

The District also maintains a library of video tapes and other educational materials that are available upon request. Local teachers are asked to participate in programs and occasionally obtain materials from the District's library for classroom use.

9. DEMONSTRATION GARDENS

In 1998 the District developed a demonstration garden featuring low water using plants from a palette of California native shrubs and flowers. The Garden is adjacent to the District's office in a highly visible location in the community. Subsequently, the District, in cooperation with the City, developed two additional demonstration gardens – one at the Sanchez Library and the other at the Community Center. The newest demonstration gardens also feature drought tolerant plants that grow well in the Pacifica climate. The Sanchez Library was featured in the local newspaper.

C. DEMAND MANAGEMENT PROGRAMS -- 2006 – 2010

1. DMM 1. WATER SURVEY PROGRAMS FOR SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL CUSTOMERS (BMP 1)

PAST EFFORTS. The District has offered water audits to its single-family and multi-family residential customers on an on-going basis since 2000. Through the end of 2004, 473 surveys had been completed. Of these, 448 were for single-family customers and 25 were multi-family dwelling units. The surveys have included leak checks of the toilets, faucets and water meter; flow rate checks of showerheads, faucets and toilets and checks of the irrigation system and irrigation controllers. Residents have been routinely offered new, low flow showerheads and when older toilets have been identified, the customers have been directed to the District's ULFT replacement program.

The CUWCC has assembled information on the effectiveness of residential water audits.¹ The data from one large program indicates that savings can range from 21 gallons per day per household for untargeted surveys to 32.2 gallons per day per household for surveys targeted to high water users. Assuming that similar results have been achieved, the North Coast County Water District has gained a conservation benefit of between 11 and 17 AFY as a result of implementing BMP 1.

IMPLEMENTATION. Residential water surveys were evaluated in the DSS Model for SFPUC Wholesale Customers, and for North Coast, it was determined that the benefit-cost ratio would be 1.2 with a projected cost of \$1,676 per million gallons of water saved. While positive, the benefit-cost ratio is marginal. Accordingly, the District will consider reordering priorities and implementing other, more cost effective DMM's during the term of this Plan. If the Residential water surveys are terminated, the District will file a cost-effectiveness exemption with the CUWCC for this BMP.

In any event, the District will continue to notify customers with anomalous increases in water consumption when identified by billing records and will offer home water conservation kits, and, upon request, residential surveys in order to assist these customers.

2. DMM 2. RESIDENTIAL PLUMBING RETROFIT

PAST EFFORTS. The District has operated a voluntary residential water conservation program almost continuously since the severe drought of 1976-77, although the program has been given extra emphasis during the years when mandatory conservation has been in effect.

The program consists of the distribution of water conservation kits containing informational packets, water bags to place in toilet tanks, showerhead flow restrictors and dye tablets for toilet leak detection. Between 1985 and 2000, over 2,000 kits were distributed. In addition, an unknown number of kits were distributed in the community during the 1976-77 drought period. In the previous Urban Water Management Plan it was estimated that up to 25% of the District's 4,000 pre-

¹California Urban Water Conservation Council, *BMP Costs and Savings Study*, July 2000, p. 2-19.

1992 residential connections have some of these devices installed, conserving as much as 25 AF each year.

Furthermore, as noted above, the District has conducted almost 500 residential water audits in the past 5 years. In the course of these audits an almost equal number of high quality low-flow showerheads have been distributed, along with a large number of associated retrofit devices.

IMPLEMENTATION. During the term of this Plan, the District will continue the distribution of low flow showerheads, faucet aerators, toilet displacement devices (as needed) and toilet flappers (as needed) to all customers, (the majority of whom are residential users living in pre-1992 homes). This would be done in conjunction with DMM 7 (Public Information) and would be intended to also meet the compliance criteria established by the CUWCC for this BMP (BMP 2).

The DSS model Conservation Measures Evaluation for this DMM calculated a benefit-cost ratio for North Coast for this DMM of 3.3. The projected cost of implementation for each million gallons of water saved was calculated to be \$643.

The District's program of distributing home water conservation kits in response to customer concerns about high water bills or in the course of investigations for potential residential leaks will be continued (DMM 1).

3. DMM 3. DISTRIBUTION SYSTEM AUDITS AND LEAK DETECTION AND REPAIR (BMP 3)

PAST EFFORTS. On a regular basis, the District staff surveys the entire distribution system using leak detection equipment owned by the District. District personnel are trained in the methodology presented by the American Water Works Association in the *Manual of Water Supply Practices, Water Audits and Leak Detection*. Leaks found during leak detection work are prioritized and scheduled for repair as quickly as possible. Larger leaks are given higher priority (but lower than emergency repairs.)

The District recognizes the value of system audits and leak detection programs in reducing water

losses and in minimizing the volume of unmetered water. The volume of unaccounted-for water for each of the past five years is shown below in Table 15.

Year	2000	2001	2002	2003	2004	2005
Percent Of Production	2.8%	7.1%	9.8%	2.4%	6.6%	7.9% (est.)

As can be seen in Table 11, the North Coast County Water District's volume of unaccounted-for water has not exceeded 10% of production in any of the past five years.

IMPLEMENTATION. The District's leak detection programs will continue to be implemented on a regular basis, as staffing is available. BMP 3 requires system audits when unaccounted-for water exceeds 10% of production, a level the District has never exceeded.

If the volume of unaccounted-for water rises above 10% of sales for a year or longer, the District will initiate a systemwide audit, unless, of course the cause of the increased water loss is identified through other means sooner. In any event, it is the District's goal to comply with DMM 3 by a) avoiding the 10% water loss trigger point for system wide audits, and b) completing periodic water audits in conformance with past management practices.

In addition, the District will continue to repair all leaks in the distribution system as quickly as possible. Both the on-going pipeline replacement and meter replacement programs will be continued.

4. DMM 4. METERING WITH COMMODITY RATES (BMP 4)

PAST EFFORTS. The North Coast County Water District is fully metered and bills all customers by volume of use. The current rate structure provides financial incentives for conservation by its low volume customers. It provides for a low (“Lifeline”) charge of \$1.85 per unit for the first 6 units per bimonthly billing period, a higher rate of \$4.65 per unit for units 7–20 and a still higher rate of \$5.60 for residential consumption over 20 units per billing period. All non-residential customers are billed on a uniform, volume of use, basis. Currently they pay \$4.65 per unit.

IMPLEMENTATION. This demand management measure has been fully implemented for many years and will be continued. The inclining block rate structure applies to all residential customers, which account for almost 85% of the District’s water sales.

5. DMM 5. LARGE LANDSCAPE CONSERVATION PROGRAMS AND INCENTIVES (BMP 5)

PAST EFFORTS. The largest irrigators in the District are the Jefferson Union High School District, the Laguna Salada Elementary School District, and the City of Pacifica (for parks). Sharp Park Golf Course is in the District boundaries but is supplied with irrigation water directly by San Francisco Water Department.) Because of its cool, marine climate the demand for irrigation water is among the lowest in California. In all, the District has 64 dedicated irrigation meters and, in 2004, the irrigation demand was 89 AF, less than 2.2% of the District’s production.

In the past, the Water District General Manager has met with the school districts and the City in response to concerns expressed about their water bills. He has made specific recommendations to each regarding steps that can be implemented to conserve landscape irrigation water and to reduce water costs. His recommendations have been implemented and all these customers have been successful in reducing their irrigation water needs. In these cases the cost of water has provided sufficient incentive to initiate water conservation efforts.

Urban Water Management Plan Programs

IMPLEMENTATION: During the term of this Plan, some of the largest irrigated facilities now served by the District are projected to begin receiving recycled water for irrigation. This would occur upon implementation of Phase I of the District's Water Recycling Project, involving construction of a distribution system for recycled water from the City-owned Calera Creek Water Recycling Plant. Facilities that are being considered for conversion to recycled water include Sharp Park Golf Course, (which now receives water served directly from the SFPUC and is not a NCCWD customer), Sharp Park Beach Promenade, Fairway Park, Highway One landscaping and playing fields at Oceana High School and Ingrid B. Lacy Middle School. In its initial phase the project would supply about 172 AF a year to these customers, of which over 70% would be used at the Golf Course.¹ The application of recycled water to landscaped areas now receiving potable water from the District would reduce the District's sales to its irrigation accounts by as much as 52.5 AFY, resulting in an immediate, and substantial, conservation benefit. This reduction in the acreage irrigated with potable water would also reduce the potential cost effectiveness of conservation programs directed at the landscape irrigation accounts.

In the interim, however, the District will work with its largest irrigation water customers to support all efforts to improve efficiency and encourage conservation. More specifically, the District will develop recommended water use budgets for the 10 largest use dedicated irrigation meters. The budgets would be equal to the reference evapo-transpiration rate for the coastal zone area applied to the area irrigated from each meter. Customers would be notified of the water budgets through messages on water bills for irrigation accounts showing the relationship between the water budget and actual consumption.

For large commercial or institutional accounts without dedicated irrigation meters (but with large landscape irrigation use) the District will offer the following services when found to be cost effective:

- a. Preparation of a voluntary water use budget;
- b. Installation of a dedicated landscape water meter.

Implementation of this program would generally satisfy the implementation criteria for BMP 5.

¹ Thomas Reid Associates/North Coast County Water District, *Water Recycling Project Mitigated Negative Declaration*, April 2004, p. II-4

The evaluation of this conservation measure by the DSS Model indicates that it would have a benefit/cost ratio of 1.6 for North Coast with a cost of \$1,200 for each million gallons saved, and a potential long-term demand reduction of 5.6 AFY. This potential savings would be overshadowed by the recycled water plan, which could reduce demand on the system by up to 52.5 AFY.

During the term of this plan, the District will also consider augmenting the proposed water budget program with financial incentives for meeting landscape water budgets. This additional step was evaluated in the *Wholesale Customer Water Conservation Potential* report as a separate conservation measure. The program would entail modifying the District's rate structure and formally linking the landscape water budgets to a special rate schedule that penalizes the account holder for exceeding its water budget and rewards them for using less than the budget. The DSS model predicts that this enforcement tool would, by itself, have a benefit-cost ratio of 7.8 with a cost of \$256 for each mg saved and a potential long-term water savings 5.6 AFY, doubling the benefits of water budgets alone.

6. DMM 6. HIGH-EFFICIENCY WASHING MACHINE REBATE PROGRAM (BMP 6)

PAST EFFORTS. From 2001 through 2004, the District offered rebates of \$50.00 to \$100.00 to residential customers purchasing high-efficiency clothes washers with a water use factor of 9.5 or less, in conformance with the CUWCC criteria for BMP 6. The rebate program was conducted jointly with BAWSCA and participating member agencies. During this time, the NCCWD awarded 397 rebates. The CUWCC BMP Cost and Savings Study estimates that the average water savings for a high-efficiency clothes washer is approximately 5,100 gallons a year. Therefore, the rebates of the past 4 years have resulted in a conservation benefit of as much as 2.02 mg a year (6.2AFY) for an incentive cost of less than \$30,000.

IMPLEMENTATION. The District intends to continue offering High Efficiency Washing Machine Rebates through 2006. In 2005, BAWSCA stopped awarding rebates on machines with a 9.5 water factor, and increased the rebate level to \$150 on machines with a 5.5 water factor. In January 2007, the California clothes washer standards tighten, and all new washing machines sold in the state will have to meet the 9.5 water factor standard. At that time the District, and other BAWSCA participants, will re-evaluate the current program and consider whether to continue to provide rebate incentives for the most efficient washing machines.

The DSS Model indicates that the washing machine rebate program has a favorable 9.3 benefit-cost ratio for North Coast with a cost of \$225 for each million gallons saved, and a potential long-term demand reduction of 4.4 AFY.

7. DMM 7. PUBLIC INFORMATION (BMP 7)

PAST EFFORTS. The North Coast County Water District has an on-going public information program and has conducted many community outreach and public education activities in past years. In the early 1990's the public information program efforts were aimed at motivating people to respond to the specific drought emergencies that were occurring, while in recent years the public information efforts have focused on general water conservation and wise water use.

The District concurs with conclusions in the SFPUC's *Wholesale Customer Water Conservation Potential* report to the effect that much of the water savings from Public Information efforts are manifested in the results of other programs such as toilet and washing machine rebates, and conservation in landscaping.

IMPLEMENTATION: Activities that have been accomplished in past years and will be continued in the coming 5-year UWMP cycle include the following:

Brochures and Flyers. The District has prepared and mailed Newsletters to all customers on several occasions. The Newsletters have included articles and information on water conservation issues and have informed customers of the types of assistance the District can offer to help customers conserve. The District has also prepared annual consumer confidence reports to customers for the past 16 years. They have been distributed as separate mailings and have included conservation messages relating to water shortages (in dry years) or messages with a water awareness theme (in normal or wet years). Water conservation messages such as "Water Conservation begins at Home" and "Water Responsibility" are also routinely included in District communications with customers questioning bills, or raising other related questions.

Water conservation flyers and brochures have been kept at the reception desk in the District Office and made available to interested customers coming to pay bills or make inquiries. Many brochures

have been distributed through this means.

In the event of a drought or pending drought, the District will use general mailings, separate from the bi-monthly billings, to announce water conservation programs, whether voluntary or mandatory, and to appeal to customers to reduce their water consumption. These efforts would be supported with stepped-up public information initiatives using a variety of local media outlets.

Bill Stuffer Inserts. The District has the ability to distribute informational bill inserts. They can be purchased from AWWA and other sources, or developed in-house. The District will continue to use bill inserts to communicate with customers throughout the term of this plan.

Past Usage Information. The District has shown past usage information on customer bills since 1996 and will continue to do so in future years.

Local Newspaper Advertisements. In recent years, the District has purchased advertisements in conjunction with Water Awareness Week. These ads have been used to initiate a community wide poster contest. The District also runs a continuing ad with a Water Wise Use theme in the Pacifica telephone directory published by the Chamber of Commerce.

In past dry years, mandatory water conservation programs implemented by the District have been announced with full-page ads in the *Pacifica Tribune*. In the event of a future drought, the District will again implement an active advertising effort to reinforce the need for active citizen participations in the conservation effort.

Local Television. The District runs water conservation messages during Water Awareness Month on public access television, and makes water education videos available to the television station for broadcast. Public service announcements have been scheduled most frequently during periods of water shortages.

Speaker's Bureau. The District will respond to requests for speakers on water supply and water conservation issues for local community gatherings and service club meetings.

Demonstration Garden. The District has developed three Demonstration Gardens in the

community. One is adjacent to the District Office and the others are at the Community Center and the Sanchez Library. The gardens showcase drought tolerant landscape plantings that are appropriate for the Pacifica climate.

Web. The District's website is: www.nccwd.com.

The SFPUC's *Wholesale Water Conservation Potential* study found that a robust public information program would have a relatively low (1.4) benefit-cost ratio for North Coast. This is based on an assumed investment of about \$2 per year per single-family residential account, or about \$22,000 annually. The District's program costs for public information have typically been lower. The District will continue the on-going program because its costs have been reasonable and because it is important to continue reminding customers of the importance of water conservation.

8. DMM 8. SCHOOL PROGRAMS (BMP 8)

AVAILABLE RESOURCES . The North Coast County Water District is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA), which provides assistance to its members (San Francisco Water Department wholesale customers) in the implementation of a school program consistent with BMP 8. BAWSCA's award winning "Our Water" program is an innovative curriculum for the fourth grade that combines visual, literary and performing arts instruction with water conservation lessons. BAWSCA, in conjunction with some member Districts expects to implement a new *Water Wise* program for fifth graders that involves a comprehensive teacher-training program and a take-home kit for each student with a water efficient showerhead, faucet aerators, toilet dye tablets, and literature for both students and parents.

PAST EFFORTS. The District has participated in past BAWSCA (and, its predecessor, BAWUA) programs that have provided a) packets of educational materials and curriculum guides for schools and b) sponsored local and regional poster contests with a water conservation theme and c) printed and distributed Water Awareness Calendars featuring poster contest winners. Recently over 150 elementary students a year have participated in the "Our Water" program.

In addition, the District has provided materials to schools for Water Awareness Month activities and student tours of District facilities, teacher training materials and water education videos to compliment the local School Districts science curriculum.

IMPLEMENTATION. The District will continue to work with BAWSCA and the faculties of the Laguna Salada Elementary School District and the Jefferson Union High School District to support the inclusion of water conservation and water education topics in the school curriculum. The District will encourage the Elementary School District's participation in BAWSCA's expanded Water Wise program for fifth graders during the term of this Plan.

9. DMM 9. CONSERVATION PROGRAMS FOR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL (CII) ACCOUNTS (BMP 9)

PAST EFFORTS. The District has no industrial accounts and less than 420 commercial and institutional accounts. In aggregate they account for about 13% of the District's sales. The District has responded to requests for water audits and conservation suggestions to all customers in these categories as they have been made. Outreach programs have been conducted during water shortages, and have included the distribution of water conservation placards to all hotels and restaurants in the community. These have been accepted and displayed in almost every case. Hotels and restaurants account for most of the District's water sales in the commercial category.

The District reviews the landscape plans and inside water fixture appliances for all new commercial customers. This ensures that landscaping and water fixtures that require low water use are installed before the new customer is connected to the District's system.

The District also offers ULFT rebates to all of its customers, including commercial and institutional accounts. Rebates of up to \$60 per toilet for up to 25 toilets per year are available to customers in these sectors.

DESCRIPTION. The implementation program for BMP 9 is quite specific and very staff intensive. It would require the District to identify and rank all CII users by sector, contact the largest accounts and offer and conduct water surveys for them. BMP 9a calls for establishing a low flow toilet rebate program for these customers.

The SFPUC *Wholesale Customer Water Conservation Potential* study evaluated several commercial water conservation measures that are essentially equivalent to BMPs 9 and 9a. According to the

DSS Model results, commercial water audits would not have a favorable benefit-cost ratio (0.8) and would cost over \$2,500 per mg saved.

However, the potential benefits of a commercial ULF Toilet and Urinal Rebate program would be greater. The DSS Model calculated that this program would have a benefit-cost ratio of 8.8 with a projected cost of \$239 for each mg saved for North Coast. Since water use by this sector is low, the net long-term benefit for the District was estimated at only 1.12 AFY.

IMPLEMENTATION. Based on the unfavorable cost benefit ratio projected for CII water audits, the District will claim an exemption from BMP 9, and will not initiate a program of water audits targeted to these sectors during the term of this UWMP.

The low flow toilet rebate program for all customers, including CII customers, will be continued, at least through 2006. In addition, the District, in conjunction with other BAWSCA agencies is offering a low flow spray rinse nozzle program to restaurants in Pacifica. Spray rinse nozzles are used in commercial kitchens to pre-rinse dishes for automatic dishwashers.

This conservation program involves offering and providing free installation of 1.6 gpm spray nozzles in restaurants or other commercial kitchens. According to the DSS Model, North Coast would have a cost-benefit ratio of 15.1 for this conservation measure, with an implementation cost of \$134 for each mg saved. The average long-term water savings would be as much as 5.6 AF a year.

10. DMM 10. WHOLESALE AGENCY ASSISTANCE PROGRAMS (BMP 10)

DESCRIPTION. This demand management BMP requires wholesale water suppliers to provide financial incentives, or equivalent resources, to their retail water agency customers for the advancement of water conservation efforts.

IMPLEMENTATION. Since the North Coast County Water District is not a wholesale water supplier, this BMP would not be applicable to the District.

11. DMM 11. CONSERVATION PRICING (BMP 11)

EXISTING RATE STRUCTURE. The North Coast County Water District has a 3-tier inclining block rate for all residential customers and a uniform rate for all commercial and institutional accounts. The residential rates have a low lifeline fee of \$1.85 per unit for the first 6 ccf units (1 unit = 100 cubic feet = 748 gallons), which is equivalent to 4,448 gallons per bi-monthly billing period or an average of approximately 100 gallons/day per residence. The rates for higher usage are \$4.65 for 7 to 20 units and \$5.60 for over 20 units. Commercial rates are \$4.65 per unit. In addition, all customers are billed a bi-monthly base charge determined by the size of the meter.

The North Coast County Water District has no jurisdiction over sewer rates, which are set by the City of Pacifica. The City charges by volume of use, which is derived from the Water District's sales to individual accounts during wet weather months when outdoor water use is the lowest. The sewer charges are billed annually in conjunction with the collection of property taxes.

IMPLEMENTATION. The Water District will continue implementing a conservation pricing rate structure.

12. DMM 12. CONSERVATION COORDINATOR (BMP 12)

DESCRIPTION. This BMP calls for the agency to designate a water conservation coordinator and support staff (if necessary) whose duties are to include the coordination and oversight of conservation programs, the preparation and submittal of annual BMP Implementation Reports, the coordination of conservation programs with operations staff and with management, and related activities.

IMPLEMENTATION. The District's Assistant General Manager – Administration serves as the Water Conservation Coordinator. She has a Water Conservation Practitioner certification from AWWA,

and has been overseeing all of North Coast's water conservation programs since 1995. She is assisted, as necessary, by other District Staff.

13. DMM 13. WATER WASTE PROHIBITION (BMP 13)

DESCRIPTION. This BMP calls for water agencies to enact and enforce certain prohibitions against wasteful water use on an on-going basis, i.e. during drought and non-drought periods. The ordinances should prohibit, at a minimum, gutter flooding, non-recirculating fountains, non-recirculating systems in any new car wash or commercial laundry installations, and any new single-pass cooling systems.

PAST ACTIVITIES. The North Coast County Water District has prohibited the waste of water as well as a number of non-essential uses of water in conjunction with water rationing programs that were implemented in 1976-77 and again 1990 and 1991. In these situations the District's ordinances prohibited non-essential water uses, which were defined as uses in excess of the specific allotments which varied by meter size. In addition, a number of defined uses of water were also prohibited as non-essential uses. These ordinances were enforced with excess use charges, warnings, and ultimately, a disconnection of service. The ordinances were suspended when the water shortage emergencies ended.

IMPLEMENTATION. To implement BMP 13, the District will consider adoption of an ordinance prohibiting wasteful water use during normal water supply situations. The ordinance could cover the wasteful water practices mentioned in the BMP as well as several others that would be relevant in the community. As an example, it could prohibit:

- a) Use of water when the customer has been given notice to repair broken plumbing, sprinkler, or irrigation systems and has not done so after 10 days;
- b) Use of water that results in flooding or runoff to gutters or streets;
- c) Use of water for washing vehicles with a hose, unless the hose has a positive shutoff nozzle or valve;
- d) Use of landscape irrigation water that results in runoff to the street or pooling due to super-

saturation of the ground;

e) Use of water in non-recirculating fountains;

f) Use of water for cooling purposes;

g) Use of water by new a commercial carwashes unless it is recycled through on-site filter systems.

14. DMM 14. ULTRA LOW FLUSH TOILET REPLACEMENT (BMP 14)

The District has an on-going ULF toilet rebate program for all customers. The program was initiated in 1996 for residential customers, and expanded to all customers a year later. The program offers rebates of up to \$100 per toilet for single-family residential customers and up to \$60 per toilet for multi-family and commercial customers (with a limit of 25 rebates per customer per year). To qualify for a rebate the customer must show proof of purchase of a new, qualifying toilet and proof of disposition of the old toilet.

The program has been promoted in press releases and bill stuffers. In the first 5 years, the program averaged over 250 ULFT installations per year, for a total of over 1,250 through the end of 2000. An additional 700 rebates were awarded between 2001 and 2004. It is estimated that the District's conservation benefit from this program is over 50 acre-feet per year.¹

The SFPUC *Wholesale Customer Water Conservation Potential* study indicates that North Coast's benefit-cost ratio for residential ULFT rebates is 1.4 and the cost of water saved by the program is over \$1,453 per mg. As noted above, in the discussion of DMM 9, the cost-benefit ratio for rebating commercial toilet replacements is much higher (8.8).

IMPLEMENTATION. The District will continue to offer ULFT rebates to both residential and commercial customers through 2006, although the marketing efforts will be targeted toward the commercial sector. After that, the District will consider discontinuing the residential ULFT program so that the District's cost and staff time for this program can be redirected to other, more effective efforts.

¹ Based on a conservation factor of 23 gallons per day per toilet derived from: CUWCC, *BMP Cost & Savings Study*, July 2000, Chapter 2.6, Table 2.

15. OTHER POTENTIAL CONSERVATION MEASURES

The SFPUC's *Wholesale Customer Water Conservation Potential* study identified 32 potential water conservation measures that could be potentially effective in the areas served by the Suburban purveyors. Many would not be cost effective for North Coast, while others are included in the DMM's addressed above. However, several conservation measures that are not DMMs but may be cost effective and beneficial for North Coast were identified by the DSS model. These measures are described below:

1. Require ULFT Retrofitting at Time of Sale of Existing Buildings.

This program would require that a certificate of compliance be filed with the District in conjunction with the sale of any residential or commercial building. The certificate would verify that a plumber has inspected the property and that ULF toilets are either present or were installed at the time of sale, or before close of escrow. The DSS model projected a cost-benefit ratio of 10.5 for this conservation measure with a cost of \$192 per mg saved and a potential conservation benefit of 83 AFY.

2. Xeriscape Education and Homeowner Irrigation Classes.

These conservation efforts involve sponsorship of staff training for stores where plants and irrigation equipment is sold to educate sales people about the benefits of low water use plants and efficient irrigation. In addition, the District would sponsor classes for homeowners at these stores or other suitable venues to provide tips and training on water efficient irrigation using drip systems, smart controllers, low volume sprinklers, and irrigation schedules appropriate to the local climate.

The DSS model calculates that these programs would have cost-benefit ratios of 4.4 and 5.0 respectively, and could result in conservation savings of up to 60 AFY.

3. Enforce Landscape Requirements for New Landscaping Systems.

This conservation measure involves the active enforcement of requirements on the use of native or

low-water-using plants for new landscaping. The enforcement procedures would require proof of compliance with existing State (AB 235) requirements in order to obtain a water connection on all new multi-family residential or commercial projects. Non-compliers would face a surcharge on their water bill until they complied.

Low water using landscaping can reduce irrigation water demand by 15% compared to traditional landscaping. The DSS Model computed a cost-benefit ratio for North Coast of 7.2 for this conservation measure, with an implementation cost of \$254 for each mg saved. The estimated water savings for this measure would be slightly over 2 AFY.

4. Provide Focused Water Audits and Retrofit Incentives for Hotels.

This is a combination of several conservation measures assessed in the DSS Model. They include water audits to hotels and motels covering bathrooms, kitchens, ice machines, cooling towers and irrigation systems and schedules. In addition, an incentive rebate schedule would be developed to cover the upgrading of certain types of inefficient equipment with more water conserving replacements. In addition, the District could encourage local hotels and motels to participate in the US EPA's WAVE program which provides water auditing software for hotels that identifies water saving projects and computes paybacks.

The DSS model calculates that these programs would have cost-benefit ratios over 7.0 and could result in conservation savings to the District of up to 5.6 AFY.

5. Require Low-Flow Urinals in New Buildings.

This conservation measure would involve adopting and enforcing a requirement that urinals in all new buildings use less than 0.5 gallons per flush. The DSS model calculated a benefit-cost ratio of 9.3 with an implementation cost of \$204 for each mg saved. Because the volume of projected new construction in Pacifica is not high, the actual water savings realized would be low.

IMPLEMENTATION. The District will review and consider the feasibility of implementing each of the additional conservation measures noted above during the first year of this Plan. Those selected for action will be developed and implemented in the following years.