

AMERICAN FORK CITY COUNCIL
OCTOBER 23, 2014
NOTICE OF WORK SESSION & AGENDA

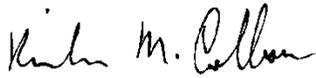
WORK SESSION

The purpose of City Work Sessions is to prepare the City Council for upcoming agenda items on future City Council Meetings. The Work Session is not an action item meeting. No one attending the meeting should rely on any discussion or any perceived consensus as action or authorization. These come only from the City Council Meeting.

Notice is hereby given that the American Fork City Council will meet in a work session on **Thursday, October 23, 2014**, in the **American Fork City Offices, 51 East Main Street**, commencing at **3:30 p.m.** The agenda shall be as follows:

1. Public Officials Training regarding communications. – *Olympus Insurance*
2. Presentation and discussion on the City of American Fork Water Management and Conservation Plan update. – *Dale Goodman*
3. Adjournment

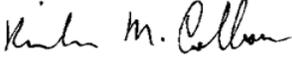
Dated this 21 day of October, 2014



Richard M. Colborn
City Recorder

CITY COUNCIL STUDY ITEM

City of American Fork
COUNCIL WORK SESSION
October 23, 2014

Department Administration Director Approval 

STUDY ITEM Public Officials Training regarding communications

SUMMARY RECOMMENDATION This topic is regarding Public Officials communication.

BACKGROUND This was a topic that surfaced during a September 18 meeting involving Mayor Hadfield, Craig Whitehead, Dale Goodman, Richard Colborn, and Olympus Insurance. It was felt that it should be discussed at a work session.

BUDGET IMPACT None

FUNDING SOURCE None

ALTERNATIVES None

SUPPORTING DOCUMENTS None

CITY COUNCIL STUDY ITEM

City of American Fork
COUNCIL WORK SESSION
October 23, 2014

Department Public Works

Director Approval 

STUDY ITEM Presentation and discussion on the City of American Fork Water Management and Conservation Plan update.

SUMMARY RECOMMENDATION Staff recommends approval of the City of American Fork Water Management and Conservation Plan Update.

BACKGROUND The Public Works Department will present information on compliance with the Water Management and Conservation Plan as required by the Utah Division of Water Resources (DWR).

Staff will also briefly discuss compliance with the previous Water Management and Conservation Plan adopted in 2009 and some of the best management practices implemented to lower the culinary water use per capita per day to a number below the state's average.

BUDGET IMPACT N/A.

ALTERNATIVES N/A.

SUPPORTING DOCUMENTS

1. Exhibit A: Water Management and Conservation Plan update.
2. Exhibit B: House Bill 71, Water Conservation Plans.
3. Exhibit C: Resolution No. 2012-10-27R, Culinary water and secondary irrigation water use fees.
4. Exhibit D: Resolution No. 2014-04-17R, Outdoor water restrictions and conservation measures.
5. Exhibit E: Resolution No. 2012-12-31R, General schedule of the fees charged by the City for water, sanitary sewer, garbage collection, storm drainage, cemetery, recreation, building and other fees.

Description	Church	City Owned	Commercial	County	Farm	Industrial	Miscellaneous
Water Usage	10,011,000	0	230,105,583	502,000	2,933,000	347,000	79,000
M-PI Usage	420,000	0	452,000	0	0	0	0
Water Amount	32,028.50	.00	752,016.36	3,346.79	11,179.61	1,517.57	347.89
WAA Amount	2,106.00	.00	54,197.31	156.00	858.00	78.00	78.00
Sewer Amount	15,138.70	.00	471,036.89	.00	1,539.98	1,092.59	.00
Garb Amount	.00	.00	2,221.93	120.00	720.00	.00	.00
Extra Amount	.00	.00	317.70	159.60	79.80	.00	.00
Drain Amount	52,077.96	.00	297,237.17	.00	1,871.77	72.00	.00
Recyc Amount	64.80	.00	762.97	64.80	64.80	.00	.00
Irrig Amount	17,844.93	.00	122,883.53	.00	1,993.80	.00	.00
M-PI Amount	1,197.05	.00	1,419.77	.00	.00	.00	.00
Late Amount	47.29	.00	17,685.74	163.32	181.46	16.18	.00
Serve Amount	.00	.00	3.51	.00	.00	.00	.00
Total Charges	120,505.23	.00	1,719,782.88	4,010.51	18,489.22	2,776.34	425.89
Previous Balance	8,317.36	.00	113,763.29	719.70	912.25	127.86	24.57
Payments	120,893.76 -	.00	1,695,996.01 -	4,542.56 -	17,827.92 -	2,736.92 -	423.48 -
Deposit Applieds	.00	.00	3,226.52 -	.00	.00	.00	.00
Balance Transfers	.00	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	3,117.18 -	.00	.00	.00	.00
Deposit Interest	.00	.00	.00	.00	.00	.00	.00
Total Charges	120,505.23	.00	1,719,782.88	4,010.51	18,489.22	2,776.34	425.89
Current Balance	7,928.83	.00	131,206.46	187.65	1,573.55	167.28	26.98
Year-To-Date: 07/01/2012 to 12/31/2013							
Water Usage	15,100,000	0	349,287,583	752,000	4,176,000	447,000	129,000
M-PI Usage	858,000	0	666,000	0	0	0	0
Water Amount	48,796.10	.00	1,130,765.95	4,888.55	16,475.75	2,058.99	512.56
WAA Amount	3,159.00	.00	81,081.62	234.00	1,287.00	117.00	117.00
Sewer Amount	24,336.82	.00	696,200.49	.00	2,102.66	1,452.05	.00
Garb Amount	.00	.00	3,323.22	180.00	1,080.00	.00	.00
Extra Amount	.00	.00	515.91	239.40	119.70	.00	.00
Drain Amount	70,570.32	.00	433,835.32	.00	1,907.77	108.00	.00
Recyc Amount	97.20	.00	1,200.54	97.20	97.20	.00	.00
Irrig Amount	24,874.93	.00	173,465.68	.00	2,887.40	.00	.00
M-PI Amount	1,796.67	.00	1,739.39	.00	.00	.00	.00
Late Amount	86.85	.00	28,253.29	226.85	348.19	16.18	.00
Serve Amount	.00	.00	3.51	.00	.00	.00	.00
Total Charges	173,717.89	.00	2,550,384.92	5,866.00	26,305.67	3,752.22	629.56
Previous Balance	16,228.80	.00	223,994.62	657.52	4,813.48	127.86	72.67
Payments	181,979.05 -	.00	2,635,616.07 -	6,335.87 -	29,545.60 -	3,712.80 -	675.25 -
Deposit Applieds	.00	.00	4,439.83 -	.00	.00	.00	.00
Balance Transfers	.00	.00	.00	.00	.00	.00	.00
Balance Write-Offs	38.81 -	.00	3,117.18 -	.00	.00	.00	.00
Deposit Interest	.00	.00	.00	.00	.00	.00	.00
Total Charges	173,717.89	.00	2,550,384.92	5,866.00	26,305.67	3,752.22	629.56
Current Balance	7,928.83	.00	131,206.46	187.65	1,573.55	167.28	26.98

Description	None	Pressurized Irrigat	Residential	School	Sprinkler	Totals
Water Usage	0	62,278,000	685,933,279	39,321,833	35,173,000	1,066,683,695
M-PI Usage	0	0	3,417,831	0	0	4,289,831
Water Amount	.00	650.09	1,908,693.91	123,713.34	125,044.64	2,958,538.70
WAA Amount	.00	4,344.38	602,143.25	1,560.00	1,838.24	667,359.18
Sewer Amount	.00	1,793.34	3,929,915.48	58,886.90	.00	4,479,403.88
Garb Amount	.00	120.00	837,207.80	.00	.00	840,389.73
Extra Amount	.00	.00	116,553.76	.00	.00	117,110.86
Drain Amount	.00	5,721.40	526,555.61	31,437.48	.00	914,973.39
Recyc Amount	.00	324.00	232,198.58	.00	.00	233,479.95
Irrig Amount	.00	173,439.02	1,473,492.03	46,172.10	359.15	1,836,184.56
M-PI Amount	.00	167.54	9,690.26	.00	.00	12,474.62
Late Amount	.00	982.12	115,962.72	2,910.00	85.55	137,863.28
Serve Amount	.00	.00	1,256.97	.00	50.00	1,310.48
Total Charges	.00	187,541.89	9,753,670.37	264,679.82	127,206.48	12,199,088.63
Previous Balance	.00	6,287.90 -	853,591.28	11,394.49	2,709.98	985,272.88
Payments	.00	187,101.12 -	9,689,088.41 -	263,779.07 -	129,370.48 -	12,111,759.73 -
Deposit Applieds	.00	75.00 -	15,889.65 -	.00	.00	19,191.17 -
Balance Transfers	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	17,634.54 -	.00	.00	20,751.72 -
Deposit Interest	.00	.00	.00	.00	.00	.00
Total Charges	.00	187,541.89	9,753,670.37	264,679.82	127,206.48	12,199,088.63
Current Balance	.00	5,922.13 -	884,649.05	12,295.24	545.98	1,032,658.89
Year-To-Date: 07/01/2012 to 12/31/2013						
Water Usage	0	85,036,000	1,003,762,979	79,894,833	64,758,000	1,603,343,395
M-PI Usage	0	0	5,387,032	0	0	6,911,032
Water Amount	.00	965.49	2,845,172.66	117,670.02	214,774.55	4,382,080.62
WAA Amount	.00	6,470.09	899,444.34	2,327.00	2,767.74	997,004.79
Sewer Amount	.00	2,257.17	5,868,092.54	83,815.22	.00	6,678,256.95
Garb Amount	.00	180.00	1,249,076.19	.00	.00	1,253,839.41
Extra Amount	.00	.00	173,190.30	.00	.00	174,065.31
Drain Amount	.00	6,255.00	783,203.07	47,156.22	.00	1,343,035.70
Recyc Amount	.00	486.00	347,023.44	.00	.00	349,001.58
Irrig Amount	.00	220,074.82	2,157,418.58	60,885.53	522.98	2,640,129.92
M-PI Amount	.00	263.72	13,357.54	.00	.00	17,157.32
Late Amount	.00	1,524.58	183,915.48	2,912.57	215.10	217,499.09
Serve Amount	.00	.00	1,256.97	.00	50.00	1,310.48
Total Charges	.00	238,476.87	14,521,151.11	314,766.56	218,330.37	18,053,381.17
Previous Balance	.00	17,381.06	914,462.27	64,945.57	30,342.51	1,273,026.36
Payments	.00	261,705.06 -	14,511,756.48 -	367,416.89 -	248,126.90 -	18,246,869.97 -
Deposit Applieds	.00	75.00 -	21,573.31 -	.00	.00	26,088.14 -
Balance Transfers	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	17,634.54 -	.00	.00	20,790.53 -
Deposit Interest	.00	.00	.00	.00	.00	.00
Total Charges	.00	238,476.87	14,521,151.11	314,766.56	218,330.37	18,053,381.17
Current Balance	.00	5,922.13 -	884,649.05	12,295.24	545.98	1,032,658.89

Description	None	Pressurized Irrigat	Residential	School	Sprinkler	Totals

Rate Table	Title	Service	Number of Customers	Number of Units	Base / Minimum	Excess/Amount	Adjustments	Total/Amount	Usage
101	Water Residential	Water	6	6.0000	713.34	535.88	4.80 -	1,244.42	389,000
102	Culinary Water	Water	7,552	7,552.0000	1,419,835.50	594,358.75	103,827.76 -	1,910,366.49	603,593,755
103	Culinary Water - County	Water	24	24.0000	6,867.82	8,072.59	538.35 -	14,402.06	1,876,500
104	Water - No Overage	Water	1	1.0000	231.30	-	12.36 -	218.94	121,000
106	Water - County-3/4" or smaller	Water	3	3.0000	363.82	226.90	-	590.72	77,000
107	Water - Presbyterian Church	Water	1	1.0000	105.56	271.32	-	376.88	132,000
108	Seven C's	Water	4	79.0000	7,071.36	268.59	341.99 -	6,997.96	1,017,000
109	Culinary Water-3/4" and smaller	Water	394	398.0000	78,049.12	97,559.33	39,758.22 -	135,850.23	96,206,774
110	Culinary Water-1"	Water	144	144.0000	33,264.46	125,078.53	10,762.30 -	147,580.69	45,534,083
111	Culinary Water-1 1/2"	Water	145	145.0000	35,449.29	446,778.90	298,962.15 -	183,266.04	141,690,000
112	Culinary Water- 2"	Water	94	94.0000	26,454.48	234,942.86	31,130.52 -	230,266.82	72,930,000
113	Culinary Water- 3"	Water	4	4.0000	2,404.11	30,589.08	57.66 -	32,935.53	10,267,583
114	Culinary Water- 4"	Water	20	95.0000	15,095.88	359,447.42	87,793.00 -	286,750.30	90,730,000
116	Culinary Water- 8"	Water	1	1.0000	1,254.64	5,231.56	14.40 -	6,471.80	1,790,000
118	Culinary-Sr. Hardship	Water	9	9.0000	832.08	575.93	188.19 -	1,219.82	329,000
201	CUP Water/Assessments	WAA	8,319	9,188.0000	666,999.27	172.14	187.77	667,359.18	104
301	Sewer - Residential	Sewer	7,579	8,246.0000	3,274,610.48	716,098.16	3,588.59 -	3,987,120.05	514,065,473
311	Sewer - Commercial	Sewer	498	732.0000	269,232.57	169,036.02	7,487.20 -	430,781.39	120,514,547
321	Sewer - Industrial	Sewer	2	2.0000	853.20	1,762.34	-	2,615.54	1,258,874
331	Sewer - Schools	Sewer	10	10.0000	-	58,886.90	-	58,886.90	128,015
501	Garbage - Residential	Garb	7,192	7,502.0000	839,006.22	264.84	103.26 -	839,167.80	582
502	Garbage - Residential Cnty	Garb	30	32.0000	1,221.93	-	-	1,221.93	27
601	Extra Garbage	Extra	1,593	1,621.0000	114,657.08	2,419.41	218.33 -	116,858.16	2,781
602	Extra Garbage-Residential Cnty	Extra	10	10.0000	252.70	-	-	252.70	8
701	Drain Fee - Residential	Drain	7,767	8,279.0000	528,774.62	62.91	58.48	528,896.01	20,487,531
711	Drain Fee - Commercial	Drain	425	546.0000	27,282.29	358,131.12	663.97	386,077.38	210,068,017
901	Recycling	Recyc	3,786	3,875.0000	233,584.53	26.83	174.61 -	233,436.75	3,476
902	Recycling-Residential Cnty	Recyc	2	2.0000	43.20	-	-	43.20	2
1101	PI - Residential	Irrig	5,888	5,899.8600	1,139,873.88	497,024.34	814.09 -	1,636,084.13	814,770,716
1102	Pressurized Irrig-Shareholder	Irrig	333	336.4700	5,441.18	7,599.54	228.77 -	12,811.95	86,697,537
1103	Pressurized Irrigation-County	Irrig	3	3.0000	892.00	508.83	-	1,400.83	395,043
1104	PI - County Shareholder	Irrig	7	7.0000	64.31	-	-	64.31	2,388,400
1105	PI Aggricultural Shareholder	Irrig	15	15.0000	-	480.36	-	480.36	600
1106	PI - Commercial,Church,School	Irrig	131	131.0000	21,564.06	165,937.17	2,158.25 -	185,342.98	84,782,673
1201	Metered /Senior Pressurized Ir	M-PI	29	29.0000	3,171.21	1,955.27	519.94 -	4,606.54	2,130,831
1202	Metered Pressurized Irrigation	M-PI	18	18.0000	1,374.26	3,829.50	-	5,203.76	1,384,000
1901	Late Fee	Late	3,483	3,483.0000	-	149,449.37	11,586.09 -	137,863.28	-
2501	Disconnect Fee	Serve	29	29.0000	-	581.00	707.00	1,288.00	5
2503	Tenant/Landlord Statement	Serve	12	12.0000	22.08	.40	-	22.48	10
Grand Totals:			55,563	58,564.3300	8,756,913.83	4,038,164.09	598,653.61 -	12,196,424.31	2,925,762,947

Description	Church	City Owned	Commercial	County	Farm	Industrial	Miscellaneous
Water Usage	10,264,000	0	226,531,396	484,000	2,930,000	215,000	81,000
M-PI Usage	619,000	0	304,000	0	0	0	0
Water Amount	33,106.62	.00	724,707.27	2,403.08	11,838.92	831.24	300.84
WAA Amount	2,106.00	.00	53,414.79	156.00	860.84	78.00	78.00
Sewer Amount	18,890.72	.00	445,046.25	.00	1,111.36	670.20	.00
Garb Amount	.00	.00	2,042.01	120.00	720.00	.00	.00
Extra Amount	.00	.00	361.11	159.60	79.80	.00	.00
Drain Amount	33,192.54	.00	271,803.55	.00	72.00	72.00	.00
Recyc Amount	64.80	.00	840.25	64.80	64.80	.00	.00
Irrig Amount	24,243.80	.00	99,206.36	.00	1,768.99	.00	.00
M-PI Amount	849.87	.00	492.37	.00	.00	.00	.00
Late Amount	87.54	.00	14,919.13	73.88	236.17	.00	.00
Serve Amount	.00	.00	.00	.00	.00	.00	.00
Total Charges	112,541.89	.00	1,612,833.09	2,977.36	16,752.88	1,651.44	378.84
Previous Balance	7,716.25	.00	88,914.95	1,200.82	709.17	62.05	20.50
Payments	111,901.97 -	.00	1,585,646.77 -	3,458.48 -	16,549.80 -	1,585.63 -	374.77 -
Deposit Applieds	.00	.00	2,337.98 -	.00	.00	.00	.00
Balance Transfers	.00	.00	.00	.00	.00	.00	.00
Balance Write-Offs	38.81 -	.00	.00	.00	.00	.00	.00
Deposit Interest	.00	.00	.00	.00	.00	.00	.00
Total Charges	112,541.89	.00	1,612,833.09	2,977.36	16,752.88	1,651.44	378.84
Current Balance	8,317.36	.00	113,763.29	719.70	912.25	127.86	24.57

Year-To-Date: 07/01/2011 to 12/31/2012

Water Usage	14,946,000	0	42,079,989	978,000	4,261,000	486,000	129,000
M-PI Usage	990,000	0	623,000	0	0	0	0
Water Amount	47,593.57	.00	101,719.58	5,449.81	17,049.29	1,673.65	413.84
WAA Amount	3,179.13	.00	80,276.57	243.85	1,328.84	117.00	117.00
Sewer Amount	29,687.57	.00	665,102.62	.00	1,632.04	883.50	.00
Garb Amount	30.97	.00	2,867.01	195.16	1,080.00	.00	.00
Extra Amount	20.59	.00	560.61	239.40	119.70	.00	.00
Drain Amount	47,911.30	.00	401,870.91	.00	108.00	108.00	.00
Recyc Amount	97.20	.00	1,220.58	97.20	97.20	.00	.00
Irrig Amount	41,191.68	.00	153,126.01	.00	2,635.39	.00	.00
M-PI Amount	1,337.62	.00	915.12	.00	.00	.00	.00
Late Amount	150.99	.00	24,983.97	458.87	290.20	.00	.00
Serve Amount	.00	.00	.00	.00	.00	.00	.00
Total Charges	171,200.62	.00	1,432,642.98	6,684.29	24,340.66	2,782.15	530.84
Previous Balance	13,253.38	.00	1,183,286.28	1,361.68	3,496.79	559.60	72.12
Payments	176,097.83 -	.00	2,498,185.07 -	7,326.27 -	26,925.20 -	3,213.89 -	578.39 -
Deposit Applieds	.00	.00	2,808.49 -	.00	.00	.00	.00
Balance Transfers	.00	.00	.00	.00	.00	.00	.00
Balance Write-Offs	38.81 -	.00	1,172.41 -	.00	.00	.00	.00
Deposit Interest	.00	.00	.00	.00	.00	.00	.00
Total Charges	171,200.62	.00	1,432,642.98	6,684.29	24,340.66	2,782.15	530.84
Current Balance	8,317.36	.00	113,763.29	719.70	912.25	127.86	24.57

Description	None	Pressurized Irrigat	Residential	School	Sprinkler	Totals
Water Usage	0	595,159,000	598,624,713	63,667,000	39,765,000	1,537,721,109
M-PI Usage	0	40,000	3,096,649	0	0	4,059,649
Water Amount	.00	179.09	1,816,302.63	63,455.91	122,504.98	2,775,630.58
WAA Amount	.00	4,238.21	592,459.79	1,547.00	1,566.50	656,505.13
Sewer Amount	.00	892.67	3,844,583.67	48,244.22	.00	4,359,439.09
Garb Amount	.00	120.00	817,208.59	.00	.00	820,210.60
Extra Amount	.00	.00	112,146.51	.00	.00	112,747.02
Drain Amount	.00	605.60	511,242.87	31,437.48	.00	848,426.04
Recyc Amount	.00	324.00	229,058.21	.00	.00	230,416.86
Irrig Amount	.00	128,556.40	1,294,207.79	35,008.87	723.54	1,583,715.75
M-PI Amount	.00	182.21	6,138.38	.00	.00	7,662.83
Late Amount	.00	827.09	107,532.45	17.93 -	300.65	123,958.98
Serve Amount	.00	.00	160.00 -	.00	.00	160.00 -
Total Charges	.00	135,925.27	9,330,720.89	179,675.55	125,095.67	11,518,552.88
Previous Balance	.00	14,308.12	756,165.62	12,161.09	2,238.93	883,497.50
Payments	.00	156,371.29 -	9,219,687.22 -	180,442.15 -	124,624.62 -	11,400,642.70 -
Deposit Applieds	.00	150.00 -	11,472.23 -	.00	.00	13,960.21 -
Balance Transfers	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	2,135.78 -	.00	.00	2,174.59 -
Deposit Interest	.00	.00	.00	.00	.00	.00
Total Charges	.00	135,925.27	9,330,720.89	179,675.55	125,095.67	11,518,552.88
Current Balance	.00	6,287.90 -	853,591.28	11,394.49	2,709.98	985,272.88

Year-To-Date: 07/01/2011 to 12/31/2012

Water Usage	0	595,247,000	875,263,606	76,398,000	62,143,000	1,671,931,595
M-PI Usage	0	88,000	5,046,477	0	0	6,747,477
Water Amount	.00	398.86	2,585,806.53	105,105.28	193,954.54	3,059,164.95
WAA Amount	.00	6,337.87	886,002.26	2,327.00	2,377.53	982,307.05
Sewer Amount	.00	1,180.43	5,727,984.01	76,893.02	.00	6,503,363.19
Garb Amount	.00	180.00	1,220,746.64	.00	.00	1,225,099.78
Extra Amount	.00	.00	168,007.93	.00	.00	168,948.23
Drain Amount	.00	662.70	764,781.12	47,156.22	22.65	1,262,620.90
Recyc Amount	.00	486.00	344,134.30	.00	.00	346,132.48
Irrig Amount	.00	210,182.34	1,884,523.92	54,857.95	1,287.78	2,347,805.07
M-PI Amount	.00	266.21	9,357.94	.00	.00	11,876.89
Late Amount	.00	1,444.35	164,581.84	2,835.34	788.20	195,533.76
Serve Amount	.00	.00	160.00 -	.00	.00	160.00 -
Total Charges	.00	221,138.76	13,755,766.49	289,174.81	198,430.70	16,102,692.30
Previous Balance	.00	14,794.89	835,847.36	25,656.35	21,927.96	2,100,256.41
Payments	.00	242,071.55 -	13,709,406.74 -	303,436.67 -	217,628.16 -	17,184,869.77 -
Deposit Applieds	.00	150.00 -	17,020.05 -	.00	20.52 -	19,999.06 -
Balance Transfers	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	11,595.78 -	.00	.00	12,807.00 -
Deposit Interest	.00	.00	.00	.00	.00	.00
Total Charges	.00	221,138.76	13,755,766.49	289,174.81	198,430.70	16,102,692.30
Current Balance	.00	6,287.90 -	853,591.28	11,394.49	2,709.98	985,272.88

Description	None	Pressurized Irrigat	Residential	School	Sprinkler	Totals

Rate Table	Title	Service	Number of Customers	Number of Units	Base / Minimum	Excess/Amount	Adjustments	Total/Amount	Usage
101	Water Residential	Water	3	3.0000	91.22	-	78.62 -	12.60	6,000
102	Culinary Water	Water	8,099	8,194.0000	1,330,933.69	911,989.63	186,864.91 -	2,056,058.41	1,234,595,417
103	Culinary Water - County	Water	13	13.0000	3,847.08	3,150.80	40.17 -	6,957.71	1,099,000
104	Water - No Overage	Water	1	1.0000	70.00	-	-	70.00	10,000
107	Water - Presbyterian Church	Water	1	1.0000	70.00	-	-	70.00	1,000
108	Seven C's	Water	3	3.0000	555.90	261.95	95.17 -	722.68	239,000
109	Culinary Water-3/4" and smalle	Water	362	368.0000	45,778.42	83,511.46	10,060.08 -	119,229.80	72,696,127
110	Culinary Water-1"	Water	138	139.0000	18,807.83	135,633.84	48,587.04 -	105,854.63	32,397,900
111	Culinary Water-1 1/2"	Water	134	134.0000	19,802.71	145,381.01	7,147.88 -	158,035.84	50,184,589
112	Culinary Water- 2"	Water	88	88.0000	14,721.59	230,850.23	94,902.56 -	150,669.26	51,333,186
113	Culinary Water- 3"	Water	4	4.0000	1,396.46	25,673.51	-	27,069.97	6,744,000
114	Culinary Water- 4"	Water	19	94.0000	18,029.62	163,417.90	34,374.71 -	147,072.81	87,390,890
116	Culinary Water- 8"	Water	1	1.0000	725.90	7,469.18	4,473.19 -	3,721.89	1,005,000
118	Culinary-Sr. Hardship	Water	2	2.0000	86.58	-	1.60 -	84.98	19,000
201	CUP Water/Assessments	WAA	8,132	8,965.0000	656,884.32	89.54	468.73 -	656,505.13	28
301	Sewer - Residential	Sewer	7,403	8,009.0000	3,209,995.53	692,957.33	23,167.11 -	3,879,785.75	495,650,722
311	Sewer - Commercial	Sewer	479	698.0000	280,233.97	156,113.91	7,638.28 -	428,709.60	100,660,573
321	Sewer - Industrial	Sewer	2	2.0000	853.20	1,846.32	-	2,699.52	1,318,800
331	Sewer - Schools	Sewer	10	10.0000	-	215,883.52	167,639.30 -	48,244.22	1,390,312
501	Garbage - Residential	Garb	7,026	7,334.0000	823,848.79	167.92	3,806.11 -	820,210.60	260
601	Extra Garbage	Extra	1,555	1,582.0000	111,033.74	2,523.48	810.20 -	112,747.02	2,081
701	Drain Fee - Residential	Drain	7,604	8,091.0000	512,879.26	40.80	470.98 -	512,449.08	20,284,904
711	Drain Fee - Commercial	Drain	404	521.0000	26,182.09	309,504.05	290.82	335,976.96	186,410,055
901	Recycling	Recyc	3,736	3,830.0000	231,063.36	58.32	704.82 -	230,416.86	3,042
1101	PI - Residential	Irrig	5,714	5,727.0200	1,070,912.61	459,371.09	33,956.56 -	1,496,327.14	848,738,186
1102	Pressurized Irrig-Shareholder	Irrig	287	290.4900	5,115.03	12,522.31	7,100.21 -	10,537.13	76,959,543
1103	Pressurized Irrigation-County	Irrig	2	2.0000	845.43	239.25	-	1,084.68	354,924
1104	PI - County Shareholder	Irrig	1	1.0000	71.84	-	5.69 -	66.15	616,812
1105	PI Aggricultural Shareholder	Irrig	15	15.0000	-	480.36	-	480.36	600
1106	PI - Commercial, Church, School	Irrig	57	57.0000	8,650.22	74,055.59	7,485.52 -	75,220.29	46,569,234
1201	Metered /Senior Pressurized Ir	M-PI	27	27.0000	4,536.95	2,977.78	148.10	7,662.83	4,059,649
1901	Late Fee	Late	3,474	3,474.0000	-	143,729.32	19,770.34 -	123,958.98	-
2502	Tampering Fee	Serve	1	1.0000	-	-	160.00 -	160.00 -	-
Grand Totals:			54,797	57,681.5100	8,398,023.34	3,779,900.40	659,370.86 -	11,518,552.88	3,320,740,834

Description	Church	City Owned	Commercial	County	Farm	Industrial	Miscellaneous
Water Usage	6,826,000	0	149,802,290	743,000	2,282,000	454,000	86,000
M-PI Usage	395,000	0	343,000	0	0	0	0
Water Amount	31,194.21	.00	633,247.61	4,750.21	9,305.90	1,395.96	220.62
WAA Amount	1,814.13	.00	45,752.73	172.35	787.03	65.00	65.00
Sewer Amount	18,383.48	.00	377,208.68	.00	873.82	391.90	.00
Garb Amount	70.97	.00	1,087.71	155.16	609.89	.00	.00
Extra Amount	42.81 -	.00	326.95	133.00	66.13	.00	.00
Drain Amount	22,166.40	.00	197,684.10	.00	60.00	60.00	.00
Recyc Amount	54.00	.00	598.39	54.00	37.96	.00	.00
Irrig Amount	28,331.23	.00	90,069.79	.00	1,352.99	.00	.00
M-PI Amount	543.75	.00	478.75	.00	.00	.00	.00
Late Amount	31.14	.00	13,873.20	391.89	80.46	.00	.00
Serve Amount	.00	.00	80.00	.00	.00	.00	.00
Total Charges	102,546.50	.00	1,360,407.91	5,656.61	13,174.18	1,912.86	285.62
Previous Balance	.00	.00	.00	.00	.00	.00	.00
Payments	94,830.25 -	.00	1,269,350.28 -	4,455.79 -	12,465.01 -	1,850.81 -	265.12 -
Deposit Applieds	.00	.00	970.27 -	.00	.00	.00	.00
Balance Transfers	.00	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	1,172.41 -	.00	.00	.00	.00
Deposit Interest	.00	.00	.00	.00	.00	.00	.00
Total Charges	102,546.50	.00	1,360,407.91	5,656.61	13,174.18	1,912.86	285.62
Current Balance	7,716.25	.00	88,914.95	1,200.82	709.17	62.05	20.50
Year-To-Date: 07/01/2010 to 12/31/2011							
Water Usage	6,826,000	0	149,802,290	743,000	2,282,000	454,000	86,000
M-PI Usage	395,000	0	343,000	0	0	0	0
Water Amount	31,194.21	.00	633,247.61	4,750.21	9,305.90	1,395.96	220.62
WAA Amount	1,814.13	.00	45,752.73	172.35	787.03	65.00	65.00
Sewer Amount	18,383.48	.00	377,208.68	.00	873.82	391.90	.00
Garb Amount	70.97	.00	1,087.71	155.16	609.89	.00	.00
Extra Amount	42.81 -	.00	326.95	133.00	66.13	.00	.00
Drain Amount	22,166.40	.00	197,684.10	.00	60.00	60.00	.00
Recyc Amount	54.00	.00	598.39	54.00	37.96	.00	.00
Irrig Amount	28,331.23	.00	90,069.79	.00	1,352.99	.00	.00
M-PI Amount	543.75	.00	478.75	.00	.00	.00	.00
Late Amount	31.14	.00	13,873.20	391.89	80.46	.00	.00
Serve Amount	.00	.00	80.00	.00	.00	.00	.00
Total Charges	102,546.50	.00	1,360,407.91	5,656.61	13,174.18	1,912.86	285.62
Previous Balance	.00	.00	.00	.00	.00	.00	.00
Payments	94,830.25 -	.00	1,269,350.28 -	4,455.79 -	12,465.01 -	1,850.81 -	265.12 -
Deposit Applieds	.00	.00	970.27 -	.00	.00	.00	.00
Balance Transfers	.00	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	1,172.41 -	.00	.00	.00	.00
Deposit Interest	.00	.00	.00	.00	.00	.00	.00
Total Charges	102,546.50	.00	1,360,407.91	5,656.61	13,174.18	1,912.86	285.62
Current Balance	7,716.25	.00	88,914.95	1,200.82	709.17	62.05	20.50

Description	None	Pressurized Irrigat	Residential	School	Sprinkler	Totals
Water Usage	0	145,903	419,778,113	17,436,000	29,963,000	627,516,306
M-PI Usage	0	72,000	2,982,656	0	0	3,792,656
Water Amount	.00	29.13 -	1,299,330.34	66,122.09	99,200.26	2,144,738.07
WAA Amount	.00	3,567.83	493,846.14	1,305.00	1,556.66	548,931.87
Sewer Amount	.00	2,382.25 -	3,176,878.40	47,417.94	1,522.84 -	3,617,249.13
Garb Amount	.00	115.81 -	678,802.53	.00	20.38 -	680,590.07
Extra Amount	.00	.00	92,607.49	.00	.00	93,090.76
Drain Amount	.00	3.68	428,860.54	23,752.20	9.31 -	672,577.61
Recyc Amount	.00	270.00	194,512.86	.00	.00	195,527.21
Irrig Amount	.00	140,086.02	979,076.78	32,530.74	846.36	1,272,293.91
M-PI Amount	.00	140.00	5,638.26	.00	.00	6,800.76
Late Amount	.00	778.82	94,046.61	2,853.27	443.46	112,498.85
Serve Amount	.00	.00	660.00	.00	.00	740.00
Total Charges	.00	142,319.16	7,444,259.95	173,981.24	100,494.21	9,345,038.24
Previous Balance	.00	.00	.00	.00	.00	.00
Payments	.00	128,011.04 -	6,670,815.94 -	161,820.15 -	98,234.76 -	8,442,099.15 -
Deposit Applieds	.00	.00	7,818.39 -	.00	20.52 -	8,809.18 -
Balance Transfers	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	9,460.00 -	.00	.00	10,632.41 -
Deposit Interest	.00	.00	.00	.00	.00	.00
Total Charges	.00	142,319.16	7,444,259.95	173,981.24	100,494.21	9,345,038.24
Current Balance	.00	14,308.12	756,165.62	12,161.09	2,238.93	883,497.50

Year-To-Date: 07/01/2010 to 12/31/2011

Water Usage	0	145,903	419,778,113	17,436,000	29,963,000	627,516,306
M-PI Usage	0	72,000	2,982,656	0	0	3,792,656
Water Amount	.00	29.13 -	1,299,330.34	66,122.09	99,200.26	2,144,738.07
WAA Amount	.00	3,567.83	493,846.14	1,305.00	1,556.66	548,931.87
Sewer Amount	.00	2,382.25 -	3,176,878.40	47,417.94	1,522.84 -	3,617,249.13
Garb Amount	.00	115.81 -	678,802.53	.00	20.38 -	680,590.07
Extra Amount	.00	.00	92,607.49	.00	.00	93,090.76
Drain Amount	.00	3.68	428,860.54	23,752.20	9.31 -	672,577.61
Recyc Amount	.00	270.00	194,512.86	.00	.00	195,527.21
Irrig Amount	.00	140,086.02	979,076.78	32,530.74	846.36	1,272,293.91
M-PI Amount	.00	140.00	5,638.26	.00	.00	6,800.76
Late Amount	.00	778.82	94,046.61	2,853.27	443.46	112,498.85
Serve Amount	.00	.00	660.00	.00	.00	740.00
Total Charges	.00	142,319.16	7,444,259.95	173,981.24	100,494.21	9,345,038.24
Previous Balance	.00	.00	.00	.00	.00	.00
Payments	.00	128,011.04 -	6,670,815.94 -	161,820.15 -	98,234.76 -	8,442,099.15 -
Deposit Applieds	.00	.00	7,818.39 -	.00	20.52 -	8,809.18 -
Balance Transfers	.00	.00	.00	.00	.00	.00
Balance Write-Offs	.00	.00	9,460.00 -	.00	.00	10,632.41 -
Deposit Interest	.00	.00	.00	.00	.00	.00
Total Charges	.00	142,319.16	7,444,259.95	173,981.24	100,494.21	9,345,038.24
Current Balance	.00	14,308.12	756,165.62	12,161.09	2,238.93	883,497.50

Description	None	Pressurized Irrigat	Residential	School	Sprinkler	Totals

Rate Table	Title	Service	Number of Customers	Number of Units	Base / Minimum	Excess/Amount	Adjustments	Total/Amount	Usage
101	Water Residential	Water	13	13.0000	649.20	2,661.92	-	3,311.12	1,169,000
102	Culinary Water	Water	7,888	8,036.0000	994,962.14	1,921,095.93	1,057,020.29 -	1,859,037.78	624,268,209
103	Culinary Water - County	Water	13	13.0000	3,264.17	4,488.02	86.48 -	7,665.71	1,235,097
104	Water - No Overage	Water	1	1.0000	126.00	-	-	126.00	151,000
107	Water - Presbyterian Church	Water	1	1.0000	150.78	1,313.60	-	1,464.38	503,000
108	Seven C's	Water	3	3.0000	389.52	47.76	-	437.28	190,000
201	CUP Water/Assessments	WAA	7,894	8,759.0000	487,912.30	169.00	84.36	488,165.66	-
301	Sewer - Residential	Sewer	7,162	7,765.0000	2,378,604.14	496,454.11	24,229.52 -	2,850,828.73	356,770,705
311	Sewer - Commercial	Sewer	473	728.0000	210,614.62	111,757.62	4,030.38 -	318,341.86	74,280,970
321	Sewer - Industrial	Sewer	2	2.0000	639.90	609.84	-	1,249.74	435,600
331	Sewer - Schools	Sewer	10	10.0000	-	42,964.92	-	42,964.92	93,402
501	Garbage - Residential	Garb	6,809	7,100.0000	611,439.94	170.00	5,038.90 -	606,571.04	67
601	Extra Garbage	Extra	1,491	1,518.0000	82,543.42	2,154.81	674.89 -	84,023.34	1,176
701	Drain Fee - Residential	Drain	7,368	7,894.0000	380,156.22	-	86.21	380,242.43	22,040,712
711	Drain Fee - Commercial	Drain	388	503.0000	19,498.11	203,540.28	309.01 -	222,729.38	133,218,008
901	Recycling	Recyc	3,674	3,768.0000	173,911.38	162.00	604.76 -	173,468.62	1,954
1101	PI - Residential	Irrig	5,508	5,521.0200	755,606.02	321,330.82	1,514.23 -	1,075,422.61	647,202,345
1102	Pressurized Irrig-Shareholder	Irrig	273	274.8300	3,498.19	3,902.88	932.55 -	6,468.52	57,427,047
1103	Pressurized Irrigation-County	Irrig	1	1.0000	310.61	179.28	-	489.89	158,382
1104	PI - County Shareholder	Irrig	1	1.0000	39.69	-	-	39.69	462,609
1105	PI Aggricultural Shareholder	Irrig	15	15.0000	-	360.27	-	360.27	451
1106	PI - Commercial,Church,School	Irrig	27	27.0000	3,637.65	52,799.51	3,902.36 -	52,534.80	30,698,491
1201	Metered /Senior Pressurized Ir	M-PI	48	48.0000	4,462.56	1,764.55	80.00 -	6,147.11	3,792,656
1901	Late Fee	Late	2,890	2,890.0000	-	105,529.55	4,492.29 -	101,037.26	-
2501	Disconnect Fee	Serve	1	1.0000	-	100.00	-	100.00	-
2502	Tampering Fee	Serve	5	5.0000	-	640.00	-	640.00	-
Grand Totals:			51,959	54,897.8500	6,112,416.56	3,274,196.67	1,102,745.09 -	8,283,868.14	1,954,100,881

WATER CONSERVATION PLANS

2004 GENERAL SESSION

STATE OF UTAH

Sponsor: Judy Ann Buffmire

Ralph Becker
Duane E. Bourdeaux
Neil A. Hansen

Rosalind J. McGee
Carol Spackman Moss

David Ure
Stephen H. Urquhart

LONG TITLE

General Description:

This bill amends certain provisions related to water conservation plans.

Highlighted Provisions:

This bill:

- ▶ provides for publishing of a report identifying entities who do not have a current water conservation plan;
- ▶ requires that water conservation plans contain existing and proposed water conservation measures;
- ▶ requires that water conservation plans contain a description of the extent to which a retail provider will use certain measures to achieve its conservation goals;
- ▶ requires that water conservation plans contain a clearly stated water use reduction goal and implementation plan for each conservation measure, including a timeline for action and an evaluation process to measure progress; and
- ▶ requires that the Board of Water Resources' report be presented to the Natural Resources, Agriculture, and Environment Interim Committee at its November 2004 meeting.

Monies Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

AMENDS:

73-10-32, as last amended by Chapter 119, Laws of Utah 1999

Be it enacted by the Legislature of the state of Utah:

Section 1. Section 73-10-32 is amended to read:

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

(1) As used in this section:

(a) "Board" means the Board of Water Resources created under Section 73-10-1.5.

(b) "Division" means the Division of Water Resources created under Section 73-10-18.

(c) "Retail" means the level of distribution of culinary water that supplies culinary water directly to the end user.

(d) "Retail water provider" means ~~[a person who]~~ an entity which:

(i) supplies culinary water to end users; and

(ii) has more than 500 service connections.

(e) "Water conservancy district" means an entity formed under Title 17A, Chapter 2, Part 14, Water Conservancy Districts.

~~[(e)-(i)]~~ (f) "Water conservation plan" means a written document that contains [ideas, suggestions, or recommendations as to] existing and proposed water conservation measures describing what [can] will be done by [state and local governments,] retail water providers, water conservancy districts, and the end user of culinary water to help conserve water and limit or reduce its use in the state in terms of per capita consumption so that adequate supplies of water are available for future needs.

~~[(ii)]~~ (2) (a) Each ^[=]water conservation plan^[=] shall contain ~~[recommendations for water saving measures that may include]:~~

(i) a clearly stated overall water use reduction goal and an implementation plan for each of the water conservation measures it chooses to use, including a timeline for action and an evaluation process to measure progress;

(ii) a requirement that each water conservancy district and retail water provider devote

part of at least one regular meeting every five years of its governing body to a discussion and formal adoption of the water conservation plan, and allow public comment on it;

(iii) 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 conservancy district or retail water provider; and

(iv) a copy of the minutes of the meeting and the notification procedure required in Subsections (2)(a)(ii) and (iii) which shall be added as an appendix to the plan.

(b) A water conservation plan may include information regarding:

~~[(A)]~~ (i) the installation and use of water efficient fixtures and appliances, including toilets, shower fixtures, and faucets;

~~[(B)]~~ (ii) residential and commercial landscapes and irrigation that require less water to maintain;

~~[(C)]~~ (iii) more water efficient industrial and commercial processes involving the use of water;

~~[(D)]~~ (iv) water reuse systems, both potable and not potable;

~~[(E)]~~ (v) distribution system leak repair;

~~[(F)]~~ (vi) dissemination of public information regarding more efficient use of water, including public education programs, customer water use audits, and water saving demonstrations;

~~[(G)]~~ (vii) water rate structures designed to encourage more efficient use of water;

~~[(H)]~~ (viii) statutes, ordinances, codes, or regulations designed to encourage more efficient use of water by means such as water efficient fixtures and landscapes;

~~[(I)]~~ (ix) incentives to implement water efficient techniques, including rebates to water users to encourage the implementation of more water efficient measures; and

(x) other measures designed to conserve water.

~~[(J) other measures designed to conserve water.]~~

(c) The Division of Water Resources may be contacted for information and technical resources regarding measures listed in Subsections (2)(b)(i) through (2)(b)(x).

~~[(2)]~~ (3) (a) Before April 1, 1999, each water conservancy district under Title 17A, Chapter 2, Part 14, Water Conservancy Districts, and each retail water provider shall:

(i) (A) prepare ~~[or]~~ and adopt a water conservation plan if one has not already been adopted; or

(B) if the district or provider has already adopted a water conservation plan, review the existing water conservation plan to determine if it should be amended and, if so, amend the water conservation plan; and

(ii) file a copy of the water conservation plan or amended water conservation plan with the division.

(b) Before adopting or amending a water conservation plan, each water conservancy district or retail water provider shall hold a public hearing with reasonable, advance public notice.

~~[(3)]~~ (4) (a) The board shall:

~~[(i) study ways to implement the water conservation plans of the water conservancy districts and the retail water providers;]~~

~~[(ii) develop recommendations on how to implement those plans; and]~~

(i) provide guidelines and technical resources to retail water providers and water conservancy districts to prepare and implement water conservation plans;

(ii) investigate alternative measures designed to conserve water; and

(iii) report [its recommendations] regarding its compliance with the act and impressions of the overall quality of the plans submitted to the Natural Resources, Agriculture, and Environment Interim Committee of the Legislature at its meeting in November [1999] 2004.

~~[(b) The board's report to the Natural Resources, Agriculture, and Environment Interim Committee may include a recommendation:]~~

~~[(i) that each water conservancy district and retail water provider devote part of at least one regular meeting of its governing body to a discussion of the water conservation plan and allow public comment on it;]~~

~~[(ii) to implement a notification procedure 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 conservancy district or retail water provider;]

~~[(iii) that certain eligibility requirements, including the adoption of a water conservation plan, be met before a water conservancy district or retail water provider may receive any state funds for water development;]~~

~~[(iv) for the coordination of conservation and drought management plans; and]~~

~~[(v) regarding any other measure designed to conserve water.]~~

(b) The board shall publish an annual report in a paper of state-wide distribution specifying the retail water providers and water conservancy districts that do not have a current water conservation plan on file with the board at the end of the calendar year.

(5) A water conservancy district or retail water provider may only receive state funds for water development if they comply with the requirements of this act.

~~[(4)]~~ (6) Each water conservancy district and retail water provider specified under Subsection ~~[(2)]~~ (3)(a) shall:

(a) update its water conservation plan no less frequently than every five years; and

(b) follow the procedures required under Subsection ~~[(2)]~~ (3) when updating the water conservation plan.

~~[(5)]~~ (7) It is the intent of the Legislature that the water conservation plans, amendments to existing water conservation plans, and the ~~[study]~~ studies and ~~[recommendations]~~ report by the board be handled within the existing budgets of the respective entities or agencies.

Impact Fee Ordinance

American Fork City, Utah

Ordinance No. 2013-02-04

ORDINANCE ADOPTING AN IMPACT FEE FACILITIES PLAN AND IMPACT FEE ANALYSES AND IMPOSING IMPACT FEES FOR CULINARY WATER, SECONDARY WATER, PARKS AND RECREATION, SANITARY SEWER, POLICE AND FIRE; PROVIDING FOR THE CALCULATION AND COLLECTION OF SUCH FEES; PROVIDING FOR APPEAL, ACCOUNTING AND SEVERABILITY OF THE SAME, AND OTHER RELATED MATTERS

WHEREAS, In April 2012, American Fork City, Utah (the "City") posted notice and as to its intention to prepare impact fee facilities plans ("Impact Fee Facilities Plans") and impact fee analyses ("Impact Fee Analyses") for Culinary Water, Secondary Water, Parks and Recreation, Sanitary Sewer and Police and Fire and invited all interested parties to participate in the impact fee preparation process, consistent with UCA Section 11-36a-501;

WHEREAS, American Fork City is a municipality in the State of Utah, authorized and organized under the provisions of Utah law and is authorized pursuant to the Impact Fees Act, Utah Code Ann. 11-36a-101 et seq. to adopt impact fees; and

WHEREAS, on February 15, 2013, the City posted notice of a public hearing in the local paper, the Herald Extra, Utah's Public Notice Website and at the City's administrative building and libraries to consider the assumptions and conclusions of the Impact Fee Facilities Plans and the Impact Fee Analyses;

WHEREAS, the American Fork City Council (the "Council") met in regular session on August 8, 2012, to convene a public hearing and to consider adopting the Impact Fee Facilities Plans and Impact Fee Analyses, imposing updated Fire/Police, Culinary/Secondary Water, Sewer and Parks and Recreation impact fees, providing for the calculation and collection of such fees, and providing for an appeal process, accounting and reporting method and other related matters; and

WHEREAS, on February 15, 2013 the Impact Fee Facilities Plan Consultant certified its work under UCA section 11-36a-306(1);

WHEREAS, on August 8, 2012 considering the input of the public and stakeholders and relying on the professional advice and certification of the Impact Fee Facilities Plan Consultant, American Fork City adopted the findings, conclusions, and recommendations of the impact fee facilities plans prepared by Zions Bank Public Finance ("Consultant"), a copy of which is attached hereto; and

WHEREAS, on February 15, 2013, the Impact Fee Analysis Consultant certifies its work under UCA Section 11-36a-306(2);

WHEREAS, based on the input of the public and stakeholders and relying on the professional advice and certification of Consultant, a copy of which is attached; and

WHEREAS, on February 15, 2013, a copy of the Impact Fee Analyses and Impact Fee Facilities Plans and the proposed Impact Fee Ordinance, along with a summary of the analyses that was designated to be understood by

a lay person, were made available to the public and deposited at the City public library, administrative office and on the public notice website; and

WHEREAS, on February 15, 2013, the Herald Extra published notice on the date, time and place of the first public hearing to consider the Impact Fee Ordinance; and

WHEREAS, on February 15, 2013, American Fork City posted notice of the date, time and place of the first public hearing to consider the Impact Fee Analysis in three public places and on the public notices website; and

WHEREAS, on August 8, 2012, the Council held a public hearing regarding the Impact Fee Analyses and the Impact Fee Ordinance; and

WHEREAS, after careful consideration and review of the comments at the public hearing, the Council has determined that it is in the best interest of the health, safety and welfare of the inhabitants of American Fork City to adopt the findings and recommendations of the Impact Fee Facilities Plans and Impact Fee Analyses to address the impacts of development upon the fire, police, culinary/secondary water, sanitary sewer and parks and recreation utilities, to adopt the Impact Fee Facilities Plans as proposed, to approve the Impact Fee Analyses as proposed, to adopt Culinary Water, Secondary Water, Sanitary Sewer, Fire, Police and Parks and Recreation impact fees, to provide for the calculation and collection of such fees, and to provide for an appeal process, and an accounting and reporting method of the same.

NOW, THEREFORE, BE IT ORDAINED by the American Fork City Council as follows:

Section 1. Findings. The Council finds and determines as follows:

1.1. All required notices have been given and made and public hearings conducted as requested by the Impact Fees Act with respect to the Impact Fee Facilities Plans, the Impact Fee Analyses, and this Impact Fee Ordinance (this "Ordinance").

1.2. Growth and development activities in American Fork City will create additional demands on its infrastructure. The facility improvement requirements which are analyzed in the Impact Fee Facilities Plans and the Impact Fee Analyses are the direct result of the additional facility needs caused by future development activities. The persons responsible for growth and development activities should pay a proportionate share of the costs of the facilities needed to serve the growth and development activity.

1.3. Impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future, in comparison with the benefits already received and yet to be received.

1.4. In enacting and approving the Impact Fee Analyses and this Ordinance, the Council has taken into consideration, and in certain situations will consider on a case-by-case basis in the future, the future capital facilities and needs of American Fork City, the capital financial needs of American Fork City which are the result of American Fork City's future facilities' needs, the distribution of the burden of costs to different properties within American Fork City based on the use of water, secondary, sewer, police/fire and park facilities of American Fork City by such properties, the financial contribution of those properties and other properties similarly situated in American Fork City at the time of computation of the required fee and prior to the enactment of this Ordinance, all revenue sources available to American Fork City, and the impact on future facilities that will be required by growth and new development activities in American Fork City.

1.5. The provisions of this Ordinance shall be liberally construed in order to carry out the purpose and intent of the Council in establishing the impact fee program.

Section 2. Definitions.

2.1. Except as provided below, words and phrases that are defined in the Impact Fees Act shall have the same meaning in this Ordinance.

2.2. "Service Area" shall mean that geographic area designated within the City's boundaries as exhibited in the appendix of the Impact Fee Analyses.

2.3. "Project Improvement" does not mean system improvement and includes, but is not limited to, those projects identified in the plans for the benefit of growth.

2.4. "Utah State Impact Fees Act" shall mean Title 11, Chapter 36a, Utah Code Annotated or its successor state statute if that title and chapter is renumbered, recodified, or amended.

Section 3. Adoption.

The Council hereby approves and adopts the Impact Fee Analyses attached and the analyses reflected therein. The Impact Fee Facilities Plans and the Impact Fee Analyses are incorporated herein by reference and adopted as though fully set forth herein.

Section 4. Impact Fee Calculations.

4.1. Impact Fees. The impact fees imposed by this Ordinance shall have two components; a future facilities impact fee as well as a buy in fee for excess capacity in existing facilities. The Impact Fee shall be calculated as set forth below.

4.2. Developer Credits/Developer Reimbursements. A developer, including a school district or charter school, may be allowed a credit against or proportionate reimbursement of impact fees if the developer dedicates land for a system improvement, builds and dedicates some or all of a system improvement, or dedicates a public facility that American Fork City and the developer agree will reduce the need for a system improvement. A credit against impact fees shall be granted for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities are system improvements to the respective utilities, or are dedicated to the public and offset the need for an identified future improvement.

4.3. Adjustment of Fees. The Council may adjust either up (but not above the maximum allowable fee) or down the standard impact fees at the time the fee is charged in order to respond to an unusual circumstance in specific cases and to ensure that the fees are imposed fairly. The Council may adjust the amount of the fees to be imposed if the fee payer submits studies and data clearly showing that the payment of an adjusted impact fee is more consistent with the true impact being placed on the system.

4.4. Impact Fee Accounting. American Fork City shall establish a separate interest-bearing ledger account for the cash impact fees collected pursuant to this Ordinance. Interest earned on such account shall be allocated to that account.

(a) Reporting. At the end of each fiscal year, American Fork City shall prepare a report generally showing the source and amount of all monies collected, earned and received by the fund or account and of each expenditure from the fund or account. The report shall also identify impact fee fund by the year in which they were received, the project from which the funds were collected, the capital projects from which the funds were budgeted, and the projected schedule for expenditure and be provided to the State Auditor on the appropriate form found on the State Auditor's Website.

(b) Impact Fee Expenditures. Funds collected pursuant to the impact fees shall be deposited in such account and only be used by the City to construct and upgrade the respective facilities to adequately service development activity or used as otherwise approved by law.

4.5. Refunds. The City shall refund any impact fee paid when:

(a) the fee payer has not proceeded with the development activity and has filed a written request with the Council for a refund within one year after the impact fee was paid;

(b) the fees have not been spent or encumbered within six years of the payment date; and

(c) no impact has resulted.

Section 5. Appeal.

5.1. Any person required to pay an impact fee who believes the fee does not meet the requirements of the law may file a written request for information with the City Council.

5.2. Within two weeks of the receipt of the request for information the City shall provide the person or entity with a copy of the reports and with any other relevant information relating to the impact fee.

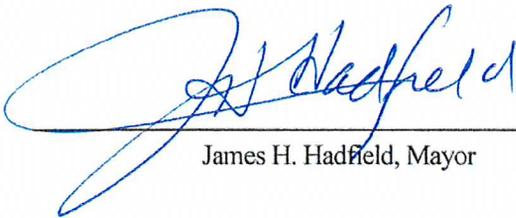
5.3. Any person or entity required to pay an impact fee imposed under this article, who believes the fee does not meet the requirements of law may request and be granted a full administrative appeal of that grievance. An appeal shall be made to the Council within thirty (30) calendar days of the date of the action complained of, or the date when the complaining person reasonably should have become aware of the action.

5.4 The notice of the administrative appeal to the Council shall be filed and shall contain the following information:

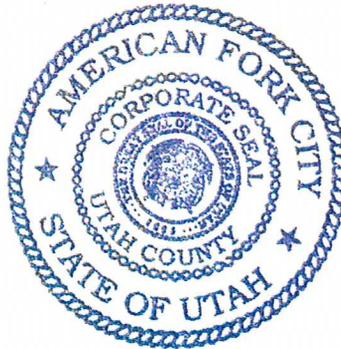
1. The person's name, mailing address, and daytime telephone number;
2. A copy of the written request for information and a brief summary of the grounds for appeal;
3. The relief sought.

5.5 The City shall schedule the appeal before the Council no sooner than five (5) days and no later than fifteen (15) days from the date of the filing of the appeal. The written decision of the Council shall be made no later than thirty (30) days after the date the challenge to the fee is filed with the City and shall, when necessary, be forwarded to the appropriate officials for action.

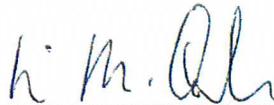
This Ordinance approved February 26, 2013 and effective upon first publication. Impact fees included in Attachment 1 to this Ordinance shall be in effect as of March 1, 2013.



James H. Hadfield, Mayor



Attested By:



Richard M. Colborn, City Recorder

2013-02-04 Impact Fee Ordinance Attachment 1

February 26, 2013

Note: Updates to Fees- Final

	Culinary Water*	Secondary Water*	Sewer	Police	Fire	Parks	Total**
American Fork Current (Residential Dwellings)	\$1,633.78	\$.42	\$1,368.00	\$580.26	\$324.05	\$7,186.73	\$11,932.82
American Fork Proposed (Residential Dwellings)	\$1,495.00	\$.48	\$588.00	\$487.31	\$414.72	\$3,212.30	\$7,157.33
Percent Change	-8%	14%	-57%	-16%	28%	-55%	-40%
*Per Square Foot							
** Assumption of a 2,000 sq foot lot for secondary water							

Reasons for changes:

- A: Culinary Water-was reported as substantially final fee as there was still some clarifications on capacity to be defined between Consultant and Engineer
- B: Secondary Water-Fee was decreased as Consultant found information on assets that led to a reclassification of an asset from Source to Supply.
- C: Sewer- No Change
- D: Police – No Change
- E: Fire- No Change
- F: Parks-Goodsell Property Debt SeNice was not included in the first report, Consultant was provided the information and included the interest component.

Culinary Water	
3/4" Meter	\$ 1,495
1" Meter	\$ 2,497
1.5" Meter	\$ 4,978
2" Meter	\$ 7,968
3" Meter	\$ 15,951
4" Meter	\$ 24,921
6" Meter	\$ 49,827
8" Meter	\$ 79,727

Pressurized Irrigation	
\$	0.48 kSF Irrigable

Sanitary Sewer	
3/4" Meter	\$ 588
1" Meter	\$ 1,471
1.5" Meter	\$ 2,942
2" Meter	\$ 4,708
3" Meter	\$ 9,415
4" Meter	\$ 14,712

Parks and Recreation	
Single Family Residential	\$ 3,212
Multi Family Residential	\$ 2,777

Public Safety	
Police	
Single Family Residential Unit	\$ 487
Multi Family Residential Unit	\$ 242
Schools (kSF Floor Space)	\$ 236
Private Non Residential (kSF Floor Space)	\$ 225
Fire/EMS	
Single Family Residential Unit	\$ 415
Multi Family Residential Unit	\$ 230
Schools (kSF Floor Space)	\$ 72
Private Non Residential (kSF Floor Space)	\$ 141
Apparatus Fee (kSF Floor Space)*	\$ 113
* Apparatus Fee is charged to Non Residential Only	

RESOLUTION NO. 2014-04-17R

**A RESOLUTION OF THE AMERICAN FORK CITY COUNCIL ADOPTING
OUTDOOR WATER RESTRICTIONS AND CONSERVATION MEASURES.**

WHEREAS, American Fork City's pressurized irrigation system and the water it supplies are valuable resources for residents and water users;

WHEREAS, the primary source of water for pressurized irrigation is the American Fork River with additional water coming from other surface sources such as wells;

WHEREAS, watering restrictions that limit the time of day and the frequency of watering have been proven to assist in the efficient use of water; and

WHEREAS, because historical data supports the fact that snowpack water flow is markedly less than average during most yearly cycles, the City Council desires to encourage water conservation;

BE IT NOW, THEREFORE RESOLVED, by American Fork City as follows:

SECTION 1. WATERING RESTRICTIONS

Residential and Small Commercial Users with Automatic Sprinkler Systems

- Odd number addresses shall water on Monday, Wednesday, and Friday.
- Even number addresses shall water on Tuesday, Thursday, and Saturday.
- Sunday watering shall be restricted to spot watering only.
- Water must be conserved and not wasted. Homes with automated systems shall refrain from watering between the hours of 10:00 am and 6:00 pm. Homes *without* automated systems shall water between the hours of 6:00 am and 6:00 pm on their assigned day.

Large Users (parks, cemetery, schools, churches, PUD's, and large commercial development)

- Water between the hours of 9:00 a.m. and 7:00 p.m.
- No area shall be watered twice on two consecutive days.
- Sunday watering is encouraged.
- Water must be conserved and not wasted.

American Fork Irrigation Flood Users

Please follow the schedule published by the American Fork Irrigation Company.

SECTION 2. ENFORCEMENT

The enforcement of these Water Restrictions shall be based on a progress scale as follows:

1. First offence - violators shall be given a written warning and reminded of the restrictions.
2. Second offence - violator shall be subject to having the Pressurized Irrigation Services locked out and assessed a reinstatement fee of \$100.

3. Third offence – violator shall be subject to having the Pressurized Irrigation Services locked out and assessed a reinstatement fee of \$300.

SECTION 3. NEW CONSTRUCTION WAIVER

Landscaping associated with a new construction project may require daily and more frequent watering to allow the landscaping to become established. If landscaping falls within this category, the owner may apply for a waiver to the requirements within this Resolution. The City will review the application and issue restrictions for the more frequent use of water or deny the request.

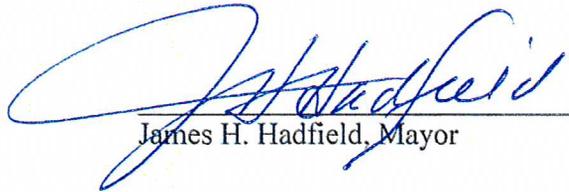
SECTION 4. SEVERABILITY

The sections, paragraphs, sentences, clauses and phrases of this Resolution are severable. If any such section, paragraph, sentence, clause or phrase shall be declared invalid or unconstitutional by the valid judgment or decree of a Court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any of the remaining sections, paragraphs, sentences, clauses or phrases of this Resolution.

SECTION 5. EFFECTIVE DATE

This Resolution shall take effect immediately upon its approval by the City Council.

PASSED AND ADOPTED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH,
this 22 day of April, 2014.



James H. Hadfield, Mayor

ATTEST:



Richard M. Colborn, City Recorder



American Fork City – Public Works Department
275 East 200 North
Tel (801) 763 3060
Fax (801) 763 3005
www.afcity.org

WATER CONSERVATION AND MANAGEMENT PLAN UPDATE

NOVEMBER 2014

This plan updates the plan prepared in February 2010 and was prepared pursuant to the Utah Water Conservation Plan Act (73-10-32 UCA)

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EXECUTIVE SUMMARY

This plan updates the Water Conservation and Management Plan prepared on February 2010 and was prepared pursuant to the Utah Water Conservation Plan Act (73-10-32, UCA). The Act requires water conservancy districts and water retailers to file water management and conservation plans with the Utah Board of Water Resources.

These plans are intended to describe the extent to which a retail provider will use certain measures to achieve its water conservation goals. Plans must contain a clearly stated water use reduction goal and implementation plan for each conservation measure, including a timeline for action and evaluation process to measure progress. The Act also requires that plans be updated at least every five years.

According to the Utah State Governor's Office of Planning and Budget, American Fork has a current population of 28,175 people. Over the next ten years the projected growth rate is 1.30 percent. The City provides water to the growing population.

During the past twenty five years, two 5 million gallon (MG) tanks and one 4.5 MG tank have been constructed to provide adequate storage and pressure to the water system. The City has a culinary system and pressurized irrigation that serves all of its residents.

The City is implementing this water management and conservation plan to reduce demands on culinary water while providing high quality water to its growing population. American Fork has established goals that will help reduce the culinary water use. The goals of this plans are the following:

1. Reduce annual per capita culinary water use 10 percent.
2. Fully implement the pressurized irrigation system citywide.
3. Increase public conservation awareness.
4. Continue emergency planning for system failures and droughts.
5. Reduce the amount of water used for irrigation by at least 5% per year.

The conservation plan describes what actions the City is currently implementing and what actions may be taken in the future. Twenty conservation option have been identified which fall under the following general descriptions:

1. System Operation, Repair and Maintenance Options
2. User Conservation Options
3. Regulatory and Rate Options
4. Behavioral and Education Options

2014 WATER CONSERVATION AND MANAGEMENT PLAN

Each of these options have been evaluated to determine which ones should be implemented based on conservation benefits, costs, public reaction, and required staff time and effort. These options are listed below by category and order of ranking. The lower totals indicate options that have the most potential to conserve water compared to cost.

ALTERNATIVE	Benefit	Cost	Public View	Time	Effort	TOTAL
System Operation, Repair and Maintenance Options						
Water Loss Budget	4	1	2	3	2	12
Leak Detection System	7	3	2	3	3	18
Large Meter Replacement	3	1	2	3	3	12
System Repairs	1	2	2	3	3	11
Full Implementation of PI System	1	1	2	2	2	8
Water Reuse	4	4	5	4	5	22
User Conservation Options						
Water Leak Detection and Repair	3	2	4	2	2	13
Voluntary Water Audits	4	1	3	3	3	14
Efficient Fixtures and Appliances	6	2	4	2	2	16
Regulatory and Rate Options						
Water Conservation Committee	3	1	1	3	2	10
Efficient Landscaping Practices	3	1	2	3	3	12
Enforcement of Ordinances	3	2	4	2	2	13
Conservation Water Rate Structure	2	1	4	4	3	14
Shortage and Emergency Planning	8	2	3	1	1	15
Conservation Building Codes	5	2	4	3	2	16
Incentive to Wholesale Users	7	3	4	2	2	19
Behavioral and Educational Options						
Public Conservation Education	4	2	1	2	2	11
Peak Use Reduction	6	2	1	2	2	13
Improved Commercial Processes	8	2	2	3	3	18
Water Rationing Policies	8	2	3	3	3	19

2014 WATER CONSERVATION AND MANAGEMENT PLAN

Recommended water conservation programs have been selected based on highest ranked conservation options. With the completion of the pressurized irrigation system, most of the City's water conservation efforts will focus on its successful implementation.

Water users within the American Fork, whether commercial, industrial or residential customers, are invited to participate in city meetings and provide feedback in establishing priorities for conservation activities. Decisions made by the City regarding establishing conservation goals and priorities will attempt to reflect suggestions and comments offered by customers and interested parties.

The goals set on the 2010 Water Management and Conservation Plan resulted on a 48% reduction on water use. There is a high demand for irrigation water and the City is taking steps to reduce water waste and bring the amount of water per capita to a number that matches the state's average more closely.

Opportunities for public involvement and comment will be provided through public hearings as this plan is approved and as future updates to the plan are made.

SECTION 1 – INTRODUCTION

The purpose of this Water Management and Conservation Plan is to identify conservation programs and opportunities supporting the City of American Fork's water management objectives.

The Plan will describe how the City can implement these opportunities to more effectively conserve its culinary water. This will help American Fork and its residents increase their desire and capabilities to become responsible steward to its valuable natural resource and provide long-term financial solvency to the water system.

This report complies with requirements from the Utah Water Conservation Plan Act (73-10-32 UCA). The Utah Water Conservation Plan Act requires water conservancy districts and water retailers to prepare and adopt, or update, a water conservation plan, which must be filed with the Utah Board of Water Resources.

Water Conservation plans are identify recommendations for water saving practices. Some examples would include such measures as the following:

1. Installation and use of water efficient fixtures and appliances
2. Landscaping that require less water to maintain (xeriscaping)
3. Water reuse systems
4. Water rate structures designed to encourage more efficient use of water

Water Management and Conservation Plans must contain a clearly stated water use reduction goal and implementation plan for each conservation measure, including a timeline for action and an evaluation process to measure progress.

SECTION 2 – BACKGROUND INFORMATION

The first settlers located in American Fork Creek or what we now call American Fork River. As is stated in George Shelley's Early History of American Fork, early settlers located here "primarily for the purpose of establishing a big pasture and cattle ranch. But as more people came, it was necessary to raise crops for their sustenance" (page 31). Because of an inadequate rainfall, these early settler's developed methods for diverting water out of the creek to their farmlands.

The American Fork City water system, in Utah County, was established in the early 1900's. Since then, improvements have been made to the system to expand its service to its current size.

In 1981, the first 5 million gallon (MG) storage tank was built and the system was broken into two pressure zones. Additional storage was added to the system in 1991 and 2001 and the current water system provides pressurized culinary water to American Fork City residents.

American Fork's current population, estimated at 28,175, is served by culinary water system through nearly 8,500 connections.

Historically approximately 40 percent of the culinary water supply has been used indoors and 60 percent outdoors. However, in 2007 the Public Works Department began the implementation of a pressurized irrigation system that will deliver untreated water throughout the City. Construction of the pressurized irrigation was completed on 2010.

While connection to the pressurized irrigation system is not mandatory, the City has implemented a revised culinary water rate structure that is designed to motivate residents to connect to the PI system.

The City's current policy is to deliver safe water drinking water to all of its customers. Rates and fees are set to cover the cost of operation and expansion, while encouraging water conservation. The City has a drought emergency plan. The City believes that adequate water is available for use but not for waste.

SECTION 3 – WATER SYSTEM ANALYSIS AND PROJECTIONS

The current water system consists of the following elements:

1. **Water Sources**: Six wells and springs supplying up to 27,600 acre-feet of water per year to the American Fork City water system:
 - a. J.C. Park Well
 - b. Hospital Well
 - c. Golf Course Well
 - d. Race Track Well
 - e. Boley Well
 - f. Country Club Well
 - g. American Fork Canyon Springs.
 - h. Additional groundwater supply may be available from the Warnick Well.

Immediate needs include re-drilling the Warnick Well prior to production because it was not constructed to comply with the current drinking water standards. Additional wells may be sited at the golf course. In addition to the groundwater sources, American Fork has right to water from irrigation canals. However, this water is committed for use in the City's pressurized irrigation system.

2. **Water Rights**: Approximately 27,000 acre-feet of total water rights filed with the Utah State Division of Water Rights. This right includes ground water and springs that are available for the pressurized irrigation system.
3. **Storage Tanks**: Three storage tanks with the capacity of holding 14.5 MG of water. Two 5 MG tanks and one 4.5 MG tank
4. **Distribution network**: The distribution system includes about 203 miles of pipes that range in size from 4 inch to 24 inch diameter. The distribution system age ranges from 20 to 60 years old with an average age of 50 years old. The pipe's materials is primarily ductile and cast iron but there are some few pipes of steel and shot coat pipes. The City has adopted and it is implementing a pipe retrofitting plan with the intent to replace most of the older pipes.
5. **Connections**: Approximately 8,500 connections including 7,597 residential, 802 commercials, 30 institutional and 2 wholesale connections. The unmetered connections to the city owned parks were switched over to the pressurized irrigation system.
6. **Metering**: Water meters are installed at each residential, commercial, and institutional connection. The meters at the parks have been bypassed due to the connection to the

2014 WATER CONSERVATION AND MANAGEMENT PLAN

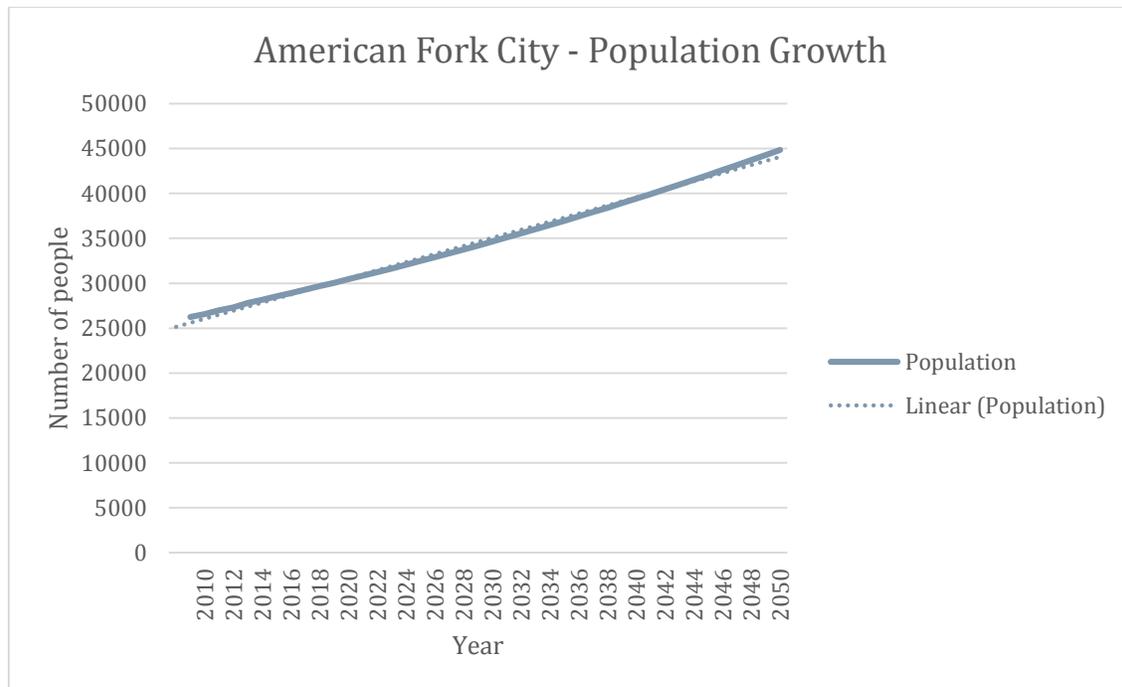
pressurized irrigation system. All of the 1 ½ inch and smaller meters have been replaced since 1991. Meter upgrades and replacement is an ongoing process throughout the City.

CURRENT POPULATION AND WATER USE

As the City of American Fork continues to grow, the demand on culinary water will increase.

The current population of American Fork is estimated at 28,175. American Fork City is projected to grow at a rate of 1.30% percent as shown on Table 1:

TABLE 1: POPULATION GROWTH	
Year	Population
2014	28,175
2020	30,445
2030	34,642
2040	39,419
2050	44,854



2014 WATER CONSERVATION AND MANAGEMENT PLAN

This growth will occur as existing farmlands and open spaces are developed into subdivisions and commercial developments. The projected numbers of connections in American Fork as shown in Table 2. These projections, taken from the City’s General Plan, are based on Equivalent Residential Connections (ERCs). One ERC is a water user who uses the equivalent water of one average residential home.

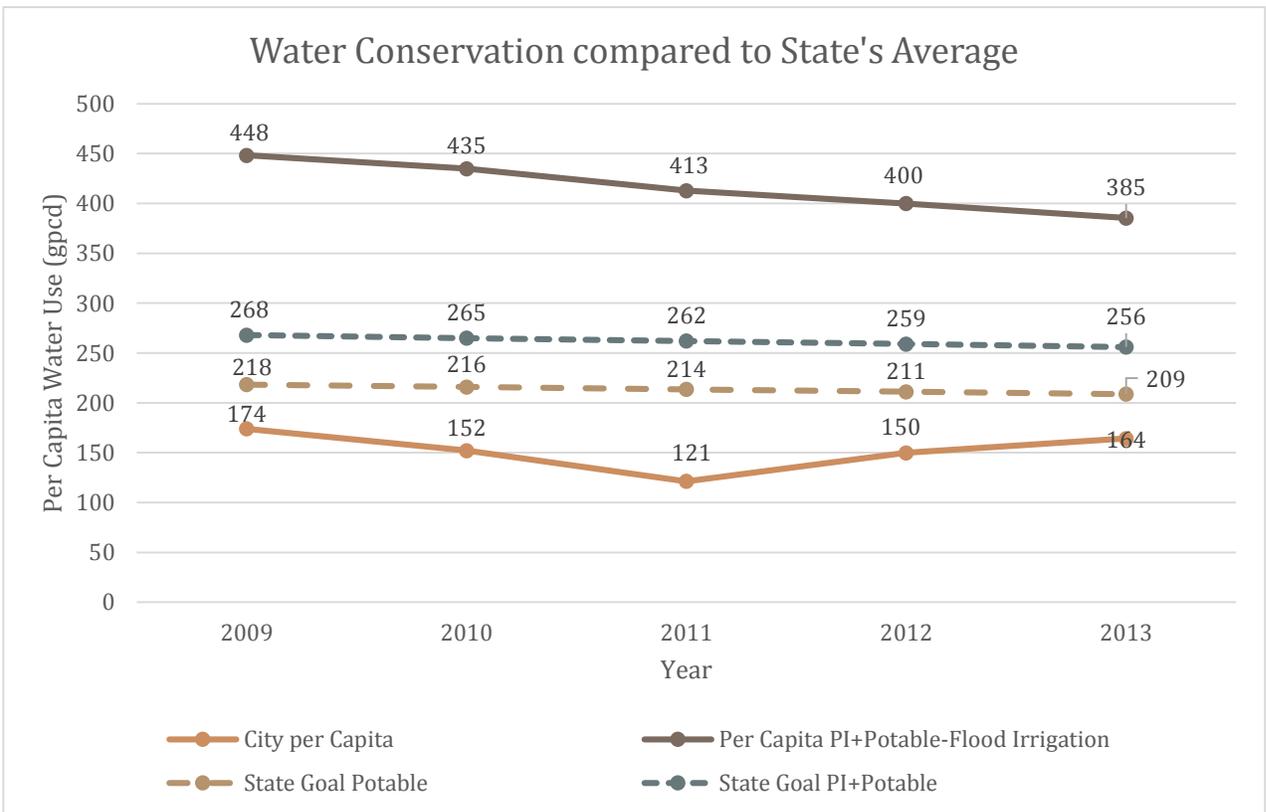
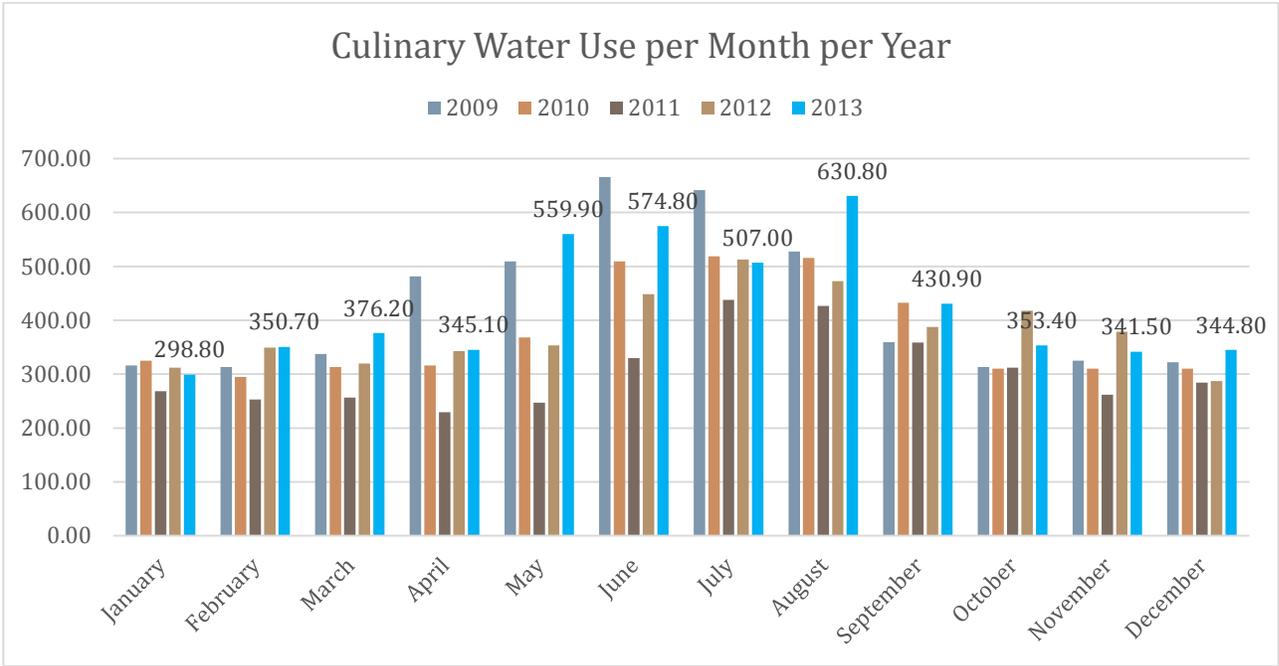
Year	Residential	Institutional	Commercial	Total
2015	8,996	1,751	6,449	17,196
2020	10,687	2,080	7,662	20,429
2025	12,402	2,414	10,078	26,872
2030	18,503	3,602	13,265	35,370

In 2013, the City of American Fork distributed 5,113.90 acre-feet of water. Table 3 shows the monthly and annual usage by residential, commercial, industrial and public users. Residential users used 69 percent of the total usage. Outdoor usage is estimated to have been approximately 60 percent of the total usage.

The 2013 total per capita usage was 164 gpd compared to 315 gpd per capita as estimated for the year 2008. This is a 48% reduction compared to 2008 water usage. The maximum water use occurred during the month of August with 630.80 acre-feet.

Month	Total Usage (acre-feet)
January	298.80
February	350.70
March	376.20
April	345.10
May	559.90
June	574.80
July	507.00
August	630.80
September	430.90
October	353.40
November	341.50
December	344.80
Yearly Total:	5,113.90

2014 WATER CONSERVATION AND MANAGEMENT PLAN



2014 WATER CONSERVATION AND MANAGEMENT PLAN

CURRENT WATER SOURCE CAPACITY

The City’s operating water sources have a capacity of 27,600 acre-feet per year (2,300 acre-feet per month). Table 4 shows the sources and their capacities:

Source	Capacity (gpm)	Capacity (acre-feet)
J.C. Well	2,100	3,390
Hospital Well	2,000	3,230
Golf Course Well	2,900	4,680
Race Track Well	3,100	5,000
Boley Well	2,600	4,200
Country Club Well	2,800	4,520
American Fork Canyon Springs	1,600	2,580
Total:	17,100	27,600

PROJECTED WATER USE AND WATER AVAILABILITY

Table 5 shows the projected annual and peak month water usage and the surplus water from existing sources. The surplus water source is the available water source in excess of demand. A water deficit results when the available source no longer exceeds demand. A deficit is indicated in Table 5 as a negative surplus.

Year	Annual Water Demand (acre-feet)	Surplus Source (acre-feet)
2015	17,196	13,461
2020	20,429	10,404
2025	23,707	3,893
Ultimate	35,370	-7,770

The projections shown on Table 5 indicate that American Fork’s existing water sources will not meet peak month demand at ultimate City build out. By that time, additional water source capacity will have to be developed, demand will have to be slowed by conservation, or water peak demand will not be met. The City is collecting data with the intent of analyzing if the recently adopted water rate structure reduces the annual demand and consequently reduces the deficit projected to happen during build-out condition.

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An additional 7,770 acre-feet per year of capacity will be needed for build out. The City believes that the Warnick Well can supply 3,000 acre-feet per year once it is developed and upgraded.

STORAGE CAPACITY

The City currently has a 14.5 MG of storage in three tanks. The Utah State Division of Drinking Water requires the following:

1. 400 gallons per connection plus
2. 2,528 gallons per irrigated acre storage.

Table 6 shows the current and projected storage requirements for the City, as calculated by the General Plan.

The projected drinking water storage requirement are based on implementation of the pressurized irrigation system. Because the pressurized irrigation system has separate storage capacity for irrigation use, the demands are not included in the projected drinking water system requirements.

TABLE 6: CURRENT AND PROJECTED STORAGE REQUIREMENTS		
Year	Storage Requirement (MG)	Surplus Storage Capacity (MG)
2015	7.4	7.1
2020	8.7	5.8
2025	10.0	4.5
Ultimate	14.6	-0.1

The City will not require additional storage until after 2025 to meet projected storage requirements.

DISTRIBUTION SYSTEM CAPACITY

The City's General Plan identifies distribution system upsizing that would be necessary to distribute projected water demands and fire flows. The improvements include new trunk lines, upsizing main lines, and pressure reducing valves to improve pressures, water flow and velocities.

2014 WATER CONSERVATION AND MANAGEMENT PLAN

CURRENT WATER RATES

The City's culinary water rates are shown in Table 7. These rates are designed to encourage use of the City's new pressurized irrigation system. The base rate is intended to provide for the indoor needs of an average family.

TABLE 7: AMERICAN FORK CULINARY WATER RATE SCHEDULE	
Residential Culinary Water Rates	
Gallons of Usage per Month	Rate
0,00 to 6,000	\$19.41
6,000 to 9,000	\$3.00
Above 9,000	\$4.20

Table 8 shows the culinary water rates for Commercial, Multi-Family, Industrial and Institutional land uses. Commercial, multi-family, industrial and institutional culinary water base rates and base allowances are assessed on a per a meter bases, not per unit.

TABLE 8: AMERICAN FORK CULINARY WATER RATE SCHEDULE	
Commercial, Multi-Family, Industrial and Institutional Water Rates	
Monthly Base Rate	Rate
¾ inch and smaller	\$22.53
1"	\$23.87
1 ½"	\$25.21
2"	\$28.90
3"	\$56.07
4"	\$66.13
6"	\$89.60
8"	\$116.43
10"	\$153.32
Block rates	
Base Allowance	
0 to 6,000 gallons per month	\$0.00
Block 2 Rate (\$/Kgal)	
6,000 to 9,000 gallons per month	\$2.65
Block 3 Rate (\$/Kgal)	
Above 9,000 gallons per month	\$3.07

2014 WATER CONSERVATION AND MANAGEMENT PLAN

The water rates for the pressurized irrigation water system are shown on table 9.

TABLE 9: AMERICAN FORK P.I. WATER RATE SCHEDULE	
Unmetered	Rate
Base rate (\$/ month)	\$19.41
Overage (\$/ month)	\$0.00259
Metered	
Base Allowance (\$/ month)	
0 to 8,000 gallons/ month	\$19.41
Block 2 Rate (\$/ Kgal)	
8,000 to 16,000 gallons/ month	\$1.74
Block 3 Rate (\$/ Kgal)	
Above 16,000 gallons/ month	\$4.60

The water rates are designed to increase in a small percentage per year and will be revised again during the 2016 fiscal budget year.

The City has adopted Resolution No: 2012-10-27R for the purpose of establishing fees charges for water and secondary irrigation water use. The collected data shows that the increase on the water rates is producing a reduction on water use per use.

The City has also adopted Resolution No: 2014-04-17R restricting the use of culinary and secondary water for outdoor activities. The Water Division has two staff members dedicated to the enforcement of this new restrictions. The collected data shows that the increase on the water rates is producing a reduction on water use per use.

EXISTING WATER MANAGEMENT AND CONSERVATION PROGRAMS

American Fork City has consistently worked to improve the water system.

Recent improvements to the culinary water system have been made to source acquisition and protection, water rights, storage capacity, pressure zones, and metering.

The implementation of the pressurized irrigation system has reduced the demand on culinary water by up to 60 percent and conserve supplies of high quality drinking water for future uses.

The City of American Fork currently sends mailers with utility bills semiannually. The mailer inform water users about conservation measures and the importance of conservation.

SECTION 4 – CONSERVATION VALUES AND GOALS

THE VALUE OF CONSERVATION

Conservation provides value to a community by preserving water sources and reducing the size and number of system improvements, thus reducing system costs. However, the overall quality of life must also be maintained. American Fork has established vegetation throughout the community. The City has an unwritten conservation philosophy that “there is enough water to use, but not enough to waste.”

To set conservation levels, it is necessary to first identify reasonable water usage and compare it with actual or projected usage. Outdoor water use can provide the greatest conservation benefit. As previously stated, total culinary water system use is 5,114 gpd per capita.

SECONDARY WATER SYSTEM VALUE

The construction of a secondary water system will conserve culinary water by using untreated water from existing irrigation canals and ditches currently use for outdoor irrigation. This will result in nearly 16,500 acre-feet per year of projected outdoor culinary water being conserved.

Much of the cost to install a secondary system will be offset by reduced capital improvement costs for the culinary system. Instead of enlarging the existing culinary system, its use would be restricted to indoor use only.

CONSERVATION GOALS.

The City of American fork has set conservation goals based on the projected needs of the community and the system analysis. These goals will allow the City to deliver safe drinking water to all of its customers and help ensure long-term, low cost sustainability of the water system. The goals are the following:

1. Reduce annual per capita culinary use 50 percent by 2015
2. Fully implement the pressurized irrigation system and encourage residents to connect and efficiently use it.
3. Increase public’s awareness of water conservation.
4. Continue emergency planning for droughts and system failures such as broken mains, pump failure, or other losses of pressure or capacity.

SECTION 5 – POTENTIAL WATER MANAGEMENT AND CONSERVATION OPTIONS

The City of American Fork has many opportunities and challenges to face as it pursues its conservation goals continuing growth. The water system must be managed to keep pace with the community for stable growth.

Conservation can be an effective management tool to reduce the impact of growth. Conservation increases the available capacity of a system with little or no capital investment. Saved water can be reallocated to new users. Several conservation programs have been identified to help meet future water needs. The alternatives were classified into four main categories:

1. System Operations, Repair and Maintenance Options
2. User Conservation Options
3. Regulatory and Rate Options
4. Behavioral and Educational Options

SYSTEM OPERATION, REPAIR AND MAINTENANCE OPTIONS BMPs

Water Loss Budget BMP 1:

American Fork currently compares supply and use annually. However, the next system loss is not tracked down from year to year. The City could develop a water budget for the water system.

By tracking the difference between the water delivered and the water used on a quarterly basis, it is possible to identify increasing system leakage and where conservation programs are needed. The source meters measure the total water delivered. The connection meters shows the water used. The sum of the connection meters measures the total water used. The amount of water lost through the system could then be calculated on a quarterly basis to determine if leaks are developing within the system.

Leak Detection System BMP 2:

American Fork performs leak detection surveys with acoustical equipment periodically. Recent leaks detection surveys identified only small leaks that were difficult and costly to pinpoint and repair. Use methods consistent with American Water Works Association's *Water Audit and Leak Detection Guidebook*.

System Repairs BMP 3:

Several improvements have been made to the water system including securing supply and rights and increasing storage. However, much of the distribution piping is over 50 years old. Capital Improvement Plans include replacement of aging pipes. In most years, at least one well pump fails during peak demand. It is likely that the failure may be due to the prolonged use of the pumps. The pumps should be evaluated and fixed or be budgeted for replacement. The construction of the pressurized irrigation will reduce the usage of the pumps.

Pressurized Irrigation System BMP 4:

The construction of the pressurized irrigation has been completed and it is being implemented. Approximately 95% of the residents are connected to the PI system.

Water Reuse BMP 5:

The City could explore water reuse. A study of the City could be made to determine potential water sources and reuse sites, including City-wide use in the pressurized irrigation system. Possible reuse sources include groundwater drain water, treated municipal and industrial wastewater and storm drain runoff. Possible reuse sites include municipal parks, school yards, cemeteries and public building grounds. By reusing water, the City would be able to reduce the amount of water needed from springs and wells.

Prior to using recycled water, it is necessary to educate users. Many people are concerned about the possible health risks associated with previously used water. Reuse water must be restricted to irrigation so that drinking water or food contamination is not likely.

Large Water Meter Replacement BMP 6:

The large water meters are more than 10 years old ($>1 \frac{1}{2}$ inch). It is likely that these meters are losing accuracy. Replacing these meters would improve the water budget and billing accuracy.

Water Meter Change-Out Program BMP 7:

A well develop method of keeping the water meters up-to-date would also keep water cost down. The typical meter age is 10 years. Over time, the meters wear out and their accuracy decreases. Systematic review and maintenance will reduce meter wear, increase meter life, and improve meter accuracy. When the meters eventually wear out, they should be replaced to keep the water measurements accurate. Also, advancements in meter technology

2014 WATER CONSERVATION AND MANAGEMENT PLAN

provide additional benefits such as automated alarms for apparent water leaks. In recent years, the City has replaced 7 percent of the meters per year.

USER CONSERVATION OPTIONS

Residential Leak Detection and Repair BMP 8:

Residential users may not know how to test for leaks in their home. Leak detection instructions could be distributed with educational literature. Assistance could be provided for those requesting some help. Use methods consistent with American Water Works Association's *Water Audit and Leak Detection Guidebook*.

Voluntary Water Audits BMP 9:

City staff would advertise and perform water audits with residents to quantify how much water is being used by various tasks including watering yards, household use, etc. Once residents know how much water they are using and how much is necessary, it would be easier for them to conserve water. Use methods consistent with American Water Works Association's *Water Audit and Leak Detection Guidebook*.

Water Efficient Fixtures and Appliances BMP 10:

Current building codes require that water efficient fixtures be installed in new building. However, older sections of American Fork were fixtures be installed in new buildings. However, older sections of American Fork were developed before these codes were in place. The City could develop a budget to assist with the replacement of wasteful fixtures. Assistance may include rebates for replacing shower heads and toilets, discounts on efficient appliances or other measures that would help to compensate for the replacement cost.

REGULATORY AND RATE OPTIONS

Water Conservation Committee BMP 11:

A Water Conservation Committee would likely be a five member committee with citizens and public officials including the Water Superintendent, Public Works Director, a Council Member and two more citizens. The committee would be responsible for distributing information to the public, receiving public comments, and making recommendations to the City Council regarding water conservation planning, regulations, and rates.

Conservation Oriented Rate Structure BMP 12:

A conservation oriented rate structure not only pays for the production and distribution of water, but also rewards users for reducing system demand and penalizes users for increasing demand. The City would need to study which rate would most fairly distribute the cost among the water users and promote conservation. Factors that may affect the rate structure include lot sizes, family size, land uses, housing density, water metering and economics.

Review Enforcement of Existing Ordinances BMP 13:

Prior to adopting new conservation ordinances, it is important to review existing ordinances and building codes and enforcement. The review will limit duplication and conflict with new ordinances. Regulation of multiple-family units, including accessory apartments, on single family parcels, may improve water use management.

Shortage Management and Emergency Planning BMP 14:

The City's shortage management and emergency plan limits public water use and restrict watering to week days during droughts. These measures are easy to enforce and can be very effective. The City also plans for system failures such as a main break, a pump failure, a well collapse, etc. with system improvements. The City's planned responses to these emergencies decrease water service interruptions.

Conservation Incentives to Wholesale Users BMP 15:

American Fork sells approximately 10 MG per month to Cedar Hills City. As with the residential users, it may be possible to provide incentive pricing to Cedar Hills City and other wholesale or large scale water users. It is also possible to limit the total of park supply to wholesale users.

Water Efficient Landscape Practices BMP 16:

Extensive research has been done in recent years to find ways to reduce landscape water use. The City could plant demonstration gardens around City buildings and prominent areas of parks so that citizens can see the beauty and effectiveness of water efficient landscape practices. These practices include selecting drought tolerant plants, shrubs, trees, efficient irrigation systems, and mulching.

The Division of Water Resources, in cooperation with USU Extension, Bureau of Reclamation, and numerous other water providers and interested agencies, has helped developed a water-wise plant tagging program to promote the use of native and other well-

adapted plans in Utah landscapes. The information can be downloaded from the following link: www.waterwiseplant.utah.gov .

Water Rationing Policies BMP 17:

The City uses water rationing for its drought emergency plan. As the City, and surrounding areas, continues to grow and become more crowded, the chances of implementing water rationing will rise. American Fork could strengthen its emergency response by developing inter-city agreements to share resources, materials, and personnel in emergencies.

BEHAVIORAL AND EDUCATIONAL OPTIONS

Public Conservation Education BMP 18:

American Fork send educational mailers to its users. Continued education through the mail, advertising, schools, civic meetings, and Water Conservation Committee meetings could improve conservation by involving the public in its water conservation efforts. The City needs to develop additional methods of providing the public with information on water conservation. The Utah State Division of Water Resources and other agencies have already developed various pamphlets on water conservation.

Basic conservation information can be issued by:

1. Providing a conservation hotline and water saving surveys.
2. Providing funding for a public information campaign and program.
3. Providing information on low water use plants and efficient irrigation systems.
4. Providing information on water pricing improvements to reduce water consumption.
5. Providing information on system improvements.

Improved Industrial and Commercial Processes BMP 19:

American Fork could explore or provide funding for companies to explore new methods that have been developed to reduce the amount of water used in industrial and commercial processes. If some of these methods could be implemented in the City, new ordinances could be created that would require new and existing companies to provide water conserving processes.

Peak use Reduction BMP 20:

The demand for water is greatest during summer months. Encouraging evening, night, and early morning watering can reduce peak demand and overall water usage.

2014 WATER CONSERVATION AND MANAGEMENT PLAN

SECTION 6 – EVALUATION OF CONSERVATION OPTIONS

The conservation options are evaluated in Table 9.

TABLE 9: CONSERVATION OPTIONS EVALUATIONS						
Alternative	BENEFIT	COST	PUBLIC VIEW	TIME	EFFORT	Total
System O&M and Repair Options						
Water Loss Budget	4	1	2	3	2	12
Leak Detection System	7	3	2	3	3	18
Large Meter Replacement	3	1	2	3	3	12
System Repairs	1	2	2	3	3	11
Full Implementation of PI System	1	1	2	2	2	8
Water Reuse	4	4	5	4	5	22
User Conservation Options						
Water Leak Detection and Repair	3	2	4	2	2	13
Voluntary Water Audits	4	1	3	3	3	14
Efficient Fixtures and Appliances	6	2	4	2	2	16
Regulatory and Rate Options						
Water Conservation Committee	3	1	1	3	2	10
Efficient Landscaping Practices	3	1	2	3	3	12
Enforcement of Ordinances	3	2	4	2	2	13
Conservation Water Rate Structure	2	1	4	4	3	14
Shortage and Emergency Planning	8	2	3	1	1	15
Conservation Building Codes	5	2	4	3	2	16
Incentive to Wholesale Users	7	3	4	2	2	19
Behavioral and Educational Options						
Public Conservation Education	4	2	1	2	2	11
Peak Use Reduction	6	2	1	2	2	13
Improved Commercial Processes	8	2	2	3	3	18
Water Rationing Policies	8	2	3	3	3	19

2014 WATER CONSERVATION AND MANAGEMENT PLAN

Cost, public view, staff time and effort are rated from 1 to 5, with 1 being inexpensive and 5 being expensive.

Benefits are rated from 1 to 10, with 1 being a large benefit and 10 being a minimal benefit. The benefit of each option was weighed so that the option with maximum benefit to culinary water conservation would rank better. The options with lower totals are preferred.

2014 WATER CONSERVATION AND MANAGEMENT PLAN

SECTION 7 – RECOMMENDED CONSERVATION PROGRAMS

Recommended water conservation programs have been selected based on highest ranked conservation options.

With the completion of the pressurized irrigation system, most of the City’s water conservation efforts will focus on its successful implementation over the next five years when they will be evaluated and amended as needed. Other programs will provide additional water conservation and provide information needed for updating the conservation plan in five years.

Programs recommended to be implemented over the next five years are summarized in Table 10. The table also lists water use reduction goals, implementation schedules and evaluation processes to measure progress.

Description	Goal	Deadline	Evaluation
System Repairs	Upgrade the culinary system by replacing older. Reduce water use to 150 gpd per capita	December 31, 2019	Collect data and calculate the use per capita per month and annually.
Enforcement of Existing Ordinances	The City has recently adopted an ordinance restricting the use of pressurized irrigation to certain days of the week.	December 31, 2019	Collect data and calculate the use per capita per month and annually and compared with State’s average use.
Water Conservation Committee	Organize a Water Conservation Committee and implement water conservation options.	December 31, 2015	Organize meetings at least quarterly and evaluate the water use and reductions based on implemented options.
Public Conservation Education	Distribute two water conservation newsletters per year with utility bills.	2014 until 2019	Document by using work orders the number of newsletters distributed per year.
Conservation Water Rate Structure	Implement the water rate structure adopted by the City Council. Update ordinance and rates during the 2016 fiscal year	December 31, 2016	Compare water consumption reduction versus water rates increases. Master plan the use of funds for system improvements.

2014 WATER CONSERVATION AND MANAGEMENT PLAN

SECTION 8 – PREVIOUS WMCP EVALUATION

Table 11 shows an evaluation of the Water Management and Conservation Plan adopted in February 2010.

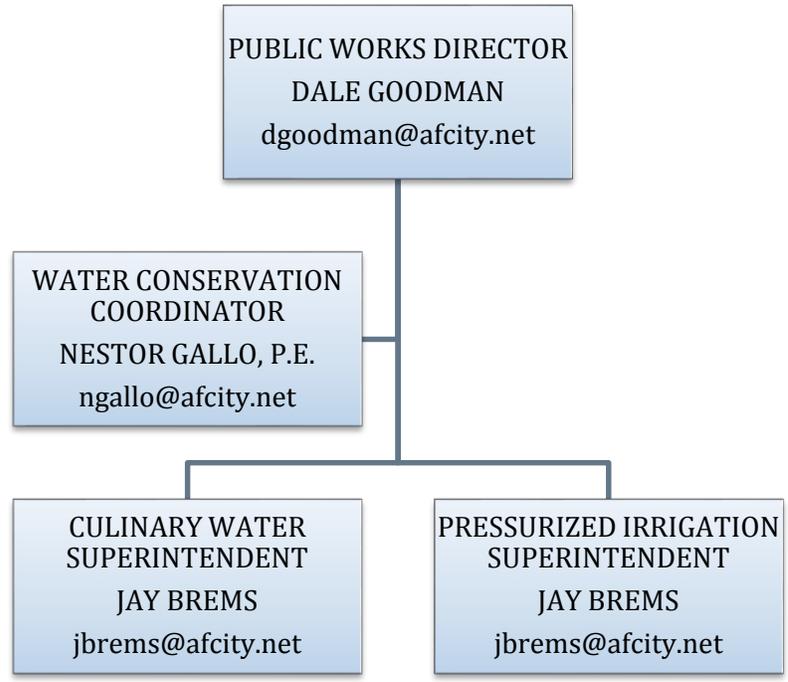
Description	Goal	Deadline	Evaluation
Full implementation of the pressurized irrigation system	Reduce per capita culinary water use by 50%. Current per capita use = 316 gpd, goal = 158 gpd	Achieve conservation goal by December 31, 2014.	Total annual culinary water use as measured by source meters, divided by 265, divided by current City population. COMPLETED. Water consumption per capita = 164 gpd compared to 316 gpd (a 48% reduction)
Water Loss Budget	N/A	December 31, 2014	N/A
Water Meter Change – Out Program	Change out 500 residential water meters per year	2010 – 2014	Number of meters replaced – 315 full meter/ transponder and 950 Orion transponder were replaced for a total of 1,265. On going program.
Public Conservation Education	Distribute two water conservation newsletters per year with utility bills.	2010 – 2014	Number of editions of newsletters distributed per year – On going program

Water users within the City of American Fork, whether commercial or residential customers, are invited to participate in city meetings and establishing priorities for conservation activities. Decisions made by the City regarding establishing conservation goals and priorities will attempt to reflect suggestions and comments offered by customers and interested parties.

Opportunities for public involvement and comment will be provided through public hearings as this plan is approved and as future updates to the plan are made.

2014 WATER CONSERVATION AND MANAGEMENT PLAN

SECTION 9 –WATER MANAGEMENT AND CONSERVATION PLAN TEAM



SECTION 10 – CONCLUSIONS

The City of American Fork is documenting its updated Water Management and Conservation Plan (WMCP) with this report. With recent construction of the pressurized irrigation, the culinary water system has adequate source, right, storage and distribution for the foreseeable future. Some additional water source and conservation measures will be needed to meet demand at total built out. The distribution system is aging and needs some repair. The implementation of the pressurized irrigation represents the best option for conservation of culinary water supplies.

The goals set on the 2010 Water Management and Conservation Plan resulted on a 48% reduction on water use. There is a high demand for irrigation water and the City is taking steps to reduce water waste and bring the amount of water per capita to a number that matches the state's average more closely.

The WMCP identifies and prioritizes several conservation options based on benefits, cost, and other factors. The recommended programs will be implemented in phases over the next five years.

2014 WATER CONSERVATION AND MANAGEMENT PLAN

LIST OF CITY OFFICERS

Mayor	James H. Hadfield
Council Member	Carlton Bowen
Council Member	Brad Frost
Council Member	Robert Shelton
Council Member	Jeffrey Shorter
Council Member	Clark Taylor
Public Works Director	Dale Goodman
Water Division Superintendent	Jay Brems

CERTIFICATION OF ADOPTION

We, _____, hereby certify that the attached Water Management and Conservation Plan has been established and adopted by our City Council on _____, 2014.

REFERENCES

American Fork City General Plan, Public Facilities and Services Element, 2010 Water Systems Component and Impact Fee Facility Plan, Horrocks Engineers in conjunction with Franson Civil Engineers, May 2012.

George Shelley, *Early History of American Fork*.

Utah Division of Water Rights. Website: www.nrwrtl.nr.state.ut.us

Utah Water Conservation Plan Act, Utah Code Annotated, Section 73-10-32.

APPENDIX

American Fork City

WATER MANAGEMENT AND CONSERVATION PLAN UPDATE

Public Works Department
Water Division
October 2014

TOPICS

- The Utah Water Conservation Act
- The 2009 Water Conservation Plan
- Comparison with the state's water use averages
- The 2014 Water Conservation Plan

The Utah Water Conservation Act

- The Utah Division of Water Resources has been charged with the administration of the Utah Water Conservation Act (73-10-32, UCA) and requires the following:
 - Submit a Water Conservation Plan
 - The Plan must be updated every five years
 - The Plan must be adopted by the City Council

The 2009 Water Conservation Plan

Description	Goal	Evaluation
Full Implementation of the pressurized irrigation system	Reduce water use by 50% from 316 gpd to 158 gpd per capita	COMPLETED. Water use has decreased from 316 gpd to 164 gpd per capita
Water Loss Budget	Keep track of the difference between water delivered and water used on a quarterly basis	On going program
Water meter change out program	Change out 500 residential water meters per year	1,265 meters were replaced
Public conservation education	Distribute two water conservation newsletters per year with the utility bills	On going program

Comparison with the state's average

Water Conservation compared to State's Average



City per Capita Per Capita PI+Potable-Flood Irrigation State Goal Potable State Goal PI+Potable

The 2014 Water Conservation Plan

Description	Goal	Evaluation
System repairs	Replace older pipes	Collect data quarterly.
Enforcement of existing ordinances	Enforce the outdoor irrigation restrictions	Collect data quarterly.
Water Conservation Committee	Organize a Water Conservation Committee to monitor the WMCP	Organize quarterly meetings and evaluate implementation
Public conservation education	Distribute two water conservation newsletters per year with the utility bills	On going program
Conservation water rate structure	Implement the water rate structure adopted on 2012 and update ordinance during the 2016 fiscal year	Evaluate if the water rates conduce to a lower water use at least yearly.

Conclusions

- The implementation of the 2009 Water Conservation has produced a reduction on the culinary water use per capita
- The culinary water user per capita is lower than the state's average
- The use of pressurized irrigation needs some help to reduce the use below the state's average
- The 2014 Water Management and Conservation Plan was prepared to reduce the use of culinary and pressurized irrigation water