



BMP 5 Preliminary Needs Survey - Summary

Background

In 2003, the CUWCC set out to ask all member agencies to answer an on-line survey with questions about BMP 5 (Large Landscape Conservation) implementation issues. A total of 36 agencies responded to the survey and responses were sorted and tallied. Additionally, ConserVision consulting was asked to conduct a number of telephone interviews with water agencies that have not been able to meet the requirements of BMP 5. Due to the size and scope of this project, it was decided to concentrate on small agencies (less than 1,000 landscape irrigation connections). The sample survey size is too small to be a representative sampling of water utilities who utilize the Council's BMP reporting database to report their activities. Nevertheless, the survey findings were sufficient to guide the development of a technical assistance program the Council is about to undertake.

The objective of this summary is to identify those elements and characteristics that are common to similar sized agencies in the development of a BMP 5 reporting tool that can be used for most agencies. Following is a summary of our findings:

Findings

Water Efficiency in Landscape as a Priority

Most agencies contacted are in agreement that water efficiency in large landscape areas is important to them. The general view is that landscape irrigation efficiency can provide needed water for population growth demands; it can be the way to equitably provide water during droughts or emergencies; and it is viewed as a source of "new water". Another telling factor supporting the conclusion that landscape irrigation efficiency is a priority is the fact that retailers and wholesalers are constantly applying for grants to fund a variety of programs that can affect the way end users monitor, upgrade or better manage their irrigation accounts.

The loss of income or decreased sales from implementation of BMP 5 was a concern for only a third of the agencies interviewed.

Status of BMP5 Reporting Implementation

Focusing on the small agencies that are not fully implementing water budget reporting to their customers, we found that for the most part, only irrigation surveys have been offered to customers. Other agencies have implemented other components, not clearly defined in the survey. More than a third surveyed, have done nothing. We have also found that conservation personnel in general, refer large landscape account holders to regional or local training programs that are geared toward landscape professionals. Some conservation staff agree that irrigation surveys are a good approach; however they are expensive and can't be offered on a large scale.

Almost 70% of surveyed agencies have a copy of the *CUWCC BMP 5 Handbook*; however, we have found that from having access to the know-how to actually be able to implement a BMP 5 program, there are a great deal of barriers to overcome. Most of these agencies point to lack of staff (or staff time). Lack of funding and costly integration with IT departments were also mentioned. It seems that in most small agencies, conservation staff is overwhelmed with many functions they need to perform and can't tackle implementing a BMP 5 program by themselves.

The Need for Technical Assistance

When conservation staff members were asked if they would benefit from staffing and/or hands-on technical assistance, 81% of them answered positively. Also, site area measurement assistance, water budgeting information, budgeting/rate integration and the need for software or on-line tools came up as strong assistance needs.

Most agencies agreed that a regional technical assistance program could be beneficial, especially if it was fully or partly subsidized. Evidence of this is when we were calling agencies to see if they would like to participate in a BMP 5 Technical assistance pilot program, one of the first questions was always “Is this going to cost us anything?”

Some agencies have stated that they have started some component of BMP 5, but are waiting for funding or applying for a grant to be able to complete some remaining tasks.

One agency is already offering water budgets using a tool similar to the one in the Council’s H2Ouse water budget calculator for their residential customers and was planning on modifying it to offer to their irrigation-only accounts. But again, the project is in the “back burner”

Basic Elements to Implement BMP 5 Findings (Or Do agencies have access to the Most Essential Elements Needed to Build a BMP 5 Tool?)

Surprisingly, the on-line survey found that most agencies do have a way to obtain the input necessary to get a water budget per irrigation account as an output but lack the resources to put all these elements together to create and/or implement a program. Following are a list of these factors:

- **Dedicated irrigation meters:** Almost 80% of the respondents to the survey indicated that their billing system can identify their irrigation accounts. Two thirds of the agencies in the survey serve anywhere between 50 and 1,000 landscape irrigation connections. Access to their consumption varies from agency to agency. In general, water departments under some cities have more of a challenge getting access to monthly consumption reports for their irrigation accounts. Water districts tend to have more modern billing systems most likely will have an in-house IT department that can provide conservation staff with a monthly consumption report. Regarding mixed use meters, agencies tend to have more of a problem identifying them and if there is any significant landscape irrigation use on some of them.
- **Proximity to a CIMIS station and coverage:** 78% of the respondents to the survey agreed that there are acceptable ETo stations such as CIMIS in their service area. Although, some indicated that the station did not represent their entire service area. From the people that we talked to, it seems that for the purposes of providing an index or an idea of a target budget, the information from a close CIMIS station could work for them.
- **Site Area Measurements.** The preliminary needs survey did not ask the agencies if they had site area measurements for their dedicated irrigation accounts. We asked this question in different ways, partly because what we wanted to know is if they have a way to obtain this information or how much of a problem will be to gather it. Since we’re dealing with small agencies, some of them did not think that spending the time measuring these sites was a problem. Some other agencies have primarily one customer with a great deal of irrigation accounts like the city parks and common areas department. These agencies expressed said that they could work together with the maintenance staff to obtain area measurements. In other agencies, we have seen staff doing the measurements themselves. Finally, some other agencies do have access to area measurements, but have not done anything with the information.

Conclusion:

These findings indicate that, for small agencies up to a 1,000 accounts, there is sufficient evidence that if there was access to one-to-one technical assistance and an easy to use tool, some of these agencies could be implementing a BMP 5 program. We also found out that agencies like a “one button solution” where you input your data on one side, press a button and get your reports on the other side. Concern about software installation and adaptation glitches of a new “BMP 5 tool” may become a problem since it was perceived that it may involve time and resources from the agency’s IT department. When we have offered an on-line web based tool, the response has been more positive.

It looks like water retailers’ staff can benefit from a web-based tool and some training in how to gather the input needed for them to get the output required to provide a water budget to the large landscape customer.

BMP 5 – Implementation of Large Landscape Conservation Programs Survey Results 2003

Agencies Completing the Survey:

100% (36 of 36) of all respondents answered this question.

- Cal Water
- Calleguas MWD
- Camrosa Water District
- Casitas MWD
- CCWD
- City of Camarillo
- City of Camarillo - Water
- City of Escondido
- City of Petaluma
- City of San Diego
- City of San Luis Obispo
- City of Santa Barbara
- City of Santa Cruz
- City of Santa Monica
- Cucamonga County Water District
- Desert Water Agency
- Eastern Municipal Water District
- El Dorado County Water Agency
- Elsinore Valley MWD
- Foothill Municipal WD
- Goleta Water District
- Helix Water District
- Lake Arrowhead Community Services District
- Las Virgenes MWD
- Marin Municipal Water District
- Monte Vista Water District
- North Coast County Water District
- Otay Water District
- Pasadena Water and Power
- Rincon del Diablo MWD
- Santa Clara Valley Water District
- Shafter Wasco Irrigation District
- South Coast Water District
- Southern California Water Company
- Suisun-Solano Water Authority
- Valley of the Moon Water District

1. Does your agency consider efficient landscape water conservation as a way to do any of the following? (check all that apply)

97% (35 of 36) of all respondents answered this question.

Action	# who answered	Percent of Respondents
Reduce the need for capital expenditures	18	51%
Reduced the need for expansion of facilities	14	40%
Provide water for a growing urban population	28	80%
Equitably provide water during a drought or emergency	24	69%
Meet the requirements of AB 325	17	49%
Reduce green waste entering landfills	10	29%
Provide a cost-effective source of “new water”	23	66%
Reduce dry stream flows and polluted run-off	18	51%
Other	4	11%

2. If your agency is responsible for storm-water management and watershed issues, does BMP 5 help your agency achieve its Total Maximum Daily Load requirements?
92% (33 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	6	18%
No	6	18%
Not Applicable	21	64%

3. Is your agency willing to participate in a regional program that would provide assistance for water budgets and other BMP 5 measures?
97% (35 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	32	91%
No	3	9%

4. Are there acceptable evapotranspiration (ETo) stations such as CIMIS in your area?
89% (32 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	25	78%
No	7	22%

5. If you answered yes to question 4, does this ETo station represent your entire service area?
83% (30 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	13	43%
No	17	57%

6. Would your agency be willing to sponsor the installation of a CIMIS station? (note: this sponsorship would include equipment purchase, monthly inspections, and providing a phone connection)
81% (29 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	14	48%
No	15	52%

7. How many dedicated irrigation meters do you have in your service area?
94% (34 of 36) of all respondents answered this question.

Answer	# who answered	Percent
None	3	9%
1 – 50	3	0%
51 - 100	2	6%
101 – 500	12	35%
501 – 1,000	8	24%
1,001 or more	6	18%

8. How are dedicated irrigation meters identified?
92% (33 of 36) of all respondents answered this question.

Answer	# who answered	Percent
On the billing system	26	79%
On a separate computer system	3	9%
On paper	0	0%
Known by field staff	0	0%
Other	1	3%
Not identified	3	9%

9. Which components of BMP 5 are you currently implementing? (check all that apply)
97% (35 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Water Budgets for Sites with dedicated irrigation meters	9	26%
Irrigation Surveys	19	54%
Rebates and incentive programs	6	17%
Other	8	23%
None of the Above	13	37%

10. What are the barriers to implementation of BMP 5? (check all that apply)

89% (32 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Lack of upper management approval	4	13%
Integration with Billing Department would be difficult (e.g. water budgets linked to water rates)	16	50%
Other Interdepartmental Coordination Problems	9	28%
Funding	17	53%
Lack of Staff	23	72%
Lack of Board or Council Approval	4	13%
Customer Reluctance or opposition (from property owners or managers)	5	16%
Other	20	63%

11. What type of assistance does your agency need to overcome barriers to implementation of BMP 5? (check all that apply)

86% (31 of 36) of all respondents answered this question.

Action	# who answered	Percent of Respondents
Area/site measurement	18	58%
Software/website/spreadsheet tools	16	52%
Irrigation survey techniques	11	35%
Case studies	8	26%
Analysis of program cost-effectiveness	15	48%
Clear definition of "large landscape"	14	45%
Program Template/Step-by-Step Guide	15	48%
Water Budgeting Information (how-to)	17	55%
Water Budgeting and Rate Integration	17	55%
Staffing/Hands-on Technical Assistance	25	81%

12. Is your governing body concerned that BMP 5 may decrease sales or income?

100% (36 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	12	33%
No	18	50%
Not Applicable	6	17%

13. Does your agency have a BMP 5 Handbook?
97% (35 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	24	69%
No	11	31%

14. If you answered yes to question 13, do you find the BMP 5 Handbook useful?
69% (25 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	16	64%
No	9	36%

15. If you answered no to question 14, please explain:
31% (11 of 36) of all respondents answered this question.

- Few large landscape areas in district.
- We have already begun implementing the BMP and most of what is in the handbook, we have dealt with already. However, we believe the handbook is and will be useful to smaller agencies that have not begun to address BMP 5.
- Only implementing; drought prevention; measures when needed during official drought conditions
- BMP 5 is self-explanatory. We created our own training materials and reference handbook.
- Eliminate large from the title of BMP 5 and the concept broadened to offer more inclusive range of solutions
- I have no time to spend reading the material.
- Although we have not used the handbook, our agency is currently implementing some of the outlined practices. We also consider the handbook an available source of useful information for future reference.
- We don't have it
- Does not address the responses in question 13
- Haven't read it yet
- staff changeover - we know we can print out from the web site and have been focusing on other water issues -- this one will be difficult to implement and is on the back burner.

16. How many non-residential (i.e. commercial, industrial and multi-family) meters do you have that serve both irrigation and indoor use (i.e. non-dedicated irrigation meters)?
83% (30 of 36) of all respondents answered this question.

- | | |
|--|----------------------------|
| • Will need to research that information, Cal Water has various water agencies throughout California | • 1,414 |
| • None, we are a wholesaler | • none |
| • 12 | • n/a |
| • specific number is unknown. | • ~2,190 |
| • 500 | • 7989 |
| • unknown at this time | • 7500 |
| • not known at this time | • 8970 |
| • 1360 | • over 2,000 |
| • 53,714 including multi-family | • not sure |
| • Unknown at this time | • 5000 - guess!? |
| • 7537 | • undetermined |
| • 1,000+/- | • roughly 30,000 to 35,000 |
| • 752 | • 0 |
| • Unknown | • not known |
| | • None |
| | • 39 |

17. What percentage of your customer base does this non-residential number represent?
75% (27 of 36) of all respondents answered this question.

- | | |
|--|--|
| • Will need to research that information, Cal Water has various water agencies throughout California | • 1.80% |
| • NA | • n/a |
| • 0.10% | • ~14% |
| • 5% | • 14.70% |
| • 46 | • 100 |
| • 7% | • 50% |
| • 20% | • 3-4 |
| • Unknown at this time | • 50% of the meters -- probably less landscape area other than city properties |
| • 30 | • undetermined |
| • 5 | • not sure , we are a wholesaler |
| • 1.70% | • 0 |
| • N/A | • ? |
| • 1.5 | • 0% |
| | • 0.58% |

18. How many years of experience do you have in water conservation? (in years)

89% (32 of 36) of all respondents answered this question.

- 2 years
- 4.5
- 8
- 2
- 12
- 15
- 5
- 7
- 5
- 12
- 15
- 13
- 8
- 25
- 5
- DWA has implemented a water conservation program since the early 1970s.
- 12 years
- 18
- 2
- 2
- 0
- 10
- 13
- part time
- 8+
- 3
- 4
- 4
- 2
- 10
- 4 years
- 6

19. Would you be interested in participating in a follow-up phone survey to more accurately assess your needs?

94% (34 of 36) of all respondents answered this question.

Answer	# who answered	Percent
Yes	28	82%
No	6	18%

Additional Comments:

33% (12 of 36) of all respondents answered this question.

- Cal Water is having difficult time getting rate relief from the CPUC and that make it hard to implement conservation programs specially BMP 5 which is costly to implement.
- Question #7, We funded 1/2 of CIMIS station #152 located at Leisure Village in Camarillo. Have budgeted funding to have an outside service perform the surveys and will hopefully be able to implement FY 2003/2004
- Q6 + 7: We provide maintenance for 4 DWR CIMIS stations that provide full service area coverage. Q9: on billing system, separately, on paper, known by field staff. Q10: Other - mixed use meters also. Q11 + 12: more staff, could do more. I have requested additional funding for BMP 5 activities for the 2003-04 fiscal year.
- Biggest problem: not written with 100% build-out in mind; currently does not offer significant savings for City of SM, distribution of dedicated meters is not reflective of existing large landscapes; all large landscapes are City owned. City has central i
- Attended CUWCC Weather Based Irrigation Control Workshop. It helped a lot with our BMP5 goals.
- Our large irrigation meter customers are mostly parks, schools and recreational areas. Thus far our program has been to provide the Protector del Agua program and landscape water audits.

- Regarding question 11: Although our agency may have a perceived &lack of upper management approval, funding, staff, and board approval, there are other underlying issues that are not addressed in the format of this question, which contribute to t
- Glad this survey was created
- Thanks for the support - we need help on this one.
- For question #9, it depends on the retailer
- Re: #5 & #7: We use to have a CIMIS Station within our District, but It was vandalized 3 times. It has been taken out. Maybe someday we will locate another CIMIS Site.