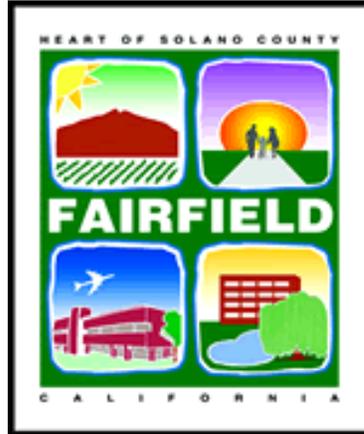


City of Fairfield, California



2010 Urban Water Management Plan

Adopted June 21, 2011

City of Fairfield – 2010 Urban Water Management Plan

City of Fairfield Plan Preparation

Water Utility Information

Fairfield, City of
1000 Webster Street
Fairfield
California
94533

Contact Information

Mr. Andrew Walker
Senior Management Analyst
City of Fairfield
Phone: 707-428-7487
Fax: 707-428-7607
Email: awalker@fairfield.ca.gov
1000 Webster Street
Fairfield, CA 94533

City of Fairfield – 2010 Urban Water Management Plan

Table of Contents

Section 1:	Plan Preparation (Section 10620)	6
1.1	Coordination	6
1.2	Plan Adoption, Submittal and Implementation	7
Section 2:	System Description Service Area Information with 25-Year Projections to 2035 (Section 10631(a))	8
2.1	Service Area Physical Description	11
2.2	Climate of Service Area	10
2.3	Population of Service Area	11
2.4	Demographic and Economic Factors	12
Section 3:	System Demands	13
3.1	Water Demands	13
3.2	Water Use by Customer Type	13
3.3	Sales to Other Agencies	16
3.4	Water Loss and Total Water Use	16
3.5	Baselines and Targets	18
3.6	Four Options for 2020 Target	20
3.7	Urban Water Use Target Method 1	21
3.8	Urban Water Use Target Method 2	22
3.9	Urban Water Use Target Method 3	23
3.10	Urban Water Use Target Method 4	24
3.11	Summary of Four Options	25
3.12	Water Reduction Plan	25
3.13	Other	26
Section 4:	System Supplies	27
4.1	Water Sources	27
4.2	Groundwater	28
4.3	Transfer Opportunitites	29
4.4	Desalination Water Opportunities	30
4.5	Recycled Water Opportunities	30
4.6	Future Water Projects	32
Section 5:	Water Supply Reliability and Water Shortage Contingency Plan	34
5.1	Water Supply Reliability	34
5.2	Water Shortage Contingency Planning	40
5.3	Water Quality	47
Section 6:	Demand Management Measures	48

Appendices:

Appendix A: Documentation of Public Notifications

Appendix B: Drought Measures Documents

Appendix C: School Education Material Example

City of Fairfield – 2010 Urban Water Management Plan

Tables¹:

Table 1: Coordination with Appropriate Agencies	6
Table 2: Population - Current and Projected	12
Table 3: Water Deliveries – Actual 2005	14
Table 4: Water Deliveries - Actual 2010.....	14
Table 5: Water Deliveries - Projected 2015.....	14
Table 6: Water Deliveries - Projected 2020.....	15
Table 7: Water Deliveries - Projected 2025, 2030 and 2035.....	15
Table 8: Low-income Projected Water Demands.....	16
Table 9: Sales to Other Water Agencies.....	16
Table 10: Additional Water Uses and Losses	16
Table 11: Total Water Use	17
Table 12: Retail Agency Demand Projections Provided to Wholesale Suppliers	17
Table 13: Base Period Ranges	18
Table 14: Base Daily per capita Water Use – 10 to 15 year range	18
Table 15: Base Daily per capita Water Use – 5 year range	19
Table 16: Water Supplies – Current and Projected.....	27
Table 17: Wholesale Supplies – Existing and Planned Sources of Water	27
Table 18: Groundwater – volume pumped.....	29
Table 19: Groundwater – volume projected to be pumped	29
Table 20: Transfer and exchange opportunities.....	30
Table 21: Recycled Water – wastewater collection and treatment.....	31
Table 22: Recycled Water – non-recycled wastewater disposal	31
Table 23: Recycled Water – potential future use	31
Table 24: Recycled Water – 2005 UWMP use projection compared to 2010 actual	32
Table 25: Methods to encourage recycled water use.....	32
Table 26: Future water supply projects	33
Table 27: Basis of water year data.....	34
Table 28: Supply reliability – historic conditions.....	34
Table 29: Factors resulting in inconsistency of supply	35
Table 30: Water Quality – current and projected water supply impacts	36
Table 31: Supply reliability – current water sources	36
Table 32: Supply and demand comparison – normal year	36
Table 33: Supply and demand comparison – single dry year	37
Table 34: Supply demand comparison – multiple dry-year events.....	38
Table 35: Water shortage contingency – rationing stages	41
Table 36: Water shortage contingency – mandatory prohibitions	43
Table 37: Water shortage contingency – consumption reduction methods.....	44
Table 38: Water shortage contingency – penalties and charges.....	44

¹ Numbered tables will be used for the DWR online submittal tool. Other tables are informational only.

City of Fairfield – 2010 Urban Water Management Plan

Additional Tables and Figures:

Figure 1: City of Fairfield General Location.....	8
Figure 2: Fairfield Water Utility Service Area Map	9
Figure 3: City of Fairfield Distribution System Delineation	10
Figure 4: Weather Statistics	11
Figure 5: City of Fairfield Population	11
Figure 6: Categories of Use	13
Figure 7: Four Target Methodologies	20
Figure 8: Option 1 Target	21
Figure 9: DWR Hydrologic Region Number	23
Figure 10: Option 4 Target	24
Figure 11: GPCD Target	25
Figure 12: Anticipated Growth Map.....	26
Figure 13: Fairfield Water Supply – “Normal Year”	35
Figure 14: Solano Project Members Agreement	42
Figure 15: Drought Respose Measures	43
Figure 16: Catasrophic Supply Interruption Plan	45
Figure 17: Prohibitions, Penalties and Consumption Redcuton Methods.....	46

2010 UWMP – Section 1: Plan Preparation

SECTION 1 – Plan Preparation

1.1 Coordination

The City of Fairfield reached out within our community and coordinated with surrounding agencies in the preparation of our Urban Water Management Plan. Table 1 outlines the coordination efforts of our City.

Table 1 Coordination with Appropriate Agencies - 2011 update						
Coordinating Agencies	Participated in UWMP Development	Commented on the Draft	Attended Public Meetings	Contacted for Assistance	Received Copy of the Draft	Sent notice of intention to adopt
Other Water Suppliers						
Vallejo	X				X	
Suisun City	X				X	
Benicia	X				X	
Vacaville	X				X	
Rio Vista	X				X	
Dixon	X				X	
SID	X				X	
Water Management Agencies						
SCWA	X			X	X	
Relevant Public Agencies						
Solano County						X
FSSD			X			
Other						
General Public			X			X
Public Library					X	
Posted on Internet					X	
Local Newspaper						X

2010 UWMP – Section 1: Plan Preparation

1.2 PLAN ADOPTION, SUBMITTAL, IMPLEMENTATION

There is an extensive set of notifications during the adoption process, documentation of submissions to the Department of Water Resources, and distribution of completion notices that are a required part of this Urban Water Management Plan. The following documents and actions are listed as requirements of the 2010 UWMP.

- A copy of the adoption resolution
- Documentation about how the 2010 Urban Water Management plan will be implemented.
- Documentation that within 30 days of submitting the Urban Water Management Plan to DWR, the adopted UWMP has been or will be submitted to the California State Library and any city or county to which the supplier provides water.
- Documentation that within 30 days of submitting the UWMP to DWR, the adopted UWMP has been or will be available for public review during normal business hours.

Many of these actions and documentation that demonstrate compliance with the UWMP development guidelines will be completed after this draft is reviewed and acted on by the City of Fairfield. The completed notices and documentation will be included in Appendix A.

2010 UWMP – Section 2: System Description

SECTION 2 – System Description

2.1 SERVICE AREA PHYSICAL DESCRIPTION

The City of Fairfield – water service area population of 102,090 in 2010 - is located mid-way between San Francisco and Sacramento and lies on the eastern edge of the SF Bay Area hydrologic region.

Our Municipal Water System operates within the corporate limits of the City of Fairfield, excluding Travis Air Force Base. The Water System’s service area encompasses approximately 22 square miles. The Water System’s treatment, storage and distribution system consists of 2 treatment plants, 11 reservoirs and approximately 378 miles of distribution lines. The Water System treats and delivers an average of 21 million gallons per day, with a rated treatment capacity of 56.7 million gallons per day to accommodate high use periods. The peak use day for the Water System to date has been 37.6 million gallons. The City presently has approximately 76 million gallons of treated water storage capacity.



Figure 1

2010 UWMP – Section 2: System Description

City of Fairfield Water System

16" and Over

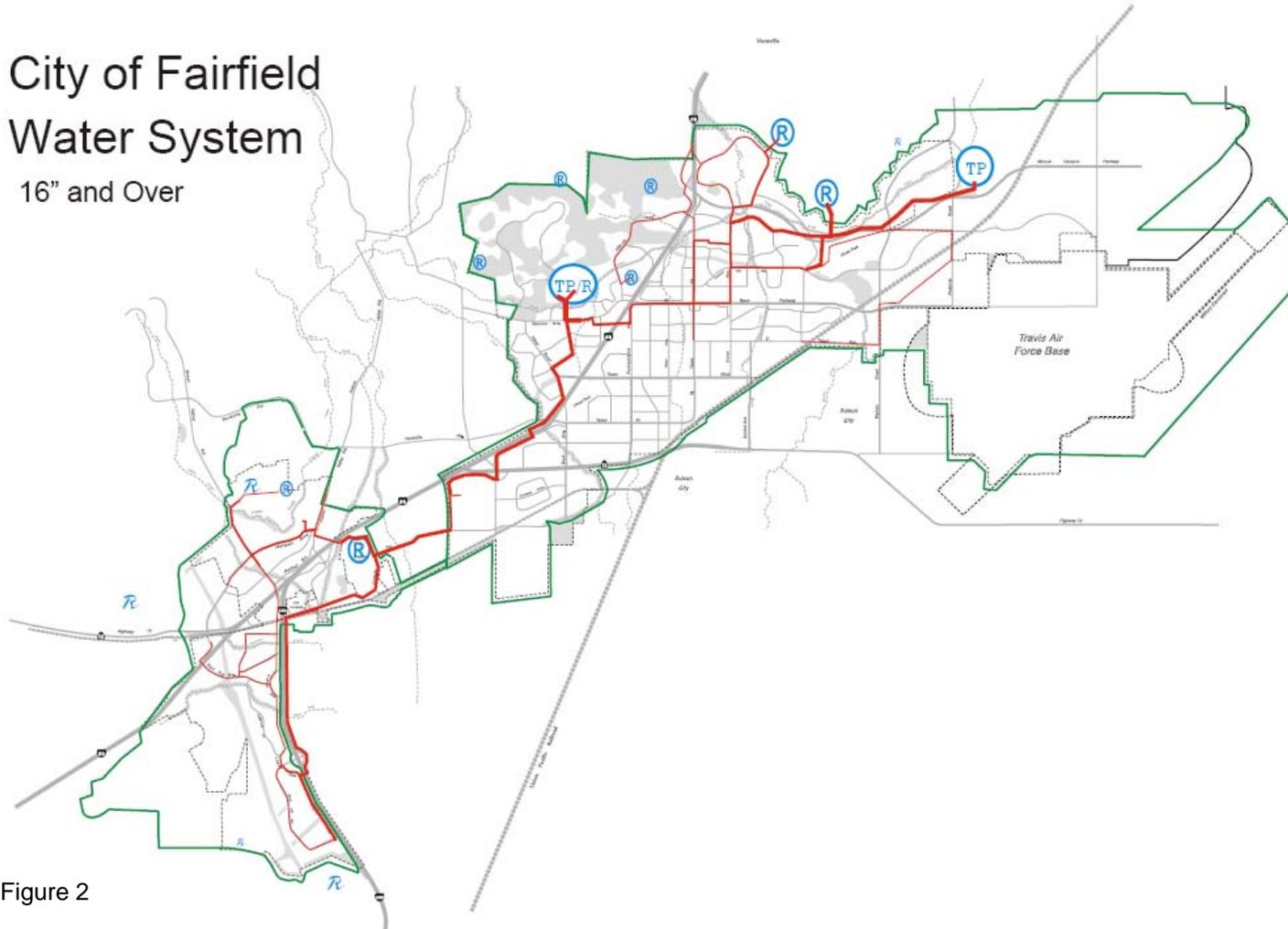


Figure 2

2010 UWMP – Section 2: System Description

The guidebook has suggested that we include a diagram showing the distribution system. The figure below defines the distribution system delineation of the City of Fairfield. Although there have been adjustments to treatment plants, and additions to the finished water storage system, the fundamental area served has not changed over the base period of this analysis.

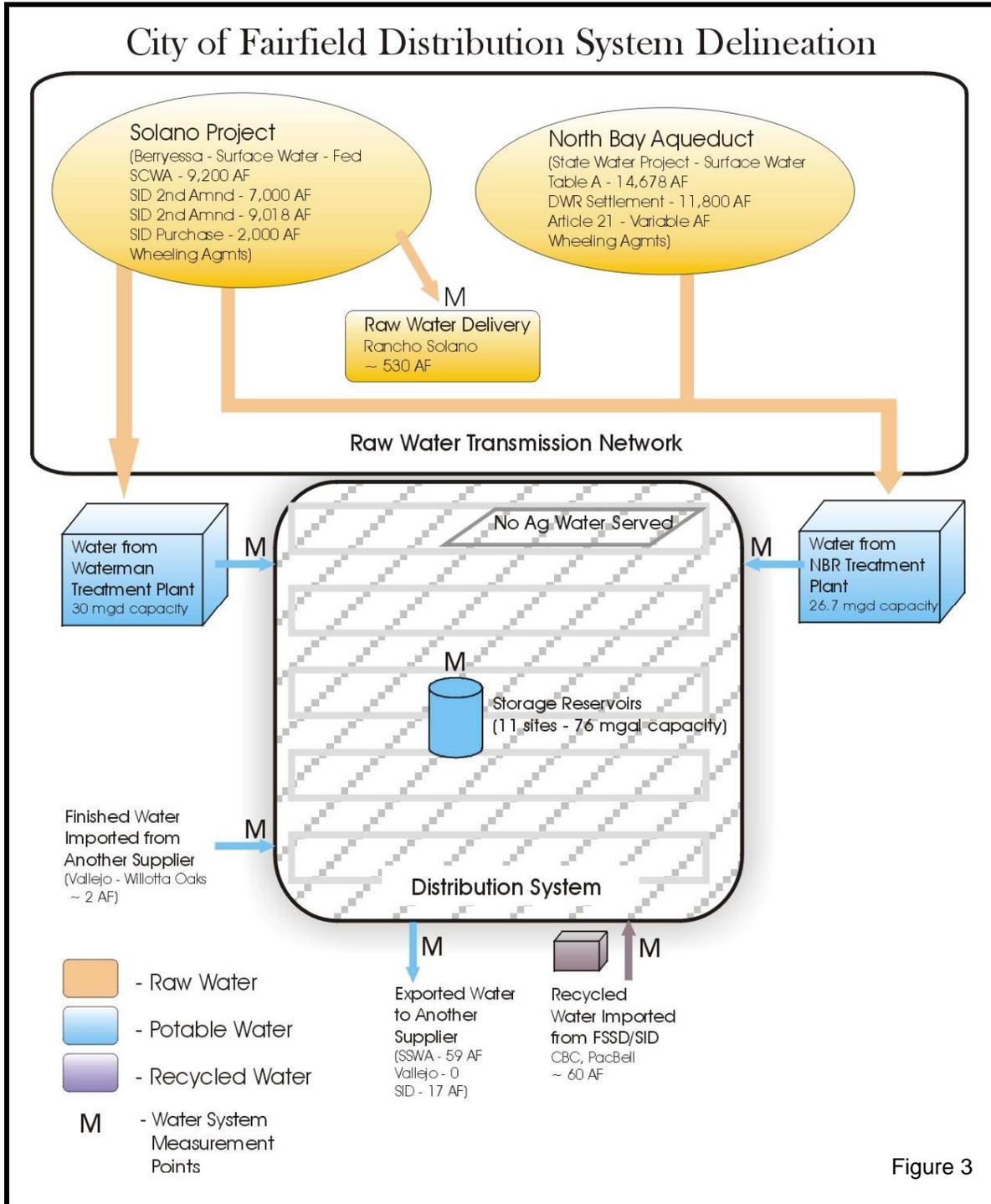


Figure 3

2010 UWMP – Section 2: System Description

2.2 CLIMATE OF SERVICE AREA

The average rainfall and average temperature information comes from the National Weather Service station 042934 for the City of Fairfield. The standard monthly average ETo comes from CIMIS stations 123 and 122 on the www.cimis.water.ca.gov/cimis/welcome.jsp web site.

The City borders the cooler bay area and warmer delta region – making summers 2 to 5 degrees cooler than inland Vacaville to the east and 2 to 5 degrees warmer than coastal Vallejo to the west. The City receives 90 percent of the annual rainfall between October and April. Measurable rainfall occurs on 50 to 60 days per year under normal conditions. The normal growing season is 244 days. There are periodic high winds off the Delta and heavy clay soils often making irrigation difficult. The local climate is classified as semi-arid temperate. Fairfield has a mild two-season Mediterranean climate that is typical of the Central Valley in California. Cool, moist-winters and warm-to-hot, dry summers characterize this area.

Weather Statistics														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Standard Monthly Avg ETo	CIMIS 123	0.6	1.34	3.01	4.67	5.84	6.96	7.95	6.84	5.25	3.81	1.41	0.88	48.26
	CIMIS 122	1.59	2.20	3.66	5.08	6.83	7.80	8.67	7.81	5.67	4.03	2.13	1.59	57.06
	Avg Precip	4.95	3.98	3.0	1.30	0.52	0.17	0.02	0.07	0.27	1.21	2.86	4.12	22.47
	Avg Temp	46.4	51.3	54.8	58.6	64.2	69.2	72.5	72.4	70.5	64.1	53.9	46.8	60.4
	Max Daily Temp	76	80	89	98	111	111	113	111	112	104	87	78	113
	Min Daily Temp	18	24	20	30	35	37	40	40	39	32	21	17	17

Figure 4

2.3 POPULATION OF SERVICE AREA

The Fairfield water utility service area includes Fairfield City and excludes portions of the Cordelia area and Travis Air Force Base.

Fairfield Population						
	2010	2015	2020	2025	2030	2035
ABAG Projections 2005 Jurisdictional Boundary	117,700	128,300	134,500	140,200	145,100	
ABAG Projections 2007 SSA	117,400	125,900	132,000	137,300	142,000	146,900
ABAG Projections 2009 SSA	113,900	118,000	121,200	124,200	126,700	129,400
OneBayArea.org Initial Scenario ABAG 2011	112,048	122,135	132,135	142,088	151,677	161,799
Less Travis AFB	10,000	9,000	8,000	7,000	7,000	7,000
Initial Vision Scenario w/o Travis	102,048	113,135	124,135	135,088	144,677	154,799
Fairfield Historical & Approved Capacity	102,090	111,970	120,970	129,970	138,970	147,970

Figure 5

2010 UWMP – Section 2: System Description

These data sources show several projections for future population. The 2005 Urban Water Management Plan used the top line. Population projections for the 2010 Urban Water Management Plan take each of these different projections into account and also adjust for the downturn in population growth through the last 3 years. The Fairfield historical and Approved Capacity forecast is less steep than the 2011 projections shown in the OneBayArea.org Initial Vision Scenario, adjusts for population that is within the city but outside of the water utility service area, and matches the historical trends of the water service area.

Population – Current and Projected (Table 2)

Table 2 Population — current and projected							
	2010	2015	2020	2025	2030	2035 - optional	Data source ²
Service area population¹	102,090	111,970	120,970	129,970	138,970	147,970	Blend of ABAG, Exclusions, and Specific Plans Approved by City Council

¹ Service area population is defined as the population served by the distribution system. See Technical Methodology 2: Service Area Population (2010 UWMP Guidebook, Section M).

² Provide the source of the population data provided.

2.4 DEMOGRAPHIC AND ECONOMIC FACTORS

Other demographic factors affecting water management include growth issues in the I-80 corridor between the Bay Area and Sacramento. Solano County, similar to other surrounding counties in the area, has experienced rapid urbanization in the last two decades. This growth is driven primarily by the rising cost of living in the San Francisco Bay Area, the availability of affordable housing in Solano County, and the proximity of these counties to both the Bay Area and Sacramento. The rate of population growth has averaged 2.0% over the past 10 years. One of the more recent factors affecting housing projections is the availability of rail service and the construction of a rail station in the North East Area of Fairfield, which is the major planned growth area of the community.

Economic growth factors affecting water supply include continued industrial growth in the food sector, which has been a water intensive use category.

Water Use Sectors of the Customer Base are addressed in Section 3.

2010 UWMP – Section 3: System Demands

SECTION 3 – System Demands

3.1 WATER DEMANDS

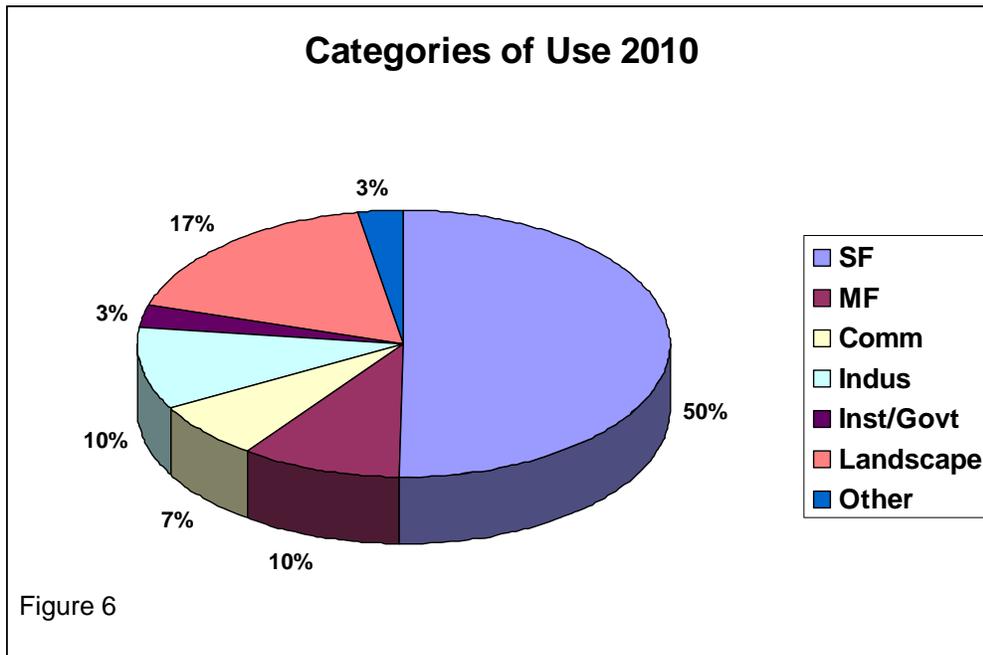
This section contains a series of tables that review recent water use and projections into the future. All water that is produced and distributed within the Fairfield Water Utility Service area is included in this analysis. Much of the information in this section will be in table form to comply with the requirements of the UWMP Guidebook from DWR.

This section also incorporates the target setting requirements for 20 x 2020 water conservation efforts as detailed in the Water Conservation Act of 2009 (also known as SB 7X-7) and the Technical Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use prepared by the California Department of Water Resources. Demand Management Measures to reduce system demands are included in Section 6.

3.2 WATER USE BY CUSTOMER TYPE

Tables 3 to 7 provide the basic information on actual and projected water use from the period of 2005 to 2035 in five year increments. The tables include the number of accounts in each sector and the volumes in million-gallons. All water deliveries and projections are for a fully metered system in the City of Fairfield.

The following figure shows total water use in 2010, broken into the sectors of use. This figure will help as we go through the tables of information that follow.



2010 UWMP – Section 3: System Demands

Table 3 Water deliveries — actual, 2005					
Water use sectors	2005				
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Single family	25,160	3,353	0	0	3,353
Multi-family	473	678	0	0	678
Commercial	923	496	0	0	496
Industrial	51	992	0	0	992
Institutional/governmental	145	164	0	0	164
Landscape	749	1,108	0	0	1,108
Agriculture	0	0	0	0	0
Other (Construction and Fire Use)	359	52	0	0	52
Total	27,860	6,842	0	0	6,842

Units: million gallons per year

Table 4 Water deliveries — actual, 2010					
Water use sectors	2010				
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Single family	25,661	2,963	0	0	2,963
Multi-family	444	582	0	0	582
Commercial	924	401	0	0	401
Industrial	73	589	0	0	589
Institutional/Governmental	151	166	0	0	166
Landscape	837	1,026	0	0	1,026
Agriculture	0	0	0	0	0
Other (Construction and Fire Use)	537	33	0	0	33
Total	28,627	5,759	0	0	5,759

Units: million gallons per year

Table 5 Water deliveries — projected, 2015					
Water use sectors	2015				
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Single family	28,411	3,484	0	0	3,484
Multi-family	456	781	0	0	781
Commercial	1,095	534	0	0	534
Industrial	80	1,396	0	0	1,396
Institutional/governmental	191	210	0	0	210
Landscape	1,043	1,341	0	0	1,341
Agriculture	0	-	0	0	0
Other (Construction and Fire Use)	550	45	0	0	45
Total	31,826	7,792	0	0	7,792

Units: million gallons per year

2010 UWMP – Section 3: System Demands

Water use sectors	2020				
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Single family	31,161	3,822	0	0	3,822
Multi-family	468	803	0	0	803
Commercial	1,247	609	0	0	609
Industrial	90	1,773	0	0	1,773
Institutional/governmental	218	238	0	0	238
Landscape	1,172	1,507	0	0	1,507
Agriculture	0	-	0	0	0
Other (Construction and Fire Use)	550	48	0	0	48
Total	34,906	8,800	0	0	8,800

Units: million gallons per year

Water use sectors	2025		2030		2035 - optional	
	metered		metered		metered	
	# of accounts	Volume	# of accounts	Volume	# of accounts	Volume
Single family	33,911	4,159	36,661	4,496	39,411	4,833
Multi-family	480	824	492	846	504	868
Commercial	1,397	682	1,545	755	1,674	818
Industrial	92	2,150	94	2,852	97	3,229
Institutional/governmental	258	284	199	329	331	365
Landscape	1,351	1,737	1,530	1,967	1,709	2,197
Agriculture	0	-	0	-	0	-
Other (Construction and Fire Use)	550	53	550	56	550	59
Total	38,039	9,889	41,171	11,301	44,276	12,369

Units: million gallons per year

The City of Fairfield has operated an affordable housing program since the formation of the Fairfield Redevelopment Agency. In reviewing housing progress between 1995 and 2009 the City was involved in developing or substantially rehabilitating 765 low-income and 505 very low-income households. The City currently has an affordable housing implementation plan which is expected to assist 840 units between now and the end of 2027 when the redevelopment project areas are completed. Much of the housing development and rehabilitation will not increase the water demand to the Fairfield Water Utility. The following table anticipates new development over this window.

Low –Income water projections are based on the historical pattern of Habitat for Humanity construction and an estimation of 25% of new multi-family housing being low-income housing. Fairfield and much of Solano County provides a lower cost housing alternative to the surrounding Bay Area counties.

The Fairfield Water Utility does not expect any limitation on low-income housing based on availability of water supply.

2010 UWMP – Section 3: System Demands

Low Income Water Demand Projections – mg/Year (Table 8)

Low Income Water Demands ¹	2015	2020	2025	2030	2035 - opt
Single-family residential	0.65	0.77	0.84	0.92	1.00
Multi-family residential	1.49	2.99	4.48	5.98	7.47
Total	2	4	5	7	8

Units: million gallons per year
¹ Provide demands either as directly estimated values or as a percent of demand.

3.3 SALES TO OTHER AGENCIES

The City of Fairfield has entered into agreements with adjoining agencies to provide water service in case of emergency. These agreements are expected to be limited in amount and irregular in use. Any sense of consistency or growth in these projections is not accurate at this time.

Sales to Other Agencies – mg/Year (Table 9)

Water distributed	2005	2010	2015	2020	2025	2030	2035 - opt
Suisun-Solano Water Authority	-	19	10	10	10	10	10
Vallejo	1	0	1	1	1	1	1
Solano Irrigation District	3	6	5	5	5	5	5
Total	4	25	16	16	16	16	16

Units: million gallons per year

3.4 WATER LOSS AND TOTAL WATER USE

Additional Water Uses and Losses are expected to adjust within future UWMP planning cycles. Fairfield is in early discussions regarding conjunctive use on a regional basis. Although not deliverable at this point, recycled water rights in conjunction with Fairfield-Suisun Sewer District may add supply reliability if balanced with the impacts on the Suisun Marsh environment.

Additional Water Uses and Losses – mg/Year (Table 10)

Water use ¹	2005	2010	2015	2020	2025	2030	2035 -opt
Saline barriers	0	0	0	0	0	0	0
Groundwater recharge	0	0	0	0	0	0	0
Conjunctive use	0	0	0	0	0	0	0
Raw water	0	0	0	0	0	0	0
Recycled water	0	0	0	0	0	0	0
System losses	694	848	866	978	1,099	1,256	1,374
Other (Define)	0	0	0	0	0	0	0
Total	694	848	866	978	1,099	1,256	1,374

Units: million gallons per year
¹ Any water accounted for in Tables 3 through 7 are not included in this table.

2010 UWMP – Section 3: System Demands

Total Water Use – mg/Year (Table 11)

Table 11 Total water use							
Water Use	2005	2010	2015	2020	2025	2030	2035 - opt
Total water deliveries (from Tables 3 to 7)	6,842	5,759	7,792	8,800	9,889	11,301	12,369
Sales to other water agencies (from Table 9)	4	25	16	16	16	16	16
Additional water uses and losses (from Table 10)	694	848	866	978	1,099	1,256	1,374
Total	7,540	6,632	8,674	9,794	11,004	12,573	13,759

Units: million gallons per year

Table 12 outlines the water demand projections that are provided to the wholesale suppliers of Fairfield's water. Under the water contracts relating to Fairfield, Solano County Water Agency (SCWA) acts as the administrator of the City's contracts. We have worked with SCWA and the other agencies in our region to plan for long term water supplies, but these efforts have worked around the principle that Fairfield's water contracts and entitlements were secured in our own local agency portfolio.

Table 12 Retail agency demand projections provided to wholesale suppliers AF/yr							
Wholesaler	Contracted Volume	2010	2015	2020	2025	2030	2035 - opt
SCWA - USBR Solano Project	28100	14700	15600	17000	18000	19200	20100
SCWA - DWR State Water Project	25030	7700	11100	13100	15200	18200	20400

2010 UWMP – Section 3: System Demands

3.5 BASELINES AND TARGETS

In the Water Conservation Act of 2009, each agency is required to establish a target for water conservation. There are four Options for establishing this target. An analysis of the baseline figures outlined in the law follows. The four target setting methods are built on this foundation.

Base	Parameter	Value	Units
10- to 15-year base period	2008 total water deliveries	7108	mg
	2008 total volume of delivered recycled water	14	mg
	2008 recycled water as a percent of total deliveries	0.2%	percent
	Number of years in base period ¹	10	years
	Year beginning base period range	1996	
	Year ending base period range ²	2005	
5-year base period	Number of years in base period	5	years
	Year beginning base period range	2003	
	Year ending base period range ³	2007	

Units: million gallons per year

¹ If the 2008 recycled water percent is less than 10 percent, then the first base period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first base period is a continuous 10- to 15-year period.

² The ending year must be between December 31, 2004 and December 31, 2010.

³ The ending year must be between December 31, 2007 and December 31, 2010.

Base period year		Distribution System Population	Annual gross water use (mg)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
Year 1	1996	77497	6,557	231
Year 2	1997	79156	6,787	235
Year 3	1998	81283	6,332	213
Year 4	1999	83410	6,709	220
Year 5	2000	85355	6,988	224
Year 6	2001	89188	7,255	223
Year 7	2002	90208	7,534	229
Year 8	2003	93637	7,682	225
Year 9	2004	94977	7,755	223
Year 10	2005	97386	7,558	213
Year 11				
Year 12				
Year 13				
Year 14				
Year 15				
Base Daily Per Capita Water Use¹				224

¹ Add the values in the column and divide by the number of rows.

2010 UWMP – Section 3: System Demands

Base period year		Distribution System Population	Annual gross water use (mg)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
Year 1	2003	93637	7,682	225
Year 2	2004	94977	7,755	223
Year 3	2005	97386	7,558	213
Year 4	2006	100147	7,649	209
Year 5	2007	101561	7,829	211
Base Daily Per Capita Water Use¹				216
<small>¹Add the values in the column and divide by the number of rows.</small>				

Population figures are simple in the Fairfield service area. The State of California Department of Finance web-site (<http://www.dof.ca.gov/budgeting/>) includes a Price and Population Factors Used for Appropriations Limit Calculations Report each year for each City in the state. Fairfield has a listing that separates exclusions, in our case Travis Air Force Base, and cleanly represents the water service area of our utility. There have been no changes in the general service area over the timeframe of the baseline calculations

Gross Water is calculated at the effluent meters of the City's two water treatment facilities.

The baselines were developed individually and represent the population and water use of the Fairfield Water Utility.

2010 UWMP – Section 3: System Demands

3.6 FOUR OPTIONS FOR 2020 TARGET

The Water Conservation Act of 2009 (also known as SBX7-7) has four basic ways to calculate the 2020 target for each agency. The language describing the target setting is found in state law and online.²

We have summarized the requirements for setting targets as follows:

Four Target Methodologies	
Target Options	Summary
1	Eighty percent of the urban retail water supplier's baseline per capita daily water use.
2	Water Efficiency Performance Standard based on the sum of the following: <ul style="list-style-type: none"> <input type="checkbox"/> Indoor residential water use of 55 gallons per capita per day (provisional). <input type="checkbox"/> Landscape Irrigation that meets the standards of the state's Model Water Efficient Landscape Ordinance. The limit of irrigation use shall not exceed the Maximum Applied Water Allowance. <input type="checkbox"/> Commercial, Industrial and Institutional water use will be reduced 10% from the baseline. Use that falls below these standards in 2015 and 2020 are deemed efficient.
3	Ninety-five percent of the 2020 target for the San Francisco Bay Area hydrologic region.
4	The California Department of Water Resources has detailed a target method as follows: <ul style="list-style-type: none"> <input type="checkbox"/> Residential use that saves 15 gallons per capita per day <input type="checkbox"/> Commercial, Industrial and Institutional water use will be reduced 10% from the baseline. <input type="checkbox"/> Landscape irrigation and water loss will be reduced by 21.6%

Figure 7

It is critical to note that provisions for economic growth and industrial process water were incorporated into the Water Conservation Act of 2009. Provisions that allow for

² An act to amend and repeal Section 10631.5 of, to add Part 2.55 (commencing with Section 10608) to Division 6 of, and to repeal and add Part 2.8 (commencing with Section 10800) of Division 6 of, the Water Code, relating to water. Website http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_0001-0050/sbx7_7_bill_20091110_chaptered.pdf

2010 UWMP – Section 3: System Demands

baseline adjustments are in process at the Department of Water Resources. Fairfield city staff was instrumental in including these provisions and are continuing to work with DWR to protect the economic interests of the City.

3.7 URBAN WATER USE TARGET METHOD 1

Fairfield’s Option 1 target is a 20% reduction from the baseline of 224 gallons per capita per day. With economic and weather conditions, the gallon per capita per day has fallen considerably from the baseline years of 1996 to 2005. The interim target for 2015 is 201 gpcd. The final target for 2020 is 179 gpcd.

The gallons per capita per day in 2010 is 177, which is below the 2020 target. It is anticipated that there will be pressure for water use to return closer to the baseline as drought conditions and economic conditions improve. Offsetting demand management measures (as outlined in Section 6) should make the interim target easily achievable. The 2020 target will be more difficult, but is within reach.

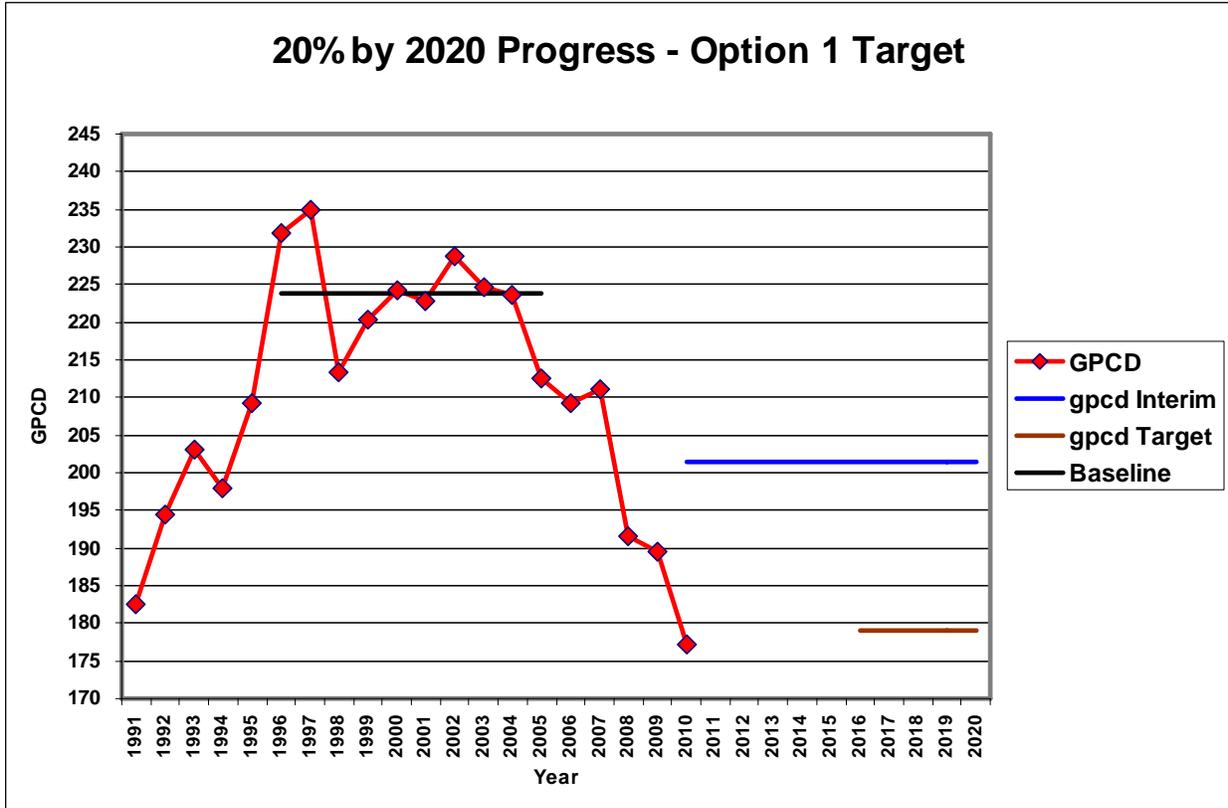


Figure 8

gpcd			
Max	235		
Base	224	96 to 05	
Interim	201	2015	10% Reduction
Target	179	2020	20% Reduction

2010 UWMP – Section 3: System Demands

3.8 URBAN WATER USE TARGET METHOD 2

Option 2 is the only option which ignores most past performance and establishes a standard of current water use efficiency. If the agency delivers water below this performance standard, it complies with the law. There are three components that make up the performance standard.

1. Indoor water use is limited to 55 gallons per capita per day.
2. Irrigated landscape is limited to the applicable standard for the Model Water Efficient Landscape Ordinance. This amount is based on Reference Evapotranspiration for our location, a factor in effect at the time of landscape installation and the actual square footage of landscape
3. Commercial, Industrial and Institutional water use is limited to 90% of a baseline period.

Although Option 2 is intriguing, it is the only Option based on future forecasts and has some difficulties which limit the ability to definitively set an accurate target. We do not know the exact square footage of irrigated landscape in 2015 or 2020. Also, by definition, the performance standard of 55 gallons per capita per day is “provisional” and is expected to be adjusted in 2015. Under current interpretations, it is questionable whether “lost water”, which by industry standard amounts to approximately 10% of produced water, will be allowed in calculating compliance.

Using 2009 data, Option 2 generates a target of 174 gallons per capita per day. This number is quite volatile, however. The target could be as low as 155 gallons per capita per day when it comes time to calculate compliance in 2020, based on changes to the indoor water efficiency goal, industrial growth and differences in landscape square footage numbers.

One important consideration is that the future gets clearer as we draw closer to 2020. The policies established by DWR allow an agency to change target methods as late as 2015. If this target gains clarity and appears to be a beneficial path to pursue, we can move to this option in 2015.

Currently, this option generates a target range of 155 to 174 gallons per capita per day.

2010 UWMP – Section 3: System Demands

3.9 URBAN WATER USE TARGET METHOD 3

Fairfield is part of the San Francisco Bay Area Hydrologic Region. In the Governor's 20 x 2020 Report, the regional target is 131 gallons per capita per day. 95% of this target is 124 gpcd. Being that Fairfield is on the eastern edge of our hydrologic region and we have a substantial CII base, this target is entirely out of the range of possibility for the City of Fairfield.

This figure was taken from the Governor's 20 x 2020 report. It shows the regional targets in the State of California. The San Francisco Bay Area hydrological region is number two.

	DWR Hydrologic Region Number									
	1	2	3	4	5	6	7	8	9	10
Baseline (1995-2005)	165	157	154	180	253	248	285	243	237	346
Interim Targets (2015)	151	144	139	165	215	211	237	208	204	278
Targets (2020)	137	131	123	149	176	174	188	173	170	211

Figure 9

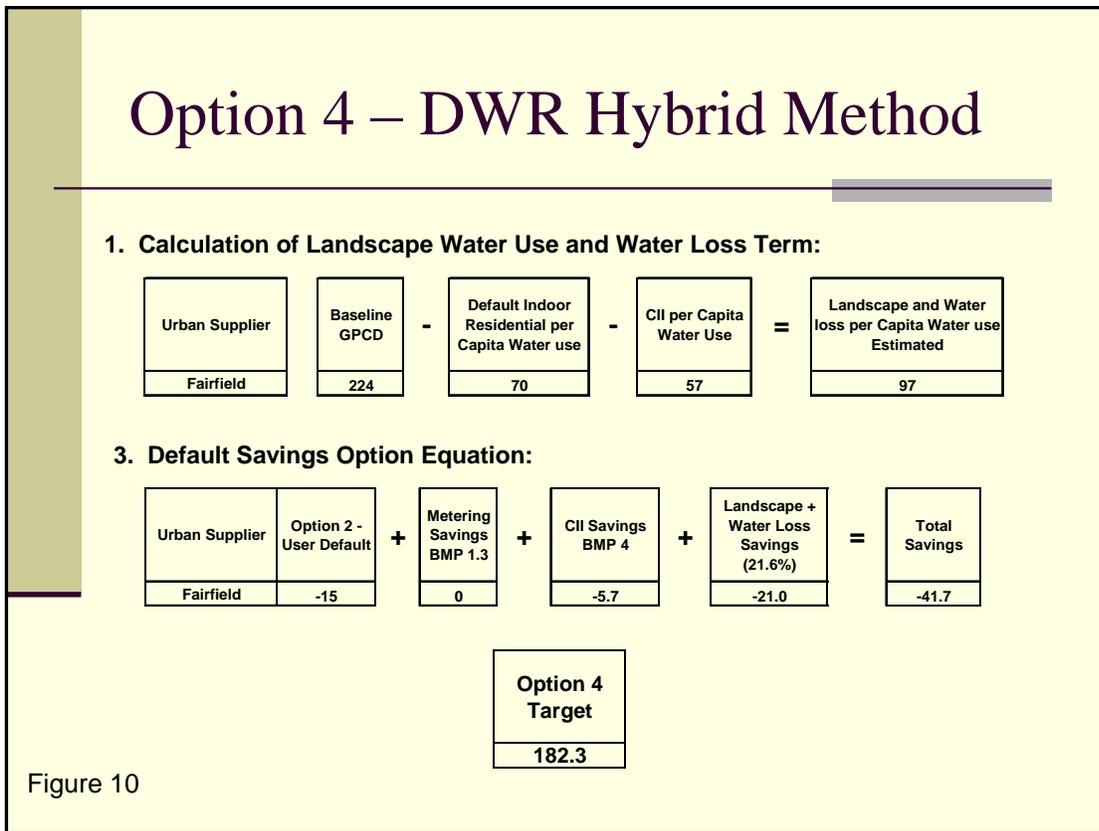
2010 UWMP – Section 3: System Demands

3.10 URBAN WATER USE TARGET METHOD 4

DWR has prepared a hybrid option that incorporates reductions by sector of use. Residential Indoor use is targeted for reduction from 70 to 55 gallons per capita per day, CII water use is expected to be reduced by 10%, and landscaping/water loss use is targeted for a 21.6% reduction.

This option is actually very similar to Option 2, but because it was prepared by DWR, several of the flaws inherent with Option 2 were fixed. Water loss is fully incorporated in the analysis. The model connects baseline water use to water produced at the plant as it enters the distribution system.

For Fairfield, this amounts to a target of 182.3 gpcd by 2020.



2010 UWMP – Section 3: System Demands

3.11 SUMMARY OF FOUR OPTIONS

In summary, the four options:

GPCD Targets

Method 1 - 20% Decrease from Base	Method 2 - 55 gpcd indoor, MAWA Landscape, 10% CII Reduction	Method 3 - 95% of Regional Target	Method 4 - DWR Hybrid
179	155 to 174	124	182.3

Figure 11

Although there is a chance that Option 2 may provide a higher target, Fairfield is planning to use Method 4, with an interim target of 203 gpcd and a 2020 target of 182.3 gpcd.

3.12 WATER USE REDUCTION PLAN

This section relates to water wholesalers. It does not apply to the City of Fairfield, which is strictly a water retailer.

3.13 OTHER

This figure shows the anticipated growth areas in the City of Fairfield. The light blue and light blue hatched areas show the primary growth area. This image is taken from the Solano County Local Agency Formation Commission Spheres of Influence map, May 2008. The water agency's service area does not absorb any existing water service areas during the growth period, and all expected growth is within the boundaries of the anticipated growth area of the City of Fairfield.

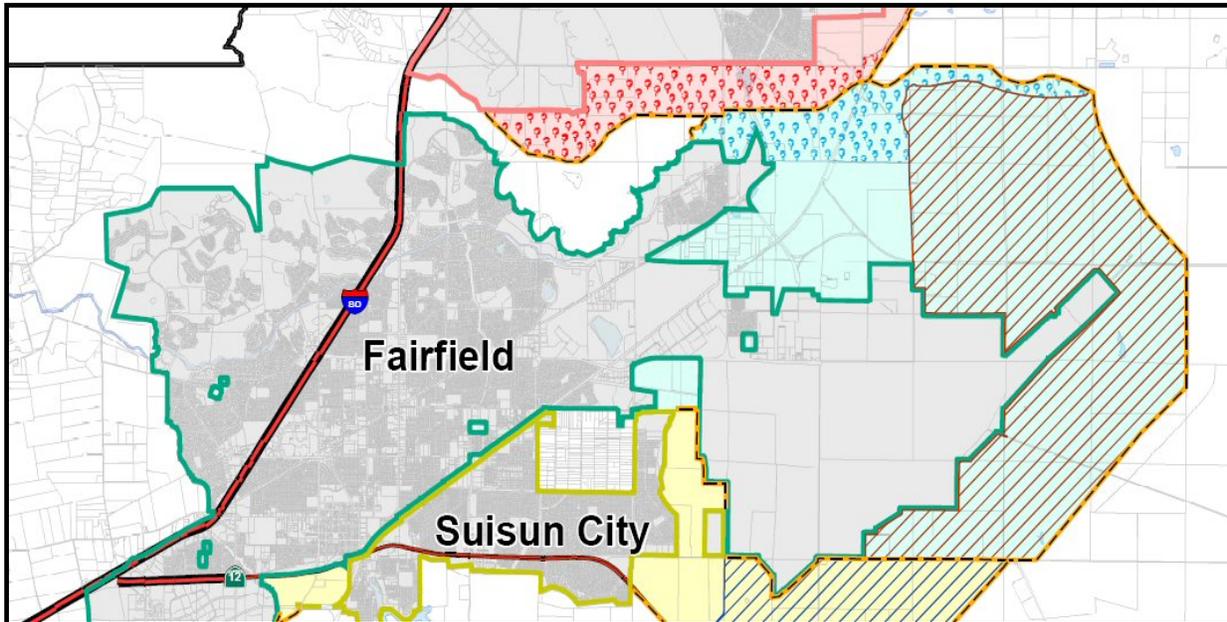


Figure 12

2010 UWMP – Section 4: System Supplies

SECTION 4 – System Supplies

4.1 WATER SOURCES

The primary water sources for the City of Fairfield are the Solano Project, the State Water Project, and “settlement water” obtained through negotiations with the Department of Water Resources in 2003. The two projects deliver water from Lake Berryessa and the Sacramento River respectively. Although legally not State Water Project water, settlement water is derived from the yield of the State Water Project.

Recycled water is a minor source of City water supply, but could possibly grow into a significant supply in the future. Potential industrial uses near the Fairfield-Suisun Sewer District have considered using recycled water for cooling towers and non-potable irrigation.

Water Supply Sources		2010	2015	2020	2025	2030	2035 - opt
Water purchased from ¹ :	Wholesaler supplied volume (yes/no)						
SCWA - USBR Solano Project	Yes	27700	27800	27900	28000	28000	28100
SCWA - DWR State Water Project	Yes	25030	25030	25030	25030	25030	25030
Supplier-produced groundwater ²							
Supplier-produced surface water							
Transfers in							
Exchanges In							
Recycled Water					600	1,200	1,800
Desalinated Water							
Other							
Other							
Total		52,730	52,830	52,930	53,630	54,230	54,930

Units (circle one): acre-feet per year
¹ Volumes shown here should be what was purchased in 2010 and what is anticipated to be purchased in the future. If these numbers differ from what is contracted, show the contracted quantities in Table 17.
² Volumes shown here should be consistent with Tables 17 and 18.

Wholesale sources ^{1,2}	Contracted Volume ³	2015	2020	2025	2030	2035 - opt
SCWA - USBR Solano Project - Surface	28,100	15600	17000	18000	19200	20100
SCWA - DWR State Water Project - Surface	25,030	11100	13100	15200	18200	20400

Units (circle one): acre-feet per year
¹ Water volumes presented here should be accounted for in Table 16.
² If the water supplier is a wholesaler, indicate all customers (excluding individual retail customers) to which water is sold. If the water supplier is a retailer, indicate each wholesale supplier, if more than one.
³ Indicate the full amount of water

2010 UWMP – Section 4: System Supplies

State Water Project (SWP) water and settlement water are delivered to the City via the North Bay Aqueduct (NBA) a component of the SWP. The NBA is 27 miles long starting from Barker Slough in the Delta and ending in Napa County. The Solano County branch of the NBA was complete in 1988. The State of California is the owner of the North Bay Aqueduct, and the Department of Water Resources is the operator. The City obtains SWP water through a “member unit” contract with Solano County Water Agency.

Settlement water is available to the City during delta “excess” conditions when standard water rights Term 91 is in effect. Excess conditions occur when the SWP and the federal Central Valley Project are unable to control flow to the Sacramento-San Joaquin Delta. Conversely, balanced conditions occur whenever the two projects are in control of delta inflows. Term 91 comes into effect during balanced conditions whenever the projects are required to release stored water to meet delta flow requirements. The City has determined that settlement water is a reliable supply because the City can schedule it to be fully utilized at least 9 out of 10 years.

The City delivers potable water supplies through its pressurized distribution system. Fairfield’s treatment and distribution facilities comprise two water treatment plants, 350 miles of pipe, 11 treated water storage reservoirs, and 12 pump stations. The capacity of the system is designed to be able to treat up to 56.7 million gallons per day and store up to 76.1 million gallons of water.

Wastewater from the Fairfield-Suisun area is treated at the Fairfield-Suisun Sewer District (FSSD). Due to requirements for discharge to Suisun Marsh, FSSD has produced tertiary effluent since the 1970s. In 2002, Fairfield entered an agreement with FSSD and Solano Irrigation District that provides the City with up to 12 million gallons per day of effluent for a recycled water supply. FSSD presently provides some recycled water to sites near the FSSD plant site for irrigation and industrial uses. Distribution facilities would need to be constructed to serve additional non-potable sites.

4.2 GROUNDWATER

The City of Fairfield does not use groundwater as a supply source. Groundwater in the area is brackish and unsuitable for irrigation or drinking water use without prohibitively expensive treatment. Groundwater is not used in the municipal water supply of Fairfield and is not considered a viable component of water in Fairfield because of tidal inflows that impact water quality.

Tables 18 and 19 show no groundwater use or anticipated use.

2010 UWMP – Section 4: System Supplies

Table 18						
Groundwater — volume pumped						
Basin name(s)	Metered or Unmetered¹	2006	2007	2008	2009	2010
None		0	0	0	0	0
Total groundwater pumped		0	0	0	0	0
Groundwater as a percent of total water supply		0.0%	0.00%	0.00%	0.00%	0.00%

Units (circle one): acre-feet per year
1Indicate whether volume is based on volumetric meter data or another method

Table 19					
Groundwater — volume projected to be pumped					
Basin name(s)	2015	2020	2025	2030	2035 - opt
None	0	0	0	0	0
Total groundwater pumped	0	0	0	0	0
Percent of total water supply	0.00%	0.00%	0.00%	0.00%	0.00%

Units (circle one): acre-feet per year
Include future planned expansion

4.3 TRANSFER OPPORTUNITIES

The City of Fairfield is not exploring any new out of area transfers or exchanges.

The City of Fairfield has entered into agreements with adjoining agencies to provide water service in case of emergency. These agreements are expected to be limited in amount and irregular in use.

The Solano County Water Agency (SCWA) has provided the following paragraphs as they pertain to transfers and exchanges:

SCWA, as a wholesaler, does not conduct exchanges or transfers on its own. SCWA does facilitate and assist cities and districts in transfers and exchanges.

2010 UWMP – Section 4: System Supplies

A thorough discussion of current transfers and exchanges is included in the Solano Agencies' Integrated Regional Water Management Plan.

One program SCWA is directly involved in is the SWP exchange agreement with the Mojave Water Agency. However, these exchanges only take place if a city provides NBA water for exchange. The amount to be exchanged is a maximum of 10,000 acre feet per year. Since this program is a two-for-one exchange, this would result in a maximum return obligation of 5,000 acre feet per year on the part of the Mojave Water Agency. The cumulative limit of the return obligation of the Mojave Water Agency is 20,000 acre feet at any one time. Currently there is a 5,500 acre feet return obligation on behalf of the City of Benicia. This is the only "out of county" exchange of transfer program SCWA is currently involved in.

Transfer agency	Transfer or exchange	Short term or long term	Proposed Volume
None			
Total			
<i>Units (circle one): acre-feet per year</i>			

4.4 DESALINATION WATER OPPORTUNITIES

Desalination is not being considered seriously, based on location and the availability of reliable surface supplies. Groundwater supplies of desalinated water would be the only viable candidate in our community. Drawing water from the Suisun Marsh, a critical environmental habitat within the primary area of the Bay-Delta, could create serious problems. Primarily because of these environmental and cost issues, we do not expect to pursue desalination opportunities within the planning window of the 2010 Urban Water Management Plan.

4.5 RECYCLED WATER OPPORTUNITIES

Recycled Water is planned in limited amounts for the far end of our planning window. Water would be taken from the Fairfield Suisun Sewer District effluent for non-potable use. This would displace the potable uses with non-potable supply within the area served by recycled distribution facilities. Diverting water from the Suisun Marsh discharge will necessitate environmental review as the water is currently released into the north end of the primary area of the Bay-Delta.

2010 UWMP – Section 4: System Supplies

Table 21 Recycled water — wastewater collection and treatment							
Type of Wastewater	2005	2010	2015	2020	2025	2030	2035 - opt
Wastewater collected & treated in service area	19,600	17,500	18,700	21,500	24,500	27,600	27,600
Volume that meets recycled water standard	19,600	17,500	18,700	21,500	24,500	27,600	27,600

Units (circle one): acre-feet per year

Table 22 Recycled water — non-recycled wastewater disposal							
Method of disposal	Treatment Level	2010	2015	2020	2025	2030	2035 - opt
Discharge into Suisun Marsh	Secondary 23	17,500	18,700	21,500	24,500	27,600	27,600
Total		17,500	18,700	21,500	24,500	27,600	27,600

Units (circle one): acre-feet per year

Table 23 Recycled water — potential future use								
User type	Description	Feasibility ¹	2015	2020	2025	2030	2035 - opt	
Agricultural irrigation								
Landscape irrigation ²					600	1,200	1,200	
Commercial irrigation³								
Golf course irrigation								
Wildlife habitat								
Wetlands								
Industrial reuse							600	
Groundwater recharge								
Seawater barrier								
Geothermal/Energy								
Indirect potable reuse								
Other (user type)								
Other (user type)								
Total			0	0	0	600	1,200	1,800

Units (circle one): acre-feet per year

1 Technical and economic feasibility.
 2 Includes parks, schools, cemeteries, churches, residential, or other public facilities)
 3 Includes commercial building use such as landscaping, toilets, HVAC, etc) and commercial uses (car washes, laundries, nurseries, etc)

2010 UWMP – Section 4: System Supplies

Use type	2010 actual use	2005 Projection for 2010 ¹
Agricultural irrigation	200	200
Landscape irrigation ²	0	360
Commercial irrigation ³		
Golf course irrigation		
Wildlife habitat	17,300	21,000
Wetlands		
Industrial reuse	0	40
Groundwater recharge		
Seawater barrier		
Geothermal/Energy		
Indirect potable reuse		
Other (user type)		
Other (user type)		
Total	17,500	21,600

Units (circle one): acre-feet per year
1From the 2005 UWMP. There has been some modification of use types. Data from the 2005 UWMP can be left in the existing categories or modified to the new categories, at the discretion of the water supplier.
2Includes parks, schools, cemeteries, churches, residential, or other public facilities)
3Includes commercial building use such as landscaping, toilets, HVAC, etc) and commercial uses (car washes, laundries, nurseries, etc)

Actions	Projected Results					
	2010	2015	2020	2025	2030	2035 - opt
Financial incentives						
Capital Improvements				600	1,200	1,800
Total	0	0	0	600	1,200	1,800

Units (circle one): acre-feet per year

4.6 FUTURE WATER PROJECTS

The Solano County Water Agency provided these paragraphs in relation to future water projects that are being considered in the County, and which the City of Fairfield may be able to participate in should they be feasible.

The February 2005 Solano Agencies' Integrated Regional Water Management Plan (IRWMP) identifies numerous water supply projects and

2010 UWMP – Section 4: System Supplies

programs to be considered for implementation. The direction in the IRWMP is to look at groundwater conjunctive use as a potential way of addressing dry year shortages. None of these conjunctive use projects have been developed enough to be classified as a “planned water supply project”.

However, in 2009 SCWA received a Proposition 50 grant for a pilot conjunctive use well and a groundwater monitoring program that could lead towards a conjunctive use project. The test conjunctive use well was completed February 2011 and pilot testing will commence during the 2011 irrigation season. The test results will be analyzed for, 1) future groundwater pumping capacity, 2) potential interactions between groundwater and surface water delivery canals, 3) potential for changes in groundwater quality caused by groundwater pumping, and 4) capital, operations and maintenance costs for groundwater infrastructure. Details of any operational conjunctive use will be developed over the next five years and will be included in the 2015 UWMP.

Table 26
Future water supply projects

Project name ¹	Project ed start date	Project ed comple tion date	Potenti al project constra ints ²	Normal- year supply ³	Single- dry year supply ³	Multiple- dry year first year supply ³	Multiple- dry year second year supply ³	Multiple-dry year third year supply ³
None								
Total			0	0	0	0	0	0

Units (circle one): acre-feet per year

1Water volumes presented here should be accounted for in Table 16.

2Indicate whether project is likely to happen and what constraints, if any, exist for project implementation.

3Provide estimated supply benefits, if available.

2010 UWMP – Section 5: Supply Reliability

SECTION 5 – Water Supply Reliability and Water Shortage Contingency Planning

5.1 WATER SUPPLY RELIABILITY

The UWMP Act requires analysis of reliability for each of the sources of water supply. Table 5 summarizes the reliability of supply for all sources. The following figures provide reliability estimates for each water source independently.

Table 27					
Basis of water year data					
Water Year Type	Base Year(s)¹			Historical Sequence	
	State Water Project SCWA Specific		Solano Project	State Water Project, SCWA Specific	Solano Project
	2009 Data	2029 Data	Ultimate		
Average Water Year	1979	1928	2005	1922- 2003	1906- 2007
Single-Dry Water Year	1994	1960	2001		
Multiple-Dry Water Years	1929-34	1989-1992	1931-34		

¹Base years were selected by identifying the year of each Water Year Type within the Historical Sequence with reliability most closely matching the average reliability of the Water Year Type over the Historical Sequence. Refer to the SCWA tables attached to the August 10, 2010 Memorandum on UWMP Reliability Data for the basis of this information.

Table 28						
Supply reliability — historic conditions						
Supply Source	Average / Normal Water Year	Single Dry Water Year	Multiple-Dry Water Years			
			Year 1	Year 2	Year 3	Year 4
State Water Project (2009 Data, SCWA Specific)	64%	63%	37%	33%	36%	39%
State Water Project (2029 Data, SCWA Specific)	64%	46%	24%	38%	39%	29%
Solano Project (ultimate)	99%	98%	100%	98%	80%	78%
Percent of Average/Normal Year						
SWP 2009 Data + SP Ultimate	100%	99%	95%	93%	78%	76%
SWP 2029 Data + SP Ultimate	100%	95%	93%	94%	78%	74%

2010 UWMP – Section 5: Supply Reliability

Table 29 Factors resulting in inconsistency of supply							
Water supply sources ¹	Specific source name, if any	Limitation quantification	Legal	Environmental	Water quality	Climatic	Additional information
State Water Project		Hydrologic conditions				x	Results in variable runoff
State Water Project		Water rights conditions	X	x	x		Endangered Species Act requirements
Solano Project		Drought				x	Voluntary reductions coordinated by agreement between Participating Agencies
Solano Project		Downstream flow requirements	X	x			Regulated by legal settlement
Solano Project		Upstream diversions	X				Limited by settlement agreement and administrated by water master

Fairfield Water Supply – “Normal Year”						
Water Supply Source	2010	2015	2020	2025	2030	2035/Opt
USBR Solano Project						
Fairfield Entitlement	9200	9100	9100	9100	9100	9100
SID 2 nd Exchange (A)	7000	6900	6900	6900	6900	6900
SID 2 nd Purch. Opt. (B)	9020	8900	8900	8900	8900	8900
2009 Supplemental Purchase (C)	2000	2000	2000	2000	2000	2000
SID '87 JPA (D)	500	600	700	800	800	900
DWR State Water Project						
Fairfield Entitlement	7340	9400	9400	9400	9400	9400
DWR Settlement	11800	11800	11800	11800	11800	11800
Recycled Water						
Phase I	0	0	0	600	600	600
Phase II		0	0	0	600	1200
Total Supply	46860	48700	48800	49500	50100	50800

* This table is also used in Section 4.1.

Figure 13

2010 UWMP – Section 5: Supply Reliability

Table 30							
Water quality — current and projected water supply impacts							
Water source	Description of condition	2010	2015	2020	2025	2030	2035 - opt
Solano Project		0	0	0	0	0	0
State Water Project		0	0	0	0	0	0
<i>Units (circle one): acre-feet per year</i>							

Table 31				
Supply reliability — current water sources				
Water supply sources¹	Average / Normal Water Year Supply²	Multiple Dry Water Year Supply²		
		Year 2011	Year 2012	Year 2013
Solano Project	28,200	25,098	25,098	25,098
State Water Project	21,200	14,714	14,714	14,714
Recycled	0	0	0	0
Percent of normal year:	100.0%	80.6%	80.6%	80.6%
<i>Units (circle one): acre-feet per year</i>				
<i>¹From Table 16.</i>				
<i>²See Table 27 for basis of water type years.</i>				

Table 32					
Supply and demand comparison — normal year					
	2015	2020	2025	2030	2035 - opt
Supply totals (from Table 16)	48,700	48,800	49,500	50,100	50,800
Demand totals (From Table 11)	30,460	32,620	36,080	39,420	42,120
Difference	18,240	16,180	13,420	10,680	8,680
Difference as % of Supply	37.5%	33.2%	27.1%	21.3%	17.1%
Difference as % of Demand	59.9%	49.6%	37.2%	27.1%	20.6%
<i>Units are in acre-feet per year.</i>					

2010 UWMP – Section 5: Supply Reliability

Table 33					
Supply and demand comparison — single dry year					
	2015	2020	2025	2030	2035 - opt
Supply totals^{1,2}	48,300	48,400	49,100	49,700	50,400
Demand totals^{2,3,4}	30,460	32,620	36,080	39,420	42,120
Difference	17,840	15,780	13,020	10,280	8,280
Difference as % of Supply	36.9%	32.6%	26.5%	20.7%	16.4%
Difference as % of Demand	58.6%	48.4%	36.1%	26.1%	19.7%

Units are in acre-feet per year.

¹*Consider the same sources as in Table 16. If new sources of water are planned, add a column to the table and specify the source, timing, and amount of water.*

²*Provide in the text of the UWMP text that discusses how single-dry-year water supply volumes were determined.*

³*Consider the same demands as in Table 3. If new water demands are anticipated, add a column to the table and specify the source, timing, and amount of water.*

⁴*The urban water target determined in this UWMP will be considered when developing the 2020 water demands included in this table.*

2010 UWMP – Section 5: Supply Reliability

Table 34 Supply and demand comparison — multiple dry-year events						
		2015	2020	2025	2030	2035 - opt
Multiple-dry year first year supply	Supply totals ^{1,2}	41,450	41,550	42,250	42,850	43,550
	Demand totals ^{2,3,4}	30,460	32,620	36,080	39,420	42,120
	Difference	10,990	8,930	6,170	3,430	1,430
	Difference as % of Supply	26.5%	21.5%	14.6%	8.0%	3.3%
	Difference as % of Demand	36.1%	27.4%	17.1%	8.7%	3.4%
Multiple-dry year second year supply	Supply totals ^{1,2}	41,450	41,550	42,250	42,850	43,550
	Demand totals ^{2,3,4}	30,460	32,620	36,080	39,420	42,120
	Difference	10,990	8,930	6,170	3,430	1,430
	Difference as % of Supply	26.5%	21.5%	14.6%	8.0%	3.3%
	Difference as % of Demand	36.1%	27.4%	17.1%	8.7%	3.4%
Multiple-dry year third year supply	Supply totals ^{1,2}	41,450	41,550	42,250	42,850	43,550
	Demand totals ^{2,3,4}	30,460	32,620	36,080	39,420	42,120
	Difference	10,990	8,930	6,170	3,430	1,430
	Difference as % of Supply	26.5%	21.5%	14.6%	8.0%	3.3%
	Difference as % of Demand	36.1%	27.4%	17.1%	8.7%	3.4%

Units are in acre-feet per year.

¹ Consider the same sources as in Table 16. If new sources of water are planned, add a column to the table and specify the source, timing, and amount of water.

² Provide in the text of the UWMP text that discusses how single-dry-year water supply volumes were determined.

³ Consider the same demands as in Table 3. If new water demands are anticipated, add a column to the table and specify the source, timing, and amount of water.

⁴ The urban water target determined in this UWMP will be considered when developing the 2020 water demands included in this table.

The reliability values for the City of Fairfield are affected dramatically by the storage facilities available to the city (the ability to carryover supplies from both the SWP and Solano Project supplies). Long term storage allows the city to swap single dry year and multiple dry year values in our planning priorities. There is no single year event that carries the weight of multiple dry year events, whereas some utilities must weight their planning toward driest year events.

2010 UWMP – Section 5: Supply Reliability

State Water Project

The City of Fairfield receives water from the State Water Project under two separate arrangements.

First, there is a contractual arrangement as an original contractor with the State of California. This water entitlement is similar in reliability to all other agencies in the project agreement, subject to reductions based on the anticipated deliveries from the project as a whole.

A second portion of water received from the State Water Project is DWR Settlement Agreement water which is based on Watershed of Origin entitlement. This water has a higher level of reliability. The working figures that follow will show the reliability factors of these two portions of State Water Project source water independently. In the tables prepared for submission to DWR, the sources will be blended

Information on the reliability of the State Water Project (SWP) supply comes from a DWR Study 2009 – SCWA Specific.

In order to categorize the water year type into dry and normal years, the Sacramento Valley Water Year Index, also known as the 40/30/30 index was used. The Sacramento Valley Index uses 40% of April through July runoff, 30% of October through March runoff and 30% of the previous year's index. The Sacramento Valley Index is used to determine water year types in State Water Resources Control Board Decision 1641. We have assigned a Sacramento Valley Index to each of the years that it has hydrologic records.

Note that the SWP also makes available Article 21 water that is available to SWP contractors under specified conditions when the Delta is in excess conditions and there is pumping capacity available. Fairfield receives its water from the North Bay Aqueduct (NBA). Current DWR policy is that Article 21 water is available whenever the Delta is in excess (out of balance) conditions. This makes Article 21 water available to NBA users more frequently than SWP contractors relying upon the Banks pumping plant (South Delta SWP export facility). For the purposes of this UWMP, Article 21 deliveries are not included although they can be a significant additional supply most years.

There are numerous factors that affect the reliability of SWP supplies. The main factor is hydrologic conditions that result in extremely variable runoff conditions. The SWP has storage from Oroville Reservoir, however most of the SWP water supply comes from Sacramento Valley runoff. There are a myriad of environmental, water quality and legal constraints on the SWP that affect water supply reliability. The water rights for the SWP are conditioned upon meeting various water quality and environmental conditions including the Federal Endangered Species Act. The models used to develop the SWP reliability data incorporate these constraints.

2010 UWMP – Section 5: Supply Reliability

Solano Project

For the Solano Project a similar year type index was developed based upon procedures similar to the Sacramento Valley index. An existing model exists for the Solano Project that uses hydrologic records from 1906 through 2007. Using similar assumptions as the Sacramento Valley 40/30/30 Index, year types were assigned to each of the years in the Solano Project model resulting in a Lake Berryessa Index that identifies wet, normal and dry years.

The Allocation process for water supplies from the Solano Project is very different than for the SWP. For the Solano Project, the contract with USBR calls for the full contract amount to be delivered unless it is physically impossible to deliver the water from Solano Project storage (i.e. reservoir is dry). Therefore, the full contract water supply is allocated until there is no water available in the reservoir.

The Solano Project member agencies (including the City of Fairfield) have entered into a separate agreement to reduce deliveries based upon storage levels in Lake Berryessa. Once the storage level drops below 800,000 acre feet, as measured on April 1, 95% of contract amounts are delivered with 5% being stored in the reservoir as carryover. If the reservoir drops below 550,000 acre feet by April 1, 90% can be delivered and 10% is stored as carryover. The City of Fairfield has the ability to carryover more than this amount if we desire. Once the reservoir level is below 400,000 acre feet on April 1, the member agencies can use their full allocation and any stored carryover. For more information see the Drought Measures Agreement in Appendix B.

5.2 WATER SHORTAGE CONTINGENCY PLANNING

The City of Fairfield addresses water shortages through two integrated components. First, we have a standard water shortage contingency plan which is included within this Urban Water Management Plan. Second, Fairfield has entered into the Solano Project Members' Agreement as to Drought Measures and Water Allocation. This agreement allows for the shifting of resources from agricultural to municipal and Industrial uses in the event of drought conditions and storage depletion. This second tier of drought response will provide for a regional approach to drought response.

Stages of Action

The City of Fairfield has developed a four staged response program to deal with water shortages. Each stage consists of specific prohibitions, regulations, fines, penalties, and rate structure to encourage the appropriate level of conservation. Though all four stages have both voluntary and mandatory components, none can be considered a rationing program because they do not strictly limit water use. However, Stages III and IV are most restrictive primarily due to the landscape irrigation component, which prohibits irrigation of any decorative landscaping. The following table outlines the stages of action in the Water Shortage Contingency Plan.

2010 UWMP – Section 5: Supply Reliability

Table 35 Water shortage contingency — rationing stages to address water supply shortages		
Stage No.	Water Supply Conditions	% Shortage
1	Solano Project At or above 800,000 AF	10%
2	Solano Project 600,000 - 800,000 AF	25%
3	Solano Project 400,000 - 600,000 AF	35%
4	Solano Project 200,000 - 400,000 AF	50%
<i>1One of the stages of action must be designed to address a 50 percent reduction in water supply.</i>		

SCWA and the Participating Agencies entered into the “Solano Project Members’ Agreement as to Drought Measures and Water Allocation” (the Drought Measures Agreement) in 1999. Per the Drought Measures Agreement deliveries of Solano Project water are reduced based upon storage levels in Lake Berryessa. Once the storage level drops below 800,000 AF, as measured on April 1 of each year, 95% of contract amounts are delivered with 5% being stored in the reservoir as carryover. If the reservoir drops below 550,000 AF by April 1, 90% can be delivered and 10% is stored as carryover. Participating agencies have the ability to carryover more than this amount if they desire. Once the reservoir level is below 450,000 AF on April 1, the participating agencies can use their full allocation and any stored carryover. For reference the following table has been prepared to clarify the amounts of water delivered and retained in Lake Berryessa depending on the storage in the lake.

2010 UWMP – Section 5: Supply Reliability

Solano Project Members' Agreement as to Drought Measures and Water Allocation Table of Drought-Induced Curtailments of Solano Project Deliveries					
<i>Storage in Lake Berryessa, in acre-feet</i>		800,000 - 1,600,000	550,000 - 800,000	450,000 - 550,000	less than 450,000
<i>% of Annual Entitlement to be Restricted (Mandatory Curtailments)</i>		0%	5%	10%	0%
<i>% of Annual Entitlement Available</i>		100%	95%	90%	100%
Annual Entitlement in acre-feet					
<i>Solano Project Participating Agency</i>	<i>Entitlements to Annual Deliveries</i>				
Solano Irrigation District	141,000	141,000	133,950	126,900	141,000
Fairfield	9,200	9,200	8,740	8,280	9,200
Vacaville	5,600	5,600	5,320	5,040	5,600
City of Suisun City	1,600	1,600	1,520	1,440	1,600
Maine Prairie	15,000	15,000	14,250	13,500	15,000
Vallejo	14,750	14,750	14,013	13,275	14,750
Total	187,150	187,150	177,793	168,435	187,150
Restricted Carryover in acre-feet					
Solano Irrigation District		0	7,050	14,100	0
Fairfield		0	460	920	0
Vacaville		0	280	560	0
City of Suisun City		0	80	160	0
Maine Prairie		0	750	1,500	0
Vallejo		0	738	1,475	0
Total		0	9,358	18,715	0

Figure 14

Note that these Solano Project storage volumes differ from those in the Drought Measures Agreement between Member Agencies. The Water Shortage Contingency Plan stages are meant to reduce demand while the Drought Measures Agreement stages are meant to adjust the supply priority in extreme conditions. Although not required by DWR, the Drought Measures Agreement has significant local impact affecting water supply reliability.

2010 UWMP – Section 5: Supply Reliability

Drought Response Measures Demand vs. Supply Reductions				
Water Conservation Requirements (Demand Reductions)			Solano Project Drought Measures Agreement Drought-Induced Curtailments of Deliveries (the Drought Measures Agreement) (Supply Reductions)	
Water Shortage Stage	Water Use Reduction Target	Solano Project Storage	Solano Project Storage	Percentage of Annual Entitlement to be Restricted
1	10%	Greater than 800,000 af	Greater than 800,000 af	0%
2	25%	600,000 - 800,000 af	550,000 - 800,000 af	5%
3	35%	400,000 - 600,000 af	450,000 - 550,000 af	10%
4	50%	200,000 - 400,000 af	Less than 450,000 af	0%

Figure 15

While tied directly to Lake Berryessa storage volumes, the Water Shortage Stages and Conservation Conditions can be declared by the City of Fairfield in response to any Water Shortage which is required, whether caused by system failures, natural catastrophes or drought conditions.

Table 36 Water shortage contingency — mandatory prohibitions	
Prohibitions	Stage When Prohibition Becomes Mandatory
Controllable Water Leaks	Always
New Installation of single pass cooling systems using potable water	Always
Landscape Irrigation between Non and 6:00 pm	Always
Washing or paved areas except to protect public health and safety	Stage 1
Running water for washing of buildings	Stage 2
Landscape Irrigation (none)	Stage 3
Hydrant Flushing	Stage 3
Construction of new pools, spas, etc.	Stage 3
New Construction (without existing permit)	Stage 4
Filling of pools, spas, decorative fountains, etc.	Stage 4

2010 UWMP – Section 5: Supply Reliability

Table 37		
Water shortage contingency — consumption reduction methods		
Consumption Reduction Methods	Stage When Method Takes Effect	Projected Reduction (%)
Single Family Tiered Rate Surcharges in blocks (3 or 4 depending on the Stage of Response)	Stage 1 - 4	10 to 50%
Non Single Family Volume Charge Increases	Stage 1 - 4	10 to 80%
Behavior Prohibitions as in Table 36	Stage 1 - 4	10 to 20%
Regulations imposed on Private, Business and Construction Practices	Stage 1 - 4	5 - 10%
Fines and Penalties (Increasing with Stage)	Stage 1 - 4	10 - 25%

Table 38	
Water shortage contingency — penalties and charges	
Penalties or Charges	Stage When Penalty Takes Effect
Penalty for excess use	Stage 0 - 4
Penalty for non-correction of water waste practice	Stage 0 - 4
Installation of Flow Restrictor upon 4th offense	Stage 0 - 4

Although not required under DWR standards for the Urban Water Management Plan, practices to offset catastrophic losses have been a practice in the City of Fairfield. The following table lists potential supply interruptions and actions which have been taken to offset these potential disruptions.

2010 UWMP – Section 5: Supply Reliability

Catastrophic Supply Interruption Plan

Possible Catastrophe	Summary of Actions
Regional Power Outage	<p>City has installed approximately 2 days of finished water storage. The system is pressurized almost entirely by gravity feed from the reservoirs.</p> <p>Some pump stations have been affected by power outages in the past. The utility has responded by sending portable generators to provide stop-gap pumping power.</p>
Earthquake	<p>City has installed approximately 2 days of finished water storage. The system is pressurized almost entirely by gravity feed from the reservoirs.</p>
Flooding	<p>Communications systems are prepared to allow for distribution system routing and contamination containment. Public communications are established to notify of any water use restrictions.</p> <p>Distribution testing procedures are established to check for contamination restrictions under backflow or intrusion conditions.</p>
Landslide	<p>With two water sources, the City of Fairfield is protected against Putah South Canal being impacted by landslide along the canal-way.</p>

Figure 16

2010 UWMP – Section 5: Supply Reliability

Prohibitions, Penalties and Consumption Reduction Methods – Summary Table

	Normal	Stage 1 – Recovery Program	Stage II – Drought Response	Stage III – Critical Drought	Stage IV – Emergency Response
RATE STRUCTURE		3 Tiers	3 Tiers	4 Tiers	4 Tiers
<u>Single-Family Rates</u>					
Surcharge/Tier 1	None	25% > 60ccf (approx 750 gpd)	40% > 40ccf (approx 500 gpd)	60% >28 ccf (approx 350 gpd)	100% >16 ccf (approx 200 gpd)
Surcharge/Tier 2	None	50% > 80ccf (approx 1000 gpd)	80% > 60ccf (approx 750 gpd)	120% > 40ccf (approx 500 gpd)	200% > 32ccf (approx 400 gpd)
Surcharge/Tier 3	None	N/A	N/A	200% > 60ccf (approx 750 gpd)	300% > 40ccf (approx 500 gpd)
Exceptions/Water Allotments	None	Large Family Large Lot Medical	Large Family Large Lot Medical	Large Family Medical	Medical
<u>Non Single-Family</u>					
Commercial/Industrial	No Volume Increase	3% Volume Increase	7% Volume Increase	11% Volume Increase	15% Volume Increase
Multi-family	No Volume Increase	3% Volume Increase	7% Volume Increase	11% Volume Increase	15% Volume Increase
Irrigation	No Volume Increase	5% Volume Increase	11% Volume Increase	500% Volume Increase	1000% Volume Increase
PROHIBITIONS	Controllable water leaks New installation of single-pass cooling systems using potable water Landscape Irrigation between Noon and 6:00 pm (Daylight savings time only) (Ordinance 94-23)	Normal prohibitions plus... Washing of paved areas except to protect public health and safety	Stage I prohibitions plus... Running water for washing of buildings, etc.	Stage II prohibitions plus... Landscape irrigation (none) Hydrant flushing Construction of new pools, spas, etc.	Stage III prohibitions plus... New construction (without existing permit) Filling of pools, spas, decorative fountains, etc.
REGULATIONS		Washing of vehicles to be done at commercial car wash or with controllable water source such as bucket or hose with shut-off nozzle	Stage I regulations plus... Restaurants serve water only upon request Hotels, etc. to post notice or drought conditions Reclaimed water for construction if feasible.	Stage II regulations plus... Reclaimed water only for construction projects	Stage III regulations
FINES/PENALTIES	(Ordinance 94-23)				
1 st Offense	Written warning	Written warning	Written warning	\$50 fine	\$100 fine
2 nd Offense	\$25 fine	\$50 fine	\$50 fine	\$100 fine	\$200 fine
3 rd Offense	\$50 fine	\$100 fine	\$100 fine	\$200 fine	\$350 fine
4 th Offense	\$100 and installation of flow restrictor	\$250 and installation of flow restrictor	\$250 and installation of flow restrictor	\$350 and installation of flow restrictor	\$500 and installation of flow restrictor

Figure 17

Any or all of these components in each stage may be enacted, by determination of the Public Works Director, in order to meet the demand reduction goal for that response stage.

2010 UWMP – Section 5: Supply Reliability

Draft Ordinance and Use Monitoring Procedure

The City of Fairfield Water Shortage Contingency Plan was adopted in 1994. The updated version of the City's Water Shortage Contingency Plan is incorporated herein. Use monitoring will be done by reviewing daily production records from the City's water treatment plants. This information is readily available and is updated on a daily basis. Weekly reviews of production and storage adjustments will provide adequate detail to monitor the effectiveness of water reduction measures.

5.3 WATER QUALITY

Water Quality is a critical issue in relation to water supply. The City of Fairfield water treatment facilities have had substantial impact on our ability to treat water to increasing standards of finished water. Since our existing sources are surface water which has not been compromised in any significant way, water quality is anticipated to have no impact on source reliability.

Impacts of the new water rights application on water quality have been judged to be negligible. Added entitlements needed to meet water demand in the City of Fairfield have been thoroughly analyzed under the most recent water rights application.

2010 UWMP – Section 6: Demand Management Measures

SECTION 6 – DEMAND MANAGEMENT MEASURES (DMMs)

The City of Fairfield will continue to implement the sound water conservation practices outlined in the California Urban Water Conservation Council Memorandum of Understanding.

As a part of this report, CUWCC members are to incorporate our 2009 and 2010 reports. The attached reports are still subject to approval and modification to represent the conservation activities of the City of Fairfield. As changes are made over the next several years, conservation practices will be adjusted to reflect the Best Management Practices of the water industry.

The fields in red are required.

Agency name:
Reporting unit name (District name):
Reporting unit number:

Primary contact:
First name:
Last name:
Email:

You must enter the reporting unit number we have on record for your agency. Click here to open a table to obtain this number.

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See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP: [?](#)

2009

BMP 1.1 Operations Practices

Comments:

Conservation Coordinator

Conservation Coordinator Yes No

Contact Information

First Name:
Last Name:
Title:
Phone:
Email:

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

Water Waste Prevention

Water Agency shall do one or more of the following:

- a. Enact and enforce an ordinance or establish terms of service that prohibit water waste
- b. Enact and enforce an ordinance or establish terms of service for water efficient design in new development
- c. Support legislation or regulations that prohibit water waste
- d. Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
- e. Support local ordinances that prohibit water waste
- f. Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

- a. A description of, or electronic link to, any ordinances or terms of service
- b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
- c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
- d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description. [?](#)

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

Enter a description:

The fields in red are required.



Agency name: City of Fairfield Dept of Public Works

Primary contact:

First name: Andrew

Reporting unit name (District name): City of Fairfield Dept of Public Works

Last name: Walker

Reporting unit number: 57

Email: awalker@fairfield.ca.gov

You must enter the report number with agency. Click here to open a table to obtain this number. **Submit Form**

[link to FAQs](#)

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2009 BMP 1.2 Water Loss Control

Did your agency complete a pre-screening system audit in 2009? Yes No

If yes, answer the following:

Determine metered sales in AF: 20,024.00

Definition: other accountable uses not included in metered sales, such as unbilled water use, fire suppression, etc.

→ Determine system verifiable uses AF: 105.00

Determine total supply into the system in AF: 21,597.00

Does your agency keep necessary data on file to verify the answers above? Yes No

Did your agency complete a full-scale system water audit during 2009? Yes No

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? Yes No

Did your agency operate a system leak detection program? Yes No

Comments:

The fields in red are required.

Agency name:

Primary contact:

First name:

Reporting unit name
(District name)

Last name:

Reporting unit number:

Email:

You must enter the
Submit Form
agency. Click here to open
a table to obtain this
number.



[Link to FAQs](#)

2009 BMP 1.2 Water Loss Control

[View MOU](#)



AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software Yes No
Email to natalie@cuwcc.org - Worksheets ([AWWA Water Audit](#)). Enter the name of the file below:

Water Audit Validity Score
from AWWA spreadsheet

Agency Completed Training In The AWWA Water Audit Method Yes No

Agency Completed Training In The Component Analysis Process Yes No

Completed/Updated the Component Analysis (at least every 4 years)? Yes No

Component Analysis Completed/Updated Date

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective Yes No

Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective Yes No

Type of Program Activities Used to Detect Unreported Leaks

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)
177	\$68,384.00	\$509,773.00	10	<input type="text"/>	\$1,074,800.00	<input type="text"/>

Comments:

version 1.0

2010

The fields in red are required.

Agency name:

Primary contact:

You must enter the reporting unit number

Reporting unit name (District name):

Last name:

Submit Form

Reporting unit number:

Email:

agency. Click here to open a table to obtain this number.



BMP 1.3 Metering with Commodity

[Link to FAQs](#)

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP: [?](#)

Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

Please Fill Out The Following Matrix

Account Type ?	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume ?	Billing Frequency Per Year	# of estimated bills/yr
Commercial	968	968	968	Bi-monthly	5,808
Industrial	69	69	69	Bi-monthly	414
Industrial	2	2	2	Monthly	24
Institutional	154	154	154	Bi-monthly	924
Fire Lines	393	393	393	Bi-monthly	2,368
Dedicated Irrig	826	826	826	Bi-monthly	4,956
Single-Family	26,194	26,194	26,194	Bi-monthly	157,184
Multi-Family	476	476	476	Bi-monthly	2,856
Other	177	177	177	Bi-monthly	1,062
Select a Cust				Other	

Number of CII Accounts with Mixed-use Meters

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

General Comments about BMP 1.3:

The fields in red are required.

Primary contact:

You must enter the reporting unit number agency. Click here to open a table to obtain this number.

Agency name: City of Fairfield Dept of Public Works

First name: Andrew

Submit Form

Reporting unit name (District name): City of Fairfield Dept of Public Works

Last name: Walker

Reporting unit number: 57

Email: awalker@fairfield.ca.gov



BMP 1.4 Retail Conservation Pricing

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2009

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue	Commodity Charges	Total Revenue	Customer Meter/Service (Fixed Charges)
Uniform	Commercial	1,088,500.00		865,657.00	
Uniform	Industrial	1,850,831.00		664,068.00	
Uniform	Institutional	418,192.00		428,207.00	
Uniform	Dedicated Irrigation	1,836,185.00		3,613.00	
Uniform	Single-Family	7,792,899.00		6,194,111.00	
Uniform	Multi-Family	1,386,131.00		2,098,301.00	
Uniform	Other	146,191.00		186,613.00	

Implementation Option (Conservation Pricing Option)

- Use Annual Revenue As Reported
- Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service Yes No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue	Commodity Charges	Total Revenue	Customer Meter/Service (Fixed Charges)
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				

Comments:

Ratios have fallen as water use has dropped 8.5% over last year.

Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP? Yes No

Enter the name(s) of the wholesale agency (comma delimited)

Solano County Water Agency

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):

solanosaveswater.org

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

Facebook and social media links; Update of rebates to include toilets, clothes washers, turf replacement and SMART Irrigation timers; Business and commercial water savings program added; Water-wise Gardening for Solano County added as an on-line resource.

Did at least one Website Update take place during each quarter of the reporting year? Yes No

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount	Personnel Costs Included? <small>If yes, check the box.</small>	Comments
Public Outreach	\$5,664	<input type="checkbox"/>	Intern Costs Included
		<input type="checkbox"/>	

Comments:

The fields in red are required.



Agency name: Primary contact: First name: Last name: Email:

Reporting unit name (District name):

Reporting unit number:

Click here to open a table that displays your agency reporting unit name reporting unit number. Please ensure that you enter the correct information.

Submit Form

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2009

BMP 2.1 Public Outreach Cont'd

[View MOU](#)

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?
Events	\$3,000	<input checked="" type="checkbox"/> If yes, check the check box.
Demo Garden	\$859	<input type="checkbox"/>
Radio Campaign (Downtown Green)	\$1,305	<input type="checkbox"/>
Water efficient Plant Cards	\$500	<input type="checkbox"/>

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes No

Public Outreach Additional Information

Public Information Programs	Importance
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? Yes No

Describe the brand, theme or mascot.

Market Research

Have you sponsored or participated in market research to refine your message? Yes No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservation committee?

Yes No

Enter the names of the community committees:

Training

Training Type	# of Trainings	# of Attendees	Description of Other

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description

Partnering Programs - Partners

Name

Type of Program

CLCA?

Green Building Programs?

Master Gardeners?

Cooperative Extension?

Local Colleges?

Other

Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

0

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

Working with PG&E on SMART Irrigation projects

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

Vacant Lot Rehabilitation in Downtown (City Center Redevelopment Project Area), Discovery Kingdom Demonstration Garden

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.

Agency name: City of Fairfield Dept of Public Works

Reporting unit name (District name) City of Fairfield Dept of Public Works

Reporting unit number: 57

Primary contact:

First name: Andrew

Last name: Walker

Email: awalker@fairfield.ca.gov

Click here to open a table that displays your agency name, reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Submit Form



[Link to FAQs](#)

2009

BMP 2.2 School Education Programs, Retail Agencies

[View MOU](#)

School Programs

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP?

Yes No

Enter Wholesaler Names, separated by commas:

Materials meet state education framework requirements?

Description of Materials

WEF Workbooks, Project WET Training materials, Waterways training in conjunction with UC Davis; All About Water; Waves, Wetlands and Watersheds; California Water Story; Fountains of Columbia; Water Precious Water; Hands-on Water Activities; Groundwater Education; California Water Problems; Project Water Science

Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

Water and Me; Save Water; Water Play; Salmonid Savers; Water Fun; Discovering Drought; California Water Works and Why it Does; Conserve Water Student's Booklet; Discover Storm Water; Captain Hydro

Number of students reached

228

Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

California Water Works and Why It Does; Conserve Water Student's Booklet; Discover Storm Water; Captain Hydro; Enviroscape Model; Groundwater Model; Watershed & California Maps; Water Test Kit; Cadillac Desert Videos

Number of Distribution

105

Annual budget for school education program

\$7,708.00

Description of all other water supplier education programs

Coast Weeks; Sponsor of High School Science Fair; Rush Ranch - Suisun Marsh Education Program; Lynch Canyon - Watershed Explorers Program; Faculty In-Service Presentations at Your School; Conserve Water Bookmark Art Contest; Waterways

School Program Activities

Classroom presentations:

Number of presentations

12

Number of attendees

333

Large group assemblies:

Number of presentations

14

Number of attendees

840

Children's water festivals or other events:

Number of presentations

1

Number of attendees

60

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations

0

Number of attendees

0

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description

Number distributed

Staffing children's booths at events & festivals:

Number of booths

Number of attendees

Water conservation contests such as poster and photo:

Description

Number distributed

Offer monetary awards/funding or scholarships to students:

Number Offered

Total Funding

Teacher training workshops:

Number of presentations

Number of attendees

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:

Number of tours or field trips

Number of participants

College internships in water conservation offered:

Number of internships

Total funding

Career fairs/workshops:

Number of presentations

Number of attendees

Additional program(s) supported by agency but not mentioned above:

Description

Number of events (if applicable)

Number of participants

Total reporting period budget expenditures for school education programs (include all agency costs):

Comments

The fields in red are required.

Agency name:

Reporting unit name (District name):

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

Submit Form
 We have an account for your agency. Click here to open a table to obtain this number.



[Link to FAQs](#)

[View MOU](#)

2009

BMP 3 Residential

Traditional
 (Sections A - D)

Flex Track
 (All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fields within the flex track boxes.

You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in form which are necessary to show that the measure was implemented as described.

A) Residential Assistance / Leak Detection

Flex Track	Traditional			Total Water Savings AF/YR	Measured Water Savings AF/YR
		Single Family	Multi Family		
	Total Number of Accounts	<input type="text" value="25,882.00"/>	<input type="text" value="445.00"/>	<input type="text"/>	<input type="text"/>
	Total Number of Participants Overall	<input type="text" value="263.00"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
	Total Number of Leak Det Surveys	<input type="text" value="263.00"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
	Total Number of Showerheads	<input type="text" value="39.00"/>	<input type="text" value="18.00"/>	<input type="text"/>	<input type="text"/>
	Total Number of Faucet Aerators	<input type="text" value="57.00"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
	Total Number of Landscape Water Survey	<input type="text" value="263.00"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
	Number of Other Components	<input type="text" value="116.00"/>			
	Description of Other Components Distributed	<input type="text" value="Hose Nozzles, Toilet Leak Detection Tablets, Hose Timers"/>			

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
 (Enter the file name and Email file to Natalie@cuwcc.org)

B) High Efficiency Clothes Washers (HECWs)

Flex Track	Traditional			Measured water savings (AF/Year)
				<input type="text"/>
	Number of incentives for HECWs with an AVERAGE Water Factor of 5.0	<input type="text" value="542.00"/>		
	Are Financial incentives provided for HECWs ?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
	Has your Agency completed a HECW Market Penetration Study (this question does not impact your coverage report, purely informational)	<input type="radio"/> Yes <input checked="" type="radio"/> No		
	HECW Market Penetration Study Documents (Enter the file name and Email file to Natalie@cuwcc.org)	<input type="text"/>		

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) WaterSense Specification (WSS) Toilets

(Agency must complete information for at least one coverage option (For Traditional 1, 2, or 3; For Flex Track 1, 2, 3, or 4).
You are encouraged to include information on other coverage options, as available.
If seeking credit for additional water savings, you must select Flex Track option)

Traditional	1. Retrofit Resale Ordinance is in Place <input type="radio"/> Yes <input checked="" type="radio"/> No If Yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org) <input type="text"/>
	2. A 75% Market Saturation Achieved <input type="radio"/> Yes <input checked="" type="radio"/> No If yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org) <input type="text"/>
Flex Track	3. WSS Toilets Installed
	Number of WSS Toilets Installed
	Single Family Multi Family
	49.00 74.00
Measured Water Savings AF/YR	
4. Non-WSS Toilets	
Type of Toilets	
Select an Option	
Number of Toilets	
Water Savings	
Multi Family	
Number of Toilets	
Water Savings	
Description of Other Non-WSS Type of Toilets	
<input type="text"/>	
If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org	
<input type="text"/>	

D) WSS for New Residential Development

(Agency must complete information for at least one coverage option. You are encouraged to include information on other coverage options, as available. If seeking credit for additional water savings you must select the Flex Track option)

Traditional

	Single Family	Multi Family
Residential development Rebates	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Recognition Programs	Yes <input checked="" type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Reduced connection Fees	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Ordinances	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>

New Development Ordinance
 (Enter the file name and Email file to Natalie@cuwcc.org)

Number of new Single Family Units built in Service Area

Number of new Multi Family Units built in Service Area

In the following table, enter one row for each incentive typr program you offer

List of Incentive Amount

Incentive Type	Incentive Amount	Number of WSS fixtures installed	Number of Participating		Measured Water Savings	
			Single Family	Multi Family	Single Family	Multi Family

If you are using your own water-savings measure, send your supporting spreadsheet
 Enter the file name and Email to Natalie@cuwcc.org

Flex Track

For Traditional Option, Stop Here, do not go further.
For Flex Track Option, please continue...

Flex Track Menu Options

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Fill in the water savings measures that your agency has implemented.

The fields in red are required.



Agency name: Primary contact:
 Reporting unit name (District name): First name:
 Reporting unit number: Last name:
 Email:

Submit Form
 We have an record for your agency. Click here to open a table to obtain this number.

2009

[Link to FAQs](#)

[View MOU](#)

BMP 4 CII

Traditional FlexTrack
 (Section A - L) (All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fields within the flex track boxes.

You must enter all measured water savings manually in the summary cells on the right. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings was measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in the flex track data entry form which are necessary to show that the measure was implemented as described.

CII Type of measure implemented

Traditional	A) High - Efficiency Toilets.		Measured water savings (AF/Year) <input type="text"/>
	Number	<input type="text" value="0"/>	
Flex Track	Type of program	<input type="text" value="Direct install"/>	Council's Annual Water Savings 0.041748 AF per device
	Other type of program	<input type="text"/>	
	Do you accept the Council's default savings number for this measure? <input type="radio"/> Yes <input type="radio"/> No		
	If not, Please provide the following:		
Total Measured Water Savings(AF/Year)	<input type="text"/>		
Measure life (years)	<input type="text"/>		
Lifetime water savings (years)	<input type="text"/>		
If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org			
<input type="text"/>			

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

L) Dry Vacuum Pumps.

Traditional	Number	<input type="text" value="0"/>	Measured water savings (AF/Year) <input type="text"/>
	Type of program	Select an Option	
	Other type of program	<input type="text"/>	

Flex Track

Do you accept the Council's default savings number for this measure ? Yes No

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

Council's Annual Water Savings 0.064 AF per device

Traditional Reporting Stop Here, Do not continue

Flex Track Reporting Please Continue...

M) Industrial Process Water Use Reduction.

Traditional	Number	<input type="text" value="1"/>	Measured water savings (AF/Year) <input type="text" value="307.00"/>
	Type of program	Other	
	Other type of program	System wide water use reduction effort at Anheuser Busch brewery. Corporate competition between plants to reduce per barrel water use per barrel of product.	

Type of Process Water Reduced

If re-using water, what was the secondary use of the water? (such as pre-rinse cycle or landscaping)



The fields in red are required.

Agency name:

Reporting unit name (District name):

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that a table to obtain this number.

Submit Form

2009

BMP 5 Landscape

[Link to FAQs](#)
View MOU

Traditional Flex Track

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fields within the flex track boxes.

You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data point also requested in form which are necessary to show that the measure was implemented as described.

Accounts with Dedicated Irrigation Meters

Traditional	Number of dedicated irrigation meter accounts	<input type="text" value="814.00"/>
	Number of dedicated irrigation meter accounts with water budgets	<input type="text" value="148.00"/>
	Aggregate water use for dedicated non-recreational landscape accounts with budgets	<input type="text" value="1,378.00"/>
	Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	<input type="text" value="523.00"/>
	Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	<input checked="" type="radio"/> Yes <input type="radio"/> No
Flex Track	Water Savings from Accounts with dedicated irrigation meters with water budgets (Acre Feet)	<input type="text"/>
	If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)	
	<input type="text"/>	

Technical Assistance

Traditional	Number of Accounts 20% over-budget	<input type="text" value="30.00"/>	Measured water savings (AF/Year) <input type="text"/>
	Number of accounts 20% over-budget offered technical assistance	<input type="text" value="0.00"/>	
	Number of accounts 20% over-budget accepting technical assistance	<input type="text" value="2.00"/>	
Flex Track	If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)		
	<input type="text"/>		

Irrigation Water Use Surveys for Mixed-use and Un-metered Accounts

Traditional	Number of mixed use and un-metered accounts	<input type="text" value="72.00"/>	Measured water savings (AF/Year)
	Number of irrigation water use surveys offered (cumulative, all years)	<input type="text" value="5.00"/>	
	Number of irrigation water use surveys accepted (cumulative)	<input type="text" value="5.00"/>	
	Can your Agency estimate the amount of landscape acreage for mixed use and Un-metered accounts	<input type="radio"/> Yes <input checked="" type="radio"/> No	
	If Yes, Aggregate acreage for mixed use and Un-metered accounts	<input type="text"/>	
Flex Track	Estimated water demand from acreage for mixed use and Un-metered accounts	<input type="text"/>	
	Annual water savings by customers receiving irrigation water savings surveys and implementing recommendations	<input type="text"/>	
	If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)		<input type="text"/>

Financial Incentives

Traditional	Have you implemented and maintained an irrigation equipment retrofit incentive program? <input type="radio"/> Yes <input checked="" type="radio"/> No			Measured Water Savings (AF/YR)	
	Number of incentives	Dollar value of incentives	Incentive Types		
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>
If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)					
<input type="text"/>					

Traditional Reporting Stop Here, Do not continue
Flex Track Reporting Please Continue...

The fields in red are required.

Agency name:
Reporting unit name (District name):
Reporting unit number:

Primary contact:
First name:
Last name:
Email:

You must enter the reporting unit number we have on record for your agency. Click here to open a table to obtain this number.

[Submit Form](#)



[Link to FAQs](#)

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP: [?](#)

2010

BMP 1.1 Operations Practices

Comments:

Conservation Coordinator

Conservation Coordinator Yes No

Contact Information

First Name:
Last Name:
Title:
Phone:
Email:

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

Water Waste Prevention

Water Agency shall do one or more of the following:

- a. Enact and enforce an ordinance or establish terms of service that prohibit water waste
- b. Enact and enforce an ordinance or establish terms of service for water efficient design in new development
- c. Support legislation or regulations that prohibit water waste
- d. Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
- e. Support local ordinances that prohibit water waste
- f. Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

- a. A description of, or electronic link to, any ordinances or terms of service
- b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
- c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
- d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description. [?](#)

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

Enter a description:

The fields in red are required.

Agency name:

Primary contact:

First name:

Reporting unit name
(District name)

Last name:

Reporting unit number:

Email:

You must enter the
Submit Form
agency. Click here to open
a table to obtain this
number.



[Link to FAQs](#)

2010 BMP 1.2 Water Loss Control

[View MOU](#)



AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software Yes No

Email to natalie@cuwcc.org - [Worksheets \(AWWA Water Audit\)](#). Enter the name of the file below:

Water Audit Validity Score from AWWA spreadsheet

Agency Completed Training In The AWWA Water Audit Method Yes No

Agency Completed Training In The Component Analysis Process Yes No

Completed/Updated the Component Analysis (at least every 4 years)? Yes No

Component Analysis Completed/Updated Date

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective Yes No

Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective Yes No

Type of Program Activities Used to Detect Unreported Leaks

Summer in Fairfield is dry with few rain events. The soil is clay and most leaks will surface with very little volume. We receive numerous reports from the community. In 2010, distribution staff responded to 1,174 reported problems.

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)
279			10		\$778,000.00	

Comments:

Summer in Fairfield is dry with few rain events. The soil is clay and most leaks will surface with very little volume. We receive numerous reports from the community. In 2010, distribution staff responded to 1,174 reported problems. Water saved was not estimated.

version 1.0

2010

The fields in red are required.

Agency name:

Primary contact:

First name:

You must enter the reporting unit number

Reporting unit name

(District name)

Last name:

Submit Form

Reporting unit number:

Email:

agency. Click here to open a table to obtain this number.



BMP 1.3 Metering with Commodity

[Link to FAQs](#)

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP: [?](#)

Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

Please Fill Out The Following Matrix

Account Type ?	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume ?	Billing Frequency Per Year	# of estimated bills/yr
Commercial	924	924	924	Bi-monthly	5,544
Industrial	71	71	71	Bi-monthly	426
Industrial	2	2	2	Monthly	24
Institutional	151	151	151	Bi-monthly	906
Fire Lines	445	445	445	Bi-monthly	2,670
Dedicated Irrig	837	837	837	Bi-monthly	5,022
Single-Family	25,001	25,001	25,001	Bi-monthly	153,988
Multi-Family	444	444	444	Bi-monthly	2,664
Other	92	92	92	Bi-monthly	552
Select a Cust				Other	

Number of CII Accounts with Mixed-use Meters

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

General Comments about BMP 1.3:

Of 618 mixed use meters. only 72 accounts use more than 2,000 gpd.

The fields in red are required:

Primary contact:

You must enter the reporting unit number that we have on record for your agency. Click Submit Form

Agency name: City of Fairfield Dept of Public Works

First name: Andrew

Reporting unit name (District name): City of Fairfield Dept of Public Works

Last name: Walker

Reporting unit number: 57

Email: awalker@fairfield.ca.gov



BMP 1.4 Retail Conservation Pricing

[link to FAQs](#)

[View MOU](#)

2010

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue	Commodity Charges	Total Revenue	Customer Meter/Service (Fixed Charges)
Uniform	Commercial	943,673.00		926,164.00	
Uniform	Industrial	1,485,509.00		727,036.00	
Select a Rate S	Institutional	435,889.00		466,120.00	
Select a Rate S	Dedicated Irrigatio	1,718,981.00		5,188.00	
Select a Rate S	Single-Familv	7,567,318.00		6,595,734.00	
Select a Rate S	Multi-Family	1,433,980.00		2,208,716.00	
Select a Rate S	Other	102,108.00		220,129.00	

Implementation Option (Conservation Pricing Option)

- Use Annual Revenue As Reported
- Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service Yes No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue	Commodity Charges	Total Revenue	Customer Meter/Service (Fixed Charges)
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				
Select a Rate S	Other				

Comments:

Ratios have fallen as water use has dropped 18% over last 2 years.

Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP? Yes No

Enter the name(s) of the wholesale agency (comma delimited)

Solano County Water Agency

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):

solanosaveswater.org

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

Facebook and social media links; Update of rebates to include toilets, clothes washers, turf replacement and SMART irrigation timers; Business and commercial water savings program updates; Water-wise Landscaping

Did at least one Website Update take place during each quarter of the reporting year? Yes No

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount	Personnel Costs Included? <small>If yes, check the box.</small>	Comments
Public Outreach	\$2,950	<input type="checkbox"/>	Intern Costs Included
		<input type="checkbox"/>	

Comments:

The fields in red are required.



Agency name: Primary contact: First name: Last name: Email:

Reporting unit name (District name):

Reporting unit number:

Click here to open a table that displays your agency reporting unit name reporting unit number. Please ensure that you enter the correct information.

[Submit Form](#)

[Link to FAQs](#)

2010

BMP 2.1 Public Outreach Cont'd

[View MOU](#)

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?
Events	\$2,000	<input checked="" type="checkbox"/> If yes, check the check box.
Demo Garden	\$754	<input type="checkbox"/>
Publications	\$196	<input type="checkbox"/>
		<input type="checkbox"/>

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts?

Yes No

Public Outreach Additional Information

Public Information Programs	Importance

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? Yes No

Describe the brand, theme or mascot.

Market Research

Have you sponsored or participated in market research to refine your message? Yes No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservation committee?

Yes No

Enter the names of the community committees:

Training

Training Type	# of Trainings	# of Attendees	Description of Other

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description

Partnering Programs - Partners

Name

Type of Program

CLCA?

Green Building Programs?

Master Gardeners?

Cooperative Extension?

Local Colleges?

Other

Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

0

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

PG&E

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

Vacant Lot Rehab in Downtown Fairfield; Discovery Kingdom Demonstration Garden

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.

Agency name:
Reporting unit name (District name):
Reporting unit number:

Primary contact:

First name:
Last name:
Email:

Click here to open a table that displays your agency name, reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Submit Form](#)



[Link to FAQs](#)

2010

BMP 2.2 School Education Programs, Retail Agencies School Programs

[View MOU](#)

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP?

Yes No

Enter Wholesaler Names, separated by commas:

Materials meet state education framework requirements?

Description of Materials

WEF Workbooks, Project WET Training materials, Waterways training in conjunction with UC Davis; All About Water, Waves, Wetlands and Watersheds; California Water Story; Fountains of Columbia; Water Precious Water; Hands-on Water Activities; Groundwater Education; California Water Problems; Project Water Science

Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

Water and Me; Save Water; Water Play; Salmonid Savers; Water Fun; Discovering Drought; California Water Works and Why it Does; Conserve Water Student's Booklet; Discover Storm Water; Captain Hydro

Number of students reached

Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

California Water Works and Why it Does; Conserve Water Student's Booklet; Discover Storm Water; Captain Hydro; EnviroScape Model; Groundwater Model; Watershed & California Maps; Water Test Kit; Cadillac Desert Videos

Number of Distribution

Annual budget for school education program

Description of all other water supplier education programs

Coast Weeks; Sponsor of High School Science Fair; Rush Ranch - Suisun Marsh Education Program; Lynch Canyon - Watershed Explorers Program; Faculty In-Service Presentations at Your School; Conserve Water Bookmark Art Contest; Waterways

School Program Activities

Classroom presentations:

Number of presentations

Number of attendees

Large group assemblies:

Number of presentations

Number of attendees

Children's water festivals or other events:

Number of presentations

Number of attendees

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations

Number of attendees

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description

Number distributed

Staffing children's booths at events & festivals:

Number of booths

Number of attendees

Water conservation contests such as poster and photo:

Description

Number distributed

Offer monetary awards/funding or scholarships to students:

Number Offered

Total Funding

Teacher training workshops:

Number of presentations

Number of attendees

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:

Number of tours or field trips

Number of participants

College internships in water conservation offered:

Number of internships

Total funding

Career fairs/workshops:

Number of presentations

Number of attendees

Additional program(s) supported by agency but not mentioned above:

Description

Number of events (if applicable)

Number of participants

Total reporting period budget expenditures for school education programs (include all agency costs):

Comments

The fields in red are required.

Agency name:

Reporting unit name (District name):

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

Submit Form
 We have an eForm for your agency. Click here to open a table to obtain this number.



2010

BMP 3 Residential

[Link to FAQs](#)

[View MOU](#)

Traditional
(Sections A - D)

Flex Track
(All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fields within the flex track boxes.

You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in form which are necessary to show that the measure was implemented as described.

A) Residential Assistance / Leak Detection

			Total Water Savings AF/YR	Measured Water Savings AF/YR
	Single Family	Multi Family		
Traditional Total Number of Accounts	<input type="text" value="25,661.00"/>	<input type="text" value="444.00"/>	<input type="text"/>	<input type="text"/>
Total Number of Participants Overall	<input type="text" value="255.00"/>	<input type="text" value="3.00"/>	<input type="text"/>	<input type="text"/>
Total Number of Leak Det Surveys	<input type="text" value="255.00"/>	<input type="text" value="3.00"/>	<input type="text"/>	<input type="text"/>
Total Number of Showerheads	<input type="text" value="88.00"/>	<input type="text" value="23.00"/>	<input type="text"/>	<input type="text"/>
Total Number of Faucet Aerators	<input type="text" value="151.00"/>	<input type="text" value="59.00"/>	<input type="text"/>	<input type="text"/>
Total Number of Landscape Water Survey	<input type="text" value="255.00"/>	<input type="text" value="3.00"/>	<input type="text"/>	<input type="text"/>
Number of Other Components	<input type="text" value="234.00"/>			
Description of Other Components Distributed	<input type="text" value="hose nozzles, leak detection tabs, Hose Timers"/>			

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
 (Enter the file name and Email file to Natalie@cuwcc.org)

B) High Efficiency Clothes Washers (HECWs)

Traditional	Number of incentives for HECWs with an AVERAGE Water Factor of 5.0	<input type="text" value="805.00"/>	Measured water savings (AF/Year)
	Are Financial incentives provided for HECWs ?	<input checked="" type="radio"/> Yes <input type="radio"/> No	
	Has your Agency completed a HECW Market Penetration Study (this question does not impact your coverage report, purely informational)	<input type="radio"/> Yes <input checked="" type="radio"/> No	
HECW Market Penetration Study Documents (Enter the file name and Email file to Natalie@cuwcc.org)		<input type="text"/>	<input type="text"/>

Flex Track

Traditional

	Single Family	Multi Family
Residential development Rebates	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Recognition Programs	Yes <input checked="" type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Reduced connection Fees	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Ordinances	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>

New Development Ordinance
 (Enter the file name and Email file to Natalie@cuwcc.org)

Number of new Single Family Units built in Service Area

Number of new Multi Family Units built in Service Area

In the following table, enter one row for each incentive typr program you offer

List of Incentive Amount

Incentive Type	Incentive Amount	Number of WSS fixtures installed	Number of Participating		Measured Water Savings	
			Single Family	Multi Family	Single Family	Multi Family

If you are using your own water-savings measure, send your supporting spreadsheet
 Enter the file name and Email to Natalie@cuwcc.org

Flex Track

**For Traditional Option, Stop Here, do not go further.
 For Flex Track Option, please continue...**

Flex Track Menu Options

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Fill in the water savings measures that your agency has implemented.

The fields in red are required.



Agency name: Primary contact:
 Reporting unit name: First name:
 (District name) Last name:
 Reporting unit number: Email:

Submit Form
 We have an record for your agency. Click here to open a table to obtain this number.

2010

[Link to FAQs](#)

[View MOU](#)

BMP 4 CII

Traditional
(Section A - L)

FlexTrack
(All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fields within the flex track boxes.

You must enter all measured water savings manually in the summary cells on the right. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings was measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in the flex track data entry form which are necessary to show that the measure was implemented as described.

CII Type of measure implemented

Traditional	A) High - Efficiency Toilets.		Measured water savings (AF/Year) <input type="text"/>
	Number	<input type="text" value="0"/>	
Flex Track	Type of program	<input type="text" value="Select an Option"/>	Council's Annual Water Savings 0.041748 AF per device
	Other type of program	<input type="text"/>	
	Do you accept the Council's default savings number for this measure? <input type="radio"/> Yes <input type="radio"/> No		
	If not, Please provide the following:		
	Total Measured Water Savings(AF/Year)	<input type="text"/>	
	Measure life (years)	<input type="text"/>	
	Lifetime water savings (years)	<input type="text"/>	
If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org			
<input type="text"/>			

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

L) Dry Vacuum Pumps.

Traditional	Number	<input type="text" value="0"/>	Measured water savings (AF/Year) <input type="text"/>
	Type of program	Select an Option	
	Other type of program	<input type="text"/>	

Flex Track

Do you accept the Council's default savings number for this measure ? Yes No

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

Council's Annual Water Savings 0.064 AF per device

Traditional Reporting Stop Here, Do not continue

Flex Track Reporting Please Continue...

M) Industrial Process Water Use Reduction.

Traditional	Number	<input type="text" value="1"/>	Measured water savings (AF/Year) <input type="text" value="264.00"/>
	Type of program	Select an Option	
	Other type of program	Direct Partnership in combination with System wide water use reduction effort at Anheuser Busch brewery. Corporate competition between plants to reduce per barrel water use per barrel of product.	

Type of Process Water Reduced

If re-using water, what was the secondary use of the water? (such as pre-rinse cycle or landscaping)



The fields in red are required.

Agency name:

Reporting unit name (District name):

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that

Submit Form

a table to obtain this number

[Link to FAQs](#)

[View MOU](#)

2010

BMP 5 Landscape

Traditional Flex Track

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fields within the flex track boxes.

You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data point also requested in form which are necessary to show that the measure was implemented as described.

Accounts with Dedicated Irrigation Meters

Traditional	Number of dedicated irrigation meter accounts	<input type="text" value="837.00"/>
	Number of dedicated irrigation meter accounts with water budgets	<input type="text" value="148.00"/>
	Aggregate water use for dedicated non-recreational landscape accounts with budgets	<input type="text" value="1,171.00"/>
	Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	<input type="text" value="523.00"/>
	Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	<input checked="" type="radio"/> Yes <input type="radio"/> No
Flex Track	Water Savings from Accounts with dedicated irrigation meters with water budgets (Acre Feet)	<input type="text"/>
	If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)	
	<input type="text"/>	

Technical Assistance

Traditional	Number of Accounts 20% over-budget	<input type="text" value="36.00"/>	Measured water savings (AF/Year) <input type="text"/>
	Number of accounts 20% over-budget offered technical assistance	<input type="text" value="24.00"/>	
	Number of accounts 20% over-budget accepting technical assistance	<input type="text" value="0.00"/>	
	If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)		
Flex Track	<input type="text"/>		

Irrigation Water Use Surveys for Mixed-use and Un-metered Accounts

Traditional	Number of mixed use and un-metered accounts	<input type="text" value="72.00"/>	Measured water savings (AF/Year) <input type="text"/>
	Number of irrigation water use surveys offered (cumulative, all years)	<input type="text" value="6.00"/>	
	Number of irrigation water use surveys accepted (cumulative)	<input type="text" value="6.00"/>	
	Can your Agency estimate the amount of landscape acreage for mixed use and Un-metered accounts	<input type="radio"/> Yes <input checked="" type="radio"/> No	
	If Yes, Aggregate acreage for mixed use and Un-metered accounts	<input type="text"/>	
Flex Track	Estimated water demand from acreage for mixed use and Un-metered accounts	<input type="text"/>	
	Annual water savings by customers receiving irrigation water savings surveys and implementing recommendations	<input type="text"/>	
	If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)		
<input type="text"/>			

Financial Incentives

Traditional	Have you implemented and maintained an irrigation equipment retrofit incentive program? <input checked="" type="radio"/> Yes <input type="radio"/> No			Measured Water Savings (AF/VR) <input type="text"/>
	Number of incentives	Dollar value of incentives	Incentive Types	
	<input type="text"/>	<input type="text"/>	SMART Irrigation Controller	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
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	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data) (Enter the file name and Email file to Natalie@cuwcc.org)				
<input type="text"/>				

Traditional Reporting Stop Here, Do not continue
Flex Track Reporting Please Continue...