# WELLSVILLE CITY RESOLUTION

RESOLUTION NUMBER 2014-10

ADOPTED Nov. 5 2014

# WELLSVILLE CITY WATER CONSERVATION PLAN

WHEREAS, the state legislation passed the Water Conservation Plan Act (UC 73-10-32), whereby all water retailers were required to prepare a water conservation plan prior to April 1, 1999.

WHEREAS, Wellsville City did prepare the original water conservation plan that was approved and adopted by Wellsville City Council on December 9, 1998. Said Water Conservation Act also requires that the plan be updated every five years, therefore an updated plan was approved by the City Council on December 1, 2004 and on January 6, 2010, and now requires we update it again.

WHEREAS the Wellsville City Council finds there is a need to protect, manage, and develop water resources, and to make changes to the Water Conservation Plan.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Wellsville, Cache County, State of Utah, that this resolution is hereby known as the Wellsville City Water Conservation Plan, and is hereby approved and adopted by Wellsville City.

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#### A. BACKGROUND INFORMATION

Wellsville City Corporation collects, treats, and distributes culinary water. Wellsville City is the service area. However, we do supply four (4) households that are not within the city limits, but since March 1, 1992 the City Code prohibits selling water outside the city limits other than the four (4) that were on the system when the code changed. We have 1,116 connections, with 1,146 units on our culinary water system as of December 31, 2013. The difference between the connections and units is: a four-plex would buy one connection but have four units.

The City of Wellsville was founded in 1856; it was the first permanent settlement in Cache Valley. The town was originally named Maughan's Fort. By 1857 Maughan's Fort had grown to nearly 100 people. In 1859 the name of the settlement was changed to Wellsville to honor Brigham Young's second counselor, Daniel H. Wells. On January 19, 1866 Wellsville was incorporated.

Since the founding of Wellsville City, the water for culinary purposes has been obtained from springs in Wellsville Canyon, with the first filing in 1861. There are several springs there, and collectively are called the Leatham Springs. The springs are in the canyon and the elevation is considerably higher than the city elevation. Therefore, we have a gravity flow system with several pressure reducing stations. Over the years the city continued to grow. In 1978 the city drilled well #1, which is developed to pump 3,000 gallons per minute. In 1996 the city drilled well #2. However, this well never did prove up to culinary standards and, therefore; is not used. In 2003 the city drilled and developed well #3, which is also developed to pump 3,000 gallons per minute.

Over the years there have been disputes over water rights in Wellsville Canyon. For over 30 years the City was in a legal battle with "The Lindley Family" over the water. In 1988 a judge ruled that Wellsville City owned all of the water from the Wellsville Canyon drainage area, with exception of 4.2% owned by "The Lindley Family".

Irrigation water for the City residents comes from four sources; the majority of it being delivered by canals and open-air ditches. The residents of the city own 576 acre feet of water in Hyrum Dam; Wellsville City owns 1,124 acre feet of water from Hyrum Dam. Wellsville Irrigation Company has a filing on West Spring from April 1<sup>st</sup> to September 30<sup>th</sup>. The third source would be water from springs at Wellsville Dam, known as East Springs. This water is filed on by Wellsville City Irrigation Company. The fourth source would be our culinary water. The majority of the residents in the community us culinary water for watering their gardens and their lawns.

For several years there has been discussion in the community of attempting to install pressurized secondary irrigation system using water from Hyrum Dam, West Spring, and East Springs, and surplus water from the City culinary water system. A secondary water system was designed by Cache Landmark Engineering and estimated the cost of the system. Based on cost, the Council decided it was not feasible at that time to attempt to put the City under a secondary system.

#### B. EXISTING RESOURCES

The city's existing water resources consists of three components: (1) Storage Capacity, (2) Distribution Infrastructure, and (3) Water Rights. They are listed as follows:

### **Storage Capacity**

Spring Reservoir	1,000,000 gallons
Lindley Reservoir	650,000 gallons
Gravel Pit Reservoir	1,000,000 gallons
Gravel Pit Reservoir	350,000 gallons
TOTAL STORAGE CAPACITY	3,000,000 gallons

#### **Distribution Infrastructure**

6" Lines	59,630 feet
8" Lines	63,361 feet
10" Lines	12,189 feet
12" Lines	3,671 feet
14" Lines	15,900 feet
TOTAL	154,751 feet

# Wellsville City Water Rights

<u>Claim No.</u> 25-1656	Brigham Spring 1.0 cfs Jan. 1 to Dec. 31	Kimball 326 (Priority May 1, 1861)
25-1657	Wellsville Canyon Creek 3.0 cfs same flow intermittently diverted at under Claims 25-1887, 1898, 2114, 1973, 19 Oct. 10 to April 1	
25-1659	Upper South Branch Spring 0.66 cfs	Appl. No. 5625 Cert. 456
	Sept. 15 to April 15	(Priority March 3, 1914)
25-1887	Middle Branch Spring Area 3.0 cfs same flow intermittently diverted at under Claims 25-1657, 1898, 2114, 1973, 1	887
	Oct. 10 to April 1	(Priority June 24, 1931)
25-1977	Wellsville Canyon Creek	(Kimball 333-a) Chg. a-1163 Cert. Chg. a-157
	3.0 cfs same flow intermittently diverted at under Claims 25-1972, 1974, 1976, 1977, 1	
	April 1 to Sept. 30	(Priority May 1, 1861)
25-1978	Wellsville Canyon Creek	(Kimball 333-a) Chg. a-1163 Cert. Chg. a-157
	3.0 cfs same flow intermittently diverted at	
	under Claims 25-1972, 1974, 1976, 1977, 1 April 1 to Sept. 30	(Priority May 1, 1861)
25-1898	Wellsville Canyon Creek 3.0 cfs same flow intermittently diverted at under Claims 25-1657, 1898, 2114, 1887, 1	Appl. No. 11107 Cert. 4037 any each or all points
	Oct. 1 to April 10	(Priority June 24, 1931)
25-576	Middle Branch Wellsville Canyon Creek 1.40 cfs same flow intermittently diverted a under Claims 25-576, 1658	Appl. No. 10818 Cert. 4129 t any each or all points
	Oct. 15 to April 1	(Priority December 30, 1929)

Claim No.		
25-1972	Middle Branch Spring Area	(Kimball 333-a) Chg. a-1163 Cert. Chg. a-157
	3.0 cfs same flow intermittently diverted at	any each or all points
	under Claims 25-1974, 1976, 1977, 1978	
	April 1 to Sept. 30	(Priority May 1, 1861)
25-1973	Wellsville Canyon Creek 3.0 cfs same flow intermittently diverted at under Claims 25-1657, 1887, 1898, 2114, 1	•
	Oct. 10 to April 1	(Priority June 24, 1931)
25-1974	Wellsville Canyon Creek	(Kimball 333-a) Chg. a-1163 Cert. Chg. a-157
	3.0 cfs same flow intermittently diverted at	any each or all points
	under Claims 25-1972, 1974, 1976, 1977, 1	
	April 1 to Sept. 30	(Priority May 1, 1861)
25-1976	Wellsville Canyon Creek	(Kimball 333-a) Chg. a-1163 Cert. Chg. a-157
	3.0 cfs same flow intermittently diverted at	any each or all points
	under Claims 25-1972, 1974, 1976, 1977, 1	
	April 1 to Sept. 30	(Priority May 1, 1861)
25-1658	Middle Branch Spring Area 1.40 cfs same flow intermittently diverted a	Appl. No. 10818 Cert. 4129
	under Claims 25-576, 1658	, , , , , , , , , , , , , , , , , , ,
	Oct. 10 to April 1	(Priority December 30, 1929)
25-2114	Wellsville Canyon Creek 3.0 cfs same flow intermittently diverted at under Claims 25-1657, 1887, 1898, 2114, 1	
	Oct. to April 1	(Priority June 24, 1931)
25-7428	Wells 2.23 cfs = 1,614.33 Acre Feet	(Change Appl. No. a 26474)

## Wellsville City Additional Water Rights

Wellsville City also has the following water rights, with the exception of 4.2% owned by "The Lindley Family".

<u>Claim No.</u> 25-1979	Wellsville Canyon Creek 34.5 cfs Direct flow Same flow intermittently diverted at any or covered by Claims 25-1979, 1968, 1970.	Kimball 333-a April 1 to Sept. 30 all points of diversion May 1, 1861
25-1980	Wellsville Canyon Creek 15.0 cfs Direct flow Same flow covered by Claims 1980, 1969, May 1, 1861	Kimball 333-b Oct. 1 to Oct. 10 1971.
25-1968	Wellsville Canyon Creek 34.5 cfs Direct flow Same flow intermittently diverted at any or covered by Claims 25-1979, 1968, 1979.	Kimball 333-a April 1 to Sept. 30 all points of diversion
25-1969	Wellsville Canyon Creek Oct. 1 to Oct. 10 Same flow covered by Claims 25-1969, 197	Kimball 333-b 71, and 19980.
25-1970	Wellsville Canyon Creek 34.5 cfs Direct flow Same flow intermittently diverted at any or covered by Claims 25-1968, 1970, 1979.	Kimball Decree 333-a April 1 to Sept. 30 all points of diversion May 1, 1861
25-1971	Wellsville Canyon Creek Oct. 1 to Oct. 10 15.0 cfs Same flow covered by Claims 25-1969, 197	Kimball Decree 333-a May 1, 1861 71, and 1980.

1,124 Acre Feet in Hyrum Dam

#### C. WATER USE

## Total Water Use (All Classifications)

	Total Connections	Total <u>Units</u>	Total Water From Springs	Total Water From Wells	Total <u>Usage</u>	Average Usage/Month / <u>Unit</u>
Det 31, 1999	840	874	330,537,000	-0-	330,537,000	31,515
Det 31, 2000	836	870	293,643,000	145,200,000	438,843,000	42,034
Dec 31, 2001	846	879	357,003,000	134,822,000	491,825,000	46,627
Dec 31, 2002	860	893	309,967,000	95,814,000	405,781,000	37,866
Dec 31, 2003	879	913	270,174,000	125,436,000	395,610,000	36,108
Dec 31, 2004	907	943	293,306,000	98,214,000	391,520,000	34,598
Dec 31, 2005	922	956	426,405,000	-0-	426,405,000	37,169
Dec 31, 2006	977	1,011	506,503,000	-0-	506,503,000	41,749
Dec 31, 2007	1,043	1,077	361,482,000	128,307,000	489,789,000	37,897
Dec 31, 2008	1,049	1,082	359,860,000	108,566,000	468,426,000	36,077
Dec 31, 2009	1,060	1,092	476,225,000	-0-	476,225,000	36,341
Dec 31, 2010	1,079	1,110	385,303,000	127,474,000	512,777,000	38,496
Dec 31, 2011	1,090	1,120	486,773,000	-0-	486,773,000	36,218
Dec 31, 2012	1,096	1,126	392,927,000	190,411,000	583,338,000	43,171
Dec 31, 2013	1,116	1,146	245,096,000	239,714,000	484,810,000	35,253

## **Total Water Used By Classification**

	Grand Total All	Grand Total All	R	esidential	Со	mmercial	Ir	ndustrial	Stoc	kwatering	Total Usage All Classifications	Average Usage Per Month Per
	Connections	Units	Units	Usage	Units	Usage	Units	Usage	Units	Usage		Unit
Dec 31, 99	840	874					1	26,497,000			330,537,000	31,515,000
Dec 31, 00	836	870					1	28,405,000			438,843,000	42,034,000
Dec 31, 01	846	879					1	33,108,000			491,825,000	46,627,000
Dec 31, 02	860	893					1	32,461,000			405,781,000	37,866,000
Dec 31, 03	879	913					1	30,893,000			395,610,000	36,108,000
Dec 31, 04	907	943	900	313,129,000	21	30,019,000	1	42,871,000	21	5,501,000	391,520,000	34,598,000
Dec 31, 05	922	956	914	324,116,000	20	56,485,000	1	34,810,000	21	10,994,000	426,405,000	37,169,000
Dec 31, 06	977	1,011	970	379,594,000	20	58,967,000	1	41,720,000	20	26,222,000	506,503,000	41,749,000
Dec 31, 07	1,043	1,077	1,028	384,714,000	21	61,407,000	1	30,921,000	27	12,747,000	489,789,000	37,897,000
Dec 31, 08	1,049	1,082	1,035	383,987,000	21	50,510,000	1	29,029,000	25	4,900,000	468,426,000	36,077,000
Dec 31, 09	1,060	1,092	1,046	420,616,000	21	18,064,000	1	33,000,000	24	4,545,000	476,225,000	36,341,000
Dec 31, 10	1,079	1,110	1,064	452,176,000	21	22,865,000	1	32,765,000	24	4,971,000	512,777,000	38,496,000
Dec 31, 11	1,090	1,120	1,076	454,659,000	19	19,669,000	1	25,585,000	24	6,529,000	486,773,000	36,218,000
Dec 31, 12	1,096	1,126	1,079	515,393,000	22	22,862,000	1	37,130,000	24	7,953,000	583,338,000	43,171,000
Dec 31, 13	1,116	1,146	1,102	420,353,000	22	24,184,000	1	33,951,000	21	6,322,000	484,810,000	35,253,000

## Residential Use Summary

	Population	Residential Units	Residents per Residential Unit	Total Usage for Residential Use in Acre Feet	Total Usage for Residential Use in Gallons	Average Monthly Use per Residential Unit in Gallons	Average per Capita Use per Day in Gallons
1999	2,541	782	3.25	964	314,040,000	33,465	338
2000	2,555	786	3.25	953	310,438,000	32,913	332
2001	2,581	794	3.25	1,027	334,629,000	35,120	335
2002	2,646	814	3.25	1,047	341,046,000	34,914	353
2003	2,685	826	3.25	1,023	333,249,000	33,620	340
2004	2,808	864	3.25	961	313,129,000	30,201	305
2005	2,860	880	3.25	998	324,116,000	30,692	310
2006	3,042	936	3.25	1,165	379,594,000	33,795	341
2007	3,230	994	3.25	1,181	384,714,000	32,253	326
2008	3,259	1,002	3.25	1,178	383,987,000	31,935	322
2009	3,399	1,046	3.25	1,290	420,616,000	33,509	339
2010	3,432*	1,064	3.25	1,387	452,176,000	35,414	360
2011	3,497	1,076	3.25	1,395	454,659,000	35,212	356
2012	3,506	1,079	3.25	1,581	515,393,000	39,804	402
2013	3,581	1,102	3.25	1,290	420,353,000	31,787	321

<sup>\*</sup> Based on 2010 Census

#### D. SOURCES OF WATER USED

#### Sources Of Water Used

	SPRINGS	WELLS	TOTAL
1999	330,537,000	-0-	330,537,000
2000	293,643,000	145,200,000	438,843,000
2001	357,003,000	134,822,000	491,825,000
2002	309,967,000	95,814,000	405,781,000
2003	270,174,000	125,436,000	395,610,000
2004	293,306,000	98,214,000	391,520,000
2005	426,405,000	-0-	426,405,000
2006	506,503,000	-0-	506,503,000
2007	361,482,000	128,307,000	489,789,000
2008	359,860,000	108,566,000	468,426,000
2009	476,558,000	-0-	476,225,000
2010	385,303,000	127,474,000	512,777,000
2011	486,773,000	-0-	486,773,000
2012	392,927,000	190,411,000	583,338,000
2013	245,096,000	239,714,000	484,810,000

# E. BASIS FOR PROJECTED WATER NEEDS (RESIDENTIAL ONLY)

## 1. Basis For Projection

2010 Population (per 2010 Census)	3,432	
2010 Number of Residential Units	1,064	
2010 Average Residents per Residential Unit	3.25	
2010 Total Water Usage – Residential Units	452,176,000	gallons
2010 Yearly gallons per Residential Unit	424,977	gallons
2010 Average Total Gallons used per Resident per Year	131,752	gallons
2010 Monthly gallons per Residential Unit	35,414	gallons
2010 Average Use per Resident per Month	10,979	gallons
2010 Gallons per Capita per Day		gallons
2010 Total Residential use for Year	1,178	acre feet

# 2. Past 10 Year Residential Growth Pattern

	Number of Residential Units	Number of Residential Units increase from prior Year
Dec 31, 2004	900	7
Dec 31, 2005	914	16
Dec 31, 2005	970	56
Dec 31, 2007	1,028	58
Dec 31, 2008	1,035	8
Dec 31, 2009	1,046	44
Dec 31, 2010	1,064	18
Dec 31, 2011	1,076	12
Dec 31, 2012	1,079	3
Dec 31, 2013	1,102	23

## 3. Projected Residential Water Needs

	Number of Residential Units	Average Residents per Residential Unit	Gallons Used per Month per Resident	Total Annual Gallons Used	Total Annual A.F. Used
2018	1,060	3.25	10,979	406,206,840	1,247
2023	1,089	3.25	10,979	417,320,046	1,281
2028	1,118	3.25	10,979	428,433,525	1,315
2033	1,147	3.25	10,979	439,546,458	1,349
2038	1,176	3.25	10,979	450,659,664	1,383
2043	1,205	3.25	10,979	461,772,870	1,417
2048	1,234	3.25	10,979	472,886,076	1,451
2053	1,263	3.25	10,979	483,999,282	1,485
2058	1,292	3.25	10,979	495,112,488	1,519

#### 4. Meeting Future Water Needs

- a. The City anticipates at some point in time to exchange the 1,124 acre feet of water it owns in Hyrum Dam to the residents of the community for their rights in West Springs, which could provide the city approximately 3,000 gallons per minute of additional culinary water. West Springs has already been tested for contaminates, lead, and copper. All test results were within culinary water standards.
- b. City subdivision code now requires that 3 acre feet of water be provided to Wellsville City per acre being developed.
- c. Continue to develop existing water rights.
- d. Continue to contract with contractors to test lines for leaks.
- e. Aggressive line replacement program.
- f. Continue to expand water rate tier structure.
- g. Through the use of the City newsletter, continue to encourage residents to conserve.
- h. Encourage "water-wise" landscaping.
- i. Expand use of "scada system" to manage water system.

#### F. CURRENT PRICING STRUCTURE

#### Monthly Rate Schedule

20,000 gallons	\$29.50
20,001 to 50,000 gallons	\$ 0.60 / 1,000
50,001 +	\$ 0.80 / 1,000

Non-City Residents charged double the above rates.

Every year from April – June as the City budget is prepared the rates are reviewed in great detail.

#### G. MEASURES TAKEN TO ENCOURAGE CONSERVATION

- 1. In 2008 and 2009 replaced all 3/4" and 1" meters with the Neptune R900i meter.
  - a. Detects leaks every 15 minutes down to a hundredth of a gallon.
  - b. Detects and notifies of continuous and/or intermittent leaks and how often it occurs.
  - c. Detects any back flows.
  - d. Gives the City the ability to detect leaks and repair if it is on city side of meter, or notify the customer if the leak is on their side of the meter.
- 2. Encouragement and suggestions on water conservation in City newsletters.
- 3. Continue to enforce uniform building/plumbing codes requiring low flow, low use plumbing fixtures.
- 4. Tier water structure.
- 5. Work with developers in an attempt to provide secondary water for new subdivisions.
- 6. Encourage developers to use drought resistant (water-wise) landscaping for open space in subdivisions.

#### H. SUMMARY

Wellsville is a bedroom community with very limited commercial and industrial users. Therefore, most of the data was based on residential usage. Because of our size, it is not anticipated that there will be a significant commercial or industrial growth in the next few years. Therefore, the projected 50 year need was based only on residential usage.

The City does not meter the water used to water parks and the Cemetery. Therefore, that amount is included as residential usage.

This resolution shall be effective upon Apolitical

ADOPTED AND PASSED by the Wellsville City Council this Enday of Now., 2014.

WELLSVILLE CITY

Thomas G. Bailey

Mayor

Don Hartle

City Manager/Recorder

Voting Status:

Gary Bates
Karen Higley
Carl Leatham
Perry N Maughan
Glenna Petersen

- 1. City Office
- 2. City Marquee
- 3. Tom's Service

Witness my hand this Landay of Nov., 2014.

<del>Don Hartle</del>

City Recorder