State Water Re					Ò
Hearing Name	IID	Transi	fer - P	hase 1	٠.
Exhibit: 20	- 1				

For Ident: \_\_\_\_ In Evidence:

Summary of IID Water Conservation Programs.					
No.	Water Conservation Activity	Year	Summary of Water Conservation Activities		
1.	Canal Seepage Recovery	1951-present	Drains have been installed parallel to portions of the All-American and the East Highline Main Canals to recover seepage. Each year approximately 24,000 acre-feet are returned to the canals.		
2.	Canal Lining	mid 1950s- present	IID has lined over 900 miles of canals with an estimated water savings of about 58,000 acre-feet per year (IID 1987 estimate).		
3.	Supervisory Control and Data Acquisition System (SCADA)	late 1950s - present	IID has used available technology to monitor and control water levels within its conveyance and delivery system.		
4.	Regulating Reservoirs	1976-present	IID constructed four regulating reservoirs prior to the IID/MWD Agreement. The regulating reservoirs have almost eliminated spills from the main canals.		
5.	13-Point Water Conservation Program	1976-87	The program focused on reducing tailwater, canal seepage, and operational water.		
6.	Aquatic Weed Control	1981-present	IID helped support the research that developed the sterile Triploid Grass Carp fish that feeds on Hydrilla (aquatic weed) that was clogging canals and drains.		
7.	Water Conservation Advisory Board	1979-present	The Advisory Board meets regularly to make recommendations concerning water conservation.		
8.	21-Point Water Conservation Program	1980-87	The program includes policies and procedures for ordering water, operating the delivery system, and assessing extra charges for excessive water use.		
9.	15-Point Water Conservation Program	1987-present	The program replaced the 13- and 21-Point programs and contain aggressive policies to promote on-farm conservation. The program describes the tailwater triple charge program.		
10.	Tailwater Recovery Demonstration Program	1983-90	The program demonstrated the technical feasibility and effectiveness of tailwater recovery systems, showing that about 12 percent of on-farm deliveries can be saved.		
11.	Irrigation Certification Program	1994-present	Mandatory irrigation training program for all water managers. The program includes a discussion of IID rules and regulations and water management.		
12.	Training for IID Operation Personnel	1995-present	IID sponsors water measurement training for zanjeros and hydrographers at California Polytechnical State University in San Lu Obispo.		
13.	Tailwater Box Replacement Program	1976-present	Land owners were contacted with a request to repair or replace tailwater boxes to facilitate better tailwater measurements.		
14.	Water Conservation Studies and Reports	1984-present	IID has spent millions of dollars on water conservation studies in a continuing effort to identify water conservation opportunities.		

Summary of Major IID/MWD Agreement Water Conservation Programs.				
No.	Water Conservation Activity	Summary of Water Conservation Activities		
1.	Water Control Center	The Water Control Center houses the equipment and personnel needed to operate the District water distribution system.		
2.	Non-Leak Headgates	Fourteen wooden headgates were replaced with non-leak metal headgates.  Estimated 1997 water savings is 630 acre-feet.		
3. Canal Lining Approximately 200 miles of canal we savings is 26,000 acre-feet.		Approximately 200 miles of canal were concrete lined. Estimated 1997 water savings is 26,000 acre-feet.		
		Automated gates were installed at strategic locations to provide better and more timely water adjustments. Estimated 1997 water savings is 13,490 acrefeet.		
5.	Regulating Reservoirs	Six regulating reservoirs were constructed, three as part of canal interceptor systems. Estimated 1997 water savings from the reservoirs (Carter and Galleano) is 9,700 acre-feet. The water savings from the other regulating reservoirs are accounted for by the interceptor canals.		
6.	Interceptor Canals	The Plum-Oasis, Mulberry-D, and Trifolium Interceptors capture the excess flows of 8, 11, and 15 laterals, respectively. The estimated 1997 water savings is 29,810 acre-feet.		
7.	Irrigators are allowed to order in 12-hour time blocks rather than the highest the deliveries to crop needs. The estimated 1997 water savings is 22,290 aper year.			
8.	Tailwater Recovery Systems	Twenty-five tailwater recovery systems were constructed to conserve about 4,670 acre-feet of water per year.		
9.	On-Farm Irrigation System	Three lateral move sprinklers and four drip systems were installed with estimated 1997 water savings of 510 acre-feet per year.		

	Summary of Water Conservation Measures Initiated by Farmers.				
No.	Water Conservation Activity	Summary of Water Conservation Activities			
1.	Lining of Farm Ditches	About 2,600 miles (over 90 percent) of on-farm head ditches have been lined at a present day cost of nearly \$200 million.			
2.	Tile Drain Installation	Nearly 34,000 miles of tile drains have been installed by farmers.			
3.	Land Leveling	Uniform slopes are required for efficient surface irrigation. Based on today's land leveling costs, farmers have invested about \$150 million to level land and provide maintenance leveling at a cost of about \$60 per acre every 5 years.			
4.	Improved On-Farm Irrigation Management	Farmers have achieved an on-farm efficiency of 79 percent through proper irrigation management including, ponding water on the tail of the field during land preparation, cutback irrigation, furrow inflow and outflow control, tailwater reuse, irrigation scheduling, sprinkler and drip irrigation, and deep tillage.			