing the Water Efficiency Standards, and acting as the liaison for water conservation matters between the citizens and City officials.

## WATER CONSERVATION PLAN AUTHOR(S)

This plan was prepared by Bowen Collins & Associates at the Draper office:

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## HERRIMAN CITY CONTACTS

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Herriman, UT 84096
801-446-5323

Justun Edwards, Director of Public Works
jedwards@herriman.org

# APPENDIX A

# HERRIMAN CITY WATER RATES

## Table B1
## Base Rates (Cost per ERU)

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|
| **City Owned Culinary Zones 1-4** | | | | | | | |
| 3/4-inch & 1-inch | $28.97 | $28.97 | Combined with Culinary MM Residential/Non-Residential Rates | | | | |
| 1 1/2-inch | $39.82 | $39.82 | | | | | |
| 2-inch | $57.91 | $57.91 | | | | | |
| 3-inch | $194.24 | $194.24 | | | | | |
| 4-inch | $244.92 | $244.92 | | | | | |
| 6-inch | $363.14 | $363.14 | | | | | |
| 8-inch | $498.27 | $498.27 | | | | | |
| **Culinary Residential Zones 1-9, Without Secondary Access,** | | | | | | | |
| **Culinary MM-Residential/Non Res Zones 1-4 and** | | | | | | | |
| **Culinary Outdoor Irrigation Zones 1-4** | | | | | | | |
| 3/4-inch & 1-inch | $29.55 | $29.55 | $34.37 | $38.83 | $43.88 | $46.95 | $48.36 |
| 1 1/2-inch | $40.47 | $40.47 | $47.07 | $53.19 | $60.10 | $64.31 | $66.24 |
| 2-inch | $59.08 | $59.08 | $68.71 | $77.64 | $87.74 | $93.88 | $96.69 |
| 3-inch | $118.16 | $118.16 | $137.42 | $155.28 | $175.47 | $187.75 | $193.39 |
| 4-inch | $249.90 | $249.90 | $290.63 | $328.42 | $371.11 | $397.09 | $409.00 |
| 6-inch | $370.42 | $370.42 | $430.80 | $486.80 | $550.09 | $588.59 | $606.25 |
| 8-inch | $508.24 | $508.24 | $591.08 | $667.92 | $754.75 | $807.59 | $831.81 |
| 10-inch | $806.03 | $806.03 | $937.41 | $1,059.28 | $1,196.98 | $1,280.77 | $1,319.19 |
| **Culinary Residential Zones 1-4 with Secondary Access** | | | | | | | |
| 3/4-inch & 1-inch | $19.69 | $19.69 | $22.90 | $25.88 | $29.24 | $31.29 | $32.23 |
| **Culinary MM-Residential/Non Res Zones 5-6 w/o Access to Secondary and** | | | | | | | |
| **Culinary Outdoor Irrigation Zones 5-6** | | | | | | | |
| 3/4-inch & 1-inch | $32.43 | $32.43 | $37.72 | $42.62 | $48.16 | $51.53 | $53.08 |
| 1 1/2-inch | $44.43 | $44.43 | $51.67 | $58.39 | $65.98 | $70.60 | $72.72 |
| 2-inch | $64.87 | $64.87 | $75.44 | $85.25 | $96.33 | $103.08 | $106.17 |
| 3-inch | $129.73 | $129.73 | $150.88 | $170.49 | $192.65 | $206.14 | $212.32 |
| 4-inch | $274.39 | $274.39 | $319.12 | $360.60 | $407.48 | $436.00 | $449.08 |
| 6-inch | $406.74 | $406.74 | $473.04 | $534.53 | $604.02 | $646.30 | $665.69 |
| 8-inch | $558.04 | $558.04 | $649.00 | $733.37 | $828.71 | $886.72 | $913.32 |
| 10-inch | $885.02 | $885.02 | $1,029.28 | $1,163.08 | $1,314.29 | $1,406.29 | $1,448.47 |
| **Culinary MM-Residential/Non Res Zones 7-9** | | | | | | | |
| 3/4-inch & 1-inch | $40.12 | $40.12 | $46.66 | $52.73 | $59.58 | $63.75 | $65.66 |
| 1 1/2-inch | $55.10 | $55.10 | $64.08 | $72.41 | $81.83 | $87.55 | $90.18 |
| 2-inch | $80.45 | $80.45 | $93.56 | $105.73 | $119.47 | $127.83 | $131.67 |
| 3-inch | $160.87 | $160.87 | $187.09 | $211.41 | $238.90 | $255.62 | $263.29 |
| 4-inch | $340.25 | $340.25 | $395.71 | $447.15 | $505.28 | $540.65 | $556.87 |
| 6-inch | $504.35 | $504.35 | $586.56 | $662.81 | $748.98 | $801.41 | $825.45 |
| 8-inch | $691.97 | $691.97 | $804.76 | $909.38 | $1,027.60 | $1,099.53 | $1,132.52 |
| 10-inch | $1,097.44 | $1,097.44 | $1,276.32 | $1,442.24 | $1,629.74 | $1,743.82 | $1,796.13 |
| **Culinary Wholesale** | | | | | | | |
| | $44.31 | $44.31 | Combined with Culinary MM Residential/Non-Residential Rates | | | | |
| **Culinary South East Herriman Bluffdale Residential** | | | | | | | |
| | $14.65 | $14.65 | $17.04 | $19.25 | $21.76 | $23.28 | $23.98 |
| **Culinary South East Herriman Bluffdale Commercial** | | | | | | | |
| | $36.61 | $36.61 | $42.58 | $48.11 | $54.37 | $58.17 | $59.92 |
| **Secondary City-Owned Zones 1-4** | | | | | | | |
| 3/4-inch & 1-inch | $26.59 | $26.59 | Combined with Culinary MM Residential/Non-Residential Rates | | | | |
| 1 1/2-inch | $36.42 | $36.42 | | | | | |
| 2-inch | $53.16 | $53.16 | | | | | |
| 3-inch | $106.34 | $106.34 | | | | | |
| 4-inch | $224.91 | $224.91 | | | | | |
| 6-inch | $333.38 | $333.38 | | | | | |
| 8-inch | $457.41 | $457.41 | | | | | |
| 10-inch | $725.43 | $725.43 | | | | | |
| **Secondary Residential 3/4" & 1" Zones 1-4** | | | | | | | |
| | $9.85 | $9.85 | $11.46 | $12.94 | $14.63 | $15.65 | $16.12 |
| **Secondary MM Res/Non Res Zones 1-4** | | | | | | | |
| 3/4-inch & 1-inch | $26.58 | $26.58 | $30.91 | $34.93 | $39.47 | $42.24 | $43.50 |
| 1 1/2-inch | $36.42 | $36.42 | $42.36 | $47.86 | $54.08 | $57.87 | $59.61 |
| 2-inch | $53.16 | $53.16 | $61.83 | $69.86 | $78.94 | $84.47 | $87.00 |
| 3-inch | $106.34 | $106.34 | $123.67 | $139.75 | $157.92 | $168.97 | $174.04 |
| 4-inch | $224.91 | $224.91 | $261.57 | $295.57 | $334.00 | $357.38 | $368.10 |
| 6-inch | $333.38 | $333.38 | $387.72 | $438.12 | $495.08 | $529.74 | $545.63 |
| 8-inch | $457.41 | $457.41 | $531.97 | $601.12 | $679.27 | $726.82 | $748.62 |
| 10-inch | $725.43 | $725.43 | $843.68 | $953.35 | $1,077.29 | $1,152.70 | $1,187.28 |
| **Culinary Outdoor Irrigation Zones 7-9** | | | | | | | |
| 3/4-inch & 1-inch | $40.22 | $40.22 | $46.78 | $52.86 | $59.73 | $63.91 | $65.83 |
| 1 1/2-inch | $55.10 | $55.10 | $64.08 | $72.41 | $81.83 | $87.55 | $90.18 |
| 2-inch | $80.45 | $80.45 | $93.56 | $105.73 | $119.47 | $127.83 | $131.67 |
| 3-inch | $160.87 | $160.87 | $187.09 | $211.41 | $238.90 | $255.62 | $263.29 |
| 4-inch | $340.25 | $340.25 | $395.71 | $447.15 | $505.28 | $540.65 | $556.87 |
| 6-inch | $504.35 | $504.35 | $586.56 | $662.81 | $748.98 | $801.41 | $825.45 |
| 8-inch | $691.97 | $691.97 | $804.76 | $909.38 | $1,027.60 | $1,099.53 | $1,132.52 |
| 10-inch | $1,097.44 | $1,097.44 | $1,276.32 | $1,442.24 | $1,629.74 | $1,743.82 | $1,796.13 |
| **Hi Country I & II** | | | | | | | |
| | $30.40 | $30.40 | $35.36 | $39.95 | $45.15 | $48.31 | $49.75 |

**Customers Outside of Herriman City will be charged two-times the applicable rate schedule listed above.*

## Table B2
## Volume Rates (Cost per Thousand Gallons)

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|
| **City-Owned Zones 1-4** | | | | | | | |
| Tier 1 (All Use) | $2.10 | $2.10 | Combined with Culinary MM Residential/Non-Residential Rates | | | | |
| **Culinary Residential 3/4" & 1" Without Access to Secondary - Zones 1-4** | | | | | | | |
| Tier 1 | $1.84 | $1.84 | $2.04 | $2.31 | $2.61 | $2.79 | $2.87 |
| Tier 2 | $1.96 | $1.96 | $2.16 | $2.44 | $2.76 | $2.95 | $3.04 |
| Tier 3 | $2.11 | $2.11 | $2.49 | $2.81 | $3.18 | $3.40 | $3.50 |
| Tier 4 | $2.45 | $2.45 | $3.21 | $3.63 | $4.10 | $4.39 | $4.52 |
| Tier 5 | $2.81 | $2.81 | $4.15 | $4.69 | $5.30 | $5.67 | $5.84 |
| Tier 6 | $3.68 | $3.68 | $5.54 | $6.26 | $7.07 | $7.56 | $7.79 |
| **Culinary Residential 3/4" & 1" Without Access to Secondary - Zones 5-6** | | | | | | | |
| Tier 1 | $2.03 | $2.03 | $2.24 | $2.53 | $2.86 | $3.06 | $3.15 |
| Tier 2 | $2.14 | $2.14 | $2.38 | $2.69 | $3.04 | $3.25 | $3.35 |
| Tier 3 | $2.31 | $2.31 | $2.74 | $3.10 | $3.50 | $3.75 | $3.86 |
| Tier 4 | $2.67 | $2.67 | $3.53 | $3.99 | $4.51 | $4.83 | $4.97 |
| Tier 5 | $3.09 | $3.09 | $4.57 | $5.16 | $5.83 | $6.24 | $6.43 |
| Tier 6 | $4.04 | $4.04 | $6.09 | $6.88 | $7.77 | $8.31 | $8.56 |
| **Culinary Residential 3/4" & 1" Without Access to Secondary - Zones 7-8** | | | | | | | |
| Tier 1 | $2.52 | $2.52 | $2.77 | $3.13 | $3.54 | $3.79 | $3.90 |
| Tier 2 | $2.65 | $2.65 | $2.94 | $3.32 | $3.75 | $4.01 | $4.13 |
| Tier 3 | $2.88 | $2.88 | $3.38 | $3.82 | $4.32 | $4.62 | $4.76 |
| Tier 4 | $3.32 | $3.32 | $4.37 | $4.94 | $5.58 | $5.97 | $6.15 |
| Tier 5 | $3.83 | $3.83 | $5.65 | $6.38 | $7.21 | $7.71 | $7.94 |
| Tier 6 | $5.01 | $5.01 | $7.53 | $8.51 | $9.62 | $10.29 | $10.60 |
| **Culinary Residential Zone 1-4 with Access to Secondary** | | | | | | | |
| Tier 1 | $1.84 | $1.84 | $2.04 | $2.31 | $2.61 | $2.79 | $2.87 |
| Tier 2 | $1.96 | $1.96 | $2.16 | $2.44 | $2.76 | $2.95 | $3.04 |
| Tier 3 | $2.38 | $2.38 | $2.86 | $3.23 | $3.65 | $3.91 | $4.03 |
| Tier 4 | $2.93 | $2.93 | $3.69 | $4.17 | $4.71 | $5.04 | $5.19 |
| Tier 5 | $3.47 | $3.47 | $4.78 | $5.40 | $6.10 | $6.53 | $6.73 |
| Tier 6 | $4.22 | $4.22 | $6.36 | $7.19 | $8.12 | $8.69 | $8.95 |
| **Culinary MM-Residential/Non Residential Zone 1-4 (All Meter Sizes)** | | | | | | | |
| Tier 1 (All Use) | $2.36 | $2.36 | $2.49 | $2.81 | $3.18 | $3.40 | $3.50 |
| **Culinary MM-Residential/Non Residential Zone 5-6 & Culinary Wholesale Water and Hi Country I & II** | | | | | | | |
| Tier 1 (All Use) | $2.36 | $2.36 | $2.74 | $3.10 | $3.50 | $3.75 | $3.86 |
| **Culinary MM-Residential/Non Residential Zone 7-9** | | | | | | | |
| Tier 1 (All Use) | $2.93 | $2.93 | $3.41 | $3.85 | $4.35 | $4.65 | $4.79 |
| **Culinary South East Herriman (Residential & Commercial)** | | | | | | | |
| Tier 1 | $2.81 | $2.81 | $3.27 | $3.70 | $4.18 | $4.47 | $4.60 |
| Tier 2 | $3.35 | $3.35 | $3.90 | $4.41 | $4.98 | $5.33 | $5.49 |
| Tier 3 | $4.27 | $4.27 | $4.97 | $5.62 | $6.35 | $6.79 | $6.99 |
| Tier 4 | $5.13 | $5.13 | $5.97 | $6.75 | $7.63 | $8.16 | $8.40 |
| **Secondary Residential & Secondary MM Residential/Non Residential Zones 1-4** | | | | | | | |
| Tier 1 | $1.50 | $1.50 | $1.73 | $1.95 | $2.20 | $2.35 | $2.42 |
| Tier 2 | $1.81 | $1.81 | $1.99 | $2.25 | $2.54 | $2.72 | $2.80 |
| Tier 3 | $2.10 | $2.10 | $2.57 | $2.90 | $3.28 | $3.51 | $3.62 |
| Tier 4 | $2.65 | $2.65 | $3.32 | $3.75 | $4.24 | $4.54 | $4.68 |
| Tier 5 | $3.10 | $3.10 | $4.43 | $5.01 | $5.66 | $6.06 | $6.24 |
| **Culinary Outdoor Irrigation Zones 1-4** | | | | | | | |
| Tier 1 | $2.14 | $2.14 | $2.16 | $2.44 | $2.76 | $2.95 | $3.04 |
| Tier 2 | $2.32 | $2.32 | $2.49 | $2.81 | $3.18 | $3.40 | $3.50 |
| Tier 3 | $2.67 | $2.67 | $3.21 | $3.63 | $4.10 | $4.39 | $4.52 |
| Tier 4 | $3.10 | $3.10 | $4.15 | $4.69 | $5.30 | $5.67 | $5.84 |
| Tier 5 | $4.05 | $4.05 | $5.54 | $6.26 | $7.07 | $7.56 | $7.79 |
| **Culinary Outdoor Irrigation Zones 5-6** | | | | | | | |
| Tier 1 | $2.36 | $2.36 | $2.38 | $2.69 | $3.04 | $3.25 | $3.35 |
| Tier 2 | $2.55 | $2.55 | $2.74 | $3.10 | $3.50 | $3.75 | $3.86 |
| Tier 3 | $2.93 | $2.93 | $3.53 | $3.99 | $4.51 | $4.83 | $4.97 |
| Tier 4 | $3.40 | $3.40 | $4.57 | $5.16 | $5.83 | $6.24 | $6.43 |
| Tier 5 | $4.45 | $4.45 | $6.09 | $6.88 | $7.77 | $8.31 | $8.56 |
| **Culinary Outdoor Irrigation Zones 7-9** | | | | | | | |
| Tier 1 | $2.93 | $2.93 | $2.94 | $3.32 | $3.75 | $4.01 | $4.13 |
| Tier 2 | $3.16 | $3.16 | $3.38 | $3.82 | $4.32 | $4.62 | $4.76 |
| Tier 3 | $3.65 | $3.65 | $4.37 | $4.94 | $5.58 | $5.97 | $6.15 |
| Tier 4 | $4.21 | $4.21 | $5.65 | $6.38 | $7.21 | $7.71 | $7.94 |
| Tier 5 | $5.51 | $5.51 | $7.53 | $8.51 | $9.62 | $10.29 | $10.60 |

**Customers Outside of Herriman City will be charged two-times the applicable rate schedule listed above.*

| OLYMPIA HILLS VOLUME RATES | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| **Olympia Hills Culinary Residential 3/4" & 1" Without Access to Secondary - Zones 1-4** | | | | | | | |
| Tier 1 | -- | -- | $3.81 | $4.17 | $4.56 | $4.84 | $5.02 |
| Tier 2 | -- | -- | $3.93 | $4.30 | $4.71 | $5.00 | $5.19 |
| Tier 3 | -- | -- | $4.26 | $4.67 | $5.13 | $5.45 | $5.65 |
| Tier 4 | -- | -- | $4.98 | $5.49 | $6.05 | $6.44 | $6.67 |
| Tier 5 | -- | -- | $5.92 | $6.55 | $7.25 | $7.72 | $7.99 |
| Tier 6 | -- | -- | $7.31 | $8.12 | $9.02 | $9.61 | $9.94 |
| **Olympia Hills Culinary Residential 3/4" & 1" Without Access to Secondary - Zones 5-6** | | | | | | | |
| Tier 1 | -- | -- | $4.01 | $4.39 | $4.81 | $5.11 | $5.30 |
| Tier 2 | -- | -- | $4.15 | $4.55 | $4.99 | $5.30 | $5.50 |
| Tier 3 | -- | -- | $4.51 | $4.96 | $5.45 | $5.80 | $6.01 |
| Tier 4 | -- | -- | $5.30 | $5.85 | $6.46 | $6.88 | $7.12 |
| Tier 5 | -- | -- | $6.34 | $7.02 | $7.78 | $8.29 | $8.58 |
| Tier 6 | -- | -- | $7.86 | $8.74 | $9.72 | $10.36 | $10.71 |
| **Olympia Hills Culinary MM-Residential/Non Residential Zone 1-4 (All Meter Sizes)** | | | | | | | |
| Tier 1 (All Use) | -- | -- | $4.26 | $4.67 | $5.13 | $5.45 | $5.65 |
| **Olympia Hills Culinary MM-Residential/Non Residential Zone 5-6** | | | | | | | |
| Tier 1 (All Use) | -- | -- | $4.51 | $4.96 | $5.45 | $5.80 | $6.01 |
| **Olympia Hills Culinary Outdoor Irrigation Zones 1-4** | | | | | | | |
| Tier 1 | -- | -- | $3.93 | $4.30 | $4.71 | $5.00 | $5.19 |
| Tier 2 | -- | -- | $4.26 | $4.67 | $5.13 | $5.45 | $5.65 |
| Tier 3 | -- | -- | $4.98 | $5.49 | $6.05 | $6.44 | $6.67 |
| Tier 4 | -- | -- | $5.92 | $6.55 | $7.25 | $7.72 | $7.99 |
| Tier 5 | -- | -- | $7.31 | $8.12 | $9.02 | $9.61 | $9.94 |
| **Olympia Hills Culinary Outdoor Irrigation Zones 5-6** | | | | | | | |
| Tier 1 | -- | -- | $4.15 | $4.55 | $4.99 | $5.30 | $5.50 |
| Tier 2 | -- | -- | $4.51 | $4.96 | $5.45 | $5.80 | $6.01 |
| Tier 3 | -- | -- | $5.30 | $5.85 | $6.46 | $6.88 | $7.12 |
| Tier 4 | -- | -- | $6.34 | $7.02 | $7.78 | $8.29 | $8.58 |
| Tier 5 | -- | -- | $7.86 | $8.74 | $9.72 | $10.36 | $10.71 |

## Table B3
## Recommended Tier Volume Breaks (in Thousand Gallons)

| | 1-inch & Smaller | 1 1/2-inch | 2-inch | 3-inch | 4-inch | 6-inch | 8-inch | 10-inch |
|---|---|---|---|---|---|---|---|---|
| **Culinary Residential 3/4" & 1" Without Access to Secondary - All Zones and** | | | | | | | | |
| **Culinary Residential Zone 1-4 with Access to Secondary** | | | | | | | | |
| Tier 1 | 0 - 5 | | | | | | | |
| Tier 2 | 5 - 10 | | | | | | | |
| Tier 3 | 10 - 25 | | | | | | | |
| Tier 4 | 25 - 45 | | | | | | | |
| Tier 5 | 45 - 70 | | | | | | | |
| Tier 6 | >70 | | | | | | | |
| **Culinary South East Herriman (Residential & Commercial)** | | | | | | | | |
| Tier 1 | 0 - 10 | | | | | | | |
| Tier 2 | 10 - 50 | | | | | | | |
| Tier 3 | 50 - 100 | | | | | | | |
| Tier 4 | >100 | | | | | | | |
| **Secondary Residential,** | | | | | | | | |
| **Secondary MM Residential/Non Residential Zones 1-4, and** | | | | | | | | |
| **Culinary Outdoor Irrigation (All Zones)** | | | | | | | | |
| Tier 1 | 0 - 10 | 0 - 17 | 0 - 27 | 0 - 50 | 0 - 83 | 0 - 167 | 0 - 267 | 0 - 383 |
| Tier 2 | 10 - 25 | 17 - 66 | 27 - 107 | 50 - 200 | 83 - 333 | 167 - 667 | 267 - 1067 | 383 - 1533 |
| Tier 3 | 25 - 40 | 66 - 116 | 107 - 187 | 200 - 350 | 333 - 583 | 667 - 1167 | 1067 - 1867 | 1533 - 2683 |
| Tier 4 | 40 - 70 | 116 - 215 | 187 - 347 | 350 - 650 | 583 - 1084 | 1167 - 2166 | 1867 - 3466 | 2683 - 4984 |
| Tier 5 | >70 | >215 | >347 | >650 | >1084 | >2166 | >3466 | >4984 |

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**HERRIMAN, UTAH**
**ORDINANCE NO. 2025-01**

**AN ORDINANCE ADOPTING THE "2024 WATER CONSERVATION PLAN" BY REFERENCE; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; AND PROVIDING FOR EFFECTIVE DATE**

**WHEREAS**, on January 8, 2025, the City Council (the "*Council*") met in regular session to consider, among other things, adopting the "2024 Water Conservation Plan" by reference; providing for repeal of conflicting ordinances; and providing for effective date; and

**WHEREAS**, a water management and conservation plan has been presented to the Council for review and consideration, a copy of which is attached to this ordinance; and

**WHEREAS**, after careful consideration the Council has determined that it is in the best interests of the health, safety and welfare of the inhabitants of Herriman to adopt the "2024 Water Conservation Plan" by reference; providing for repeal of conflicting ordinances; and providing for effective date; and

**NOW THEREFORE,** be it ordained by the Council as follows:

*Section I.* Adoption of Water Conservation Plan. The 2024 Water Conservation Plan which is attached hereto is hereby adopted by reference

*Section II.* Repeal. All ordinances in conflict with the provisions of this ordinance are hereby repealed.

*Section III.* Effective Date. This Ordinance, assigned Ordinance No. 2025-01, shall take immediate effect as soon as it shall be published or posted as required by law and deposited and recorded in the office of the City's recorder.

This Ordinance, assigned Ordinance No. 2025-01, shall take effect immediately.

**PASSED AND APPROVED** this 8th day of January, 2025.

**HERRIMAN COUNCIL**

**Lorin Palmer**, Mayor

**ATTEST:**

**Jackie Nostrom**, MMC City Recorder

Corporate Seal Incorporated HERRIMAN CITY 1999 State of Utah

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## INTRODUCTION

Attitudes toward water supplies are changing. Water is no longer considered to have an endless supply, but is valued as a limited commodity that needs to be managed carefully. With this shift in attitude, conservation is becoming a larger part of water suppliers' plans to meet future water needs in Utah. Many water suppliers throughout the country have adopted conservation programs. Benefits experienced as a result of these programs include:

- Using existing water supplies more efficiently.
- Maximizing utilization of existing water conveyance, treatment and distribution facilities.
- Delaying or deferring expensive construction of capital improvement projects.
- Reducing the need for additional water supplies.

Herriman City has adopted water conservation as a key element in its long-term plan to serve its customers. As a result, the City has already reduced per capita water use by 18% since 2010. However, the City recognizes that per capita water use may return to higher levels without continued emphasis on the importance of conservation. Since sustained additional water conservation will be an important component in the City's plans for future water use, this water conservation plan evaluates the City's current conservation program, establishes the City's new conservation goal and discusses additional measures that will result in the increased conservation of water.

## HERRIMAN CITY WATER SYSTEM SERVICE AREA

Figure 1 shows the Herriman City corporate boundaries, water system service boundaries and the City's general plan for land use. For the most part, the system serves all development within the incorporated area of Herriman City. Herriman City also serves some of the demands of the High Country Estate subdivisions (Phases I and II which are not part of Herriman City) as a wholesale supply to the subdivisions.

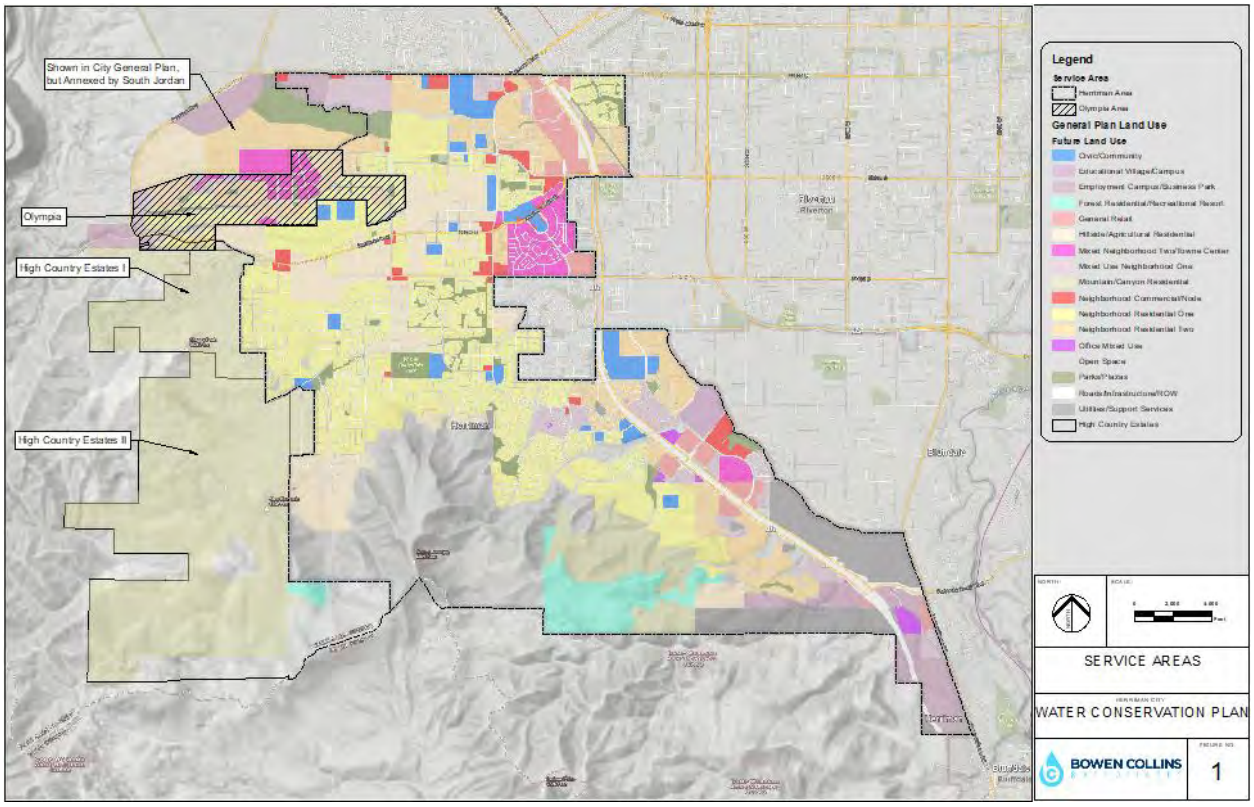



***Figure 1 Herriman City Service Area***

## HISTORIC POPULATION AND FUTURE GROWTH

Herriman City is located within Salt Lake County near the south west end of the county boundary. Since the City's establishment in 1999, Herriman has significantly developed and grown with an estimated existing water system service area population of 68,861 people in 2024.

While Herriman City has experienced large amounts of growth in the past, substantial future growth through new development is expected. The historic and projected population estimates for Herriman City water system service area are shown in Table 1. Population projections from the years 2000-2065 have been obtained from the City's Water Master Plan prepared by Bowen Collins and Associates (BC&A).

**Table 1**
**Historic and Projected Water Service Area Population[1]**

| Year | Herriman City Water System Residential Population |
|---|---|
| 2000 | 1,523 |
| 2005 | 12,393 |
| 2010 | 21,785 |
| 2020 | 55,144 |
| 2024 | 68,861 |
| 2025 | 73,089 |
| 2030 | 92,854 |
| 2034 | 105,655 |
| 2035 | 108,342 |
| 2040 | 118,820 |
| 2045 | 125,221 |
| 2050 | 128,892 |
| 2055 | 130,921 |
| 2060 | 132,020 |
| 2065 | 132,608 |

[1] Historic and projected population values have been taken from those developed for the City's Water Master Plan.

## EXISTING WATER USERS (MUNICIPAL & INDUSTRIAL CONNECTIONS)

To quantify the amount of water that can reasonably be conserved in Herriman City, a cursory analysis of current water use patterns has been performed. Usage among different classes of customers for the year 2023 is presented in Table 2.

#### Culinary Water Usage

Roughly 98 percent of the culinary meters in Herriman City are residential connections, accounting for 87 percent of the total culinary water use. Hence, residential water use represents the largest single area for potential conservation. Herriman City also has a small number of culinary commercial connections. While comprising approximately 2 percent of the total number of meters, commercial customers accounted for 4 percent of Herriman City's culinary water use. In addition, roughly 1 percent of the total culinary meters in Herriman City are institutional connections, accounting for approximately 8 percent of total water use. Thus, commercial and institutional accounts should not be overlooked as potential contributors to future conservation efforts. The City has one industrial connection that makes up only 0.1% of demand.

#### Secondary Water Usage

Secondary water connections accounted for 15 percent of total water connections in Herriman City and approximately 8 percent of combined culinary and secondary water use.

**Table 2**
**2023 Water Usage by Connection Type[1]**

| Customer Class | Accounts | % of Connections | Annual Water Use (acer-ft) | % of Total Water Use |
|---|---|---|---|---|
| Residential | 14,718 | 97.5% | 6,680.7 | 87.2% |
| Commercial | 215 | 1.4% | 318.1 | 4.2% |
| Industrial | 1 | 0.0% | 8.0 | 0.1% |
| Institutional | 157 | 1.0% | 651.9 | 8.5% |
| **Total Culinary** | **15,091** | **100.0%** | **7,658.7** | **100.0%** |
| **Secondary** | | | | |
| Residential | 2,643 | 98.4% | 516.5 | 79.6% |
| Commercial | 19 | 0.7% | 16.6 | 2.6% |
| Industrial | 0 | 0.0% | 0.0 | 0.0% |
| Institutional | 23 | 0.9% | 115.8 | 17.8% |
| **Total Secondary** | **2,685** | **100.0%** | **648.9** | **100.0%** |
| **Total Culinary & Secondary** | **17,776** | **100.0%** | **8,307.6** | **100.0%** |

[1] Water usage by connection type data obtained from Herriman City's billing software and may not match reports to the State of Utah exactly.

## CURRENT AND FUTURE WATER SUPPLY

The following section summarizes Herriman City's current and future water supply as documented in Herriman City's Water Master Plan (BC&A). The existing supply for Herriman City is summarized in Table 3 below.

**Table 3**
**Estimated Production – Herriman City Average Year[1]**

| Supply Category | Estimated Production (acre-ft) |
|---|---|
| Existing Wells (Potable) | 3,915 |
| Purchased From Jordan Valley Water Conservancy District | 5,975 |
| Purchased from Bluffdale City (temporary arrangement) | 11.3 |
| Arnold Hollow Springs | 88.1 |
| Welby Jacob Canal (Secondary) | 804 |
| Existing Wells (Secondary) | 176 |
| **Total** | **10,969** |

#### Future Supply

While the specific details regarding future source capacity are currently in evaluation, the majority of the City's future culinary demand is intended to be supplied by water purchased from Jordan Valley Water Conservancy District (JVWCD). The City's secondary system will be limited to areas with existing secondary infrastructure. Depending on development patterns in the City, the City may continue to purchase Welby Jacobs water to offset limits on JVWCD water supply based on JVWCD water budget per acre. The available water budget from JVWCD is only 1.35 acre-ft/acre for developing areas. The City will need to make up the difference between proposed development demands and this water availability budget through either donated water or additional costs. This emphasizes the need for conservation in the City.

## HISTORIC WATER PRODUCTION, SALES AND SYSTEM LOSS

#### Historic Per Capita Water Production and Consumption

It is important to note that some of the production and consumption data since the year 2010 may not be as reliable as 2010 data. So even though the State of Utah conservation goal is based on 2015 data, the year 2010 data will be used as the baseline year for the purposes of this report because of high confidence in the population count and relative reliable data from the culinary water system. In 2012, the City began portions of its secondary water system. Although the City has meters on its secondary water system, the data reliability of some of its data acquisition systems was not as robust as for the culinary system (especially in 2015).

Historic water use in gallons per resident from 2010 to 2023 is summarized in Table 4. Table 4 also shows per capita water sales and per capita water production in Herriman for the same period. Per capita water use was quantified using available water production records and water sales records from the Division of Water Rights and population estimates.

As shown in Table 4, total metered water sales vary from a high of 192 gpcd in 2010 to a low of 158.1 gpcd in 2018.

Total per capita water production varies from a high of 192 gallons per capita per day (gpcd) in 2010 to a low of 147 gpcd in 2018. However, based on these numbers, system losses in the Herriman City water system are actually negative values. As a result, it does not appear that the production numbers are accurate enough to make any reliable conclusions regarding source production or system losses.

**Table 4**
**Historic Per Capita Water Production, Sales and System Loss[1]**

| Year | Herriman City Population | Historic Water Production (acre-ft)[1] | Per Capita Production (gpcd) | Historic Culinary Water Sales (acre-ft) | Per Capita Culinary Water Use (gpcd) | Historic Secondary Water Sales (acre-ft) | Per Capita Secondary Water Use (gpcd) | Total Historic Water Sales (acre-ft) | Total Per Capita Use (gpcd) | Total System Loss | Total System Loss % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000[2] | 1,523 | 431 | 252.3 | 150 | 88.1 | - | - | 150 | 88.1 | 280 | 65% |
| 2010 | 21,785 | 4,676 | 191.6 | 4,704 | 192.8 | - | - | 4,704 | 192.8 | -28 | -1% |
| 2011 | 25,922 | 2,984 | 102.8 | 5,629 | 193.9 | - | - | 5629 | 193.9 | -2645 | -89% |
| 2012 | 27,331 | 4,066 | 132.8 | 6,032 | 197 | - | - | 6,032 | 197 | -1966 | -48% |
| 2013 | 29,531 | 5,615 | 169.7 | 5,818 | 175.9 | - | - | 5818 | 175.9 | -203 | -4% |
| 2014 | 31,984 | 5,519 | 154 | 5,861 | 163.6 | - | - | 5,861 | 163.6 | -343 | -6% |
| 2015 | 34,801 | 5,914 | 151.7 | 6,430 | 164.9 | - | - | 6430 | 164.9 | -516 | -9% |
| 2016 | 38,811 | 5,320 | 122.4 | 6,377 | 146.7 | - | - | 6,377 | 146.7 | -1058 | -20% |
| 2017 | 44,465 | 6,942 | 139.4 | 7,582 | 152.2 | - | - | 7582 | 152.2 | -640 | -9% |
| 2018 | 51,681 | 8,515 | 147.1 | 8,028 | 138.7 | 1128 | 19.5 | 9,156 | 158.1 | -641 | -8% |
| 2019 | 51,348 | 8,695 | 151.2 | 7,443 | 129.4 | 654 | 11.4 | 8,098 | 140.8 | 597 | 7% |
| 2020 | 55,144 | 12,164 | 196.9 | 9,000 | 145.7 | 863 | 14.0 | 9,863 | 159.7 | 2,301 | 19% |
| 2021 | 58,198 | 10,844 | 166.3 | 8,635 | 132.5 | 1061 | 16.3 | 9,696 | 148.7 | 1,148 | 11% |
| 2022 | 60,385 | 11,637 | 172.0 | 8,502 | 125.7 | 932 | 13.8 | 9,434 | 139.5 | 2,203 | 19% |
| 2023 | 64,615 | 10,969 | 151.5 | 8,693 | 120.1 | 1018 | 14.1 | 9,711 | 134.2 | 1,258 | 11% |

[1] Historic water sales and production data are values on record from the Utah Division of Water Rights.
[2] Year 2000 data is considered to be unreliable.

## CURRENT PER CAPITA WATER USE

A thorough analysis of Herriman's current residential, commercial, industrial and institutional water use was completed. Estimated water use by type for the year 2023 is summarized in Table 5. Per capita water use for the year 2023 was estimated using the approximate population of 64,615 people for the year 2023 and monthly metered sales data provided by Herriman City.

**Residential Use** – Indoor residential water use was quantified using the average metered sales of residential users during the winter months. It is estimated that 48 percent of residential culinary water is used indoors while 52 percent is used outdoors.

**Industrial Use** – The City has one existing industrial user. Industrial use in July is 5 times higher than in the winter, but this may not be a direct result of outdoor irrigation as industrial and cooling uses can also increase in the summer. The additional cooling, manufacturing use, or outdoor use from April to October represents approximately 50 percent of total annual use.

**Commercial and Institutional Use–**Indoor water use for commercial and institutional users was quantified using the average metered sales of each user class during the winter months. On average it is estimated that 26 percent of culinary water is used indoors by commercial / institutional users while 74 percent is used outdoors.

**Secondary Water –** Approximately 14 gpcd of secondary water is used to water residential, commercial and institutional landscapes. This statistic is a little misleading because it spreads secondary water use across residents that do not have access to secondary water. Residential secondary water users used on average 0.20 acre-ft per connection.

**Table 5**
**2023 Per Capita Water Use By Type**

| User Type | Indoor Use (gpcd) | Outdoor Culinary Use (gpcd) | Outdoor Secondary Use (gpcd) | Total Use (gpcd) |
|---|---|---|---|---|
| Residential | 41.4 | 44.0 | - | 85.4 |
| Industrial | 0.05 | 0.06 | - | 0.11 |
| Commercial / Institutional | 8.6 | 15.8 | - | 24.4 |
| **Total** | **50.0** | **59.9** | **15.6** | **125.5** |

## CONSERVATION GOAL WITH MILESTONES

The State of Utah has adopted water conservation goals on a State-wide basis on a regional basis. The goal for Salt Lake County uses a 2015 baseline of water demand. For Herriman City, 2015 does not represent the most useful year to begin as a baseline for conservation. Because the City was still in the process of phasing in use of its secondary water system, data irregularities due to the secondary water system makes this year less useful. Data from the year 2010 is considered more reliable because the City had not yet begun using secondary water. Herriman City will match the conservation goal for the County, but use a 2010 baseline for conservation goals with an added 5 percent conservation assuming 1 percent conservation per year from 2010.

Water production and metered water sales records show that efforts made by the City's staff and residents have been effective in achieving a significant amount of conservation as the City has

substantiality grown and developed. Herriman's average daily per capita water use in 2010 was 192.8 gallons. Through conservation efforts, that number has been reduced to 151.5 gallons per capita per day in 2023. However, it's worth noting that per capita use was 196.9 gpcd in 2020 (a historically warm and dry year). Per capita water use is greatly reduced from where it was in 2010 and is already ahead of milestones associated with the State conservation goals.

To date, conservation efforts have primarily focused on education and pricing to motivate the voluntary efforts of customers to conserve. While the observed results are positive, there are still additional conservation measures that can further reduce water use. Herriman City personnel understand that additional conservation in the City is possible and are committed to making further progress in this area. However, to continue the trend of increasing conservation in the City, it is likely that a more aggressive effort and level of investment will be required.

**Draft Regional Conservation Goals –** Based on data collected regarding conservation potential throughout the State, the Draft Regional Conservation Goals identified for the Salt Lake Region recommend reducing year 2015 per capita water use by 11 percent by the year 2030. As stated above, Herriman City will be using year 2010 as a baseline for conservation goals and add 5 percent to the Salt Lake Regional goal. For example, the City's conservation goal for 2030 is 162 gpcd which is a 5 percent higher conservation amount than the regional goal. The City's target goals have been summarized in Table 6.

**Table 6**
**Conservation Goal Through 2065**

| Year | City Target Percent Conservation | Salt Lake Region Target Percent Conservation | Herriman City Target Per Capita Use (gpcd)* |
|---|---|---|---|
| 2010 | 0.00% | -- | 192.8 |
| 2015 | 5.00% | 0.00% | 183.2 |
| 2020 | 8.67% | 3.67% | 176.1 |
| 2025 | 12.33% | 7.33% | 169.0 |
| 2030 | 16.00% | 11.00% | 162.0 |
| 2040 | 20.00% | 15.00% | 154.2 |
| 2065 | 24.00% | 19.00% | 146.5 |

* The City has been using production to establish this conservation target. The State of Utah conservation goal is based on water sales.

Herriman City's per capita target for conservation is already well ahead of the State of Utah's goal for the Salt Lake Region which begins at 210 gpcd in 2015 based on water sales or 247 gpcd if estimated based on water production and the average 15 percent system loss for the State.

### CONSERVATION GOAL RELATIVE TO LAND USE

In addition to the measurable goals for conservation, the City has also adopted landscape water efficiency standards that will lead to significant conservation from historic production. Table 7 identifies Herriman City zoning types within the City and the associated outdoor water use estimates based on the City's water efficiency standards. Table 8 identifies Herriman City zoning types within the City and the total water use anticipated in 2024 based on land use type. Indoor use is anticipated to reduce every year following the City's conservation goal.

**Table 7**
**Zone Type Outdoor Water Use Targets**

| Zone Type | 2010 Outdoor Water Use (acre-ft/year*) | Maximum Outdoor Use Estimate (acre-ft/year*) | Percent Reduction |
|---|---|---|---|
| Roads/Infrastructure/ROW | 0.000 | 0.000 | 0% |
| Open Space | 0.000 | 0.000 | 0% |
| Utilities/Support Services | 0.061 | 0.036 | 40% |
| Parks/Plazas | 2.763 | 2.298 | 17% |
| Mountain/Canyon Residential | 0.014 | 0.012 | 16% |
| Forest Residential/Recreational Resort | 0.028 | 0.023 | 16% |
| Civic/Community | 2.456 | 1.540 | 37% |
| Hillside/Agricultural Residential | 0.935 | 0.715 | 24% |
| Neighborhood Residential One | 1.376 | 1.046 | 24% |
| Neighborhood Commercial/Node | 0.614 | 0.273 | 56% |
| Office Mixed Use | 0.614 | 0.273 | 56% |
| Employment Campus/Business Park | 0.461 | 0.273 | 41% |
| General Retail | 0.461 | 0.273 | 41% |
| Neighborhood Residential Two | 1.102 | 0.837 | 24% |
| Mixed Use Neighborhood One | 1.087 | 0.821 | 24% |
| Mixed Neighborhood Two/Towne Center | 0.614 | 0.469 | 24% |
| Educational Village/Campus | 1.300 | 1.008 | 22% |

*per gross acre

**Table 8**
**Zone Type Water Use Targets**

| Zone Type | Total Area (acres) | 2024 Indoor Water Use (acre-ft/year*) | Maximum Outdoor Use Estimate (acre-ft/year*) | 2024 Total Water Use (acre-ft/year*) |
|---|---|---|---|---|
| Roads/Infrastructure/ROW | 449 | 0.000 | 0 | 0.000 |
| Open Space | 3,052 | 0.000 | 0 | 0.000 |
| Utilities/Support Services | 707 | 0.000 | 0.036 | 0.036 |
| Parks/Plazas | 591 | 0.000 | 2.298 | 2.298 |
| Mountain/Canyon Residential | 4,573 | 0.064 | 0.012 | 0.076 |
| Forest Residential/Recreational Resort | 503 | 0.088 | 0.023 | 0.111 |
| Civic/Community | 416 | 0.230 | 1.54 | 1.770 |
| Hillside/Agricultural Residential | 932 | 0.295 | 0.715 | 1.010 |
| Neighborhood Residential One | 2,989 | 0.825 | 1.046 | 1.871 |
| Neighborhood Commercial/Node | 210 | 0.888 | 0.273 | 1.161 |
| Office Mixed Use | 50 | 1.077 | 0.273 | 1.350 |
| Employment Campus/Business Park | 657 | 1.122 | 0.273 | 1.395 |
| General Retail | 372 | 1.143 | 0.273 | 1.416 |
| Neighborhood Residential Two | 1,394 | 1.758 | 0.837 | 2.595 |
| Mixed Use Neighborhood One | 570 | 2.638 | 0.821 | 3.459 |
| Mixed Neighborhood Two/Towne Center | 378 | 3.517 | 0.469 | 3.986 |
| Educational Village/Campus | 88 | 3.884 | 1.008 | 4.892 |

*per gross acre

## PROJECTED WATER SUPPLY AND DEMAND

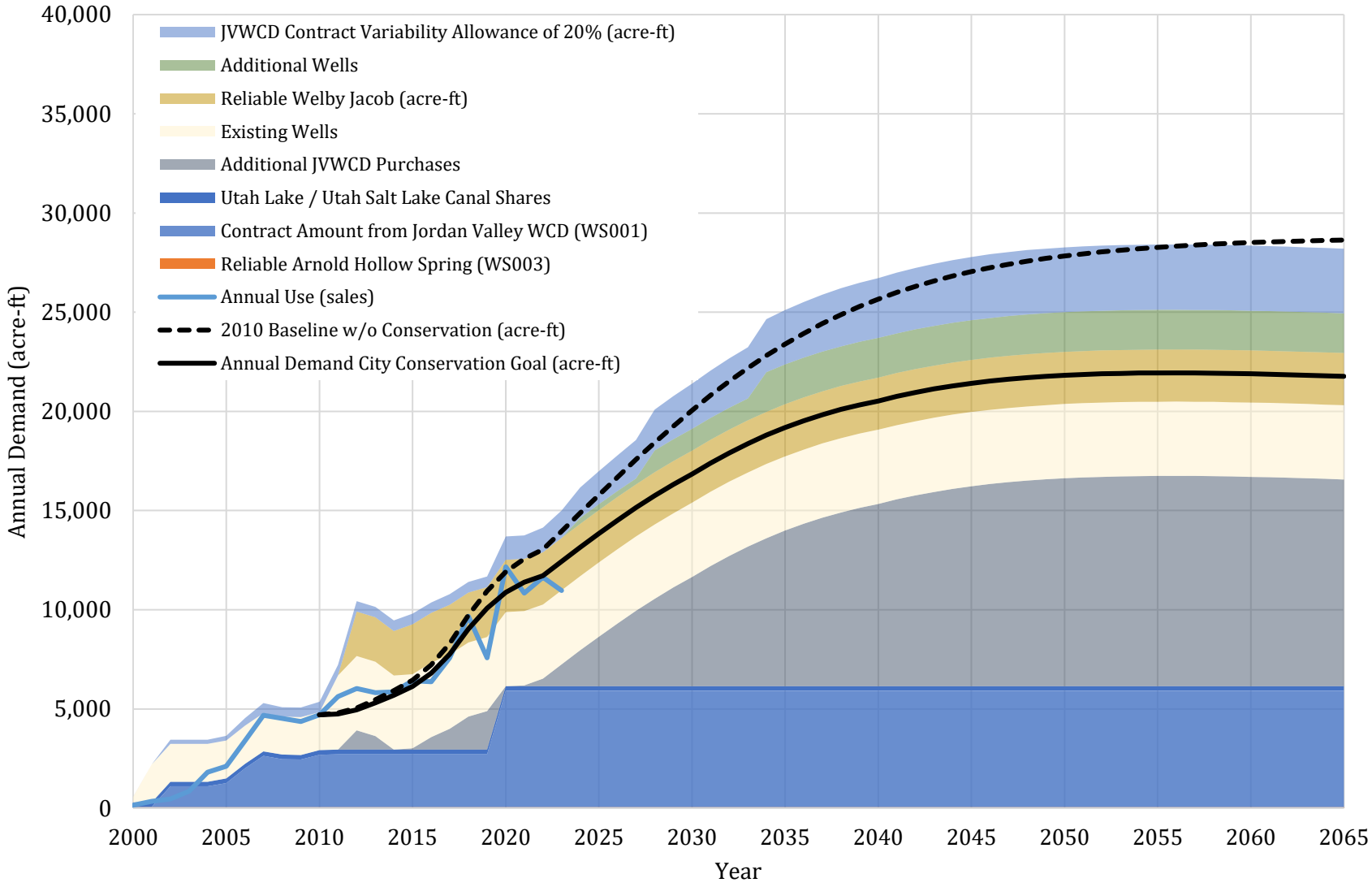
To adequately represent the implications of the City's water conservation goals, a comparison of projected demands (based on total system production requirements) and available supplies must be made. Table 9 shows the projected water production requirements for the City with conservation and the projected production requirements if no conservation occurs. Perhaps most importantly, Table 9 also compares projected demands against the existing available water supply. This same information is shown graphically in Figure 2.

**Table 9**
**Projected Water Production Requirements[1]**

| Year | Estimated Herriman City Population | Projected Production Requirements Without Conservation (acre-ft) | Projected Production Requirements with Conservation (acre-ft) | Total Supply (acre-ft) | Estimated New Supply Development Which Can Be Delayed Through Conservation (acre-ft) |
|---|---|---|---|---|---|
| 2010 | 21,785 | 4,704 | 4,704 | 6,292 | 0 |
| 2020 | 55,144 | 11,908 | 10,876 | 12,164 | 0 |
| 2025 | 73,089 | 15,783 | 13,836 | 12,164 | 1,947 |
| 2030 | 92,854 | 20,051 | 16,843 | 12,164 | 3,208 |
| 2035 | 108,342 | 23,395 | 19,184 | 12,164 | 4,211 |
| 2040 | 118,820 | 25,658 | 20,526 | 12,164 | 5,132 |
| 2045 | 125,221 | 27,040 | 21,416 | 12,164 | 5,624 |
| 2050 | 128,892 | 27,833 | 21,821 | 12,164 | 6,012 |
| 2055 | 130,921 | 28,271 | 21,938 | 12,164 | 6,333 |
| 2060 | 132,020 | 28,508 | 21,894 | 12,164 | 6,614 |
| 2065 | 132,608 | 28,635 | 21,763 | 12,164 | 6,872 |

[1] Herriman City Water Master Plan.

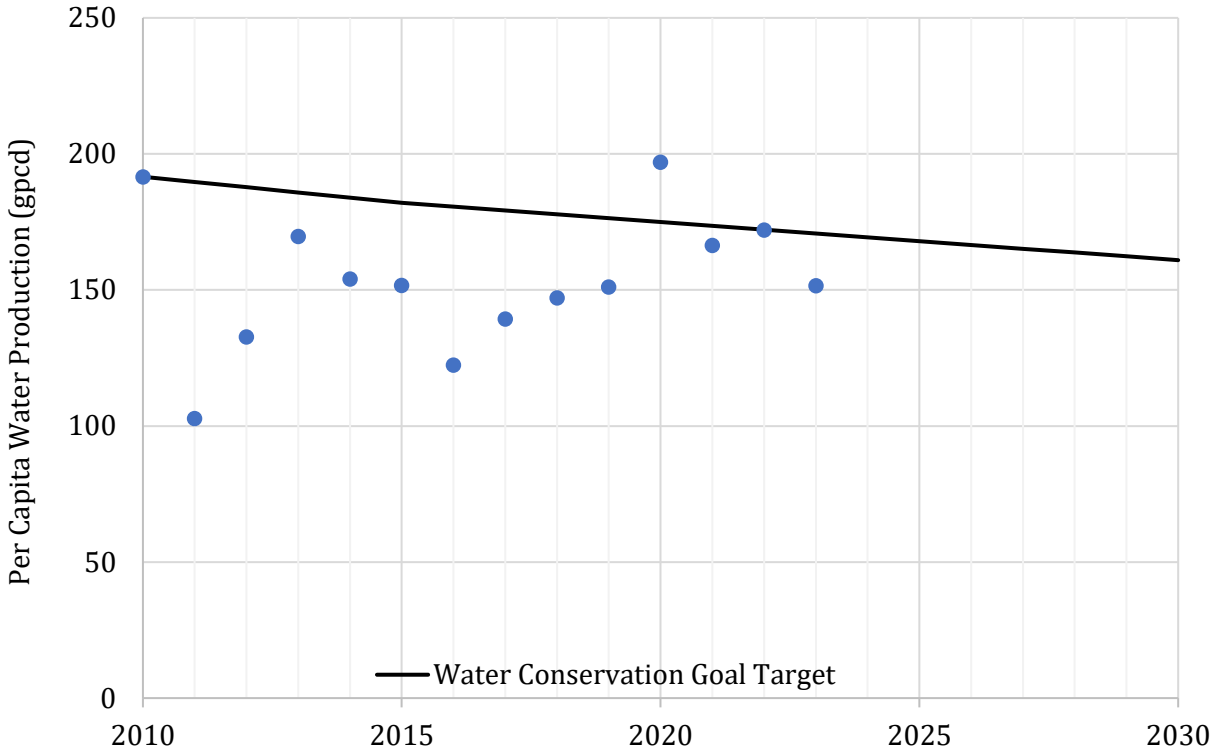
***Figure 2: Per Capita Demand Projections & Conservation Goals***



## MEASURING SAVINGS FROM CONSERVATION

Figure 3 graphically show historic annual per capita culinary water use for the period from 2010 through 2023. Figure 3 graphically shows the annual percent reduction from 2010 average water use.

***Figure 3: Historic Per Capita Water Use***




As can be seen in the figure, the City's per capita use is trending downward. For 2023, Herriman per capita demand was 21% less than in 2010. However, 2022 demand matched the City's conservation goal exactly. Moving forward, the City will need to figure out how to both reduce long-term water use trends and how to sustain these reductions during hot and dry years.

## WATER METERING AND REPLACEMENT SCHEDULE

Currently, all culinary water connections in the Herriman City water system service area are metered and read on an monthly basis. Including meters at every culinary and secondary water service connection was an important part of the City's conservation plan. In addition, the City has a goal of replacing water meters every 15 – 20 years as needed to maintain meter and reporting accuracy.

The City recently switched to an automated metering infrastructure (AMI) system that is read remotely and has leak detection capabilities (all meters installed after 2011 read usage every 15-minutes). This allows City personnel to notify residents on a monthly basis if a leak is detected. All new meters in the City will have this capability.

## CURRENT RATES

To encourage conservation, the City has implemented a tiered water rate structure for both culinary and secondary water (full water rate schedule is attached as Appendix A). All water connections are charged a monthly base rate based on the meter size with no monthly water allowance included in the base rate. Each tier in the structure charges a higher rate based on the quantity of water being used.

## CURRENT CONSERVATION PRACTICES

As part of its overall water supply plan, Herriman City has been very aggressive in implementing several conservation measures to reduce water usage. The City's water system is well maintained and operated. The City has been proactive in implementing and maintaining many programs to ensure that the water system meets high operating standards. Each of these programs is discussed in detail below.

**Aggressive System Maintenance and Operations Program –** Herriman City will continue to maintain and improve its existing water system maintenance and operations program as outlined below:

- ***Mainline Replacement Program***: Since the City's infrastructure is relativity new a mainline replacement program has yet not been established. However, based on expected design life of the Herriman City water system, the City should expect to replace the pipes in its water system distribution network every 100-years.
- ***Advanced Metering Infrastructure (AMI)***: All retail meters within the City are AMI. AMI technology automatically collects status data, diagnostic and consumption from water meters. That AMI data is transferred to a central database for analyzing, billing and troubleshooting. The AMI system allows the City to monitor demands on a daily basis and provide frequent feedback to users on their water use habits.
- ***Meter Leak Detection*** – All meters installed since 2011 can log water use every 15 minutes and can detect fixture leaks at connections. This data is used to notify users of leaks in household fixtures.

**SCADA Control System –** The City currently utilizes Supervisory Control and Data Acquisition as a critical component of operating and understanding the City's water system. The City is continuing to look for areas where additional improvements will increase overall system operating and reporting efficiency.

**Secondary Water System** – The City has a significant amount of secondary pipes in pressure zones 1 to 4. As part of the secondary system, meter boxes and setters are installed so that secondary water can be tracked and paid for by volume.

**Rain Sensors Installed in Parks –** The City has been installing rain sensors at all new City parks and open spaces and intends to install rain sensors at existing parks and open spaces as budget allows. These devices can detect rainfall events and send messages to the central control computer, indicating how much precipitation has been received at the site and can terminate a watering cycle when the precipitation makes irrigation unnecessary.

**Open Space & Parks** – The City meters water use at all parks and open spaces and evaluates use at larger parks on an annual basis to determine if any changes to irrigation patterns are warranted.

**Tiered Water Rates** – To encourage conservation, the City has implemented a tiered water rate structure for culinary and secondary water. The goal is to reduce peak system demands and reduce the waste of water on outdoor landscaping uses.

**Public Awareness/Public Education Programs –** Over the years a significant amount of water reduction has been achieved through increased awareness and water conservation education. The following is a list of ongoing public awareness and educational programs which the City will continue to utilize and implement:

- ***Consumer Confidence Report –*** Each year, water conservation information is included in the consumer confidence report. This report is sent to all Herriman City customers and is posted on the City's web site. The report also includes information on the City's water sources, water quality information, and conservation tips.
- ***Flyers –*** Occasionally, flyers are sent to all consumers in their monthly water bills giving information on water conservation and tips on methods to conserve water both indoor and outdoor. Flyers are also located in the City offices giving facts and tips on water conservation.
- ***Education Programs –*** The City participates with JVWCD in the "Slow the Flow" educational program and encourages the use of water wise plumbing fixtures, landscaping plans, and irrigation systems. A link to educational programs offered by JVWCD is included on the City's website.
- ***Public Education Efforts –*** Herriman City currently supports many water conservation programs. Herriman City plans to remain active in public education on water conservation to sustain a long-term reduction in water use.
- ***Water Wise Landscaping –*** Many of the City's landscapes consist of water wise landscaping. The increased use of water wise landscaping and the installation of rain sensors has helped the City conserve water and demonstrate outdoor water conserving practices.

**City Ordinances Regarding Water Conservation –** The City adopted the JVWCD model landscape efficiency standard in December 2020. The ordinance requires new commercial and multifamily developments, as well as new City-owned properties, to submit landscape and irrigation plans during the development review process. The plans are required to be designed by certified professionals in both landscape and irrigation systems. The landscaped areas of the new developments are required to meet certain irrigation system efficiency standards once installation is completed. In addition, water conserving plants are required for areas with steep slopes. The developments are required to pass a water audit once the irrigation systems have been installed.

- ***Water Conservation Plan –*** The City updates its Water Conservation Plan at least every five years and adopts it by Ordinance.
- ***Annual Meter Leak Audit –*** The City has been participating in a water audit program with its meter supplier. This program helps water suppliers quantify system water loss and associated revenue losses.
- ***Rain Barrel Program –*** The City provides rain barrels to City residents at cost to reduce water system demand.
- ***Utah Water Savers –*** Because of the City's adopted water efficiency landscape standards, the City qualifies to be full participants in the Utah Water Savers program. This program offers up to $3/square foot of removed grass, $100 for WaterSense smart controllers, and $150 for old toilet replacements.

## NEW CONSERVATION PRACTICES PLANNED FOR IMPLEMENTATION

There are several new conservation practices that the City has either recently started to implement or will implement in the next few years. Table 10 summarizes the implementation schedule, estimated costs and potential partners of the new practices.

**Customer Portal for Water Use Monitoring –** The City is working on developing a new customer web-portal to allow data collected through the AMI system to be viewed to allow customers to review their water use, set monthly parameters, and compare their water usage with surrounding residents.

**Non-Functional Turf Identification for City Property –** The City will identify non-functional turf on City owned properties and create a schedule to convert the areas to waterwise landscaping.

**Leak Detection Program –** The City is investigating leak detection technology. The City plans to meet with at least two vendors in the next year to review options for identifying leaks on services and/or from mains.

**Large Water User Audits –** The City will conduct audits on large industrial, commercial, and residential users to identify the source of demand and potentially identify ways to conserve additional water. As part of these audits, the City will identify the efficacy of water efficiency standards and what other options can be used to reduce water use.

**Table 10**
**Implementation Schedule, Estimated Costs & Measurement of Progress**

| New Conservation Practices | Implementation Timeline | Estimated Cost | Measurement of Progress |
|---|---|---|---|
| Water Conservation Plan | Complete by Year End 2024 | $15,000 | Completion of Report |
| Public Education Efforts | Ongoing | $63,000/yr | Completion of any of the associated tasks recommended (See New Conservation Practices) |
| Customer Portal for Water Use Monitoring | Complete by Year End 2025 | $10,000 | Available Portal |
| Rain Barrel Program | Ongoing | $4,600/yr | Complete any of the associated tasks recommended (See New Conservation Practices) |
| Water Conservation Coordinator | Ongoing | $72,000/yr | Completed audit score and record |
| Non-functional Turf Identification | Complete by Year End 2025 | $0 | Map & Schedule Developed |
| Turf Replacement Project Design | Complete by Year End 2025 | $30,000 | Completion of Design |
| Turf Replacement (73,000 sf) – Herriman Main St Center Median | Complete by Year End 2026 | $876,000 | Measure area of replacement |
| Leak Detection technology Investigation | Complete 2025 | $0 | Meet with at least two vendors |
| Large Water User Audits | Ongoing | $0 | Audit top 10 water users and report findings and recommendations |

## WATER CONSERVATION COORDINATOR AND COMMITTEES

### Water Conservation Coordinator

The City has designated William Szwarc as the City's Water Conservation Coordinator. The coordinator is responsible for all City conservation efforts including the Public Education Program, the Water Conservation Workshop, distributing City conservation information at City events, enforcing the Water Efficiency Standards, and acting as the liaison for water conservation matters between the citizens and City officials.

## WATER CONSERVATION PLAN AUTHOR(S)

This plan was prepared by Bowen Collins & Associates at the Draper office:

Bowen Collins & Associates
154 E. 14075 South
Draper, Utah 84020
801.495.2224 Office

Primary authors of the plan are:

Andrew McKinnon, P.E.
AMcKinnon@bowencollins.com

## HERRIMAN CITY CONTACTS

Herriman City Public Works Office
5355 West Herriman Main Street
Herriman, UT 84096
801-446-5323

Justun Edwards, Director of Public Works
jedwards@herriman.org

# APPENDIX A

# HERRIMAN CITY WATER RATES

Placeholder for PDF Replacement

**Table B1**
**Base Rates (Cost per ERU)**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|
| **City Owned Culinary Zones 1-4** | | | | | | | |
| 3/4-inch & 1-inch | $28.97 | $28.97 | Combined with Culinary MM Residential/Non-Residential Rates | | | | |
| 1 1/2-inch | $39.82 | $39.82 | | | | | |
| 2-inch | $57.91 | $57.91 | | | | | |
| 3-inch | $194.24 | $194.24 | | | | | |
| 4-inch | $244.92 | $244.92 | | | | | |
| 6-inch | $363.14 | $363.14 | | | | | |
| 8-inch | $498.27 | $498.27 | | | | | |
| **Culinary Residential Zones 1-9, Without Secondary Access,** | | | | | | | |
| **Culinary MM-Residential/Non Res Zones 1-4 and** | | | | | | | |
| **Culinary Outdoor Irrigation Zones 1-4** | | | | | | | |
| 3/4-inch & 1-inch | $29.55 | $29.55 | $34.37 | $38.83 | $43.88 | $46.95 | $48.36 |
| 1 1/2-inch | $40.47 | $40.47 | $47.07 | $53.19 | $60.10 | $64.31 | $66.24 |
| 2-inch | $59.08 | $59.08 | $68.71 | $77.64 | $87.74 | $93.88 | $96.69 |
| 3-inch | $118.16 | $118.16 | $137.42 | $155.28 | $175.47 | $187.75 | $193.39 |
| 4-inch | $249.90 | $249.90 | $290.63 | $328.42 | $371.11 | $397.09 | $409.00 |
| 6-inch | $370.42 | $370.42 | $430.80 | $486.80 | $550.09 | $588.59 | $606.25 |
| 8-inch | $508.24 | $508.24 | $591.08 | $667.92 | $754.75 | $807.59 | $831.81 |
| 10-inch | $806.03 | $806.03 | $937.41 | $1,059.28 | $1,196.98 | $1,280.77 | $1,319.19 |
| **Culinary Residential Zones 1-4 with Secondary Access** | | | | | | | |
| 3/4-inch & 1-inch | $19.69 | $19.69 | $22.90 | $25.88 | $29.24 | $31.29 | $32.23 |
| **Culinary MM-Residential/Non Res Zones 5-6 w/o Access to Secondary and** | | | | | | | |
| **Culinary Outdoor Irrigation Zones 5-6** | | | | | | | |
| 3/4-inch & 1-inch | $32.43 | $32.43 | $37.72 | $42.62 | $48.16 | $51.53 | $53.08 |
| 1 1/2-inch | $44.43 | $44.43 | $51.67 | $58.39 | $65.98 | $70.60 | $72.72 |
| 2-inch | $64.87 | $64.87 | $75.44 | $85.25 | $96.33 | $103.08 | $106.17 |
| 3-inch | $129.73 | $129.73 | $150.88 | $170.49 | $192.65 | $206.14 | $212.32 |
| 4-inch | $274.39 | $274.39 | $319.12 | $360.60 | $407.48 | $436.00 | $449.08 |
| 6-inch | $406.74 | $406.74 | $473.04 | $534.53 | $604.02 | $646.30 | $665.69 |
| 8-inch | $558.04 | $558.04 | $649.00 | $733.37 | $828.71 | $886.72 | $913.32 |
| 10-inch | $885.02 | $885.02 | $1,029.28 | $1,163.08 | $1,314.29 | $1,406.29 | $1,448.47 |
| **Culinary MM-Residential/Non Res Zones 7-9** | | | | | | | |

# Herriman City

ORDINANCE NUMBER: **2025-01**

**SHORT TITLE:** ORDINANCE ADOPTING THE 2024 WATER CONSERVATION PLAN BY REFERENCE, PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES AND PROVIDING FOR AN EFFECTIVE DATE

PASSAGE BY THE CITY COUNCIL OF HERRIMAN CITY ROLL CALL

| NAME | MOTION | SECOND | FOR | AGAINST | OTHER |
|---|---|---|---|---|---|
| Lorin Palmer | | | X | | |
| Jared Henderson | X | | X | | |
| Teddy Hodges | | X | X | | |
| Sherrie Ohrn | | | X | | |
| Steven Shields | | | X | | |
| | TOTALS | | 5 | | |

This ordinance was passed by the City Council of Herriman City, Utah on the 8th day of January 2025, on a roll call vote as described above.

# CITY COUNCIL MINUTES

## Wednesday, January 08, 2025
## Approved January 22, 2025

The following are the minutes of the City Council meeting of the Herriman City Council. The meeting was held on **Wednesday, January 8, 2025, at 5:30 p.m.** in the Herriman City Council Chambers, 5355 West Herriman Main Street, Herriman, Utah. Adequate notice of this meeting, as required by law, was posted in the City Hall, on the City's website, and delivered to members of the Council, media, and interested citizens.

**Presiding**: Mayor Lorin Palmer

**Councilmembers Present:** Jared Henderson, Teddy Hodges (online), Sherrie Ohrn, Steven Shields

**Staff Present**: City Manager Nathan Cherpeski, Assistant City Manager Wendy Thomas, City Recorder Jackie Nostrom, Finance Director Kyle Maurer, City Attorney Todd Sheeran, Communications Manager Jonathan LaFollette, City Planner Michael Maloy, Unified Fire Authority Assistant Chief Anthony Widdison, Building Official Cathryn Nelson, Public Works Director Justun Edwards, Community Development Director Blake Thomas, Operations Director Monte Johnson, Police Chief Troy Carr, HPD Commander Zach Adams, City Engineer Bryce Terry, and Management Analyst Trevor Ram, Events Manager Lorren Mitchell, Deputy Director of Parks, Recreation and Events Anthony Teuscher, Human Resources Manager Travis Dunn, Assistant City Attorney Matt Brooks

**5:30 PM – WORK MEETING:** (Fort Herriman Conference Room)

**1. Council Business**

Mayor Lorin Palmer called the meeting to order at 5:32 p.m. and noted Councilmembers Jared Henderson and Steven Shields would be late.

**1.1. Review of this Evening's Agenda**

Staff and Council briefly reviewed the agenda.

**1.2. Future Agenda Items**

Councilmember Sherrie Ohrn asked when the Garbage Request for Proposals would be brought to the Council for discussion. City Manager Nathan Cherpeski responded it was scheduled for the following meeting. Police Chief Troy Carr stated there would be an upcoming animal services segment to address questions and assured specifics would be provided.

**1.3. Council discussion of future citizen recognitions**

Assistant City Manager Wendy Thomas mentioned that the Trails Committee Chair would be recognized at the next meeting.

**2. Administrative Reports**

**2.1. Proposal for a 2025 Winter Holiday Event** – Wendy Thomas, Assistant City Manager

Assistant City Manager Thomas introduced a proposal for the 2025 winter holiday event at the pavilion level of Butterfield Park, designed with the "Christmas in Color" concept. She indicated the proposal outlined the following elements from the vendor: event organizers would finance all necessary infrastructure; vendors and entertainment would be part of the event; tickets would be sold for entry. Assistant City Manager Thomas noted the vendor was requesting reduced or waived fees to utilize the park. She also noted that Friends of Herriman were expected to volunteer during the event and the City would receive a percentage of ticket sales.

Mayor Palmer raised questions about possible security and traffic concern, to which Assistant City Manager Thomas that the event organizers would take charge of parking managements and employing security personnel. Councilmember Henderson voiced concern regarding fee waivers or reductions as the City should recover actual costs. Councilmember Ohrn agreed, adding that the City should not subsidize the event and proposed the adoption of a flat fee for the event. Councilmember Hodges expressed support with a reduction in fees.

Council consensus was to proceed with the proposal, subject to the following conditions: formulating a property use agreement, reviewing the fee structure to consider a flat rate and ensure actual costs were covered, include terms for traffic and safety management, and contemplate a multi-year agreement with provisions for annual evaluation and adjustment. Assistant City Manager Thomas indicated a comprehensive proposal would be brought to a future meeting for Council consideration.

**2.2. City Insurance Provider Discussion** – Travis Dunn, Human Resources Manager

Human Resources Manager Travis Dunn delivered an update concerning the current and future insurance options available to the City, outlining several critical points. He noted that insurance rates rose by an average of 26% in 2024. The incumbent provider, Utah Local Governments Trust, anticipated a $402,000 cost in premiums for the upcoming fiscal year. Conversely, an alternative provider, Olympus, proposed a plan set at approximately $320,000. However, this option would entail higher deductibles, albeit presenting an opportunity for the City to have annual savings of $60,000.

Manager Dunn turned the conversation to workers' compensation insurance as it was a separate policy, and highlighted the City held a low rate with the Trust because of the low volume of claims. He further detailed the City's risk management strategies, emphasizing departmental responsibility for deductibles related to claims, the support of an active safety committee, the conduction of routine safety trainings, and the implementation of a team-based safety incentive program. The Council collectively conveyed their support for pursuing insurance options.

*Councilmember Steve Shields arrived at 5:48 p.m.*

**2.3. Hungry Herriman & Marketplace Schedule 2025** – Lorren Mitchell, Events Manager

Events Manager Lorren Mitchell outlined the proposed schedule for the Hungry Herriman and Marketplace for 2025 based on the significant decline in attendance for weekly events in 2024 compared to 2023. She suggested transitioning from weekly to monthly markets in alignment with larger city-planned events and proposed introducing fees for food trucks and market vendors to address concerns related to sales tax revenue. The Council deliberated on the challenges in accurately tracking sales tax revenue from food trucks, and the potential implications of fees imposed on participants, along with the financial impact on local brick-and-mortar businesses. The Council concurred to maintain weekly food truck events, adjust markets to monthly occurrences, while implementing a 5% fee on sales for larger events, and levy a $10 fee for monthly market vendors.

**2.4. Community Development Block Grant Request for Salt Lake County Urban County Funding for the 2025-2026 Program Year** – Wendy Thomas, Assistant City Manager

Assistant City Manager Thomas offered a detailed presentation on the Community Development Block Grant proposal for the 2025-2026 program year. The proposal recommended allocating $15,000 for transportation services facilitated through the Riverton Senior Center, $15,000 for updates to the consolidated plan, and $1,000 for administrative expenditures. The Council talked about the long-term objective of establishing a senior center in Herriman but raised no objections to the proposed grant requests.

**2.5. Fire Station 103 Design Update** – Justun Edwards, Public Works Director
Public Works Director Justun Edwards introduced AJC Architect representatives to provide an update on the design of Fire Station 103. Director Edwards offered a detailed review of the site and landscape plans, which had incorporated modifications as suggested by the Planning Department. He presented the floor plan, emphasizing the distinction between the ears for operational efficiency. AJC Architect Project Manager Nathan Williams provided an overview of the exterior and interior finishes, featuring materials such as brick, metal panels, and an aged copper accent.

Councilmember Hodges asked if additional considerations had been given to installing traffic control signals in the vicinity of the station. Director Edwards confirmed features like HAWK lights would be installed along. He noted that a monument sign that would incorporate both the UFA and Herriman emblems was anticipated to be installed. Director Edwards offered an overview of the projected construction timeline, targeting completion in 2026.

**2.6. City Council Board and Committee Assignments** – Nathan Cherpeski, City Manager
The Council conducted a review of the existing board and committee assignments. It was determined that no alterations were necessary; however, it was requested to include the South Valley Chamber assignment to the list.

**2.7. Legislative Update**
Assistant City Manager Thoams noted as of the meeting date, 149 bills had been filed, with 249 bills being requested so far. City Manager Cherpeski noted the City would continue to monitor bills that would have a direct impact on the community.

*Councilmember Shields moved to temporarily recess the City Council work meeting to convene in a closed session to discuss pending or reasonably imminent litigation, and discussion regarding deployment of security personnel, devices, or systems, as provided by Utah Code Annotated §52-4-205 at 6:37 p.m. Councilmember Ohrn seconded the motion.*

*The vote was recorded as follows:*

| | |
|---|---|
| *Councilmember Jared Henderson* | *Aye* |
| *Councilmember Teddy Hodges* | *Aye* |
| *Councilmember Sherrie Ohrn* | *Aye* |
| *Councilmember Steven Shields* | *Aye* |
| *Mayor Lorin Palmer* | *Aye* |

*The motion passed unanimously.*

The Council reconvened the City Council meeting at 6:53 p.m.

**3. Adjournment**

*Councilmember Shields moved to adjourn the City Council work meeting at 6:59 p.m. Councilmember Ohrn seconded the motion, and all voted aye.*

**7:00 PM – GENERAL MEETING:**

**4. Call to Order**

Mayor Palmer called the meeting to order at 7:09 p.m.

**4.1. Invocation/Thought/Reading and Pledge of Allegiance**

Scout Troop No 7 led the audience in the Pledge of Allegiance.

**4.2. City Council Comments and Recognitions**

Councilmember Shields expressed his appreciation for the difficult and often distressing work undertaken by law enforcement, particularly in dealing with tragic events and challenging interactions within the community. Having reviewed various reports on the intense situations police officers face, he conveyed his gratitude for their dedication and acknowledged the sacrifices made by both the officers and their families in their ongoing efforts to maintain public safety.

Councilmember Hodges thanked staff for their efforts with the Night of Lights event held in December.

**5. Public Comment**

Joe Roberts inquired about future plans for approving Accessory Dwelling Units (ADUs) in the city and the process for rezoning agricultural land to residential in the High Step area. Mayor Palmer directed City Planner Michael Maloy to discuss the timeline and process with Mr. Roberts.

**6. City Council Reports**

**6.1. Councilmember Jared Henderson**

There was no report.

**6.2. Councilmember Teddy Hodges**

Councilmember Hodges reported on the December Board meeting for the Jordan Basin Water Reclamation Facility, where they reviewed the final budget and amendments.

**6.3. Councilmember Sherrie Ohrn**

Councilmember Ohrn reported on the Wasatch Front Waste and Recycling District meeting held on December 18th. She mentioned that the budget was approved with a rate increase to $26 per month effective January 1st. Councilmember Ohrn expressed her concerns about the rate increase and stated the City was looking into whether this was the best plan for the community. She highlighted that there was no increase in the District's health insurance costs.

**6.4. Councilmember Steven Shields**

There was no report.

**7. Mayor Report**

Mayor Palmer reported on the reconvening of the Southwest Mayor's Coalition. He mentioned that they plan to meet with legislators twice during the session and that Senator Fillmore expressed appreciation for the comprehensive review from the area. Mayor Palmer stated that he would keep the Council updated on these meetings and invited other council members to join them at the capitol when they occur.

**8. Reports, Presentations and Appointments**

**8.1. Recognition of Lon Christensen for receiving the Bonneville Chapter of International Code Council Ron Bullock Award** – Cathryn Nelson, Building Official

Building Official Cathryn Nelson presented an award to Lon Christensen, the Assistant Building Official, who received the Ron Bullock Service Award from the Bonneville Chapter of the International Code Council. She highlighted Lon's 20 years of service to the City, his expertise in the construction industry, and his contributions to the department and the City as a whole.

**8.2. Friends of Herriman Presentation**

Friends of Herriman Representative Chris Berbert presented a video showcasing the organization's accomplishments over the past year. He reported that their 2023 budget was $176,000, and the 2024 budget is $244,000. Mr. Berbert mentioned potential grants for a bike park project ($132,000) and improvements at Butterfield ($30,000). He highlighted the partnership with the City and the importance of volunteers in their programs.

The Council expressed appreciation for the organization's growth and its positive impact on the community. They discussed the transition from city-led events to community-driven initiatives and the benefits of this change.

**9. Public Hearings**

**9.1. 2024 Water Conservation Plan Update and Public Hearing** – Justun Edwards, Public Works Director

Public Works Director Justun Edwards presented the 2024 Water Conservation Plan update. He explained the state requirements for the plan and its importance for potential funding opportunities. Director Edwards outlined the City's conservation goals, which were generally higher than the state's regional goals. He presented data showing that Herriman is currently ahead of the state goals, with an average of 167 gallons per capita per day between 2019 and 2023.

Director Edwards discussed the plan's strategies, including education and outreach, pricing incentives, and physical system improvements. He highlighted upcoming initiatives such as a new web portal for customers to monitor their water usage, turf replacement programs, and leak detection equipment.

Councilmember Ohrn inquired about the launch date for the web portal, to which Director Edwards responded it would be implemented this month and announced in the January newsletter.

Councilmember Hodges asked how Herriman compared to other cities in terms of water usage per capita. Director Edwards explained that Herriman's usage was much lower than most other cities due to newer homes with water-efficient fixtures and the city's water efficiency standards.

Mayor Palmer opened the public hearing.

No comments were offered.

*Councilmember Shields moved to close the public hearing. Councilmember Ohrn seconded the motion, and all voted aye.*

*Councilmember Henderson moved to approve Ordinance No 2025-01 adopting the 2024 water conservation plan by reference, providing for repeal of conflicting ordinances and providing for an effective date. Councilmember Hodges seconded the motion.*

*The vote was recorded as follows:*

| | |
|---|---|
| *Councilmember Jared Henderson* | *Aye* |
| *Councilmember Teddy Hodges* | *Aye* |
| *Councilmember Sherrie Ohrn* | *Aye* |
| *Councilmember Steven Shields* | *Aye* |
| *Mayor Lorin Palmer* | *Aye* |

*The motion passed unanimously.*

**10. Consent Agenda**

**10.1. Review and consider Herriman City Planning Commission policy amendments to "Rules of Procedure" and "Administrative Referral" for land use applications** – Michael Maloy, City Planner

**10.2. Review and consider approval of a City Council policy on the appointment and re-appointment process for regular and alternate members of the Herriman City Planning Commission – Michael Maloy, City Planner**

**10.3. Review and consider the re-appointment of two alternate members of the Herriman City Planning Commission for an additional one-year term of service** – Michael Maloy, City Planner

**10.4. Approval of the October 30, 2024, City Council work meeting minutes and the November 13, 2024, City Council meeting minutes**

**10.5. Review and Approval of the November 2024 Budget Versus Actual Report** – Kyle Maurer, Director of Finance and Administrative Services

**10.6. Consideration and approval of a Master Services Agreement (MSA) and Statement of Work (SOW) with Univerus Inc. for ERP software, support, and implementation** – Kyle Maurer, Director of Finance and Administrative Services

**10.7. Accounting of Recently Approved Change Orders** – Bryce Terry, City Engineer

*Councilmember Shields moved to approve the consent agenda as written; Councilmember Ohrn seconded the motion.*

*The vote was recorded as follows:*

| | |
|---|---|
| *Councilmember Jared Henderson* | *Aye* |
| *Councilmember Teddy Hodges* | *Aye* |
| *Councilmember Sherrie Ohrn* | *Aye* |
| *Councilmember Steven Shields* | *Aye* |
| *Mayor Lorin Palmer* | *Aye* |

*The motion passed unanimously.*

**11. Discussion and Action Items**

**11.1. Approval of a Memorandum of Understanding between Herriman City, Teton Ranch, LLC, Olympia Land, LLC and Olympia Ranch, LLC** – Wendy Thomas, Assistant City Manager

Assistant City Manager Wendy Thomas presented a memorandum of Understanding between Herriman City, Teton Ranch, Olympia Ranch, and Olympia Land which focused on land exchanges and rezoning related to a planned regional park initiative. She detailed the properties involved and the proposed modifications, which include:

- 5600 West Property
  - 18.8 acres of property deeded
  - Maximum of 212 units
  - R-2-10 zoning with Master Development Agreement
  - Require rezone, general plan amendment, Master Development Agreement
  - Staff recommended amending section C-i to negotiate the potential reimbursement of sidewalks and streetlights at a future date
- 12600 South Property
  - Maximum of 11 units single family residential
  - Require a General Plan Amendment
- Creek Ridge Park Property
  - City transfer Creek Ridge Park, as identified in the Creek Ridge Master Development Agreement to Ranch
  - Maximum of 136 single family residential units
  - Require General Plan Amendment, Master Development Agreement amendment with Land Reserve, new Master Development Agreement with Ranch, and the removal of Codes, Covenants and Restrictions.
- Copper Field Surplus
  - .76 acres from City to Ranch to be used for detention and/or open space
- Master Development Agreement Amendments
  - Teton Ranch
    - Lots to be reduced in size from ½ acre to approximately 13,000 square foot lots (approx. 1/3 acre)
    - First right of refusal on the purchase of the property if the athletic complex does not proceed
    - Reimbursement agreement expanded to include impact fees from additional units
  - Olympia

- Reduce open space by 7 acres
- Eliminate the obligation to pay $700,000 toward athletic complex
- Increase total of units to 6,380
- Consider offsite improvements satisfied

o Land Reserve
- Remove park from Master Development Agreement
- Minimum two acres of commercial project wide
- Improve any remnant space to the level the City deemed satisfactory

o 6400 West future reimbursement agreement for design, engineering and construction from 12600 South to just south of Midas Creek

The Council articulated their concerns about the potential binding nature of the Memorandum of Understanding and its ramifications. They emphasized that the document would serve as a framework for negotiations and was not indicative of final agreements concerning the proposed alterations.

Developer Ryan Button highlighted the intricacy of the project and the significance of advancing on elements to sustain momentum and establish goodwill with the involved parties.

*Councilmember Henderson moved to approve the Memorandum of Understanding between Herriman City and Teton Ranch, LLC, Olympia Land, LLC, and Olympia Ranch, LLC with the amendment to remove 1.6 acres of property from the 5600 West property due to Fire Station 103 location and the amendment to section C-i to negotiate the potential reimbursement of sidewalks and streetlights at a future date. Councilmember Shields seconded the motion.*

*The vote was recorded as follows:*

| | |
|---|---|
| *Councilmember Jared Henderson* | *Aye* |
| *Councilmember Teddy Hodges* | *Aye* |
| *Councilmember Sherrie Ohrn* | *Aye* |
| *Councilmember Steven Shields* | *Aye* |
| *Mayor Lorin Palmer* | *Aye* |

*The motion passed unanimously.*

11.2. **Review and consider a proposed amendment to the Teton Ranch Master Development Agreement to increase the maximum number of single-family residential dwelling units from 767 to 784 on ±270 acres of property located generally between 11800 South, Herriman Boulevard (12420 South), Mustang Trail Way (6000 West), and 6400 West Street in the R-1-10 Residential, R-2-10 Residential, and A-1-43 Agricultural Zones** – Michael Maloy, City Planner

City Planner Michael Maloy presented a proposed amendment to the Teton Ranch Master Development Agreement to increase the maximum number of single-family residential dwelling units from 767 to 784 on 270 acres of property. He explained that this change would offset the displacement of 77 homes due to the proposed regional park.

The Council discussed the implications of this change, with Councilmember Ohrn expressing concerns about altering a previously negotiated agreement. Councilmember Henderson explained the context of the change, including the involvement of Richmond American Homes and the potential benefits of the regional park project.

Developer Ryan Button provided additional context, emphasizing the collaborative nature of the project and the potential economic benefits for the City.

*Councilmember Henderson moved to approve Ordinance No 2025-02 approving an amendment to the Teton Ranch Master Development Agreement. Councilmember Henderson seconded the motion.*

*The vote was recorded as follows:*

| | |
|---|---|
| *Councilmember Jared Henderson* | *Aye* |
| *Councilmember Teddy Hodges* | *Aye* |
| *Councilmember Sherrie Ohrn* | *Aye* |
| *Councilmember Steven Shields* | *Aye* |
| *Mayor Lorin Palmer* | *Aye* |

*The motion passed unanimously.*

**12. Future Meetings**

**12.1.** Next City Council Meeting: January 22, 2025

**12.2.** Next Planning Meeting: January 15, 2025

**13. Events**

**13.1.** Martin Luther King Jr. Day: January 20, 2025: City Offices Closed

**14. Closed Session**

The Herriman City Council may temporarily recess the City Council meeting to convene in a closed session to discuss the character, professional competence, or physical or mental health of an individual, pending or reasonable imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205

*Councilmember Shields moved to temporarily recess the City Council meeting to convene in a closed session to discuss pending or reasonable imminent litigation, and the deployment of security personnel, devices, or systems, as provided by Utah Code Annotated §52-4-205 at 8:33 p.m. Councilmember Ohrn seconded the motion.*

*The vote was recorded as follows:*

| | |
|---|---|
| *Councilmember Jared Henderson* | *Aye* |
| *Councilmember Teddy Hodges* | *Aye* |
| *Councilmember Sherrie Ohrn* | *Aye* |
| *Councilmember Steven Shields* | *Aye* |
| *Mayor Lorin Palmer* | *Aye* |

*The motion passed unanimously.*

The Council reconvened the City Council meeting at 9:40 p.m.

**15. Adjournment**

*Councilmember Ohrn moved to adjourn the City Council meeting at 9:40 p.m. Councilmember Hodges seconded the motion, and all voted aye.*

**16. Recommence to Work Meeting (If Needed)**

*I, Jackie Nostrom, City Recorder for Herriman City, hereby certify that the foregoing minutes represent a true, accurate and complete record of the meeting held on January 8, 2025. This document constitutes the official minutes for the Herriman City Council Meeting.*

*Jackie Nostrom, MMC*
*City Recorder*

Support

PUBLIC NOTICE WEBSITE
DIVISION OF ARCHIVES AND RECORDS SERVICE

# Public Hearing Notice

## General Information

Government Type:

Municipality

Entity:

Herriman

Public Body:

Public Hearings and Notices

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## Notice Information

Add Notice to Calendar

Notice Title:

Public Hearing Notice

Notice Subject(s):

Water and Irrigation , Other

Notice Type(s):

Notice, Hearing

Event Start Date & Time:

December 20, 2024 10:00 AM

Event End Date & Time:

January 8, 2025 08:00 PM

Description/Agenda:

Herriman City
Public Hearing Notice

NOTICE IS HEREBY GIVEN that the Herriman City Council will hold a Public Hearing on Wednesday, January 8, 2025 at 7:00 p.m. at the Herriman City Council Chambers located at 5355 West Herriman Main Street Herriman, Utah. The purpose of the hearing is to accept comment on the Herriman Water Conservation Plan. Interested persons are invited to attend. Information on the proposal is available by contacting the City Recorder at 801.446.5323. /s/ Jackie Nostrom, City Recorder

Notice of Special Accommodations (ADA):

NA

Notice of Electronic or Telephone Participation:

NA



## Meeting Information

Meeting Location:

5355 West Herriman Main Street
Herriman, UT 84096
Show in Apple Maps | Show in Google Maps

Contact Name:

Jackie Nostrom

Contact Email:

jnostrom@herriman.org

Contact Phone:

(801)446-5323

## Notice Posting Details

Notice Posted On:

December 19, 2024 11:18 AM

Notice Last Edited On:

December 19, 2024 11:18 AM

# Download Attachments

| File Name | Category | Date Added |
|---|---|---|
| Herriman Conservation Plan Draft Updated 20241118.pdf | Public Information Handout | 2024/12/19 11:18 AM |

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