

Accounts and Water Use

Reporting Unit: Long Beach Water Department	BMP Form Status: 100% Complete	Year: 2005
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Reporting Year: Calendar	Month Ending: June
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A. Service Area Population Information:

1. Total service area population	488,688
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B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	Number of Accounts	Water Deliveries (AF)	Number of Accounts	Water Deliveries (AF)
1. Single-family	60,258	18,997	0	0
2. Multi-family	19,871	21,926	0	0
3. Commercial	7,906	19,484	0	0
4. Industrial	319	695	0	0
5. Institutional	0	0	0	0
6. Dedicated Irrigation	996	2,834	0	0
7. Recycled	83	4,589	0	0
8. Other	1	5,095	0	0
9. Unaccounted	—	3,387	—	0
TOTAL	89,434	77,007	0	0
	TOTAL METERED		TOTAL UNMETERED	

Accounts and Water Use

Reporting Unit: Long Beach Water Department	BMP Form Status: 100% Complete	Year: 2006
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Reporting Year: Calendar	Month Ending: June
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A. Service Area Population Information:

1. Total service area population	490,166
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B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	Number of Accounts	Water Deliveries (AF)	Number of Accounts	Water Deliveries (AF)
1. Single-family	60,266	19,433	0	0
2. Multi-family	19,887	21,582	0	0
3. Commercial	7,942	18,438	0	0
4. Industrial	316	749	0	0
5. Institutional	0	0	0	0
6. Dedicated Irrigation	1,020	2,814	0	0
7. Recycled	83	5881	0	0
8. Other	1	2,350	0	0
9. Unaccounted	—	3,254	—	0
TOTAL	89,515	74,501	0	0
	TOTAL METERED		TOTAL UNMETERED	

BMP 1 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
Long Beach Water Department

Date MOU Signed:
9/28/1995

Reporting Period:
05-06

Rep Unit Category:
Retail Only

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: No exemption request filed

If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet three conditions to satisfy strict compliance for BMP 1.

Condition 1: Adopt survey targeting and marketing strategy on time

Condition 2: Offer surveys to 20% of SF accounts and 20% of MF units during report period

Condition 3: Be on track to survey 15% of SF accounts and 15% of MF units within 10 years of implementation start date.

Test For Condition 1

Latest Year RU to Implement Targeting/Marketing Program: 1999

Single Family Multi Family

Year RU Reported Implementing Targeting/Marketing Program: 2002 2003

RU Met Targeting/Marketing Coverage Requirement: Yes Yes

Test For Condition 2

Latest Year Survey Program to Start: 1998

Res Survey Offers (%)

Single Family Multi Family

6.66%

6.92%

Select a Reporting Period: 05-06

Survey Offers 20%

No

No

Test For Condition 3

Completed Residential Surveys

Single Family Multi Family

Total Completed Surveys through 2006

10,917

5,182

Credit for Surveys Completed Prior to Implementation of Reporting Database

19,672

0

Total + Credit

30,589

5,182

Res. Accounts in Base Year

60,634

18,951

RU Survey Coverage as % of Base Year Res Accounts

50.45%

27.34%

Coverage Requirement by Year 8 of Implementation per Exhibit 1

RU on Schedule to Meet 10 Year Coverage Requirement

Yes

Yes

BMP 1 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

BMP 2 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 05-06 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one of three conditions to satisfy strict compliance for BMP 2.

Condition 1: The agency has demonstrated that 75% of SF accounts and 75% of MF units constructed prior to 1992 are fitted with low-flow showerheads.

Condition 2: An enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts is in place for the agency's service area.

Condition 3: The agency has distributed or directly installed low-flow showerheads and other low-flow plumbing devices to not less than 10% of single-family accounts and 10% of multi-family units constructed prior to 1992 during the reporting period.

Test For Condition 1

Report Year	Report Period	Single Family		Multi Family	
		Reported Saturation	Saturation 75%?	Reported Saturation	Saturation 75%?
1999	99-00	25	No	50	No
2000	99-00	25	No	50	No
2001	01-02	50	No	55	No
2002	01-02	55	No	55	No
2003	03-04	60	No	60	No
2004	03-04	63	No	63	No
2005	05-06	72	No	72	No
2006	05-06	72	No	72	No
2007	07-08	79	Yes	79	Yes
2008	07-08	82	Yes	82	Yes

BMP 2 Coverage Requirement Status

Test For Condition 2

RU has ordinance
requiring showerhead
retrofit?

Report Year	Report Period	
1999	99-00	No
2000	99-00	No
2001	01-02	No
2002	01-02	No
2003	03-04	No
2004	03-04	No
2005	05-06	No
2006	05-06	No
2007	07-08	No
2008	07-08	No

Test For Condition 3

1992 SF Accounts	Num. Showerheads Distributed to SF Accounts	Single Family Coverage Ratio	SF Coverage Ratio 10%
<u>59,700</u>	<u>750</u>	<u>1.3%</u>	<u>No</u>
1992 MF Accounts	Num. Showerheads Distributed to MF Accounts	Multi Family Coverage Ratio	MF Coverage Ratio 10%
<u>17,800</u>	<u>750</u>	<u>4.2%</u>	<u>No</u>

BMP 2 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

BMP 3 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
Long Beach Water Department

Date MOU Signed:
9/28/1995

Reporting Period:
05-06

Rep Unit Category:
Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

RU operates a water distribution system: Yes

Tests For Conditions 1 and 2

Report Year	Report Period	Pre Screen Completed	Pre Screen Result	Full Audit Indicated	Full Audit Completed
1999	99-00	Yes	95.1%	No	Yes
2000	99-00	Yes	93.7%	No	Yes
2001	01-02	Yes	94.9%	No	No
2002	01-02	Yes	94.2%	No	No
2003	03-04	Yes	98.2%	No	No
2004	03-04	Yes	93.9%	No	No
2005	05-06	Yes	95.3%	No	No
2006	05-06	Yes	95.3%	No	No
2007	07-08	Yes	93.6%	No	No
2008	07-08	Yes	96.8%	No	No

BMP 3 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 4 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 05-06 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

For agencies signing the MOU prior to December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2009.

For agencies signing the MOU after December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2012
OR within six years of signing the MOU (whichever date is later). All retrofits must be completed no later than one year prior to the requirements of state law (January 1, 2025).

Tests For Compliance

Total Meter Retrofits Reported through 2006	<u>0</u>
No. of Unmetered Accounts in Base Year	<u>0</u>
Meter Retrofit Coverage as % of Base Year Unmetered Accounts	<u>No Unmetered Accounts</u>
Coverage Requirement by Year 8 of Implementation	<input type="text" value="64.0%"/>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>

BMP 4 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

BMP 5 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995

Reporting Period: 05-06

Rep Unit Category: Retail Only

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

RU indicated "At least as effective as" implementation during report period: Yes

Exhibit 1 Coverage Requirement

An agency must meet three conditions to comply with BMP 5.

Condition 1: Develop water budgets for 90% of its dedicated landscape meter accounts within four years of the date implementation is to start.

Condition 2: (a) Offer landscape surveys to at least 20% of its CII accounts with mixed use meters each report cycle and be on track to survey at least 15% of its CII accounts with mixed use meters within 10 years of the date implementation is to start OR (b) Implement a dedicated landscape meter retrofit program for CII accounts with mixed use meters or assign landscape budgets to mixed use meters.

Condition 3: Implement and maintain customer incentive program(s) for irrigation equipment retrofits.

Test For Condition 1

Report Year	Report Period	BMP 5 Implementation Year	No. of Irrigation Meter Accounts	No. of Irrigation Accounts with Budgets	Budget Coverage Ratio	90% Coverage Met by Year 4
1999	99-00	0	898	898	1.00	NA
2000	99-00	1	898	898	1.00	NA
2001	01-02	2	898	0	0.00	NA
2002	01-02	3	898	0	0.00	NA
2003	03-04	4	900	0	0.00	No
2004	03-04	5	915	170	0.19	No
2005	05-06	6	962	321	0.33	No
2006	05-06	7	962	360	0.37	No
2007	07-08	8	837	837	1.00	Yes
2008	07-08	9	808	808	1.00	Yes

Test For Condition 2a (survey offers)

Select Reporting Period: 05-06

Large Landscape Survey Offers as % of Mixed Use Meter CII Accounts: 2.7%

Survey Offers Equal or Exceed 20% Coverage Requirement: No

BMP 5 Coverage Requirement Status

Test For Condition 2a (surveys completed)

Total Completed Landscape Surveys Reported through 2006	364
Credit for Surveys Completed Prior to Implementation of Reporting Database	0
Total + Credit	<u>364</u>
CII Accounts with Mixed Use Meters in Base Year	<u>7,031</u>
RU Survey Coverage as % of Base Year CII Accounts	<u>5.2%</u>
Coverage Requirement by Year 7 of Implementation per Exhibit 1	<u>7.9%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>No</u>

Test For Condition 2b (mixed use budget or meter retrofit program)

Report Year	Report Period	BMP 5 Implementation Year	Agency has mix-use budget program	No. of mixed-use budgets
1999	99-00	0	no	0
2000	99-00	1	no	0
2001	01-02	2	no	0
2002	01-02	3	no	0
2003	03-04	4	no	0
2004	03-04	5	no	0
2005	05-06	6	no	0
2006	05-06	7	no	0
2007	07-08	8	no	0
2008	07-08	9	no	0

Report Year	Report Period	BMP 4 Implementation Year	No. of mixed use CII accounts	No. of mixed use CII accounts fitted with irrig. meters
1999	99-00	1	7500	0
2000	99-00	2	7500	0
2001	01-02	3	7500	0
2002	01-02	4	7500	0
2003	03-04	5	0	0
2004	03-04	6	0	0
2005	05-06	7	7142	0
2006	05-06	8	7142	0
2007	07-08	9	48	0
2008	07-08	10	48	0

BMP 5 Coverage Requirement Status

Test For Condition 3

Report Year	Report Period	BMP 5 Implementation Year	RU offers financial incentives?	<u>Loans</u>		<u>Grants</u>		<u>Rebates</u>	
				No.	Total Amount	No.	Total Amount	No.	Total Amount
1999	99-00	0	no						
2000	99-00	1	no	0	0	0	0	0	0
2001	01-02	2	no	0	0	0	0	0	0
2002	01-02	3	yes	0	0	9500	9500	0	0
2003	03-04	4	yes	0	0	18000	18000	0	0
2004	03-04	5	yes	0	0	0	0	1	300
2005	05-06	6	yes	0	0	0	45405	0	0
2006	05-06	7	yes	0	0	3	11500	238	99617
2007	07-08	8	yes	0	0	1	120000	0	0
2008	07-08	9	yes	0	0	0	0	21	40021

BMP 5 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

BMP 6 Coverage Requirement Status

Reporting Unit ID 66 Rep Unit Name: Long Beach Water Department
Date MOU Signed: 9/28/1995 Reporting Period: 05-06 Rep Unit Category: Retail Only
RU indicated "At least as effective as" implementation during report period: No
RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Pre-2004 Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 6.

Condition 1: Offer a cost-effective financial incentive for high-efficiency washers if one or more energy service providers in service area offer financial incentives for high-efficiency washers.

Revised Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 6.

Condition 1: Offer cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less.

Condition 2: Meet Coverage Goal ($CG = \text{Total Dwelling Units} \times 0.0768$) by July 1, 2008. Agencies signing the MOU after July 1, 2003, shall have a prorated Coverage Goal, based on implementation period of less than 4.0 years.

Test For Condition 1

Agency offered cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less: yes

Test For Condition 2

Coverage Goal: 13,352
Total Coverage Points Awarded (incl. past credit): 16,347
% of Coverage Goal: 122.4%

BMP 6 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 7 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[05-06](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: [No](#)

RU filed an exemption for this BMP during report period: [No exemption request filed](#)
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

Test For Condition 1:05-06

Report Year	Report Period	BMP 7 Implementation Year	RU Has Public Information Program
1999	99-00	1	Yes
2000	99-00	2	Yes
2001	01-02	3	Yes
2002	01-02	4	Yes
2003	03-04	5	Yes
2004	03-04	6	Yes
2005	05-06	7	Yes
2006	05-06	8	Yes
2007	07-08	9	Yes
2008	07-08	10	Yes

BMP 7 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 8 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[05-06](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: [No](#)

RU filed an exemption for this BMP during report period: [No exemption request filed](#)

If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8's definition.

Test For Condition 1

Report Year	Report Period	BMP 8 Implementation Year	RU Has School Education Program
1999	99-00	1	Yes
2000	99-00	2	Yes
2001	01-02	3	Yes
2002	01-02	4	Yes
2003	03-04	5	Yes
2004	03-04	6	Yes
2005	05-06	7	Yes
2006	05-06	8	Yes
2007	07-08	9	Yes
2008	07-08	10	Yes

BMP 8 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 9 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
Long Beach Water Department

Date MOU Signed:
9/28/1995

Reporting Period:
05-06

Rep Unit Category:
Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 9.

Condition 1: Agency has identified and ranked by use commercial, industrial, and institutional accounts.

Condition 2(a): Agency is on track to survey 10% of commercial accounts, 10% of industrial accounts, and 10% of institutional accounts within 10 years of date implementation to commence.

OR

Condition 2(b): Agency is on track to reduce CII water use by an amount equal to 10% of baseline use within 10 years of date implementation to commence.

OR

Condition 2(c): Agency is on track to meet the combined target as described in Exhibit 1 BMP 9 documentation.

Test For Condition 1

Ranked Commercial Customers **yes**

Ranked Industrial Customers **yes**

Ranked Institutional Customers **yes**

Rank Coverage Met **Yes**

Test For Condition 2a

	Commercial	Industrial	Institutional
Total Completed Surveys Reported through 2006	<u>2077</u>	<u>205</u>	<u>54</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	<u>0</u>	<u>0</u>	<u>0</u>
Total + Credit	<u>2,077</u>	<u>205</u>	<u>54</u>
CII Accounts in Base Year	<u>6,691</u>	<u>340</u>	<u>0</u>
RU Survey Coverage as % of Base Year CII Accounts	<u>31.0%</u>	<u>60.3%</u>	<u>?</u>
Coverage Requirement by Year 7 of Implementation per Exhibit 1	<u>5.3%</u>	<u>5.3%</u>	<u>5.3%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>	<u>Yes</u>	<u>No</u>

BMP 9 Coverage Requirement Status

Test For Condition 2b

Coverage Year	Performance Target Savings (AF/Yr)	Performance Target Savings Coverage	Performance Target Savings Coverage Requirement	Coverage Requirement Met
1999	200	1%	0.5%	Yes
2000	400	2%	1%	Yes
2001	400	2%	1.7%	Yes
2002	406	2%	2.4%	No
2003	441	2%	3.3%	No
2004	502	3%	4.2%	No
2005	507	3%	5.3%	No
2006	558	3%	6.4%	No
2007	622	3%	7.7%	No
2008	702	4%	9%	No

Test For Condition 2c

Total BMP 9 Surveys + Credit	<u>2,336</u>
BMP 9 Survey Coverage	<u>33.2%</u>
BMP 9 Performance Target Coverage	<u>3.5%</u>
BMP 9 Survey + Performance Target Coverage	<u>36.7%</u>
Combined Coverage Equals or Exceeds BMP 9 Survey Coverage Requirement?	<u>Yes</u>

BMP 9 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 11 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[05-06](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: [No](#)

RU filed an exemption for this BMP during report period: [No exemption request filed](#)
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing.

Test For Compliance

Fully metered?	Yes
Water Coverage Met?	Maybe
Provide Sewer Service?	
Sewer Coverage Met?	Yes

BMP 11 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

BMP 11 Sewer Coverage Status Summary

BMP 12 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 05-06 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Exhibit 1 Coverage Requirement
Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

Test For Compliance

Report Year	Report Period	Conservation Coordinator Position Staffed?	Total Staff on Team (incl. CC)
1999	99-00	yes	1
2000	99-00	yes	1
2001	01-02	yes	1
2002	01-02	yes	1
2003	03-04	yes	1
2004	03-04	yes	3
2005	05-06	yes	6
2006	05-06	yes	6
2007	07-08	yes	5
2008	07-08	yes	5

BMP 12 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 13 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 05-06 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

Exhibit 1 Coverage Requirement
 Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

Test For Compliance

Agency or service area prohibits:

Report Year	Gutter Flooding	Single-Pass Cooling Systems	Single-Pass Car Wash	Single-Pass Laundry	Single-Pass Fountains	Other	RU has ordinance that meets coverage requirement
1999	yes	no	no	no	yes	yes	No
2000	yes	no	no	no	yes	yes	No
2001	yes	no	no	no	yes	yes	No
2002	yes	no	no	no	yes	yes	No
2003	yes	no	no	no	yes	yes	No
2004	yes	no	no	no	yes	yes	No
2005	yes	yes	yes	yes	yes	yes	Yes
2006	yes	yes	yes	yes	yes	yes	Yes
2007	yes	yes	yes	yes	yes	yes	Yes
2008	yes	yes	yes	yes	yes	yes	Yes

BMP 13 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

Accounts and Water Use

Reporting Unit: Long Beach Water Department	BMP Form Status: 100% Complete	Year: 2007
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Reporting Year: Calendar	Month Ending: June
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A. Service Area Population Information:

1. Total service area population	490,193
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B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	Number of Accounts	Water Deliveries (AF)	Number of Accounts	Water Deliveries (AF)
1. Single-family	60,267	23,037	0	0
2. Multi-family	19,908	22,151	0	0
3. Commercial	7,954	16,227	0	0
4. Industrial	315	530	0	0
5. Institutional	0	0	0	0
6. Dedicated Irrigation	1,029	2,630	0	0
7. Recycled	69	5384	0	0
8. Other	1	1,168	0	0
9. Unaccounted	—	4,506	—	0
TOTAL	89,543	75,633	0	0
	TOTAL METERED		TOTAL UNMETERED	

Accounts and Water Use

Reporting Unit: Long Beach Water Department	BMP Form Status: 100% Complete	Year: 2008
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Reporting Year: Calendar	Month Ending: June
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A. Service Area Population Information:

1. Total service area population	492,642
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B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	Number of Accounts	Water Deliveries (AF)	Number of Accounts	Water Deliveries (AF)
1. Single-family	60,255	21,462	0	0
2. Multi-family	19,935	21,515	0	0
3. Commercial	7,932	15,818	0	0
4. Industrial	313	501	0	0
5. Institutional	0	0	0	0
6. Dedicated Irrigation	1,018	2,480	0	0
7. Recycled	70	5103	0	0
8. Other	1	4,994	0	0
9. Unaccounted	—	1,854	—	0
TOTAL	89,524	73,727	0	0
	TOTAL METERED		TOTAL UNMETERED	

BMP 1 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[07-08](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: [No exemption request filed](#)

If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet three conditions to satisfy strict compliance for BMP 1.

Condition 1: Adopt survey targeting and marketing strategy on time

Condition 2: Offer surveys to 20% of SF accounts and 20% of MF units during report period

Condition 3: Be on track to survey 15% of SF accounts and 15% of MF units within 10 years of implementation start date.

Test For Condition 1

Latest Year RU to Implement Targeting/Marketing Program: 1999

Single Family	Multi Family
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Year RU Reported Implementing Targeting/Marketing Program: 2002 2003

RU Met Targeting/Marketing Coverage Requirement: Yes Yes

Test For Condition 2

Latest Year Survey Program to Start: 1998

Res Survey Offers (%)

Single Family	Multi Family
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5.55%

1.94%

Select a Reporting Period: 07-08

Survey Offers 20%

No

No

Test For Condition 3

Completed Residential Surveys

Single Family	Multi Family
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Total Completed Surveys through 2008

11,219

5,253

Credit for Surveys Completed Prior to Implementation of Reporting Database

19,672

0

Total + Credit

30,891

5,253

Res. Accounts in Base Year

60,634

18,951

RU Survey Coverage as % of Base Year Res Accounts

50.95%

27.72%

Coverage Requirement by Year 10 of Implementation per Exhibit 1

RU on Schedule to Meet 10 Year Coverage Requirement

Yes

Yes

BMP 1 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

BMP 2 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 07-08 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one of three conditions to satisfy strict compliance for BMP 2.

Condition 1: The agency has demonstrated that 75% of SF accounts and 75% of MF units constructed prior to 1992 are fitted with low-flow showerheads.

Condition 2: An enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts is in place for the agency's service area.

Condition 3: The agency has distributed or directly installed low-flow showerheads and other low-flow plumbing devices to not less than 10% of single-family accounts and 10% of multi-family units constructed prior to 1992 during the reporting period.

Test For Condition 1

Report Year	Report Period	Single Family		Multi Family	
		Reported Saturation	Saturation 75%?	Reported Saturation	Saturation 75%?
1999	99-00	25	No	50	No
2000	99-00	25	No	50	No
2001	01-02	50	No	55	No
2002	01-02	55	No	55	No
2003	03-04	60	No	60	No
2004	03-04	63	No	63	No
2005	05-06	72	No	72	No
2006	05-06	72	No	72	No
2007	07-08	79	Yes	79	Yes
2008	07-08	82	Yes	82	Yes

BMP 2 Coverage Requirement Status

Test For Condition 2

RU has ordinance
requiring showerhead
retrofit?

Report Year	Report Period	
1999	99-00	No
2000	99-00	No
2001	01-02	No
2002	01-02	No
2003	03-04	No
2004	03-04	No
2005	05-06	No
2006	05-06	No
2007	07-08	No
2008	07-08	No

Test For Condition 3

1992 SF Accounts	Num. Showerheads Distributed to SF Accounts	Single Family Coverage Ratio	SF Coverage Ratio 10%
<u>59,700</u>	<u>2,250</u>	<u>3.8%</u>	<u>No</u>
1992 MF Accounts	Num. Showerheads Distributed to MF Accounts	Multi Family Coverage Ratio	MF Coverage Ratio 10%
<u>17,800</u>	<u>2,250</u>	<u>12.6%</u>	<u>Yes</u>

BMP 2 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 3 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[07-08](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: [No](#)

RU filed an exemption for this BMP during report period: [No exemption request filed](#)
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

RU operates a water distribution system: [Yes](#)

Tests For Conditions 1 and 2

Report Year	Report Period	Pre Screen Completed	Pre Screen Result	Full Audit Indicated	Full Audit Completed
1999	99-00	Yes	95.1%	No	Yes
2000	99-00	Yes	93.7%	No	Yes
2001	01-02	Yes	94.9%	No	No
2002	01-02	Yes	94.2%	No	No
2003	03-04	Yes	98.2%	No	No
2004	03-04	Yes	93.9%	No	No
2005	05-06	Yes	95.3%	No	No
2006	05-06	Yes	95.3%	No	No
2007	07-08	Yes	93.6%	No	No
2008	07-08	Yes	96.8%	No	No

BMP 3 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 4 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 07-08 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

For agencies signing the MOU prior to December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2009.

For agencies signing the MOU after December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2012
OR within six years of signing the MOU (whichever date is later). All retrofits must be completed no later than one year prior to the requirements of state law (January 1, 2025).

Tests For Compliance

Total Meter Retrofits Reported through 2008	<u>0</u>
No. of Unmetered Accounts in Base Year	<u>0</u>
Meter Retrofit Coverage as % of Base Year Unmetered Accounts	<u>No Unmetered Accounts</u>
Coverage Requirement by Year 10 of Implementation	<input type="text" value="90.0%"/>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>

BMP 4 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 5 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995

Reporting Period: 07-08

Rep Unit Category: Retail Only

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

RU indicated "At least as effective as" implementation during report period: Yes

Exhibit 1 Coverage Requirement

An agency must meet three conditions to comply with BMP 5.

Condition 1: Develop water budgets for 90% of its dedicated landscape meter accounts within four years of the date implementation is to start.

Condition 2: (a) Offer landscape surveys to at least 20% of its CII accounts with mixed use meters each report cycle and be on track to survey at least 15% of its CII accounts with mixed use meters within 10 years of the date implementation is to start OR (b) Implement a dedicated landscape meter retrofit program for CII accounts with mixed use meters or assign landscape budgets to mixed use meters.

Condition 3: Implement and maintain customer incentive program(s) for irrigation equipment retrofits.

Test For Condition 1

Report Year	Report Period	BMP 5 Implementation Year	No. of Irrigation Meter Accounts	No. of Irrigation Accounts with Budgets	Budget Coverage Ratio	90% Coverage Met by Year 4
1999	99-00	0	898	898	1.00	NA
2000	99-00	1	898	898	1.00	NA
2001	01-02	2	898	0	0.00	NA
2002	01-02	3	898	0	0.00	NA
2003	03-04	4	900	0	0.00	No
2004	03-04	5	915	170	0.19	No
2005	05-06	6	962	321	0.33	No
2006	05-06	7	962	360	0.37	No
2007	07-08	8	837	837	1.00	Yes
2008	07-08	9	808	808	1.00	Yes

Test For Condition 2a (survey offers)

Select Reporting Period: 07-08

Large Landscape Survey Offers as % of Mixed Use Meter CII Accounts: 5.0%

Survey Offers Equal or Exceed 20% Coverage Requirement: No

BMP 5 Coverage Requirement Status

Test For Condition 2a (surveys completed)

Total Completed Landscape Surveys Reported through 2008	<u>586</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	<u>0</u>
Total + Credit	<u>586</u>
CII Accounts with Mixed Use Meters in Base Year	<u>7,031</u>
RU Survey Coverage as % of Base Year CII Accounts	<u>8.3%</u>
Coverage Requirement by Year 9 of Implementation per Exhibit 1	<u>11.5%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>No</u>

Test For Condition 2b (mixed use budget or meter retrofit program)

Report Year	Report Period	BMP 5 Implementation Year	Agency has mix-use budget program	No. of mixed-use budgets
1999	99-00	0	no	0
2000	99-00	1	no	0
2001	01-02	2	no	
2002	01-02	3	no	0
2003	03-04	4	no	0
2004	03-04	5	no	0
2005	05-06	6	no	0
2006	05-06	7	no	0
2007	07-08	8	no	0
2008	07-08	9	no	0

Report Year	Report Period	BMP 4 Implementation Year	No. of mixed use CII accounts	No. of mixed use CII accounts fitted with irrig. meters
1999	99-00	1	7500	0
2000	99-00	2	7500	0
2001	01-02	3	7500	0
2002	01-02	4	7500	0
2003	03-04	5	0	0
2004	03-04	6	0	0
2005	05-06	7	7142	0
2006	05-06	8	7142	0
2007	07-08	9	48	0
2008	07-08	10	48	0

BMP 5 Coverage Requirement Status

Test For Condition 3

Report Year	Report Period	BMP 5 Implementation Year	RU offers financial incentives?	<u>Loans</u>		<u>Grants</u>		<u>Rebates</u>	
				No.	Total Amount	No.	Total Amount	No.	Total Amount
1999	99-00	0	no						
2000	99-00	1	no	0	0	0	0	0	0
2001	01-02	2	no	0	0	0	0	0	0
2002	01-02	3	yes	0	0	9500	9500	0	0
2003	03-04	4	yes	0	0	18000	18000	0	0
2004	03-04	5	yes	0	0	0	0	1	300
2005	05-06	6	yes	0	0	0	45405	0	0
2006	05-06	7	yes	0	0	3	11500	238	99617
2007	07-08	8	yes	0	0	1	120000	0	0
2008	07-08	9	yes	0	0	0	0	21	40021

BMP 5 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

BMP 6 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
Long Beach Water Department

Date MOU Signed:
9/28/1995

Reporting Period:
07-08

Rep Unit Category:
Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Pre-2004 Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 6.

Condition 1: Offer a cost-effective financial incentive for high-efficiency washers if one or more energy service providers in service area offer financial incentives for high-efficiency washers.

Revised Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 6.

Condition 1: Offer cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less.

Condition 2: Meet Coverage Goal ($CG = \text{Total Dwelling Units} \times 0.0768$) by July 1, 2008. Agencies signing the MOU after July 1, 2003, shall have a prorated Coverage Goal, based on implementation period of less than 4.0 years.

Test For Condition 1

Agency offered cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less: yes

Test For Condition 2

Coverage Goal:	<u>13,352</u>
Total Coverage Points Awarded (incl. past credit):	<u>16,347</u>
% of Coverage Goal:	<u>122.4%</u>

BMP 6 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 7 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[07-08](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period:

RU filed an exemption for this BMP during report period: [No exemption request filed](#)
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

Test For Condition 1:07-08

Report Year	Report Period	BMP 7 Implementation Year	RU Has Public Information Program
1999	99-00	1	Yes
2000	99-00	2	Yes
2001	01-02	3	Yes
2002	01-02	4	Yes
2003	03-04	5	Yes
2004	03-04	6	Yes
2005	05-06	7	Yes
2006	05-06	8	Yes
2007	07-08	9	Yes
2008	07-08	10	Yes

BMP 7 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 8 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[07-08](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: [No](#)

RU filed an exemption for this BMP during report period: [No exemption request filed](#)

If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8's definition.

Test For Condition 1

Report Year	Report Period	BMP 8 Implementation Year	RU Has School Education Program
1999	99-00	1	Yes
2000	99-00	2	Yes
2001	01-02	3	Yes
2002	01-02	4	Yes
2003	03-04	5	Yes
2004	03-04	6	Yes
2005	05-06	7	Yes
2006	05-06	8	Yes
2007	07-08	9	Yes
2008	07-08	10	Yes

BMP 8 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 9 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department
 Date MOU Signed: 9/28/1995 Reporting Period: 07-08 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 9.

Condition 1: Agency has identified and ranked by use commercial, industrial, and institutional accounts.

Condition 2(a): Agency is on track to survey 10% of commercial accounts, 10% of industrial accounts, and 10% of institutional accounts within 10 years of date implementation to commence.

OR

Condition 2(b): Agency is on track to reduce CII water use by an amount equal to 10% of baseline use within 10 years of date implementation to commence.

OR

Condition 2(c): Agency is on track to meet the combined target as described in Exhibit 1 BMP 9 documentation.

Test For Condition 1

Ranked Commercial Customers **yes**
 Ranked Industrial Customers **yes**
 Ranked Institutional Customers **yes**
 Rank Coverage Met **Yes**

Test For Condition 2a

	Commercial	Industrial	Institutional
Total Completed Surveys Reported through 2008	<u>2077</u>	<u>206</u>	<u>89</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	<u>0</u>	<u>0</u>	<u>0</u>
Total + Credit	<u>2,077</u>	<u>206</u>	<u>89</u>
CII Accounts in Base Year	<u>6,691</u>	<u>340</u>	<u>0</u>
RU Survey Coverage as % of Base Year CII Accounts	<u>31.0%</u>	<u>60.6%</u>	<u>?</u>
Coverage Requirement by Year 9 of Implementation per Exhibit 1	<u>7.7%</u>	<u>7.7%</u>	<u>7.7%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>	<u>Yes</u>	<u>No</u>

BMP 9 Coverage Requirement Status

Test For Condition 2b

Coverage Year	Performance Target Savings (AF/Yr)	Performance Target Savings Coverage	Performance Target Savings Coverage Requirement	Coverage Requirement Met
1999	200	1%	0.5%	Yes
2000	400	2%	1%	Yes
2001	400	2%	1.7%	Yes
2002	406	2%	2.4%	No
2003	441	2%	3.3%	No
2004	502	3%	4.2%	No
2005	507	3%	5.3%	No
2006	558	3%	6.4%	No
2007	622	3%	7.7%	No
2008	702	4%	9%	No

Test For Condition 2c

Total BMP 9 Surveys + Credit	<u>2,372</u>
BMP 9 Survey Coverage	<u>33.7%</u>
BMP 9 Performance Target Coverage	<u>3.5%</u>
BMP 9 Survey + Performance Target Coverage	<u>37.2%</u>
Combined Coverage Equals or Exceeds BMP 9 Survey Coverage Requirement?	<u>Yes</u>

BMP 9 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 11 Coverage Requirement Status

Reporting Unit ID

Rep Unit Name:
[Long Beach Water Department](#)

Date MOU Signed:
[9/28/1995](#)

Reporting Period:
[07-08](#)

Rep Unit Category:
[Retail Only](#)

RU indicated "At least as effective as" implementation during report period: [No](#)

RU filed an exemption for this BMP during report period: [No exemption request filed](#)
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing.

Test For Compliance

Fully metered?	Yes
Water Coverage Met?	Yes
Provide Sewer Service?	yes
Sewer Coverage Met?	Yes

BMP 11 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 11 Sewer Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 12 Coverage Requirement Status

Reporting Unit ID Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 07-08 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
If exemption filed, type: _____

Exhibit 1 Coverage Requirement

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

Test For Compliance

Report Year	Report Period	Conservation Coordinator Position Staffed?	Total Staff on Team (incl. CC)
1999	99-00	yes	1
2000	99-00	yes	1
2001	01-02	yes	1
2002	01-02	yes	1
2003	03-04	yes	1
2004	03-04	yes	3
2005	05-06	yes	6
2006	05-06	yes	6
2007	07-08	yes	5
2008	07-08	yes	5

BMP 12 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 13 Coverage Requirement Status

Reporting Unit ID: Rep Unit Name: Long Beach Water Department

Date MOU Signed: 9/28/1995 Reporting Period: 07-08 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed
 If exemption filed, type: _____

Exhibit 1 Coverage Requirement
 Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

Test For Compliance

Agency or service area prohibits:

Report Year	Gutter Flooding	Single-Pass Cooling Systems	Single-Pass Car Wash	Single-Pass Laundry	Single-Pass Fountains	Other	RU has ordinance that meets coverage requirement
1999	yes	no	no	no	yes	yes	No
2000	yes	no	no	no	yes	yes	No
2001	yes	no	no	no	yes	yes	No
2002	yes	no	no	no	yes	yes	No
2003	yes	no	no	no	yes	yes	No
2004	yes	no	no	no	yes	yes	No
2005	yes	yes	yes	yes	yes	yes	Yes
2006	yes	yes	yes	yes	yes	yes	Yes
2007	yes	yes	yes	yes	yes	yes	Yes
2008	yes	yes	yes	yes	yes	yes	Yes

BMP 13 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

BMP 14 Coverage Calculation

Long Beach Water Department

66

Show Summary

1992 Housing Stock	Single Family	Multi Family
Average rate of natural replacement (% of remaining stock)	59,700	17,800
Average rate of housing demolition (% of remaining stock)	4.0%	4.0%
Estimated Housing Units with 3.5+ gpf Toilets in 1997	0.50%	0.50%
Average resale rate	48,728	14,529
Average persons per unit	4.5%	9.0%
Average toilets per unit	2.58	2.10
Average savings per home (gpd; from Exhibit 6)	1.80	1.20
	40.30	42.50

Single Family Housing Units

Coverage Year	Unretrofitted Houses	Houses Sold	Houses Unsold	Sold & Retrofitted	Sold & Already Retrofitted	Unsold & Retrofitted	Gross ROR Savings (AFY)	Nat'l Replacement Only Savings (AFY)	Net ROR Savings (AFY)
1999	44,713	2,162	46,322	2,162	0	1,853	676	583	94
2000	41,029	2,152	46,091	1,984	167	1,700	843	667	176
2001	37,648	2,141	45,860	1,821	320	1,560	995	747	248
2002	34,546	2,130	45,631	1,671	459	1,432	1,135	825	310
2003	31,699	2,119	45,403	1,533	586	1,314	1,264	899	364
2004	29,087	2,109	45,176	1,407	702	1,205	1,382	971	411
2005	26,690	2,098	44,950	1,291	808	1,106	1,490	1,039	450
2006	24,491	2,088	44,725	1,184	903	1,015	1,589	1,105	484
2007	22,473	2,077	44,502	1,087	991	931	1,680	1,169	512
2008	20,621	2,067	44,279	997	1,070	855	1,764	1,229	535

Multifamily Housing Units

Coverage Year	Unretrofitted Houses	Houses Sold	Houses Unsold	Sold & Retrofitted	Sold & Already Retrofitted	Unsold & Retrofitted	Gross ROR Savings (AFY)	Nat'l Replacement Only Savings (AFY)	Net ROR Savings (AFY)	Coverage Reqmt (AF)
1999	12,699	1,304	13,152	1,304	0	526	243	183	60	153
2000	11,099	1,297	13,086	1,140	158	460	319	210	109	439

BMP 14 Coverage Calculation

Show Summary

2001	9,701	1,291	13,021	996	295	402	385	235	150	837
2002	8,479	1,284	12,956	871	414	351	444	259	184	1,331
2003	7,411	1,278	12,891	761	517	307	494	283	212	1,908
2004	6,478	1,272	12,827	665	607	268	539	305	234	2,552
2005	5,662	1,265	12,763	581	684	235	578	327	251	3,253
2006	4,949	1,259	12,699	508	751	205	612	348	264	4,002
2007	4,325	1,253	12,635	444	809	179	641	367	274	4,787
2008	3,780	1,246	12,572	388	858	157	667	387	281	5,602

The fields in red are required.



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

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

[Link to FAQs](#)

2009

BMP 1.1 Operations Practices

Comments:

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

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

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: LBWD

Reporting unit name (District name) LBWD

Reporting unit number: 66

Primary contact:

First name: Matthew

Last name: Lyons

Email: matthew.lyons@lbwater.org

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

2009 BMP 1.2 Water Loss Control

[Link to FAQs](#)

[View MOU](#)

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

If yes, answer the following:

Determine metered sales in AF: 54,220.00

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

Determine system verifiable uses AF: 247.00

Determine total supply into the system in AF: 57,005.00

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.

Primary contact:

Agency name: LBWD

First name: Matthew

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

Reporting unit name (District name) LBWD

Last name: Lyons

Reporting unit number: 66

Email: matthew.lyons@lbwater.org



BMP 1.3 Metering with Commodity 2009

[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	6,844	6,844	6,844	Monthly	6
Dedicated Irrigatic	1,072	1,072	1,072	Monthly	6
Industrial	308	308	308	Monthly	6
Multi-Family	19,972	19,972	19,972	Monthly	6
Single-Family	60,249	60,249	60,249	Monthly	6
Fire Lines	1,178	1,178	1,178	Monthly	6
Other	1	1	1	Monthly	0
Other				Other	
Other				Other	
Other				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:

1) With respect to the date of the "Feasibility Study", it was first completed in 2008; it

For BMP 1.3. Metering with Commodity Rates:

A feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters

This is an update of the study first completed for the BMP reporting period ending FY 2008.

LBWD had 7,160 CII accounts that were not dedicated irrigation or firelines. It used a random number generator to assign a number to each account. It then selected the 160 accounts that had the highest random numbers. These accounts formed the basis of the study. LBWD's Geographic Information System (GIS) was used to locate and to measure the landscape at each site (the GIS system includes an aerial photograph layer). Nine of the accounts could not be located using GIS.

Only two of the accounts had at least an acre of land and both these accounts were removed from the study. One account was a school that already had a very sophisticated, web-based WBIC installed by LBWD (although it did not have a dedicated irrigation meter); therefore, it is unlikely additional savings would be realized by installing multiple dedicated meters at this site. The other was a hospital complex with roughly one acre of landscape broken into many small landscaped areas spread throughout the complex, each irrigated using the water line in its general vicinity. To install dedicated irrigation meters on all these small landscaped areas easily seems cost-prohibitive, as illustrated below.

The average parcel of the remaining sites was 60,604 square feet; the average amount of landscape per parcel was 1,925 square feet; or about 3-percent of the parcel's size.

Fifty-three of the properties had essentially no landscape. The remaining 96 accounts averaged 2,118 square feet of landscape. This analysis focused on these remaining 96 sites.

For this analysis we made simplifying assumptions:

- Water use without a dedicated irrigation meter was at a rate of 7 acre-feet of water per year per acre of land.
- Water use would decline 15% as a result of the installation of the dedicated irrigation meter (this number seems optimistic).

Benefit of Installing a Dedicated Irrigation Meter

Given the above, installing a dedicated meter would result in savings about 0.051 acre-feet per year per account. Given the retail rate for water is \$2.439 per hundred cubic feet, the benefit to the customer of the water saved would be roughly \$54.24 per year.

Cost of Dedicated Meter's Daily Service Charge

There are two major costs associated with installing a dedicated irrigation meter: the capital cost of the installation and the daily service charge (DSC) associated with every service connection. The annual cost of the DSC is:

- If a 1-inch meter is installed: \$230 per year; or
- If a 1-½ inch meter is installed: \$429 per year.

Therefore, the additional cost of the DSC alone significantly outweighs the benefit (\$54.24) of the additional meter.

Capital Cost of Installing a Dedicated Meter

The capital cost of converting a mixed-use account to include a dedicated irrigation meter has two major components: the cost of installing a new meter and the cost of isolating the irrigation system from the existing customer water lines and connecting the irrigation system to the new meter. The meter installation costs can be expressed as both the out-of-pocket cost as well as a "payback period". For this example, we use a simple payback period that does not include discounting because the numbers are so extreme it would not make a meaningful difference in the final analysis:

- If a 1-inch meter is installed: fee = \$1,800; payback period of 33 years
- If a 1-½ inch meter is installed: fee = \$2,400; payback period of 44 years.

In addition to the fee for installing the dedicated meter, the customer will incur costs associated with isolating the irrigation system from the existing source of water and connecting the irrigation system to the new meter. For the sake of this analysis we used a simplifying assumption that this will cost \$1,000. This is a fairly low estimate. The cost will increase significantly depending on factors such as the number of connections to the existing supply, the distance to the new meter, whether asphalt and/or concrete must be cut in order to complete the connection, etc. Again, using a simple payback period calculation:

- An installation cost of \$1,000 results in an 18 year payback period.

The combined payback periods for the capital cost components are

- If a 1-inch meter is installed: 51 years
- If a 1-½ inch meter is installed: 62 years.

Conclusion

The cost of the DSC alone overwhelms the benefit of installing a dedicated irrigation meter. Consequently, the payback period related to capital costs is infinity; meaning there will be no net annual gain that can offset the initial capital costs. But even if the DSC were eliminated, the capital costs alone make the installation of a dedicated irrigation meter impractical.

The fields in red are required.

Agency name: LBWD

Primary contact:

First name: Matthew

Reporting unit name (District name) LBWD

Last name: Lyons

Reporting unit number: 66

Email: matthew.lyons@lbwater.org

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



BMP 1.4 Retail Conservation Pricing

[Link to FAQs](#)

[View MOU](#)

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.

2009

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	12,662,925.00		3,343,683.00
Uniform	Industrial	274,140.00		151,318.00
Uniform	Dedicated Irrigation	2,080,952.00		504,393.00
Uniform	Fire Lines	10,588.00		555,322.00
Increasing Block	Multi-Family	19,021,006.00		3,969,514.00
Select a Rate Struc	Other	18,571,650.00		8,031,840.00
Select a Rate Struc	Other			

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)
Uniform	Single-Family	1,429,103.00		3,874,459.00
Uniform	Multi-Family	1,747,121.00		1,970,765.00
Uniform	Other	1,212,879.00		1,261,276.00
Select a Rate Struc	Other			
Select a Rate Struc	Other			
Select a Rate Struc	Other			
Select a Rate Struc	Other			

Comments:

"Other" in the Waste Water section, above, is CII; our billing system does not differ

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 name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Link to FAQs](#)

[View MOU](#)

2009

BMP 2.1 Public Outreach - Retail Reporting

Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP?

Yes No

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

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Public Information Programs List

Did at least one contact take place during each quarter of the reporting year?

Number of Public Contacts	Public Information Programs
12	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
4	Newsletter articles on conservation
1	Website
6	Email Messages
	Select a public contact

Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP?

Yes No

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

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year?

Media Contacts List

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types
4		News releases
1		Articles or stories resulting from outreach
1		Television contacts
		Select a type of media contact
		Select a type of media contact
		Select a type of media contact

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)

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):

www.lbwater.org

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

Changes to rebate page; information on prohibited uses of water; add additional things to list of resources; information on the "opportunity drawing" for free landscape makeover.

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 break 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
General	\$293,917	<input type="checkbox"/>	
		<input type="checkbox"/>	

Comments:

The numbers shown in the number of public outreach and of media contacts is really just a small portion of what's actually done; we have many contacts with the r

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 name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Link to FAQs](#)

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?
	\$388,830.00	<input type="checkbox"/> If yes, check the check box.
		<input type="checkbox"/>
		<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.

Although we have many messages, the more predominant one is a "Stop Sign" shaped image with a Don't Waste Water message inside the sign.

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:

Water ambassadors

Training

Training Type	# of Trainings	# of Attendees	Description of Other
General conservation	\$6	\$10	We have about 10 Water Ambassadors come to the meeting

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

--

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

Conservation Gardens

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

We completely renovated the drought tolerant garden at our administration building.

Landscape contests or awards

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

We "raffled" 9 new residential landscapes to people who entered the "Opportunity Drawing", a turf-removal campaign.

Comments:

The drop-down list in the Public Information Programs section did not appear to be working correctly; I was not able to enter data

The fields in red are required.



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

[Link to FAQs](#)

[View MOU](#)

2009

BMP 2.2 School Education Programs, Retail Agencies School Programs

Is your agency implementing school programs which can be counted to help another agency comply with this BMP? Yes No

Enter Wholesaler Names, separated by commas:

Materials meet state education framework requirements?

Description of Materials

Worked with MWDSC to develop grade-appropriate materials.

Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

"Salad Bowl": how much water does it take to grow inters to make a salad; standards: Grades 2, 3 & 4 science and math. "World of Water" activity, students create a "stress ball world" using balloons and rice; standards K-6 creative expression. Poster Contest: student art projects expressing water conservation ideas; K-6 standards in creative expression.

Number of students reached

Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

"Water Times": Grades 6-8 standards in sci, math, English and Language Arts. Poster contest: student art projects expressing water conservation ideas; 7-12 standards in creative expression.

Number of Distribution

Annual budget for school education program

Description of all other water supplier education programs

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

Annual poster contest for grades K-6 and 7-12.

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

2 54,000

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.

Primary contact:

Agency name: LBWD

First name: Matthew

Division name (Reporting unit): LBWD

Last name: Lyons

Reporting unit number: 66

Email: matthew.lyons@lbwater.org



Service Area Population: 462257

Non- Potable Water

If you select Other for type, enter

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
Long Beach Recycled Water	4,269.00	Recycled Non Potable	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Exported Water Name	AF/YEAR	Where Exported? such as groundwater recharge, retail,

2010

The fields in red are required.



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

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

[Link to FAQs](#)

2010

BMP 1.1 Operations Practices

Comments:

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

See the coverage requirements for this BMP:

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: Last name: Email:

Reporting unit name (District name):

Reporting unit number:

You must enter the reporting unit number that we have on record for your 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

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)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments:

The fields in red are required.

Primary contact:

Agency name: LBWD

First name: Matthew

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

Reporting unit name (District name) LBWD

Last name: Lyons

Reporting unit number: 66

Email: matthew.lyons@lbwater.org



BMP 1.3 Metering with Commodity 2010

[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	6,296	6,296	6,296	Monthly	6
Dedicated Irrigatic	1,074	1,074	1,074	Monthly	6
Industrial	263	263	263	Monthly	6
Multi-Family	19,841	19,841	19,841	Monthly	6
Single-Family	59,747	59,747	59,747	Monthly	6
Fire Lines	1,125	1,125	1,125	Monthly	6
Other	1	1	1	Monthly	0
Other				Other	
Other				Other	
Other				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. Describe, upload or provide an electronic link to the Feasibility Study Upload File

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

Web address(s) URL: comma-separated list

Comments:

1) With respect to the date of the "Feasibility Study", it was first completed in 2008; it

For BMP 1.3. Metering with Commodity Rates:

A feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters

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- If a 1-½ inch meter is installed: \$429 per year.

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Conclusion

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The fields in red are required.

Primary contact:

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

Agency name: First name:

Reporting unit name (District name): Last name:

Reporting unit number: Email:



[Link to FAQs](#)

BMP 1.4 Retail Conservation Pricing

[View MOU](#)

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.

2010

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)
<input type="text" value="Uniform"/>	<input type="text" value="Commercial"/>	<input type="text" value="13,838,369.00"/>	<input type="text" value="3,820,013.00"/>
<input type="text" value="Uniform"/>	<input type="text" value="Industrial"/>	<input type="text" value="224,696.00"/>	<input type="text" value="171,205.00"/>
<input type="text" value="Uniform"/>	<input type="text" value="Dedicated Irrigation"/>	<input type="text" value="1,965,223.00"/>	<input type="text" value="611,044.00"/>
<input type="text" value="Uniform"/>	<input type="text" value="Fire Lines"/>	<input type="text" value="9,263.00"/>	<input type="text" value="644,835.00"/>
<input type="text" value="Increasing Block"/>	<input type="text" value="Multi-Family"/>	<input type="text" value="20,868,384.00"/>	<input type="text" value="4,570,627.00"/>
<input type="text" value="Increasing Block"/>	<input type="text" value="Single-Family"/>	<input type="text" value="19,702,784.00"/>	<input type="text" value="9,236,758.00"/>
<input type="text" value="Select a Rate Struc"/>	<input type="text" value="Other"/>	<input type="text"/>	<input type="text"/>

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)
<input type="text" value="Uniform"/>	<input type="text" value="Single-Family"/>	<input type="text" value="1,688,049.00"/>	<input type="text" value="4,672,331.03"/>
<input type="text" value="Uniform"/>	<input type="text" value="Multi-Family"/>	<input type="text" value="2,080,037.00"/>	<input type="text" value="2,375,657.85"/>
<input type="text" value="Uniform"/>	<input type="text" value="Other"/>	<input type="text" value="1,356,506.00"/>	<input type="text" value="1,514,582.70"/>
<input type="text" value="Select a Rate Struc"/>	<input type="text" value="Other"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Select a Rate Struc"/>	<input type="text" value="Other"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Select a Rate Struc"/>	<input type="text" value="Other"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Select a Rate Struc"/>	<input type="text" value="Other"/>	<input type="text"/>	<input type="text"/>

Comments:

With respect to waste water revenue, "Other" is CII. Our billing system does not



The fields in red are required.



Agency name: LBWD

Reporting unit name (District name) LBWD

Reporting unit number: 66

Primary contact:

First name: Matthew

Last name: Lyons

Email: matthew.lyons@lbwater.org

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.

[Link to FAQs](#)

[View MOU](#)

2010

BMP 2.1 Public Outreach - Retail Reporting

Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP?

Yes No

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

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Public Information Programs List

Did at least one contact take place during each quarter of the reporting year?

Number of Public Contacts	Public Information Programs
12	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
4	Newsletter articles on conservation
4	Landscape water conservation media campaigns
4	Website
	Select a public contact

Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP?

Yes No

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

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year?

Media Contacts List

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types
1		Articles or stories resulting from outreach
12		News releases
2		Newspaper contacts
2		Television contacts
		Select a type of media contact
		Select a type of media contact

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)

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):

www.lbwater.org

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

Completely revamped website; added "Lawn to garden" website; added "LA Coastal Gardens" website; update to rebate page.

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 break 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
General	\$371,917	<input type="checkbox"/>	
		<input type="checkbox"/>	

Comments:

The numbers shown in the number of public outreach and of media contacts is really just a small portion of what's actually done; we have many contacts with the r

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 name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[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?
	\$236,517.00	<input type="checkbox"/> If yes, check the check box.
		<input type="checkbox"/>
		<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.

Although we have many messages, the more predominant one is a "Stop Sign" shaped image with a Don't Waste Water message inside the sign.

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:

Water ambassadors

Training

Training Type	# of Trainings	# of Attendees	Description of Other
General conservation	\$6	\$10	We have about 10 Water Ambassadors come to the meeti

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

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

Conservation Gardens

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

Created a drought tolerant California Native garden in the front of our administration building.

Landscape contests or awards

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

Comments:

The drop-down list in the Public Information Programs section did not appear to be working correctly; I was not able to enter data

The fields in red are required.



Agency name: LBWD

Reporting unit name (District name) LBWD

Reporting unit number: 66

Primary contact:

First name: Matthew

Last name: Lyons

Email: matthew.lyons@lbwater.org

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.

[Link to FAQs](#)

[View MOU](#)

2010

BMP 2.2 School Education Programs, Retail Agencies School Programs

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

Yes No

Enter Wholesaler Names, separated by commas:

Materials meet state education framework requirements?

Description of Materials

Worked with MWDSC to develop grade-appropriate materials.

Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

"Salad Bowl": how much water does it take to grow inters to make a salad; standards: Grades 2, 3 & 4 science and math. "World of Water" activity, students create a "stress ball world" using balloons and rice; standards K-6 creative expression. Poster Contest: student art projects expressing water conservation ideas; K-6 standards in creative expression.

Number of students reached

950

Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

"Water Times": Grades 6-8 standards in sci, math, English and Language Arts. Poster contest: student aret projects expressing water conservation ideas; 7-12 standards in creative expression. "Solar Cup Competition" building solar-powered boat capable of competing in races; grades 9-12, standards for sci, math English and Language Arts.

Number of Distribution

400

Annual budget for school education program

\$25,000.00

Description of all other water supplier education programs

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

Annual poster contest for grades K-6 and 7-12.

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

AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.1

[Back to Instructions](#)

[Click to access definition](#)

Water Audit Report for: **Long Beach Water Department**

Reporting Year: **2010** / 7/2009 - 6/2010

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	<input type="text" value="5"/>	<input type="text" value="34,655.400"/>	acre-ft/yr
Master meter error adjustment (enter positive value):	<input type="text" value="5"/>	<input type="text" value="3.500"/>	under-registered acre-ft/yr
Water imported:	<input type="text" value="8"/>	<input type="text" value="22,236.600"/>	acre-ft/yr
Water exported:	<input type="text" value="10"/>	<input type="text" value="0.000"/>	acre-ft/yr
WATER SUPPLIED:		<input type="text" value="56,895.500"/>	acre-ft/yr

AUTHORIZED CONSUMPTION

Billed metered:	<input type="text" value="8"/>	<input type="text" value="54,091.000"/>	acre-ft/yr
Billed unmetered:	<input type="text" value="8"/>	<input type="text" value="0.000"/>	acre-ft/yr
Unbilled metered:	<input type="text" value="8"/>	<input type="text" value="221.000"/>	acre-ft/yr
Unbilled unmetered:	<input type="text" value="8"/>	<input type="text" value="23.000"/>	acre-ft/yr
AUTHORIZED CONSUMPTION:		<input type="text" value="54,335.000"/>	acre-ft/yr

Click here: for help using option buttons below

Pcnt: Value:

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption)

acre-ft/yr

Apparent Losses

Unauthorized consumption: acre-ft/yr
 Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	<input type="text" value="7"/>	<input type="text" value="5"/>	<input type="text" value="771.164"/>	acre-ft/yr
Systematic data handling errors:	<input type="text" value="7"/>	<input type="text" value="6"/>	<input type="text" value="100.000"/>	acre-ft/yr

Apparent Losses:

Pcnt: Value:

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: acre-ft/yr

WATER LOSSES: acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: acre-ft/yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	<input type="text" value="7"/>	<input type="text" value="10"/>	<input type="text" value="902.9"/>	miles
Number of active AND inactive service connections:	<input type="text" value="7"/>	<input type="text" value="10"/>	<input type="text" value="91,146"/>	
Connection density:			<input type="text" value="101"/>	conn./mile main
Average length of customer service line:	<input type="text" value="7"/>	<input type="text" value="9"/>	<input type="text" value="0.2"/>	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	<input type="text" value="7"/>	<input type="text" value="3"/>	<input type="text" value="65.0"/>	psi

COST DATA

Total annual cost of operating water system:	<input type="text" value="7"/>	<input type="text" value="8"/>	<input type="text" value="\$35,528,809"/>	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<input type="text" value="7"/>	<input type="text" value="10"/>	<input type="text" value="\$0.00"/>	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	<input type="text" value="7"/>	<input type="text" value="10"/>	<input type="text" value="\$759.63"/>	\$/acre-ft/yr

Retail costs are less than (or equal to) production costs; please review and correct if necessary

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	<input type="text" value="4.9%"/>
Non-revenue water as percent by cost of operating system:	<input type="text" value="3.8%"/>
Annual cost of Apparent Losses:	<input type="text" value="\$0"/>
Annual cost of Real Losses:	<input type="text" value="\$1,175,219"/>

Operational Efficiency Indicators

Apparent Losses per service connection per day:	<input type="text" value="9.93"/>	gallons/connection/day
Real Losses per service connection per day*:	<input type="text" value="15.15"/>	gallons/connection/day
Real Losses per length of main per day*:	<input type="text" value="N/A"/>	
Real Losses per service connection per day per psi pressure:	<input type="text" value="0.23"/>	gallons/connection/day/psi
<input type="text" value="7"/> Unavoidable Annual Real Losses (UARL):	<input type="text" value="440.75"/>	million gallons/year
From Above, Real Losses = Current Annual Real Losses (CARL):	<input type="text" value="1,547.10"/>	million gallons/year
<input type="text" value="9"/> Infrastructure Leakage Index (ILI) [CARL/UARL]:	<input type="text" value="1.14"/>	

* only the most applicable of these two indicators will be calculated

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 69 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Master meter error adjustment
- 3: Customer metering inaccuracies

[For more information, click here to see the Grading Matrix worksheet](#)

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Water Audit Report For:		Report Yr:	
Long Beach Water Department		2010	
Own Sources (Adjusted for known errors)	34,658.900	Revenue Water	54,091.000
Water Imported	22,236.600	Non-Revenue Water (NRW)	2,804.500
Water Exported	0.000	Billed Water Exported	
Water Supplied	56,895.500	Billed Metered Consumption (inc. water exported)	54,091.000
		Billed Unmetered Consumption	0.000
		Unbilled Metered Consumption	221.000
		Unbilled Unmetered Consumption	23.000
		Unauthorized Consumption	142.239
		Customer Metering Inaccuracies	771.164
		Systematic Data Handling Errors	100.000
		Leakage on Transmission and/or Distribution Mains	Not broken down
		Leakage and Overflows at Utility's Storage Tanks	Not broken down
		Leakage on Service Connections	Not broken down
Authorized Consumption	54,335.000	Billed Authorized Consumption	54,091.000
		Unbilled Authorized Consumption	244.000
Water Losses	2,560.500	Apparent Losses	1,013.403
		Real Losses	1,547.097



California Urban Water Conservation Council

TARGETS / COMPLIANCE (CUWCC MOU)

Baseline / Initial GPCD
(Use option buttons to select)

GPCD in 2006 127.7
Baseline GPCD (1997 to 2006) 133.0

GPCD in 2010 109.9
GPCD Target for 2018 109.1

Biennial GPCD Compliance Table

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	128.2	100%	133.0
2012	2	92.8%	123.4	96.4%	128.2
2014	3	89.2%	118.6	92.8%	123.4
2016	4	85.6%	113.8	89.2%	118.6
2018	5	82.0%	109.1	82.0%	109.1

Potable Water GPCD for each Year in the
Baseline Period

Year	GPCD
2006	127.7
2005	129.7
2004	135.9
2003	130.6
2002	134.6
2001	133.9
2000	134.2
1999	131.9
1998	132.6
1997	138.8

Monthly GPCD Data for Weather Normalization

Fiscal Year Ending	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
2010	131.4	128.0	122.2	115.2	106.1	95.1	93.8	82.1	101.8	100.6	120.1	122.2
Baseline avg*	159.5	161.3	150.1	139.4	121.6	116.8	114.3	103.9	119.0	123.4	139.2	147.3

* The average for each month is based on the baseline period 1997 to 2006



California Urban Water Conservation Council

TARGETS / COMPLIANCE (SBx7-7)

Target Summary	2020	2015
Method 1	107.3	120.7
Method 2	N/A	N/A
Method 3	124.9	129.5
Method 4	0.0	0.0

Input cells:
 Calculated cells:

GPCD in 2010	109.9
Base daily per capita water use (10-15yr baseline)	134.1
Base daily per capita water use (5yr baseline)	131.5
Max. allowable GPCD target in 2020 (95% x 5yr baseline)	124.9

Base daily per capita water use (10-15yr baseline)
 Base daily per capita water use (5yr baseline)
 Max. allowable GPCD target in 2020 (95% x 5yr baseline)

Method 1: Baseline per Capita Water Use

80% x Base daily per capita water use (10-15yr baseline):

107.3

2015 Target: 120.7
 2020 Target: 107.3

Method 3: Hydrologic Region Targets

Enter the percentage of your service area population in each hydrologic region

Region	Region Name	% Population	GPCD Target
1	North Coast		137
2	San Francisco Bay		131
3	Central Coast		123
4	South Coast	100.0%	149
5	Sacramento River		176
6	San Jacinto		174
7	Tulare lake		188
8	North Lahontan		173
9	South Lahontan		170
10	Colorado River	100.0%	211

2015 Target: 129.5
 2020 Target (reduced): 124.9

Method 2: Performance Standards

TM 2 Indoor Water Use allowance: 0.0
 TM 6 Landscaped Area Water Use: 0.0
 TM 7 Baseline CII Water Use: 0.0

2015 Target: N/A
 2020 Target: N/A

Method 4:

To be Developed



California Urban Water Conservation Council

GPCD Matrix

Fiscal Year Ending	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL GPCD
2010	131.5	128.1	122.2	115.3	106.1	95.1	93.8	82.1	101.8	100.6	120.1	122.2	109.9
2009	131.8	128.4	129.7	125.7	106.8	87.3	92.5	79.8	101.1	102.4	117.7	118.7	110.1
2008	151.5	155.8	131.0	131.3	116.0	104.9	101.9	94.1	117.1	121.6	126.3	131.0	123.6
2007	161.3	152.8	141.7	138.1	123.4	117.0	122.6	106.1	126.1	123.5	141.2	146.4	133.3
2006	150.9	158.9	139.0	130.1	120.1	119.0	116.5	110.4	108.6	109.7	127.7	142.5	127.8
2005	156.6	161.3	153.6	128.7	117.4	112.3	111.3	98.1	113.7	125.2	136.9	141.8	129.7
2004	155.7	154.6	151.7	142.1	122.0	117.1	120.3	110.5	126.9	132.9	146.1	151.7	136.0
2003	158.6	155.1	148.7	139.6	123.7	109.6	121.7	101.3	117.6	122.9	129.9	139.1	130.6
2002	158.3	149.7	149.7	139.0	120.2	114.9	115.2	110.3	129.4	127.7	142.3	151.0	134.7
2001	163.8	167.4	153.3	134.8	123.0	124.6	114.9	100.9	114.2	121.7	141.1	147.8	134.0
2000	159.3	157.6	146.0	150.3	129.8	124.5	104.7	102.0	114.7	125.7	144.0	153.3	134.3
1999	156.7	164.8	146.4	142.6	120.5	117.2	117.7	104.8	115.5	116.9	137.9	143.4	132.0
1998	171.3	169.3	156.7	149.3	120.0	114.5	111.0	94.8	113.4	113.6	128.5	149.7	132.7
1997	164.4	166.7	156.1	138.6	120.8	115.2	110.9	107.0	136.8	138.6	158.2	153.7	138.9
1996	157.5	161.4	154.6	144.4	126.7	122.9	121.7	105.9	116.2	133.0	152.8	155.4	137.7
1995	163.7	169.4	151.5	147.7	127.1	123.2	107.9	104.0	113.3	127.5	139.8	142.1	134.8
1994													
1993													
1992													
1991													
1990													

Recycled water accounts for 9.9% of 2008 deliveries, therefore select a 10 year baseline period using the selection buttons below

Baseline Ending In...	Baseline 10- years	N/A	N/A	N/A	N/A	N/A	N/A
2010	<input type="radio"/>						
2009	<input type="radio"/>						
2008	<input type="radio"/>						
2007	<input type="radio"/>						
2006	<input type="radio"/>						
2005	<input checked="" type="radio"/>	127.0					

Ending in... years	Baseline 5- years
2010	<input type="radio"/>
2009	<input type="radio"/>
2008	<input type="radio"/>
2007	<input checked="" type="radio"/>

Base daily per capita water use (10-15yr baseline) **134.1**

Base daily per capita water use (5yr baseline) **131.5**

User selection buttons:



User selection buttons:
Use the buttons to indicate the chosen baseline period



Population

Input cells:
 Calculated cells:

Enter population data for the service area.

YEAR	POPULATION
2010	462,257
2009	462,184
2008	462,110
2007	462,037
2006	461,963
2005	461,890
2004	461,816
2003	461,743
2002	461,669
2001	461,596
2000	461,522
1999	458,196
1998	454,894
1997	451,616
1996	448,361
1995	445,130
1994	
1993	
1992	
1991	
1990	

Please note:

The GPCD calculation is very sensitive to errors in population. Please review the guidance document *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use* for additional information and direction in order to acquire the most accurate population estimates.

Population data are only required for years that contain water use data.

If you see "<--Enter Population" this indicates you have entered water use data for this timeframe but not population. Please add population data to enable a calculation of GPCD and associated targets.

457,130

Average population, for the baseline period selected, in the GPCD Matrix worksheet

The following weather-normalizes LBWD's 2010 GPCD, using a weather-normalization Model approved by CUWCC.

I. Baseline GPCD

The Baseline GPCD shall equal the average annual Potable Water GPCD for the years 1997 through 2006 (fiscal or calendar year, at the discretion of the retail water agency, so long as all calculations from an agency are consistent).

The MOU allows water agencies to petition for a different baseline period (other than 1997-06). LBWD reserved to option of making such a petition. This calculation of the baseline is, therefore, tentative based on a decision to petition for a different baseline period.

FY (July-June) ending	Production (AF)	Population*	GPCD
1997	70,308.40	451,616	139.0
1998	67,564.80	454,894	132.6
1999	67,722.70	458,196	131.9
2000	69,401.10	461,522	134.2
2001	69,227.14	461,596	133.9
2002	69,613.80	461,669	134.6
2003	67,529.60	461,743	130.6
2004	70,287.56	461,816	135.9
2005	67,088.60	461,890	129.7
2006	66,085.11	461,963	127.7
			133.0 Baseline GPCD

* Population on Jan 1, i.e., half way through fiscal year.

II. Average Weather During Baseline

Month of Yr (J-J)	Precip (max 4" per mo.)*	Ave Daily Max Temp	Adj Summer Temp**
7	0.04	82	1.5
8	-	83	1.5
9	0.08	82	1.25
10	0.99	76	1
11	0.82	71	0
12	1.62	67	0
1	2.26	67	0
2	4.00	66	0
3	1.53	68	0
4	0.85	70	0
5	0.47	74	1
6	0.06	77	1.5
	12.72	74	

** The effect of Temp on water use increases during the summer months; these values capture that increased impact.

III. Compliance Year GPCD

Compliance Year (FY J-J)	2010
AF into the System	56,892
Population	462,257
Compliance Year GPCD	110

IV. Calculate adjustment to Compliance Year's GPCD based on that year's weather

Adjustment to GPCD per 1-unit increase from Baseline

	Precip	Temp	Summer Temp
Monthly	(2.836)	0.930	0.170
Annual	(0.236)	0.077	0.014

Calculate adjustment

Month of Yr (J-J)	Compliance Year Weather*		C	Actual - Baseline		Impact on GPCD from the difference in weather			
	A	B		D	E	F	G	H	I
	Precipitation	Ave Daily Max Temp	Limit Precip to 4"/month	Precip (max 4" per mo.)*	Ave Daily Max Temp	Precip	Temp	Summer Temp	Total Impact the Difference in Weather had on GPCD
7	-	82.87	-	(0.04)	1	0.01	0.10	0.03	0.13
8	-	84.39	-	-	1	-	0.08	0.02	0.11
9	-	85.20	-	(0.08)	4	0.02	0.28	0.06	0.37
10	0.59	76.45	0.59	(0.40)	0	0.09	0.03	0.01	0.14
11	-	74.00	-	(0.82)	3	0.19	0.24	-	0.43
12	2.46	64.94	2.46	0.84	(2)	(0.20)	(0.16)	-	(0.36)
1	6.89	67.61	4.00	1.74	0	(0.41)	0.04	-	(0.38)
2	4.64	65.43	4.00	0.00	(1)	(0.00)	(0.05)	-	(0.05)
3	0.25	69.74	0.25	(1.28)	2	0.30	0.13	-	0.43
4	0.77	67.73	0.77	(0.08)	(2)	0.02	(0.18)	-	(0.16)
5	0.05	71.58	0.05	(0.42)	(2)	0.10	(0.19)	(0.04)	(0.13)
6	0.01	73.70	0.01	(0.05)	(3)	0.01	(0.22)	(0.06)	(0.27)
	15.66	74	12.13	(0.59)	1.15	0.14	0.09	0.02	0.25

* From the National Weather Service station for the Long Beach Airport (<http://www.weather.gov/climate/index.php?wfo=lox>)

V. Weather-Normalized GPCD

133.0 Baseline GPCD (from Section I)

109.9 Compliance Year GPCD (from Section III)

(0.3) Adjust Compliance Year's GPCD for impact of weather (from Section IV)

109.6 Weather-normalized GPCD

18% Percent Reduction from Baseline GPCD

LONG BEACH WSCMO, CALIFORNIA

Western Regional Climate Center

<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?calong>

Monthly Total Precipitation (inches)

Long Beach WSCMO data:

<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5085>

Under "Precipitation", "Monthly Precip Listings", click "Monthly Totals"

Western Regional Climate Center, wrcc@dri.edu

Baseline Months Only				
FY (J-J)	Year	Month	Month	Precip
1997	1996	7		-
1997	1996	8		-
1997	1996	9		-
1997	1996	10		1.5
1997	1996	11		1.8
1997	1996	12		4.1
1997	1997		1	6.2
1997	1997	2		0.1
1997	1997	3		-
1997	1997	4		-
1997	1997	5		-
1997	1997	6		-
1998	1997	7		-
1998	1997	8		-
1998	1997	9		0.5
1998	1997	10		-

Baseline Period			
Monthly Ave Rainfall			
Month	Count	Baseline	Baseline
7	10	0.04	
8	10	-	
9	10	0.08	
10	10	0.99	
11	10	0.82	
12	10	1.62	
1	10	2.26	
2	10	4.00	
3	10	1.53	
4	10	0.85	
5	10	0.47	
6	10	0.06	

12.72

Monthly Average Maximum Temperature (Degrees Fahrenheit)
 from "Weather Service Contract Meteorological Office", or WSCMO
<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?caalong>

Western Regional Climate Center, wrcc@dri.edu

Max Ave Daily Temp - Baseline Period				
FY (J-J)	CY	Month	Ave Max Temp	
1997	1996	7	83.0	
1997	1996	8	84.7	
1997	1996	9	80.3	
1997	1996	10	73.4	
1997	1996	11	71.3	
1997	1996	12	66.0	
1997	1997	1	64.3	
1997	1997	2	67.3	
1997	1997	3	73.0	
1997	1997	4	73.6	
1997	1997	5	80.3	
1997	1997	6	76.4	
1998	1997	7	80.5	

Baseline Period			
Monthly Ave Max Daily Temp	Count	Mos	Baseline Ave
			Max Daily Temp
7	10	10	81.6
8	10	10	83.3
9	10	10	81.6
10	10	10	76.0
11	10	10	70.9
12	10	10	67.0
1	10	10	67.2
2	10	10	66.1
3	10	10	68.1
4	10	10	70.1
5	10	10	74.1
6	10	10	76.6