5 WATER DEMAND MANAGEMENT MEASURES

5.1 Introduction

The District has a history of commitment to water conservation and in June of 2005 became a member of the California Urban Water Conservation Council (CUWCC), which further commits the District to preserving its valuable water supply. Since the District recently became a signatory this year, no annual CUWCC report is provided in support of the DMM implementation. DMM implementation is detailed following the description of each DMM or Best Management Practice (BMP).

This chapter will discuss the 14 BMPs for conservation as outlined by the DWR. These practices are consistent with those presented in California Water Code §10631(f)(1). The BMPs established are considered generally accepted practices among water suppliers that result in more efficient use or conservation of water.

This chapter further describes the District's current efforts towards conservation and the District's future plans to implement reporting compliance as required by the CUWCC. Each of the management practices listed below as part of Water Code §10631(f)(1) are described in more detail in Section 5.3:

1. Water Survey Programs for Single-Family Residential and Multifamily Residential Customers
2. Residential Plumbing Retrofits
3. System Water Audits, Leak Detection, and Repair
4. Metering With Commodity Rates For All New Connections and Retrofit of Existing Connections
5. Large Landscape Conservation Programs and Incentives
6. High-Efficiency Washing Machine Rebate Program
7. Public Information Program
8. School Education Program
9. Conservation Program for Commercial, Industrial, and Institutional Accounts
10. Wholesale Water Agency Programs
11. Conservation Pricing
12. Water Conservation Coordinator
13. Water Waste Prohibitions
14. Residential Ultra-Low-Flush Toilet Replacement Program

5.2 History: Pre-2000 Water Conservation Programs

A number of important water conservation policies and practices were implemented by the District prior to 2000. These policies include the following:

5.2.1 Metering

The District is fully metered and charges all customers by volume of usage. This practice is recognized as a sound urban water management practice as well as a BMP measure four. The District's sources of supply are also metered, and the supply meters can be cross-checked against the inlet meters at the wells and treatment plants. These practices are consistent with those presented in California Water Code §10631(f)(1).

5.2.2 Water Conservation Pricing

An increasing block rate pricing structure has been in place since the early years of the District and all accounts are imposed usage fees accordingly. In 1992, two additional rate blocks, totaling five tiers, were adopted to encourage water conservation. In February of 2005, another block rate, totaling six tiers, was added to the rate structure to further encourage water conservation by the highest of users. Since March 1, 1992, there has been an average increase of 115% in each rate block to further encourage water conservation. This rate structure is consistent with BMP measure four (Metering with Commodity Rates) and BMP 11 (Conservation Pricing). The increasing block rate structure is outlined in Table 3-5.

5.2.3 Main Flushing in Winter Months

The District undertakes most water main flushing projects in late winter early spring when the daily water demand is lower in the system. The 2005 flushing program started on March 21st and throughout a seven day period it is estimated that between eighty and ninety percent of the entire distribution system of the District was flushed.

5.2.4 Leak Repairs

The District staff repairs all distribution system leaks as quickly as possible after they are discovered. Customers are encouraged to repair leaks as soon as they become aware of them and are further advised to repair any such leaks within 24 to 48 hours or be subject to the District's staff making the repair for them at up to four times the cost depending on the severity of the leak.

5.2.5 Pipeline Replacement

The District has an ongoing capital improvement program that methodically replaces older pipelines in the system to minimize leakage. If the District's distribution system suffers a failure to a main pipeline, the District is committed to repairing or replacing it in a timely and appropriate manner. The District operates an ongoing leak detection program that is used to identify pipelines that require repair or replacement.

5.2.6 Water Audits

The District's billing system is programmed to keep a record of each customer's usage for the same period of the previous year and print the comparison of the current period's consumption with the prior year's record.

Furthermore, the District's staff has developed a routine to check for any significant increases in usage over previous billing cycles on individual accounts. After records are reviewed, the customer is notified by telephone, by hanging a blue tag notice, or via mail regarding a possible leak. The notification requests that the customer check their interior and exterior plumbing in an attempt to resolve their leak as soon as possible.

5.3 Recent History and Current Water Conservation Programs, 2005-2010

An overview of the District's current conservation programs follows:

- The first part of the District's conservation program is to directly encourage conservation through water metering (all customers are metered) and an increasing block or tiered rate structure for water usage. Metering, alone, has proven to have a high success rate in demand management (i.e., voluntary conservation by customers). An increasing rate tier structure is still considered "leading edge" in the industry for further encouraging demand management and the District utilizes six tiers in the domestic usage rate structure.

- The next component of the conservation program is to provide retrofit rebates for customers who change existing plumbing to lower flow units. The District amended Ordinance 119-96 to provide retrofit credits in 1999. In fiscal year 2003-04 the District issued $6,400 in toilet "rebates" (actually credit towards future bills) and $8,800 towards washing machine "rebates." In fiscal year 2004-05, the District issued $5,400 in toilet "rebates" and $6,200 towards washing machine "rebates". The current ordinance follows:

Section 3.44 - Retrofit Credit

(a) Customers who replace existing water fixtures with approved low flow fixtures as per the Uniform Building Code will receive a credit upon their water bill to a maximum of 25% of the cost of the low flow fixtures, not to exceed $50.00 per account. The Customer is required to submit a copy of the receipt when requesting a credit.

(b) For ULF toilets, 1.6 gallon per flush, a $100.00 credit will be given for each higher water volume toilet that is replaced. The customer is required to submit a copy of the receipt when requesting a credit.

(c) A credit of $100.00 will be given for each washing machine that is replaced with an approved H-axial washing machine for residential application. The customer is required to submit a copy of the receipt when requesting a credit.

(d) A credit of $200.00 will be given for each washing machine that is replaced with an approved H-axial washing machine for commercial application. The customer is required to submit a copy of the receipt when requesting a credit. Commercial application is herein defined to mean any washing machine that is coin operated and is intended to serve more than one family, residential structure or premise.

- The District's more expensive conservation program is a Leak Adjustment Policy. If a customer finds a leak and can provide evidence of having repaired it, the District provides an adjustment to their bill for up to a four-month period during which the leak occurred. The goal in adopting this policy was to get people to repair leaks more rapidly, thus conserving water. During fiscal year 2003-04, the District credited customers $33,329.14 on this program and in fiscal year 2004-05, $32,488. The current policy follows:

Section 4.18 - Leakage Adjustment Policy

The Manager is hereby authorized upon written request of the Customer to adjust water billings for documented undetected leaks, (not the result of Customer negligence), in an amount of seventy-five percent (75%) of the existing water rates. An account may be adjusted one time per year, and be based upon no more than two (2) billing cycles per adjustment after the repair date. The District will credit not more than seventy-five percent (75%) of the difference between the existing charges and the Customer's average bill, based on the Customer's yearly average consumption prior to

the leak. The Customer must provide the District with a written adjustment request stating the date of repair, the type of repair, together with copies of any receipts. Requests for adjustments in excess of seventy-five percent (75%) will be denied. This adjustment policy is based on the decision of the Board of Directors and is final.

- The District also has an education program which, despite limited resources, had several successes during the past couple of years. In 2004, the District's annual Consumer Confidence Report (CCR), which is provided to all customers of the District, included a paragraph reminding customers that "Water is Too Precious to Waste". Together with SLVWD, the District conducted a free public landscaping and water conservation workshop in the spring at the District office (to celebrate May's Water Awareness Month). In June of 2005, the District's CCR notified customers that the District had became a signatory to the CUWCC, which represents the District's commitment to the best conservation practices available. The District also participates in a cooperative water agency committee, consisting of Soquel Creek Water District, Pajaro Valley Water Management Agency, the City of Watsonville's Water, and the City of Santa Cruz's Water Department. This committee mutually contributed funds for community awareness campaigns to better inform the public about conservation methods and practices. Through local radio stations, newspaper advertisements, and community events this outreach campaign has become highly regarded and is well attended by the community.

With limited staff and limited financial resources, the District cannot always do all the activities that a larger utility might undertake. However, the District is committed to conservation – both financially and technically whenever feasible.

5.4 Demand Measurements – Best Management Practices

Specific discussions of the various BMPs are contained in the following sections:

5.4.1 Water Survey Programs for Single-Family Residential and Multi-Family Residential Customers

Implementation methods shall be at least as effective as identifying the top 20% of water users in each sector, directly contacting them (e.g. by mail and/or telephone) and offering the service on a repeating cycle; providing incentives sufficient to achieve customer implementation (e.g. free showerheads, hose end sprinkler timers, etc.) (Water Code §10631(f), 1-A)

This DMM involves providing interior and exterior water audits and water conservation incentive programs for single-family residential, multi-family residential, governmental, and institutional customers. With the acceptance of the District's membership into the CUWCC,

the District is committed to implementing an acceptable Water Survey Program (BMP1) by July 1, 2006.

The District installed the existing billing system in 1998. It was programmed to keep a record of each customer's usage for the same period of the previous year and print a comparison of the current period's consumption with the prior year's record. This will also be a feature of any new computerized billing system that the District installs.

The District staff uses this information to check for any large increases in the customer's usage. This is reviewed and the customer is notified by telephone and then sent a letter informing them they may have a leak on the property or in the residence. Advice and assistance is given where appropriate. This has been an exceptionally effective program and continues to be implemented. Customers have been responsive and notify the District as soon as any leak(s) is repaired. The customer receives a 75% credit on their water bill when they provide proof of repair on a leak (complete ordinance in Section 5.3 - 4.18). The District currently does not offer any free showerheads or other devices.

BMP 1 includes checking individual meters. The District has an ongoing program for checking, calibrating, and replacing customer meters that are over 15 years old or that have registered over 1,000,000 gallons of usage. This important program allows the District to (a) enhance revenues by ensuring payment for all water sold; (b) encourage conservation by ensuring that customers pay for all water delivered; and (c) increase the District's ability to account for all distributed water. This replacement program is ongoing.

Currently the District is reviewing all single-family and multi-family residential customers to determine the least intrusive, most helpful water survey audit program that it can make available to its customers. District staff has been introduced to other local agencies' active residential audit programs to help establish such a program.

The District currently has 3,054 single-family residential customers and 125 multi-family residential customers. By July 1, 2006, staff will contact 20% (approximately 610) of the District's single-family residential customers and 20% (approximately 25) of its multi-family residential customers by survey. The survey will be used to confirm the customer's indoor and outdoor usage components to further determine what water saving recommendations and assistance can be provided based on the individual customer's system. The District is committed to surveying 100% of these customers by June 30, 2016. At this time, the water savings for implementing a program of this nature cannot be accurately quantified since there no data is previously available, although the District will analyze the results of the surveys and replacements of fixtures to determine the water savings impact. Table 5-1 presents the projected number of surveys and estimates of expenditures and water savings.

Table 5-1 Water Survey Projections

Planned Water Surveys	2006	2007	2008	2009	2010
# Single family surveys	610	610	610	610	610
# Multifamily surveys	25	25	25	25	25
Projected expenditures ($)*	2000	2000	2000	2000	2000
Projected water savings (AFY)*	15	15	15	15	15

*Estimated, no surveys conducted prior to 2006

IMPLEMENTATION: *The District is committed to implementing an acceptable water surveying program by July 1, 2006 and will continue the efforts as standard operational procedures.*

5.4.2 Residential Plumbing Retrofits

Implementation methods shall be at least as effective as delivering retrofit kits including high quality low-flow showerhead to pre-1980 homes that do not have them and toilet displacement devices or other device to reduce flush volume for each home that does not already have ULF toilets; offering to install devices; and following up three times. (Water Code §10631(f), 1-B)

Retrofit programs generally focus on plumbing installed prior to 1992, in part reflecting the passage of the Federal Energy Policy Act of 1992, which restricted all newly manufactured faucets and showerheads to a flow of 2.5 gallons per minute (DWR, August 1994). Another key regulation is the requirement by the California Plumbing Code that ultra-low-flush (ULF) toilets be installed in all new construction starting January 1, 1992. The City of Scotts Valley enforces the plumbing standards within the Scotts Valley Water District boundaries.

The District encourages plumbing retrofits through distribution of the District's annual CCR and an informational service application provided to all new customers of the District. The District currently does not provide retrofit kits or low flow fixtures to its customers, although it is continually encouraging customers to replace any old and outdated fixtures with new low-flow devices and informs them of the financial advantages of doing so. The District documents and provides quarterly reports on retrofit credits provided to its customers.

By July 1, 2006, District staff will confirm the total number of residences constructed before 1992 and determine a strategy for mandating these customers to upgrade any existing outdated fixtures with new low-flow devices. Currently the District can not financially fund the fixtures to the customer or provide installation services, but for now the retrofit credits

are considered to be a good incentive for the customer to perform the upgrade themselves. As compliance of reporting is met and the replacement of the fixtures by customer base is determined, the District will reevaluate the cost effectiveness of providing the fixtures and installation services to the customer. Table 5-2 presents the projected number of plumbing retrofit devices distributed by the District. No devices were provided by the District to customers prior to 2006.

Table 5-2 Residential Plumbing Retrofit

Planned Plumbing Retrofit Distribution	2006	2007	2008	2009	2010
# Single family devices	0	0	0	0	0
# Multifamily devices	0	0	0	0	0
Projected expenditures ($)	0	0	0	0	0
Projected water savings (AFY)	0	0	0	0	0

***IMPLEMENTATION**: The current retrofit program will continue as the District's commitment of adopting an acceptable system to mandate retrofits is determined. By July 1, 2006 the District will have established the manner and means to mandate the upgrades and commits to having 100% of the homes utilizing low flow devices. It will be actively promoted with public information efforts (BMP 7) initiated in conjunction with any future voluntary water rationing programs.*

5.4.3 System Water Audits-Leak Detection and Repair

Implementation methods shall be as least as effective as at least once every three years completing a water audit of the water supplier's distribution system using methodology such as that described in the American Water Works Association's 'Manual of Water Supply Practices, Water Audits and Leak Detection'; advising customers whenever it appears possible that leaks exist on customer's side of the meter; and performing distribution system leak detection and repair whenever the audit reveals that it would be cost effective. (Water Code §10631(f), 1-C)

In the Annual Water Supply Report to the Department of Health Services Drinking Water Field Operations Division, the District staff performs a simple system-wide audit of the previous year's water production and water sales in order to quantify and review the un-metered water usage. Authorized uses such as water used for fire fighting, street cleaning, water sold through portable meters, and water used for filter backwashing at the treatment

plants are subtracted from the total to provide an estimate of "unaccounted-for" or "lost" water.

While this evaluation does not go as far toward tracing the specific causes of lost water as would a formal water audit, it is done annually, rather than every three years as suggested in BMP 3.

In order to have a more accurate annual audit of actual production relative to sales, the District has begun replacing the water well production meters and checking those against the treatment plant meters.

The District's pipeline system is only 35 years old and is considered to be a tight system. In August of 2005, the District retained a third party leak detection service to perform a leak detection survey of the entire distribution system resulting one small detected leak. The leak was fixed and no other significant leaks were detected. Table 5-3 and Table 5-4 present past and future system water audits performed by the District respectively.

Table 5-3 Past System Water Audits

	2001	2002	2003	2004	2005
% of unaccounted for water	26%	12%	21%	5%	5%
Miles of distribution lines surveyed	0	0	0	0	10.74
Miles of lines repaired	0	0	0	0	<1
Actual expenditures*	0	0	0	0	4103
Actual water savings (AFY)	0	0	0	0	0.4

Table 5-4 Future System Water Audits

	2006	2007	2008	2009	2010
% of unaccounted for water	5%	5%	5%	5%	5%
Miles of distribution lines to be surveyed	0	0	0	0	0
Miles of lines to be repaired	0	0	0	0	0
Actual expenditures*	0	0	0	0	0
Actual water savings (AFY)	0	0	0	0	0

*Does not include District staff's time to compile data

Customers are advised of possible leaks on their side of the meter as described above. The District's Leak Adjustment Program, described in the same section, provides further inducement for customers to repair leaks that are detected.

> ***IMPLEMENTATION:*** *The District will continue to quantify the amount of unaccounted-for water on an annual basis and will respond to any significant increases as they are identified. In addition, the District will continue to repair all leaks in the distribution system as quickly as possible. The District will also continue to notify customers of possible leaks on their side of the meter as suspected by their meter readers or as reported by other persons. Both the on-going main replacement and meter replacement programs will be continued.*

5.4.4 Metering with Commodity Rates for all New Connections and Retrofit of Existing Connection

Implementation methods shall be requiring meters for all new connections and billing by volume of use. (Water Code §10631(f), 1-E)

As previously described the District's system is metered throughout and customers are invoiced by volume of usage. There is an increasing-block, tiered rate usage/commodity rate structure in place to encourage conservation and/or conversion to use of recycled water, whenever possible. The increasing block rate structure coupled with metered water usage, which is fundamental to water conservation, has been in place in the District for many years.

The District has an ongoing water meter replacement program for customer meters that are over 15 years old or have registered over 1,000,000 gallons of usage. Currently 80% or 3018 metered connections of the District's domestic water meters have been upgraded to meet this standard, and a total system upgrade is expected to be completed by the end of 2005.

IMPLEMENTATION: *This BMP has been in effect for many years and will be continued. In February 2005, the District added a sixth tier to the rate structure and increased the gap between tiers to further encourage conservation and conversion to recycled water use. Evaluations of meter function and reliability are reviewed every billing cycle and meters are repaired or replaced according to the results.*

5.4.5 Large Landscape Conservation Programs and Incentives

Implementation methods shall be at least as effective as identifying all irrigators of large (at least 3 acres) landscapes, contacting them directly, offering landscape audits using methodology such as that described in the Landscape Water Management Handbook prepared by the California Department of Water Resources and cost effective incentives to achieve customer implementation; providing follow-

up audits at least once every five years; and providing multi-lingual training and information necessary for implementation. In addition, enacting and implementing landscape water conservation ordinances, or if the supplier does not have the authority to enact ordinances, cooperating with cities, counties and the green industry in the service area to develop and implement landscape water conservation ordinances pursuant to the 'Water Conservation in Landscaping Act' (Government Code 65591 et. seq.). (Water Code §10631(f), 1-E)

The largest irrigators in the District are the Enterprise Business Campus (formerly Borland International), Scotts Valley School District's high school (playing fields) and the City parks. The three largest City parks have been converted to recycled water. Late in the summer of 2004, the high school was converted to recycled water, and in October of 2004 the Enterprise Business Campus was also converted to recycled water.

For those irrigators that now use recycled water there is a conservation incentive built into the recycled water pricing system. The District is currently evaluating the rates for possible additional incentives. In addition, the recycled water use site permits mandate periodic checks and assurances that no water is running offsite. Status of these visual checks is reported quarterly to the RWQCB and the Monterey Drinking Water Field Operations Branch of the CADHS.

Those large landscape users still on potable water have an even stronger incentive to audit themselves because the top tier water rate is now $8.30 per thousand gallons of water used. The District projects supplying recycled water to some 40 additional landscape water users within the next five years. The primary incentive to change to recycled water is the discounted cost of the water. However, in at least two cases, the District had to force conversions by citing Water Code §13551 and threatening to turn off potable water used for irrigation.

The District is not an agency of land use planning jurisdiction and although the District has adopted landscape water conservation ordinance (Ordinance #119-96, amended by Resolution #1-01), the District typically leaves the utilization requirements to the City of Scotts Valley to enforce. The District works closely with the City of Scotts Valley in adopting and implementing water conservation and recycled water ordinances. The City of Scotts Valley has such an ordinance (Resolution #1413) mandating use of recycled water if it is accessible to the project to be constructed. All new projects are required to comply for final approval. This ordinance is provided in Appendix B.

The City of Scotts Valley requires a landscape design plan to be submitted to the Planning Commission as part of the development plans. Plants specified in the Plan must be appropriate to the climatic, geologic, and topographical conditions of the site and must be grouped in hydrozones with other plants having similar water use requirements. At least ninety percent of the plants selected for non-turf areas must be drought tolerant varieties. The landscape plans are required to be submitted to the Planning Commission as a part of

the development plans for the site. The landscape plan is required to address function, energy use, environmental and aesthetic conditions specific to the site, as well as water conservation.

By July 1, 2006, the District is committed to identifying all dedicated irrigation metered customers and surveying their landscaping use. The survey will help staff determine the customer's usage habits in order to provide the customer with a budget of their landscape use and provide informational assistance on how they could potentially conserve usage.

> ***IMPLEMENTATION:*** *The District's volume pricing policy will remain in effect, providing strong financial incentives for the conservation of irrigation water because of the high volumes required. The District will also encourage all major irrigators to convert to recycled water as soon as it is available to individual sites. The District will continue to support the City of Scotts Valley's efforts to implement their water conservation ordinance and continue to promote water conserving landscaping in its public information programs. A landscape survey program will be implemented by July 1, 2006, to further assist customers in reducing their landscape water use. Staff will continue their efforts of out-reach according to the requirements outlined by the MOU of the CUWCC.*

5.4.6 High-Efficiency Washing Machine Rebate Program

Implementation methods shall be enacted to provide incentives for replacement of older less efficient washing machines with newer, high-efficiency models. (Water Code §10631(f), 1-F)

The District allows a credit of $100 for each washing machine that is replaced with an approved H-axial washing machine for residential application and $200 for each washing machine that is replaced with an approved H-axial washing machine for commercial application. The District's rebate program is provided in its entirety in Section 3.44 Retrofit Credits. As with other rebate programs, the District documents and gives quarterly reports on retrofit credits provided to its customers. Actual rebates provided to customers prior to 2005 and projected rebates to be provided to customers through 2010 are presented in Table 5-5 and Table 5-6 respectively.

Table 5-5 Actual Washing Machine Rebates from 2001-2005

	2001	2002	2003	2004	2005
$ per rebate	100	100	100	100	100
# of rebates paid*	57	120	101	99	67
Actual expenditures ($)*	$5,700.00	$12,000.00	$10,100.00	$9,900.00	$6,700.00
Actual water savings (AFY)	N/A	N/A	N/A	N/A	N/A

*Through December 2, 2005
N/A - Not Available

Table 5-6 Projected Washing Machine Rebates from 2006-2010

	2006	2007	2008	2009	2010
$ per rebate	100	100	100	100	100
# of rebates paid	100	100	100	100	100
Actual expenditures ($)	$10,000.00	$10,000.00	$10,000.00	$10,000.00	$10,000.00
Actual water savings (AFY)	N/A	N/A	N/A	N/A	N/A

IMPLEMENTATION: *This program is on-going and will be continued. It will be actively promoted with public information efforts (BMP 7) initiated in conjunction with any future voluntary water rationing programs. Staff will continue their efforts of out-reach according to the requirements outlined by the MOU of the CUWCC.*

5.4.7 Public Information Program

Implementation methods shall be at least as effective as ongoing programs promoting water conservation and conservation related benefits including providing speakers to community groups and the media; using paid and public service advertising, using bill inserts; providing information on customers bills showing use in gallons per day for the last billing period compared to the same period the year before; providing public information to promote other water conservation practices; and coordinating with other governmental agencies, interest groups and public interest groups. (Water Code §10631(f), 1-G)

The District has conducted an extensive variety of public education activities over the past ten years. Some were aimed at motivating customers to respond to the drought situation, while others were more general and informational in scope. The following is a list of some activities that have been undertaken:

Brochures and Newsletters. General mailings, separate from the bimonthly billings, were sent to all customers to encourage water conservation. Water conservation pamphlets "Conserve Water, Inside and Outside Your Home and Business" were provided to all trailer parks, public libraries, and City offices. Newsletters are mailed out every 6-12 months to remind customers of conservation and inform them of other District activities. Water conservation flyers and brochures have been kept at the Customer Relations Representative's desk in the District Office and made available to interested customers coming to pay bills or make inquires.

Service Club Presentations. Management staff of the District has made presentations to local service clubs on water supply and water conservation related topics. This includes the Scotts Valley Rotary, Kiwanis, Lions, and Exchange Clubs. In addition, annual presentations are made to the City of Scotts Valley's City Council for their resources update meeting, which is televised locally.

Cooperative Agency Program. The District also participates in a cooperative water agency committee, consisting of Soquel Creek Water District, Pajaro Valley Water Management Agency, the City of Watsonville Water, and the City of Santa Cruz Water Department. This committee mutually contributes funds for community awareness campaigns to better inform the public about conservation methods and practices. Through local radio stations, newspaper advertisements, and community events, this outreach campaign has become highly regarded and is well attended by the community.

> ***IMPLEMENTATION:*** *The District's programs of informational pamphlets, newsletters and community presentations will continue on a routine basis. The level of public contact through the media will be increased in the event that voluntary or mandatory water rationing is enacted during the term of this plan. Staff will continue their efforts of out-reach according to the requirements outlined in the CUWCC MOU.*

5.4.8 School Education Programs

> *Implementation methods shall be at least as effective as ongoing programs promoting water conservation and conservation related benefits including working with the school districts in the water suppliers' service area to provide educational materials and instructional assistance.* (Water Code §10631(f), 1-H)

The District has joined with other water suppliers in Santa Cruz County to coordinate school programs on water conservation and wise water use. This includes professional players performing water related skits to the 3rd and 4th grade classes. These performances are incorporated into the 3rd and 4th grade curriculum on water conversation at the local elementary schools. The District furnishes teacher guides and activity books for the program. The District also has tours of its laboratory and facilities for these classes.

During the month of May, "Water Awareness Month" the District provides conservation and water wise workbooks to all 2nd and 3rd grade students (approximately 450 students) within the District's boundaries. The material is approved age appropriate for these students and is incorporated in their curriculum by the education staff at the schools. Each year the District evaluates the content and issues of the available conservation materials and provides the schools with an age appropriate instructional workbook.

> ***IMPLEMENTATION:*** *The District will continue to work with the Scotts Valley Unified School District and the Private Schools in the area to support the inclusion of water conservation topics in their curriculum. Staff will continue their efforts of out-reach according to the requirements outlined in CUWCC MOU.*

5.4.9 Commercial, Industrial, and Institutional Water Conservation

> *Implementation methods shall be at least as effective as identifying and contacting the top 10% of the industrial and commercial customers directly (by mail and/or telephone); offering audits and incentives sufficient to achieve customer implementation; and providing follow-up audits at least once every five years if necessary.* (Water Code §10631(f), 1-l)

The District's water sales to commercial and industrial accounts are a small part of the total water sales because the primary industry in the area is computer disk drive assembly and software generation. Their largest usage is for landscape irrigation. The District has access to tertiary water and will encourage landscape accounts to utilize recycled water if it is available to their site. The District currently does not offer water audits to the commercial and industrial accounts due to their low volume.

By July 1, 2006, the District is committed to implementing a survey for commercial and industrial accounts to determine their indoor and outdoor components in order to provide assistance on water saving recommendations and assistance. At this time, the water savings for implementing a program of this nature is not known, but the District will analyze the results of the surveys and replacements of fixtures to determine the water savings impact. Table 5-7 presents the projected number of survey to be completed in the next five years from the existing 267 commercial and industrial customers in the District.

Table 5-7 Conservation Programs for Commercial and Industrial Customers

	2006	2007	2008	2009	2010
# of on-site surveys to be completed	20	40	40	40	40
Will incentives be provided	Unknown	Unknown	Unknown	Unknown	Unknown
# of follow-up visits	5	5	5	5	5
Projected expenditures ($)	N/A	N/A	N/A	N/A	N/A
Projected water savings (AFY)	N/A	N/A	N/A	N/A	N/A

*N/A = not available, no prior data on cost or savings from surveys

IMPLEMENTATION: *The District will continue to work with all commercial and industrial accounts to improve their water use efficiency, particularly for landscape irrigation. Staff will continue their efforts according to the requirements outlined in CUWCC MOU.*

5.4.10 Wholesale Water Agency Programs

Wholesale Water Agency Programs are not applicable to the District as the District has no opportunity to either buy water from wholesalers or sell water to retailers (Water Code §10631(f-j)).

5.4.11 Conservation Pricing

Implementation methods shall be at least as effective as eliminating nonconserving pricing and adopting conserving pricing. For signatories supplying both water and sewer, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make a good faith effort to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service. (Water Code §10631(f), 1-K)

The District has an inclining block rate for all potable water customers that began in 1992. The consumption start at $2.57 per 1,000 gallons for the first 3,000 gallons to $8.30 per 1,000 gallons for all consumption over 50,000 gallons per month (See Table 3-5). The District's rates were last revised effective February 11, 2005, although the same basic rate structure relative to the size of meter has been in effect for a number of years.

The District also has an inclining block rate for all recycled water customers. Currently, the rates are 80% of the potable rates and the rates are under review to possibly provide further incentive for use.

The District has no jurisdiction over the sewer rates set by the City of Scotts Valley. However, the Water District does supply the City with the consumption rates of the commercial and industrial users, for billing purposes.

IMPLEMENTATION: *The District will continue a conservation pricing rate structure.*

5.4.12 Water Conservation Coordinator

*Implementation methods shall be at least as effective as designating a water conservation coordinator responsible for preparing the conservation plan, managing its implementation, and evaluating the results. For very small water suppliers, this might be a part-time responsibility. For larger suppliers this would be a full-time responsibility with additional staff as appropriate. This work should be coordinated with the supplier's operations and planning staff (*Water Code §10631(f-l).

The Accountant/Office Supervisor effectively fulfills the function of a water conservation coordinator. The staff member has the responsibility for placement of the District's public service and advertising announcements and is responsible for administrating any survey or water rationing programs. This position has been considered the part time responsibility of one District staff member for the past five years and will continue to be for the subsequent five years. The actual and projected expenditures of this position are not quantified since the position caries other responsibilities previously budgeted for by the District.

IMPLEMENTATION: *The Accountant/Office Supervisor will continue to fulfill the District's needs for the management and coordination of its water conservation programs.*

5.4.13 Water Waste Prohibition

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, sales of automatic (self regenerating) water softeners, single pass cooling systems in new connections, nonrecirculating systems in all new conveyer car wash and commercial laundry systems and non-cycling decorative water fountains. (Water Code §10631(f), 1-M)

The District has an ordinance in effect since 1983 prohibiting gutter flooding, non-recirculating systems for conveyor car washes, and non-recycling decorative water fountains. This ordinance is provided in Appendix B.

IMPLEMENTATION: *It is recommended that the ordinance prohibiting certain water wasting practices, during non-rationing periods, be amended by the Board of Directors during the term of this Plan, to include prohibiting; sales of automatic water*

softeners, single pass cooling systems and commercial laundry systems without recirculating systems. See Appendix B.

5.4.14 Ultra Low Flush (ULF) Toilet Replacement Program

*An Implementation program for replacement of existing high-water-using toilets with ultra-low-flush toilets (I. 6 gallons or less) in residential, commercial and industrial buildings shall be enacted. Such programs would be at least as effective as offering rebates of up to $100 for each replacement that would not have occurred without the rebate, or requiring the replacement at time of resale, or requiring the replacement at the time of change of service (*Water Code §10631(f-n)).

The District allows a credit of $100.00 for each ULF toilet installed by the customer. The District does not currently install or offer to install ULF toilets. This program has been in place for many years and the District's ordinance can be found in Section 3.4.4 Retrofit Credits. Actual and projected ULF toilet rebates and expenditures are provided in Table 5-8 and 5-9 respectively.

Table 5-8 Actual ULF Toilet Rebates Provided to Customers 2001-2005

	2001	2002	2003	2004	2005
# of ULF rebates	52	60	71	71	67
# of ULF direct installs	0	0	0	0	0
# of ULF CBO installs	0	0	0	0	0
Actual expenditures ($)	$5,200.00	$6,000.00	$7,100.00	$7,100.00	$6,700.00

Table 5-9 Projected ULF Toilet Rebates Provided to Customers 2005-2010

	2006	2007	2008	2009	2010
# of ULF rebates	62	62	62	62	62
# of ULF direct installs	0	0	0	0	0
# of ULF CBO installs	0	0	0	0	0
Actual expenditures ($)	$ 6,200.00	$6,200.00	$6,200.00	$6,200.00	$6,200.00

IMPLEMENTATION: *The District will continue its retrofit credit.*