

Demand Measurement Measures Survey									
1. Organization (optional)		2. Survey responders name (optional):		3. Survey responders title:					
Answer Options	Response Count	Answer Options	Response Count	Answer Options	Response Count				
<i>answered question</i>	42	<i>answered question</i>	39	<i>answered question</i>	52				
<i>skipped question</i>	20	<i>skipped question</i>	23	<i>skipped question</i>	10				
Number	Response Text	Number	Response Text	Number	Response Text				
1	Sweetwater Authority	1	Sue Mosburg	1	Conservation manager				
2	Municipal Water District of Orange County	2	Joe Berg	2	Program Manager				
3	San Diego County Water Authority	3	Dana Frieauf	3	Water Use Efficiency Programs Manager				
4	California Department of Water Resources	4	Richard Mills	4	Principal Water Resource Specialist				
5	CITY OF DELANO	5	JOE ROJAS	5	Chief, Water Recycling and Desalination Sector				
6	City of Oceanside	6	Jennifer Ares	6	Director of Water Utilities				
7	Yucaipa Valley Water District	7	Stan Kolodzie	7	Associate Engineer Conservation Coordinator				
8	Dublin San Ramon Services District	8	Shelly Reider	8	Senior Project Manager				
9	City of Millbrae	9	Shane Taylor	9	Program Manager				
10	City of Arroyo Grande	10	Chris Robbins	10	General Manager				
11	City of San Diego	11	Irene Yamashita	11	Water Resources Manager				
12	Mammoth Community Water District	12	Jeffrey Meyer	12	Associate Engineer				
13	Calaveras County Water District	13	Justin Scott-Coe	13	Environmental Programs Manager				
14	Monte Vista Water District	14	Chris Brown	14	Utilities Supervisor				
15	California Urban Water Conservation Council	15	Andrew Florendo	15	Supervising Management Analyst				
16	Solano County Water Agency	16	Lisa Kern	16	Environmental Specialist/Public Affairs				
17	City of San Buenaventura (Ventura)	17	Matthew Lyons	17	Director of Financial Planning				
18	Long Beach Water Department	18	Amanda Kasten	18	Public Affairs Director				
19	West Valley Water District	19	Dawn Calciano	19	Executive Director				
20	City of Woodland	20	David Beauchamp	20	Senior Water Resources Specialist				
21	Atkins	21	Daniel Carney	21	Water Use Efficiency Manager				
22	Marin Municipal Water District	22	Bill O'Donnell	22	Management Analyst II				
23	San Dieguito Water District	23	Shelley Flock	23	Director of Planning and Conservation				
24	Soquel Creek Water District	24	H Kennedy	24	Water Conservation Coordinator				
25	City of shasta lake	25	Toby Roy	25	Water Conservation Coordinator				
26	Consultant	26	Dee Jaspar	26	Project Manager - Water Resources				
27	San Diego County Water Authority	27	Don Groundwater	27	Water Conservation Manager				
28	consultant	28	Rosmaier	28	Assistant General Manager				
29	Dee Jaspar & Assoc., Inc. Civil Engineers	29	Cathleen Brennan	29	Staff Analyst				
30	Bella Vista Water District	30	Jerry De La Piedra	30	water superintendent				
31	DWR	31	Anthony Herda, P.E.	31	Management Analyst				
32	Coastside County Water District	32	Steve Mack	32	Project Manager				
33	Santa Clara Valley Water District	33	Vicki Sacksteder	33	Water Resources Manager				
34	Civiltec Engineering, Inc.	34	Dana Haasz	34	observer				
35	Sweetwater Springs Water District	35	Randy Werner	35	President				
36	San Juan Water District/Wholesale and Retail Age	36	Boytrese Osias	36	Water Conservation Coordinator				
37	Kennedy/Jenks consultants	37	Dean K. Uota, PE	37	District Engineer				
38	Livermore Municipal Water	38	Ellen Carlson	38	Senior LWU Scientist				
39	City of Inglewood	39	Simon Hsu	39	Water Resources Analyst				
40	Dinuba, City of			40	Supervising Program Administrator - Water Conservation Unii				
41	Elk Grove Water District			41	Planning Services Manager				
42	Los Angeles City Department of Water and Power			42	General Manager				

**1) What value does the UWMP DMM section provide to your organization and/or to water suppliers?**

Answer Options	Response Count
<i>answered question</i>	43
<i>skipped question</i>	19
Number	Response Text
1	The DMM section provides a standard format to communicate to the public measures taken to reduce potable water system demands. Although some agencies report through the CUWCC, several agencies required to compile and submit UWMPs either are not CUWCC members or do not fully complete and submit BMP reports to the CUWCC.
2	Not too much. It's too prescriptive.
3	Limited value as we are a signatory to the MOU and provide our BMP reporting to comply with the UWMP DMM.
4	Documentation of our extensive demand management efforts
5	IN GENERAL, THE UWMP DMM SECTION PROVIDES THE TOOL TO IMPLEMENT THE ORGANIZATION WATER CONSERVATION PROGRAM.
6	It keeps us accountable for measuring both the volume and the impact of our programs.
7	Summarizes current water conservation efforts and quantifies information when available.
8	provides an evaluation tool.
9	Gives a guideline about conservation measures to implement.
10	This section helps keep all the various utilities addressing the issue of water conservation with the same vocabulary and the same box of tools. So it ensures uniformity in the approach across the state.
11	We have had a number of water conservation programs in place for a number of years. We implement these programs as we do other water conservation programs.
12	It provides a set of programs designed to reduce water consumption through many different techniques. It also provides mitigation measures that can be conditioned upon new development to offset projected water use of a new project.
13	NONE
14	Aspects that are helpful: summarizing work completed for the public and the Board of Directors. Cons: requirement to address DMM that are not useful in unique communities and potentially needing to use complicated worksheets to justify why we are not implementing.
15	Provides focus and detail on conservation measures.
16	None. We are focused on achieving the 20x2020 requirement under SBX7-7. The 14 DMMs are a dated and no longer applicable model for measuring conservation program effectiveness. Thankfully, submission of BMP compliance documentation meets this reporting requirement.

**1) What value does the UWMP DMM section provide to your organization and/or to water suppliers?**

- |    |   |
|----|---|
| 17 | As written it provides a list of activities to which the more detailed BMPs are compared; otherwise they are not helpful. The scoring i gave on the previous list is my perception of relative water savings from different activities on the list as i understand they are currently practiced when BMPs are not in place..  |
| 18 | The term "value" is vague. It is more a requirement listing the organization's plan and often does not tie into the plans or goals of the water suppliers. Goals and budgets are different.   |
| 19 | No value.   |
| 20 | It forces us to take a real look at what we are doing and what it is costing us to implement a DMM. That way we can see what the water savings is costing our customers. Sometimes it means spending less or more on a program based on the effectiveness of the DMM..  |
| 21 | The District feels the DMM section helps to provide guidance on how water suppliers can meet our 2020 target reduction by promoting various conservation measures.  |
| 22 | It provides an outline of how to achieve water conservation goals but I would like to see it coincide with the SBx7-7 requirements with the gpcd option and the DMMs as guidelines not requirements.  |
| 23 | The DMMs are only as good as the water supplier/individuals that know the true value of water, know their service area, take DMM seriously and engage to reduce system-wide demand. DMMs work well if it saves customers money.   |
| 24 | Research, standards-setting, statewide information sharing, political leverage  |
| 25 | It provides a set of baseline requirements and allows agencies that are meeting the DMMs to quantify and measure water savings. Agencies can then measure the effectiveness of their conservation programs.   |
| 26 | This provides a guideline of the type of programs we should be conducting to address the reduction of water waste. We have found that tweaks to the DMM in ways that suit our community more favorably offer much greater reward within the community and water savings - rather than just sticking with the standard program format for a particular DMM.                          |
| 27 | For many utilities it seems to be a check the box exercise. Some provide significant benefit and others just don't make sense for some agencies.  |
| 28 | For our agency, it has very little benefit, since our programs have evolved beyond the DMMs. For agencies starting out they may be helpful. The usefulness of each DMM is agency specific   |
| 29 | it should articulate how an agency will meet its requirements. it's hard to tell how succesfull that will be given that it was the 1st year for sbx7 in 2010 so agency's didn't have to report on how they were meeting their goal. reporting on the DMMs may be outdated soon but it can be a useful way to gather and track informations, especially as it becomes more flexible. |
| 30 | Allows ongoing reporting and updating of DMM activities in CA.  |
| 31 | For our clients - it affords an opportunity for the client (municipal water purveyors) to evaluate existing programs, and consider addition of new programs.  |

**1) What value does the UWMP DMM section provide to your organization and/or to water suppliers?**

**32** The DMMS round out San Juan Water District's water conservation plan to maximize our urban water efficiency and conservation programs annually and at five year intervals. The DMMs target a range of programs, projects, and activities designed to achieve the 20 percent per capita reduction in urban water demand by 2020.

**33** Many of the DMM are not cost effective for either our District or its customers.

**34** The DMM section increases the importance of water efficiency measures within an organization.

**35** As a reviewer of urban plans, my opinion is based on the DMM sections of UWMPs I have reviewed. Because the Water Code does not include specific requirements for each DMM, there is an extreme variation of information provided in the plans. If specific information was required to be reported, the DMM section may provide guidance as to how to implement each DMM.

**36** The DMM section of the UWWMP does not provide much value for our organization. We used GPCD compliance option with the CUWCC to meet the DMM requirement. We are a residential community on the Coast with a small CII sector and a relatively low ETo compared to most of California. So the CII DMM and large landscape DMM are not cost effective for our agency.

**37** Documentation of everything we're doing in water conservation.  
Also, since there wasn't a text box for the previous section I'm going to add a comment here. The previous section asked us to rate the "effectiveness" of the DMM, however there was no instructions given. Effectiveness can be measured in many ways (water savings, increasing awareness, meeting internal requirements, etc). Also, I wasn't sure if I was supposed to rate the DMM in terms of how it's written, in terms of how I'm implementing it, in terms of how it's generally being implemented throughout the state, etc. I think you'll get more out of that section if you include an explanation of what you're looking for.

**38** Provides framework for the development of water conservation programs. Meaningful monitoring is virtually impossible to achieve. Generally, reporting is a nuisance that gets a low priority for resource allocation, training and technology.

**39** Very little - we follow the lead of the California Urban Water Conservation Coalition (CUWCC). That is where the work is being done.

**40** It provides a good starting point for all of our programs. It keeps us going in the right direction.

**41** It provides a guideline for planning and implementation when locally feasible.

**42** provides guidelines which are difficult to enforce effectively with existing staffing and resources

**43** It's very easy to overlook conservation when wrangling the business of the water business. The DMM forces water agencies to examine conservation needs and to incorporate conservation in strategic planning.

**2) What changes to the reporting requirements would improve the UWMP DMM section?**

Answer Options	Response Count
<i>answered question</i>	40
<i>skipped question</i>	22
Number	Response Text
1	Better alignment with the new CUWCCC BMP format and reports, streamlining dual reporting. The DMM report should require reporting on foundational activities (ie: do agencies price water to encourage efficiency, meter use, account for water entering and leaving the system etc.) and then provide a standard format for collecting and reporting data on various programmatic options (number of widget rebates, end use audits, landscape program elements etc.) which have been, or will be, used to achieve water reduction goals (20x2020).
2	It's impossible to actually quantify savings so eliminating that requirement would be positive.
3	Improved flexibility to report activities beyond pre defined DMMs.
4	Align the reporting to match CUWCC BMP reporting
5	Uniformity in reporting. Early expectations as to quantifiable information required to report.
6	Allow an agency to report the DMM does not make sense in their particular situation. (eg. no reporting for areas with minimal commercial accounts.)
7	Not requiring a cost effectiveness analysis if a particular DMM is not going to be implemented.
8	It is OK as it is.
9	Simplification of the reporting section would be good.
10	none
11	Clear explanations of the demand measurement measures. Flexibility of implementing the measures without arduous justification. Not implementing CUWCC standards for DMM (which member agencies have difficulty implementing and reporting), Standardized water savings calculations used across all agencies.
12	None.
13	Eliminate it, or replace it with a simple measurement of whether an agency is "on track" toward achieving its 20x2020 goals. DMMs are next reported in the 2015 UWMP, when compliance with the first 20x2020 interim goal must also be reported; there is simply no need for maintaining DMMs independent from 20x2020 requirements.
14	Metrics should be developed in the mode of a performance standard like the BMPs so that the level of activity was measured.
15	No changes at thsi time.

**2) What changes to the reporting requirements would improve the UWMP DMM section?**

- 16** Change #1: eliminate the requirement to do all this reporting. Gathering and reporting this info costs money, but none of it is put to beneficial use; so the cost/benefit is infinity.  
Change #2: About the only DMM reporting that would provide value would be summarizing agencies most important/ cost-effective programs. It would help other water agencies and the State to have water conservation practitioners identify and summarize the programs they believe are the most important.
- 17** Not having set DMMs in the UWMP that you must report on. It implies that all the DMMs listed should be implemented by an agency - and sometimes there is not enough money to do them all. So you are better off implementing the most effective. There should be more flexibility in an agencies choice of what DMMs to carryout.
- 18** The District would suggest changing the implementation of the DMMs and justifying the reasoning for not implementing them. Each agency needs to evaluate their customers and their demands as some of the DMMs are not feasible for every water supplier. The DMMs should be used as a tool not as a requirement and the justification for not implementing them should be a lot simpler than having to do a cost ratio analysis.
- 19** Providing more flexibility and having them align with SBx7-7. We have found that the indoor retrofits with plumbing reaching its useful life soon and the changes to the building codes that they are not beneficial for our area. We also have much higher irrigation use due to being in the Central Valley so we focus on landscape and irrigation rebates. In addition, we found that being newly metered the amount of water savings we could achieve sending letters to high water users and working with people who have large leaks far eclipsed any of the savings we garnered from retrofit programs to date.
- 20** the biggest change occurs if the water supplier is a CUWCC member - other than that reporting is an onerous and rigorous task that most small water suppliers will not track well or perform sufficiently
- 21** Required verified (metered) water savings of conservation program participants in addition to water balances by production volume, unaccounted for water, and/or estimated savings by program and/or fixtures.
- 22** None
- 23** Providing metrics to help put the efforts in perspective of possible water savings. For many of these activities it is very difficult to assign a value of water savings.
- 24** Reduce the required level of detail to justify why some DMMs don't make sense - particularly for agencies projecting to meet their per capita water use reduction targets.
- 25** it should be more consistent with CUWCC revised BMPs and, more importantly, better aligned with SBX7-7. it's not clear how DMMs are relevant given that they sunset soon.
- 26** Guidance language (i.e., in DWR UWMP Guidebook) clarifying linkage between DMM section in its current form, the 2007 revised MOU and the terms of SBX7-7. Clarification of what is required in the cost-effectiveness evaluations and what needs to be reported for each DMM. Clarification about qualifications for exemptions. Consideration of GPCD targets and recognition that agencies already meeting targets or on track to do so may not need to implement all DMMs.
- 27** Cost / Benefit analysis of the programs is a good tool for quantifying the relative benefits of programs that require specific capital outlay. However - the reduction in unit water use over time will measure the effectiveness of the DMM Program most effectively.

<b>2) What changes to the reporting requirements would improve the UWMP DMM section?</b>	
<b>28</b>	Instead of requiring reporting for all DMMs, require water suppliers to state whether they met their 20x200 target; what DMMs were selected and then implemented (including a description) and the degree of success with each selected DMM.
<b>29</b>	Simplify it and reduce the frequency of the reporting.
<b>30</b>	Allowing a level of flexibility like the CUWCC BMPs allow with the flex track and GPCD compliance options.
<b>31</b>	Specific information for EACH DMM would provide guidance to agencies as to how to implement a DMM and how to improve reporting.
<b>32</b>	I think that since there is mandatory water conservation goals (20x2020), since 2009 the DMM section is no longer needed in the UWMP. Let agencies focus on the 2009 Water Conservation Act.
<b>33</b>	Consistent with CUWCC BMP reporting requirements.
<b>34</b>	Make reporting optional.
<b>35</b>	Better coordination with CUWCC reporting. Better assistance to smaller agencies. The way it is set up now one almost has to hire a consultant or have staff dedicated to doing this report.
<b>36</b>	We are not existing members of the MOU, so we don't report except in our UWMP.
<b>37</b>	none
<b>38</b>	Reporting requirements don't seem to be consistent. CUWCC members are told that they must report through CUWCC, but that cannot be the only choice, because what do non-members do? I object to relying on an organization to monitor state requirements, especially since I do not believe that the CUWCC is robust enough to handle that job.
<b>3) Did you address the UWMP DMM requirements through:</b>	
Describing the DMMS: <b>32.6%</b>	
Compliance with the California Urban Water Conservation Council best management practices: <b>23.9%</b>	
Both: <b>52.2%</b>	
<i>answered question</i>	<b>46</b>
<i>skipped question</i>	<b>16</b>

**4) What conservation goals did you set in the DMM section of the 2010 UWMP?**

<b>Answer Options</b>	<b>Response Count</b>
<i>answered question</i>	36
<i>skipped question</i>	27
<b>Number</b>	<b>Response Text</b>
1	Overall demand reduction to meet 20x2020 compliance target. Specific conservation program incentive rebate participation levels and customer assistance/education achievement goals were not included.
2	10% reduction by 2015 and 20% reduction by 2020.
3	BMP Compliance and MWDOC's share of Metropolitan's Integrated Resources Plan water use efficiency and recycling goal.
4	20%
5	<p>1. Establish baseline and target determination, to address the requirements of the Water Conservation Bill of 2009.</p> <p>2. Establish a foundational document for compliance with Water Supply Assessments (SB 610, CWC §10613 et seq. added by Stats. 2001, chapter 643) and Written Verifications of Water Supply (SB 221, CWC §66473.7, added by Stats. 2001, chapter 642). Effective in January 1, 2002 both statutes require urban water suppliers, cities, and counties to coordinate local water supply availability and land use decisions to improve the link between information on water supply availability and certain land use decisions made by cities and counties. See 2010 UWMP Guidebook Part II, Section F: Related Programs for additional discussion on these programs.</p> <p>3. Update the City's water supply and demand changes</p> <p>4. Update the City's present and future water supply and demand estimates</p> <p>5. Update DMM summaries</p>
6	Goals based on 20 x 2020 requirements.
7	20 x 2020
8	All of the DMM's were set as a goal. Some of the goals may be hard to achieve.
9	Achieve the District's gpcd goals as set in SBX7_7.
10	The City's 2010 UWMP includes the SBX7-7 gpcd goals of 113 gpcd.
11	to achieve a per capita water use to 149gpcd by 2020
12	We did not set conservation goals in the the DMM chapter of the UWMP. Our agency discusses demand reduction priorities and pursues changes in operations to address the areas that will result in the greatest potential for water savings. For example, we have been replacing our main water lines and increasing contact time with property managers working on large landscape areas.
13	To meet SBx7-7 legislation 20x2020 and/or 142 gpcd.
14	n/a
15	Meet 20 x 2020 reduction goals with limited funding.
16	Since the City has already met its DMM and SBx7-7 targets, the focus of our conservation programs is to maintain our gpcd target and ensure that demand does not increase.

**4) What conservation goals did you set in the DMM section of the 2010 UWMP?**

17	Our only conservation goal is the 20 x 2020 target.
	<p>The West Valley Water District in preparation for the 20% reduction by the year 2020 has planned to implement the following programs to reach that goal. These programs are in addition to all of the foundational BMPs that are being implemented at compliance levels.</p> <p>Residential Plumbing Retrofit Kits - In 2008 the District started offering water conservation kits to customers, free of charge that includes 2 low flow showerheads, 1 kitchen faucet aerator and 2 bathroom faucet aerators. The District plans to keep this program in place through 2020.</p> <p>Residential ULFT/HET Rebates (SF/MF) - In 2010 the District implemented its Ultra Low Flush Toilet/High Efficiency Toilet Rebate Program. This program is open to any resident within the District's service area that replaces their toilet with an ULFT or HET toilet. The District plans on revising the program to target homes that were built before 1992 to maximize savings. The District in 2011 will also start to target the multi-family use accounts. The District plans to keep this program in place through 2020.</p> <p>CII WBIC Direct Install - In 2010 the District and San Bernardino Valley Municipal Water District, installed a Weather Based Irrigation Control Tower to help CII accounts reduce their outdoor use. The District plans to target high water users and provide them with a dedicated irrigation survey. If they qualify, they will be offered rebates to install ET controllers. This program will start in 2011 and continue until the funds are exhausted.</p> <p>-Institutional Rebate Programs - In 2011 the District is going to implement a rebate program targeted at the schools located within the District's boundaries and work with each school on an individual basis to offer them rebates on ULFT/HET toilets, ET controllers for landscaping and any other water efficient devices that the District could see fit to reduce demand. This program will continue until District funds are exhausted.</p> <p>CI Rebate Programs - In 2011 the District is going to implement a rebate program for Commercial and Industrial accounts within the District's boundaries. The District will target the high water users and conduct a survey. The District will then work with each company on an individual basis to create a conservation program tailored to their particular needs.</p> <p>-Recycled Water - In 2012, the District will be completing a Recycled Water Plan to help offset the consumption of potable water. If recycled water and funds are available the District will start to implement a recycled water program.</p>
18	
19	To reach our 15% reduction in gpcd by 2015, be fully metered, and base our water rates on tiered pricing.
21	Maintaining current (2010) consumption levels or lower - already meeting 2020 targets.
22	We did not set specific goals in the DMM section of the UWMP. We did project an overall 15% decrease in demand between 2010 and 2030 due to conservation and other factors.
23	Only goal was to be in compliance with 20% reduction by 2020.
24	20 X 2020 compliance
26	in most that i've seen...very few goals were set. usually a vague statement about starting to implement something over the next few years.
27	The entities that I represent are attempting to measure the reduction in unit water use over time - however, the type of water year greatly
28	SBX7-7 GPCD targets.
29	The 2010 DMMs were used to evaluate the conservation program. Additional programs/incentives were offered to participants but water savings studies were not complete and agency was unsure if they added value.

4) What conservation goals did you set in the DMM section of the 2010 UWMP?	
30	(Various) Increased use of recycled water eliminated need for additional water conservation via DMMs. Many DMMs determined not to apply. Final water use efficiency goals already achieved by 2010; therefore, recommended continuing current policies rather than increasing use of DMMs.
31	I have a long-term savings goal that I need to meet. The goal was first established in our 2003 IWRP but has since been included in our 2005
32	Our conservation goals are to meet the GPCD in 20x2020 and the GPCD for the CUWCC
33	99 gpcd
34	Since the City's water system has been fully metered since 1956, no numeric goals were set.
35	Increased retrofit, completion of meter retrofit and participation in regional conservation outreach programs.
5) What process do you use to review and evaluate progress toward the conservation goals?	
Answer Options	Response Count
<i>answered question</i>	36
<i>skipped question</i>	26
Number	Response Text
1	Annual analysis and evaluation of customer participation in programs against cost and water savings achieved. Routine review of demand against water use forecasts and historical demand.
2	Review per capita production on a monthly basis.
3	For the 2010 UWMP we evaluated progress by our level of BMP compliance. Currently, we are evaluating through a Water Use Efficiency
4	WE CREATED A WATER USE REDUCTION IMPLEMENTATION PLAN
5	We have adopted a Conservation Master Plan that identifies specific DMMs that will provide the greatest cost/benefit to our agency and our customers.
6	GPCD
7	gpcpd
8	Review of the GPCD calculations
9	Monthly review of overall District water conservation and calculation of gpcd; tracking of gpcd progress to meet the interim and 2020 goals.
10	We evaluate participation in our programs and total water use.
11	We calculate per capita use on a monthly basis
12	Monthly water loss reports are generated for the Board and staff. Irrigation meter readings are compared to previous years. Estimates of indoor savings through the rebate program are developed monthly.
13	Annual reporting as well as BMP reports to CUWCC.
14	n/a
15	Review GPCD and compare it to established targets and goals.
16	We have our own Water Efficiency Plan that is annually reviewed to see that progress is being made.
17	Track GPCD on a regular basis.

**5) What process do you use to review and evaluate progress toward the conservation goals?**

<b>18</b>	The District uses various tools to help evaluate conservation programs such as bill stuffers, outreach programs, water audits, and tracking consumption of customers who have participated in the rebate program to see if water savings was achieved.
<b>19</b>	Creating an annual work plan which includes addressing the DMMs and a multi-year plan for water conservation goals and objectives.
<b>20</b>	N/A
<b>21</b>	Total production, total sales, multi-year overall and per program changes in water use by conservation program participants.
<b>22</b>	We periodically evaluate consumption and production and track water savings associated with various conservation measures (e.g., rebates, surveys, etc.)
<b>23</b>	We evaluate the changes in water consumption for the accounts we've provided selected DMM services to.
<b>24</b>	Tracking water use and GPCD
<b>25</b>	Evaluations are implemented through customer surveys as well as staff and customer feedback along with water conservation activity tracking. At this time, San Juan's monthly District Plant Flow Summary is the most important data reviewed. We evaluate our up-to-date GPCD and assess if we are on track for 20x2020. This gives us the flexibility to make adjustments to programs as needed.
<b>26</b>	I haven't seen many agencies that read their DMM sections between filings
<b>27</b>	Historic water use by the residential customer. Accounts can be selected at random and water use compared on a yearly basis.
<b>28</b>	Used to use MOU compliance standards or DMM compliance standards, now using SBX7-7 requirements and targets.
<b>29</b>	Annual reporting to the CUWCC. Annual GPCD reduction calculation.
<b>30</b>	Recommended implementation of technology capable of detecting the incremental changes in water use associated with the DMMs. Intended to review trends per CUWCC BMP reporting; however, availability of data from CUWCC was limited in 2011 during much of the 2010 UWMP preparation process.
<b>31</b>	AWE savings model
<b>32</b>	GPCD
<b>33</b>	monthly review of water use, tracking system leaks and water loss.
<b>34</b>	Annual internal reviews to evaluate described objectives.
<b>35</b>	internal annual reporting on implementation of DMM/ BMPs
<b>36</b>	Sample size monitoring for use changes in target customers.

What conservation goals did you set in the DMM section of the 2010 UWMP?

From: Vicki Sacksteder

San Juan Water District Wholesale and Retail Agency

#### 6.1 DMM A – Residential Water Audits

The District met the initial CUWCC BMP coverage requirements, but will continue to implement water surveys for single-family and multi-family residential customers to include the following:

- Develop and distribute water efficiency and conservation marketing strategies and outreach materials with the focus on water surveys
- Promote water surveys to all existing customers at least twice per year through newsletters and notes on customers' bills.
- Provide inspections of irrigation system and timers by appointment.
- Review or develop irrigation schedules per customers' request.
- Provide customer information packets that include water survey results as well as efficiency and conservation recommendations. Complete water survey results are provided to customers along with an explanation as well as kept on file. Water survey results include watering schedules and recommendations to improve both water use efficiency and customer satisfaction. All residential customers receive a bimonthly newsletter and most issues advertise the residential water audit service. With funding from USBR, the District developed and implemented programs to increase the number of audits (surveys) performed. A water audit is required for customers to participate in the District's high efficiency washing machine rebate program and a reimbursement program for irrigation efficiency improvements. The District monitors annual results for meeting CUWCC program coverage goals. The District also tracks customer water usage in a customer database and provides usage information on bills. The District will continue to offer this program to its customers.

#### 6.2 DMM B – Residential Plumbing Retrofits

The District offers residential plumbing retrofit kits to its customers. Customers are notified of retrofit programs through the District newsletter, notes on bills, bill stuffers, and community events. The District does not maintain an ordinance to enforce retrofits and instead relies on our marketing strategy to inform and provide customers of our available retrofit services. The District targets homes built prior to 1992. Marketing efforts include announcements in new residential welcome packets, messages on bill statements, and bi-monthly newsletters. Although the CUWCC saturation requirement has been met, the District continues to offer kits to customers with high use fixtures. The District tracks customer water usage in a customer database and provides usage information on bills. The District will continue to offer this program to its customers.

#### 6.3 DMM C – Water Loss Control

Leak detection methods include monitoring of zone usage, zone pressure, and surface conditions. Repairs are made on an as-needed basis. The District has a Capital Improvement Program (CIP) that extends to 2030 and includes an annual main line replacement program and a leak detection survey program. Additionally, the District conducts distribution system water audits per the AWWA methodology. The San Juan Water District has an active leak detection program. The District has contracts with an electronic leak detection service to survey large sections of the

service area. In 2010, the program identified eight leaks, varying in flow from 0.68 gpm to 48 gpm. This small number of leaks is a typical finding. Leaks are also detected by our field crews, customers, other utilities and public works departments, and our meter reader. All leaks are repaired immediately. In 2010, a total of 72 leaks were identified and repaired for an estimated savings of approximately 23 million gallons. Additionally, in 2009, new magnetic flow meters were installed throughout the wholesale system at a cost of \$4.7 million. The system is now in place to conduct a complete water loss audit for both the retail and wholesale systems. Audit results will help determine the cost/benefit ratio and justify the level of further leak detection efforts. The District monitors and maintains data per the BMP requirements to track annual number of leaks, estimated losses, percent of water loss, length of pipeline tested for leaks, costs, and other parameters.

#### 6.4 DMM D – Metering and Commodity Rates

The District began installing meters in 1986, is currently 100% metered, and bills on a metered basis for all commercial, institutional, and landscape irrigation customers, as well as some single- and multi-family customers. The District is working on the formal development of a meter testing and replacement program.

#### 6.5 DMM E – Large Landscape Programs

The District offers irrigation audits and notifications by well trained technicians to large landscape accounts through District newsletters, bills, and community events. Information includes audit availability, controllers, and services available, over-watering evaluations, specific drought watering instructions, drought resistant landscapes, irrigation strategies, and other efficiency methods. Information also includes schedules for irrigation seasons and lists recommended system checks and schedule changes prior to start and just after end of irrigation season. Landscape irrigation training and financial incentives are also offered to customers. Accounts with Dedicated Irrigation Meters. Accounts with dedicated irrigation meters have not been assigned ETO-based water budgets, but are given ETO-based watering schedules when water surveys are performed. All of the District's accounts with dedicated irrigation meters are billed on a volumetric basis. CII Accounts with Mixed-Use. All CII mixed-use accounts are offered the same survey provided under BMP 1.

Surveys include the following:

- Irrigation system check.
- Distribution uniformity analysis.
- Review/Develop irrigation schedules.
- Provide customer report/information.
- Tracking survey offers and results.
- Provide irrigation and water efficiency information per BMP 01. The District also maintains an Irrigation Efficiency Program that is offered to all customers. The program provides customers up to 50 percent reimbursement of total material costs for qualifying irrigation system upgrades. Eligible irrigation equipment includes equipment that improves irrigation efficiencies as determined by District conservation staff. Efficiencies may include:
  - The removal of an old irrigation timer and replacement with an ET controller or one that has a rain sensor, multiple program start times, and/or soil moisture sensor.
  - Conversion of spray systems to drip irrigation.
  - Retrofit existing non-efficient spray heads with matching precipitation heads.

- Removal of leaking or broken equipment and replacement with new equipment.
- Materials associated with system design improvements that will increase watering efficiencies.
- Other system modifications that enhance irrigation efficiency. To qualify for reimbursement, customers must agree to a free indoor water audit and/or free landscape irrigation review by a certified San Juan Water District staff member before any improvements are made. Rebates are limited and available on a first-come, first-served basis. To receive a rebate a customer will contact the District to schedule an inspection of current irrigation system. Staff will inspect the customer's current system and make recommendations to improve the efficiency of the customer's irrigation system. The customer provides a landscape design plan to improve irrigation efficiency to the District. After approval, the customer may purchase and install equipment. A follow-up landscape irrigation review is schedule with the District. If the District approves the improvements and all proper paperwork is submitted and approved, the customer receives the rebate in the form of a credit on the water bill. The District will monitor annual results for each landscape program and compare the costs of the program with customer results. Customers are provided water usage comparisons on their bills to allow the customer to evaluate their own usage and results. The District monitors customer usage data and will modify the program based on water demand results.

#### 6.6 DMM F – High Efficiency Washing Machine Rebate

The local power utility, Sacramento Municipal Utilities District (SMUD), offers graduated rebates for electric water heating users up to \$125 and the Pacific Gas and Electric Company (PG&E) offers rebates to natural gas water heating customers up to \$75 on clothes washers (and other hot water using appliances). Information on this program is provided to District customers through SMUD is marketing activities and their website as they administer the program on behalf of participating water districts. SJWD also supplement's SMUD's efforts in the District newsletters, website, and community events; RWA also markets these rebate programs to customers throughout the region Implementation Monitoring. The District will monitor performance of this BMP and report annually in the BMP report.

#### 6.7 DMM G – Public Information Program

The District will continue to implement a public information water conservation and water efficiency program through active participation in the RWA Regional Water Efficiency Program and through the following District managed methods:

- Generate newspaper articles on water saving techniques as well as water efficiency and conservation information.
- Maintain an extensive literature collection and video library providing landscape and water-related resources available to students, teachers, and our customers.
- Provide public information booth with water efficiency and conservation information at related fairs and events.
- Participate in special events and media events to promote water efficiency and conservation.
- Provide landscape irrigation, composting, and tree-pruning classes to our customers, emphasizing water efficiency and conservation.
- Mail out new resident welcome packets with a variety of water efficiency and conservation materials.
- Provide an annual water awareness calendar to our customers.
- Distribute water efficiency and water conservation information via bill inserts/newsletters/brochures.
- Staff the CIMIS hotline.
- Provide discount coupons for our customers from cooperating plant nurseries.
- Support paid water efficiency and conservation advertising through RWA membership.
- Provide water efficiency and conservation public service announcements through RWA membership.
- Maintain and promote our demonstration

Water Efficiency Landscape (WEL) garden and provide tours for individuals and groups. • Participate in the regional water efficiency and conservation speaker's bureau. • Participate in coordinated water efficiency and conservation programs with other government agencies, industry, and public interest groups, and the media. • Provide free customer services, water surveys and irrigation troubleshooting, from our Master Gardener and conservation staff, all certified by the Irrigation Association and Cal Poly's Irrigation Training and Research Center • Provide comparisons of flat rate to metered rate as well as telephone contact with customers regarding ways to reduce their bill. • Provide timely and comprehensive water efficiency, conservation, and rebate information as well as drought updates on our website The District annually monitors a number of events for each category and report in the annual CUWCC BMP reports.

#### 6.8 DMM H – School Education Program

The District maintains a school education program that covers urban and environmental water issues and conditions in the local watershed that includes classroom presentations and instructional assistance. All materials provided meet the State education framework requirements. The District participates with other water agencies in a water awareness poster contest each year and invites students from grades 4-6 to participate. District staff makes class presentations each year to teach water efficiency and conservation as well as provide information about our water treatment plant operations. In addition to the classroom presentations, the District and RWA support the Sacramento Bee's Media in Education (MIE) program. Funded and managed by RWA, the MIE offers state framework water efficiency materials to over 700 classrooms and more than 24,000 students in the greater Sacramento area including the San Juan Water District students. The District annually monitors the number of events for each category and report in the annual CUWCC BMP reports.

#### 6.9 DMM I – Commercial, Industrial, and Institutional Conservation Programs

The District has identified and ranked CII accounts for water usage between commercial and institutional accounts. The District does not have any industrial accounts. All non-residential accounts are metered and are billed on a volume basis. The District budgets money for toilet retrofits and large landscape and irrigation efficiency reimbursements, though very few customers have taken advantage of the program. In addition to the program described below, CII customers are also offered the irrigation efficiency program under DMM E. The District offers surveys that include the following: • Site visit • Report identifying recommended efficiency measures, paybacks, and agency incentives. In addition to surveys, the District "Water Bucks" program targets schools as the largest commercial/institutional water user in the retail area. The Water Bucks program instructs students and teachers how to conduct site audits, report findings to the principal, and check for achieved maintenance. The schools are rewarded with rebates in the amount of the school's water bill paid by the school district office. The schools use these funds for physical plant and infrastructure improvements. The District will annually monitor type, number, and water use for each CII account type, surveys offered, and survey results and report them in the annual CUWCC BMP reports.

#### 6.10 DMM J – Wholesale Agency Programs

The District is a wholesale water district as well as a retail water district. The District provides technical support through workshops on CUWCC BMP procedures as well as residential and

large turf irrigation, serves as a technical resource for BMP compliance, provides program management support for DMMs E, G, H, J, and L and maintains and promotes a water-efficient demonstration garden that is open to the public. In addition, the District has an extensive video library, provides speakers for school presentations, and coordinates the annual water-awareness poster contest. The District's wholesale agencies are all members of the Regional Water Authority (RWA). The RWA is a joint powers authority formed in 2001 to promote collaboration on water management and water supply reliability programs in the greater Sacramento, Placer, and El Dorado County region. RWA applies for and receives regional grants and administers water conservation and efficiency public outreach and school education campaigns that satisfy the requirements of the respective BMPs. RWA also holds technical sessions where new technologies and program implementation methods and practices are shared, reviewed, and discussed. District staff attends CUWCC workshops and meetings on behalf of its retail agencies.

#### 6.11 DMM K – Conservation Pricing

All of the District's retail customers are metered, billed bi-monthly, and, based on their meter size, pay a daily base charge with tiered rate structure for volumetric use. The District's current tiered structure is unique in that it incorporates an inclining and declining block. This tiered rate structure was developed where, during normal water supply years when there is adequate water supply, the third tier (and highest consumption) is actually billed a lower rate than the second tier. During drought years, the third tier can be increased to further encourage water conservation. Residential Base Charge 1" \$1.15/day 1 1/2" \$3.07/day 2" \$4.90/day Tier 1 Baseline Rate 0 – 20 units \$0.44/unit Tier 2 Standardized Residential Rate 21 – 200 units \$0.74/unit Tier 3 Landscape Efficiency Rate 200+ units \$0.52/unit Approximately 40% of our revenue is derived from volumetric charges. Average residential use in 2010 was 43 units per month based on one (1) unit = 100 cubic feet = 748 gallons. Non-Residential Base Charge (varies depending on meter size) 1" \$1.15/day 1 1/2" \$3.07/day 2" \$4.90/day 3" \$9.75/day 4" \$15.19/day Standardized Non-Residential 1+ units \$0.63/unit

#### 6.12 DMM L – Conservation Coordinator

The District has a full-time water conservation coordinator, three water conservation specialists, and one part time temporary administrative clerk. The District's conservation coordinator duties and responsibilities include the following: • Coordination and oversight of conservation program and water efficiency measures • Tracking, planning, and reporting CUWCC BMP implementation • Coordination of water conservation and efficiency efforts and programs with District executive team, other staff, and other agencies • Preparation of annual BMP budgets • Participation in CUWCC plenary and committee meetings • Preparation of conservation elements in the District' Urban Water Management Plan

#### 6.13 DMM M – Water Waste Prohibition

The District has a water waste prohibition that prohibits gutter flooding, non-recirculating systems in decorative fountains, and evaporative coolers, and unnecessary/wasteful uses of water. District conservation staff responds to all water waste complaints and requests for assistance from customers. They show customers how to improve system performance and water efficiency. In some cases, staff repair minor leaks for customers, which is a no-cost service

included in the conservation budget. The water waste prohibition is part of the San Juan Water District's Code of Ordinance attached in Appendix E.

#### 6.14 DMM N – Residential Ultra Low Flow Flush Toilet Program

The rebate program for single-family and multi-family customers is the same. The District advertises the toilet replacement program in our newsletter, welcome packets to new residents, and on our website. The Regional Water Efficiency Program and Sacramento Area Sewer District also does regional promotion of the toilet replacement program for SJWD. Customers may receive a rebate of up to \$75 per toilet to replace existing 3.5 gallons per flush (gpf) or higher toilets with 1.6 gpf or better and a \$125 per toilet rebate to replace high flush toilets with an HET. The Sacramento Area Sewer District advertises and offers an additional \$50 rebate to our customers who reside in Sacramento County. The South Placer Wastewater Authority offers an additional \$50 for customers using their wastewater services. The District conducts an inspection on all rebate recipients, to provide verification of installation. The District will continue to offer this program and track the number of toilets replaced on an annual basis.

**DMM A: Water survey programs for single-family residential and multifamily residential customer**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	2	6	4	9	4	5	7	6	1	4	4.80	48
<i>answered question</i>												<b>48</b>
<i>skipped question</i>												<b>14</b>

**DMM B: Residential plumbing retrofit**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	4	7	4	4	6	5	4	9	3	2	4.80	48
<i>answered question</i>												<b>48</b>
<i>skipped question</i>												<b>13</b>

**DMM C: System water audits, leak detection, and repair**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	1	0	3	3	5	5	12	9	4	7	4.90	49
<i>answered question</i>												<b>49</b>
<i>skipped question</i>												<b>13</b>

**DMM D: Metering with commodity rates for all new connections and retrofit of existing connections**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	0	1	0	1	3	3	7	10	8	16	4.90	49
<i>answered question</i>												<b>49</b>
<i>skipped question</i>												<b>13</b>

**DMM E: Large landscape conservation programs and incentives**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	3	1	5	3	2	10	8	9	6	1	4.80	48
<i>answered question</i>												<b>48</b>
<i>skipped question</i>												<b>14</b>

**DMM F: High-efficiency washing machine rebate programs**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	8	3	6	5	6	4	8	4	2	3	4.90	49
<i>answered question</i>												<b>49</b>
<i>skipped question</i>												<b>13</b>

**DMM G: Public information programs**

Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	1	2	1	6	2	14	5	9	4	5	4.90	49
<i>answered question</i>												<b>49</b>
<i>skipped question</i>												<b>13</b>

**DMM H: School education programs**

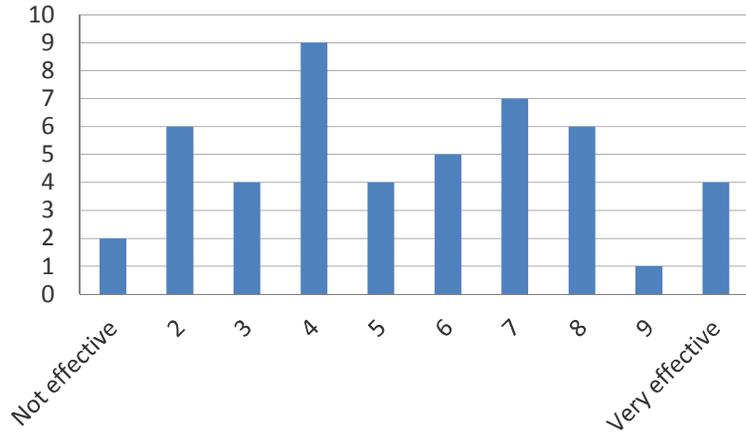
Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
	2	3	2	3	3	13	10	5	3	6	5.00	50
<i>answered question</i>												<b>50</b>
<i>skipped question</i>												<b>12</b>

**DMM I: Conservation programs for commercial, industrial, and institutional accounts**

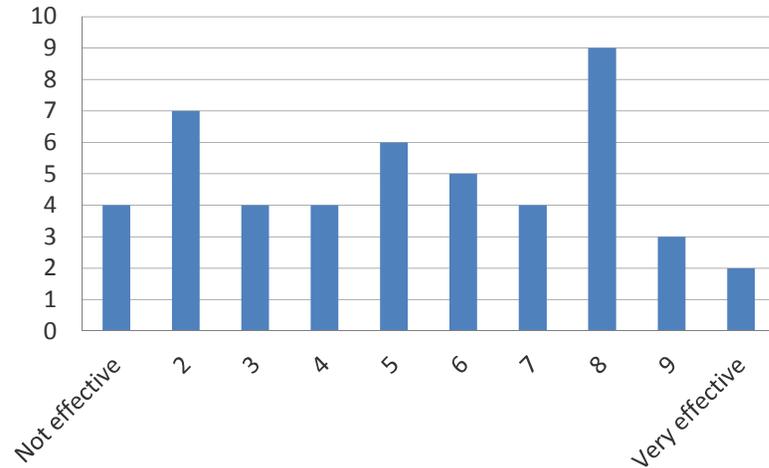
Answer Options	Not effective	2	3	4	5	6	7	8	9	Very effective	Rating Average	Response Count
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<i>answered question</i>												<b>46</b>
<i>skipped question</i>												<b>16</b>



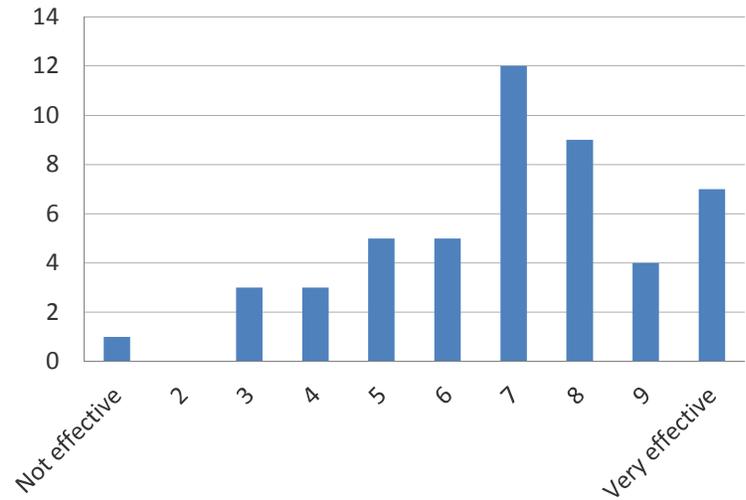
**DMM A: Single/Multi-family residential survey programs**



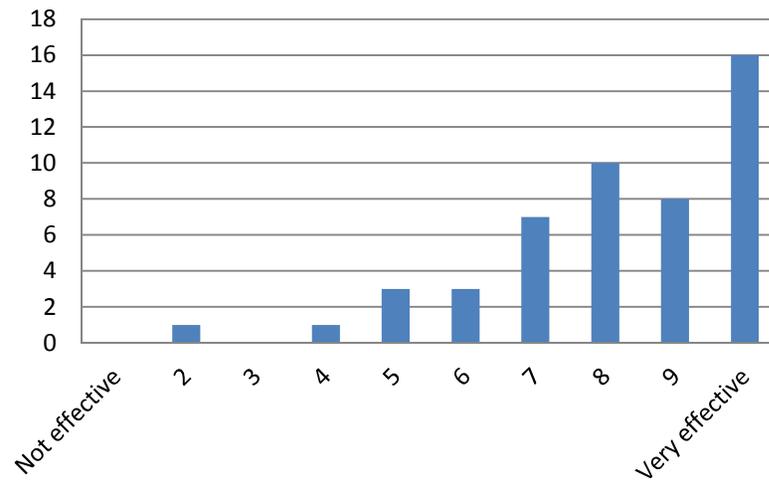
**DMM B: Residential plumbing retrofit**



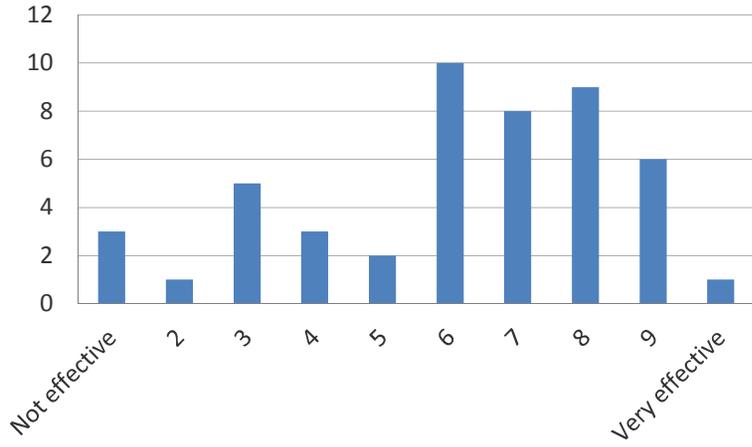
**DMM C: System water audits, leak detection, and repair**



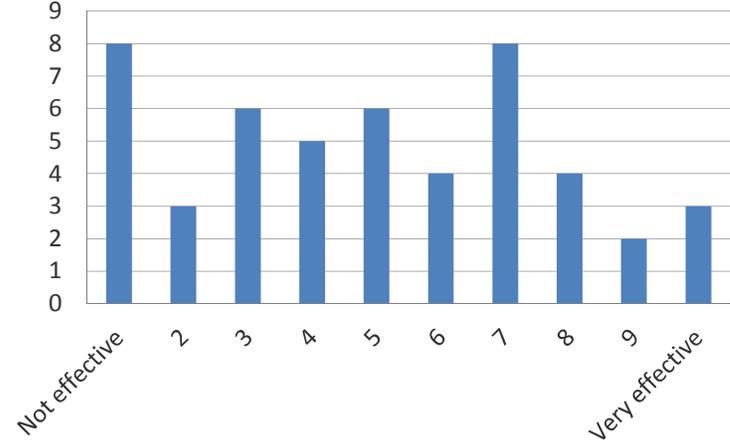
**DMM D: Metering w/ commodity rates for new connections & retrofit of existing connections**



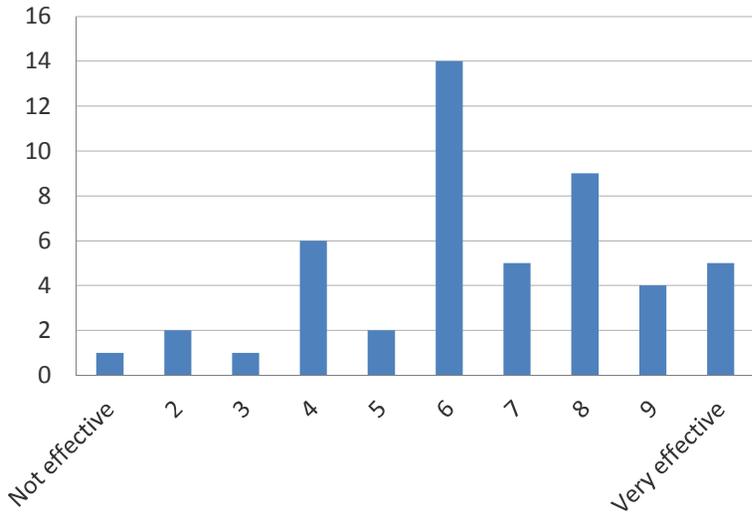
**DMM E: Large landscape conservation programs & incentives**



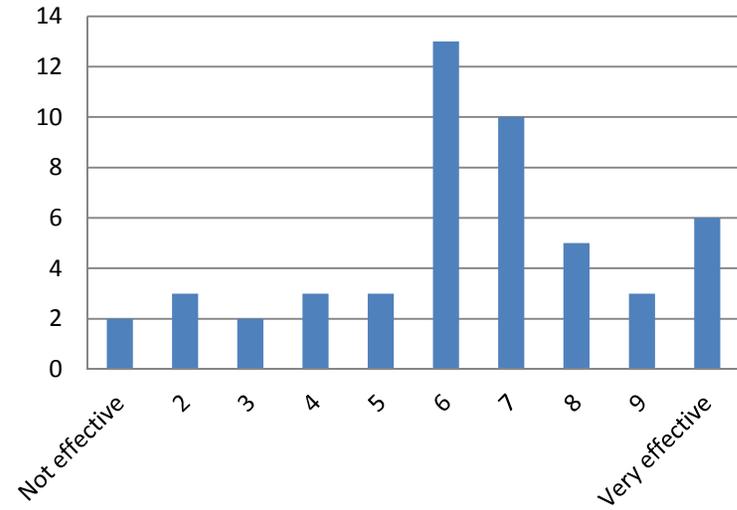
**DMM F: High efficiency washing machine rebate programs**



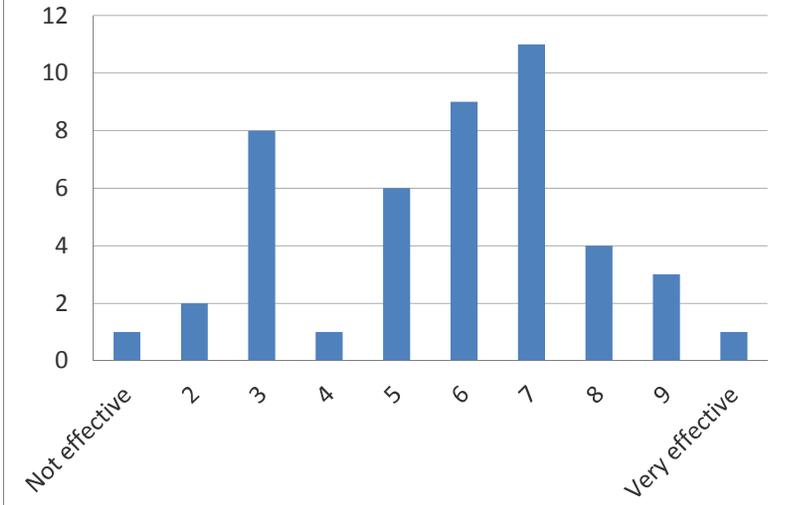
**DMM G: Public information programs**



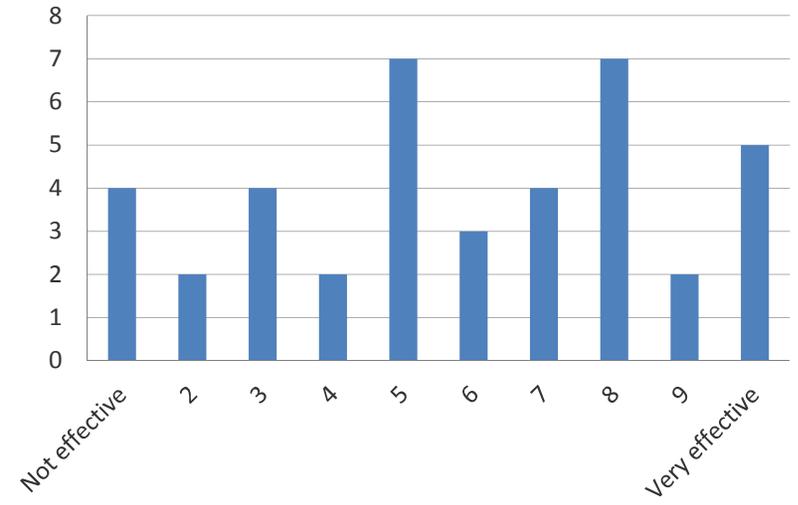
**DMM H: School education programs**



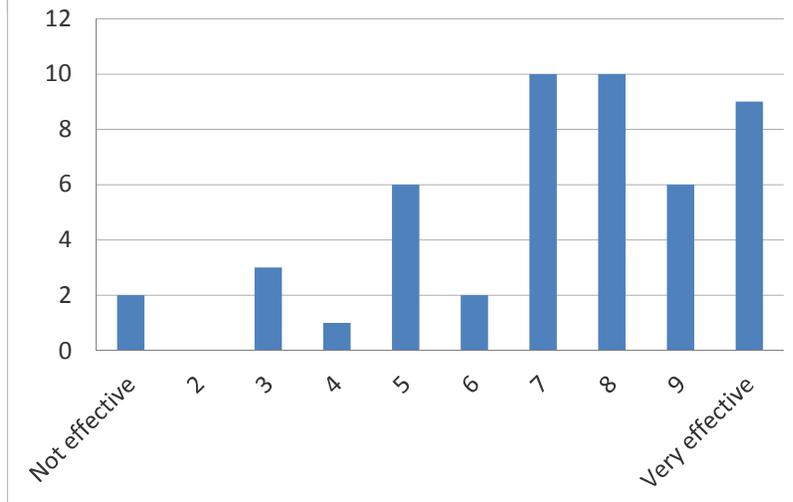
**DMM I: Conservation programs for CII**



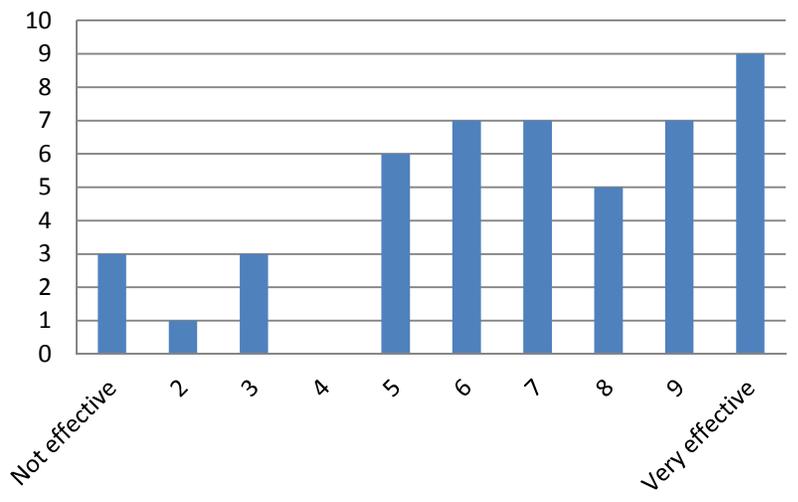
**DMM J: Wholesale agency programs**



**DMM K: Conservation pricing**



**DMM L: Water conservation coordinator**



DMM M: Water waste prohibition

