San Diego County Water Authority
2750 Fourth Avenue, San Diego, California 92103 (714) 297-3218
(A Public Agency Organized June 9, 1944)

May 4, 1981

Mr. George F. Bailey
Chairman
San Diego Association of
Governments
1200 Third Avenue
San Diego, California 92101

Dear Mr. Bailey:

At its regular monthly meeting of April 9, 1981, the Board of Directors of the San Diego County Water Authority adopted Resolution 81-15 (copy attached) adopting a Water Conservation Plan dated March 1981 designating the Authority's responsibility in the Regional Water Conservation Program.

I have been authorized and directed to implement the water measures included in the plan. Pete Rios, Public Information Officer for the Water Authority, will conduct liaison activity with SANDAG staff as it relates to the Water Conservation Development Plan.

Sincerely,

L. R. Burzell
General Manager and Chief Engineer

LRB/PR/mh

Attachment

Public Information Committee
Item 6

San Diego County Water Authority

2750 Fourth Avenue, San Diego, California 92103 (714) 297-3218
(A Public Agency Organized June 9, 1944)

March 31, 1981

TO: Board of Directors

VIA: Public Information Committee

SUBJECT: Water conservation plan for the San Diego County Water Authority prepared under the Water Conservation Element of the Areawide Water Quality Management Plan

The Water Authority staff through a contract with the San Diego Association of Governments (SANDAG) has prepared individual water conservation plans for the water agencies and cities of the region. A draft of the individual plan prepared separately for the Authority was circulated to members of the Board at the March meeting, and a revised copy has been placed in your agenda folders.

The Water Authority plan includes thirteen conservation measures that can best be accomplished by the Authority. Most of these measures have been recognized as beneficial and have already been implemented. A major new measure is the preparation of model landscaping brochures to illustrate the many uses of drought-resistant plants as a conservation approach. Such brochures would be prepared and distributed in cooperation with the water agencies and cities, as has been the case with most of the Authority's conservation efforts.

The Authority's water conservation plan should be approved and adopted by adoption of the accompanying draft resolution. The resolution would also authorize the implementation of the new approaches proposed in the plan. The Board should recommend that the Authority member agencies take timely action in adopting their own individual conservation plans.

LRB

L. R. Burzell
General Manager and Chief Engineer

LRB:jmr

Attachment Re. # 81-15

Document No. Attach Res. 2243

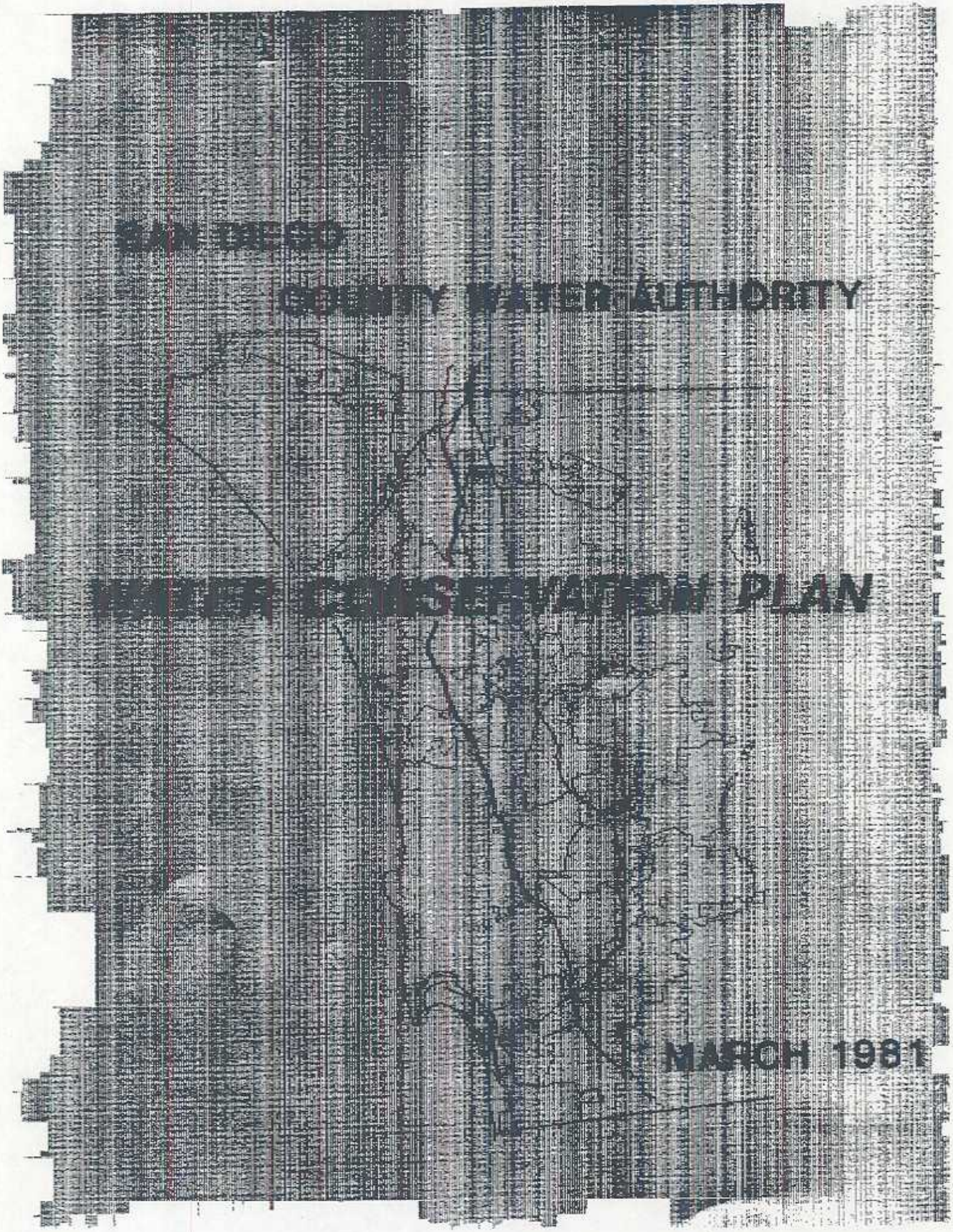
Filed 4/29/81

I. D. COUNTY WATER AUTHORITY

Janet Ronalt

Executive Secretary

SDCWA Water Conservation Plan


SANTA ROSA
COUNTY WATER AUTHORITY
MASTER PLAN
MARCH 1981

SAN DIEGO COUNTY WATER AUTHORITY
San Diego, California

DRAFT WATER CONSERVATION STUDY

FOR THE

SAN DIEGO COUNTY WATER AUTHORITY

This report was prepared by the San Diego County Water Authority for the San Diego Association of Governments. It was financed by funds provided by the U. S. Environmental Protection Agency and funds provided by SANDAG member agencies.

Linden R. Burzell
General Manager and Chief Engineer

March, 1981

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This report was prepared by the staff of the San Diego County Water Authority. Staff Project Engineer was Lawrence R. Michaels. Graphics were prepared by Donald A. Bandick.

PROGRAM SUMMARY

The implementation of a water conservation plan for the San Diego region is to be accomplished through the implementation of specific plans by each municipality and water agency in the region. This plan for the San Diego County Water Authority includes the regional recommendations that the Authority could best implement to make the entire plan effective. The recommendations build upon the conservation work the Authority has accomplished before and during the 1976-77 drought.

Water Conservation Program

The Authority made a major conservation effort during the 1976-66 drought to provide a regionwide focus on the need for conservation. The most direct effort was in the educational program to the schools and the public at large. However, the support programs to local water agencies were equally essential and may have been more productive in reducing actual demand. The Authority's role in implementing regional programs during the drought is the basis for the assignment of regional programs. The conservation programs recommended for the Authority include:

- School presentations
- Areawide advertising programs
- Development of landscape design information
- Supplying conservation information to cities and member agencies
- Technical assistance to member agencies
- Special emergency measures

It is also recommended that the Authority accept the task of monitoring the regional conservation program in the future to assure the continued success of the efforts of all the agencies that have been assigned a role.

Results of the Conservation Program

An analysis of the savings of the successful implementa-

tion of the regional measures showed that savings could be achieved equal to 15% of the projected increase in domestic demand for the next 20 years. Such success will not come early but the magnitude of the savings is worth a considerable effort. The Authority programs would not result in a direct measureable savings, but would greatly contribute to the success of every effort made in the region.

INTRODUCTION

The preparation of a water conservation plan for the San Diego region is intended as a means of identification and implementation of all conservation measures that are economical and suited to the region. Two earlier work products listed and evaluated over fifty different approaches. Those that has value were recommended for implementation by the Water Agencies and municipalities in the region. However, no single agency could be responsible for every approach. Individual plans were developed for each agency outlining which approaches might be best for that agency. This plan includes the recommendations which appear to be most suited to the San Diego County Water Authority with some justification for the selection of alternatives.

The Authority should review these recommendations and if found to be acceptable, the plan should be adopted. In adopting the plan the Authority would be agreeing to implement the measures shown in the individual plan. This is the important part of the whole process. More water is conserved by a few measures effectively implemented than by adopting the most grandiose plan which goes no farther than being printed in a report. If any recommendations are not acceptable to the Authority, they should be excluded from the plan when adopted.

Conservation must be a long term part of the water supply program if it is to attain full effectiveness. The reduction in demand that results from conservation must be sufficiently reliable over a projected period that it can be considered in system design. Then it will have the effect of reducing the size of facilities rather than in resulting in their under utilization for a period of time. This does not mean that approaches that produce temporary reduction in de-

mand during emergencies should never be considered in the plan. Some of the recommendations would be implemented only during emergencies and the scope and emphasis of others would be affected by short-term requirements. But, conservation must be more than an emergency response in an area that is as dependent on imported water as the San Diego region. The proposed conservation plan is intended to produce that long term beneficial effect.

WATER AUTHORITY BACKGROUND

The Water Authority has the responsibility of supplying imported water to the region. Since the water demand in even wet years is greater than the local supply available to almost any agency, the Authority will be called upon to supply all new demands that develop in the future.

The Authority service area includes 898,773 acres of which only about 44% are actually served at the present time. At the present time about 78% of the total water demand of the region is for municipal and industrial use. The imported supply meets about 70% of the demand in wet years but must meet 94% of an increased demand during dry years. The projections of future population and water use are as follows:

YEAR	POPULATION	DOMESTIC PRODUCTION AF/YR	AGRICULTURAL PRODUCTION AF/YR	TOTAL PRODUCTION AF/YR
1980	1,806,000	359,940	101,600	461,540
1985	1,960,000	392,080	128,050	520,130
1990	2,176,000	435,110	139,050	574,160
1995	2,450,000	474,720	146,900	621,620
2000	2,684,000	514,070	153,600	667,670

These projections are used for expansion of the capacity of the Authority Aqueduct system. Domestic water projections are based on a constant per capita use for the Authority service area of 179 gallons per day. Historically, the average per capita demand has generally increased and reached a peak of 187 gallons per day prior to the drought. The total increase over the past twenty years has been about 50% or a 2% average annual rate of increase. Since the projected average annual rate of increase for population for the next twenty years is also about 2%, a continuation of past practices would result in twice as much additional domestic water being required as has been projected.

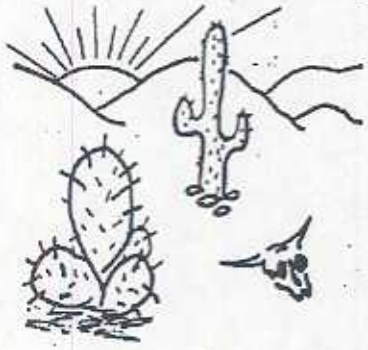
The Authority is committed to preventing future increases

in the present per capita use of water. It is recognized that part of the historical increase is due to the reduction in family size that has occurred throughout the country. Smaller families have an apparent increase in per capita demand because landscape watering, commercial and industrial use and use by public agencies is spread over a smaller population. Some of the increase is real, but is controlled by regulations requiring larger lot size and greater landscape requirements or in the public demand for greater use of water-using appliances. The purpose of conservation is not to adversely effect the lifestyles of the region. Instead, it is believed that efforts to make people more water-conscious, to eliminate waste and to educate people to use water wisely will maintain a constant per capita use in the region.

WATER CONSERVATION PROGRAM

The Water Authority role in conservation should be in those programs directed at the population of the region as a whole rather than at groups within a particular service area. The best examples are school presentations, areawide advertising and programs at special areawide events. Wherever the effects are aimed at people who cross agency lines rather than being identified as customers or residents, the Water Authority has a role. This has been the area of Water Authority effort in the past and should continue in the regional program.

A second important function that the Water Authority should undertake is supporting agency public information programs. The Authority has stocked information pamphlets, films, and slide presentations on conservation and other areas of water supply in the past. This effort should be expanded to a formal warehouse function for water saving devices and kits. In addition, the Authority should prepare information on landscaping design with drought resistant plants which can be distributed by other agencies.



Finally, the Authority should undertake a monitoring program of the regional conservation program. In the past, more intensive conservation efforts occurred only during times of emergency or drought. When the reason for strong conservation measures ended, the measures were dropped or greatly reduced in scope. The regional conservation efforts started during the drought have been reduced in scope but many agencies have continued their programs. Some cities and water agencies have changed their approach but actually intensified their total effort. Under these conditions most of the approaches recommended in the regional program could be restarted without much difficulty.

A long term conservation effort which is successful in reducing the design requirements for future facilities must be monitored. Each agency in the region will tend to do their share if it can be shown that most other agencies are doing their share. More importantly, new approaches to conservation are being developed and old ones improved and these must be incorporated into the regional effort. Monitoring would not be just an annual checking up on other agencies with the Authority as watchdog even though annual reporting is necessary. Rather it should be in maintaining a constant interest in improving the regional program as new approaches are developed in the region or elsewhere in the state and nation. The Authority is a logical agency to accomplish this task.

The list of specific conservation approaches that were assigned to the Water Authority as part of the regional program are described in the next section. Most of the program was implemented during the drought emergency or before and is still in operation. The new programs are primarily directed toward the support effort for other agencies. However, that part of the regional program assigned to the Water Authority should be considered a minimum effort to produce a basic effort for the region. Additional programs that are identified by the Authority should be implemented whenever it is determined that they would effectively further the conservation effort in the San Diego Region. A summary of the different approaches and how they were assigned to the cities and water agencies is included at the end of this report.

RECOMMENDED MEASURES

1. School Presentations - The Water Authority has had a program since 1974 to provide instructions on water supply and conservation techniques to junior high, high school students and now has extended the program to elementary, college and adult education levels. This program utilizes two full time teachers to provide the instruction at a cost of $52,000 for 1980-81. The number of people attending the presentations is estimated to be 28,000. Since this program has been in operation for five years, some of these students are being involved in the program for a second time at a higher level. Water conservation is the major element of this program even though other water supply information is included. Some additional costs are involved in the program due to water agency personnel being involved in the presentations to explain local problems. Additional impressions are obtained during follow-up tours of local water facilities to reinforce understanding and familiarity.

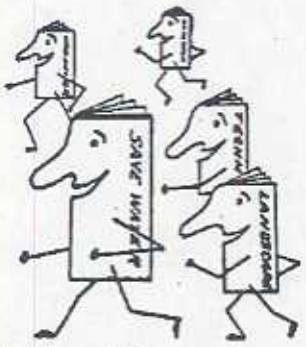
This program is important to maintaining an understanding of water supply problems and conservation measures. It should be considered a permanent program and expanded as necessary in the future.

2. Speakers Bureau - The speakers bureau for presentation of water conservation programs operated by the Water Authority staff has existed since the drought and should be continued. The presentations are made to 500 to 600 people per month in business, professional, educational, and service organizations throughout the region. A quarterly letter is sent to organizations reminding them of the availability of the speakers bureau, so the present effort may constitute a completely developed program. The Water Authority program

costs $7,700 per year and reaches about 6,000 persons. The

Water Authority has prepared a speakers kit to assist in making presentations to business, professional, educational and service organizations. About half of the water agencies have acquired these kits for their own local use. Local water agencies probably reach another 6,000 persons with their own speakers programs. The number of requests increase greatly when important issues arise, such as during the drought or on the need for the Peripheral Canal. However, the acceptance of this program by groups throughout the region attests to its importance and it also provides the Authority with direct input on how the conservation message might best be presented. This information should be helpful in updating information and presentations for use by other water agencies who use the speaker kits.

3. Brochures and Handouts - The Water Authority should expand its brochure program to make available a wide selection of such information to all public agencies in the region taking part in the conservation program.



Presently water conservation literature is made available to the public by the Metropolitan Water District, the Authority and member agencies. Distribution is through the Authority's education and speakers programs. Member agencies who have direct contact with customers distribute literature with water bills. This approach to public information was very widely used during the drought and could be revived on a more coordinated basis.

An important area that must be covered by brochures is in the use of drought resistant landscaping. The information

that is prepared under the Water Authority's part in that program must reach the widest possible segment of the public. Existing brochures on that subject should continue to be made available.

4. Displays - The Water Authority should continue with its program of using displays in public places as a means of conservation education. Presently the displays are used at shopping centers, banks, savings and loan institutions, post offices, home shows and other public events during the year. Displays are a reminder for most visitors but also provide a focal point for distribution of brochures of an educational nature. The most successful display was the exhibit at the Southern California Exposition at Del Mar with an attendance of over 670,000 visitors to the demonstration garden. The cost of staffing other displays is $5,000 per year for an estimated 18,000 visitors. Consideration should be given to constructing some smaller displays which might be staffed and used by local agencies.

5. Transit Advertising -Advertising on buses provides a means of reaching a portion of the population that may not be reached by other means. The program should be continued with a periodic updating of the advertising message. Transit advertising has been used by the Water Authority since March, 1979. Forty-three public transportation buses carried a water conservation message to 13 million viewers per month from the North County to the Mexican border. Additionally, 300 inside bus cards for the convenience of 3.2 million monthly commuters were exhibited throughout the bus system.

6. Public Service Messages - This approach was widely used during the drought and should be used more widely in the future. A consultant may be necessary to prepare a large selection of short T.V. spots that could be used over a long period of time. Reminders to do or stop doing something and why would be better than slogans. The Authority has requested public service messages on T.V. and radio this year. It is hoped that three per month can be obtained on T.V. and twenty per month on radio stations. The program of having two messages displayed at all events in the San Diego stadium will be continued. There is no charge for public service messages. An estimate of the number of impressions is 500,000 from station messages, 900,000 from T.V. and 250,000 from radio. Requests have been made for public service space on billboards and bus stop benches and such approaches should be continued.

7. Newspaper Advertising - Conservation reminders should be directed at the public through very short phrases in newspaper ads. The most effective would be slogans that were bold, direct, easily understood and remembered and which appeared at regular intervals throughout the year. A reminder that took two column inches and was published weekly with a different message each week would cost about $51 per week in the San Diego Union and Evening Tribune. The readership of those newspapers is estimated to be 722,000. Even if only half of the readers saw the ad, the cost per impression would be about the same as bus advertising and the changing message each week might produce a more effective response. More importantly, the newspaper should reach a different group of citizens so

that both approaches have a place in the program. All newspapers in the region should be used so that the widest possible coverage is obtained.

8. Water Conservation Home Awards - Professional and other organizations give awards for building designs. The Authority should encourage such award programs to include water conservation features in the judging criteria for such awards or as a separate award class. The Authority should consider sponsoring annual awards for the best conservation design for a home or building and for the best conservation landscape design. Such programs are an important public awareness approach to encourage conservation. However, a more important aspect of such award programs is that they tend to produce new approaches to water conservation each year by architects, landscape architects, engineers and others which is an important on-going contribution to the regional effort.

9. Water Softener Backwash - The Authority should support investigations into the reduction in total backwash water used for regeneration of home water softeners. Present softeners require from about 33 to 60 gallons per regeneration cycle for about the same softening capacity. SB-2148, which became effective January, 1980, had provisions to improve the efficiency in which salt was used to regenerate softeners. Improving salt efficiency will increase water use by regenerating more often. With the resetting of softeners for salt efficiency, homes will be retrofitted with conservation devices to more than offset the additional water used by the softeners.

Softeners sold in the San Diego region may be set to regenerate more often than required for the present water hardness. Sales personnel usually consider Colorado River water hardness when suggesting how a customer should set the automatic regeneration control. Since most of the region is now

served from a blend of Colorado River water and Northern California water, or even local water, regeneration may be occurring more often than necessary. The Authority should work with the local water softening industry to develop a program for recommending changes in setting where justified by softer water being supplied.

10. Landscaping Design Information - The greatest difficulty in promoting drought resistant landscaping is the lack of public knowledge on what plants are drought resistant and how they may be best used in landscaping. Information on the types of individual plants is not fully useable by an uninformed public. The Authority, in conjunction with the demonstration garden program, should prepare sample landscaping plans which give suggestions on landscaping with drought resistant plants. Such practical design information should be provided to the public on request, included with the demonstration garden, and made available to cities and water agencies for distribution to their residents and customers. The brochures should be provided to nurseries to assist in stocking plants.

The greater use of drought resistant plants is the most important conservation approach in the region. The success of changing the way landscaping is done will require a well prepared, coordinated and sustained effort. Yet without success in this area, the program will not appear to have accomplished what is needed in the future.

11. Technical Assistance - The Public Information office of the Authority should provide technical assistance to the agencies of the region in obtaining conservation information and devices. The office should continue to be familiar with State and national water conservation regulations so that the regional effort meets requirements from those governmental

levels. Contact with the State Department of Water Resources and colleges and universities is important because of on-going conservation research activities which provide new approaches. Regular information bulletins should be distributed to the agencies assigned a role in the regional program to summarize new conservation techniques. One person assigned as a coordinator could greatly improve the regional effort.

12. Technical Assistance Hotline - During severe shortages and emergencies the need to implement stronger conservation measures to temporarily reduce demand will promote an increase in customer questions about conservation. Such calls will originate due to areawide news programs and press releases. Such information sources cannot give complete information on which public agencies to contact for more information. Therefore, a single areawide hotline number should be established to receive such calls. The City of San Diego, as the major water agency, might best be able to staff such a hotline answering service. However, the Water Authority would have to coordinate information gathering from other water agencies and provide staff assistance for inquiries from outlying areas. Consideration should be given to creating a north county number for the water agencies in that area. The Water Authority and member agencies should prepare plans for establishing, staffing and operating such an information system so that it can be quickly activated in an emergency. Unlike the drought hotline number, many of the uses of such a program would require experienced personnel with little time for training and activation.

13. Demonstration Gardens - A series of ten demonstration gardens to show how drought resistant plants can be used for landscaping have been proposed and partially implemented by the Water Authority. The first garden was included as part of the permanent display at the Southern California Exposition at Del Mar. Other gardens would be established in parks and public access areas throughout the region. The City of San Diego and Costa Real M.W.D. presently are providing assistance in locating and preparing sites. Where such gardens are included in the landscaping of public areas, the additional cost would be small and the number of gardens could be increased beyond the original ten sites. Each site should be landscaped in a way that illustrates good planting practice for residential landscaping and that uses a broad range of plants. A permanent plant identification chart should be installed at each site. The sites at public offices could provide handout information on the garden and other brochures to the public. The garden plans should be coordinated with landscaping design information prepared and distributed in the region.

RESULTS OF THE CONSERVATION PROGRAM

The conservation program proposed for the Authority builds on past conservation efforts with emphasis on public education and information programs, development of methods to reduce landscape irrigation, support of programs by local agencies and emergency measures. Implementation of the Authority program would beneficially affect the conservation efforts of every other agency in the region.

Reduction in per capita water demands are very much dependent on a reduction in irrigation of landscaping. Since

the installation of drought resistant plants is cost effective on new homes and would reduce landscaping maintenance costs at the same time, their use could be widely accepted as a conservation approach. This measure would require a significant educational effort to get started, since few people are aware of which plants are available or how they are used. Such information must be developed by the Authority so that it can be made available as a new home is being built or occupied to produce a real savings. Later conversion of landscaping to drought resistant plants is far less cost effective and would never be a completely adopted as could occur with new homes.

Other approaches which reduce indoor use are included and stressed in the regional plan and the individual plans of each agency. Past information efforts and the expanded conservation effort during the drought probably have accomplished much of what could be done in reducing indoor use. However, maintaining those gains through a regional information program will continue to be necessary and new opportunities can not be left untapped. Personal habits in using water are easily adjusted during an emergency but a real change is

neither easy nor lasting without a continued effort. It should be recognized that the heightened public awareness that conserves water is also the same instrument that encourages elected public officials to maintain municipal and water agency programs. With every election, public policies are challanged or supported, depending on how the elected official understands what the electorate perceives as being important.

The results of the regional conservation effort could be expected to reduce domestic demand by 10,100 AF per year if only moderately successful. More widespread use of drought resistant plants could increase that total to 26,400 AF per year equal to about 15% of the projected increase in domestic demand in the next twenty years. The Authority must play a major role in producing those savings and may have a critical role in developing the landscaping design information necessary to produce the full 15% savings.

A summary of how the regional conservation approaches were assigned to the agencies of the region and the projected water savings assigned to each agency are shown in the following tables. The varied approaches of each agency are coordinated and are mutually supportive where two agencies serve a local area. The tables show the value of the coordinated approach where water districts and general purpose government working together often implement a broader range of measures than a single agency could accomplish alone. Only in the cities that supply water are both municipal and water supply approaches accomplished in a single agency. The summary of water savings show the direct savings that could be measured in analysing the effectiveness of the regional plan. No direct savings could be measured for the Water Authority measures but they are necessary and supportive of all the efforts. Those shown as individual savings are directly related to the programs carried out by that agency and no other. The total savings include those that are jointly

shared with other agencies. The total savings column cannot be totalled directly because of the duplication of the shared savings. The percentages of maximum savings as a percent of growth applies to increases in domestic demand through the end of the century.

The Authority and its member agencies have established a goal of not allowing the per capita use to increase in the future. Reaching that goal may take a greater effort than is often spent in building facilities to supply the additional water. Yet in a time of increasing difficulties in developing public water supplies, reaching that goal may be necessary to gain acceptance of any new project. This regional program is intended to assist in making that goal attainable.

A SUMMARY OF THE WATER CONSERVATION PROGRAM RECOMMENDED IN INDIVIDUALIZED WATER CONSERVATION PROGRAMS

x Recommended Program

X Recommended Program Implemented

CONSERVATION PROGRAMS	School Presentations	Speakers Bureau	Brochures and Handouts	Displays	Transit Advertising	Public Service Messages	Newspaper Advertising	Conservation Home	Conservation Awards	Uniform Pricing	Faucet Aerators	Shower Restrictors	Reduced Flush Devices	Self Closing Faucets	Hot Water Insulation	Retro Flush Valves	Water Softener Backwash	Moisture Sensors	Sprinkler Override	Landscaping Information	Demonstration Gardens	Landscape Planting Lists	Landscaping Incentives	Technical Assistance	Assistance Hotline	Show Previous Year Use	Restaurants Water Service	Restrict Driveway Washing	Irrigation Hours	Monitor Agricultural Use	Information on AB 1150
S.D.C.W.A.	X	X	X	X	X	x	x		x									x		x	X			x	x						
Primarily Agriculture																															
DeLuz M.W.D.			X							X		x	x							x						x				X	
Rainbow M.W.D.	X	X	X							X		x	x							x				x		x				x	x
Valley Center MWD	X	X	X							X		X	X							x				X		x				x	x
Yuima M.W.D.			X							X		x	x							x						x				x	
Agricultural/Domestic																															
Costa Real M.W.D.	X	X	X							X	x	X	X					x		x				X		x		x	x	x	x
Fallbrook P.U.D.	X	X	X							X	x	x	x					x		x				x		x		x	x	x	x
Helix W.D.	X	X	X							X	x	X	X					x		X				x		x		x	x		x
Olivenhain M.W.D.	X	X	X							X	x	x	x					x		x				x		X		x	x	x	x
Otay M.W.D.	X	X	X							X	x	x	x					x		x				x		x		x	x	x	x
Padre Dam M.W.D.	X	X	X							X	x	X	X					x		x				X		x		x	x		x
Ramona M.W.D.	X	X	X							X	x	X	X					x		x				x		x		x	x	x	x
Rincon del Diablo MWD	X	X	X							X	x	X	X					x		x				x		x		x	x	x	x
San Dieguito W.D.	X	X	X							x	x	X	X					x		x				x		x		x	x	x	x
San Marcos C.W.D.	X	X	X							X	x	X	X					x		x				x		x		x	x	x	x
Santa Fe I.D.	X	X	X							x	x	x	x					x		x				X		X		x	x	x	x
Sweetwater Authority	X	X	X							X	x	x	x					x		x				X		x		x	x		x
Vista I.D.	X	X	X							X	x	X	X					x		x				X		x		x	x	x	x
Cities W/water Supply																															
Del Mar	X	X	X					x		X	x	x	x	x	x	x		x	x	x		x	x	X		x	x	x	x		x
Carlsbad		x	x					x		x	x	x	x	x	x	x		x	x	x		x	x	x		x	x	x	x		x
Escondido	X	X	X					x		x	x	x	X	x	x	x		x	x	x		X	x	X		X	x	x	X	x	x
Oceanside	X	X	X					x		x	x	x	x	x	x	x		x	x	x		x	x	x		x	x	x	x	x	x
Poway	X	X	X					x		X	x	x	x	x	x	x		x	x	X		x	x	X		x	x	x	x	x	x
San Diego	X	X	X					x		X	x	X	X	x	x	x		x	x	x	x	X	x	X	x	x	X	x	x		x
Other Cities																															
Chula Vista			x					x						x	x	x			x	x		x	x				x				x
Coronado			x					x						x	x	x			x	x		x	x				x				x
El Cajon			x					x						x	x	x			x	x		x	x				x				x
Imperial Beach			x					x						x	x	x			x	x		x	x				x				x
La Mesa			x					x						x	x	x			x	x		x	x				x				x
Lemon Grove			x					x						x	x	x			x	x		x	x				x				x
National City			x					x						x	x	x			x	x		x	x				x				x
San Marcos			x					x						x	x	x			x	x		x	x				x				x
Santee			x					x						x	x	x			x	x		x	x				x				x
Vista			x					x						x	x	x			x	x		x	x				x				x
County of San Diego			x					x						x	x	x	x		x	x		x	x		x		x				x

SUMMARY OF WATER SAVINGS

	Individual Savings		Total Savings		Maximum Savings as % of Growth
	Minimum AF/YR	Maximum AF/YR	Mimimum AF/YR	Maximum AF/Yr	
Agricultural					
De Luz MWD	0	-	1	6	12%
Rainbow MWD	10	-	100	480	9%
Valley Center MWD	10	-	30	120	13%
Yuima MWD	5	-	15	60	12%
Municipal & Ag.					
Costa Real MWD	70	-	250	1,000	8%
Fallbrook MWD	35	-	80	260	12%
Helix WD	330	-	540	1,370	17%
Olivenhain MWD	45	-	140	500	11%
Otay MWD	130	-	540	2,170	12%
Padre Dam MWD	150	-	360	1,210	14%
Ramona MWD	35	-	120	490	14%
Rincon MWD	30	-	90	320	12%
San Dieguito WD	55	-	120	370	15%
San Marcos CWD	60	-	220	870	10%
Santa Fe ID	25	-	60	180	7%
Sweetwater Auth.	240	-	340	750	21%
Vista ID	95	-	230	780	10%
Cities/Water					
Del Mar	20	40	20	40	24%
Escondido	290	-	470	1,200	14%
Oceanside	640	1,870	640	1,870	13%
Poway	300	860	300	860	17%
San Diego	4,120	8,300	4,120	8,300	18%
Carlsbad	80	-	450	1,530	9%
Cities					
Chula Vista	190	-	440	1,460	16%
Coronado	40	-	60	120	15%
El Cajon	145	-	160	235	32%
Imperial Beach	50	-	70	170	18%
La Mesa	100	-	130	260	21%
Lemon Grove	40	-	60	125	18%
National City	90	-	100	145	50%
San Marcos	45	-	130	470	12%
Vista	80	-	150	425	13%
County	440	-	2,760	8,450	13%

TOTAL SAVINGS IN REGION

Minimum - 10,100

Maximum - 24,644