



# Water Conservation Plan 2025

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Prepared By:



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## SECTION 1 - SYSTEM PROFILE

### SERVICE AREA

Fruit Heights City currently serves all areas within the City boundaries (See Map 1). The current City boundary includes approximately 2.30 square miles. Of this area approximately 674 acres is residential; 43 acres is commercial, industrial, or institutional; 154 acres makes up the mountain hillside portion of the City; 99 acres is undeveloped parks and open space; and 177 acres are developed parks (including a golf course). Streets and hard surfaced areas have not been subtracted out of the totals.

Fruit Heights currently provides culinary water to approximately 6,075 people through 1,716 connections. This water is intended for indoor, sanitary, and commercial uses. Water for outdoor and landscaping needs is provided and managed by the Hights Creek Irrigation Company, Benchland Irrigation Company, and a small Special Improvement District managed by the City (56 connections).

Table 1.1 below lists each type of connection and the total number of each as of December 2024.

Table 1.1 - Number of Connections

| Connection Type        | Total        |
|------------------------|--------------|
| Residential / Domestic | 1,702        |
| Commercial             | 4            |
| Institutional          | 0            |
| Industrial             | 0            |
| Unmetered              | 0            |
|                        | <b>1,716</b> |

### SUPPLY

Fruit Heights obtains its water from two (2) sources: a potable water well (owned and operated by the City) and wholesale water purchased from Weber Basin Water Conservancy District (WBWCD).

Table 1.2 below shows a breakdown of the current water sources, as of December 2024.

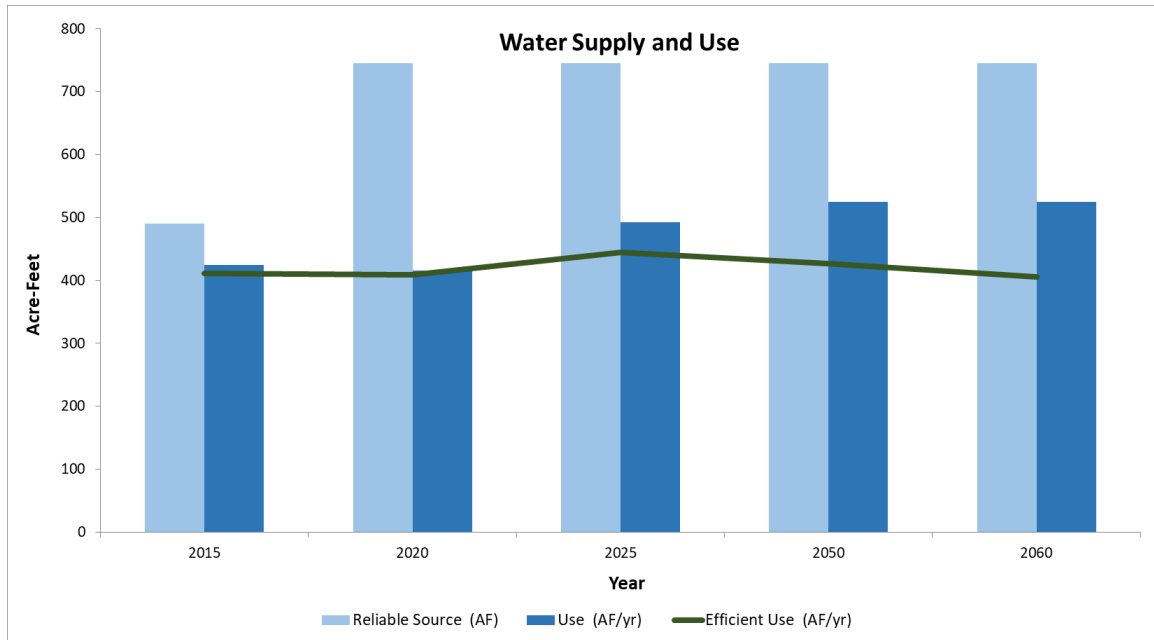
Table 1.2 - Existing Water Sources Used

| Source Used | Volume (Acre-Feet) | Total (Acre-Feet) |
|-------------|--------------------|-------------------|
| Wells       | 34.79              | 34.79             |
| Purchased   | 390.29             | 390.29            |
|             |                    | <b>425.08</b>     |



As illustrated in graph 1.1 below, the City's water supply verses projected use provides a sufficient amount of water through the year 2060.

Graph 1.1 - Water Supply and Use



## FUTURE WATER SOURCES & COST PROJECTION

The Fruit Heights Water 2024 Water Capital Facilities Plan (CFP) indicates that build-out could occur as early as 2031 with an approximate population of 7,253 (2,232 ERCs) requiring approximately 590 acre-feet of water. The City has an annual reliable water supply of 745 acre-feet (not including the well source of 30.5 acre-feet, due to its inability to produce a consistent reliable source).

According to the graph above, the City has sufficient water supply through 2060. In the event the actual population exceeds the projected population the City may need to acquire additional water from Weber Basin Water Conservancy District. The implementation of continued water conservation measures may eliminate or substantially slow any need for additional water.

Due to anticipated sufficient water supply through build-out, the City will not need to purchase any additional reliable water source.



## WATER MEASUREMENT & BILLING

**Meters:** All of the connections to the water system are metered and read monthly using the automated Badger Meters. Table 1.4 below shows the City's metered connections as of December 2024.

Table 1.3 – Metered Connections

| Connection Type | Percentage of System | Reading Frequency | Calibration Schedule | Replacement Schedule |
|-----------------|----------------------|-------------------|----------------------|----------------------|
| Residential     | 99%                  | 1 / Monthly       | Per Manufacturer     | As Needed            |
| Commercial      | >1%                  | 1 / Monthly       | Per Manufacturer     | As Needed            |
| Industrial      | NA                   | NA                | NA                   | NA                   |
| Institutional   | >1%                  | 1 / Monthly       | Per Manufacturer     | As Needed            |

## SYSTEM WATER LOSS CONTROL

Table 1.4 below shows the population, annual use, and percentage loss in relation to used source.

Table 1.4 – Annual Information

| Year | Population | Annual Use (AF) | Return | Percentage Loss |
|------|------------|-----------------|--------|-----------------|
| 2009 | 5000       | 510.54          |        | 0.00%           |
| 2010 | 5681       | 416.11          |        | 3.79%           |
| 2011 | 5117*      | 403.00          |        | 3.25%           |
| 2012 | 5516       | 421.30          |        | 0.00%           |
| 2013 | 5516       | 453.32          |        | -0.23%          |
| 2014 | 5744       | 441.22          |        | 18.47%          |
| 2015 | 5726       | 424.30          |        | 13.46%          |
| 2016 | 5760       | 436.90          |        | 0.00%           |
| 2017 | 5750       | 432.62          |        | 7.86%           |
| 2018 | 5910       | 395.45          |        | 12.32%          |
| 2019 | 6200       | 371.04          |        | 17.19%          |
| 2020 | 6625       | 416.29          |        | 4.45%           |
| 2021 | 6240       | 393.91          |        | 3.60%           |
| 2022 | 6010       | 384.86          |        | 2.29%           |
| 2023 | 6070       | 379.30          |        | 6.40%           |
| 2024 | 6075       | 364.86          |        | 14.17%          |

\*2011 population not entered into Division of Water Rights, number is based on available Census data



Water loss is controlled by:

**SCADA System:** Each storage reservoir is connected to the City's SCADA system that provides continual monitoring of water storage. In the event there are issues with the pressure or levels of water, the City's designated employees are immediately alerted and able to quickly resolve the issue.

**Independent Audit:** In addition to this, the City conducts an annual audit of the amount of water billed verse the amount of water used. This ensures the water being used is being paid for and usage is accurately being tracked. This audit is in addition to the City's annual fiscal budget audit. "Zero Consumption" meter reports are also created every other month. Each meter is investigated and replaced as needed.

**New Development:** All new developments are required to follow Title 11, Subdivision Regulations, of the City Code and follow the adopted Public Works Standards for Development, Design, and Construction. As part of the approval process, the City Engineer checks the available water sources and distribution system to ensure adequacy and responsible use of the City's water resource. If a proposed development meets the requirements of the water distribution model and planned water source use, then the development is allowed to proceed through the approval process. During construction of the development, City staff oversees and inspects the water system to ensure the installation meets City Standards.

## INCREASING RATE STRUCTURE

The following table outlines the current water rate schedule adopted by Resolution in January 2025. To continue to encourage conservation, these rates have been significantly increased and the tiered gallon allotments decreased since the 2019 Plan.

Table 1.5 - Water Rate Schedule

| \$ Base Rate / Month | Allotment (Gal)             | Additional Fee / 1,000 Gal |
|----------------------|-----------------------------|----------------------------|
|                      | Rounded to Nearest Thousand |                            |
| \$37.40              | 0 – 3,000                   | \$2.10                     |
|                      | 3,001 - 6,000               | \$3.25                     |
|                      | 6,001 – 8,000               | \$4.10                     |
|                      | 8,001 – 10,000              | \$4.45                     |
|                      | 10,001 – 13,000             | \$4.90                     |
|                      | 13,001 – 18,000             | \$5.30                     |
|                      | 18,001 – 22,000             | \$6.35                     |
|                      | 22,001 +                    | \$7.40                     |



## WATER USE

Table 1.6 below shows the water inflow verse the water outflow for each type of use between 2005 and 2024.

**Table 1.6 –Water Use**

| Year | INFLOW     |        |       |      | OUTFLOW |             |            |             |            | % Diff. |
|------|------------|--------|-------|------|---------|-------------|------------|-------------|------------|---------|
|      | Total (AF) | Res    | Com   | Ind  | Inst.   | Whole -sale | Other Uses | Un-meter ed | Total (AF) |         |
| 2005 | 245.35     | 245.32 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 245.35     | 0.00    |
| 2006 | 373.67     | 374.00 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 374.00     | -0.09   |
| 2007 | 524.28     | 524.26 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 524.26     | 0.00    |
| 2008 | 569.04     | 562.62 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 562.62     | 1.13    |
| 2009 | 501.54     | 501.54 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 501.54     | 0.00    |
| 2010 | 432.51     | 416.11 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 416.11     | 3.79    |
| 2011 | 416.53     | 403.00 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 403.00     | 3.25    |
| 2012 | 0          | 410.20 | 4.00  | 0.00 | 1.10    | 0.00        | 5.00       | 1.00        | 421.30     | 0.00    |
| 2013 | 452.26     | 453.32 | 0.00  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 453.32     | -0.23   |
| 2014 | 541.17     | 435.72 | 5.50  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 441.22     | 18.47   |
| 2015 | 490.30     | 418.50 | 5.80  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 424.30     | 13.46   |
| 2016 | 436.90     | 431.30 | 5.60  | 0.00 | 0.00    | 0.00        | 0.00       | 0.00        | 436.90     | 0.00    |
| 2017 | 469.53     | 408.37 | 21.77 | 0.00 | 2.48    | 0.00        | 0.00       | 0.00        | 432.62     | 7.86    |
| 2018 | 451.01     | 371.99 | 22.05 | 0.00 | 1.41    | 0.00        | 0.00       | 0.00        | 395.45     | 12.32   |
| 2019 | 448.05     | 325.67 | 43.76 | 0.00 | 1.61    | 0.00        | 0.00       | 0.00        | 371.04     | 17.19   |
| 2020 | 435.66     | 384.35 | 30.56 | 0.00 | 1.38    | 0.00        | 0.00       | 0.00        | 416.29     | 4.45    |
| 2021 | 408.64     | 348.03 | 43.79 | 0.00 | 2.09    | 0.00        | 0.00       | 0.00        | 393.91     | 3.60    |
| 2022 | 393.88     | 346.86 | 36.00 | 0.00 | 2.00    | 0.00        | 0.00       | 0.00        | 384.86     | 2.29    |
| 2023 | 405.22     | 357.02 | 21.09 | 0.00 | 1.19    | 0.00        | 0.00       | 0.00        | 379.30     | 6.40    |
| 2024 | 425.08     | 346.32 | 16.48 | 0.00 | 2.06    | 0.00        | 0.00       | 0.00        | 364.86     | 14.17   |

\*Information obtained from Utah Division of Water Rights Water Records/Use Information

This analysis shows that between 2015 and 2019 there is an average deficiency of 10.17%. There is, however, a continued decrease (or increased efficiency) over the next five-year period (2020-2024) to an average loss of 6.18%. The increase can be attributed to more accurate accounting, metering, and reporting of water use. Water loss can be attributed to fire hydrant use, meter errors, and system leaks. The goal of the City is to reduce losses even further as additional improvements are made to the water infrastructure.

Prior to 2004, the City had 60 connections utilizing culinary water for landscaping and outdoor needs. However, a special improvement project was constructed. As of 2005, the City has a minimal number of connections that use culinary water for outdoor purposes. These connections are only permitted because irrigation is not available to them. When/if irrigation becomes available, these connections will be required to use irrigation water for all outdoor purposes. All other users within the City are serviced through and monitored by either the Hights Creek Irrigation Company, Benchland Irrigation Company, or the City's small Special Improvement District.



## USE - GALLONS PER CAPITA PER DAY

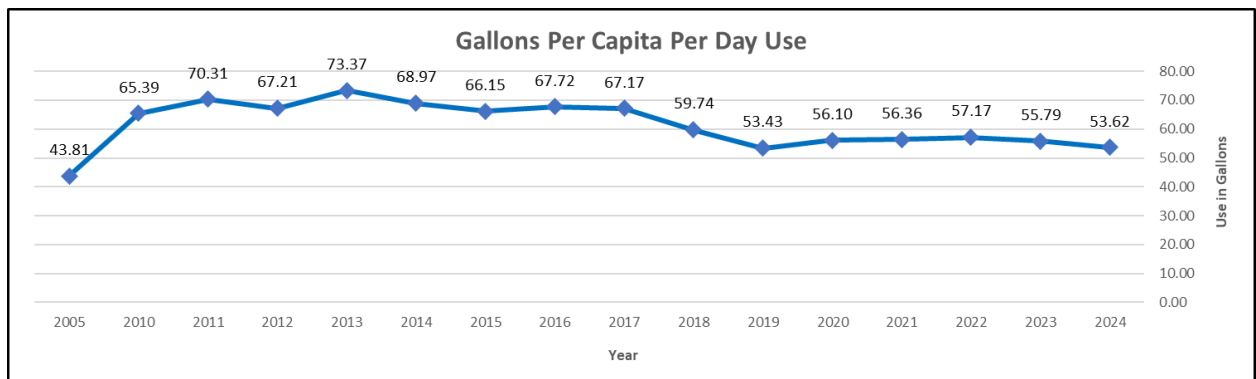
Table 1.7 below outlines the gallons per capita per day in 2024.

Table 1.7 –Water Use

| 2024 Total GPCD |              |
|-----------------|--------------|
| Residential     | 50.89        |
| Commercial      | 2.42         |
| Institutional   | 0.30         |
| Industrial      | 0.00         |
| <b>Total</b>    | <b>53.61</b> |

Based on Graph 1.2 below illustrates the Gallons per Capita Per Day Use trend, indicating an overall decrease in water use and an increase in conservation.

Graph 1.2 – Gallons Per Capita Per Day Use



## SECTION 2 – CONSERVATION PRACTICES

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### CURRENT CONSERVATION

Fruit Heights City places a high value on the conservation of water and is already practicing the following:

- All culinary water connections are currently metered.
  - City employees monitor the water use and meters are read monthly. Users work with the City to identify the issue(s) so that it can be repaired in a timely manner.
  - “Zero Consumption” readings are investigated every other month and faulty meters are replaced where necessary.
- The City provides water conservation education and public outreach through:
  - Providing conservation tips on City’s Website.
  - Information in City’s Newsletter.
  - Providing a copy of the Annual Consumer Confidence Report with a utility bill.
  - Supporting the Davis County Water Fair for elementary school students.
- The City maintains memberships in supporting organizations such as American Water Works Association, Water Environment Federation and The Rural Water Association that educate our personnel and keep up to date on source protection, public education and current regulations.
- The City requires the use of secondary water for all outdoor uses. In the small area of the City that does not have access to irrigation water, the City has adopted landscaping requirements that focuses on conservation.
- The current water pricing and billing system was updated and adopted by resolution in July 2025. The new pricing and billing is adequate to cover expenses in the water enterprise account and is tiered so as to discourage excessive water use. The City may consider additional water pricing and billing system updates as needed.
- The City continues to complete infrastructure projects identified in the Capital Facilities Plan.



## CONTACT

### **Mayor, John Pohlman and Member of the City Council**

910 South Mountain Road  
Fruit Heights City, UT 84037  
[jpohlman@fruitheightscity.com](mailto:jpohlman@fruitheightscity.com)

### **Public Works Director, Layne Leonard**

910 South Mountain Road  
Fruit Heights City, UT 84037  
[lleonard@fruitheightscity.com](mailto:lleonard@fruitheightscity.com)

## EVALUATION OF EXISTING CONSERVATION EFFORTS

In the 2019 Water Conservation Plan, the City established four goals. The goals and status of each are provided below:

**Goal 1 – Increase Public Awareness & Education Efforts:** Currently, the City only utilizes the City’s website to provide information about water conservation. Over the next five years, the City plans to provide bi-annual flyers/information with the monthly utility bill utilizing existing messages from Slow the Flow, DWRs’s Conserve Utah, and WaterSense.

***Status: The City was able to provide information twice each year – once as part of the monthly utility bill and again as part of the City’s newsletter that is sent to all residents and businesses within the City.***

**Goal 2 – Reduce Water Use.** Over the next five years, the City will reduce overall water deficiency by 5%, bringing the average water loss down to 6.5%.

***Overall Status: The City was able to achieve and exceed this goal, bringing the average water deficiency is 6.18% between 2019 and 2024.***

1. Reduce governmental water use at City building and parks by 5%.

***Status: City Hall has all low-usage faucets and smart timers have been installed.***

2. Continue to install water meters that record 40 days of usage.

***Status: All culinary connections are metered and replaced as needed and as budget allows.***

3. Implement high water use notification system to ensure Users are notified of high-usage in a timely manner.

***Status: The City runs a “high-use” report monthly and notifies those connections with high reads either via phone call or a door-hanger notification.***



**Goal 3 – Monitor Construction Water.** By 2022, create an Ordinance requiring all new development and construction projects utilize a meter when flushing hydrants or new connections. The Ordinance shall include how water consumed is paid and penalties.

***Status: A new City Ordinance was not created; instead this has been incorporated as part of the regulations outlined in the Public Works Standards and the City's Fee Schedule now includes a meter rental fee of \$800 and a \$10 per 1,000 gallons of water used rate. The meter is required for use on every new development and City-owned project.***

**Goal 4 - Review and Update Ordinances.** To ensure requirements are up-to-date and effective, over the next five years, review and update the City's ordinances related to water conservation efforts. More specifically review Title 8 Public Utilities, Chapter 5 Water Conservation Measures, and Title 11 Subdivision Regulations.

***Status: Title 11 Subdivision Regulations were updated in 2024 and included updates to the Public Works Standards to require new development follow Low Impact Development Standards. The City also updated Title 8 Chapter 5a Water Conservation Measures. This is applicable to the entire City but largely focuses on ensuring the small area of the City that does not currently have access to irrigation water wisely landscapes and conserves water used outdoors.***

## **NEW BEST MANAGEMENT PRACTICES & IMPLEMENTATION PLAN**

**Goal 1 – Reduce the City's Per Capita Water Use Rate by 5% over the next five years. The water use rate is currently 53.6 gallons per capita per day (gcpd) and will be reduced to 50.92 gcpd by 2030.** The savings will be measured in acre-feet and will be analyzed annually by using the data that is submitted to the Division of Water Rights. The goal will be implemented as the City continues to implement system improvement projects, rate structures, and public education and outreach.

***Note: The City's gallons per capita per day is 53.6 which is 28.6% under the established Davis County Regional Water Conservation Goal of 187 gcpd and 26.5% under the Statewide Goal of 202 by 2030. The City also considered the overall percentage decrease of 18% proposed by the State; however, this does not seem realistic for the five-year timeframe for which this goal has been established.***



## PUBLIC INFORMATION, EDUCATION, & PROGRAMS

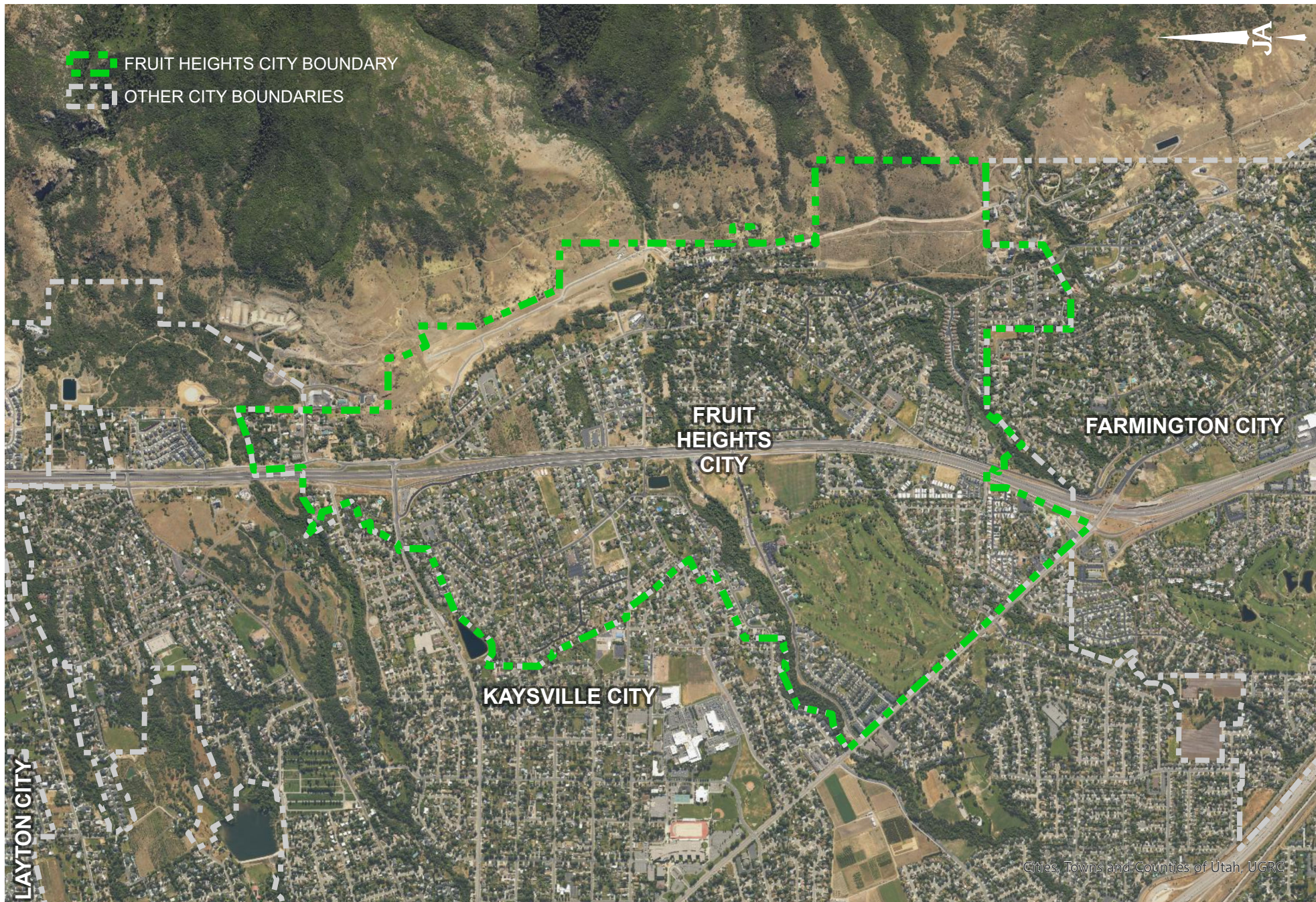
The City currently provides regular information to residents and educates them on wise watering practices through the City's newsletters; website: <https://www.fruitheightscity.com/296/Water-Conservation>; and works to educate high-use consumers individually.

## CITY ORDINANCES & STANDARDS IN PLACE

The following ordinances and standards have been adopted and are currently in place:

- Water Shortage Plan, 2014
- Public Work Standards for Development, Design, & Construction were updated and adopted in May 2024
  - Incorporates the Manual of Standard Plans, published by Utah LTAP Center, Utah State University (commonly known as APWA)
  - Includes information for Low Impact Developments (using rainwater, collecting rainwater, etc.)
- City Code, Title 8 Public Utilities, Chapter 5 Water Conservation Measures
- City Code, Title 11 Subdivision Regulations





**CONSULTING ENGINEERS**

6080 Fashion Point Drive  
South Ogden, Utah 84403 (801) 476-9767

SCALE:

**1:24,000**

DATE:

**6/9/2025**

**FRUIT HEIGHTS CITY  
WATER CONSERVATION PLAN**

**SERVICE AREA MAP**

SHEET:

**1**

OF 1 SHEETS

**Fruit Heights  
RESOLUTION 2025-10  
Water Conservation Plan 2025**

**BE IT HEREBY RESOLVED**, by the City Council of Fruit Heights City, State of Utah, as follows:

**WHEREAS**, Fruit Heights City has a Water Conservation Plan (in accordance with U.C.A. 73-10-32) that establishes conservation planning efforts identifying water supply inventory for both present and future water requirements and establishes implementation procedures;

**WHEREAS**, the City Engineer has reviewed and updated the Water Conservation Plan,

**WHEREAS**, the City Council has reviewed the City Engineer's recommendations,

**WHEREAS**, a public hearing was held on August 19, 2025.

**NOW THEREFORE BE IT RESOLVED**, Fruit Heights City hereby adopts the **2025 Water Conservation Plan**, for the geographic City boundary. The plan was updated by Zac Burk, City Engineer.

**PASSED AND ADOPTED** by the City Council of Fruit Heights City, August 19, 2025

ATTEST:

  
Deputy City Recorder

Fruit Heights City

By   
John Pohlman, Mayor

{SEAL}



Voting:

|                 |                                         |                              |
|-----------------|-----------------------------------------|------------------------------|
| Gary Anderson   | Yea <input checked="" type="checkbox"/> | Nay <input type="checkbox"/> |
| Shon Steveson   | Yea <input checked="" type="checkbox"/> | Nay <input type="checkbox"/> |
| Florence Sadler | Yea <input checked="" type="checkbox"/> | Nay <input type="checkbox"/> |
| Mark Cottrell   | Yea <input checked="" type="checkbox"/> | Nay <input type="checkbox"/> |
| Eileen Moss     | Yea <input checked="" type="checkbox"/> | Nay <input type="checkbox"/> |
| John Pohlman    | Yea <input type="checkbox"/>            | Nay <input type="checkbox"/> |

(if needed)

ATTEST:

  
Deputy City Recorder

DEPOSITED in the office of the City Recorder this 19 day of August 2025

RECORDED this 19 day of August, 2025