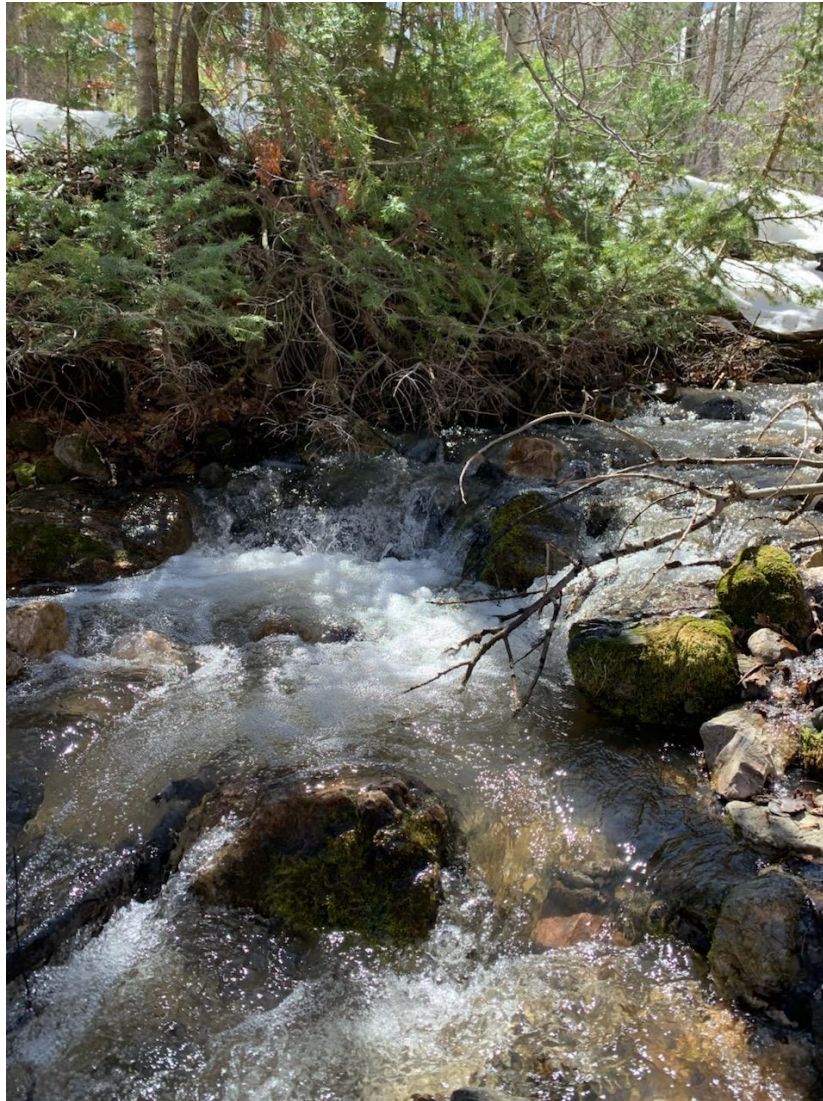


2025 WATER CONSERVATION PLAN



PREPARED BY:

OGDEN CITY
PUBLIC SERVICES DEPARTMENT
WATER UTILITY DIVISION

133 WEST 29TH STREET

OGDEN, UTAH 84401



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Contact Information:

Brady Herd
Water Utility Director
801-629-8097
BradyHerd@OgdenCity.gov

Matthew Haack
Water Conservationist
801-629-8329
MatthewHaack@OgdenCity.gov

Purpose of the Plan

As the Wasatch Front's population continues to grow, an increased water supply is needed to sustain that growth. Immediate measures must be taken to maintain and supply limited water resources to a growing population. The purpose of this Water Conservation Plan is to find ways to conserve water and sustain a growing population's current water consumption as well as preparing for its future needs.

As with any plan, there is a desired outcome. The desired result for Ogden City's Water Conservation Program is to achieve a consumption rate of 175 gallons per capita daily (GPCD) by 2065. This will be achieved by helping its population become more efficient with its water use while simultaneously maintaining a high quality of life for its residents. Reducing water use while maintaining high quality of life ensures the City will continue to attract residential growth and business development without huge impacts to the environment.

The 2025 Water Conservation Plan is an update of the 2019 Water Conservation Plan as required by the State. The plan outlines the water conservation activities and measures that will occur during the next five years. This document complies with the requirements of Utah State Code Section 73-10-32 which states that:

Utah Code

Effective 5/3/2023

73-10-32 Definitions -- Water conservation plan required.

- (1) As used in this section:
 - (a) "Division" means the Division of Water Resources created under Section 73-10-18.
 - (b) "Water conservancy district" means an entity formed under Title 17B, Chapter 2a, Part 10, Water Conservancy District Act.
 - (c) "Water conservation plan" means a written document that contains existing and proposed water conservation measures describing what will be done by a water provider, and the end user of culinary water to help conserve water in the state in terms of per capita use of water provided through culinary water infrastructure owned or operated by the water provider so that adequate supplies of water are available for future needs.
 - (d) "Water provider" means:
 - (i) a retail water supplier, as defined in Section 19-4-102; or
 - (ii) a water conservancy district.
- (2)
 - (a) A water conservation plan shall contain:
 - (i)
 - (A) a clearly stated overall water use reduction goal that is consistent with Subsection (2)(d); and
 - (B) an implementation plan for each water conservation measure a water provider chooses to use, including a timeline for action and an evaluation process to measure progress;
 - (ii) a requirement that a notification procedure be implemented that includes the delivery of the water conservation plan to the media and to the governing body of each municipality and county served by the water provider;
 - (iii) a copy of the minutes of the meeting regarding a water conservation plan and the notification procedure required in Subsection (2)(a)(ii) that shall be added as an appendix to the water conservation plan; and

- (iv) for a retail water supplier, as defined in Section 19-4-102, the retail water supplier's rate structure that is:
 - (A) adopted by the retail water supplier's governing body in accordance with Section 73-10-32.5; and
 - (B) current as of the day the retail water supplier files a water conservation plan.
- (b) A water conservation plan may include information regarding:
 - (i) the installation and use of water efficient fixtures and appliances, including toilets, shower fixtures, and faucets;
 - (ii) residential and commercial landscapes and irrigation that require less water to maintain;
 - (iii) more water efficient industrial and commercial processes involving the use of water;
 - (iv) water reuse systems, both potable and not potable;
 - (v) distribution system leak repair;
 - (vi) dissemination of public information regarding more efficient use of water, including public education programs, customer water use audits, and water saving demonstrations;
 - (vii) water rate structures designed to encourage more efficient use of water;
 - (viii) statutes, ordinances, codes, or regulations designed to encourage more efficient use of water by means such as water efficient fixtures and landscapes;
 - (ix) incentives to implement water efficient techniques, including rebates to water users to encourage the implementation of more water efficient measures;
 - (x) regional conservation planning and shared shortage agreements; and
 - (xi) other measures designed to conserve water.
- (c) The division may be contacted for information and technical resources regarding measures listed in Subsection (2)(b).
- (d)
 - (i) The division shall adopt by rule, made in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, regional water conservation goals that:
 - (A) are developed by the division;
 - (B) take into consideration goals established in the Colorado River management plan adopted pursuant to Section 63M-14-204;
 - (C) for areas in the Great Salt Lake watershed, take into consideration the Great Salt Lake, including the water budget associated with the integrated surface and ground water assessment described in Section 73-10g-402;
 - (D) take into consideration how growth and regional conservation goals impact agriculture water use;
 - (E) are reevaluated by December 31, 2030, and every 10 years after December 31, 2030; and
 - (F) define what constitutes "water being conserved" under a water conservation goal after considering factors such as depletion, diversion, use, consumption, or return flows.
 - (ii) As part of a water conservation plan, a water provider shall adopt one of the following:
 - (A) the regional water conservation goal applicable to the water provider;
 - (B) a water conservation goal that would result in more water being conserved than would be conserved under the regional water conservation goal; or
 - (C) a water conservation goal that would result in less water being conserved than would be conserved under the regional water conservation goal with a reasonable justification as to why the different water conservation goal is adopted and an explanation of the factors supporting the reasonable justification, such as demographics, geography, lot sizes, make up of water service classes, or availability of secondary water.
- (3)
 - (a) A water provider shall:
 - (i) prepare and adopt a water conservation plan; and

- (ii) file a copy of the water conservation plan with the division.
- (b)
 - (i) Before adopting or amending a water conservation plan, a water provider shall hold a public hearing with reasonable, advance public notice in accordance with this Subsection (3)(b).
 - (ii) The water provider shall provide public notice at least 14 days before the date of the public hearing.
 - (iii) A water provider meets the requirements of reasonable notice required by this Subsection (3)(b) if the water provider posts notice of the public hearing:
 - (A) for the service area of the water provider, as a class A notice under Section 63G-30-102, for at least 14 days; and
 - (B) if the water provider is a private entity and has a public website, on the water provider's public website.
 - (iv) Proof that notice described in Subsection (3)(b)(iii) was given is prima facie evidence that notice was properly given.
 - (v) If notice given under authority of this Subsection (3)(b) is not challenged within 30 days from the date of the public hearing for which the notice was given, the notice is considered adequate and proper.
- (c) A water provider shall:
 - (i) post the water provider's water conservation plan on a public website; or
 - (ii) if the water provider does not have a public website, make the water provider's water conservation plan publicly available for inspection upon request.
- (4)
 - (a) The division shall:
 - (i) provide guidelines and technical resources to help water providers prepare and implement water conservation plans;
 - (ii) assist water providers by identifying water conservation methods upon request; and
 - (iii) provide an online submission form that allows for an electronic copy of the water conservation plan to be filed with the division under Subsection (3)(a)(ii).
 - (b) The division shall post an annual report at the end of a calendar year listing water providers in compliance with this section.
- (5) A water provider may only receive state funds for water development if the water provider complies with the requirements of this section.
- (6) A water provider specified under Subsection (3)(a) shall:
 - (a) update the water provider's water conservation plan no less frequently than every five years; and
 - (b) follow the procedures required under Subsection (3) when updating the water conservation plan.
- (7) It is the intent of the Legislature that the water conservation plans, amendments to existing water conservation plans, and the studies and report by the division be handled within the existing budgets of the respective entities or agencies.

Amended by Chapter 238, 2023 General Session

Amended by Chapter 435, 2023 General Session

The 2025 Conservation Plan fulfills the requirements of the Act and provides new goals and measures within the City.

CHAPTER 2 – HISTORY OF OGDEN'S WATER SYSTEM

In 1914, a shortage of culinary water was predicted and the City Engineer was directed to conduct a study to find additional sources of water. As a result of this study, thirteen artesian wells were developed in the Ogden Valley, located about 10 miles east of the City. The water was piped from each well to a central collection basin and then piped through a redwood pipeline down Ogden Canyon to the Ogden Water System. The wells were found to deliver excellent drinking water. By 1923, a total of fifty-one wells had been drilled in Ogden Valley at a place designated as Artesian Park.

In 1936, Pineview Dam was constructed and the water impounded by the dam covered Artesian Park and the wells. Forty-Seven of the original fifty-one wells were piped to a central location and served as the main water source to Ogden City, even though the wells were under 40-50 feet of water most of the year. In 1958, the height of Pineview dam was increased 30 feet, which increased the depth of the water over the wells, and created issues with cleaning and maintaining them. When iron bacteria started growing in the artesian wells in 1964 it was determined that the old artesian wells would have to be replaced.

Between 1970 and 1973, six new deep wells were drilled on the north shore of Pineview Reservoir adjacent to the old artesian well field. The wells were located above the reservoir level so they could be serviced and maintained.

Growing demand for drinking water resulted in the 1956 construction of a water treatment facility immediately below Pineview Dam in Ogden Canyon. The treatment plant originally had the capacity to treat 10 Millions of Gallons per Day (MGD) of Pineview Reservoir surface water for distribution in the City.

A portion of the treatment plant was updated between 1970 and 1973. This project increased the treatment plant's capacity to 13.5 (MGD). The expansion helped provide sufficient water for the City's population and provided a redundant water source if the Pineview Well Field becomes inoperative.

In 1997, the City completed another renovation of the treatment plant, which updated the equipment and added a pretreatment facility east of the plant. Construction of a new water treatment facility began in April 2014. The new water treatment facility provides more reliable water treatment ability and provides for future expansion of water treatment capacity.

The City began major improvements to its water system in 2008 to increase water storage capacity and replace failing infrastructure. These projects included new linings and covers at the 23rd street water storage reservoir, upgrades to existing facilities, improved pumping and storage facilities at 9th street, a new reservoir at 36th street, replacement of the 46th street transmission line and the construction of the Taylor Canyon Well, Airport Well, Ogden Canyon 24-inch and 36-inch transmission lines.

In addition to the above described drinking water sources, approximately 37% of residential parcels within the City have access to seasonal irrigation water through a secondary irrigation system. The secondary irrigation system is currently not owned or operated by the City, but is part of the Pineview Water and Weber Basin Water Systems. Certain users also utilize irrigation water from open channel flows managed by individual irrigation companies.

CHAPTER 3 - DESCRIPTION OF OGDEN CITY AND ITS WATER SYSTEM

Inventory of Water Supply System

Ogden City covers an area of 26.6 sq. mi and is located in Northern Utah nestled between the Wasatch Mountains and the Great Salt Lake. Climate can vary drastically from cool and snowy winters to dry and hot summers. During hot summer months, demands on water production increase significantly for landscape irrigation and put pressure on the distribution system. This inventory analysis will help determine current and future water needs of the City.

The source of much of the information concerning the drinking water distribution system is found in the Ogden Culinary Water Master Plan. Currently the City receives water from underground water wells year round and when demand exceeds the capacity of the wells, the water supply is supplemented with treated surface water.

City owned water rights that feed the plant consist of 10,000 acre-feet of water from Ogden River Water Users Association from the original Pineview Reservoir project, and 1,500 acre-feet of surface water from Weber Basin Water Conservancy District (WBWCD) as a result of the expansion of Pineview Reservoir. The City also has various other water rights within Ogden Canyon which can be treated and used during the peak irrigation season.

The City's total water supply is currently served by six Pineview wells located in Eden, Utah that produce 14.9 MGD. The Ogden City Water Treatment Plant has a capacity of 13.5 MGD combining for a total 28.4 MGD for the Canyon sources. The Taylor Canyon Well has a capacity of 1.44 MGD. The Airport Well has a capacity of 2.61MGD and WBWCD connections have a capacity of 4.33 MGD, 4.3 MGD, and 3.32 MGD respectively combining for a total of 11.95 MGD for Weber Basin sources.

Table 1. Summary of Ogden's Culinary Water Sources

Source	Capacity
Pineview Wells	14.9 MGD
Taylor Canyon Well	1.44 MGD
Airport Well	2.61 MGD
Treatment Plant	13.5 MGD
WBWCD	11.95 MGD
Total	44.4 MGD

The amount of water supplied from the treatment facility and the Pineview Well Fields is limited by the capacity of the pipes that run through Ogden Canyon. The existing pipelines (24" and 36" diameter pipes) in Ogden Canyon linking the Pineview Wells and treatment plant to the City have a maximum capacity estimated at about 30 MGD. The existing transmission pipelines capacities closely match the existing production capacity of the Pineview wells and treatment plant at 28.4 MGD. Figure 1, shows the total water delivered from all sources. As can be seen in Figure 1 water usage has remained fairly stable over the last 9 years despite the growing population.

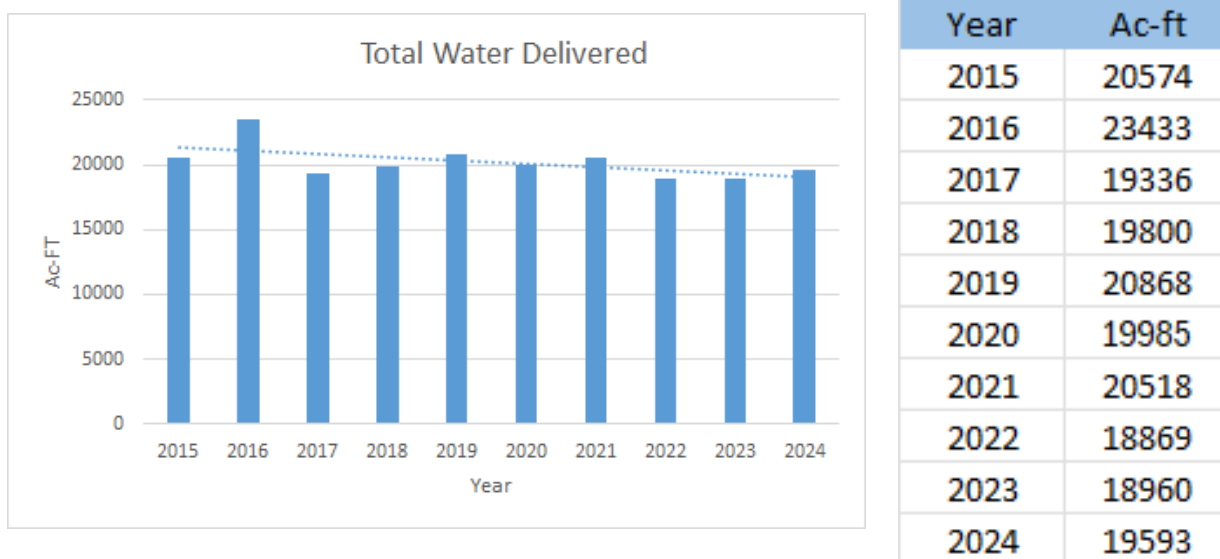


Figure 1: Ogden City water utility totals, well, treated, and WBWCD.

City Connections

Ogden currently has 25998 connections. Table 2 shows the number of connections by type and future projections of connections to 2060.

Table 2: Current and projected water connections.

Year	Residential	Commercial	Industrial	Institutional	Unmetered	Total
2024	23741	1750	119	388	0	25998
2040	28305	1867	165	296	0	30850
2060	33860	2233	197	613	0	36904

See Appendix F for complete 2024 water-use data

Water Consumption Goals

With increasing attention to water conservation, appropriate evaluations of per capita use has become critical. Determining the per capita water consumption can be achieved by dividing the total gross water used over a continuous 12-month period by the service area population. As part of the State Water Conservation Plan, there is a goal set to decrease per capita water consumption to 175 GPCD by the year 2065. Ogden City has adopted this reduction as its goal. The daily per capita water use can be seen in Figure 2. According to our data there is a downward trend in per capita water consumption.

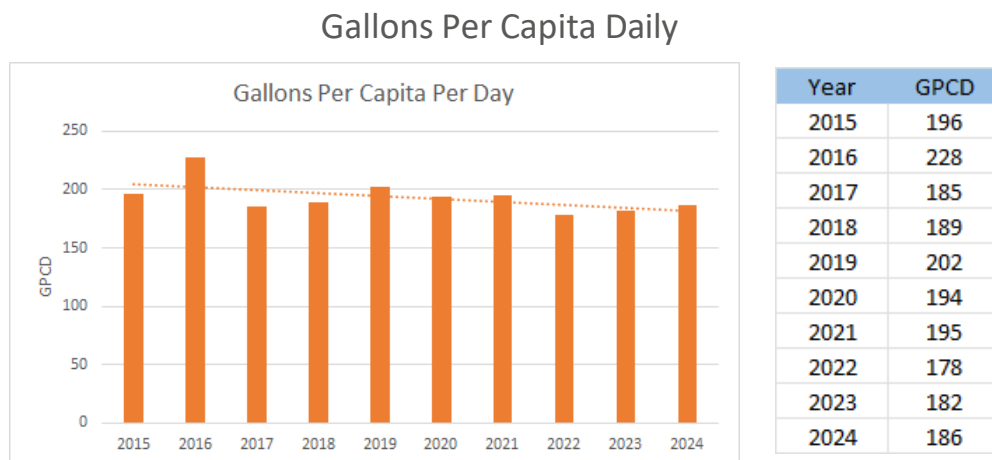


Figure 2: Gallons Per Capita Daily (GPCD)

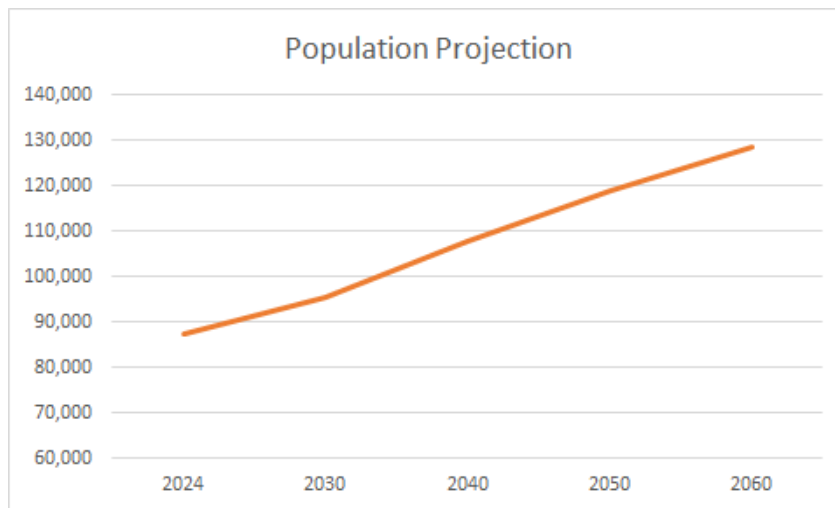
Storage Requirements

The total existing storage requirement for the Ogden City water system including equalization, fire suppression, and emergency storage for existing is 31.5 million gallons (MG), 2040 storage requirement is 31.3 (MG), 2060 storage requirement is 36.0 MG. The total existing storage capacity for the Ogden system as a whole is 72.9 MG, most of which is provided by the 23rd/24th street reservoirs.

CHAPTER 4 - POPULATION GROWTH AND CONTINUAL WATER CONSERVATION

Projected Population Growth Based on 20 Year Plan

With any water distribution system supply and demand is always the critical question. Population projections help utilities plan where funding and resources should be spent in the distribution system. There are various methods for projecting population and future growth for cities. For this Water Conservation Plan, the projected population growth rate used for Ogden was the rate determined based on the Ogden Culinary Water Master Plan. Figure 3 shows the projected population. It should be noted that actual population growth rate may vary from this average projected growth rate.

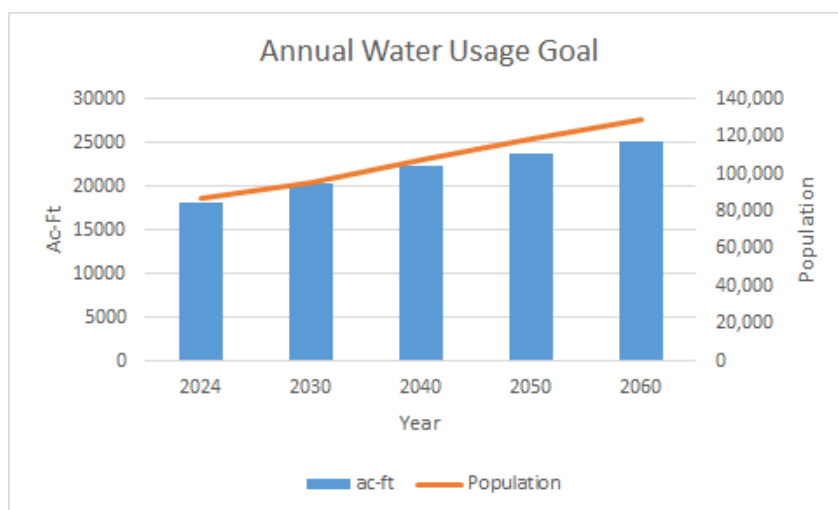


Year	Population
2024	87,267
2030	95,519
2040	107,620
2050	118,880
2060	128,740

Figure 3. Ogden City Population Projection.

Water Conservation Importance with a Growing Population

With an increasing population comes a higher demand for water. If the City can reduce overall water use per capita to 175 GPCD by 2065 then we see in Figure 4 that water consumption will just slightly increase with the growing population during the next 50 years. One way this can be achieved is by reducing the daily per capita water used for each person or entity. This reduction also allows Ogden City to supply water to the population without additional infrastructure.



Year	Population	ac-ft
2024	87,267	18245
2030	95,519	20260
2040	107,620	22276
2050	118,880	23756
2060	128,740	25236

Figure 4: Water Usage Goal

To facilitate State water reduction goals, Ogden City has also set its water conservation goal to achieve a daily per capita water consumption rate of 175 gallons by 2065. To achieve this, water conservation goals should include lowering peak day demand, reducing waste, distribution system efficiency, and optimized system capacities.

CHAPTER 5 – INTERNAL CONSERVATION MEASURES

Capital Improvement Projects

Ogden City continues to dedicate funds to complete capital improvement projects with the majority of those being water utility projects. These include: water transmission line replacements, construction of two new wells, and water storage facility maintenance.

5 Year Capital Improvement Plan

The five-year capital improvement plan includes the projects that have been prioritized as the most urgent projects. These projects are those that should be completed during the next five years.

- Pipe classifications and replacement projects due to leaks and age.
- Various transmission and distribution system projects

Leak Detection and Repair

The AWWA publication, “Quantifying Future Rehabilitation and Replacement Needs of Water Mains”, documents the life expectancy data of four major US water utilities (Deb, A. K., Y. J Hasit, F. M Grablutz, and R. K Herz, 1998). The study put various pipe materials into a survival probability curve. The study showed that the pipe’s health started to decline around 60 years and rapidly deteriorated at around 100 years. According to the Ogden Culinary Water Master Plan, there is a high percentage of pipes that fall under the age category where pipe health starts to decline; therefore, a large majority of resources should be allocated for pipe leak detection, pipe rehabilitation and pipe replacement in order to mitigate further water loss (Figure 5).

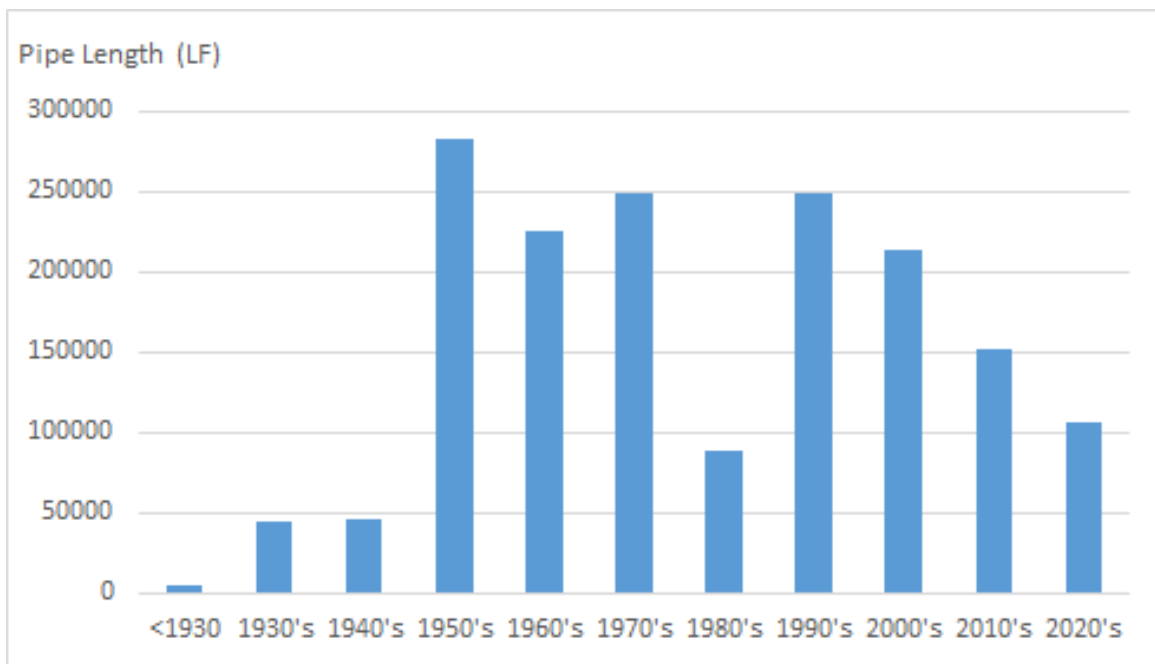


Figure 5: Ogden City Water Pipe Attributes Categorized by Age

Ogden City Water Utility has an active leak detection and repair program. The Water Utility Division provides 24-hour standby personnel available to receive notification of water leaks. Once notification is received a repair crew is dispatched to repair the leak. During working hours the response time is usually within an hour. At other times repair crews are dispatched within one to forty-eight hours depending on the severity of the leak.

An extensive study of the 36" and 24" Ogden Canyon pipelines that link the Pineview Wells to Ogden City was completed in January of 2009. The study determined the pipe thickness, pipeline deterioration, possible water loss, and rehabilitation options available. Inspection results indicated that the 24" line varied from good to poor condition. Fifteen total leaks were found on the 24" line with 12 leaks classified as large, two leaks classified as medium, and one small leak. This study led to the replacement of the 24" line in the winter of 2012-2013. To prevent further water loss, the 36" Ogden Canyon pipeline is scheduled for replacement beginning in 2025.

The City also plans to establish an annual leak detection survey. Working with a consultant, the Water Utilities Division staff will identify areas of the water distribution system deemed to be at most risk for leaks.

Supervisory Control and Data Acquisition (SCADA)

Operation efficiency is an important and ongoing program that has been adopted by Ogden City Water Utility. SCADA is an acronym for Supervisory Control and Data Acquisition. Ogden City's SCADA system is an integral part of improving operational efficiency. It is a monitoring system that allows for real-time measurement and control of pumping rates, water flows, tank elevations and other operational data. Before 2006, the City's SCADA system was limited to its water treatment plant and wells. In 2006 this system was expanded to include the reservoirs, pump stations, and many of its major components, and is continuing to expand as new components come online. This system can collect data from monitoring points throughout the water system and transmit the information to a central location, allowing the water division to analyze the data and perform on-line control functions to operate the system. This SCADA system has greatly improved the efficiency of operations within Water Utility.

System Water Loss Control and Water Audit

Improvements to the SCADA network and Water Metering infrastructure have helped facilitate a city-wide water loss audit. Reliable and complete water metering is critical to identifying key losses within the system. We have performed an American Water Works Association (AWWA) Audit. The audit produces a validity grade based on operational practices throughout the water system. This includes water supplied, water imported, meter accuracy, and customer billing. Ogden City has received a grade of 59/100. Ogden City has a goal of achieving a 70/100 score by 2040. This score can be improved by ensuring all connections are metered along with routine calibration.

Pressure Regulator Valves

Pressure Regulator Valves (PRVs) regulate and control pressure zones throughout the City, eliminating fluctuations in pressure by opening and closing valves as needed to keep a consistent flow, and therefore, a more consistent pressure in each of the city's pressure zones. In 2005, the City evaluated its 34 existing PRVs as well as approximately 12 separate pressure zones to determine the possibility of consolidating pressure zones in order to eliminate stations and provide a more effective level of service to the water users. The evaluation found that 11 PRVs needed to be replaced because of deterioration, and an additional 3 new PRV's were added to the system. Since the completion of these installations and realignments the City has seen a significant drop in leaks due to pressure fluctuations. Ogden City will continue to replace older PRV's throughout the city as funding becomes available.

Water Rate Structure

Residential and commercial water rates are based on the gallons of water used, meter size, and availability of secondary water. The base rate is charged monthly and is based on the water meter size. A discount of the minimum monthly charge, or base rate, is given to users who are granted tax abatement by Weber County.

The structure is graduated and increases rates with usage. The structure also accounts for those with secondary water available. Higher users that have access to secondary water are penalized. This structure is a great way to encourage water conservation.

(See Appendix A)

Meter Replacement

Water meters lose accuracy in the negative direction as they age. This results in decreased water revenues and unaccounted water losses. The City has now retrofitted all of its water meters to create an Advanced Metering Infrastructure (AMI). These new meters have reporting capabilities to identify leaks and backflow events.

Secondary Water System

Approximately 37% of residential parcels within the City have access to seasonal irrigation water through a secondary irrigation system. The City encourages the connection to the secondary irrigation system when available. The secondary irrigation system is currently not owned or operated by the City, but is part of the Pineview Water and Weber Basin Water Systems. Certain users also utilize irrigation water from open channel flows managed by individual irrigation companies.

Enforce Current Water Conservation Ordinances

Ogden City has enacted several ordinances to promote water conservation. These ordinances target unnecessary excess water usage and allow the City to impose water use restrictions in times of emergency. An example of this is restriction of water use for landscape between the hours of 10 a.m. and 6 p.m. from April 15th through November 1st. If violators are found watering during the mandatory time restrictions, penalties may be imposed. (See Appendix B).

Develop and Adopt Future Water Conservation Ordinances

Future ordinances could include expanded use of water-wise landscaping. The goal would be to limit the use of cool season turf grass on all new developed lands and include native and water efficient plants that can survive on limited amounts of water.

Install Smart Flow Sensors

The goal is to install smart flow sensors on all City owned automatic irrigation systems. These sensors supply water based on real-time data. Relating to this is a goal to replace all manual irrigations systems in Ogden City parks, recreational and open space areas with automatic smart flow systems.

Water Conservationist

The City retains a Water Conservationist to develop programs that would educate the public about water conservation measures, coordinate public outreach programs, and solicit public involvement and calls to action in water conservation measures. The Water Conservationist also provides support for finding solutions for water losses throughout the City and system improvements. This position was created in July 2014.

Backflow Program

Ogden City Water Utility maintains a backflow prevention program to reduce the risk of unprotected cross-connections and ensure the highest quality drinking water. The

certified backflow technicians perform hazard assessments throughout the city to determine the degree of hazard at each site and adequate backflow protection at each connection that may pose a risk to water quality. All new construction, modifications and (or) expansions of plumbing systems will fall under the permit process such as plan review and inspections. Additionally, Ogden City Water Utility sends notices to property owners letting them know when testing of their backflow assemblies are due (See Appendix C).

Water Reclamation

Studies on water reclamation from other cities have been done. Currently, installing a system for the reclamation of water appears too costly. We are monitoring other entities in the State as they study this option. Further study will be discussed in the future.

CHAPTER 6 – EXTERNAL CONSERVATION MEASURES

Public Information

A vital component in water conservation is public awareness. Currently, information is distributed via social media, monthly *At Your Service* news articles, the Ogden City Website, and a semiannual water conservation flyer that is sent to all residents and businesses in their utility bill. Brochures are provided by Ogden City, as well as from Weber Basin Water Conservancy District, concerning water conservation strategies. The City has launched a website where customers can pay their water bill and find information concerning water conservation and programs available to the public. The website is focused on recommendations for conserving water, provide water-wise landscape information, and promote free indoor and outdoor water audits at the customer's property.

Public Education and Involvement

Every year the City participates in the spring Weber County Water Fair. Classes from the Ogden and Weber School Districts participate in the fair. The City plans to visit each school as permitted to educate youth about their role in water conservation. The Water Conservationist also hosts a booth at the Ogden Nature Center for Earth Day and for events at the Weber Basin Water Conservation District Demonstration Garden.

Three major themes for water conservation will be:

- Promote awareness that while Ogden is situated near the Wasatch watershed, the Rocky Mountains still border the Great Basin Desert with Ogden only receiving an average of 1.8 inches of precipitation a month according to the Utah Annual Rainfall and Climate Data
- Conservation of our water sources and protection of our watershed is vital.
- Conserve water to preserve habitat and recreational opportunities for our future quality of life.

Emergency Readiness

Water, wastewater, and storm water services are critical functions provided for the public's well-being. Each of these utilities can be affected by disasters and emergencies, resulting in disruption of services and water shortages (See Appendix D). Water conservation programs have an important role in our community's disaster readiness.

- Water conservation programs help us plan for ways to manage consumption of a limited resource, especially when disruptions of a city's water supply due to emergencies and disasters may occur.
- Water conservation programs help us use water more efficiently which enables more water to be available for emergency response.
- Water conservation programs give the community the tools and information they need to respond accordingly when an emergency occurs.
- Water conservation programs help us adapt quickly to changing water conditions such as drought.

Partnering Entities

With any program, combining resources, sharing information, and utilizing experts in the field are advantages to a successful Water Conservation Program. Ogden City Water Utility partners with other entities such as Weber Basin Water Conservancy District (WBWCD) and other institutions to help educate and provide new insights into water conservation. Ogden City Water Utility recognizes that water conservation is not just a City concern, but a state and global concern and that new programs should reflect this broad view.

Landscape Conservation Programs and Incentives

The City, in partnership with Utah State University, has installed a Water Conservation Learning Garden located in the Ogden Botanical Gardens. The garden features medium, low, to no use water areas. It also features how-to areas that illustrate how to group certain plants together based on watering needs. The garden also demonstrates how to landscape a park strip that can be maintained with very little water, while still retaining aesthetic appeal. Ogden City, in recent years, has partnered with Weber Basin Water Conservancy District to develop and implement a water-efficient park strip incentive program.

Outdoor Water Audit Programs

The Water Conservationist will go to a resident's home or business and perform a water audit, or sprinkler check. The audit will consist of checks such as: the amount of water the system is providing, how uniform the distribution is, the soil permeability, the root depth of the grass, and then recommend a general watering schedule. The technician will also point out any deficiencies in the system such as broken, missing, or sunken nozzles that need to be replaced. The technician will provide additional information on water conservation activities that can be implemented during spring and summer months.

Indoor Water Audit Programs

The Water Conservationist will go to a resident's home or business and perform a general water loss prevention inspection. The inspection includes identifying leaking plumbing fixtures, potential water loss areas and fixtures that could be replaced with more water efficient fixtures. The residential inspection will also offer suggestions on winterizing pipes, what to look for during the winter mohe Water Conservationistnths, and general ways that water can be conserved through everyday household activities.

Remote Metering

Remote Metering is a system that provides water meter readings at designated time intervals. The data collected can provide hourly consumption data, continuous consumption status, and reverse flow event status. This will provide customers with the ability to monitor their water usage.

Water Efficient Plumbing Standards

In 1992 the federal government enacted the 1992 U.S. Energy Policy Act. This law required plumbing manufacturers to produce fixtures such as toilets, showerheads and faucets that meet a set standard for water-efficiency. All toilets sold in the U.S. now have a maximum flush of 1.6 gallons instead of 3 to 5 gallons per flush.

All new construction in Ogden City since 1992 has the new higher efficiency fixtures; however, according to the U.S. Census data there are approximately 27,000 homes in Ogden built before the Energy Policy Act (Figure 6). As homeowners replace old and worn out fixtures, these replacements will result in "automatic" water savings. It is estimated by 2025 the natural replacement of old fixtures with new water efficient fixtures will result in approximately 3.5% or 850 acre-feet per year reduction in overall water use.

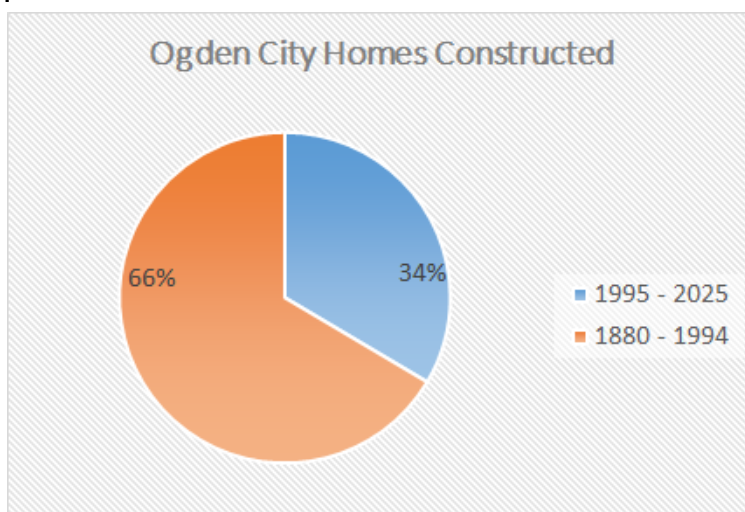


Figure 6: Age of Homes Constructed in Ogden (3420 homes built before 1995 have undergone renovation and are included in the 1995-2025 numbers)

With a large majority of the city being constructed before 1992, there is a definite need to encourage upgrades of older less efficient water fixtures. In order to offset the amount of water wasted while upgrades are made to these older fixtures, the City is offering Conservation Kits to Ogden residents in an effort to help mitigate water loss. Each Conservation Kit will contain the following:

- (1) 2.0 gpm showerhead
- (2) 1.0 gpm faucet aerators
- (1) Packet of toilet leak detection tablets
- (1) Information sheet containing water conservation tips and ideas.

Ogden City Water Utility encourages residents to take advantage of rebates offered through Utah Water Savers.

Rain Harvesting

According to the Utah Division of Water Rights, rain collection was made legal in 2010 with the following stipulations:

- *To collect, store, and place the captured precipitation to a beneficial use, a person must register the use with the Utah Division of Water Rights as detailed in 73-3-1.5.*
- *A person may collect and store precipitation without registering in no more than two covered storage containers if neither covered container has a maximum storage capacity of greater than 100 gallons.*
- *The total allowed storage capacity with registration is no more than 2,500 gallons. Collection and use are limited to the same parcel of land on which the water is captured and stored.*
- *There is no charge for registration and a certificate will be provided to the applicant.*

The harvested rainwater may be used for non-potable purposes only such as lawn and garden watering, washing vehicles, etc.

High Water Usage Reports

Monthly reading and billing can be used as a conservation measure by providing property owners with data to assess not only their recent usage but historical usage as well. This data will help owners assess any issues with their plumbing system and whether changes in water use behavior would affect their monthly usage and costs.

Monthly billing and software has enabled the city to generate a high water usage report which provides information about which properties have unusually high water use relative to their normal use. The City then contacts the owner of the property as soon as the high water usage is detected instead of waiting for the owner to receive this information in their billing statement. This enables the owner to resolve any issues that may be present in the owner's system immediately. The City may also send the Water Conservationist out to the property to help the owner locate possible water loss areas and provide conservation tips, ideas, and recommendations for improving water efficiency.

CHAPTER 7 – WATER CONSERVATION GOALS

Conservation Measure Summary

Table 3: Summary of water conservation program activities.

Measure	Description	Ongoing	In Development	Suggested
Brochures, Newsletters, Billing Inserts	Develop and distribute brochures, newsletters, and articles concerning water conservation and programs available	X		
School Programs	Develop programs, presentations, and activities that facilitate classroom learning on conservation	X		
Water Fair	Participate in annual Weber County Water Fair	X		
Water Week	Develop community programs that promote world water week and water conservation	X		
Learning Garden	Design and construct public garden demonstrating water wise landscaping	X		
Media	Develop and distribute water conservation programming and material for media outlets.	X		

Water Website	Develop and design water utility website with a focus on water conservation	X		
Community Involvement	Develop and promote programs that bring awareness and provide community action regarding water conservation	X		
Water Conservationist	Provide a full time person dedicated to water conservation and public education	X		
Meet and Greets	Allow public to meet the Water Utility Director and Water Conservationist in a Water Conservation Open House	X		
Contests	Promote drawing, photo, and writing contests in the community about water conservation			X
Employee awareness	Provide yearly presentation on water conservation techniques and strategies		X	
Landscape and Irrigation	Develop and distribute a guide for water efficient landscapes and irrigation systems	X		
Landscape check-ups	Provide residential landscape assessments and offer suggestions to enhance water efficiency	X		
Landscape plant list	Develop and distribute a water-wise plant list specific to local weather and soils	X		
Landscape templates	Develop and distribute landscape reference plans	X		
Outdoor Audits	Promote and conduct lawn sprinkler check-ups for residential, commercial, and institutional properties	X		
Indoor Audits	Promote and conduct internal check-ups for residential, commercial, and institutional properties	X		
Parkstrips	Encourage water-wise plants to be planted in parkstrips	X		
Parkstrip Incentives	Provide incentives for the removal of high water use plants in exchange for low water use plants	X		

Parkstrip Plants List	Develop and distribute an approved water-wise plant list for parkstrip areas	X		
Virtual Learning Garden	Develop virtual water-efficient learning garden tour for website			X
Conservation Kits	Provide low water use shower heads, aerators, and save tanks and provide information on water saving procedures	X		
Partnering	Partner with other water entities and institutions in an effort to provide new strategies on water conservation and public awareness	X		
Workshops and Classes	Provide workshops on various water conservation strategies and promote WBWCD classes and workshops	X		
Rate structuring	Utilize a rate structure to encourage responsible water use	X		
Rebates	Promote rebate programs available through WBWCD	X		
High water usage report	Promptly notify property owners when large spikes in water use are reported	X		
Monthly meter reading and billing	Provide timely information to the customer concerning water use and show historical data to be used as a comparison	X		
Universal metering	Ensure that every account is metered	X		
Water loss prevention	Revitalize distribution system by implementing an aggressive pipe replacement program	X		
Leak detection	Provide annual leak detection audits and identify and repair leaks in a timely manner	X		
Pipe Replacement plan	Develop and implement a system in replacing aging pipes	X		
Water loss Audit	Complete a full system water loss audit	X		
Irrigation Standards	Develop and adopt water efficiency standards for all commercial properties		X	

Landscape ordinance	Develop and adopt ordinance to encourage water-wise landscaping	X		
Parkstrip ordinance	Develop and adopt ordinance to encourage water-wise planting	X		
Rainwater Harvesting	Promote rainwater harvesting based on state legislative guidelines	X		
Rain Sensor Ordinance	Require properties with automated sprinkler systems to be upgraded with rain sensor			X
Wasteful water Ordinance	Develop and adopt an ordinance that would prohibit any unnecessary or excessive use of water	X		
Water Shortage Contingency Plan	Update and identify specific actions to be taken during water shortages and emergencies	X		
EPA Residential Study	Measure water efficiency in newly constructed homes			X
Plumbing fixtures	Inventory upgrades in plumbing fixtures and calculate the quantity of remaining older fixtures to be replaced			X
Plumbing rebates	Provide rebates to property owners with fixtures older than 1994			X

5 Year Conservation Activities

Ogden City's water conservation goal is to reduce per capita water use to 175 GPCD by the year 2065. This reduction from the base year of 2015 is currently underway. Progress will be evaluated annually when compiling the Water Use Report. This approach will take into account population growth, funding for new and rehabilitation projects that may not be readily available upfront to realize instantaneous results, and continued public education of current and new techniques and strategies on conservation as they are developed and implemented.

The next five years activities will specifically focus on the following recommendations to achieve current water reduction goals:

- Continue to improve infrastructure and perform leak detection.
- Work to implement and encourage water efficient landscapes, landscape ordinances, policies, and regulations.

- Continue improvements in Advanced Metering Infrastructure
- Work closely with other entities such as Weber Basin Water Conservancy District and Utah State University on water conservation tips and procedures.
- Continue to promote the use of water efficient plumbing fixtures.
- Educate consumers about benefits of water conservation and provide information on techniques and strategies to achieve conservation goals.
- Continue to utilize analytical water use software to identify and resolve continuous water use events.

REFERENCES

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Ogden Culinary Water Master Plan, Prepared by Ogden City Water Utility Department., Ogden, UT. 2009

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APPENDICES

Appendix A – Culinary Water Rates

Appendix B – Water Conservation Ordinances

Appendix C – Backflow and Cross Connection

Appendix D – Water Shortage Response Summary

Appendix E – Water Utility Service Area Map

Appendix F – Water Use Data

APPENDIX A

Culinary Water Rates

Water Rates

5-1 through 10-31	3/4" and smaller without secondary
Base	\$ 29.43
0 to 6,000	\$ 2.52
6,001 to 42,000	\$ 3.86
42,001 - 84,000	\$ 4.46
Above 84,000	\$ 5.02

and those without winter rate	3/4" and smaller with secondary
base	\$ 29.43
0 to 6,000	\$ 2.52
6,001 to 12,000	\$ 3.86
Above 12,000	\$ 5.02

In order to get a discount from Ogden City, residents must qualify and receive abatement of taxes through a Weber County tax relief program. Discount amount is \$15.83 per month on the water base rate. This amount is increased annually based on the BIA.

5-1 through 10-31	1" without secondary
Base	\$ 48.68
0 to 6,000	\$ 2.52
6,001 to 42,000	\$ 3.86
42,001 - 84,000	\$ 4.46
Above 84,000	\$ 5.02

and those without winter rate	1" with secondary
base	\$ 48.68
0 to 6,000	\$ 2.52
6,001 to 12,000	\$ 3.86
Above 12,000	\$ 5.02

base 1 1/2	\$ 67.96
base 2	\$ 109.10
base 3	\$ 304.44
base 4	\$ 383.03
base 6	\$ 852.47
base 8	\$ 1,562.30
0 and above	\$ 3.86

Storm Water Service Fees

Price Per Equivalent Surface Unit	\$10.22
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Sewer Rates

Meter Size	Sewer Base Rate	CWS Base Rate	Combined Total
3/4 and smaller	\$ 19.52	\$ 20.07	\$ 39.59
1"	\$ 32.32	\$ 33.23	\$ 65.55
1 1/2"	\$ 45.08	\$ 46.38	\$ 91.46
2"	\$ 72.35	\$ 74.41	\$ 146.76
3"	\$ 202.03	\$ 207.65	\$ 409.68
4"	\$ 254.13	\$ 261.26	\$ 515.39
6"	\$ 565.59	\$ 581.41	\$ 1,147.00
8"	\$ 1,036.52	\$ 1,065.52	\$ 2,102.04
sewer will be charged 0.48 additional per thousand above 6000 gal winter average for 1" smaller- all usage on above 1"			

Refuse Rate

First Cart Rate:	
96 Gallon	\$ 26.14
64 Gallon	\$ 20.68
Additional Cart Rate:	
96 Gallon	\$ 22.80
64 Gallon	\$ 17.27
per month/per additional cart	
per month/per additional cart	
Cart Pick Up	\$ 32.59
Cart replacement fee is the actual cost to the city for a new cart	

BIA (Blended Inflation Adjustment) CPI (Consumer Price Index)

4% Rate increase + 2.13% BIA Increase for Water beginning of fiscal year.

2.13% BIA Increase for Sanitary Sewer, and Storm Sewer beginning of fiscal year.

2.40% CPI Increase for Garbage beginning of fiscal year.

9-1-6: RATES AND BILLING:

A. Designated:

1. Metered Water Service: All water service, except the delivery of water which does not meet the requirement for domestic and culinary use and sales negotiated by contract, shall be metered by water meters of a design and size approved by the division. Monthly service and usage charges for metered water service not otherwise negotiated by contract are as follows:

a. The service charge, or base rate, shall be charged to each customer to whom water service is available regardless of whether any water is used. The base rate is determined by meter size as follows:

Water Monthly Service Charge (Base Rate) Table					
Meter Size	Begin July 1, 2024 FY 2025 Rate	Begin July 1, 2025 FY 2026 Rate Increase	Begin July 1, 2026 FY 2027 Rate Increase	Begin July 1, 2027 FY 2028 Rate Increase	Begin July 1, 2028 FY 2029 Rate Increase
Water Monthly Service Charge (Base Rate) Table					
Meter Size	Begin July 1, 2024 FY 2025 Rate	Begin July 1, 2025 FY 2026 Rate Increase	Begin July 1, 2026 FY 2027 Rate Increase	Begin July 1, 2027 FY 2028 Rate Increase	Begin July 1, 2028 FY 2029 Rate Increase
3/4" and 5/8"	\$27.73	\$1.11	\$1.15	\$1.20	\$1.25
1"	\$45.87	\$1.83	\$1.91	\$1.98	\$2.06
1 1/2"	\$64.03	\$2.56	\$2.66	\$2.77	\$2.88
2"	\$102.80	\$4.11	\$4.28	\$4.45	\$4.63
3"	\$286.86	\$11.47	\$11.93	\$12.41	\$12.91
4"	\$360.91	\$14.44	\$15.01	\$15.61	\$16.24
6"	\$803.23	\$32.13	\$33.41	\$34.75	\$36.14
8" or Larger	\$1,472.06	\$58.88	\$61.24	\$63.69	\$66.23
Current Year Rate = (Previous Year Rate + Current Year Rate Increase)x(1 + current year blended inflation adjustment (BIA))					
Sample calculation: FY2026 rate calculated for 3/4" meter assuming BIA = 3%: \$29.70 = (\$27.73+\$1.11)x(1+.03)					

b. In addition to the base rate which is determined by meter size, the following rates shall be charged per 1,000 gallons of water used, determined by meter size, the availability of secondary water on the property, and the number of gallons of water used per month:

(1) One inch meter and smaller; except that connections without secondary water service shall be billed according to the schedule in Subsection A.1.b(2) of this section between May 1 and October 31:

One Inch and Smaller Usage Rate Table (except those without secondary water from May 1 to Oct 31)					
Gallons of Water Used Per Month	Begin July 1, 2024 FY 2025 Rate Per Thousand Gallons	Begin July 1, 2025 FY 2026 Rate Increase Per Thousand Gallons	Begin July 1, 2026 FY 2027 Rate Increase Per Thousand Gallons	Begin July 1, 2027 FY 2028 Rate Increase Per Thousand Gallons	Begin July 1, 2028 FY 2029 Rate Increase Per Thousand Gallons
0-6,000	\$2.37	\$0.09	\$0.10	\$0.10	\$0.11
6,001-12,000	\$3.64	\$0.15	\$0.15	\$0.16	\$0.16
Above 12,000	\$4.73	\$0.19	\$0.20	\$0.20	\$0.21
Current Year Rate = (Previous Year Rate + Current Year Rate Increase)x(1 + current year blended inflation adjustment (BIA))					
Sample calculation: FY2026 rate calculated for 3/4" meter assuming BIA = 3%: \$2.54 = (\$2.37+\$0.9)x(1+.03)					

(2) One inch and smaller without secondary water service between May 1 and October 31:

One Inch and Smaller Usage Rate Table (those without secondary water from May 1 to Oct 31)					
Gallons of Water Used Per Month	Begin July 1, 2024 FY 2025 Rate Per Thousand Gallons	Begin July 1, 2025 FY 2026 Rate Increase Per Thousand Gallons	Begin July 1, 2026 FY 2027 Rate Increase Per Thousand Gallons	Begin July 1, 2027 FY 2028 Rate Increase Per Thousand Gallons	Begin July 1, 2028 FY 2029 Rate Increase Per Thousand Gallons
0-6,000	\$2.37	\$0.09	\$0.10	\$0.10	\$0.11
6,001-42,000	\$3.64	\$0.15	\$0.15	\$0.16	\$0.16
42,001-84,000	\$4.20	\$0.17	\$0.17	\$0.18	\$0.19
Above 84,000	\$4.73	\$0.19	\$0.20	\$0.20	\$0.21
Current Year Rate =(Previous Year Rate + Current Year Rate Increase)x(1 + current year blended inflation adjustment (BIA)) Sample calculation: FY2026 rate calculated for 3/4" meter assuming BIA = 3%: \$2.54 = (\$2.37+\$0.9)x(1+.03)					

(3) Larger than one inch:

Larger than 1" Water Usage Rate Table					
Gallons of Water Used Per Month	Begin July 1, 2024 FY 2025 Rate Per Thousand Gallons	Begin July 1, 2025 FY 2026 Rate Increase Per Thousand Gallons	Begin July 1, 2026 FY 2027 Rate Increase Per Thousand Gallons	Begin July 1, 2027 FY 2028 Rate Increase Per Thousand Gallons	Begin July 1, 2028 FY 2029 Rate Increase Per Thousand Gallons
Charge per 1,000 gallons	\$3.64	\$0.15	\$0.15	\$0.16	\$0.16
Current Year Rate =(Previous Year Rate + Current Year Rate Increase)x(1 + current year blended inflation adjustment (BIA)) Sample calculation: FY2026 rate calculated for 3/4" meter assuming BIA = 3%: \$3.90 = (\$3.64+\$0.15)x(1+.03)					

c. In addition, the specified monthly culinary water base rate and usage charges shall be increased annually on July 1 in perpetuity by a blended inflation adjustment (BIA) determined as follows:

(0.67 multiplied by the percentage change in the west region consumer price index for all items derived for urban consumers (west region CPI-U), without any seasonal adjustment, for the prior year from January to January and produced by the United States Bureau of Labor Statistics (CPI)) plus (0.33 multiplied by the percentage change in the construction cost index shown by American City and County for the prior year from January to January (CCI)).

The blended inflation adjustment shown as a formula is: $BIA = (0.67 * CPI) + (0.33 * CCI)$.

d. If the blended inflation adjustment falls below zero for the prior calendar year, no inflation adjustment will be made.

2. Discount: Subject to city policy governing utility discounts, any property owner in a single or two-family dwelling who receives abatement of taxes through a Weber County tax relief program may receive a \$15.50 per month discount on the water base rate:

The discount may be increased annually based on the blended inflation adjustment (BIA) defined in this section.

3. Increase for Extraordinary Conditions:

a. Whenever the mayor determines that extraordinary drought conditions or other emergency conditions exist affecting the quantity of available water, the mayor, under an administrative order adopted pursuant to Subsection 9-1-8.A and after seven days' advance written notice to the city council, may temporarily increase by 20% the water rates assessed on the basis of usage listed in Subsection A.1.b for all amounts of water used over:

(1) Six thousand gallons per month for the class of users with meters one inch and smaller in size;

(2) Fifty thousand gallons per month for the class of users with meters one and one-half to two inches in size; or

(3) Two hundred thousand gallons per month for the class of users with meters over two inches in size.

b. For purposes of this subsection "extraordinary drought conditions" shall be considered to exist whenever the annual rate of precipitation affecting the Weber-Ogden River basin drops to a level at or below 30% of median using information from the Natural Resources Conservation Service or if the total amount of water stored in Pineview Reservoir is less than 35,000 acre feet. The above determination shall be based on precipitation received since the beginning of the water year, or existing reservoir storage, on or after April 1 of the year in which such increase commences. Any temporary increase in water rates due to extraordinary drought conditions shall terminate on the earlier of November 1 of the applicable year or a date provided in an administrative order.

c. For purposes of this subsection "other emergency conditions" shall be considered to exist whenever insufficient water resources exist to meet anticipated customer demand over a foreseeable period of time exceeding 30 days due to: 1) a reduction of available water sources for reasons other than drought; or 2) a failure of, or damage to, some or all of the city's water storage, distribution, or treatment facilities. Any temporary increase in water rates due to other emergency conditions shall terminate no later than 30 days after water resources return to normal levels.

d. In an administrative order regarding an increase for extraordinary conditions, the mayor:

(1) May increase rates incrementally by issuing more than one order so long as the total of all increases does not exceed 20%;

(2) May increase rates for fewer than all of the user classes described in Subsection A.3.a. and, if more than one user class is included in an order, may adopt different rate increases for different classes of users; and

(3) May treat a water user with an approved water use plan under Section 9-8-3 differently than water users in the same class or other classes who do not have an approved water use plan.

e. It is not the intention of this section to restrict or limit emergency powers of the mayor under a declared local emergency pursuant to Section 12-15-3 that threatens or affects the water resources available to the city.

B. Bills Due:

1. Except as provided in Subsection B.3., utility bills are due and payable within 23 days after the billing date as shown in the bill.

2. Utility bills not paid in full by the due date:

a. Are delinquent and water service may be discontinued; and

b. Shall be assessed a late payment charge in accordance with Subsection 4-6-1.B.18.

3. As an alternative to payment of the actual utility bill each month, the utility manager may implement an equal pay program that allows owners with at least 12 months of billing history at their current address to pay an equal amount from month to month subject to the terms and conditions adopted by the mayor in an administrative order.

4. Account Transferred: Uncollected amounts on any delinquent utility account may be transferred to any active account under the owner's or applicant's name, and upon failure to pay said bill after at least five days' prior written notice, water being served to that account shall be turned off.

C. Bills Delivered; Payment Responsibility: Unless otherwise requested, all water bills and notices relative to water bills will be addressed and mailed or delivered to the customer at the address receiving water service. On written request, water bills will be mailed to a different address designated by the customer. The customer must assume the responsibility of notifying the division of any change of address or change of person responsible for payment. Failure to give such notice will constitute sufficient cause for the withdrawal of billing service to the address designated in the request, and subsequent bills and notices will be sent to the premises served. Failure to receive a water bill will not relieve any person of the responsibility of the payment of said bill within the prescribed period, nor exempt any person from penalties imposed for delinquency in the payment thereof.

D. Unpaid Charges; Deemed Debt to City: Water service charges are levied and assessed against the person liable under law, ordinance or contract for water services rendered at the premises receiving water service through the city and are a debt due the city from and after the end of the accounting period for which a statement for water services is to be rendered under the ordinances and regulations governing the sale and distribution of water by the water utility.

E. Unpaid Charges a Lien: All unpaid charges for water service are a lien against the premises to which water service is rendered or for which such service is procured from the city, except to the extent limited by Utah law. Such lien may be foreclosed in any court of competent jurisdiction; or, by written direction of the water manager, the lien may be waived and an action in person may be maintained for the collection of such charges.

F. Meters:

1. Reading; Interpretation: The public services director shall, by regulation or effective order, prescribe the frequency with which meters of the various sizes for each type or class of service rendered shall be read, giving due consideration to the efficiency and economy of the operation of the utility as well as to the reasonable accuracy and justice to the consumer of the readings obtained. When meters are read less frequently than once a month, the measured water service determined by such readings shall be allocated to each month included in the period of time covered by the reading upon the

assumption that water was consumed at an equal and unvarying rate throughout the period of time covered, and the rate shall be computed for the service allocated to each month on that basis.

2. Rates; Applicable When: The rates and minimums specified in Subsection A shall apply to consumers using secondary or rented meters. In cases where more than one meter is required to supply a building or premises, the water service measured by each of said meters shall be charged and billed separately at the regular rate for all water measured by each meter, except that in the case of a compound meter such billing may be combined.

G. Temporary Service: For Temporary Service Using a Fire Hydrant : Where temporary water service is provided for temporary purposes from fire hydrants, the consumer served shall pay, in addition to the regular water rates, the reasonable charges of the utility for the rental of the fire hydrant meter and the other equipment incidental to the meter. Such charges shall be fixed by order of the public services director from time to time on the basis of 115% of the average cost of such special service as determined by the water manager.

H. Sale of Surplus Water:

1. Domestic and Culinary: The mayor is authorized to furnish domestic and culinary water service to consumers outside the corporate limits of the city when and only when determined that such service may be rendered out of culinary and domestic water which is surplus and not required for the ordinary use, provided service to consumers outside the city limits may be discontinued at any time. The monthly rates charged for such water service outside the corporate limits shall be twice the monthly rate charged to consumers within the city, and the monthly minimum charges to be charged to and paid by consumers outside the city limits shall be double those specified for consumers within the city.

2. Other: The mayor is further authorized from time to time, to furnish and sell to consumers or water users inside or outside the corporate limits of the city such quantities of water not meeting standards for domestic and culinary use as determined to be surplus and not required for the ordinary uses of consumers of domestic and culinary water served by the utility. The price to be charged for such water shall be such price as the mayor shall determine to be fair and reasonable under all of the facts and circumstances existing. Contracts for the furnishing of such water shall all be subject to termination at any time. At any time, the mayor may declare that the water subject thereto is necessary for the ordinary uses of consumers of water for culinary or domestic purposes or for the municipal purposes of the city, including reservation thereof for future distribution. Nothing contained in this subsection shall be construed to authorize the sale, transfer or encumbrance of any water rights owned or held by the city.

I. Supplying Free Water Service; Prohibited: The utility shall not supply free water or service to the city, departments, or divisions thereof, or to any person, firm, public or private corporation, or to any public agency or instrumentality. All use, whenever practical, shall be metered. When metering is not feasible, the water use shall be estimated using standard formulas to determine water requirements and agencies or organizations in accordance with the rates in Subsection A.

J. Monies; Depositing in Water Utility Fund: All monies received by the utility from the sale of water or the sale of bonds, facilities, or equipment or from any other source shall be paid to the city treasurer, who shall deposit such monies in a separate water utility fund which shall be maintained separate from other public funds.

1. Separate records and accounts shall be kept for the fund and all costs of maintenance, operation, bonded indebtedness, and capital improvement for the utility shall be paid from the fund.

2. Charges for water service are intended to provide sufficient revenue for the costs of all water services and a fair return to the city as payment in lieu of property and franchise taxes.

K. Charitable Contributions: The water manager may establish a program whereby utility customers may make charitable contributions over and above their monthly utility bill for the purpose of providing assistance to low income customers in paying their city utility bill, including those portions of the bill as may be related to the provision of sanitary sewer services and refuse services. Any such program shall be implemented in such a manner so as to ensure proper use of any donated funds. Program administration may be contracted to a nonprofit, charitable organization; provided, that administrative costs shall not be excessive.

L. New Owners: The utility may not require an applicant to pay for water that was furnished to the premises before the applicant became the owner of the property, nor may it deny service to a property based on delinquencies of a prior owner.

(1979 Code §§ 14.32.010, 14.32.020, 14.32.030, 14.32.040, 14.32.050, 14.32.090, 14.32.100, 14.32.110, 14.32.120, 14.32.130, 14.32.131; amd. Ord. 80-31, 6-26-1980; Ord. 81-28, 6-25-1981; Ord. 82-13, 3-18-1982; Ord. 83-10, 3-3-1983; Ord. 85-1, 1-3-1985; Ord. 90-44, 8-9-1990; Ord. 91-47, 12-5-1991; Ord. 96-28, 7-19-1996; 1999 Code; Ord. 2001-3, 1-2-2001; Ord. 2001-38, 6-12-2001, eff. 1-1-2002; Ord. 2001-42, 7-3-2001, eff. retroactive to 7-1-2001; Ord. 2002-38, 6-18-2002, eff. 7-1-2002; Ord. 2003-28, 6-17-2003, eff. 7-1-2003; Ord. 2004-30, 5-25-2004; Ord. 2004-39, 6-15-2004, eff. 7-1-2004; Ord. 2004-44, 6-15-2004, eff. 7-1-2004; Ord. 2004-45, 6-15-2004, eff. 7-1-2004; Ord. 2005-39, 6-14-2005, eff. 7-1-2005; Ord. 2006-33, 6-13-2006; Ord. 2007-41, 6-12-2007; Ord. 2007-79, 12-18-2007; Ord. 2008-28, 6-10-2008, eff. 11-1-2008; Ord. 2008-47, 10-7-2008; Ord. 2009-32, 4-28-2009; Ord. 2010-22, 6-22-2010, eff. 7-1-2010; Ord. 2011-32, 6-21-2011, eff. 7-1-2011; Ord. 2012-23, 5-22-2012; Ord. 2014-29, 6-24-2014; Ord. 2015-28, 6-16-2015; Ord. 2016-23, 4-12-2016; Ord. 2019-23, 6-11-2019; Ord. 2021-10, 4-6-2021; Ord. 2021-31, 6-22-2021; Ord. 2022-19, 5-3-2022; Ord. 2024-16, 6-18-2024)

1. See also section 9-1-12 of this chapter

APPENDIX B

Water Conservation Ordinances

9-1-8: RIGHTS AND AUTHORITY OF CITY:

A. Restriction Of Water Use:

1. Generally: Whenever the mayor, after investigating the various needs for water in the city and the supply of water available to meet such needs, determines that it is in the best interests of the city to place restrictions on the use of water distributed in the city, he shall have the authority, by administrative order, to place reasonable restrictions, as to time, manner and place, on the use of water for any purpose whatsoever within the limits of the city. All such orders shall take effect when filed with the city recorder and published once in a newspaper of general circulation in the city.

2. Emergency: Whenever any immediate threat arises to the quantity or quality of the city water supply, or any part thereof, that creates an emergency necessitating immediate remedial action, the mayor shall have the authority to promulgate such temporary rules as are reasonably necessary in effect when published once in a newspaper of general circulation in the city or, if such publication is not immediately available, when such rules are announced through other means of communication calculated to give the public reasonable notice.

B. Water Shutoff; Nonliability: The division may shut off the water in its mains at any time and without notice to make repairs and/or extensions or for any other reasonable purpose. Neither the city nor the utility shall be liable for any breakage, damage or injury whatsoever that may result from the shutting off of water for any such purpose.

C. Right Of Entry: Any inspector or other authorized agent of the division shall have access at reasonable hours to all premises supplied with water by the city for the purpose of ensuring that applicable ordinances, orders, rules and regulations are complied with and to make any examination of the plumbing or water fixtures that may be reasonably necessary.

(1979 Code §§ 14.08.030, 14.08.040, 14.08.050, 14.08.060; amd. 1999 Code; Ord. 2004-30, 5-25-2004)

9-1-9: RULES AND REGULATIONS:

A. Unauthorized Water Use: It is unlawful for the owner or occupant of any premises to supply water to others or to permit others to secure water through their service line by hose or other devices without written permission from the manager. If such unauthorized use of water or services is permitted to continue after a five (5) day written notice from the utility to discontinue such use, the water supply shall be turned off and shall not be restored until the person authorized to use the service line has deposited with the division the sum of fifty dollars (\$50.00) to be forfeited in the event of any future violation and has paid the applicable charge for turning the water off and on again.

B. Defective Fixtures: Water service will be discontinued to any premises where there are defective or leaking closets, faucets or other plumbing fixtures that are not repaired or replaced after notice from the division. All fixtures must be closed when not in use.

C. Equipment Maintenance:

1. a. Consumers shall keep their sprinklers, hydrants, faucets, valves, hose, curb stop, angle stops, meter box, meter box ring and cover and all other fixtures and service pipes in good condition at their own expense.

b. Within public rights of way inside of the city, the water utility shall maintain service pipes serving retail consumers and running from the main to the closer of:

- (1) The curb stop if a curb stop has been installed;
- (2) Twelve inches (12") behind the curb if no curb stop has been installed; or
- (3) Five feet (5') behind the street pavement if no curb stop has been installed and there is no curb.

c. Notwithstanding subsection C1b of this section, the water utility is not responsible to maintain, repair or pay any cost of maintaining or repairing service pipes:

- (1) At any point on the consumer's side of the water meter;
- (2) Located underneath a driveway;
- (3) At any point beyond the water main or transmission line for service to consumers whose property is not inside the corporate limits of Ogden City or who are not retail consumers of the water utility; or
- (4) At any point beyond the water main or transmission line in other locations where water service is provided in a nonstandard way, such as subdivisions with private water infrastructure or on a combined fire line and service line.

d. Whenever it is found that service pipes, other than service pipes maintained by the water utility as described in subsection C1b of this section and limited by subsection C1c of this section, or any fixture on consumer's premises is broken or not in serviceable condition, the consumer shall, upon notice, make the necessary repairs or replacements at the consumer's expense. Should a consumer fail to do so, the water shall be turned off or service limited and not turned on again until said repairs or replacements have been made.

2. At the discretion of the manager, the utility may make repairs to the angle valve, if determined to be necessary for adequate control of water. In such event, the manager is authorized to charge the owner for the actual cost of materials incurred in such repair.

3. If the meter box is not in an allowed location as provided in section 9-2-6 of this title, the city will install a new meter

box at the proper location at city expense when either the property owner finds it necessary to replace their service line or when repair is required to a service pipe running from the main to a meter box not located within the public right of way. The property owner or the owner's plumber shall be responsible for removal and disposal of the old meter box and the installation or restoration of improvements associated with the relocation of the service line.

D. **Separate Fixtures; Required When:** Except where there is a house or houses situated in the rear of a house fronting on a street and on the same building lots and owned by the same person, firm or corporation, service pipes must be so arranged that each separate house or premises is supplied from a separate tap on the water main and controlled by a separate stopcock placed within or near the line of the street curb.

E. **Multiple Fixtures:**

1. **Actions Designated:** Where water is being supplied to one or more houses or buildings or families through one service pipe, the manager may, at the manager's discretion:

- a. Discontinue water service to the single line until separate service lines are provided for each house or building;
- b. Require each house or building to be metered from the common service line; or
- c. Continue to supply water service on the condition that one party or person assumes full liability for all water supplied to all parties concerned through the common service line.

2. **Common Service Line; Maintenance:** In the event the manager elects to permit the continued use of a common service line under one of the provisions of subsection E1 of this section, it shall be the responsibility of all persons receiving water therefrom to maintain the common service line from the relevant location described in subsection C1 of this section to the house or buildings serviced by the line. In the event of the failure of such persons to make any necessary repairs to such line after ten (10) days' written notice, the supply of water to such line may be turned off until such repairs are made.

(Ord. 2015-43, 9-22-2015)

9-1-10: PROHIBITED ACTS:

A. **Misuse Of Facilities; Liability:** No person shall use either the water or the facilities of the utility without prior written permission, nor shall any water facilities be used in any manner nor by any person except in accordance with such written permission. Any person using such water or facilities contrary to the provisions of this subsection shall be liable for the reasonable value thereof, for any damages resulting therefrom and for the cost of preventing or terminating such unauthorized use of water or facilities.

B. **Misuse Of Water:** It is unlawful for any person to misuse, waste, or in any way fail to conserve water distributed in the city for either culinary, commercial or irrigating purposes.

C. **Diversion Or Damage:** It is unlawful to maliciously or wilfully divert any portion of the water supply of the utility or to corrupt the same or render it impure, or to damage or to destroy any canal, aqueduct, pipe, conduit, equipment or other property used or required for the procurement or distribution of water.

D. **Interference:** It shall be unlawful to remove, damage, destroy or deface any property of the utility or in any way interfere, disturb or interrupt the operations, work or activities of the utility.

E. **Contamination:** It is unlawful for any person to erect or maintain any buildings, pens, stalls or fenced enclosures in which horses, cattle, sheep or other animals are kept, or to permit any such animals to be corralled, to be bedded or to run at large in that area that extends three hundred feet (300') on each side of every stream from which water is taken for the city water utility system and fifteen (15) miles upstream from the point of diversion, or in any area within three hundred feet (300') from the maximum high water line storage elevation of any reservoir from which water is taken for the city water utility system. It shall also be unlawful to carry on any other activities in said areas that may in any way contaminate any water or water source used by the city water utility system. All closets, privies, toilets or outhouses in said area must be provided with effective septic tanks or other suitable sanitary facilities to prevent the contamination of such water or water sources and may be constructed only after written approval by the manager and by the county health department.

F. **Time Restrictions:** No outside use of water shall be allowed between ten o'clock (10:00) A.M. and six o'clock (6:00) P.M. for the watering of lawns or other landscaping from April 15 through November 1 of each year, unless a written permit has been granted by the manager for the watering of new landscaping planted during the water season then in effect. The adoption of this regulation is not intended to restrict the mayor's power to adopt stricter or more extensive regulations under subsection 9-1-8A of this chapter.

(1979 Code §§ 14.08.020, 14.08.120, 14.08.140, 14.12.010, 14.16.010; amd. 1999 Code; Ord. 2004-30, 5-25-2004; Ord. 2022-19, 5-3-2022)

9-1-11: SERVICE RESTORATION; FEES; PENALTIES:

A. **Payment In Full; Required:** Whenever water has been turned off or water service limited in accordance with this chapter or any other ordinance, rule or regulation of the city, the water shall not be turned on again nor shall service be restored to normal, unless and until:

1. All sums due the city with respect to utility services provided by the city to the premises together with any applicable late charges or penalties have [all] been paid in full; and

2. The required deposits are paid in the manner required by ordinance, provided that in cases of hardship, water service may be restored prior to payment in full on conditions approved by the manager.

B. Enumerated: There is established a service fee in the sum of thirty dollars (\$30.00) for turning on or restoring normal water service where water has been turned off under the provisions of this title.

C. Meter Removal; Charge: In the event a water customer turns the water back on after it has been turned off by the city and the city removes the water meter to enforce this turnoff and later replaces the water meter, a charge of fifty dollars (\$50.00) in addition to all other fees and charges shall be assessed and be collected for such additional service.

D. Illegal Hookup: In the event an owner or occupant makes an unauthorized connection by bypassing a meter box from which the water meter has been removed by the division, a charge of fifty dollars (\$50.00) in addition to all other fees and charges shall be assessed, which charge shall be collected prior to reinstatement of water services.

E. Penalty For Illegal Watering:

1. In the event of water usage in violation of the time restrictions imposed under subsection 9-1-10F of this chapter or administrative order adopted by the mayor pursuant to subsection 9-1-8A of this chapter:

a. For the first offense, a written warning will be issued to the customer either personally or by first class mail, postage prepaid, to the address listed on the application for service applicable to the location of the violation.

b. For the second offense in the same year, a civil penalty in the amount of twenty five dollars (\$25.00) shall be imposed, in addition to all other fees and charges assessed herein, which penalty shall be collected in the same manner as other fees and charges assessed under this chapter.

c. For subsequent offenses in the same calendar year, an additional civil penalty shall be imposed in the same manner, but each subsequent civil penalty shall be double the amount of the penalty previously imposed on the same customer; provided that no penalty shall exceed an amount of eight hundred dollars (\$800.00).

2. No more than one civil penalty may be imposed on any one day.

3. If such penalties are not paid when due, water will be shut off and not reinstated again as provided herein, until all such penalties are paid in full.

(1979 Code § 14.08.180; amd. Ord. 81-28, 6-25-1981; Ord. 84-9, 4-5-1984; Ord. 85-1, 1-3-1985; Ord. 92-8, 1-9-1992; Ord. 2001-3, 1-2-2001; Ord. 2004-30, 5-25-2004; Ord. 2004-44, 6-15-2004, eff. 7-1-2004; Ord. 2021-10, 4-6-2021)

9-1-12: FIRE HYDRANTS :

A. Installation, Maintenance And Removal: Fire hydrants may be installed on private property only with the written approval of the water manager. All fire hydrants, whether on private or public property, must meet the requirements of the city's subdivision title. Hydrants on private property will be maintained by the utility at the cost of the property owner and will be used only in case of fire, except as provided in subsection B of this section. If the property owner fails to pay the cost of maintaining any such fire hydrant, or if it is used for an unauthorized purpose, the water to the hydrant will be shut off. It will not be turned on again until all costs, including a reasonable fee for turning the water off and on, have been paid. In the event the water is shut off because of unauthorized use, the manager may, in the manager's discretion, remove the fire hydrant or require that the water to the fire hydrant be metered at the expense of the property owner.

(1979 Code § 14.20.010; amd. 1999 Code)

B. Temporary Private Water Service:

1. Authorized When: Water service may be supplied to a private person through a public or private fire hydrant, or through other connections designed primarily for the use of the city, only upon issuance of a special written permit by the manager, after a determination by him that it is impractical to render the desired service through any other means. Nothing except temporary service for a period of not more than sixty (60) days may be rendered through such facilities, but such permits may be renewed by the manager for successive periods upon a showing that the necessity for such service continues without the fault or neglect of the consumer. Permits may be revoked for failure to comply with the rules and regulations of the utility or the ordinances of the city. Such service may be rendered only through facilities and connections approved and connected by the division. Such facilities and connections shall be so designed and installed as to permit the use of the fire hydrant or other connection for public use for its primary purpose with a minimum of delay in making required adjustments.

(1979 Code § 14.20.020; amd. 1999 Code)

2. Application: Application for the use of water from fire hydrants or other connections shall be made upon forms furnished by the division, stating the purpose for which the water is to be used and the justification for issuance of a permit. The division will furnish equipment to place the hydrant in use, including hydrant gate valves, hydrant water meters, hose and hydrant wrench. A deposit in the amount of the value of any equipment provided by the division must accompany the application and will be refunded upon return of the equipment. The hydrant must be operated in accordance with the instructions and the rules and regulations of the division. Only hydrant wrenches approved by the division shall be used in operating the hydrant. Any damage to the fire hydrant or the equipment of the utility will be charged to the applicant and may be deducted from his deposit.

(1979 Code § 14.20.030; amd. 1999 Code)

C. Prohibited Acts:

1. Unauthorized Possession Of Keys: It is unlawful for any person, without authority, to have in his possession any wrench for a fire hydrant or a gate key for a water gate valve.

(1979 Code § 14.20.040)

2. Obstruction; Parking: It is unlawful for any person to park any vehicle within fifteen feet (15') of any fire hydrant, or to place any goods or materials or to plant any trees, plants, flowers or shrubs within ten feet (10') of any fire hydrant, or to in any way interfere with or impede the free access of the fire department to any fire hydrant.

(1979 Code § 14.20.050; amd. Ord. 2005-26, 4-19-2005)

Notes

- I** 1. See also subsection 9-1-6G of this chapter.

9-1-13: PINE VIEW RESERVOIR; POLLUTION CONTROL:

A. Findings; Jurisdiction: The city draws a portion of its domestic and culinary water from waters impounded in Pine View Reservoir and the city has a duty to its water users to protect the reservoir from pollution and contamination. The city has jurisdiction, pursuant to Utah Code Annotated section 10-8-15, to protect said waters and all other water from which it draws its city water supply and to penalize persons polluting or contaminating the same.

(1979 Code § 14.24.010; amd. Ord. 83-36, 12-22-1983; 1999 Code)

B. Enforcement: All peace officers of the state, including regular and special officers of the city police department and authorized personnel of the division, are authorized and charged with the duty to enforce the provisions of this chapter.

(1979 Code § 14.24.060; amd. Ord. 83-36, 12-22-1983; 1999 Code)

C. Pollution Prohibited: No person shall do any act whatsoever which tends to make impure or unwholesome the water in Pine View Reservoir; nor cast or drop into or allow to float in or fall into the water of said reservoir any filth, sewage, carrion, garbage or any excretion, clothing, paper, rags or other extraneous substance; nor do any act or thing that would pollute or tend to pollute the water of said reservoir.

(1979 Code § 14.24.050; amd. Ord. 83-36, 12-22-1983)

9-1-14: PENALTY:

A. In the event of the violation of any of the provisions of chapters 1 through 4 of this title or any administrative order, rule, or regulation promulgated under the authority thereof or any amendments thereof, the water division may turn off the water supply to the premises where such violation occurred, and such water supply need not be turned on again until the violation has ceased; any damage resulting therefrom has been paid; all expenses incurred by the city, including the expenses of turning such water supply off and on, have been paid; all service fees and civil penalties have been paid; and the division has been given reasonable assurance that such violation will not be repeated.

B. Any person violating any provision of this title shall be deemed guilty of a class B misdemeanor, punishable as set forth in title 1, chapter 4 of this code.

C. The provisions of this title may also be enforced by injunction, mandamus, abatement, or any other appropriate judicial action in law or equity.

D. All remedies provided in this section for such violation shall be cumulative and shall be in addition to all other remedies that may be available to the city, its departments and employees and any other party injured by such violation.

(1979 Code § 14.36.010; amd. 1999 Code; Ord. 2004-30, 5-25-2004; Ord. 2005-29, 5-24-2005)

APPENDIX C

Backflow and Cross Connection

CHAPTER 4

BACKFLOW AND CROSS CONNECTION CONTROL

SECTION:

9-4-1: Purpose

9-4-2: Definitions

9-4-3: Cross Connections

9-4-4: Duties And Responsibilities

9-4-5: Requirements

9-4-1: PURPOSE:

A. Protection: To protect the public potable water supply of the city from the possibility of contamination or pollution by isolating within the customer's internal distribution system such contaminants or pollutants which could backflow into the public water systems; and

B. Elimination: To promote the elimination or control of existing cross connections, actual or potential, between the customer's in house potable water system and nonpotable water system, plumbing fixtures, industrial piping system; and

C. Maintenance: To provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems.

(1979 Code § 14.08.161; Ord. 91-5, 2-21-1991)

9-4-2: DEFINITIONS:

As used in this chapter, the following words and terms shall have the meanings ascribed to them in this section:

APPROVED BACKFLOW ASSEMBLY: The backflow assembly accepted by the Utah department of health as meeting an applicable specification or as suitable for the proposed use.

AUXILIARY WATER SUPPLY: Any water supply on or available to the premises other than the city public water supply will be considered as an auxiliary water supply. These auxiliary waters may include water from another city/municipality's public potable water supply or any natural source such as a well, spring, river, stream, harbor, etc., or "used waters" or "industrial fluids".

BACK PRESSURE: The flow of water or other liquids, mixtures or substances under pressure into the distribution pipes of a potable water supply system from any source, other than the intended source.

BACK SIPHONAGE: The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source, other than the intended source, caused by the reduction of pressure in the potable water supply system.

BACKFLOW: The reversal of the normal flow of water caused by either back pressure or back siphonage.

BACKFLOW PREVENTION ASSEMBLY: An assembly or means designed to prevent backflow. Specifications for backflow prevention assemblies are contained within the plumbing code as adopted in title 16 of this code and by the state of Utah pursuant to Utah Code Annotated section 58-56-6, as amended. All backflow prevention assemblies must be approved by the Utah department of health prior to installation. A listing of these approved backflow prevention assemblies is available from the Utah department of health.

CONTAMINATION: An impairment of the quality of the potable water supply by sewage, industrial fluids, waste liquids, compounds or other materials to a degree which creates an actual or potential hazard to the public health through poisoning or through the spread of disease.

CROSS-CONNECTION: Any physical connection or arrangement of piping or fixtures between two (2) otherwise separate piping systems, one of which contains potable water and the other nonpotable water or industrial fluids of questionable safety, through which, or because of which, backflow may occur into the potable water system. This would include any temporary connections, such as swing connections, removable sections, four-way plug valves, spools, dummy sections of pipe, swivel or change-over devices or sliding multiport tubes.

CROSS-CONNECTION; CONTAINMENT: The installation of an approved backflow prevention assembly at the water service connection to any customer's premises where it is physically and economically infeasible to find and permanently eliminate or control all actual or potential cross-connections within the customer's water system; or, it shall mean the line leading to and supplying a portion of a customer's water system where there are actual or potential cross-connections which cannot be effectively eliminated or controlled at the point of the cross-connection (isolation).

CROSS-CONNECTIONS; CONTROLLED: A connection between a potable water supply system and a nonpotable water system with an approved backflow prevention assembly properly installed and maintained so that it will continuously afford

the protection commensurate with the degree of hazard.

(1979 Code § 14.08.161; Ord. 91-5, 2-21-1991; amd. 1999 Code)

9-4-3: CROSS-CONNECTIONS:

A. Prohibited: It is unlawful for the owner or occupant of any premises using water supplied by the Water Utility to cross-connect such water supply with a foreign source of water that does not meet the purification standards maintained for the City supply or with any appliance, appurtenance, hose, pipe or other fixture in such a manner that there is a possibility that water from such foreign source may flow, be siphoned or be pumped into the City water system.

(1979 Code § 14.08.160; amd. 1999 Code)

B. Purification Of Fixtures: It is unlawful for any owner or occupant of any premises using water supplied by the Water Utility to make any connection, whether temporary or permanent, between the City water system and any appliance, appurtenance, hose, pipe or other fixture that was previously supplied with water from a foreign source as described in subsection A of this Section, unless the property owner or occupant first purifies, in a manner satisfactory to the Water Utility Division, any such appliance, appurtenance, pipe, hose or other fixture and, in addition, agrees in writing that the water from such foreign source will not again be used in such appliance, appurtenance, hose, pipe or other fixture.

(1979 Code § 14.08.170; amd. 1999 Code)

9-4-4: DUTIES AND RESPONSIBILITIES:

A. City; Water Manager: The City shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. The Water Manager is vested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this Chapter. If, in the judgment of the Water Manager, an approved backflow prevention assembly is required (at the customer's water service connection or within the customer's private water system) for the safety of the water system, the Water Manager shall give notice in writing to said customer to install such an approved backflow prevention assembly at a specific location on his premises. The customer shall immediately install such approved assembly at the customer's own expense. Failure, refusal or inability on the part of the customer to install, have tested and maintain said assembly shall constitute grounds for discontinuing water service to the premises until such requirements have been satisfactorily met.

B. Inspection Services Division: The Inspection Services Division has the responsibility to review building plans and inspect plumbing installations to ensure compliance with the current edition of the plumbing code, as adopted by the city and the state with respect to cross connections and back siphonages. The inspection services division's responsibility begins at the point of service (the downstream side of the meter) and carries throughout the entire length of the customer's water system.

C. Certified Backflow Assembly Technician: Certified backflow assembly technicians only shall do the testing, maintenance and/or repair of backflow prevention assemblies. The certified technician must tag each double check valve, pressure vacuum breaker, reduced pressure backflow assembly and air gap, showing the serial number of the assembly, date tested and by whom. The technician's license number must also be on this tag.

(1979 Code § 14.08.161; Ord. 91-5, 2-21-1991; amd. 1999 Code)

9-4-5: REQUIREMENTS:

A. Conditions Or Defects Corrected: Service of water to any premises shall be discontinued by the city if a backflow prevention assembly required by this chapter for control of backflow and cross connections is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed or if an unprotected cross connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

B. Open For Inspection: The customer's system shall be open for inspection at all reasonable times to authorized representatives of the city to determine whether cross connections exist.

C. Assembly; Installation: An approved backflow prevention assembly shall be installed on each service line to a nonresidential customer's water system, at or near the property line or immediately inside the building being served, when it is deemed necessary by the utility to conform to the safe drinking water act of 1974, Utah Code Annotated section 19-4-101 et seq., the occupational safety and health act, Utah Code Annotated section 35-9-1 et seq., and the plumbing code, as adopted in title 16 of this code, and by the state of Utah pursuant to Utah Code Annotated section 58-56-6. In all cases, the assembly will be installed before the first branch line leading off the service line, whenever the city deems the protection of the water supply to be in the best interest of the water supply customers.

D. Assembly; Type: The type of protective assembly required under this section shall depend upon the degree of hazard which exists at the point of cross connection (whether direct or indirect), as stipulated in the plumbing code as adopted in title 16 of this code, and by the state of Utah, pursuant to Utah Code Annotated section 58-56-6.

E. Exclusions: All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved assemblies for the purpose described herein at the time of installation and which have been properly maintained, shall, except for inspection and maintenance requirements, be excluded from the requirements of these rules so long as the city is assured that they will satisfactorily protect the public water system. Whenever the existing assembly is moved from the present location or requires more than minimum maintenance or when the city finds that the maintenance of

the assembly constitutes a hazard to health, the unit shall be replaced by an approved backflow prevention assembly meeting the requirements of this chapter.

F. Certified Inspections: It shall be the duty and responsibility of the customer at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at least once per year at the customer's expense. In those instances where the city deems the hazard to be great, it may require certified inspections and tests at a more frequent interval. These inspections and tests shall be performed by a certified backflow assembly technician.

G. Degree Of Protection: Backflow prevention assemblies shall be installed in water supply lines to provide at least the degree of protection stipulated in the plumbing code as adopted in title 16 of this code, and by the state of Utah pursuant to Utah Code Annotated section 58-56-6. All backflow prevention assemblies shall be exposed for easy observation and be readily accessible.

H. Maintenance: All backflow prevention assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working condition by the person or persons having control of such assemblies. Upon inspection, any assembly found to be defective or inoperative shall be replaced or repaired. No assembly shall be removed from use, relocated or another assembly substituted, without the approval of the City.

I. Testing: All backflow prevention assemblies shall be tested within ten (10) working days of initial installation.

J. Safety Hazards: No backflow prevention assembly shall be installed so as to create a safety hazard. Example: installed over an electrical panel, steam pipe, boilers, pits or above ceiling level.

(1979 Code § 14.08.161; Ord. 91-5, 2-21-1991; amd. 1999 Code)

APPENDIX D

Water Shortage Response Summary

Ogden City Division of Water Utility

Ogden City Water Shortage Management Plan



OGDEN CITY WATER SHORTAGE MANAGEMENT PLAN

Ogden City Division of Water Utility

SECTION I: DECLARATION OF POLICY, PURPOSE, AND INTENT

The Ogden City Water Shortage Management Plan is intended to augment and support Ogden City Water Conservation Plans and Ordinances.

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety, and minimize the adverse impacts of water supply shortages or other water supply emergency conditions, the Ogden City Division of Water Utility (Hereafter "Utility") hereby adopts the following Plan to address water shortages brought about by drought, service interruption, or other emergency or event.

SECTION II: LEGAL AUTHORITY

This Plan is adopted by Water Utility pursuant to the direction of the Mayor and the City Council contained in Section 9-8-1, Ogden City Code (hereafter referred to as "ordinance").

SECTION III: APPLICATION

The provisions of this Plan shall apply to all persons, customers, and properties utilizing water provided by Ogden City Water Utility.

SECTION IV: PRIMARY INDEX

Surface Water Supply Index (hereinafter "SWSI"): The SWSI will be used internally to determine the severity of drought each year. The SWSI is designed to complement the Palmer Drought Index, where mountain snowpack is a key element of water supplies in the intermountain west. The SWSI is calculated by river basin, based on snowpack, stream flow, precipitation, and reservoir storage. The data for the Ogden River SWSI is available on the World Wide Web at: <http://www.ut.nrcs.usda.gov/snow/watersupply/swsi/SWSIOGDE.pdf>

Section V: Secondary Index:

The Utah State Division of Natural Resources publishes the data for snow pack, precipitation and reservoir storage. These data will be used to quantify and support the Surface Water Supply Index Data.

1. Weber Basin Snow Pack Data
2. Weber River Precipitation
3. Pineview Reservoir Storage Data

The data for these indices are available on the World Wide Web at:

<http://www.ut.nrcs.usda.gov/snow/watersupply/wsor.html>

Both the SWSI and secondary data will be utilized by the utility to determine the severity of drought each year and subsequently that years conservation action(s) to be taken.

SECTION VI: CRITERIA FOR INITIATION AND TERMINATION OF WATER SHORTAGE PHASES

Initiation and Termination of Water Shortage Phase

Ogden City customers receive water from three main sources: groundwater from wells, surface water drawn from Pineview Reservoir and Wheeler Creek, and treated water purchased from Weber Basin Water Conservancy District (WBWCD). WBWCD's water is a combination of treated ground and surface water from wells and the Weber River. The Water Utility Director will monitor these system components to determine the level of supply and notify the City Council and City Administration of the severity of the situation.

Each year the utility director will review drought conditions using the SWSI and other secondary data available. That year's drought conditions will be collected and evaluated by the utility director and the appropriate water shortage phase will be implemented (a copy of the water shortage phase response summary is attached to this report). Termination of each plan phase will be announced when the trigger conditions that initiated the drought measures have subsided and the shortage no longer exists, by the determination of the Utility Director. Upon terminating a phase, it is not incumbent on the Utility Director to implement the phase immediately lower. If the Utility Director does not designate a Plan phase, then the next lower phase becomes active.

SECTION VII: NOTIFICATION AND EDUCATION

The Water Utility Director shall notify residents of the applicable Plan phase and corresponding conservation measures, or the termination of a Plan phase and corresponding conservation measures, by one or more of the following means:

- Publication of notices in a newspaper of general circulation
- Direct mail to each customer on the utility bill, as a bill insert, and/or as a special mailing Public service announcement
- Signs posted in public places
- Take-home fliers at schools
- Public meetings/city council meetings
- Ogden City municipal website
- City sponsored social media outlets

Customer Agency Notification:

The Utility Director shall endeavor to notify directly the following individuals and entities:

1. Ogden City Council
2. Fire Chief(s)
3. City and/or County Emergency Management Coordinator(s)
4. Ogden City Director of Public Services
5. Critical water users (i.e. hospitals, nursing homes)
6. Large water users (typically commercial users)
7. Local School Boards

Additionally, through a public education program the Ogden Water Utility will periodically provide customers and customer agencies with information about the Plan, including information about water conditions under which each phase of the Plan is to be initiated or terminated, the response measures to be implemented in each phase, as well as any Plan updates. Ogden Water Utility currently participates in a yearly water fair program. This valuable program is sponsored by the local chapter of the American Water Works Association (AWWA) and other local water suppliers. The program utilizes water conservation information and games to educate youth about the importance of water conservation and water management. The program encourages local schools to attend and participate in the program. The participation has been very good and schools participate by allowing classes to take one day to attend the fair and view various exhibits prepared by water organizations. The students are encouraged to participate in experiments and other hands-on programs to increase their understanding of water and water conservation. Additionally, students are able to take home a variety of information and promotional items to their family. Ogden Water Utility will work with the AWWA and the other local water suppliers to develop our participation in the water fair program to be more comprehensive and interesting to children. The concept of this program is to make the most of children's more accepting nature for new concepts and their ability to promote new ideas to their family.

The success of any water conservation program in achieving long term water conservation targets as might be required under a water shortage is dependent on Water Utility ability to convey to the community the water-supply situation, the expected response actions, and clear and measurable targets. The Response Summary and Appendices have been developed to enhance public understanding of water supply levels, response actions, and restrictions (a copy of the water shortage phase response summary is attached to this report).

SECTION VIII: PHASES AND RESPONSES:

This plan provides for four water shortage phases and associated responses of increasing severity, as progressively more serious conditions warrant. The measurements can be applied to identify the four phases in the proposed severity index. Each phase has associated with it a color to provide a visual, at a glance understanding of the severity of that phase. Attached to and made part of this plan is the Ogden City Phase and Condition Index outlining the general conditions for each phase of the drought plan and the corresponding color or cautionary segment. Each segment outlines the conditions that will trigger the phase and outline some advisory and mandatory actions.

Following are proposed severity benchmarks that are intended to notify the public and city officials of the severity of a drought situation and recommend steps to be taken during that phase.

Phase I – Normal to Moderate Water Conditions

This phase should be on-going and primarily be an education and conservation encouragement phase by which the Water Utility Division will, prepare and publish drought education and management information to the public and industry. The intent of this phase is to educate and encourage water use conservation.

Trigger: There is no specific trigger for implementing this phase. This phase is ongoing and intended to educate and encourage the public to conserve water.

Target: Water Use Reduction: No specific target

Phase II – Severe

This phase is intended as a cautionary phase by which the [City Council with the] Public Utility Division informs the public that the city is experiencing severe drought conditions and all indications are that this condition will extend for the rest of the water season (April 15 to November 1).

Trigger: (conditions) when this phase may be initiated are:

- Severe drought: The State drought indices indicate a severe drought
- Significant system failure: An important water supply line breaks or any other significant system component fails and a large section of the city is without water for an extended period.
- Water Supply Contamination: A contaminate is found with in the water system that could affect the health and well-being of major portion of the city residences.

Target: Water Use Reduction: a city wide 10% reduction in water usage.

Phase III – Extreme

This phase is intended to inform the public that the city is in an extreme drought condition and there is a critical need to reduce water usage and increase water restrictions. This condition may, at the Mayor's discretion, require mandatory actions. This phase is used when the drought indices indicate a progressive extreme drought situation.

Trigger: (conditions) when this phase may be initiated are:

- Extreme drought: The State drought indices indicate a Extreme drought
- Significant system failure: An important water supply line breaks or any other significant system component fails and a large section of the city is without water for an extended period.
- Water Supply Contamination: A contaminate is found with in the water system that could affect the health and well-being of major portion of the city residences.

Target: Water Use Reduction: A Citywide 20% reduction in water usage.

Phase IV – Exceptional

This is the most extraordinary of the drought indices. This phase is initiated when the supply of water is not able to keep up with the demand for an extended period of time (3 days or more) and there is a possibility of initiating a mandatory shut-off of water service.

Trigger: (conditions) when this phase may be initiated are:

- Exceptional drought: The State drought indices indicate an Exceptional drought.
- A region wide drought has progressed to the point where the utility cannot maintain restricted service to a major portion of the city.
- Significant system failure: An important water supply line breaks or any other significant system component fails and a large section of the city is without water for an extended period.
- Water Supply Contamination: A contaminant is found within the water system that could affect the health and well-being of major portion of the city residences.

This phase sets in motion an emergency situation by which the public utility may need to prioritize water service to keep the most critical residences and industries supplied and shut off certain types of non-essential use. Those critical industries will include hospitals, nursing homes and other life and health preserving enterprises. This phase may require the utility working closely with state drinking water authorities to assist in mitigating and managing the situation.

Target: Water Use Reduction: A Citywide 30% reduction in water usage

SECTION IX: ENFORCEMENT

Provisions of the Plan and Response Summary shall be enforced as indicated in Ogden Municipal Code, Title 9, Chapter 8 (Ord. 2009-32, 4-28-2009; amd. Ord. 2022-19, 5-3-2022).

Violations:

First violation: If a property is observed using inordinate amounts of water or is ignoring the rules and regulations set out in the drought ordinance, the property owner will be notified of the violation by a letter from the City Public Utility. The first letter notice will explain to the property owner that the city has adopted a conservation program that educates and assists property owners to conserve water. The notice will further explain that the property owner has been observed using more water than what seems necessary and may be in violation of City Ordinances. The Notice will be accompanied by educational materials and tips on how to conserve water.

The second violation will be considered more stern and require the city to issue a ticket to the property owner. The ticket will be accompanied by a requirement to meet with the city Water Utility Director and discuss the violation and the importance of citizens being conservation minded. The Water Utility Director will discuss a remediation program with the property owner and request they develop a program to change their watering habits, including changes to their irrigation system to provide a more efficient "water wise" system.

The city Water Utility Director recognizes that there are special circumstances when a property owner may need to deviate from water wise standards. One of those instances may be to ensure the survival of newly planted landscaping and lawn. The Water Utility Director will have the ability to allow for special watering where property owners can show unusual or extraordinary circumstances requiring more water or unusual watering systems.

A typical water conservation program presented to the Water Utility Director by a commercial business would have elements that are both practical (applied to their water system) and educational (applied to educate their employees).

Suggested elements for a commercial program might be:

1. Have a plumber or their in-house property management service review their system. In the case of a manufacturing company that may include an evaluation of the system components and their efficiency.
2. Develop and implement a water wise landscaping scheme for the property surrounding their building(s). This can be accomplished by a landscape company or by utilizing ideas promoted by Extension Services provided by local universities. Some local water companies provide water wise advice and demonstrations designed to educate people on water wise landscaping. Weber Basin Water Conservancy District provides such service.
3. Set specific goals intended to decrease overall water use within a specific period.

Overall, a program must have elements that evaluate and address adjustments to the privately owned system and include a plan to educate employees. Goals must be set to develop timeframes for accomplishment and keep the program on track.

A non-commercial (home) program may include:

1. An evaluation of the home sprinkling system to determine effectiveness. Determine how much water the lawn is getting from the present method by zone. Adjustments as necessary for seasons and soil.

2. A Soil evaluation to determine if soil augmentation is appropriate to ensure the appropriate water is applied for the soil water intake.
3. Mowing aeration and sprinkling plans (i.e. mowing height, sprinkler clock and yearly aeration).
4. A sprinkler system maintenance plan designed to check the irrigation system on a regular basis to ensure top performance. A routine check of sprinkler heads and adjustments to eliminate runoff on walks and driveways. Annual draining of the system to clear water from the system and avoid breaks caused by freezing. An annual battery check to ensure the timer and clock are performing as designed.

If a service is disconnected, Ogden City Water Utility in accordance with applicable city ordinances will assess and collect a fee before service is restored. That fee is in addition to other fines or charges imposed under any particular water shortage response measure.

Customer Notification of Violation:

In accordance with applicable city ordinances, any customer subject to a civil fine shall be notified by the Utility no more than SEVEN (7) calendar days after the date of occurrence of the violation. The notice shall advise the customer of his/her right to appeal the fine within ten business days after receipt of the notice. The appeal process will follow the specific procedure set out in the Ogden City Municipal Code. The Water Utility Director, at his or her sole discretion may grant written variances to persons who apply for approval to use water not in compliance with the Plan. A letter from the property owner explaining in detail the situation requiring the inordinate use of water or the installation of an unusual watering system must be submitted to the Water Utility Director. The PUM will review the details and circumstances and may discuss the request with the property owner to better understand the request. A variance may be granted if the PUM finds that such water use or system is necessary to prevent an emergency condition relating to health or safety, extreme economic hardship.

Monies collected from fines are not considered rates for the production of water revenue. money collected from this program will be placed in a special water conservation fund, to be administered by Ogden City Water Utility, and used for, but not limited to, meeting the expenses of enforcement of restrictions under this Plan, producing educational materials relating to water conservation, promoting information related to the Plan.

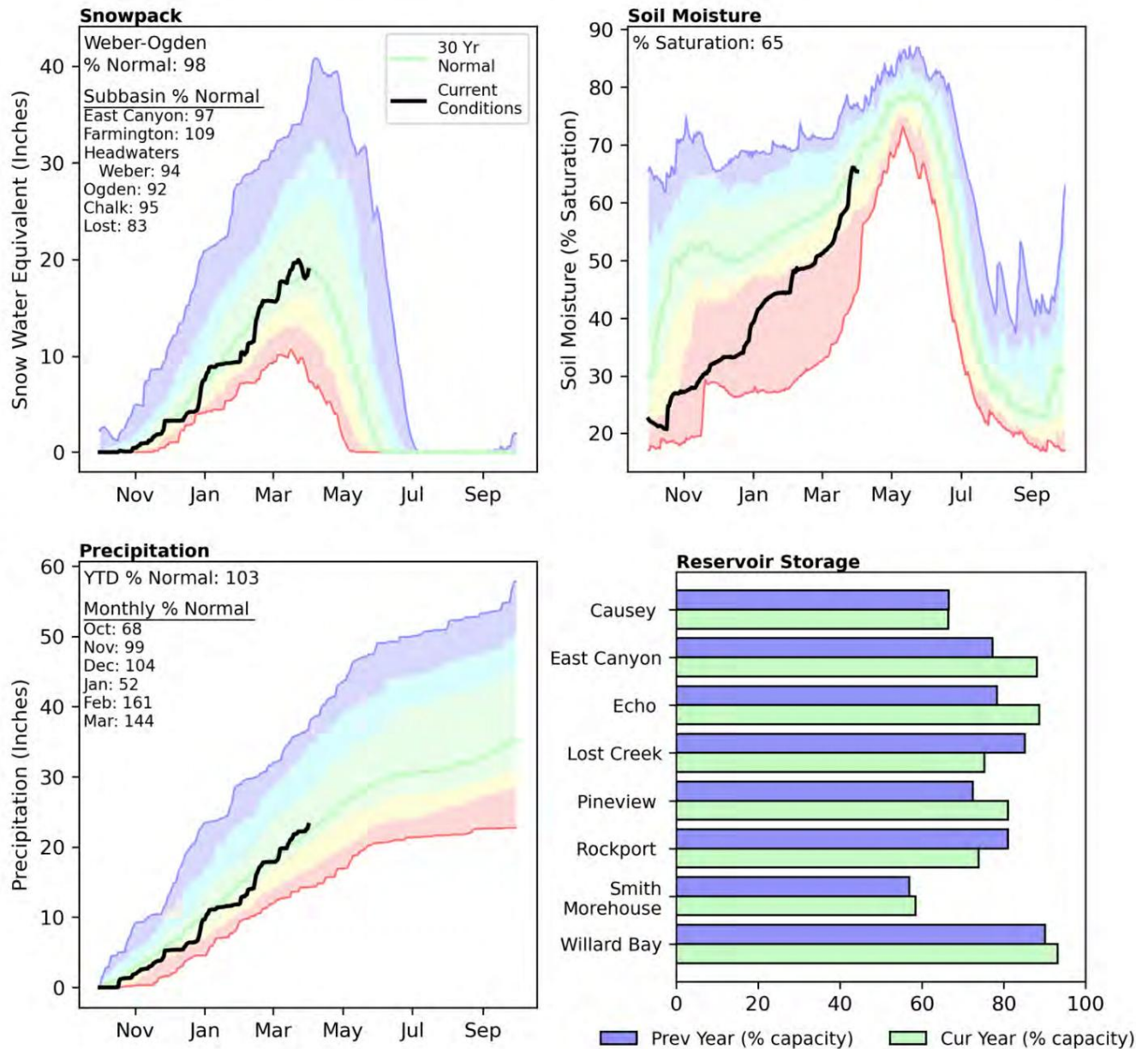
Director, Ogden City Water Utility

Date:

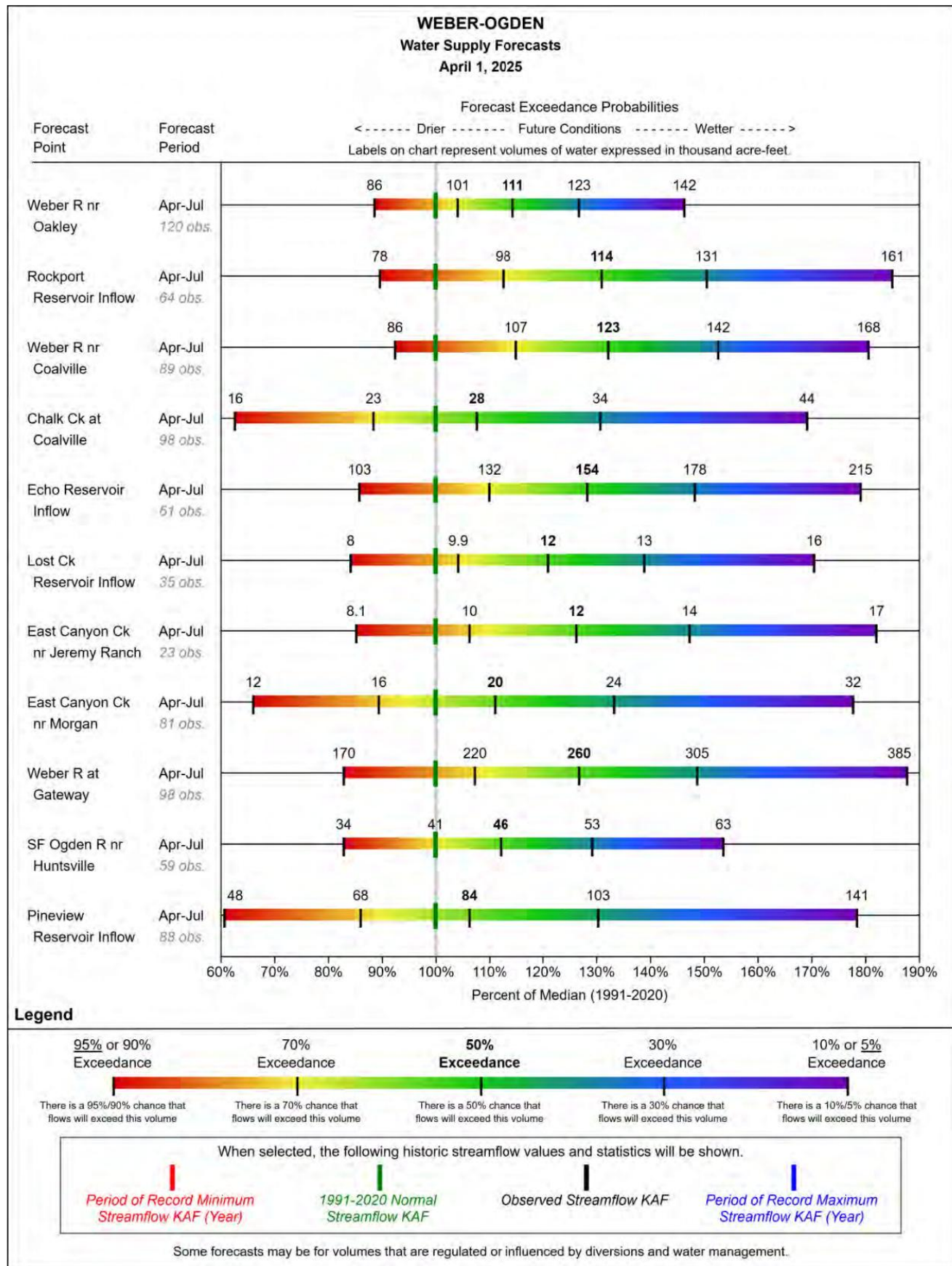
Surface Water Supply Index

Weber-Ogden | April 1, 2025

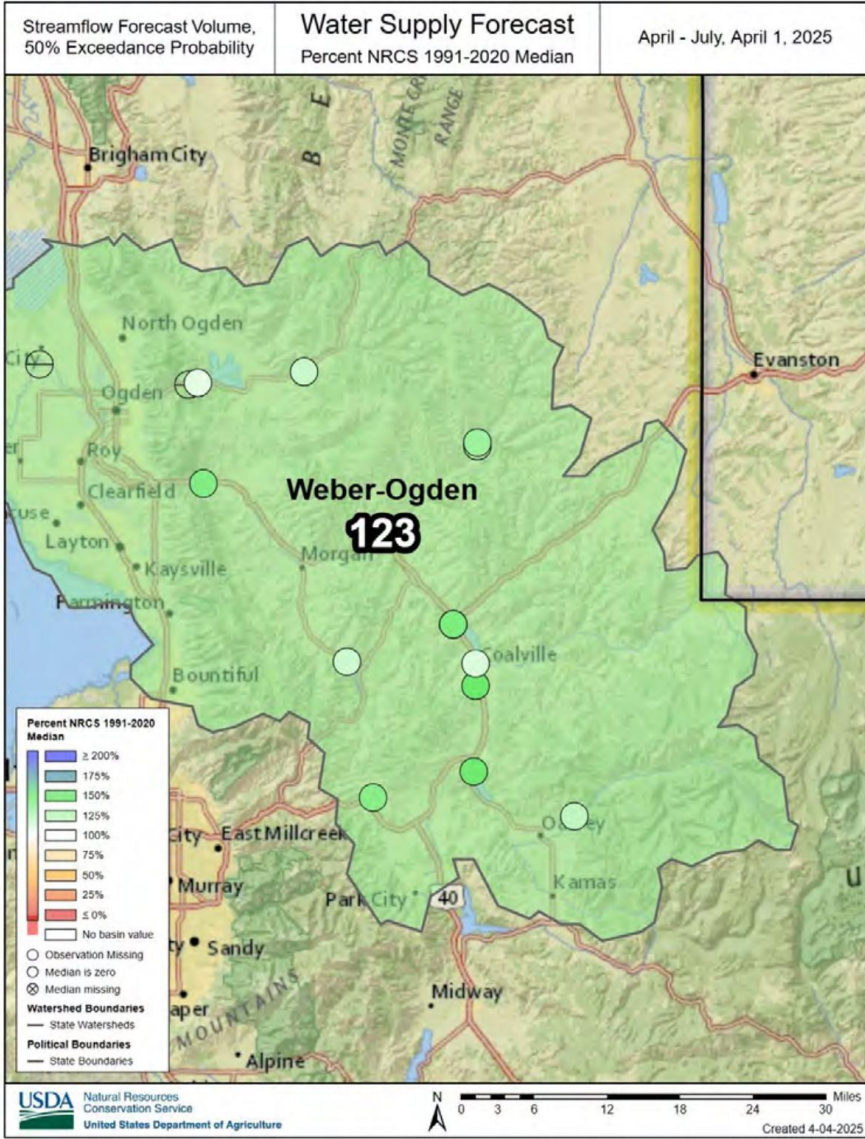
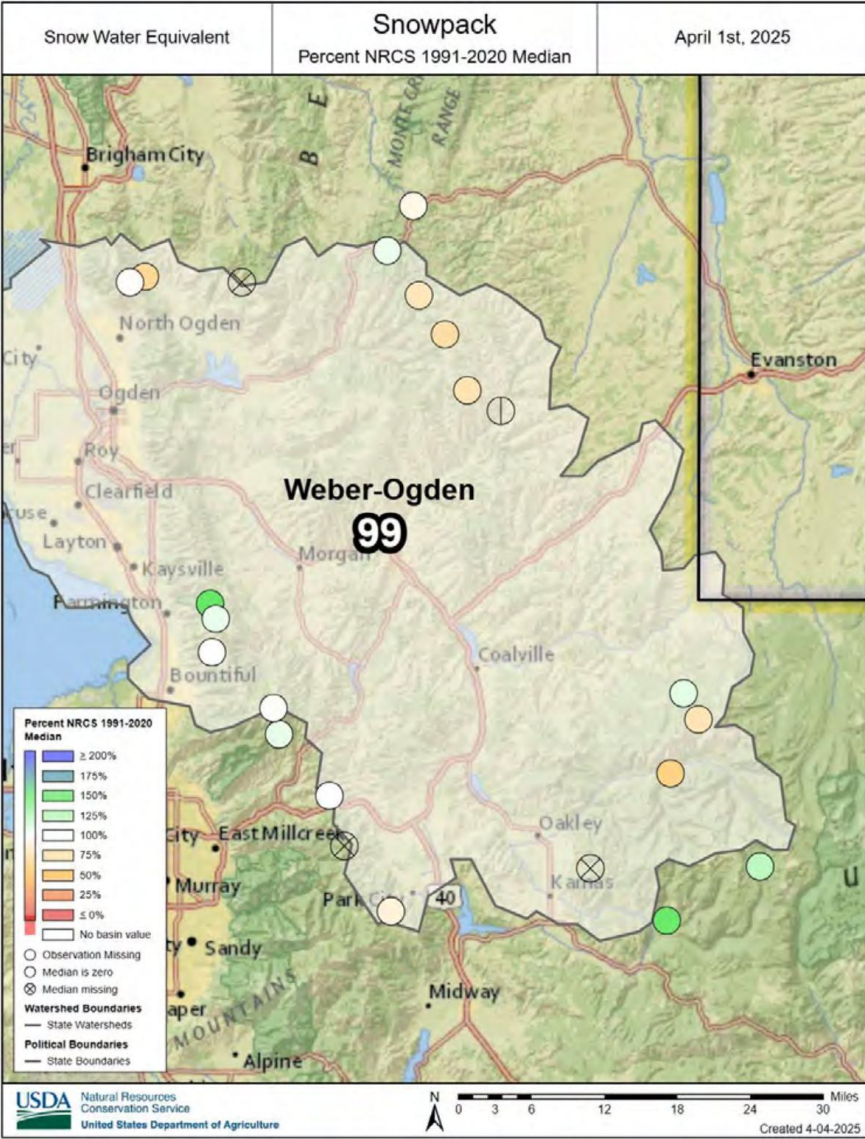
Snowpack in the Weber and Ogden River Basins is about normal at 98% of median, compared to 133% at this time last year. Precipitation in March was well above normal at 144%, which brings the seasonal accumulation (October-March) to 103% of median. Soil moisture is at 65% saturation compared to 74% saturation last year. Reservoir storage is 85% of capacity, compared to 81% last year. Forecast streamflow volumes (50% exceedence, April-July) range from 106% to 132% of normal. The Surface Water Supply Index percentiles are 57% for the Weber, and 57% for the Ogden.



Weber-Ogden



Weber-Ogden



Regulation	Phase I	Phase II	Phase III	Phase IV
Residential	Advisory Normal to Moderate	Severe	Extreme	Exceptional
Lawn Watering Prohibited between 10 am and 6 pm	Mandatory	Mandatory	Mandatory	All Lawn Watering Prohibited
Maximum Irrigation days per week ½-inch of water per irrigation	3-4	2	1	0
Conservation tip: Always maintain and properly adjust your irrigation system to avoid wasting water. Adjust watering times based on weather. Grass needs less water than you think.				
Swimming Pools Use pool covers when pools are not in use and lower water level to reduce water loss from splashing.	Voluntary	Voluntary	Mandatory	Pools shall not be filled
Outdoor fountains and ponds Water must not spray above fountain or pond surface	Voluntary	Voluntary	Highly Recommended	Mandatory
Hard-Surface Washing No hard-surface washing (Except for health or safety)	Voluntary	Highly Recommended	Mandatory	Mandatory
Washing Personal Vehicles Use a bucket and a positive pressure nozzle on the end of any hose. Wash the vehicle on the lawn or any permeable surface.	Voluntary	Voluntary	Highly Recommended	Prohibited

Property Type / Response	Phase I	Phase II	Phase III	Phase IV
Commercial and Industrial	Advisory Normal to Moderate	Severe	Extreme	Exceptional
Water Management Plan Prepare and implement a water management plan for your organization outlining practices and procedures and best water management practices.	Voluntary Reduce use 5%-14%	Voluntary Reduce use 15% - 24%	Voluntary Reduce use 25%-34%	Mandatory Reduce use 35%
Maximum Irrigation days per week ½-inch of water per irrigation	3-4	2	1	0
Commercial Lawn Watering Prohibited between 10 am and 6 pm	Mandatory	Mandatory	Mandatory	Mandatory 85% reduction in lawn watering
Swimming Pools Use a pool cover when the pool is not in use. Lower the pool water level by 4 inches to minimize water loss by splashing.	Voluntary	Voluntary	Highly Recommended	Mandatory
Outdoor fountains and ponds Water must not spray above fountain or pond surface	Voluntary	Voluntary	Highly Recommended	Mandatory
Restaurants Serve water only upon customer request	Voluntary	Voluntary	Highly Recommended	Mandatory
Hotels / Lodging Recommend that laundry not be washed daily for multiple night stay by same patrons.	Voluntary	Voluntary	Highly Recommended	Highly Recommended

Failure to comply with mandatory water use restrictions imposed by Ogden Municipal Code, Title 9, Chapter 8, after an initial warning, will result in the issuance of a civil penalty.

Violation Classification	1st Violation (Initial Penalty)	2nd Violation (Intermediate Penalty)	3rd and Additional Violations (Maximum Penalty)
Phase I/Phase II (Normal/Moderate/Severe Shortage)	\$50 .00	\$100 .00	\$150 .00
Phase III (Extreme Shortage)	\$125 .00	\$250 .00	\$500 .00
Phase IV (Exceptional Shortage)	\$500 .00	\$1,000 .00	\$1,000 .00

CHAPTER 8

WATER SHORTAGE MANAGEMENT PLAN

SECTION:

9-8-1: Findings; Purpose

9-8-2: Definitions

9-8-3: Plan Required

9-8-4: Violations Deemed A Public Nuisance

9-8-5: Enforcement

9-8-6: Appeal Of Notice Of Violation

9-8-7: Penalty

9-8-1: FINDINGS; PURPOSE:

A. The city council finds and declares that adequate water supply and availability will always play a significant role in safeguarding the public welfare, that recurring drought conditions are a normal part of the climate of Ogden City, and that the city should plan in advance for fluctuations in the available water supply.

B. It is further found and determined that the policy of the city is to anticipate and prepare for water shortages of varying degrees and duration regardless of the reason for such shortage; encourage water conservation; make the maximum beneficial use of water from all sources available to the city without unnecessary waste; and maintain sufficient water supplies to meet the reasonable future needs of the public. This chapter is enacted to achieve these policies and to protect the public in times of water shortage.

(Ord. 2009-32, 4-28-2009)

9-8-2: DEFINITIONS:

For the purposes of this chapter, the following terms shall have the indicated meanings:

AUTHORIZED ENFORCEMENT OFFICER:	The employees of the city designated by the mayor with the authority to enforce the provisions of this title and the duly approved water shortage management plan provided for in this chapter.
DIRECTOR:	The director of the department of public services.
EXCEPTIONAL WATER SHORTAGE:	The water supply condition with the greatest number of mandatory water use restrictions. At the beginning of the irrigation season, exceptional water shortage conditions may be declared only when the SWSI scale is below -3.51. An exceptional water shortage may also be declared when any other conditions exist, as provided in the water shortage management plan, requiring significant curtailment in the use of water in all or a large part of the city.
EXTREME WATER SHORTAGE:	The water supply condition with the second greatest number of mandatory use restrictions. At the beginning of the irrigation season, extreme water shortage conditions may be declared only when the SWSI scale is below -2.76.
MANAGER:	The manager of the water utility division within the department of public services.
NORMAL TO MODERATE WATER CONDITIONS:	The water supply condition where water supply is expected to adequately meet demand and which has the fewest number of mandatory water use restrictions. At the beginning of the irrigation season, normal to moderate water conditions exist when the SWSI scale is between +4.1 and -1.75.
SEVERE WATER SHORTAGE:	The water supply condition with the second fewest number of mandatory water use restrictions. At the beginning of the irrigation season, severe water shortage conditions may be declared only when the SWSI scale is below -1.76.
SURFACE WATER SUPPLY INDEX (SWSI):	The index formulated and disseminated by the United States department of agriculture's natural resources conservation service for the Ogden River drainage that is scaled from +4.1 (abundant water supply) to -4.1 (extremely dry) with a value of zero indicating median water supply as compared to historical analysis.

WATER SHORTAGE MANAGEMENT PLAN:	The plan prepared pursuant to this chapter encouraging water conservation and imposing restrictions on the use of water depending on the available water supply.
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(Ord. 2009-32, 4-28-2009; amd. Ord. 2022-19, 5-3-2022)

9-8-3: PLAN REQUIRED:

The director together with the manager shall prepare a water shortage management plan which, before being implemented, shall be approved by resolution of the city council.

A. Mandatory Provisions: The plan, including approved revisions adopted as conditions and experience warrant, shall at a minimum:

1. Include water usage recommendations and mandatory restrictions during periods of normal to moderate water conditions, severe water shortage, extreme water shortage and exceptional water shortage. Separate recommendations and restrictions shall be provided for residential, commercial and industrial, and institutional water users.

2. Include guidelines and criteria, in addition to the surface water supply index, for determining the water supply condition at the beginning of the irrigation season and under what conditions the water supply condition should be upgraded or downgraded in response to various water supply, delivery, and demand conditions.

B. Optional Provisions: The plan, including approved revisions adopted as conditions and experience warrant, may:

1. Include a process allowing a person using large volumes of water to submit for the review and approval of the manager its own water use plan under which it will operate during periods of drought or water shortage. The manager may approve a water use plan only if it meets the water reduction targets associated with each water supply condition set forth in the water shortage management plan or provides an offsetting public benefit.

2. Set higher standards for reduction of city water use during each water supply condition.

3. Allow a person violating a mandatory water use restriction to receive a warning and be given a period of time to come into compliance with the terms of the plan.

C. Declaration Of Shortage Conditions:

1. The manager will use the SWSI report issued closest to April 1 of each year in determining the water supply conditions at the beginning of the irrigation season.

2. Severe water shortage and extreme water shortage may be declared by the mayor pursuant to the plan guidelines.

3. Exceptional water shortage conditions, and the accompanying water use restrictions, shall be implemented by declaration of the mayor upon the advice and recommendation of the public services director pursuant to the plan guidelines.

D. Compliance: The plan shall specify a method for providing notice of violation of mandatory water use restrictions. Other than time of day irrigation restrictions, the plan may not provide for mandatory water use restrictions on residential or commercial customers until either: 1) a severe water shortage condition has been declared; or 2) the director otherwise determines that, in the exercise of his or her best professional judgment, the city is unable to meet anticipated essential water needs without implementing such mandatory measures.

E. Enforcement: Compliance with all mandatory response measures set forth in the plan may be enforced through the imposition and collection of civil fines, as provided in this chapter. If the plan allows for approval of independent water plans, a person with an approved water use plan is not subject to civil fines so long as the terms of the approved plan are followed. Any person who, within fifteen (15) days after being served with a notice of violation, fails to pay any civil fine imposed pursuant to this chapter, or fails to make satisfactory arrangements to pay such civil fine with the manager, shall be subject to having the water supply to the premises of such customer shut off. Water service shall be restored only upon full payment of the civil fine imposed and payment of the turnon fee provided in section 9-1-11 of this title. In addition, at the manager's sole discretion, a customer may be required to install flow restrictors.

F. Plan Nonexclusive: The creation and implementation of the water shortage management plan as provided in this chapter shall be in addition to, and not in place of, any other actions taken by the city from time to time to conserve water or manage limited water supplies, including administrative orders issued pursuant to section 9-1-8 of this title. Limitations on the use of water by any customer of the water utility described elsewhere in this code remain in force and shall be in addition to any restrictions required by the water shortage management plan.

(Ord. 2009-32, 4-28-2009; amd. Ord. 2022-19, 5-3-2022)

9-8-4: VIOLATIONS DEEMED A PUBLIC NUISANCE:

In addition to the enforcement processes and penalties provided, use of water in violation of the mandatory response measures identified in the plan during periods of extreme water shortage or exceptional water shortage is a threat to public health, safety, and welfare, and is declared and deemed a public nuisance, and may be summarily abated at the owner's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken pursuant

to title 1, chapter 4, article C of this code.

(Ord. 2009-32, 4-28-2009; amd. Ord. 2022-19, 5-3-2022)

9-8-5: ENFORCEMENT:

A. Notice Of Violation: Whenever an authorized enforcement officer finds that a person has violated a provision of this title or a mandatory restriction identified in the water shortage management plan, the authorized enforcement officer may issue a notice of violation to the property owner, customer, or any other occupant of the property where a violation is occurring.

B. Service Of Notice: Service of a notice of violation shall be complete when made in the following manner:

1. In person on any occupant of the property where a violation is occurring who is fourteen (14) years of age or older; or
2. By posting the notice in a conspicuous place on the premises where the violation is occurring together with mailing the notice to the billing address on file with the water utility division.

C. Abatement; Deadline: In addition to any other penalty imposed by this chapter, abatement of a violation may be required by the authorized enforcement officer. In such case, the notice of violation shall set forth a deadline within which such abatement must be completed.

(Ord. 2009-32, 4-28-2009)

9-8-6: APPEAL OF NOTICE OF VIOLATION:

Any person receiving a notice of violation may appeal the determination of the authorized enforcement officer. The notice of appeal must be filed in writing in the city recorder's office within ten (10) days of the date of the notice of violation. Hearings shall be conducted as provided in title 4, chapter 4, article A of this code. All applications for hearing shall be accompanied by a copy of the notice of violation and the applicable fee established in section 4-6-1 of this code. As part of an appeal, any civil fine based on a violation susceptible to corrective action may be reduced or waived by the appeal officer if the person completes corrective action within a reasonable period of time, taking into account the nature of the violation, the nature of the action needed, and the anticipated cost of the corrective action. The scope and benefit of any proposed corrective action must first be reviewed and approved by the manager prior to any fine reduction.

(Ord. 2009-32, 4-28-2009)

9-8-7: PENALTY:

A. Civil Penalties: Failure to comply with the provisions of this title or the mandatory water restrictions outlined in the water shortage management plan shall be enforced by imposition of the following civil penalties pursuant to title 1, chapter 4, article B of this code:

1. The first notice of violation issued after expiration of any applicable warning period shall subject the person to the initial penalty as provided in subsection B of this section, and may direct the person to meet with the manager to discuss how to modify their water use.
2. The second notice of violation issued after expiration of any applicable warning period and the prior imposition of the initial penalty shall subject the person to the intermediate penalty as provided in subsection B of this section, and may direct the person to meet with the manager to discuss how to modify their water use.
3. Any subsequent notice of violation issued after expiration of any applicable warning period and the prior imposition of an intermediate penalty, or any reoccurring violation under section 1-4B-6 of this code, shall subject the person to the maximum penalty as provided in subsection B of this section and termination of water service.

B. Civil Penalty Schedule: Violations of this chapter shall carry civil penalties pursuant to the following schedule:

Violation Classification	1st Violation (Initial Penalty)	2nd Violation (Intermediate Penalty)	3rd And Additional Violations (Maximum Penalty)
1. Failure to comply with mandatory water use restrictions imposed by this title or the water shortage management plan during normal water conditions or moderate to severe water shortage	\$ 50.00	\$ 100.00	\$ 150.00

2. Failure to comply with mandatory water use restrictions imposed by this title or the water shortage management plan during extreme water shortage conditions	125.00	250.00	500.00
3. Failure to comply with mandatory water use restrictions imposed by this title or the water shortage management plan during exceptional water shortage conditions	500.00	1,000.00	1,000.00

C. Violation History: The violation level shall be based on violation history for the preceding twelve (12) months. A civil fine for a person's first violation of mandatory water use restrictions provided in the water shortage management plan during normal water conditions shall be imposed only after the issuance of a written warning to such person.

D. Use Of Fines Collected: All fines collected pursuant to this section shall be set aside in a segregated fund within the water department, and used exclusively for paying all or a portion of the costs and expenses incurred by the city in connection with the implementation and administration of the plan and other elements of the city's water conservation program.

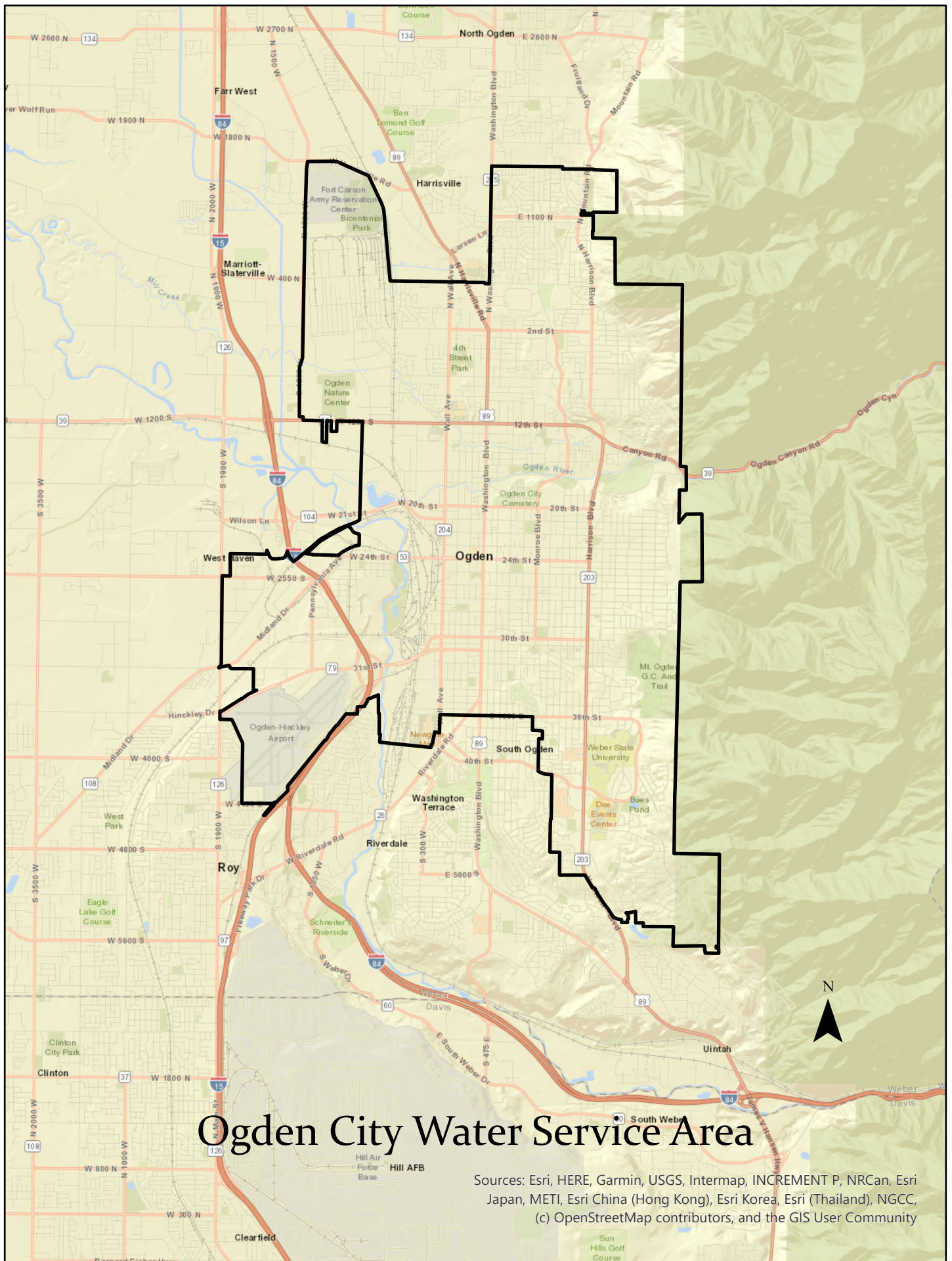
E. Separate Offense Each Day: Each day that any violation of this chapter continues shall be considered a separate offense for purposes of the penalties and remedies available to the city.

F. Compliance Not Excused: No criminal conviction or imposition of civil penalties shall excuse the person from otherwise complying with the provisions of this chapter.

(Ord. 2009-32, 4-28-2009; amd. Ord. 2022-19, 5-3-2022)

APPENDIX E

Water Utility Service Area Map



APPENDIX F

Water Use Data

Utah Public Water Supply Use Form
Data Year: 2024

System Name: Ogden City Water System

(Water Rights ID: 1018)

(PWS ID: UTAH29011)

Supervisor: Brady Herd

Address: 133 W 29th St.
Ogden, UT, 84401

County: Weber

Operational Days: January 1 to December 31, (2024)

I. Summary Information

Contact Person: Brady Herd

Email Address: bradyherd@ogdencity.com

Contact Number: (801) 629-8097

Retail Population: 87,267

To the best of my knowledge all information is accurate and complete:

Name: Brady Herd

Cert. Professional: Brady Herd

Certification Type: Water Manager

License Number:

***Data must be completed and signed by a Drinking Water Certified Operator,
Professional Engineer, or Water Manager.***

II. Retail Culinary Water Use Breakdown

Units Of Measurement: **Gallons**
Method Of Measurement: **Meter**

Culinary Water Use Category	Retail Annual Quantity [Gallons]	Number of Active Connections
Residential Use:	2,443,009,700.00	23,741.00
Commercial Use:	1,314,744,253.00	1,750.00
Industrial Use:	725,661,800.00	119.00
Institutional Use:	546,491,500.00	388.00
Total Use:	5,029,907,253.00	25,998.00

Unmetered Culinary Institutional Water Use

1. Is there unmetered culinary water use for the irrigation purposes of churches, schools, parks, etc? **No**
2. If YES, please provide an estimate of the total unmetered institutional acreage that is irrigated: **0.00**

III. Equivalent Residential Connection Summary (ERC)

- | | |
|--|-----------|
| 1. Estimated Equivalent Residential Connections: | 48,880.00 |
| 2. Do you accept the estimated ERC value: | Yes |

IV. AWWA Estimated Water Loss System Review

Have you completed a water audit of your system using the AWWA standard methodology?	Yes
--	-----

V. Political Boundaries

- | | |
|---|-----|
| 1. Do you supply water outside your political boundaries? | Yes |
| 2. If YES, are they included in the NUMBER OF ACTIVE CONNECTIONS above? | Yes |
| 3. If YES, what are the total connections outside your political boundaries? | 128 |
| 4. Does your Water Service Area Boundary need to be updated? | No |
| 5. If YES, please contact Brandon Mellor at (801) 927-7433 or bmellor@utah.gov. | |

VI. Peak Demand Summary (Water demand on the day of the highest water consumption in one year.)

- | | |
|--|-------------------------------|
| 1. Are you able to accurately measure Source Peak Day Demand? | Yes |
| 2. What day of the year did your source Peak Demand occur? | 2024-07-25 |
| 3. Units Of Measurement for the source Peak Day Demand volume: | Gallons |
| 4. What is your source Peak Day Demand volume? | 29,880,209.00 (Gallons / Day) |
| 5. The Peak Day Demand measurement includes: | Both Indoor AND Outdoor Use |
| 6. Does the reported Source Peak Day Demand include wholesale water supplied to other water systems? | Yes |
| 7. What is the volume of wholesale water supplied to other water systems on the Peak Day identified above? | 1,442,991.00 |
| 8. Units of Measure for wholesale water volume: | Gallons |

Peak Demand Comments:

Peak Day Demand was calculated using individual meters from all sources.

Wholesale Deliveries

Pineview West:11,511
Bona Vista: 1,431,480

VII. Summary of Water Data

A. Total from all Sources of Water:		6,384,539,198.57
Water Total from all Diversions:	4,494,876,068.57	
Purchased Water:	1,889,663,130.00	
B. Sum of Retail Culinary Use:		5,029,907,253.00
C. Sum of ALL Wholesale Deliveries:		439,228,761.00
D. Sum of ALL Returns:		0.00
Estimated Water Loss (Loss, Unaccounted, or Unbilled) [A - (B + C + D)]:		915,403,184.57
Estimated Water Loss Percentage:		14.34 %

VIII. Source Inventory

Source Name: Airport Well (WS017)

USE TYPE: [Water Supplier]
LOCATION: [S 389 ft W 767 ft from NE cor Sec 12 T5N R2W SL]
WATER RIGHT(s): [35-300]
UNITS OF MEASUREMENT: [Acre Feet]
METHOD OF MEASUREMENT: [Individual Meter]
ANNUAL USE: [0.19]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00

Source Name: Eden Well Site (Group)

USE TYPE: [Water Supplier]
LOCATION: [S 2805 ft W 1152 ft from N4 cor Sec 11 T6N R1E SL]
WATER RIGHT(s): [35-683, 35-2281, 35-2282, 35-2283, 35-2284, 35-2285,]
[35-2286, 35-2287, 35-2288, 35-2289, 35-2290, 35-2291,]
[35-2292, 35-2293, 35-2294, 35-2295, 35-2296, 35-2297,]
[35-2298, 35-2300, 35-2301, 35-2302, 35-2303, 35-2304,]
[35-2305, 35-2306, 35-2307, 35-2308, 35-2309, 35-2310,]
[35-2311, 35-2312, 35-2313, 35-2314, 35-2315, 35-2316,]
[35-2317, 35-2318, 35-2319, 35-2320, 35-2321, 35-2322,]
[35-2324, 35-2325, 35-2327, 35-2328, 35-7402]
UNITS OF MEASUREMENT: [Acre Feet]
METHOD OF MEASUREMENT: [Individual Meter]
ANNUAL USE: [10,966.26]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
762.80	703.22	770.80	752.24	984.18	1,068.61	1,143.93	1,098.13	1,013.24	1,014.25	827.52	827.34

Source Name: Pine View Reservoir (WS001)

USE TYPE: [Water Supplier]
LOCATION: [N 1699 ft E 603 ft from S4 cor Sec 16 T6N R1E SL]
WATER RIGHT(s): [35-5691, 35-7016, 35-7401, 35-11309, E287, E288]
UNITS OF MEASUREMENT: [Acre Feet]
METHOD OF MEASUREMENT: [Individual Meter]
ANNUAL USE: [2,068.00]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.00	0.00	0.00	0.00	0.00	189.30	633.00	758.80	486.90	0.00	0.00	0.00

Source Name: Taylor Canyon Well (WS012)

USE TYPE: [Water Supplier]
LOCATION: [S 1559 ft E 197 ft from NW cor Sec 35 T6N R1W SL]
WATER RIGHT(s): [35-8111]
UNITS OF MEASUREMENT: [Acre Feet]
METHOD OF MEASUREMENT: [Individual Meter]
ANNUAL USE: [52.20]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.54	0.00	0.00	1.11	13.70	4.74	9.20	6.22	0.00	12.94	2.75	0.00

Source Name: Wheeler Creek Intake (WS002)

USE TYPE: [Water Supplier]
LOCATION: [N 1578 ft E 252 ft from S4 cor Sec 16 T6N R1E SL]
WATER RIGHT(s): []
UNITS OF MEASUREMENT: [Acre Feet]
METHOD OF MEASUREMENT: [Individual Meter]
ANNUAL USE: [707.60]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.00	0.00	0.00	0.00	0.00	399.30	261.70	46.00	0.60	0.00	0.00	0.00

Comments:

Reporting Period - Plant Operation [June 4th - September 26th]

IX. Purchase Inventory

Purchase Name: Purchased from Weber Basin Treated (WS011)

USE TYPE: [Water Supplier]
LOCATION: [Sec 01 T R]
WATER RIGHT(s): []
UNITS OF MEASUREMENT: [Gallons]
METHOD OF MEASUREMENT: [Master Meter]
ANNUAL USE: [1,889,663,130.00]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
130,916,0	138,671,0	141,501,0	134,236,0	151,810,7	168,666,2	213,977,0	178,905,0	181,465,0	192,526,0	121,425,0	135,564,130.

X. Wholesale Source Inventory

Wholesale Name: Sold to Bona Vista WD (PWS ID 29004)

USE TYPE: [Water Supplier]
LOCATION: [Sec T R]
UNITS OF MEASUREMENT: [Gallons]
METHOD OF MEASUREMENT: [Master Meter]
ANNUAL USE: [434,999,800.00]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
35,823,31	48,302,81	40,278,23	26,438,94	28,037,80	37,326,81	40,981,20	33,468,90	24,450,83	39,436,02	42,306,76	38,148,190.0

Wholesale Name: Sold to Pineview West (PWS ID 29029)

USE TYPE: [Domestic]
LOCATION: [Sec T R]
UNITS OF MEASUREMENT: [Gallons]
METHOD OF MEASUREMENT: [Master Meter]
ANNUAL USE: [4,228,961.00]
ACTIVE SOURCE: [Yes]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
105,719.0	284,241.0	102,618.0	75,685.00	181,007.0	668,664.0	810,410.0	776,682.0	377,698.0	367,459.0	167,977.0	310,801.00

XI. Return Location Inventory

XII. Secondary or Untreated Water Use Breakdown

1. Do you provide separate secondary untreated water to your culinary customers? **No**
2. Do other secondary districts and/or irrigation companies provide secondary water within the boundaries of your culinary water service area? **Yes**
3. What is the percentage of culinary customers using a separate PRESSURIZED irrigation system for landscaping: **34 %**
4. Pressurized Irrigation System Company Data:
Pineview Water: 801-621-6555
Weber Basin Water Conservancy District: 801-771-1677
5. What percentage (%) of your culinary customers use a separate DITCH irrigation system for their landscapes? **3 %**
6. Ditch Irrigation System Company Data:
Dinsdale Ditch, Brent Stephens, 801-564-9752
Glenwood Irrigation, Tom Wikstrom, 801-366-8482
Lynne Ditch, Robert Giboney, 801-394-0273
Mound Fort No. 1, Lew Hathaway, 801-621-5620
Mound Fort No. 2, Cody Terry, 801-809-2781
Mound Fort No. 3, Dale Palmer, 801-399-1962
Mound Fort No. 4, Betty Slack, 801-605-8199
Mound Fort No. 6, Kelly Larkin, 801-920-3267
Western Irrigation, Robby Spronk, 801-458-7864