CLEARFIELD CITY

WATER USE AND PRESERVATION PLAN

AN ELEMENT OF THE CLEARFIELD GENERAL PLAN

2025

CLEARFIELD
UTAH'S MILITARY CITY

ADOPTED

NOVEMBER 2025

ACKNOWLEDGMENTS

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Weber Basin Conservancy

State of Utah Division of Water Resources, Department of Natural Resources

State of Utah Division of Drinking Water, Department of Environmental Quality

State of Utah Department of Agriculture

Funding support for the Water Use and Preservation Plan provided through the Division of Water Resources.

CLEARFIELD
UTAH'S MILITARY CITY

FFKR | LANDSCAPE & PLANNING

CHAPTER ONE: INTRODUCTION

1.1 WELCOME

WHAT IS THE WATER ELEMENT AND WHY DOES IT MATTER?

This water use and preservation element of Clearfield's General Plan is a key step in creating a holistic, integrated path toward a more sustainable water future. The integration of water and land use planning is a critical action to ensure future water supplies can meet the demands related to our growth.

Because water seems so readily available, the relative scarcity of water in Utah's semi-arid climate often is overlooked. A large factor in our water use is the high proportion of water, often culinary, used outdoors to irrigate landscaped yards for homes, businesses, schools, churches, and government buildings, as well as our parks, open spaces, and recreational fields. Our land use development patterns, including lot sizes, configuration of landscaped areas, and irrigation practices all play a role in how much water we use at different times of the year.

Utah is one of the highest water users in the United States while also being one of the driest states. Our state also remains one of the fastest growing in the nation. By the year 2065, the population of Utah is expected to double, with a projected population of approximately 6 million people. With growth comes demand for water and an increasing burden on our water resources. To support the anticipated growth of the state's population and economic viability, we must make our state more resilient by better integrating water and land use planning. **Where and how we grow matters.**

With a growing population, Clearfield City has actively implemented a water conservation framework for the community, resulting in reduced water use per capita over the past decade. **Clearfield is helping to make a difference!**

DOES CLEARFIELD NEED A WATER ELEMENT?

Yes. Each City and Town is required by Utah Code to prepare and adopt a comprehensive, long-range general plan. Recognizing the inherent connection between land use and water consumption and a critical need for action, Utah passed SB110 in 2022 and SB76 in 2023. By integrating water considerations into our land use planning, we have a significant opportunity to collectively reduce water use in our region and statewide.

Image: Tree planting; Clearfield City

USING THE ELEMENT

The Water Use and Preservation Element of the General Plan is not just for City Staff and Officials. Here are some examples of who can use the element and why/how:

City Staff and Officials use this element of the General Plan to guide their decisions and to adopt or update policies and regulations related to water and land use. It can help when prioritizing budget-related decisions on capital improvements.

Residents, Business Owners, Property Owners, and Developers can use this element of the General Plan to understand the direction the city is taking related to water and land use. This helps them understand how that impacts the choices they have regarding their property, business, or development.

Regional Partners and Agencies can refer to this element of the General Plan to understand the water and land use strategies Clearfield City has adopted to support regional and statewide goals for water conservation.

1.2 KEY TERMS

The Water Use and Preservation Element uses terms and acronyms that may not be familiar to everyone or are not well understood. This section provides an overview of key terms.

Watershed: A watershed is the area of land from which water drains into a river, stream, or other waterbody. Water flows from the land into a waterbody by way of rivers and streams, and underground through groundwater aquifers. The rivers and streams that flow into a larger waterbody are called tributaries. The word "watershed" is sometimes used interchangeably with drainage basin or catchment. Watersheds consist of surface water--lakes, streams, reservoirs, and wetlands--and all the underlying groundwater. **Clearfield is part of the Weber River Basin, which contains two sub-basins, the Lower Weber and the Upper Weber. T**he Weber River Basin is one of the five main sub-basins that drain into the Great Salt Lake.

Water Infrastructure: The complex network of human-made and natural systems that collect, treat, store, transport, and distribute water. The water infrastructure system also manages wastewater and stormwater.

Acre-feet per year (AF/year): An acre-foot is the volume that would cover one acre of land to a depth of one foot. One acre-foot equals 325,851 gallons.

Gallons per capita per day (gpcd): The amount of water used by one person in one day. This is a standard metric used for evaluating a community's water use. It is typically calculated by taking the water used in a geographical area and dividing this amount by the population of that area.

Image: Rain barrel harvesting; USU Extension

DID YOU KNOW?

Rainwater harvesting is legal in Utah!

As of 2010, all Utahns are allowed to collect up to 2,500 gallons of rainwater. Rainwater harvesting is the practice of collecting and storing precipitation for later use. This technique has been around for thousands of years and was used by Native Americans in our region. Currently, rain barrels are commonly used to harvest rain. Rain barrels are an example of green infrastructure, such as rain gardens, green roofs, and permeable pavers.

However, if a residence is collecting rainwater in more than two containers (or any container exceeds 100 gallons), they must register with the Division of Water Rights. There is no charge for this registration.

Potable water: Also known as **culinary water or drinking water**. This water comes from surface and ground water sources and is treated to levels that meet state and federal standards for human consumption. Water that has not been treated may make you sick. Public water utilities remove harmful germs and chemicals to make tap water safe to drink. Potable (pō-tə-bəl; rhymes with quotable and notable) comes from the Latin word potare, which means to drink.

Secondary water: Also known as irrigation water. This is untreated, unfiltered water typically used for irrigation of agricultural fields, outdoor residential landscaping, and gardening. It comes directly from surface waters and is stored in large, open-air reservoirs. It contains pathogens that can cause serious illness and is not suitable for consumption by humans or pets. (see Non-potable water)

Graywater: Graywater is wastewater from bathtubs, sinks, showers, and clothes washing machines and can be used to save potable water. Graywater is not considered potable water, although it can replace potable water to irrigate plants, and fill toilets. Using graywater helps reduce the burden on wastewater treatment plants, by reusing water for different purposes, therefore saving potable consumption. Graywater systems in Utah are regulated by Utah code (R317-401), which provides jurisdiction to local health departments for administration.

Non-potable water: (see Secondary water above) Non-potable water is taken from lakes, rivers, and ground water and has not been treated, and therefore would not be safe to drink, shower, or bathe in.

Blackwater: What comes out of the toilet is considered black water and must be sent to a wastewater treatment plant.

Water audits: Audits consist of checking the irrigation system and making suggestions on ways it could be more efficient. A simple field soil test will determine general soil type and texture, which impacts how much water to use and when. A catch-cup test will determine how quickly the sprinklers are applying water to the lawn and determine how uniform the water is being applied. Water audits are designed to help property owners be as efficient as possible with landscape irrigation.

Flip your Strip: Flip Your Strip (FYS) is a rebate program administered by Weber Basin Water Conservancy District and is intended to remove turf from park strips and create attractive, low-water alternatives. Park strips can be one of the largest water wasting areas of a landscape because they are often narrow and can't be watered effectively when planted with turf. http://www.utahwatersavers.com/

Landscape Lawn Exchange: Landscape Lawn Exchange (LLE) is an incentive program administered by Weber Basin Water Conservancy District and aimed at converting high water consuming turf with low-water landscape materials, including native plants. The program provides the incentive of a nominal amount per square foot for any area of a current yard that is covered in lawn and is replaced with a more water-efficient alternative. https://mywaterutah.org/

Water-wise Landscaping: An approach to landscaping that requires limited or no irrigation, often used in arid regions. Also known as xeriscaping, it is an attractive, sustainable landscape that conserves water by using native plants and is based on sound horticultural practices. It is NOT no landscape, or zero-scape with no plants. The term "xeriscape" was coined in the Denver area in 1981 as part of response to water shortages and is, in fact, a registered trademark of the Office of Water Conservation, Denver Water. The term was created by combining "landscape" and the Greek word "xeros," which means dry.

CHAPTER TWO: CONTEXT

Steed Pond; purchased by Clearfield City in 2008 to help support storm water retention.

2.1 LOCAL CONTEXT

Clearfield City continues to experience growth and change along with our region and state. Clearfield has evolved from an early agricultural settlement into a vibrant, diverse community with a mix of post-World War II residential neighborhoods, parks, open space, and commercial areas.

In 2025, Clearfield City has an estimated 35,000 residents, reflecting a growth of 16% since 2010. As of April 2025, Clearfield had an estimated 12,798 housing units. Of these, approximately 45% are detached single-family homes, 21% are attached single-family homes, and 34% are multi-family dwelling units.

Containing 7.7 square miles, Clearfield is surrounded by other cities. With little vacant land, growth will primarily occur through small scale infill development or larger-scale redevelopment. **This growth is primarily anticipated in key centers**.

CLEARFIELD'S WATER SUPPLY & CONNECTIONS

Water Sources & Average Annual Use in acre-feet from each (2016-2020):

Weber Basin: 4,561(74%)

Hill Field Well: 542 (9%)

Freeport North Well: 526 (9%)

Freeport South Well: 362 (6%)

Reservoir Well: 192 (3%)

Number of connections [as of 2024] and percentage of total connections:

Residential: 6,856 [91.4%]

Commercial & Industrial: 615 [8.2%]

Institutional: 32 [0.4%]

Total connections: 7,503

While residential connections reflect 92.4% of all connections, these connections use only 67.8% of water supplied by Clearfield City.

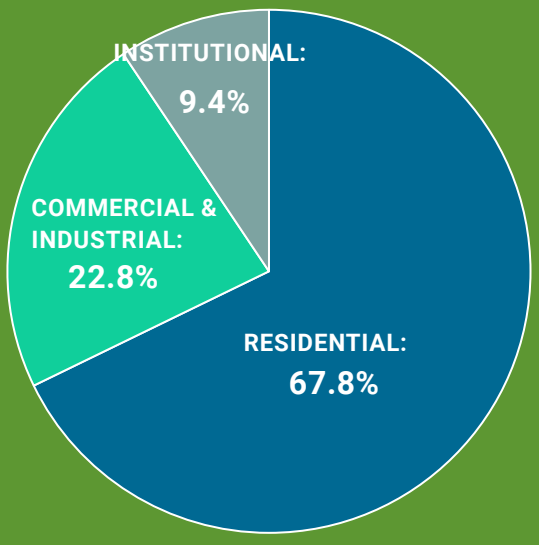


Figure 2.1: Percentage of water used by each category of connection (in 2024)

2.2 WATER PROFILE

Clearfield City provides water service to residential, commercial, recreational, and industrial entities located within the city boundaries. The majority of Clearfield's water supply is used for the City's residential neighborhoods.

Clearfield's water supply comes from a diversity of sources, including water distributed from the Weber Basin Water Conservancy District and four City wells. A fifth City well (200 South Well) is inactive. This diversity of sources is important and ensures a level of redundancy in unexpected and/or emergency situations.

The City prioritizes the purchase of most of its water from Weber Basin and only uses its wells during peak summer months and during emergencies.

While the City has the capacity to produce more water from its wells, it is currently constrained by groundwater conditions. Over the past 50 years, the ground water levels in the East Shore area of the Great Salt Lake have declined as much as 50 feet. While over 5,900 wells have been constructed in this East Shore area, most of the discharge is from about 200 wells that supply municipalities and industrial users.

Clearfield has significant water storage capacity to accommodate projected growth, with the ability to hold 13.32 million gallons in its storage tanks.

Clearfield's water use per capita per day has been steadily decreasing, reflecting progress toward the City's water conservation goals.

In 2024, the five-year average for water use (2020-2024) was 121 gpcd, a decrease from the 2019 five-year average (2015-2019) of 145 gpcd.

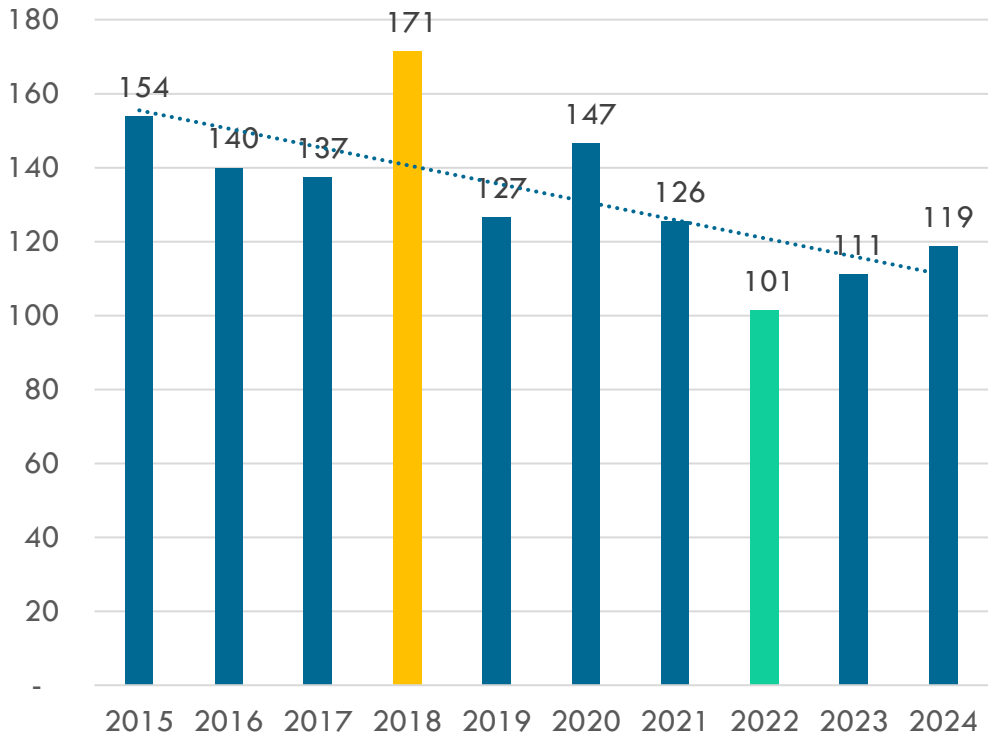


Figure 2.2: Average Daily Per Capita Culinary Water Use (2015 - 2024) with trendline

2.2 WATER PROFILE (CONT.)

SECONDARY WATER

A small percentage of Clearfield (less than 10%) uses secondary water, which is diverted from the south branch of the Davis-Weber Canal. The Davis and Weber Counties Canal Company (DWCCC) owns and manages the Davis-Weber Canal system and distribution of the water for irrigation uses. Secondary water systems are seasonal and typically provide irrigation water between mid-April to mid-October. Secondary water systems must be metered by 2030 to meet state requirements.

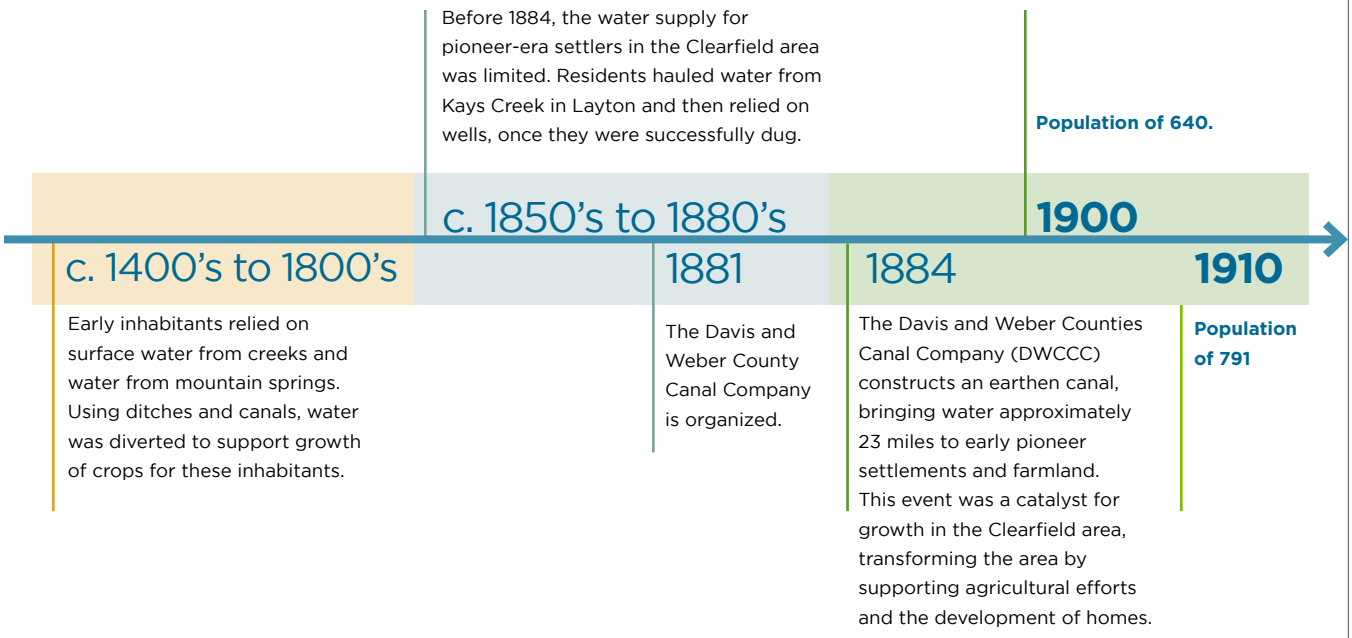
In Clearfield, the DWCCC delivers irrigation water from the Davis-Weber Canal to a few private irrigation companies, including Home & Garden Irrigation Company, South Clearfield Pipeline Company, and Clearfield Irrigation. These companies, in turn, distribute the water to property owners. Once the water leaves the Davis-Weber Canal, the responsibility to maintain the water and the delivery system is with the individual "Ditch Masters."

The use of a city-wide secondary water irrigation system in Clearfield is constrained by the capital costs of installing the transmission and distribution system to reach the end users. Developing a system in the future may be possible if the City were to pursue grants and/or special funding from the state or federal government. Clearfield City retains a total of 171 secondary water shares from the DWCCC, Clearfield Irrigation, and Layton City. Some of these shares are used to fill Steed Pond and irrigate portions of Bicentennial Park.

2.3 CLEARFIELD'S WATER & GROWTH

Human settlement is intrinsically linked to water availability, with freshwater for survival and irrigation for agriculture. Clearfield's settlement, growth, and evolution are linked to the supply and availability of water. Clearfield was one of the last communities in northern Davis County to be settled. Water availability and Clearfield's evolution are summarized in six key eras and their related events.

1. Native American Settlement & Inhabitation
2. Pioneer Settlement & Inhabitation
3. Agricultural Community & Incorporation
4. Military and Industrial Establishment
5. Suburban Residential Development
6. Downtown Revitalization and Transit-Oriented Community



1920

Population of 658

1922

Clearfield is incorporated as a town, with a population of approximately 700 people.

1930

Population of 799

c. 1930's

1930's Water Supply: Clearfield receives water from the Kays Creek System in the 1930s. A pipeline installed at the base of the Wasatch Mountains and over to Clearfield provides water for culinary use and irrigation.

1940

Population of 982

c. 1940's

1940's Water Supply: To supplement the water from the Kays Creek System, two wells are drilled on the Naval Supply Depot site, now known as Freeport Center.

1942-49

The United States Bureau of Reclamation began planning for the Weber Basin Project in 1942, and Congressional authorization of the Project was received in 1949.

1950

The Weber Basin Water Conservancy District was created on June 26, 1950, by a decree of the Second District Court of Utah, under the guidelines of the Utah Water Conservancy Act.

Population of 4,723

c. 1950's

1950s Water Supply: Weber Basin Water Conservancy District begins serving water to Clearfield City, supplementing the water supplied by the City's wells.

1956

Rockport Reservoir completed and stores snowmelt flowing from the Uintas in the spring.

1960

Population of 8,833

Image: Weber Basin Water Conservancy District

Image: South Steed Park; Clearfield City

1969

The Weber Basin Water Conservancy District assumes control of the Weber Basin Project.

1980

Population of 17,982

c. 1960's

1960s Water Supply: The 700 South Well is drilled.

1970

Population of 13,316

c. 1980's

1980s Water Supply: The Hill Field Well is drilled.

2000

Population of 25,974

1990

Population of 21,435

2007

Clearfield adopts a new tiered water rate structure to encourage water conservation, lowering the beginning point for consumption charges from 10,000 gallons to zero. Charges include a base fee for the connection and five tiers with increasing charges based on the amount of water consumed by each connection. Prior to this Clearfield has a base rate (up to 10,000 gallons) and an overage rate (everything over 10,000 gallons).

2010

Population of 30,122

2021

Clearfield City installs and begins using the WeatherTrak System for irrigation at 98% of city facilities/ sites with turn and automatic irrigation systems.

2025

Estimated Population of 35,100

2020

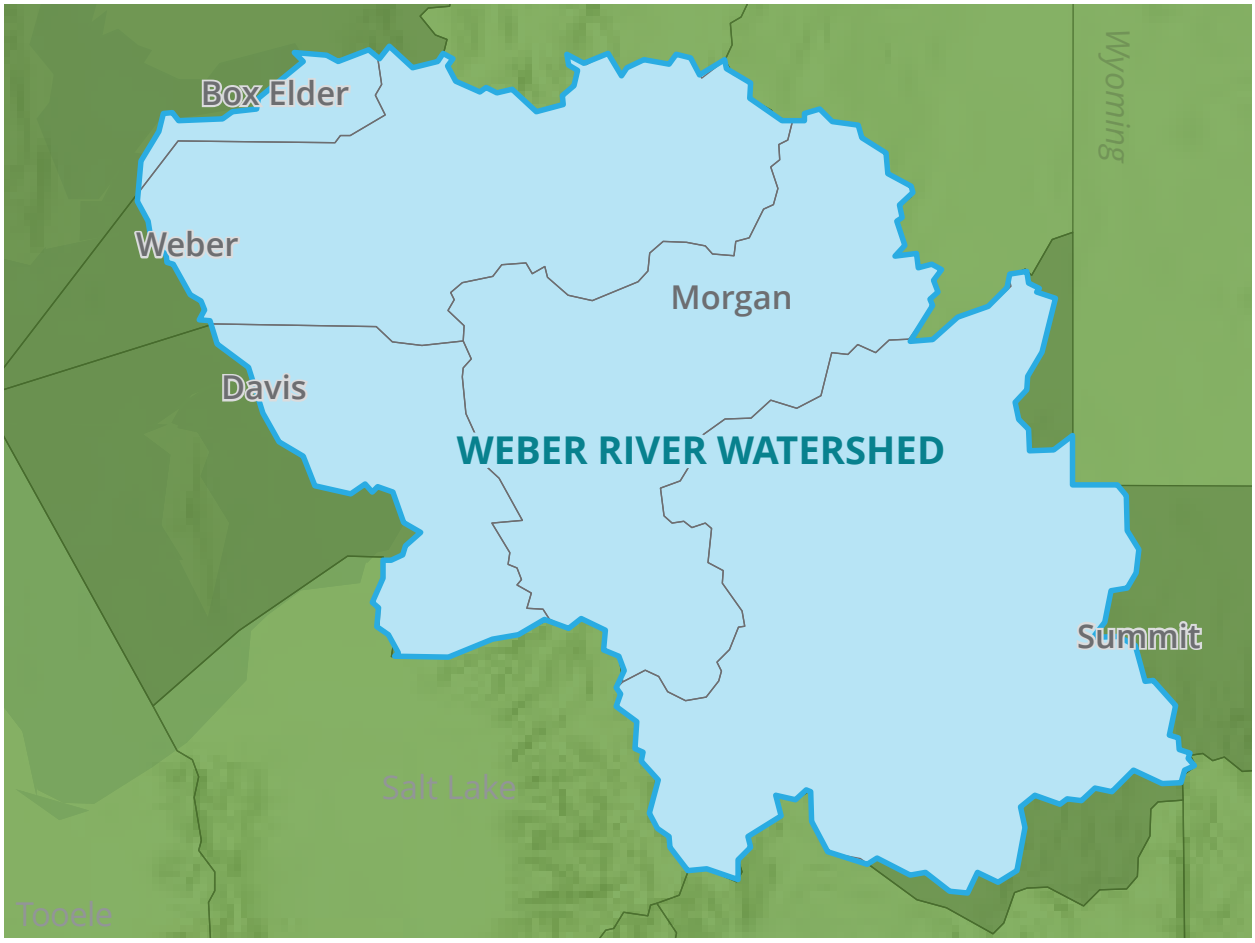
Population of 31,909

2022

Clearfield adopts a water efficient landscape ordinance.

2023

Clearfield begins updating water meters for customers' connections.



Weber River Basin Watershed

2.4 REGIONAL CONTEXT

Clearfield is located in the Weber River Basin, one of the watersheds in Utah. The Weber River Basin is one of the five main sub-basins that drain into the Great Salt Lake.

The Great Salt Lake contributes greatly to Utah's hydrologic cycle by providing a warm environment where water condenses into the lower atmosphere before being returned as snow in the Wasatch and Uinta Mountain ranges. Considering that our water sources rely on this "lake effect," it is vital to consider how to preserve these natural systems. While maintaining sufficient reservoir levels is critical, water stewardship includes the release of water into streams, rivers, and natural lakes to maintain our life-supporting ecosystem.

Clearfield is served by the Weber Basin Water Conservancy District (WBWCD). WBWCD is the regional supplier within the Ogden and Weber River drainages and provides culinary and secondary water to over 700,000 people in five counties (Box Elder, Davis, Morgan, Summit, and Weber). WBWCD delivers approximately 230,000 acre-feet of wholesale water each year. This translates to about 205 million gallons of water every day!

WBWCD operates seven large storage reservoirs, three hydro-power generation plants, twenty-one wells, four water treatment plants, and hundreds of miles of canals, tunnels, aqueducts, and pipelines. With each community working to conserve water as regional growth continues, WBWCD can work to meet regional conservation goals.

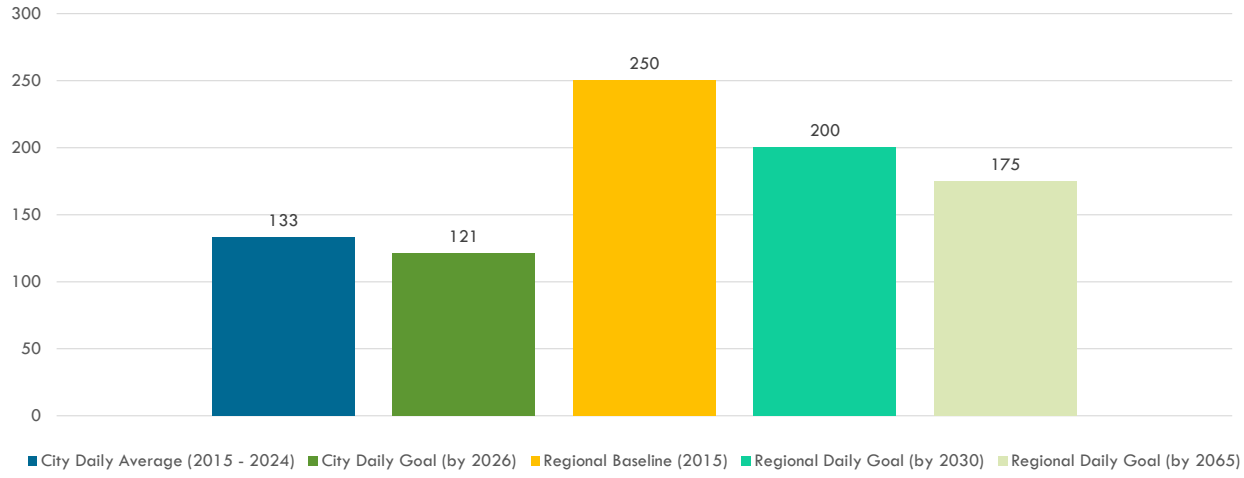


Figure 2.3: Clearfield City Average Daily Use and City and Regional Goals

2.5 REGIONAL COLLABORATION

In 2019, Utah established Regional Water Conservation Goals for the state's nine municipal and industrial (M & I) areas. A regional approach allows the goals to be tailored to the differing contexts of each region, including climate, elevation, and regional characteristics. Clearfield is part of the Weber River Region.

Average water use, in gallons per capita per day (gpcd), from the year 2015 serves as the baseline for the regional water conservation goals. In the Weber River Region this baseline is 250 gpcd. Compared to the other eight regions, Weber Basin is the third lowest for average water use, however it is higher than the statewide average of 240 gpcd. Other regions have a 2015 baseline ranging from 210 to 400 gpcd.

The Weber River Region has the following water conservation goals/targets:

by 2030 - reduction to 200 gpcd, a 20% reduction from the 2015 Baseline of 250

by 2040 – reduction to 184 gpcd, a 26% reduction from the 2015 Baseline of 250

by 2065 – reduction to 175 gpcd, a 30% reduction from the 2015 Baseline of 250.

Regional goals for the Weber Basin Region are some of the most aggressive, and are higher than the statewide goals, which are targeting 16%, 22%, and 26% reductions, respectively.

Clearfield City is one of the lowest water consumers (gallons per capita per day) served by WBWCD. Clearfield City set a goal in 2021 to reduce water consumption by 10 to 15% in five years through various conservation efforts. The rolling five-year average for daily per capita water consumption has decreased from 142 gpcd (2017-2021) to 121 gpcd (2020-2024), reflecting a 15% reduction in just three years.

By comparison, other urban and suburban communities in the region have reported average daily water consumption levels of 198, 252, and 319 gpcd in their water conservation plans. Many communities in the region, however, rely on a combination of culinary water and secondary water and report on consumption of both. With secondary water historically un-metered, use levels may be higher than actual consumption as data has often been based on contract amounts rather than metered use.

CHAPTER THREE: VISION

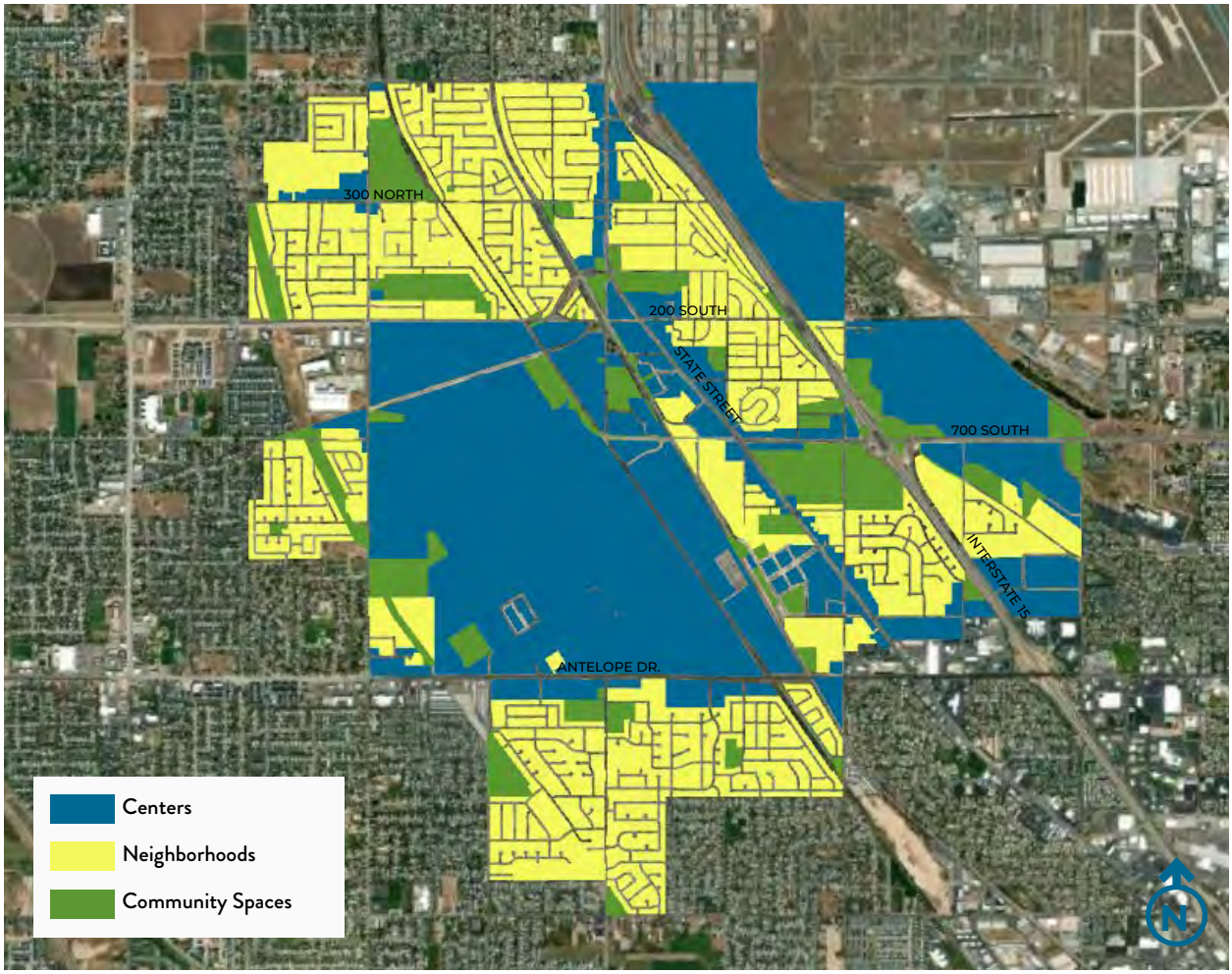


Figure 3.1: Centers of Growth and Land Use Change

Growth and/or land use changes that will impact Clearfield's future water needs will primarily occur in identified Centers, with the majority of change anticipated in Downtown Clearfield and near Clearfield Station (shown in blue). Neighborhoods (shown in yellow) will remain relatively stable with minor changes and little impact to future water needs.

3.1 VISION ALIGNMENT

The water use and preservation element aligns with the overall vision of the General Plan, which guides decisions to support a high quality of life and efficient use of land and infrastructure for the community. The goals, objectives, policies, and strategies of the water element support the four vision initiatives for Clearfield City, which reflect the key areas and topics of focus for the General Plan. The majority of projected growth, and new water users, will be focused in the key centers as captured in the Vision Initiatives.

Initiative #1: Focused, Centered, and Balanced Growth

Initiative #2: Connected Community

Initiative #3: Community Wellbeing and Quality of Life

Initiative #4: Resilient City

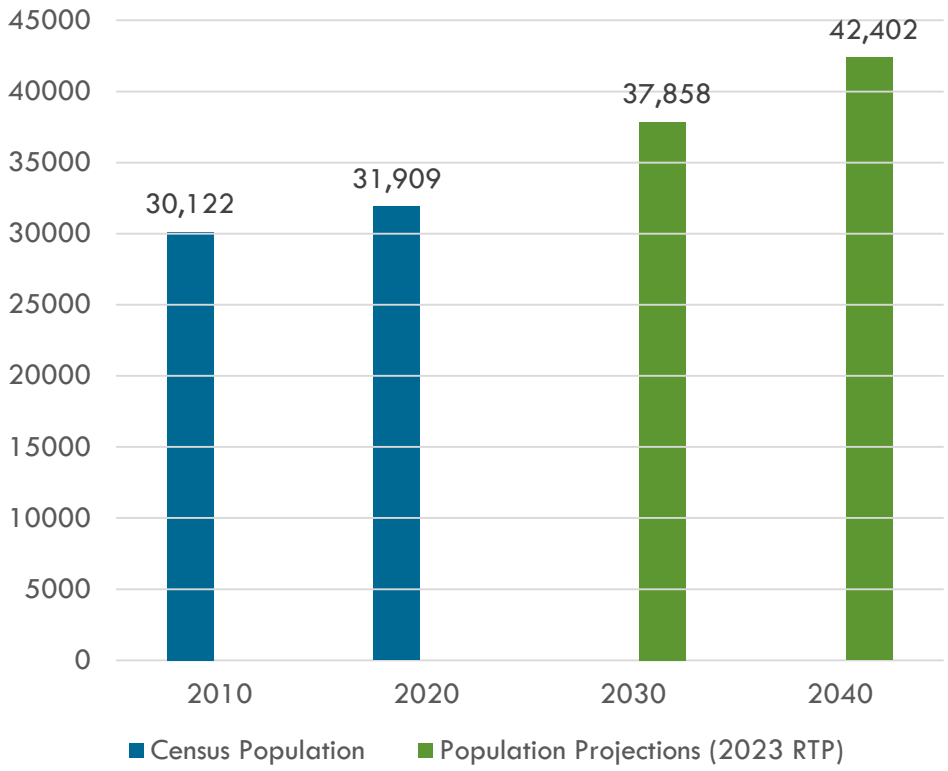


Figure 3.2: Population Projections

3.2 PLANNING FOR THE FUTURE

PROJECTED GROWTH

Based on Clearfield's planned future land use and development patterns, the City is projected to **add 7,500 residents by the year 2040**. This growth to 42,500 people reflects the estimated "build out" scenario for water supply and infrastructure captured in the City's Culinary Water Impact Fee Facilities Plan. Clearfield is planning for and constructing the infrastructure necessary for this projected growth. (*WFRC population projections; Clearfield 2023 Culinary Water IFFP*)

FUTURE LAND USE AND DEVELOPMENT PATTERNS

With growth focused in key centers, the majority of new housing is expected to be small lot single-family, attached single-family townhomes, multi-family dwellings, or mixed-use developments. This new growth is anticipated to have lower per capita water use than that of existing neighborhoods. Average household size may also decrease based on the size and style of housing units planned in Clearfield's neighborhoods and mixed use centers. Clearfield's residential zoning reflects this, with minimum lot size requirements of 9,000 sq. ft. or less.

While a small amount of agricultural land remains in Clearfield, preservation of large-scale productive agricultural use is not anticipated. However, some of these areas may develop under a conservation subdivision framework and retain small urban farming operations. Clearfield's agricultural zoning provides the opportunity to integrate small-scale agricultural uses and animal rights in its residential neighborhoods, requiring minimum lots sizes of only one-third acre.

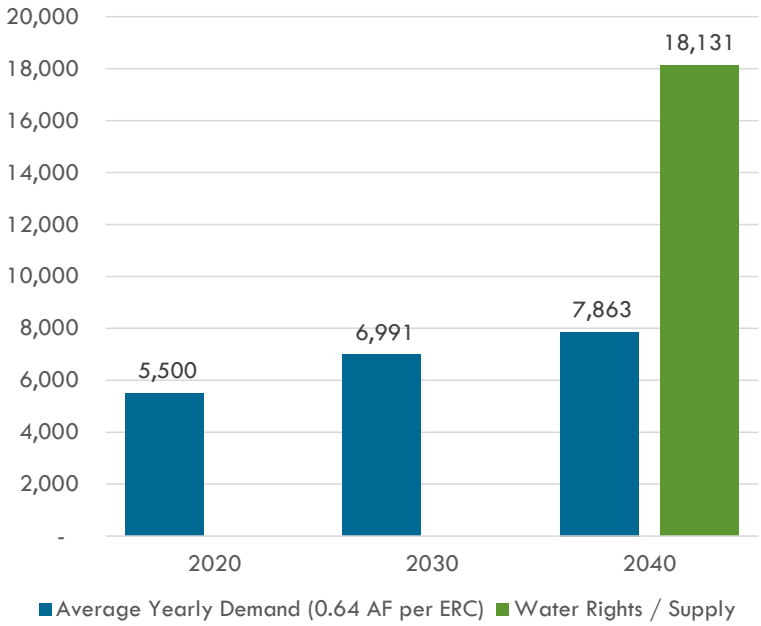


Figure 3.3: Future Water Demand Projections / Water Budget

FUTURE WATER SUPPLY

Through Clearfield's land use decisions to guide growth into centers, coupled with water conservation efforts, the following water budget supports the estimated growth to 42,500 people by 2040 with an additional 3,081 equivalent residential connections (ERCs).

Water Supply: (1,371 gpd per ERC) – 16,844,106 gpd *[excess capacity: 4,657,974 gpd]*

Water Rights: (0.64 acre-feet per ERC) - 7,863 acre-feet *[excess capacity: 10,268 acre-feet]*

Water Storage: 12,870,008 gallons *[excess capacity: 444,992 gallons]*

Clearfield City intends for most of its future water to be supplied through the purchase of water from the Weber Basin Water Conservancy District (WBWCD). Water needs beyond the existing contract, however, may likely be at a higher cost rate to support infrastructure costs for WBWCD water supplies. Water from WBWCD, coupled with water from the City's wells during summer months and emergency situations, will be used for both indoor and outdoor water connections.

A city-wide secondary water system is not currently planned. The small portion of Clearfield connected to a secondary water supply, through the private irrigation companies, is expected to retain these connections; additional/new connections to these systems are not expected.

WATER-WISE DEVELOPMENT IN CLEARFIELD

All new development within Clearfield must comply with the City's Water-Efficient Landscape Ordinance, implemented in 2022. Considering that over half of the water used by residents in Utah has typically been applied to outdoor landscapes, new development in Clearfield will strive to reduce that amount through the promotion of more water-efficient development patterns (smaller lot sizes, attached single-family and multi-family housing, and mixed-use centers) and the installation of resilient landscapes that promote decreased water needs.

The resulting development aims to provide decreased maintenance, increased curb appeal and accessibility, all while conserving water by reducing overall lawn area sizes and utilizing efficient water sense irrigation systems. Clearfield has a well maintained and operated water system and has been proactively implementing several conservation measures to reduce water usage in the community, including the repair and replacement of water infrastructure to support decreased water system losses and support capacity for future growth.

CITY ACTION HIGHLIGHT: UPDATED IRRIGATION SYSTEMS & WATERING PRACTICES

In 2021, Clearfield City installed the WeatherTrak Irrigation System, new master valves, and flow sensors for 98% of the city's irrigated sites. These approaches allow the City to take a more proactive approach to conserve water now and in the future. The Parks Department reduced water usage by over 30%. Collectively, these updates have led to an estimated reduction of 5% annually (equaling over 300 acre-feet of water).

At Barlow Park, Clearfield saved 7.7 million gallons of water due to new WeatherTrak system. The Parks and Recreation Department has a comprehensive plan in place to reduce and/or eliminate watering on City property while still preserving the sports fields and community spaces.

Image: Barlow Park Soccer Fields; Clearfield City

3.3 WATER SAVING SUCCESS STORIES

CITY ACTIONS

Clearfield City has implemented several initiatives to help conserve water. Actions include education campaigns, infrastructure updates, and revised irrigation and maintenance methods at city parks and property.

EDUCATION CAMPAIGNS

Clearfield City uses the city's website, social media, the monthly e-mail newsletter, and other communication channels to provide information and tips for conserving water and being water-wise.

COLLABORATION

During a recent water tank emergency, collaboration with Syracuse City, along with community conservation efforts, allowed Clearfield City time to make critical repairs and restore necessary equipment to maintain the water capacity of the City's water tanks.

INFRASTRUCTURE UPDATES

Clearfield City has been making necessary repairs to its water system to ensure its reliability, especially during peak usage periods.

WATER METER REPLACEMENTS

Clearfield City began replacing water meters in 2023. Most of the water meters in Clearfield were installed in the late 1990's and have an effective battery life of 10 to 15 years. As the water meter wears out it produces inaccurate readings, making it challenging/ to get an accurate account of total usage for that meter. The new meter system alerts the City when there is a constant flow of water, indicating a leak that may otherwise get overlooked. More accurate meters, coupled with the City's tiered water rates, help raise awareness on the amount of water being used for each connection.

COMMUNITY PARTICIPATION HIGHLIGHT: WATERWISE LANDSCAPES

Residents, businesses, and institutions have responded to the call for water conservation by updating their landscapes with more water-wise designs and materials.

Image: Multi-family Housing; Clearfield City

Image: Davis County Library; Clearfield City

Image: Legend Hills; Clearfield City

COMMUNITY PARTICIPATION

The Clearfield community has responded to the City's water conservation campaigns, including participation in rebate initiatives, landscaping changes, reduced watering, and responding to critical action/emergency water situations.

EMERGENCY CAMPAIGN RESPONSE

In July 2025, Clearfield City was faced with a critical electrical issue with the City's water tanks, leading to pumping system constraints. In addition to the City's usual communication platforms, Clearfield used the Davis County emergency alert notification program to request voluntary reductions in water usage, especially outdoors. Residents responded and their actions gave the city time to make critical repairs and avoid water shortages or pressure change concerns.

Clearfield residents are encouraged to sign up for the Everbridge emergency alert notification system used by Davis County:

https://www.daviscountyutah.gov/emergency-management/emergency-alert-sign-up

INCENTIVES / REBATES

Community members have participated in the various rebate incentive programs administered by Weber Basin Water Conservancy District. Participation numbers are for the years 2018 to 2025.

- **Flip Your Strip** – 41 Applicants; 19,802 square feet replaced
- **Landscape Lawn Exchange** – 20 Applicants; 42,741 square feet replaced
- **Toilet Rebate** – 18
- **Smart Controllers for Irrigation** – 252

PLANNING AND POLICY HIGHLIGHT: CLUSTERED DEVELOPMENT

Using various zoning tools, Clearfield City has provided a supportive framework for the planning and design of more conservation-oriented development patterns. Provisions for clustered development patterns lead to more water-efficient neighborhoods compared to typical single-family homes, with reduced individual lawns in exchange for shared open space areas.

Image: Wilcox Farms Subdivision, Clearfield City

PLANNING AND POLICY

Clearfield City has been facilitating water conservation efforts through its planning and policy decisions over the past decade or more, including directing growth to key centers, updating ordinances, short- and long-range planning, and revising water rate structures.

WATER EFFICIENT LANDSCAPE ORDINANCE

In 2022, Clearfield City adopted updates to its landscape ordinance with a focus on implementing water efficiency standards.

CLEARFIELD STATION AREA PLANNING

Clearfield Station opened in 2008, and Clearfield City began a collaboration with UTA to facilitate transit-oriented development on 70 acres owned by UTA adjacent to the station. A master development plan was approved in 2014, leading to construction of the Clearfield Station Apartments (216 units). Development stalled, leading to a joint effort with UTA to develop a Station Area Plan in 2019 (Clearfield Connected) for the remaining 60 acres owned by UTA. In 2024, Clearfield updated the Station Area Plan to meet state code requirements, expanding the scope to include a half-mile radius from the station.

DOWNTOWN CLEARFIELD

Past and current city councils have worked hard to revitalize Downtown Clearfield by bringing more businesses, public parks, and housing opportunities. This has been a 20-year journey, and the City has begun to see the effects through key redevelopment projects over the past several years with more in the pipeline. With a focus on higher intensity uses, Downtown Clearfield will absorb much of the city's growth in a more waterwise development pattern.

WATER RATES

Clearfield City is keeping water rates consistent with the conservation rates adopted by city council in 2022. Conservation rates help preserve the community's water resources by encouraging behaviors that reduce water waste.

Clearfield City has been using tiered water rates since 2007, with the most recent update in 2024.

CHAPTER FOUR: POLICY GUIDE

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POLICY GUIDE TERMINOLOGY

GOALS

- Goals reflect an aspirational direction or outcome desired by the community. Goals are typically achieved through incremental and long-term implementation.

OBJECTIVES

- Objectives focus on the outcomes the city is trying to achieve, which are tied to the overall goal(s) and can include specific metrics/ indicators toward accomplishment or progress.

POLICIES & STRATEGIES

- Policies and strategies reflect a framework of potential options for helping Clearfield meet the objectives and overall goals of the General Plan.
- Policies are more specific statements reflecting a preferred action or perspective. They relate back to the overarching goal/ aspirational statement. Policies provide guidance for making decisions and for compliance with the General Plan vision.
- Strategies can function as catalysts for achieving the goals. Strategies are a launching point for implementing new ordinances, new policies, or for making changes to existing ordinances, programs, capital improvements/ investments, or other city policies and implementation mechanisms. Strategies describe the "how" and are more action-oriented than goal-oriented. They describe ways to make progress toward the goals and objectives. Many strategies can help to achieve more than one goal or individual objective.

4.1 INTRODUCTION

The Policy Guide, along with the City's Vision Initiatives, provides Clearfield with a strategic water-centric framework for making decisions to lead the city to a successful future.

The Policy Guide is a tool to help Clearfield achieve the City's water conservation goals of reducing water consumption by 10% or more and support regional water conservation goals of reducing water consumption by 20% before the year 2030.

RATEGIES

, FDR, CC]

The Policy Guide serves as a resource for the City to use when evaluating actions and the implementation of ideas to achieve the vision of the General Plan. For example, the General Plan is used as the key resource and reference when deciding how to respond to requests for changes to zoning or for implementing new development ideas. The City can evaluate whether the requests are consistent with the objectives of the General Plan and the Water Use and Preservation element. The element will also ensure consistency between the City's departments in water planning, education efforts, and communication.

It is possible all identified strategies may not be used, accomplished, or implemented. **Impacts such as costs, timing, or changing priorities may alter or nullify the feasibility of a strategy.** Additionally, new strategies may be identified in the future.

Objectives, policies, and strategies will address one or more of the following:

(Existing Development Reductions; EDR) - reducing water demand and per capita water use for existing development.

(Future Development Reductions; FDR) - reducing water demand and per capita water use for future development.

(Clearfield City Practices; CCP) – water-wise practices by Clearfield City.

RELEVANT / RELATED PLANNING EFFORTS

The City has been working to direct growth toward existing and emerging centers, such as Downtown Clearfield and the Clearfield Station area. This centered and balanced growth supports stewardship through the efficient use of land and water resources.

2016 Creating Downtown Clearfield - Small Area Plan

Better Cities Report

2016 Clearfield Storm Water Management Plan (update)

2018/20 Downtown Form-Based Code (updated in 2020)

2019 Clearfield Connected Small Area Plan

2021 Clearfield Water Conservation Plan (update)

2022 Landscape Ordinance Updates Adopted

2023 Culinary Water Impact Fee Facilities Plan/Impact Fee Analysis

2024 Clearfield Station Area Plan – compliance with State Code updates

2025 Clearfield General Plan Update Adopted

4.2 OVERALL GOAL & OBJECTIVES

WATER USE AND PRESERVATION - OVERALL GOAL

Clearfield strives to continue facilitating growth and development patterns that support responsible use of the City's water supply, ensuring the ability to meet current and future demands and respond to water supply issues.

WATER USE AND PRESERVATION - OBJECTIVES

Eight objectives reflect key targets Clearfield would like to achieve to meet the overall goal for Water Use and Preservation.

1. Promote and support development patterns with lower water usage habits and where infrastructure already exists. (FDR)
2. Collaborate with regional partners to protect the health of the Great Salt Lake, the Wasatch Mountain watersheds, waterways, and other water sources. (EDR, FDR, CC)
3. Foster the use of water efficient building standards, plumbing fixtures, and site development techniques. (EDR, FDR, CC)
4. Uphold water-efficient landscaping techniques and maintenance practices appropriate to our climate. (EDR, FDR, CC)
5. Promote water conservation while still maintaining community aesthetics and character. (EDR, FDR, CC)
6. Aspire to improve the level of public awareness regarding water conservation through positive messaging and engaging the community in key water challenges. (EDR, FDR, CC)
7. Ensure water resources are used responsibly and efficiently at City facilities. (CC)
8. Lead by example through the pursuit of funding and outside resources to support innovative methods and pilot demonstration projects. (EDR, FDR, CC)

4.3 POLICIES & STRATEGIES

The following policies and strategies reflect a framework of potential options for helping Clearfield meet the eight objectives and overall goal for Water Use and Preservation.

EDUCATION AND INCENTIVES [EDR, FDR, CC]

- WU-1: Continue to use city communications and community education programs to encourage water-wise practices and collaborate with regional partners to host events in Clearfield.
- WU-2: Establish campaigns to target Clearfield's older homes/neighborhoods, which are more likely to have older, less water-efficient appliances and fixtures. Promote participation by having a citywide "contest" and/or providing incentives.
- WU-3: Coordinate with the Parks and Recreation Commission to evaluate establishing an award category to recognize well-landscaped, water saving yards for a range of use types.
- WU-4: Consider establishing volunteer Water Conservation Ambassadors as a community-led effort to help educate residents and businesses regarding water-efficient landscapes and irrigation practices.

REGULATIONS / STANDARDS [EDR, FDR, CC]

- WU-5: Review allowed land uses in the zoning code and consider minimizing and/or establishing conditional use requirements for uses that consume large amounts of water.
- WU-6: Continue to evaluate and update, as relevant, zoning regulations and development standards that reduce outdoor water use and stormwater runoff.
- WU-7: Maintain minimum requirements for living plant cover and trees to support groundwater recharge, help mitigate urban heat island impacts, and minimize soil erosion.
- WU-8: Evaluate the city's standards regarding the use of green roofs, containers, and other alternatives to meet landscaping requirements outside of the Form-Based Code districts.

WATER USE AND PRESERVATION - POLICIES & STRATEGIES (CONT.)

MEASUREMENT / MONITORING [EDR, FDR, CC]

- WU-9: Consider establishing a water conservation dashboard to communicate the effectiveness of various strategies and policies implemented by Clearfield.
- WU-10: Consider a regular evaluation of the City's water rate structure to evaluate if the rate tiers are aligned with land use and development patterns.
- WU-11: Consider establishing drought metering rates to use during times of extreme drought.
- WU-12: Pilot an indoor/outdoor meter program and consider requiring outdoor meters for all new development and major remodels.
- WU-13: Coordinate/collaborate with secondary water providers on their progress to install water meters on secondary water connections; integrate this water use data with the city's culinary water data to provide a comprehensive understanding of indoor and outdoor water use in Clearfield.

DEMONSTRATION / COLLABORATION / INNOVATION [EDR, FDR, CC]

- WU-14: Coordinate with Davis County Health on graywater/water recycling systems and consider a pilot demonstration project at a city facility.
- WU-15: Continue to explore funding through grants and other programs to supplement rebates, support innovative efforts, and conduct pilot projects.
- WU-16: Encourage rainwater harvesting and consider a pilot demonstration project at a city facility. Coordinate with the city's stormwater management efforts.
- WU-17: Prioritize the maintenance, watering, and planting of street trees to retain community character and help mitigate urban heat island impacts.
- WU-18: Communicate the success of water conservation at city-owned/managed facilities and places.

WATER INFRASTRUCTURE INVESTMENTS [EDR, FDR, CC]

- WU-19: Continue to support the meter and water pipeline replacement program to keep the City's water infrastructure in good condition and minimize system inefficiencies.
- WU-20: Evaluate the potential for secondary water connections or graywater systems at city-owned/managed facilities.

4.4 IMPLEMENTATON

THE IMPLEMENTATION MATRIX WILL BE EVALUATED REGULARLY TO ESTABLISH THE CITY'S PRIORITIES AND EFFORTS FOR THIS ELEMENT.

		Ongoing Effort	Short-Term: 1 to 5 years	Long-Term: 5 to 10+ years
WU-1	Continue to use city communications and community education programs to encourage water-wise practices and collaborate with regional partners to host events in Clearfield.	■		
WU-2	Establish campaigns to target Clearfield's older homes/neighborhoods, which are more likely to have older, less water-efficient appliances and fixtures. Promote participation by having a citywide "contest" and/or providing incentives.		■	
WU-3	Coordinate with the Parks and Recreation Commission to evaluate establishing an award category to recognize well-landscaped, water saving yards for a range of use types.		■	
WU-4	Consider establishing volunteer Water Conservation Ambassadors as a community-led effort to help educate residents and businesses regarding water-efficient landscapes and irrigation practices.			■
WU-5	Review allowed land uses in the zoning code and consider minimizing and/or establishing conditional use requirements for uses that consume large amounts of water.			■
WU-6	Continue to evaluate and update, as relevant, zoning regulations and development standards that reduce outdoor water use and stormwater runoff.			■
WU-7	Maintain minimum requirements for living plant cover and trees to support groundwater recharge, help mitigate urban heat island impacts, and minimize soil erosion.		■	
WU-8	Evaluate the city's standards regarding the use of green roofs, containers, and other alternatives to meet landscaping requirements outside of the Form-Based Code districts.			■
WU-9	Consider establishing a water conservation dashboard to communicate the effectiveness of various strategies and policies implemented by Clearfield.		■	
WU-10	Consider a regular evaluation of the City's water rate structure to evaluate if the rate tiers are aligned with land use and development patterns.	■		
WU-11	Consider establishing drought metering rates to use during times of extreme drought.			■
WU-12	Pilot an indoor/outdoor meter program and consider requiring outdoor meters for all new development and major remodels.			■
WU-13	Coordinate/collaborate with secondary water providers on their progress to install water meters on secondary water connections; integrate this water use data with the city's culinary water data to provide a comprehensive understanding of indoor and outdoor water use in Clearfield.		■	
WU-14	Coordinate with Davis County Health on graywater/water recycling systems and consider a pilot demonstration project at a city facility.			■
WU-15	Continue to explore funding through grants and other programs to supplement rebates, support innovative efforts, and conduct pilot projects.	■		
WU-16	Encourage rainwater harvesting and consider a pilot demonstration project at a city facility. Coordinate with the city's stormwater management efforts.			■
WU-17	Prioritize the maintenance, watering, and planting of street trees to retain community character and help mitigate urban heat island impacts.	■		
WU-18	Communicate the success of water conservation at city-owned/managed facilities and places.		■	
WU-19	Continue to support the meter and water pipeline replacement program to keep the City's water infrastructure in good condition and minimize system inefficiencies.	■		
WU-20	Evaluate the potential for secondary water connections or graywater systems at city-owned/managed facilities.			■

CLEARFIELD
UTAH'S MILITARY CITY

CLEARFIELD CITY

WATER USE & PRESERVATION PLAN

2025

ADOPTED NOVEMBER 2025