

WATER CONSERVATION FIELD SERVICES PLAN FY 1998 ANNUAL REPORT Southern California Area Office

GENERAL PROGRAM DESCRIPTION

In October of 1982, the Reclamation Reform Act (RRA) was approved by the U.S. Congress and signed into law. The RRA is a principal law that establishes the conditions under which entities can receive and use water from Reclamation projects. The law contains water conservation provisions that direct all water districts having entered into water service repayment contracts with Reclamation, to develop water conservation plans and implement appropriate water conservation measures (Section 210b). The RRA also calls upon Reclamation to encourage water conservation on Federal Reclamation projects (Section 210a), and directs the Secretary of the Interior to coordinate with and involve others in water conservation efforts. Specifically to southern California, Part 417 of Title 43, Code of Federal Regulations, directs the Lower Colorado Region to consult with Colorado River water users annually regarding water conservation and the reasonable, beneficial use of Colorado River water.

In order to assist districts with their legal obligation under the RRA and to encourage water conservation on Federal and non-Federal projects, Reclamation established and developed the Water Conservation Field Services Program (WCFSP). The WCFSP is a voluntary program whereby Reclamation assists water users in effective water management planning and plan implementation through direct technical assistance and financial incentives. The WCFSP provides Reclamation an opportunity to develop partnerships with water agencies and encourages: 1) the development of quality water conservation plans; 2) progressive outreach and educational programs; 3) demonstrations of innovative conservation technologies; and 4) the implementation of effective efficiency measures.

In 1993, Reclamation became a signatory of the "Memorandum Of Understanding Regarding California Urban Water Conservation" (MOU). This MOU, signed by over 100 California urban water agencies, environmental organizations, and other public interest groups, established the California Urban Water Conservation Council (CUWCC) of which Reclamation is an ex-officio member. The MOU includes 16 specific best management practices (BMPs), which the signatories agree to implement according to a specific implementation schedule.

The Southern California Area Office's WCFSP is specifically committed to assisting water agencies in their development of quality water conservation plans. It is also dedicated to the implementation of the BMPs to meet the requirements of the California Urban Water Management Planning Act, as developed by the California Department of Water Resources.

LOCAL PROGRAM DESCRIPTION

The Southern California Area Office (SCAO) is located in Temecula, California. Its



service area encompasses all of southern California within the Lower Colorado Region with the exception of Imperial and Coachella Valleys. Situated in a desert climate without enough fresh water locally to support the population and economy, the area is dependent on imported water from northern California and the Colorado River, one of the most controversial and heavily regulated rivers in the world. Any drought induced reductions in State Water Project deliveries, as well as court-mandated reductions from the Colorado River and Eastern Sierra streams, will make it difficult to sustain a \$500 billion economy with a population growth of approximately 200,000 people annually. In addition, the Secretary of the Interior, the Water Master of the Colorado River, has notified Californians to prepare for possible decreases in the water supply provided by the Colorado River, because of increasing demands from other Colorado River water recipients. Southern Californians are seeking ways to reduce their current use of approximately 5.2 million acre-feet back to their allotment of 4.4 million acre-feet of Colorado River water. The ongoing competition for water to serve the urban, agricultural, and environmental needs of the Lower Basin States, paired with impending reduction in Bay-Delta diversions, has resulted in significant uncertainties in the deliveries of firm water supplies to southern California. When coupled with the diverse and competing needs of locally developed water within the area, the problem of providing a reliable water supply becomes even more difficult.

In addition to these rising water demands, urban water agencies are confronted with water quality issues. Surface water and groundwater supplies have been contaminated by both man-made and natural substances. The most significant threat to water quality is non-point source pollution, which may include runoff from city streets, construction sites and agricultural fields, leaking underground storage tanks, accidental spills, and abandoned mines. High total dissolved solids (TDS) from natural sources, irrigation, reservoir evaporation, and municipal and industrial discharges are also concerns for southern California's water suppliers. Pathogens such as Giardia and Cryptosporidium, and recently traces of perchlorate, an inorganic contaminant, have been detected in the Colorado River. These pathogens are of special concern because of their ability to survive in the environment for long periods of time. At the same time, protecting water quality, which may also impact water allocation, is of fundamental importance to fisheries, wildlife, and recreational interests.

Although much of the SCAO's jurisdiction is urbanized, there is a significant amount of valuable habitat. Wetlands within the area include salt marshes and estuaries, freshwater marshes, riparian woodland and a number of reservoirs and natural lakes. Vegetation is predominantly scrub lands consisting of coastal sage scrub and a number of chaparral vegetation communities. Other vegetation include oak woodland and grasslands. This diversity of vegetation types also leads to diverse wildlife species. These range from species adapted to the coastal and marine environments to those habitating in coastal sage scrub and chaparral habitats. Marshes and riparian zones also support the diverse wildlife species. In addition, southern California encompasses the Pacific flyway and is the home of a large number of wintering waterfowl.

Societal values have evolved over the last century from an ethic of conquering nature to one of coexisting with it. This fundamental change in values combined with the passage of strict State and Federal laws protecting endangered species and their habitat, and law suits by environmental groups to enforce these laws, has impeded most conventional water development for the last two decades.

The SCAO's objectives are to encourage and facilitate water conservation and efficiency improvements on Federal and non-Federal projects and to assist agencies in meeting their demands. The SCAO's primary focus is to develop, institutionalize and deliver an incentive-based field program of direct assistance to water users for effective water management planning and implementation. Meanwhile, the WCFSP will assist Reclamation's Lower Colorado Regional Office in the facilitation and verification of reasonable, beneficial use of Colorado River water, as well as provide technical and/or financial assistance in the preparation or implementation of district plans. The SCAO has designed a program that actively promotes water conservation, assists districts with their responsibility to develop plans, and supports and complements existing State and other conservation programs.

PROGRAM RESOURCES

In Fiscal Year 1998, a Water Conservation Specialist and a Planning Manager were hired to implement the goals of the WCFSP. Together, they actively sought public input to assist in the development of a strong water conservation program throughout southern California. It is the goal of the Water Conservation Specialist to continue the coordination effort between Reclamation and other stakeholders, lead water agencies, and other State and Federal agencies to support a progressive water conservation ethic within the SCAO's service area. In addition, the SCAO assisted in compensating a contractor to administer a \$3.65 million cooperative agreement between Reclamation and the Metropolitan Water District of Southern California (MWD), which has provided a wide variety of water conservation programs throughout southern California.

Funding for the WCFSP consisted of \$91,000 in Water Management and Conservation (WMC) funds and \$150,000 in Energy Incentive Program (EIP) funds for a total program

of \$241,000. Table I represents an accounting of staff resources utilized in Fiscal Year 1998. Table II shows the budget resources for the SCAO in Fiscal Year 1998.

TABLE I.

Staff Resources							
Total number of Reclamation staff days planned for FY 1998 250							
WCFSP Coordinator staff days	215*						
Support Staff staff days used	Area Office	25					
	Regional Office	7					
Stan days dood	Denver Office	0					
Total number of Reclamation staff days	247						
Estimated number of staff days from oth	er organizations	75					

^{*} Excluding 10 Federal holidays.

TABLE II.

Budget Resources									
		WMC	EIP	Totals					
Technical Assistance	Budgeted	40,000	0	\$40,000					
(staff and other)	Expended	20,156	10,000	\$30,156					
Financial Assistance	Budgeted	0	150,000	\$150,000					
(grants and other)	Expended	26,000	140,000	\$166,000					
Total WCESD Dragram	Budgeted	91,000	150,000	\$241,000					
Total WCFSP Program	Expended	46,156	150,000	\$196,156					
Total Program Accomplis	shment	51%	100%	82%					

Although, the WCFSP was successful this year, limited funding resources did not allow the SCAO to meet all of its stated goals. However, as the program develops, it is anticipated that the budget will increase to allow for future conservation partnering opportunities and continued success.

The WCFSP not only encourages southern Californians to use existing resources more

efficiently, it also enhances and highlights many of Reclamation's on-going efforts. The SCAO has integrated water conservation with several other local Reclamation programs to complement, support and leverage an integrated water resource management strategy.

- Title XVI water reclamation and reuse projects (PL 102-575) are being authorized throughout the southern California region to assist water agencies in developing a reliable, local water supply.
- The Southern California Comprehensive Water Reclamation and Reuse Study is currently taking place to analyze the feasibility of a regional reclamation system which will help reduce the region's reliance on water from the Colorado River.
- A Salinity Management Study to discover ways to reduce the salinity issues that often plague local water agencies has almost been completed.
- The Imperial Irrigation District and San Diego County Water Authority are presently negotiating a water transfer that would permit a long-term transfer of major quantities of water to the San Diego region. This transfer will help Californians live within their Colorado River water entitlement of 4.4 million acre-feet per year.

PROGRAM ACCOMPLISHMENTS

The WCFSP has allowed the SCAO to build trusting, working partnerships with many of its customers. It has allowed many water agencies to embark on innovative conservation planning efforts and implement sound conservation measures. Through the WCFSP, southern California water agencies and districts have been given the opportunity to gain tremendous experience and familiarity with various aspects of planning programs, selecting and managing program contractors, tracking program costs, implementing quality assurance practices, and developing more cost-effective program designs. Equally important, the WCFSP has encouraged and promoted reliable water efficiency management and has allowed Reclamation to be recognized as an environmentally sensitive water resources manager.

On the following pages are some of the key highlights from the Southern California Area Office's WCFSP for Fiscal Year 1998.

COOPERATIVE FUNDING WITH THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TO IMPLEMENT WATER CONSERVATION PROGRAMS

Partners: Metropolitan Water District of Southern California

45 member and sub-member agencies

This cooperative agreement has allowed a growing number of southern California water agencies to develop water conservation programs designed to reduce retail demand. The grant funding from the WCFSP has allowed many smaller agencies to implement an effective program by encouraging the hiring of staff, technical assistance and program management expertise. These programs resulted in agencies only having to fund 10 percent of program costs and allowed them to develop programs that represented "cutting edge" technologies that would create verifiable water savings.

As a result of the program the following accomplishments have been attained through FY 1998:

- 45 agencies managed Reclamation co-funded projects
- 66 projects were completed
- 61,511 ultra-low flush (ULF) toilets were retrofitted (including 3,189 non-residential)
- 132 landscape surveys were conducted
- 450 moisture sensors, 35 controllers, and one centralized controller installed on large landscapes
- 7 local weather stations installed to enhance water budgeting
- 256 commercial/industrial/institutional surveys completed
- 15 skilled nursing facilities retrofitted with ULF toilets and other conservation devices
- 9,450 residential surveys conducted
- 6 new agencies signed the MOU

Water savings estimated at 55,000 acre-feet of water saved over project lifetimes at a cost of \$162 per acre-foot.

WATER CONSERVATION PROGRAM ACTIVITIES IN SOUTHERN CALIFORNIA CITIES OF SOUTH GATE, LYNWOOD, NORWALK, COMPTON AND OTHER SOUTH-CENTRAL LOS ANGELES AREAS.

Partners: West Basin Municipal Water District

Central Basin Municipal Water District

ADVANCE - Community-based organization ExPERT - Community-based organization AmeriCorp - Community-based organization To help cities implement a variety of BMPs, funding assistance was provided to implement community-based ultra-low flow toilet direct installation programs. The program offers a rebate or sometimes free approved toilets to those residents that meet specific compliance with the U.S. Treasury and HUD guidelines. This program also incorporates an on-site home water audit. This approach helps promote community awareness and allows multiple levels of involvement. The program is ongoing and has been expanded to include water system leak detections.





It has been estimated that as a result of leak detection audits and subsequent system improvements, 4,000 acre-feet of water has been saved and the ULF toilet rebate program has distributed over 40,000 toilets.

MOBILE IRRIGATION WATER AND NUTRIENT MANAGEMENT LABS

Partners: USDA Natural Resources Conservation Service

San Jacinto Basin Resource Conservation District

Eastern Municipal Water District

This ongoing effort allows area growers and turf managers who are referred by Cooperative Extension farm advisors, local water district officials or previous customers, to examine poor irrigation performance, high water bills, poor crop yields or uncertainties about how to determine proper irrigation scheduling for farming or landscaping operations. Fundamental services provided by the Mobile Lab includes comprehensive field evaluations of irrigation system performance; an assessment of water use history for crops or landscape; and irrigation system scheduling. Reclamation also sponsors an annual technical conference and trade show.







Fiscal Year 1998 water savings has been calculated at nearly 300 acre-feet.

IRRIGATION MANAGEMENT MOBILE LAB

Partners: Riverside-Corona Resource Conservation District

City of Corona

Western Municipal Water District

This mobile lab began at the end of Fiscal Year 1998 and will be conducting residential management evaluations on homes that have historically high water bills, problems with landscaping, drainage or other water related issues. The test will demonstrate how to reduce runoff and drainage water, and manage irrigation on an as needed basis. Two homeowner workshops will be given in the Fall and Spring to inform participants of the analysis. Irrigation schedules will be provided based on how much water the landscapes really need.



Homeowners will be able to reduce water waste up to 15 percent.

MOBILE IRRIGATION EVALUATION LAB

Partners: Mission Resource Conservation District

San Diego County Water Authority

The objective of this program was to evaluate the irrigation systems and irrigation practices of growers in San Diego County who are presently using Colorado River water supplied by the San Diego County Water Authority and its member agencies. The Mobile Irrigation Lab provided on-site irrigation system evaluations which included evaluating the existing irrigation system while the system is in operation and soil type analysis to determine water holding capacity and possible drainage problems. A written report will be compiled and returned to participating growers and will contain the following information: summary of the system's hydraulic performance, including the system's pressure and flow rates; emission uniformity; recommendations for improvements; detailed soil information; baseline crop water use guidelines; specification of sprinklers/emitters; and all flow/pressure data collected during the evaluation.





Fifteen evaluations were conducted and an estimated savings of 400 acre-feet of water from the Colorado River is anticipated.

WATER CONSERVATION GARDEN & LEARNING CENTER

Partners: Otay Water District

Helix Water District

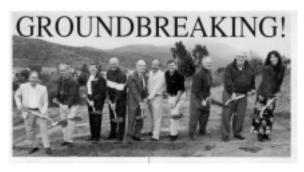
Metropolitan Water District of Southern California

Cuyamaca Community College

The Water Conservation Garden Authority is designing, developing, and maintaining a water conservation garden and learning center. This project will promote reduced water consumption by demonstrating and educating the application of xeriscape methods in the design, retrofit, and maintenance of landscapes that will result in a 50% savings in landscaping consumption. Reclamation will be recognized by two educational signage

entitled, "The Edible Garden Exhibit" and the "Water Alternatives Exhibit". Reclamation's logo will be embossed in a highly visible area and its contribution will be recognized in press releases, newsletters, and other promotional materials.

The Garden is expected to draw approximately 1000-2000 visitors per month and special



events may draw as many as 2000 or more visitors in a single day or over a weekend.

RESIDENTIAL OUTDOOR MOISTURE SENSOR PROGRAM

Partner: Southern California Water Company



As a result of this program, 300 residential moisture sensors which meet BMP goal #1 have been installed. Moisture sensors were installed in residences which have an automatic sprinkler system and a minimum of 500 square feet of turf. A comparison of preintervention water use history to post-intervention water use history will be documented and included in the final report. Moisture sensors conserve water by not allowing a time clock to actuate control valves when water is not needed.

It is estimated that in a single family dwelling unit, water saving for a moisture sensor is 127 gallons per day over 5 years will calculate into 213 acre-feet of water saved.

CALIFORNIA URBAN WATER CONSERVATION COUNCIL

Partners: California Urban Water Conservation Council (CUWCC)

Over 100 signatories to the MOU

California Department of Water Resources

The CUWCC was formed to participate, monitor and evaluate the implementation of water conservation practices by signatory agencies in California. CALFED is recommending the CUWCC adopt a process for endorsement or certification of water supplier compliance with the terms of the MOU as part of CALFED's Water Use Efficiency Program. The proposed certification process would serve as a basis for assuring that urban areas are implementing cost-effective water use efficiency measures. A grant has been issued to assist the CUWCC to become the key facilitator of urban water conservation planning and implementation in California.

The CUWCC and the BMP process it oversees are now central to existing and proposed State and Federal urban water conservation initiatives, including the following: CVPIA, Urban Water Management Planning, California's 4.4 Plan, and CALFED Water Use Efficiency Program.

"WATER EFFICIENT LANDSCAPE MANAGEMENT" MANUAL

Partners: Municipal Water District of Orange County

California Landscapes Contractors Association

Irvine Ranch Water District

A landscape manual titled, "Water Efficient Landscape Management: A Water Efficient Future," was designed to assist water agencies implement BMP goal #5. It will promote landscape conservation by educating landscape contractors and homeowner association boards regarding both the financial and aesthetic benefits of water efficient landscape management. The manual will describe the benefits of water efficient landscape management to landscape contractors and their customers. It will demonstrate ways to administer landscape irrigation budgets and will be used as a marketing tool throughout California.

Approximately 10,000 copies distributed throughout southern California.

CONFERENCES AND WORKSHOP PARTICIPATION

1998 CALIFORNIA ENVIRONTHON

Financial assistance grant to provide California youth with natural resource experiences to promote a sense of personal stewardship of the natural environment and to empower

them to take responsibility for the wise use of those resources for future generations.

 1998 INTERNATIONAL SOIL AND WATER CONSERVATION ANNUAL CONFERENCE

The SCAO sponsored this event and set up an exhibit booth to showcase Reclamation's commitment to water resources management.

- WATER SITE SUPERVISOR TRAINING CLASS
 The SCAO assumed costs associated with printing and assembling "Training Guide/Reference Manuals" for the one-day class.
- SEMI-ANNUAL WATER CONSERVATION INFORMATION COMMITTEE MEETING In conjunction with California Department of Water Resources, Reclamation hosted the semi-annual meeting in September 1998. The two-day meeting included a tour of the San Diego Zoo to examine the water conservation practices that are being implemented there, as well as a one-day discussion of "The Role of Economics in Water Management."



Water Information

Conservation Committee

In addition to the water conservation implementation strategies, the SCAO's Water

Conservation Specialist has met with multiple water agencies to inform them of the technical assistance available from Reclamation's staff to encourage good water conservation planning and to inquire how Reclamation can be of assistance to them. Meetings have taken place with the California Department of Water Resources to establish criteria and evaluation processes to ensure that water agencies' efforts are not being duplicated. It has been emphasized to all agencies that good plans should include goals, measures for implementation, and an appropriate time schedule for execution. The SCAO has provided agencies with a guidebook and computer software to help them achieve efficient water plans.

There is only one water service contract within the SCAO's jurisdiction. The contract is with the Metropolitan Water District of Southern California (MWD), however, this contract is currently administered by Reclamation's Boulder City Office. The service area of MWD includes the southern California coastal plain and extends approximately 200 miles along the Pacific ocean from the city of Oxnard to the Mexican border on the south, and it reaches 70 miles inland. The total area serviced by MWD is approximately five percent of California's land area and includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties. There are 27 member agencies, including 14 cities, 12 municipal water districts and one county authority. (See Attachment #1)

It has been the SCAO's objective to provide assistance to each of these member agencies and sub-agencies. Under the California Water Code Sections 10610 of the Urban Management Planning Act, every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acrefeet of water annually must prepare and adopt an urban management plan.

Recently, the SCAO received a final draft of MWD's Water Conservation Plan in the format outlined in the guidebook previously provided. The Plan was not anticipated until December of 1999.

The efforts of the SCAO to implement water conservation plan measures in order to support the indicated goals has been successful. The SCAO has completed several effective projects with efficiency measures and is continuing to schedule more programs and activities for implementation or continuation in the upcoming fiscal years.

Common measures or BMPs that are currently accepted and implemented by urban water agencies in the SCAO's jurisdiction are:

- Water survey programs for single-family residential and multi-residential customers.
- Residential plumbing retrofit.
- System water audits, leak detection and repair.
- Metering with commodity rates for all new connections and retrofit of existing connections.
- Large landscape conservation programs and incentives.
- High-efficiency washing machine rebate programs.
- Public information programs.

- School education programs.
- Conservation programs for commercial, industrial and institutional accounts.
- Wholesale agency assistance programs.
- Conservation pricing.
- Conservation coordinator.
- Water waste prohibition.
- Residential ULF toilet replacement programs.

The following table is a summary of the SCAO's Water Conservation Field Services Program performance indicators for Fiscal Year 1998.

TABLE III.

Conservation Planning Indicators								
Number of districts required to prepare/submit plans	1							
Number of acres/water users/population represented by RRA districts required to submit plans	>1,392,000 acre-feet 27 member agencies >15,919,124 population							
Number of districts with current plans	1 final draft							
Number of districts overdue for plan development or update	0							
Number of districts submitting plans in FY 1998	0							
Number of acres served/population served by districts submitting plans	>1,392,000 acre-feet >15,919,124 people							
Number of conservation plans reviewed by Reclamation in FY 1998	0							
Number of districts committed to developing/updating plan	1							

This table represents a compilation of WCFSP assistance indicators.

TABLE IV.

Program Assistance Indicators						
Number of water districts/entities assisted with conservation planning	5					
Number of water districts/entities assisted with conservation education	3					
Number of water districts/entities assisted with conservation demonstrations	13					
Number of water districts/entities assisted with conservation implementation	25					
Number of districts assisted in developing and implementing WC measures	10					
Number of districts with one-on-one meetings to review plans/explain WCFSP	1					
Number of conservation measures/programs implemented by water districts/entities	27					
Number of water districts/entities assisted with fundamental measures	14					
Number of water districts/entities implementing fundamental measures	23					

As the SCAO continues to move progressively forward with innovative ideas to implement water conservation efforts, funding resources have become more essential. Currently, two exciting projects are awaiting funding availability to begin a strategic regional water conservation effort.

- Region-wide Commercial Industrial and Institutional Water Conservation Program A
 unified approach to market end-users with facilities in multiple member agency
 service areas to increase volume of water use efficiency devices installed.
- 2) Modeling Work for Forecasting of Demands and Implementation of Water Use Efficiency Measures - Develop demand models to forecast demands at the retail agency level and implement a forecast methodology that will allow agencies to predict how much demand reduction can be expected. This will allow agencies to realize the costs and implementation responsibilities for water use efficiency measures.

Funding for the Southern California Area Office's WCFSP for Fiscal Year 1999 is approximately \$426,000. These resources will continue be utilized on the following four priority areas of the WCFSP: 1) conservation planning assistance; 2) demonstration of innovative technologies; 3) implementation of effective efficiency measures; and 4) information and education.

PROGRAM EVALUATION

Currently, the WCFSP has allowed the SCAO to embark upon new relationships with water entities throughout southern California and extend a water use efficiency ethic that reaches beyond just its water service contractor. The Water Conservation Specialist has become an active member on the Steering Committee of the CUWCC and is supportive of the development of "Urban Water Conservation Certification," which will allow the CUWCC to effectively monitor BMP implementation and exemption status of urban water suppliers throughout the state of California. The SCAO has also developed a strong working relationship with the Mid-Pacific Region's Water Conservation Coordinators and is cognizant of laws and requirements under the Central Valley Project Improvement Act. This liaison will help ensure that Reclamation's mission and goals are carried out in an uniform and effective manner and will help California water agencies reduce duplication of their efforts.

Since the WCFSP's inception in 1997, the SCAO's program has continued to mature. Planning efforts and integrated water resources management have become a high priority. Goals established by the SCAO's staff have included water use efficiency management strategies. These efforts ensure cooperation and success for <u>all</u> of the SCAO's programs.

In the SCAO's efforts to carry out Reclamation's mission, the WCFSP has been a key component to help obtain data, knowledge, and an assessment of its local customers' needs. In the upcoming years, the SCAO will continue to build strong working relationships to assist Reclamation in carrying out its goals as defined by the Government Performance Review Act (GPRA).

Annual Performance Goals fulfilled by activities scheduled to be implemented in FY 1999 for the SCAO include the following:

Strategic Plan Strategy 5: Increase Water Availability

Strategic Plan Goal: By 2002, review 100 percent of water conservation plansdeveloped by Reclamation water users, ensure implementation of all those required by law or contract, and using incentive-based strategies, encourage implementation of all plans not required under law or contract.

Annual Performance Goal 01.05.21.99: In FY 1999, Reclamation will provide technical assistance to water districts through implementation of a WCFSP, emphasizing four categories of activities at the Area Office level: conservation, planning assistance, conservation education, demonstration of conservation technologies, and implementation of conservation measures. Specifically, Reclamation will contact at least 50 percent of water districts to offer assistance, and will provide assistance to at least 25 percent of interested water districts.

Annual Performance Goal 01.05.22.99: In FY 1999, Reclamation will review and

comment on 100 percent of all plans submitted.

Annual Performance Goal 01.05.23.99: In FY 1999, Reclamation will work with partners to implement the four "fundamental" water conservation measures (water measurement; incentive pricing; education programming; and designation of conservation coordinator) through incentives.

PROGRAM OUTLOOK

The expectation for the FY 1999 WCFSP is contained in Attachment #2. It contains the SCAO's goals and priorities, scheduled and on-going activities, anticipated results, and program resources available to meet the needs of its participants.

In order to implement Reclamation's goals, the SCAO has dedicated 1.5 FTE. The SCAO's Water Conservation Specialist, will continue to actively participate on the CUWCC and assist signatories to the MOU in the development of urban water management plans and the implemention of the BMPs. This assistance may be provided in the form of technical assistance and/or financial assistance.

In addition, a water awareness campaign will be strategically implemented throughout southern California. A website and bi-annual newsletter will be developed to foster a broader communication between the SCAO and water conservation coordinators throughout the SCAO's area. It is anticipated that the website will be linked to other conservation websites to help provide as much useful information as possible and to allow for a wide variety of circulation. The SCAO will also participate in other statewide and local campaigns such as, the 1999 California Water Awareness Campaign, Environthon, and CONSERV99.

Through the WCFSP, Reclamation will continue to seek innovative technologies and methodology to integrate a sound resource management strategy with water conservation efforts which will benefit urban and agricultural users, as well as protect the environmental and recreational interests.

ATTACHMENT #1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MUNICIPAL WATER DISTRICTS (12)

Calleguas Central Basin Chino Basin Coastal Eastern Foothill

Las Virgenes Orange County Three Valleys West Basin Upper San Gabriel Valley Western

MEMBER CITIES (14)

Anaheim Beverly Hills Burbank Compton Fullerton Glendale San Marino
Long Beach Santa Ana
Los Angeles Santa Monic
Pasadena Torrance
San Fernando

SAN DIEGO COUNTY WATER AUTHORITY

Cities Within Member Agencies

Calleguas MWD
Camarillo Heights*
Fairview*
Las Posas Valley*
Moorpark*
Oak Park*
Oxnard
Santa Rosa Valley*

Santa Rosa Valley*
Simi Valley
Thousand Oaks

Central Basin MWD

Artesia
Bell
Bellflower
Bell Gardens
Cerritos
Commerce
Cudahy
Downey
East Compton*
East La Mirada*
East Los Angeles*
Florence*
Graham*

Graham*
Hawaiian Gardens
Huntington Park
La Habra Heights
Lakewood
Los Nietos*
La Mirada
Lynwood

Maywood Montebello Norwalk Paramount Pico Rivera Santa Fe Springs Signal Hill South Gate

South Gate South Whittier* Vernon Walnut Park* West Compton* West Whittier* Whittier Willowbrook*.

Chino Basin
Chino
Chino Hills
Fontana
Montclair
Ontario
Rancho Cucamonga
Upland

Coastal MWD
Capistrano Beach*
Corona del Mar
Costa Mesa
Dana Point*
Laguna Beach

Coastal MWD (cont.)
Newport Beach
San Clemente
South Laguna*

Eastern MWD
East Hemet*
Good Hope*
Hemet
Homeland*
Lakeview-Nuevo*
Mead Valley*

Murrieta Hot Springs*

Perris Quail Valley* Romoland* San Jacinto Sun City* Sunnymead* Temecula Valle Vista*

Foothill MWD
Altadena*
La Canada
La Crescenta*
Montrose*

Winchester*

Las Virgenes MWD Agoura Hills

Calabasas*
Chatsworth Lake Manor*
Hidden Hills
Malibu Lake*
Monte Nido
Westlake Village

MWD of Orange County Brea

Buena Park Cypress El Toro* Fountain Valley Garden Grove Huntington Beach. Irvine Laguna Hills* Laguna Niguel* La Habra La Palma Los Alamitos Mission Viejo Orange Placentia Rossmoor San Juan Capistrano Seal Beach

Stanton Tustin Tustin Foothills* Villa Park Westminster Yorba Linda Three Valleys MWD
Charter Oak*
Claremont
Covina Knolls*
Diamond Bar
Glendora
Industry
La Verne
Pomona
Rowland Heights*
San Dimas
So. San Jose Hills*
Walnut

Upper San Gabriel Valley MWD

Jpper San Gabriel
Arcadia
Avocado Heights*
Baldwin Heights*
Bradbury
Citrus*
Covina
Duarte
El Monte
Hacienda Heights*

Irwindale
La Puente
Mayflower Village*
Monrovia*
Rosemead
San Gabriel
South El Monte
South Pasadena
South San Gabriel*

Temple City Valinda* West Covina West Puente Valley* West Basin MWD

Alondra Park* Angeles Mesa* Carson Culver City Del Aire* El Nido-Clifton* El Segundo Gardena Hawthorne Inglewood Ladera Heights* Lawndale Lennox* Lomita Malibu* Manhattan Beach Marina del Rey* Palos Verdes Estates Point Dume Rancho Palos Verdes Redondo Beach Rolling Hills Rolling Hills Estates Ross Sexton* Topanga Canyon* Victor

West Basin MWD (cont.)

View Park*
West Athens*
West Carson*
West Hollywood
Westmost
Windsor Hills*
National Military Home*
Wiseburn

Western MWD of Riverside County Bedford Heights* Corona Eagle Valley* El Sobrante* Green River* Lake Elsinore Norco Riverside Temescal Woodcrest* March A.F.B*

San Diego CWA Alpine' Bonita* Camp Pendleton* Cardiff-by-the-Sea* Carisbad Casa De Oro* Castle Park* Chula Vista Del Mar Ei Cajon Encinitas Escondido Falibrook* Lakeside* La Mesa Lemon Grove Leucadia* Mount Helix* National City Oceanside Otav* Poway Rainbow* Ramona* Rancho Santa Fe* San Diego San Marcos

Santee

Vista

Solana Beach

Spring Valley* Valley Center*

*Denotes Unincorporated Areas

SOUTHERN CALIFORNIA AREA OFFICE

"FIELD SERVICES PROGRAM PLAN"

PROGRAM ACTIVITIES for FY 1999

(1) PRIO /CAT	(2) GOALS	(3) MEASURES	(4) TARGET DATES	(5) WHO	(6) COST	(7) FTE	(8) RESULTS
1. H-TA	Save 1% of the Colorado River water going to MWD	SJRCD - Irrigation Water Management Mobile Laboratory to assess and develop ways to improve efficiency of irrigation systems within San Jacinto Valley. The Lab will do 20 system evaluations, hold a public workshop, recognize USBR as sponsor on all literature, and report annually on findings.	09/99	USBR SJRCD	\$20,000.00	0.10	400 af saved @ \$37.50/af will verify in annual report.
2. H-TA	Save 1% of the Colorado River water going to MWD	MRCD - Irrigation Water Management Mobile Laboratory to assess and develop ways to improve efficiency of irrigation systems within San Diego County. The Lab will do 15 system evaluations, hold a public workshop, recognize USBR as sponsor on all literature, and report annually on findings.	09/01	USBR SDCWA	\$45,000 \$ 6,500	0.10	400 af saved @ \$37.50/af will verify in annual report
3. H-TA	Save 1% of the Colorado River water going to MWD	RCRCD - Irrigation Water Management Mobile Laboratory to assess and develop ways to decrease residential water use within Riverside County. The Lab will do 100 site audits, hold a public workshop, recognize USBR as sponsor on all literature, and report annually on findings. USBR will purchase a CIMIS station for City of Corona.	06/99	USBR RCRCD City of Corona Western Municipal	\$21,292 \$19,220	0.10	400 af saved @\$37.50/af will verify in annual report
4. H-FA		MWD - Partnership to encourage and fund innovative urban water conservation projects.	12/98	USBR MWD SUB-AG	\$400,000 \$400,000 In-Kind	0.10	30,000 af saved per year will verify in annual report

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5. H-TA	Annual report of water conservation programs to be completed.	Provide assistance to MWD by funding a contractor to administer Reclamation's conservation programs. This ensures timely and accurate documentation of results of implementation.	12/98	USBR	\$25,000	0.10	Annual Report
6. H-FA	Establish partnerships	CUWCC - Endorse CALFED's recommendation to adopt a process for endorsement or certification of water supplier compliance with terms of the MOU.	12/00	USBR USBR-MP CUWCC DWR CALFED	\$150,000 \$150,000	0.30	Partipication on the Steering/Plenary Committees
7. H-FA	Distribute 800 High-efficiency clothes washers	SDCWA - Provide incentives to retailers and dealers to distribute 800 water and energy saving washing machines. Rebates will encourage residential customers to have machines installed in their homes and use approximately 30% less water per load than standard machines.	10/99	USBR SDCWA MWD sub-agencies SDG&E	\$40,000 \$20,000 \$20,000 \$20,000 in-kind	0.10	168 af saved over estimated 14 years of life @ \$595 af verify by report

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8. H-FA	Retrofit 47.85 acres of irrigated landscaping	SDCWA - Landscape Retrofit of the U.S. Navy's Chesterson Family Housing which will implement Best Management Practice 5 of the Memorandum of Understanding for Urban Water Conservation in California.	09/03	USBR MWD SDCWA City of San Diego US Navy	\$53,095 \$106,190 In-Kind In-Kind	0.10	137.91 af saved @\$77.00/af will verify in report

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9. H-FA	Installation of Xeriscape Garden	OWD- Provide financial assistance for the installation of a xeriscape garden which will be an educational facility, resource outlet and learning center that will focus on cost-effective, labor reducing, water-efficient, environmentally sound landscapes. Reclamation will be recognized at the Water Alternative Exhibit and the Edible Garden Exhibit, as well as, on press releases, newsletters, and any other promotional materials.	12/99	USBR Otay WD Helix WD Padre WD Riverview WD SDCWA	\$50,000	0.10	Annual attendance expected to be 15,000 to 20,000 viewers. verify by public participation and attendance rosters attendance
10. H-TA	Develop and Sponsor Educational Mobile Lab	NRCS- Sponsor Commencement 2000 which will develop a natural resources mobile laboratory to target east and South Central Los Angeles communities and schools to educate participants on wetlands, watersheds, and air, water, and soil pollution. Reclamation will be recognized on all promotional materials as well as, during community events, fairs, and festivals.	09/99	USBR USDA- NRCS LA Unified Shool Districts	\$15,000 \$25,000 \$28,674 in-kind services	0.10	Educate approximately 6,500 students and 300 teachers and administrators, 500 residents and community interests in East and South Central Los Angeles.
11. M-FA	Develop and distribute a handbook to commercial and home landscape contractors	Assist commercial and home landscape contractors in understanding how state and local water issues affect businesses, how to achieve water and resource efficient landscapes and how to market and sell this service to customers.	12/98	USBR USBR-MP MWDOC	\$10,000 \$10,000 in-kind	0.10	Distribute and educate landscape local landscape contractors.

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12. H-TA	Statewide awareness campaign	California Water Awareness Campaign - Sponsor education through a statewide campaign. Will develop educational materials, sponsor Water Efficiency Awards, and assist agencies in publicizing Water Awareness Month. This will assist agencies in fulfilling public information goals of the Best Management Practices.	09/99	USBR CA Water Association Various Agencies	\$5000 Varies	0	Educate approximately 1,809,244 people through broadcasts, community fairs, newspapers, magazines and other media materials
13. M-TA	Provide water conservation info to thousands through the Internet	Establish a home page with accurate and updated water conservation information. Provide links to other conservation sites. Develop a semi-annual newsletter to update customers on the success of SCAO's Field Services Program.	09/99	USBR	\$3000	0.20	1000 accesses to network page. Easy access to water conservation info. Distribute to SCAO's service area.
14. H-TA	Distribute 600 unit residential moisture sensors	SCWC - Direct install 600 unit residential moistuer sensors which will meet BMP goal #1.	12/99	USBR SCWC	\$16,500 \$16,500	.10	212.94 af saved over 5 years will verify in annual report

⁽¹⁾ Priority use a L-Low, M-Medium, or H-High and a Category of work such as TA-Technical Assist., FA-Financial Assist., etc...

⁽²⁾ Goals for water conservation. (Eg.. Save 2% of flows to a district, Contact 2% of the districts, etc...

⁽³⁾ List site-specific measures to achieve each goal (examples on attached sheet) and write a paragraph or two about the measure.

⁽⁴⁾ Give specific target dates to implement each measure.

⁽⁵⁾ Sources of technical assistance (if necessary) to implement each measure.

⁽⁶⁾ Projected costs to implement measures and, if applicable, funding sources. Percent of cost share funds by our partners (e.g., 50/50, etc...)

⁽⁷⁾ USBR FTE's dedicated to do the work.

⁽⁸⁾ Results of the effort (e.g... Quantify or estimate the expected water savings (AF/YR), People contacted, etc...), include the evaluation procedures to be used to determine or assure the goals areeing achieved, and according to the target dates.), also add the cost effectiveness of the effort (e.g... \$/AF, \$/people contacted, etc...)