

**ORDINANCE
2015-07**

**AN ORDINANCE AMENDING ORDINANCE 2009-08, WELLINGTON CITY'S WATER
CONSERVATION PLAN**

Section I. Preamble

WHEREAS, Wellington City operates a culinary water system; and

WHEREAS, the City Council understands the pressing need to use water in a more efficient manner to allow for future sustained growth of the community; and

WHEREAS, the Utah State Legislature has adopted the Water Conservation Plan Act (Section 73-10-32 Utah Code Annotated) which requires all retail water providers with 500 or more service connections to adopt a Water Conservation Plan; and

WHEREAS, the Wellington City Council held a public hearing on December 16, 2015 to receive public comment on the Water Conservation Plan.

Section II. Ordaining Clause

NOW, THEREFORE, BE IT ORDAINED by the City Council of Wellington City that Wellington City's Water Conservation Plan be amended and revised and re-adopted, a copy of which is attached as Exhibit A.

PASSED, ADOPTED, AND ORDERED posted by the City Council of the City of Wellington, Carbon County, Utah on the 3rd day of June, 2015.

By: _____

Joan Powell, Mayor

Voting:

Kirt Tatton	Yea ___	Nay ___
Terry Sanslow	Yea ___	Nay ___
Marvon Willson	Yea ___	Nay ___
Glen Wells	Yea ___	Nay ___
Pete Yakovich	Yea ___	Nay ___



ATTEST:

Glenna Etzel, City Recorder



Water Conservation Plan

Wellington City

2015

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Water Conservation Plan

For Wellington City

INTRODUCTION

In response to the rapid growth occurring in many parts of the State of Utah, Wellington City citizens and leaders are becoming concerned for the future cost and availability of water supply. A similar concern has been demonstrated by the state legislature in the Water Conservation Plan Act (House Bill 71) passed and revised in the 2004 legislative session (Section 73-10-32 Utah Code Annotated). This water conservation plan is written to address how water conservation programs and practices will play an important role in meet our future water needs, as well as address the concerns of leaders and citizens of both Wellington City and the State of Utah.

1-DESCRIPTION OF WELLINGTON CITY AND ITS WATER SYSTEM

Wellington City is located in the center of Carbon County, in the second driest state in the nation. The City's 2015 population was approximately 1,600. Providing water to meet the needs of its citizens has always been a top priority of city leaders and planners. As a result, a well-maintained and operated water system provides the citizens of Wellington with water when and where needed. Currently, the water system provides water to 631 residential, 21 commercial, 2 industrial, and 7 institutional (public) connections.

Our City residents and their leaders place a high value on open space. Consequently, 42 acres of land in the City have been set aside for parks and a cemetery. Landscaped areas around schools, churches and industries occupy approximately another 15 acres. As of January 2015, Wellington still had nearly 600 acres of vacant land in undeveloped residential zones, 300 vacant areas in manufacturing/industrial zones, and 30 vacant acres in commercial zones. The total estimated acreage of Wellington City is 2800 acres.

Wellington City is not receiving significant residential, commercial and industrial growth.

Inventory of Water Resources

Wellington has pledged 341 acre-feet of Scofield Reservoir Water (Price River Water Users Association Stock) annually to the Price River Water Improvement District for the purpose of meeting the City's demands for culinary water. The City also pledges the remainder of its water stock, 317 acre-feet Scofield Reservoir Water (Price River Water Users Stock), and 926.3 shares Wellington Canal Stock, for the purpose of supplying pressurized secondary irrigation water to its citizens for outdoor watering.

Potable and secondary water for future residents will come from additional purchases of Scofield Reservoir Water (Price River Water Users Association Stock). The City, as noted above, owns shares of stock in the local canal company and in the Price River Water Users Association as shown below. Water provided under these shares is, and will continue to be used for culinary irrigation purposes by the citizens of Wellington, as well as city-owned facilities, parks, and open spaces.

Table 1
City Owned Stock in Local Canal Companies

<u>Company</u>	<u>Shares</u>	<u>Acre-Feet</u>
Price River Water users Assoc.* (Reservoir Storage)	658.4	658.4
Wellington Canal Company*	924.3	308.1

*Surface Water Rights

Wellington City contracts with Price River Water Improvement District to furnish the culinary needs of the City. The City currently pledges 341 shares (acre feet) of Price River Water Users Association Stock to the District as guarantee for water to the City's individual culinary water connections. The City has agreed to collect one share of Price River Water Users Association Stock for each new residential connection made to its system. Commercial connections are negotiated based on expected water usage.

Water Budgets

The following table shows the amount of water delivered into the water system and the metered outflows to end-users for the year 2010 to 2015

Table 3
City Water Budget - 2003 through 2014

Inflow (AF)			Outflow (AF)				
Year	District	Res	Com/Ind	Church/Schools	Govt/Parks/Cemetery	% Diff.	
2010	45204	42,415	8,203	6,967	316	28.09%	
2011	67062	41,552	9,005	8,054	1,367	-10.56%	
2012	63020	35,716	7,114	5,823	312	-22.30%	
2013	68675	43,587	8,848	8,171	224	-11.42%	
2014	59703	31,208	4,155	2,656	170	-36.04%	
2015	57089	37,702	6,039	5,015	301	-14.07%	

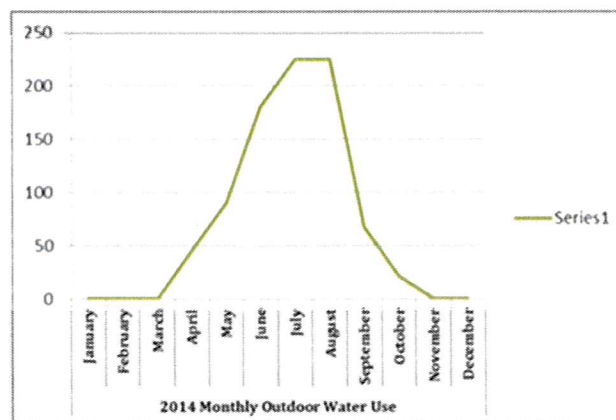
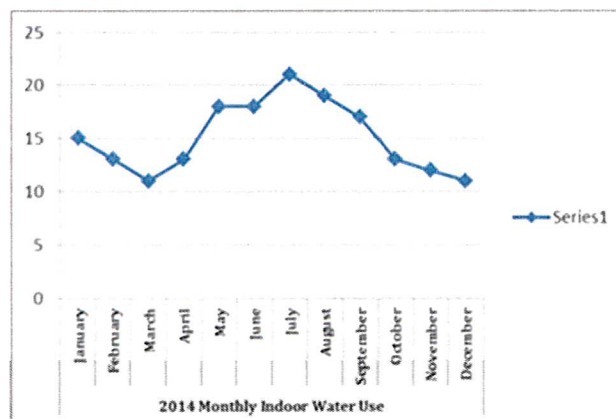
Average losses from the system are just over 11.05 percent for the last five complete years tabled.

Present Water Use and Future Water Needs

When all uses of culinary grade water are compared with the number of people living in Wellington City in 2014 (approx. 1600), residents used 100 gallons of water per capita per day (gpcd). However, when the un-metered secondary water is included in the resident's gpcd, a 477 gpcd can be compared to the statewide average of 293 gpcd and 184 gpcd nationally. It should be noted that the un-metered secondary irrigation system provides lower quality water to the extensive public (city & county), agricultural users (city & county), and private and public landscaped acres. Total month water use for 2014 is shown in Figure 1.

Population growth over the past 20 years has been insignificant and the growth anticipated over the next 20 years is projected to be 10 percent, or a 2035 population of around 1900 people. Current parks and open spaces are considered to be adequate; improvements on existing facilities have been made to encourage greater use by the residents of the City.

Figure 1



owners in the landscaping of private yards with water efficient irrigation systems and trees and shrubs.

3-CURRENT CONSERVATION PRACTICES

Wellington City has already implemented several water conservation measures; these, along with additional measures that will effectively solve Wellington City's water problems are discussed below.

Wellington's current water conservation program is directed primarily at managing water waste and providing useful material to assist residents to use water more efficiently. Current measures include a water conservation contingency plan, water education program for outdoor and indoor water use, and a conservation oriented water rate structure.

Emergency Response Plan

The City has an "Emergency Response Plan" dated August 2004, which spells out climate and political realities related to water use during drought or other water supply shortages. Also address in this report are the conservation measures that may be implemented during times of high demand, equipment or system failure or shortages due to drought. They are as follows:

Phase 1. Request selected large users to modify their water use to reduce demand in the water distribution system.

Phase 2. Although Wellington City continually promotes wise water use for all residents, all water users will be strongly encouraged to follow wise water use practices. Some examples of wise water use include sweeping driveways rather than washing with a water hose, outside irrigation during non-daylight hours, storing drinking water in the refrigerator, homeowners repairing leaks, etc.

Phase 3. Request odd-even watering days based upon street address.

Phase 4. Request voluntary reduction in water usage.

Phase 5. Mandatory reduction with enforcement.

The above phases are not intended to limit or restrict the ability of Wellington City to meet the demands of their customers. Rather it provides a guideline from which management decision can be made. Wellington City reserves the right to select the appropriate rationing phase upon the specific circumstances, the anticipated duration of rational, existing supply reserves, and the availability of alternate water sources.

Water Education Program

Information on efficient outdoor and indoor water use is available to the citizens of Wellington semi-annually through the monthly water bill. This information is made available through various water agencies and examples are attached as "Appendix 1 through 5". These examples may be updated, added to, or deleted as updated information and material becomes available.

Outdoor Water Use

- Water landscape only as much as required by the type of landscape, and the specific weather patterns of your area, including cutting back on watering times in spring and fall or during wet weather cycles. We encourage our customers to utilize weekly lawn watering guide located at www.conservewater.utah.gov.

- Know where your main shutoff valve is and make sure it works. Shutting the water off yourself when a pipe breaks, or a leak occurs, will not only save water and money, but also eliminates or minimizes damage to your personal property.
- Keep a jar of water in the refrigerator for a cold drink instead of running water from the tap until it gets cold. You are putting several glasses of water down the drain for one cold drink.
- Plug the sink when rinsing vegetables, dishes, or anything else. Use only a sink full of water instead of continually running water down the drain.

4-CURRENT PRICING STRUCTURE

The Wellington City council has maintained the City's culinary water rates since 2008. Due to a higher rate, and a stagnant community, it is not anticipated Wellington City will raise its Culinary Water Rates within the next year to year and a half.

Table 5	
Current Water Rates (Culinary)	
Type:	Increasing Block Rate
Base Charge	\$40.13/month
Base Allocation	0 Kgal/month
Amount of Water	Rate
0 to 10 kgal	\$1.84/Kgal
10 to 20 Kgal	\$2.34/Kgal
20 to 100 Kgal	\$2.84/Kgal
100 + Kgal	\$3.34/Kgal
Current Water Rates (Secondary)	
Type:	Fixed Rate
Base Charge	
1" Connection	\$17.00/month
1 ½" Connection	\$22.00/month
2" Connection	\$31.50/month

5-ADDITIONAL CONSERVATION MEASURES

In order to effectively meet Wellington City's future water needs and solve water problems identified, additional water conservation measures may be required. These include meter replacement and leak repair, education, and plumbing fixture replacement.

1. Meter Replacement and Leak Detection Program

As meters age they become less accurate in recording actual flows. This leads to lost revenue and inaccurate data to citizens. Approximately 84% of the city's meters are less than 10 years old. It is estimated that these meters are recording on average 99% of actual water being consumed. The City intends to rotate 10% of its oldest meters annually.

Leak detection is an ongoing program. It is estimated that 12% of the City's water lost is in its distribution system at a cost of \$12k annually. Much of this loss is due to aging service laterals that are replaced as soon as water leakage is detected.

The result of an effective program to boost the efficiency with which secondary water is used in the city will be much more difficult to monitor than the culinary water savings due to lack of metering. The effect of conserving secondary water will not be realized in dollars saved by the city, but the availability of secondary water for future growth will be a savings. Current values for one share of reservoir water (1 acre foot) are greater than \$2k. A fifteen percent conservation goal would make available 93 acre feet annually for future through, a value of \$186k.

Long Term Benefits of Water Conservation Program (Culinary Water)									
Year	Pop	Futuer Use Without Conservation				Futuer Use With Conservation			
		Purchased Water (AF)	Cost/AF	Total Cost (\$)	gpcd	Purchased Water (AF)	Total Cost (\$)	gpcd	
2014	1600	200.00	378	75,600	127	200.00	75,600	127	
2015	1600	200.00	378	75,600	127	170.00	64,260	111	
2016	1615	202.13	378	76,405	127	171.85	64,959	110	
2017	1630	204.26	378	77,210	127	173.70	65,659	110	
2018	1645	206.39	378	78,015	127	175.55	66,358	110	
2019	1660	208.52	378	78,821	127	177.40	67,057	110	
2020	1675	210.65	378	79,626	127	179.25	67,757	110	
2021	1690	212.78	378	80,431	127	181.10	68,456	110	
2022	1705	214.91	378	81,236	127	182.95	69,155	110	
2023	1720	217.04	378	82,041	127	184.80	69,854	110	
2024	1735	219.17	378	82,846	127	186.65	70,554	110	
2025	1750	221.30	378	83,651	127	188.50	71,253	110	
2026	1765	223.43	378	84,457	127	190.35	71,952	110	
2027	1780	225.56	378	85,262	127	192.20	72,652	110	
2028	1795	227.69	378	86,067	127	194.05	73,351	110	
2029	1810	229.82	378	86,872	127	195.90	74,050	110	
2030	1825	231.95	378	87,677	127	197.75	74,750	110	
2031	1840	234.08	378	88,482	127	199.60	75,449	111	

Cost of Reaching Goal #1:

The result of an effective program to boost the efficiency with which secondary water is used in the city will be much more difficult to monitor than the culinary water savings due to lack of metering. The effect of conserving secondary water will not be realized in dollars saved by the city but the availability of secondary water for future growth will be a savings. Current values for one share of reservoir water (1 acre foot) are greater than \$2000. A 15 percent conservation goal would make available 93 acre feet annually for future growth, a value of \$186,000.