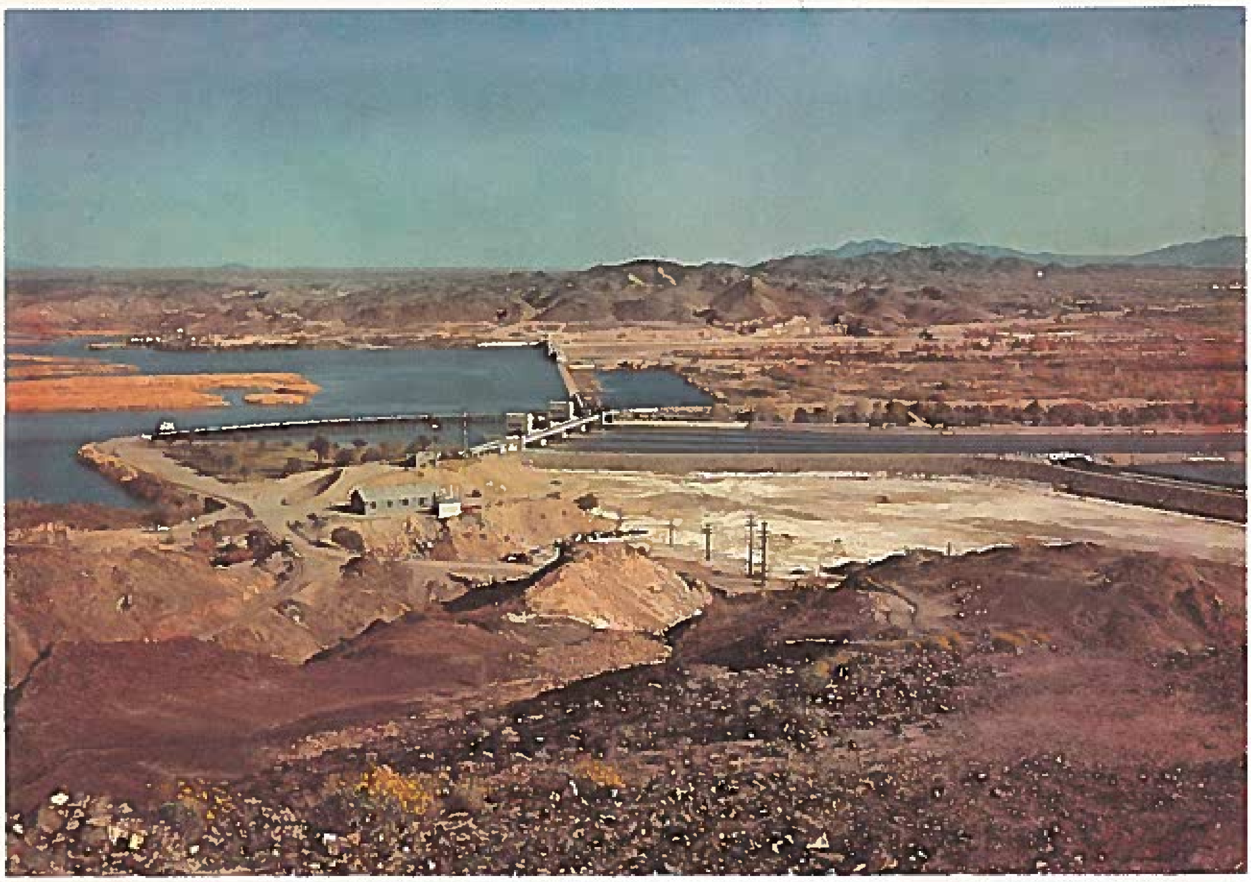


FIFTY-FIRST

ANNUAL REPORT

IMPERIAL IRRIGATION DISTRICT

1961

Imperial Valley's second producing geo-thermal steam well was drilled in 1961 and tested early in 1962. Several thousand acres of District owned land were leased in 1960 for exploratory purposes to the firm of J. I. O'Neill, Jr. and associates of Midland, Texas.

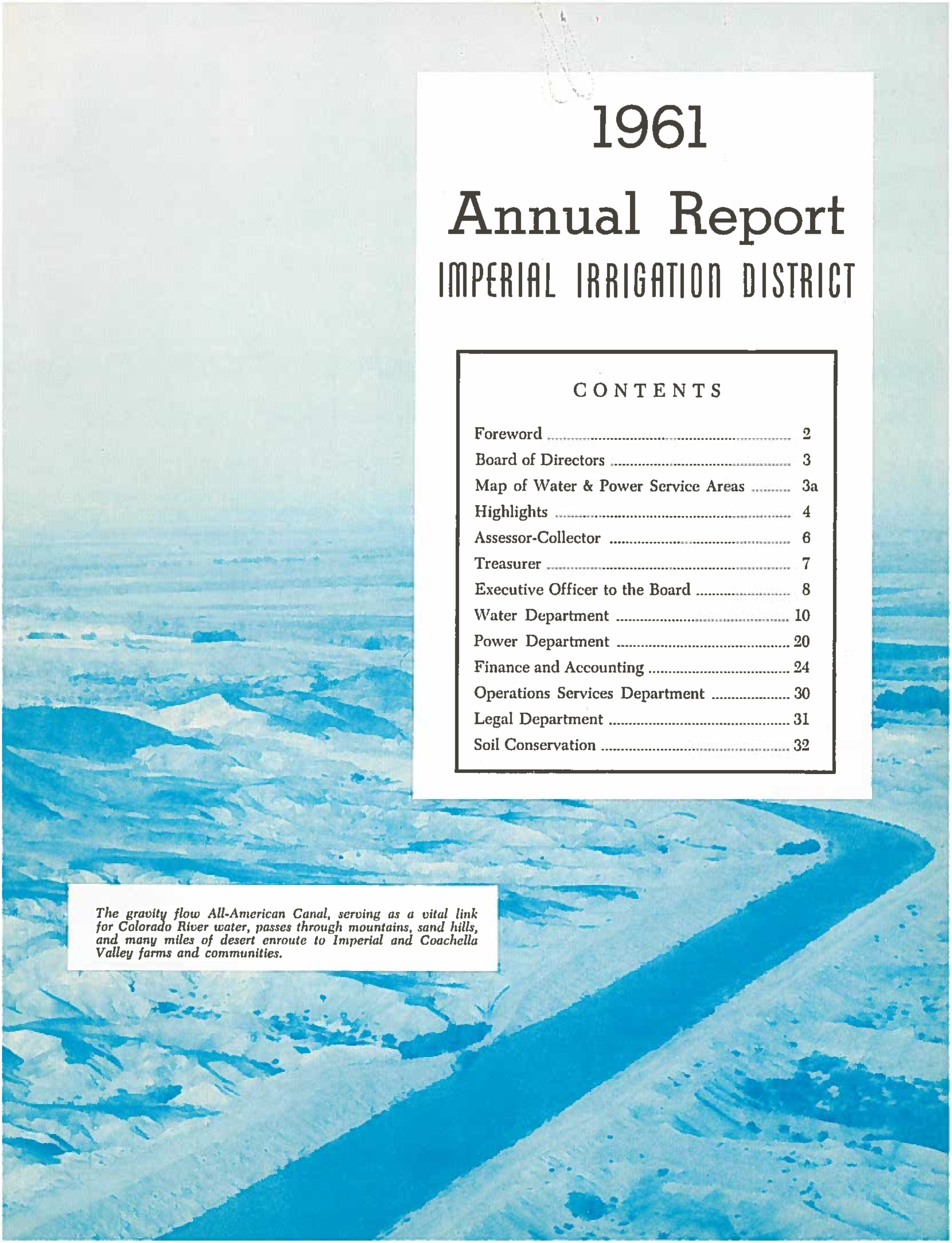
1961

Annual Report

IMPERIAL IRRIGATION DISTRICT

CONTENTS

Foreword	2
Board of Directors	3
Map of Water & Power Service Areas	3a
Highlights	4
Assessor-Collector	6
Treasurer	7
Executive Officer to the Board	8
Water Department	10
Power Department	20
Finance and Accounting	24
Operations Services Department	30
Legal Department	31
Soil Conservation	32



The gravity flow All-American Canal, serving as a vital link for Colorado River water, passes through mountains, sand hills, and many miles of desert enroute to Imperial and Coachella Valley farms and communities.

F O R E W O R D

RAYMOND L. (LOM) THOMPSON
President
Board of Directors

In presenting this 1961 annual report, we find that the District has moved forward financially, facilities have been improved and updated, major additions to the power and water systems have been authorized and/or completed, and adjustments made in employee compensation.

Capital expansion of the power and water systems—authorized, construction started, or completed during the year — totaled $3,827,000. This expansion was paid for entirely from revenue. In addition the bonded indebtedness was reduced by $1,573,000.

Major improvements include completion of the Double Weir Combination Check-Hydroelectric Plant, design and start of construction on an additional transmission line to serve customers in Coachella Valley, design and start of construction on a new Imperial Power and Water Division Office building, and start of construction on four new buildings in the Headquarters yard at Imperial.

Installation of two 10,000-kilowatt gas turbine generators was authorized to meet growing peak demands on the system. These units are expected to be placed in service in late spring or early summer 1962.

Geo-thermal exploration on the southern shore of Salton Sea has produced a supply of natural steam which, at this time, appears to be of commercial value. Under the terms of a 99-year lease with a Texas firm to explore geo-thermal potentials, one producing well was brought in and a second well on an adjacent site was being drilled at year-end.

In August contracts for liquidation of the Compania de Terrenos y Aguas de la Baja California properties in Mexico were concluded between the Department of Hydraulic Resources, Government of Mexico and Compania liquidators. The 50-year, non-renewable concession to operate and maintain the canal system expired in 1960, and Compania directors had no alternative but to liquidate. The liquidation contract calls for payment of $360,000 for Compania properties including canals, defense levee system, telephone system and protective works.

Other important actions during the year included a two-year agreement between Yuma County Water Users' Association and the District authorizing a transfer of Siphon Drop power water to the Pilot Knob Hydro Plant. Water involved in the transfer had formerly passed through the smaller-head U.S. Bureau of Reclamation Siphon Drop Hydro Plant.

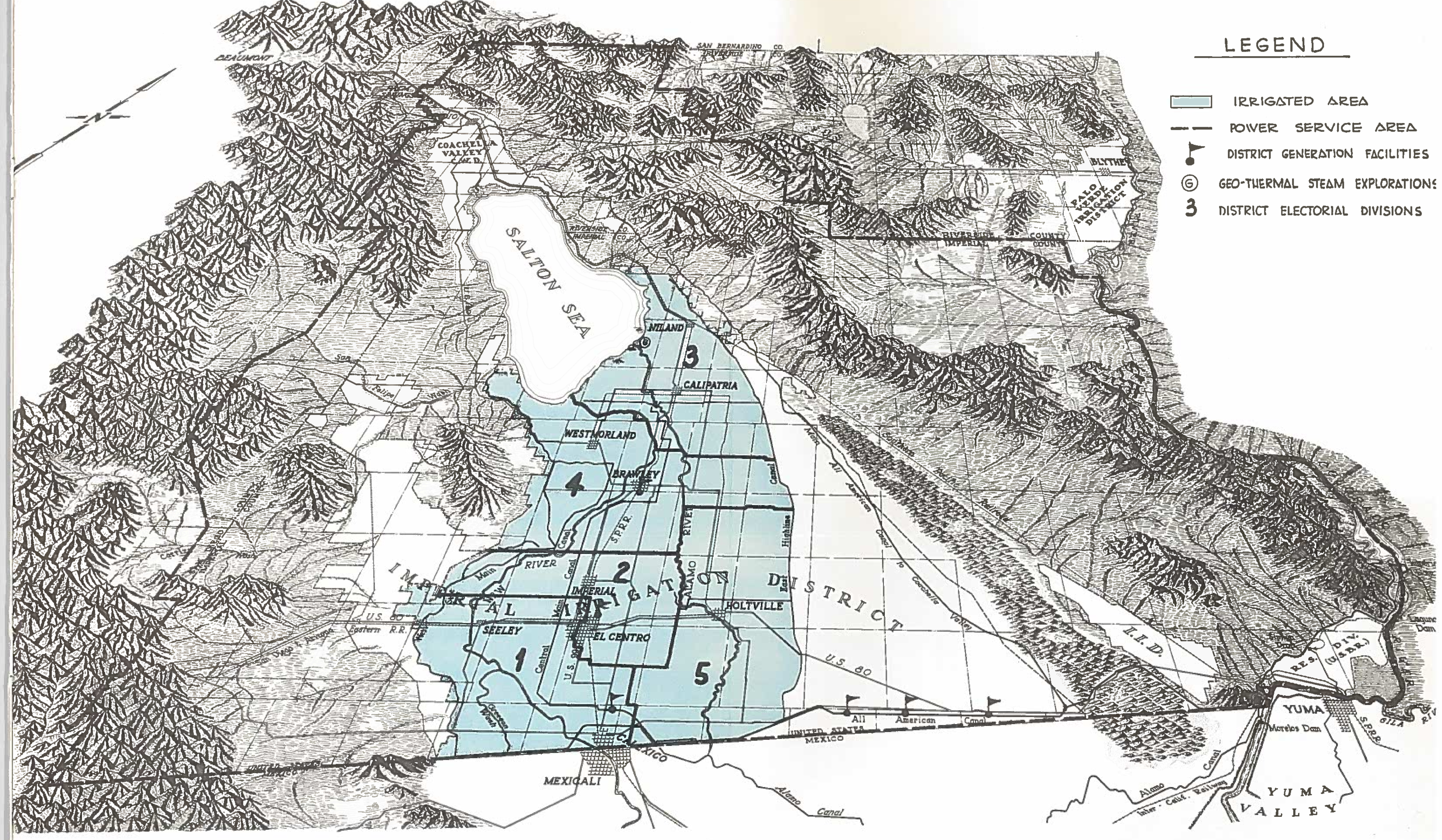
To permit more complete evaluation of long-range citrus potentials on the East Mesa, the District lease on the Drop 2 Experimental Farm from the United States was re-negotiated and extended to May 1, 1992. The sub-lease with Brock Ranches, Inc. was extended for a like period.

The accomplishments of 1961 were possible only because of the co-operation and loyal support of the Board of Directors, management, and personnel.

ROBERT F. CARTER
General Manager

President, Board of Directors

General Manager


LEGEND
IRRIGATED AREA
POWER SERVICE AREA
DISTRICT GENERATION FACILITIES
GEO-THERMAL STEAM EXPLORATIONS
3 DISTRICT ELECTORIAL DIVISIONS
SALTON SEA
IMPERIAL IRRIGATION DISTRICT
COACHELLA VALLEY C.W.D.
PALO VERDE IRRIGATION DISTRICT
BLYTHE
NILAND
CALIPATRIA
WESTMORLAND
BRAWLEY
IMPERIAL
EL CENTRO
HOLTVILLE
SEELEY
CALEXICO
MEXICALI
YUMA
YUMA VALLEY
I.I.D.
All American Canal
Alamo Canal
UNITED STATES
MEXICO
U.S. 80
1
2
3
4
5

BOARD OF DIRECTORS

RAYMOND L. (Lom) THOMPSON
President
Division 1

JOSEPH D. MOORE
Division 2

H. FRANK HOWINGTON
Division 3

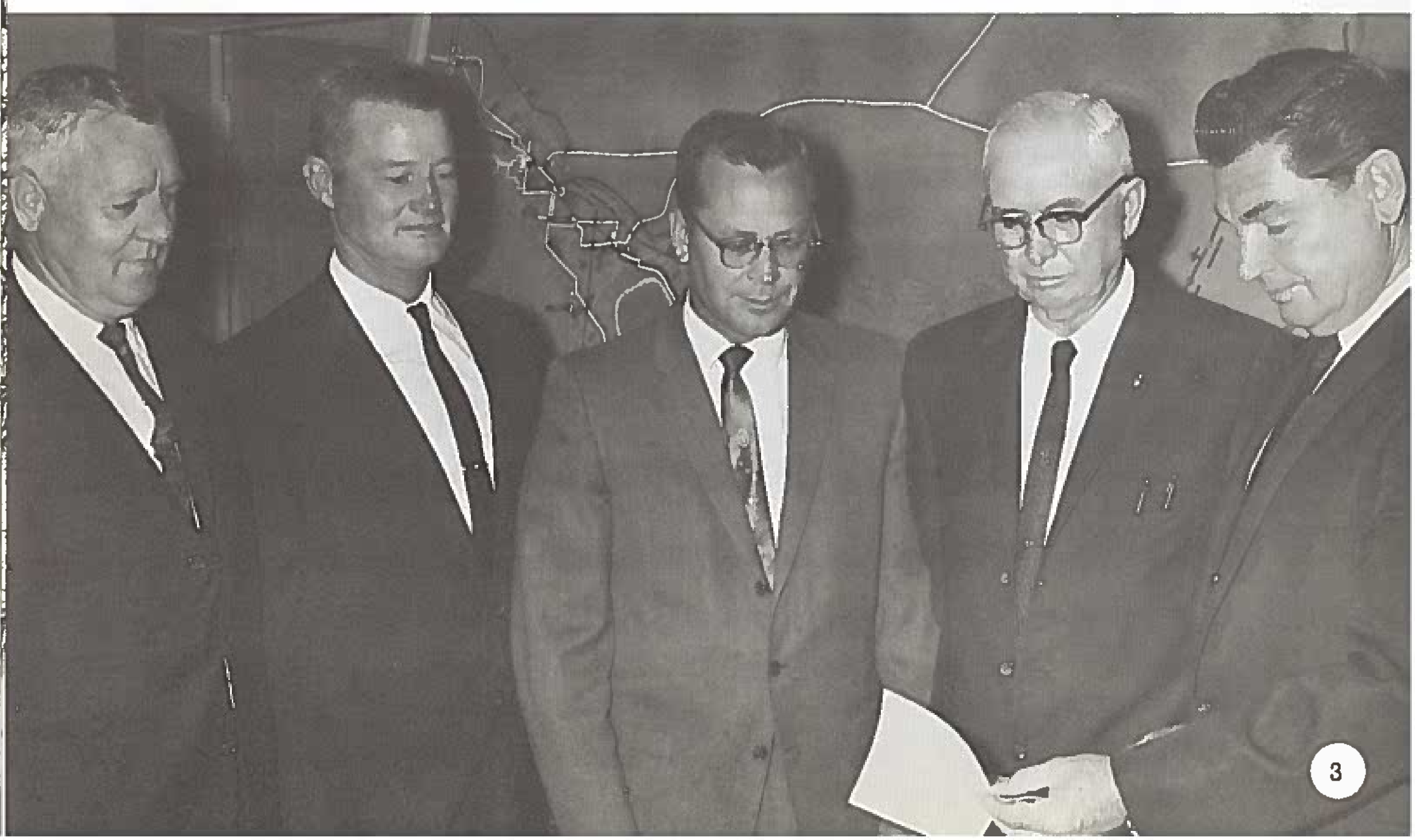
PAUL A. MITCHELL
Division 4

CARL C. BEVINS
Division 5

Board members inspect newly completed Double Weir Combination Check Hydroelectric Plant on Central Main Canal.

Joint meetings and tours with directors of nearby irrigation districts created better understanding of mutual problems.

Directors Mitchell, Bevins, Moore, Howington and Thompson (left to right).

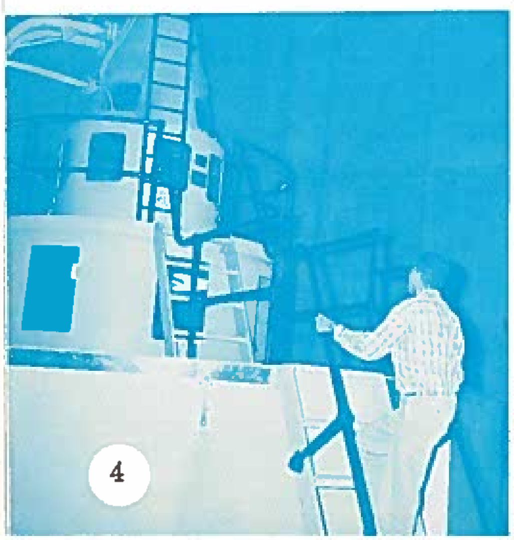


OPERATIONAL

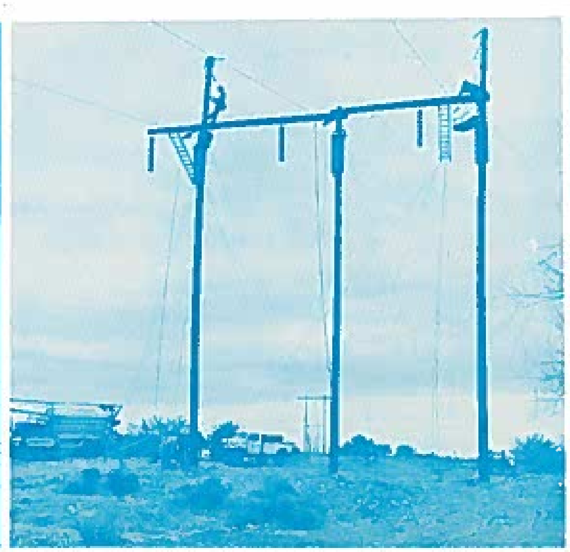
POWER

The District's Power Department Earned		$ 9,774,434
From: Power Sales	$ 9,406,045	
Interest on Reserves	246,934	
Rental of Electric Property	37,194	
Other Sources	84,261	
Which Was Used or Set Aside For:		
Operating Expenses	5,226,237	
Interest on Bonds	859,345	
Lease of Power Rights	31,725	
Taxes	16,699	
Accounting for Operating Expenses and Income Deductions of	$ 6,134,006	
Leaving Net Earnings of	3,640,428	
Which Were Used For:		
Retirement of Electric Revenue Bonds	1,035,000	
Additions to Plant	1,241,743	
Payment into Bond Reserve Funds	106,500	
Payment into Special Electric Plant Construction Fund	751,529	
Additions to Other Reserve Funds	141,151	
Deposit with the United States on All-American Canal Contract	146,464	
Additions to Operating Funds	218,041	
	$ 3,640,428	
Which Accounts in Full for		$ 9,774,434

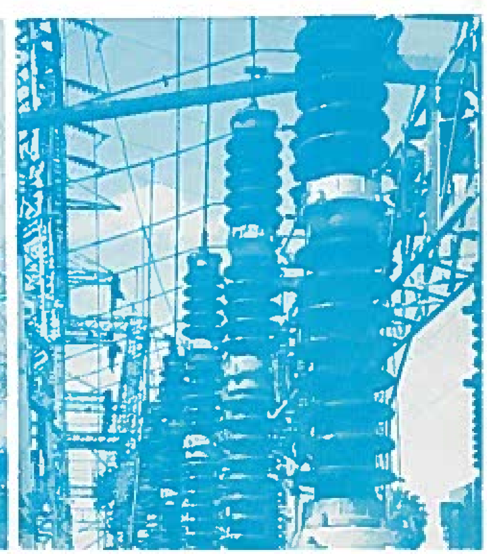
Hydroelectric generation provides a low-cost energy source.



Another line for Coachella Valley.



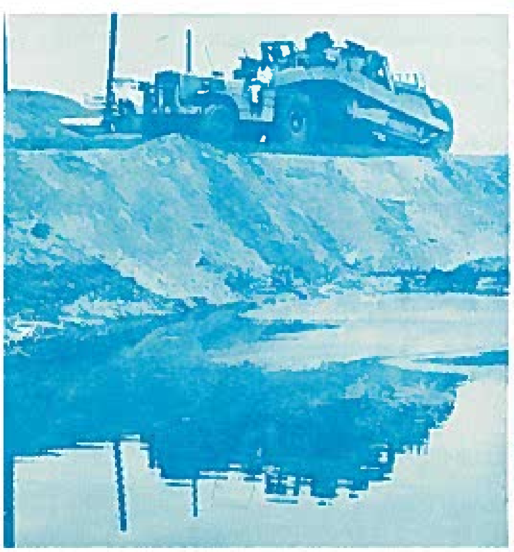
Seventy-four substations form an integr part of the system.



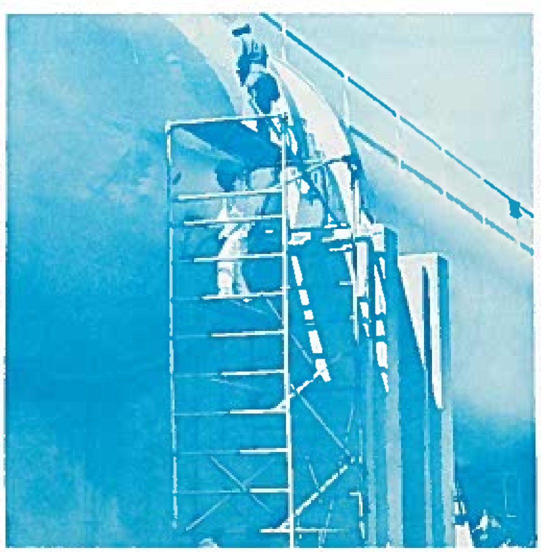
HIGHLIGHTS

WATER

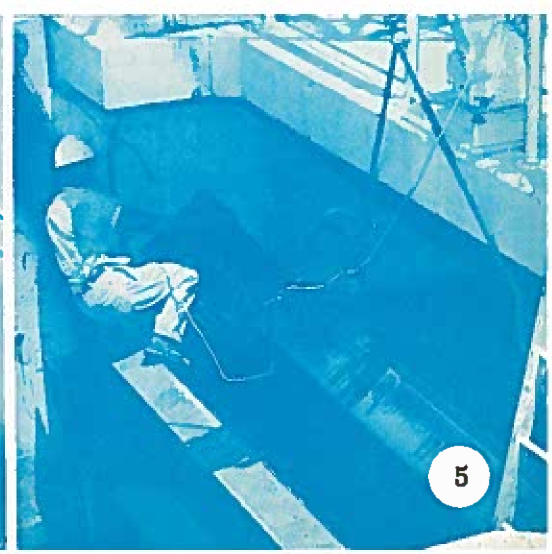
The District's Water Department Earned		$ 6,274,870
From: Assessments, Penalties and Costs	$ 1,518,290	
Sales and Rentals of Land Held Under Assessment Deeds	15,802	
Interest on Redemption of Delinquent Assessments	3,665	
Water Deliveries, Gate and Pipe Service Charges	4,394,061	
Interest on Reserves	139,675	
Rental of Land, Buildings and Equipment	89,832	
Other Sources	113,545	
Which Was Used or Set Aside For:		
Operating Expenses	3,520,425	
Interest on Bonds	232,671	
Taxes	2,531	
Accounting for Operating Expenses and Income Deductions of	$ 3,755,627	
Leaving Net Earnings of	2,519,243	
Which Were Used For:		
Retirement of Bonds	597,000	
Additions to Canal System	751,227	
Additions to Drainage System	418,850	
Additions to Buildings and Land	32,320	
Payments into All-American Canal Emergency and Replacement Fund	89,007	
New Equipment	181,568	
Additions to Operating Funds	449,271	
	$ 2,519,243	
Which Accounts in Full For		$ 6,274,870



Reinforcing banks of All-American Canal.



New River Siphon carries water in All-American Canal over New River.



Preventive maintenance of canal gates assures trouble-free operation.

Walter E. Lancaster
Assessor-Collector

ASSESSOR-COLLECTOR'S OFFICE

Assessed valuation of land within the boundaries of the District increased $772,986 for 1960-61 due to land improvements, such as tiling and leveling, which increased productivity of the land.

Total valuation for the assessment year was $50,303,716 as compared to $49,530,730 for 1959-60.

Collections totaled $1,469,531.70 – 96.87 per cent of the total assessment – by June 20, the date after which assessments became delinquent. The unpaid $47,419.06 – 3.13 per cent of the total – included delinquent assessments, assessments, and unpaid balances. The small delinquency is attributed to a fair equalized assessment and a realistic tax rate.

The Assessor-Collector's Office following the policy of providing personal service makes available as public information the following services not given by other assessment agencies:

1. Country property Map Index showing the owner's name on property.
2. Country valuation reference.
3. Country property Tile Map Index.
4. Aerial Maps scaled at 1" – 660 ft.
5. Contour Maps.

The assessment rate of $3.00 per $100 valuation – first established by the Board of Directors for the year 1949-50 – was again fixed by the Board for the 1960-61 assessment year.

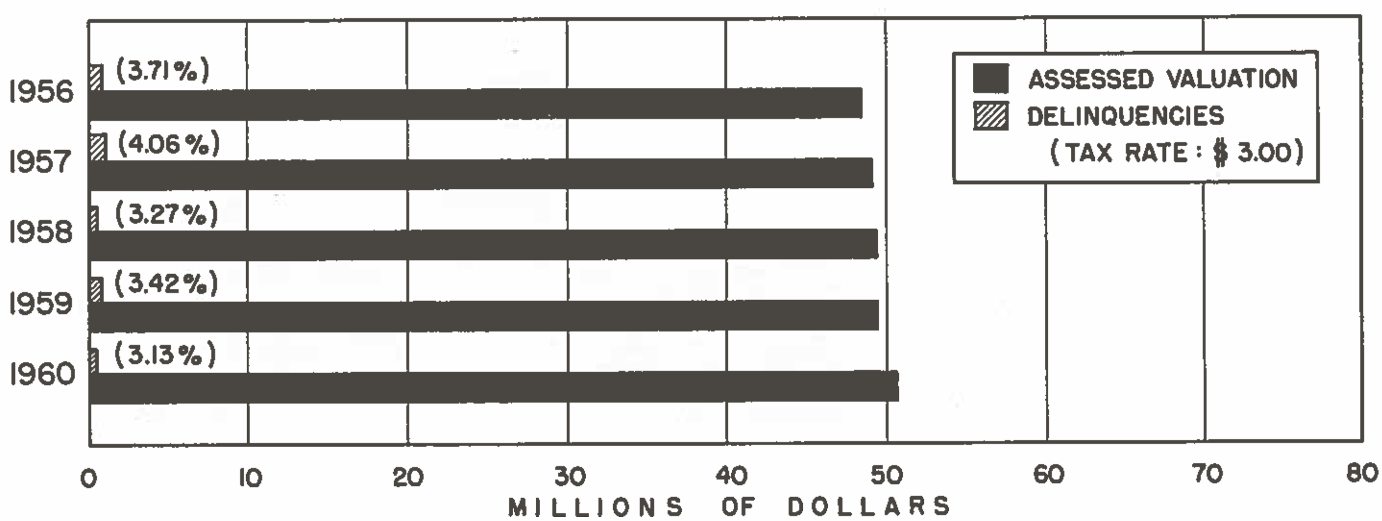
As required by the Water Code of the State of California, in fixing the rate, a 15 per cent deduction for anticipated delinquencies was applied to the equalized aggregate assessed value of $50,303,716. Thus the net equalized assessed valuation for the year 1960-61 was $42,758,158.

The amount to be raised for the 1960-61 assessment year was classified by the Board of Directors as follows:

Redemption Fund: 15.21 mills on the dollar to raise $650,000 for payment of interest and principal on general obligation bonds.

Drainage Fund: 3.51 mills on the dollar to raise $150,000 for necessary improvements to, and extensions of, the District's drainage system.

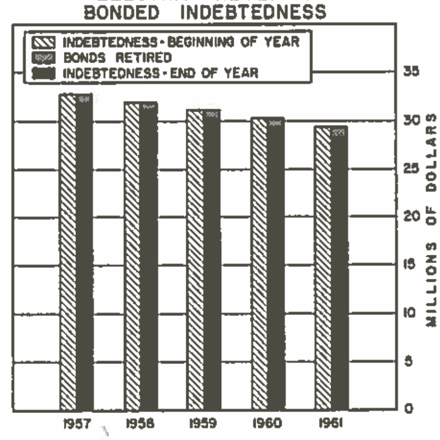
Operation and Maintenance: 11.28 mills on the dollar to raise $482,312.02. This amount combined with other revenues will provide funds to meet current expenses of the District for the year 1961.



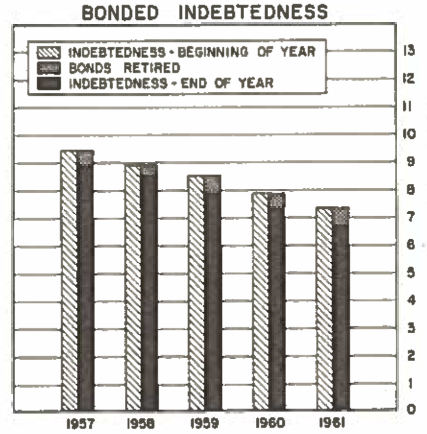
ANNA T. MCMANUS
Treasurer

TREASURER'S OFFICE

ELECTRIC REVENUE BONDED INDEBTEDNESS



GENERAL OBLIGATION BONDED INDEBTEDNESS

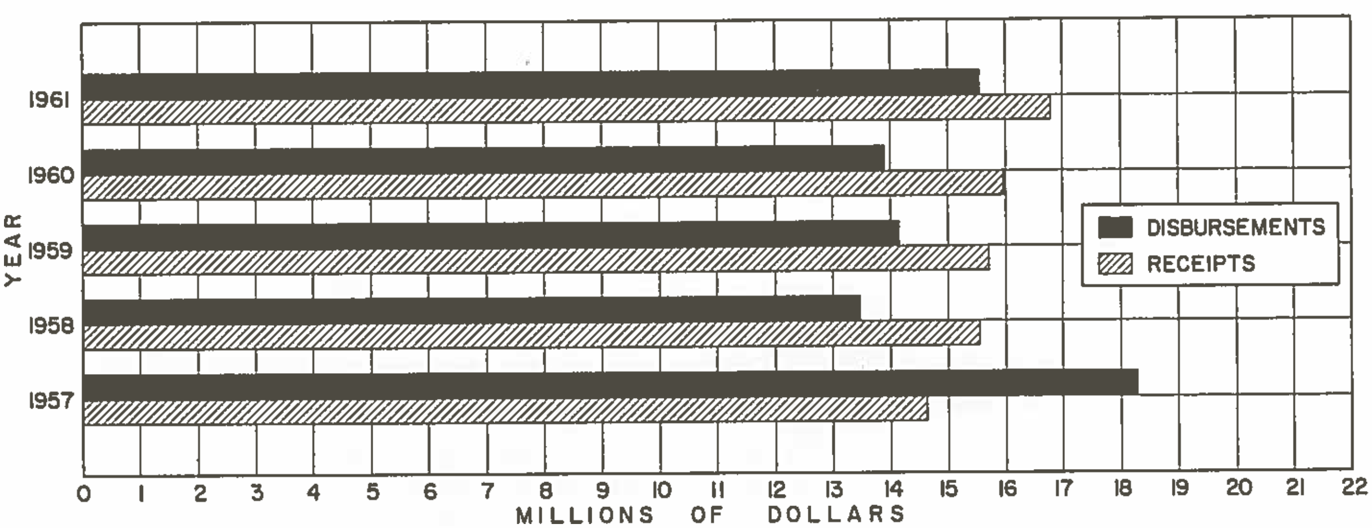


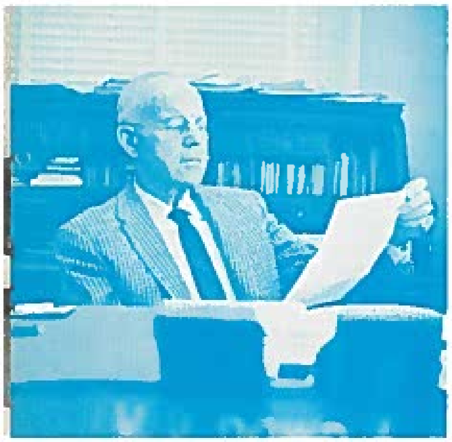
The Treasurer of Imperial Irrigation District, elected by the people within District boundaries, is charged with the responsibility of safeguarding all District funds and, in compliance with the provisions of the Water Code of the State of California, is obligated to furnish an Indemnity Bond guaranteeing personal integrity and good faith in the handling of all District cash assets. The amount of the bond is determined by the Board of Directors.

The total annual income from the sale of water and power, assessment collections, and all other sources flows into the Treasurer's Office and is retained in specified funds until such time as expenditure is approved by the Board of Directors. Total income of the District during 1961 amounted to $16,798,194, of which $15,564,691 was expended for payment of bond principal, bond interest, District payrolls and expense checks, and Compania payrolls and expense checks.

During this year, payments amounting to $1,572,000 substantially reduced the bonded indebtedness of the District to a new low of $34,908,000 comprised of $6,715,000 in general obligation bonds and $28,193,000 in electric revenue bonds.

Sufficient funds were set aside to meet the annual budget requirements, such as water and power department operations, payments on bonds, and coverage of various reserves and sinking funds, as required by law. Cash funds not required for meeting current expenses were placed in interest-bearing accounts with banks located in Imperial and Coachella Valleys. Those accounts, combined with government bonds purchased in previous years with reserve funds, provided the District with a total earned-interest income of $386,609.





M. J. Down
Executive Officer to the Board of Directors

EXECUTIVE OFFICER TO BOARD OF DIRECTORS

The Executive Officer to the Board of Directors is responsible for protecting and advancing the interests, rights and plans of the District involving relationships with governmental, industrial, community groups, and the general public. He also consults with the Board and Management on problems and policies concerning irrigation, drainage and power operations of the District.

The Executive Officer has the further responsibility to keep the Board of Directors informed of proposed projects and legislation on the State and Federal levels which will affect District operations and services directly or indirectly.

In the execution of these duties and responsibilities the Executive Officer maintains liaison with legislators, either appearing as a witness or securing witnesses to appear at committee and sub-committee hearings on matters of interest to the District; represents the District, performing official duties with such groups as the National Reclamation Association, American Public Power Association, Colorado River Board of California, Colorado River Water Users' Association, Irrigation Districts Association of California; work with other irrigation districts in matters of mutual interest.

The Executive Officer to the Board is responsible for the general supervision of the Public Information Office.

COLORADO RIVER BOARD

The Colorado River Board of California was created by State Law in 1937. Board membership includes a representative from each of the six California agencies having rights to use water or power from the Colorado River. Members are appointed by the Governor. The Executive Officer represents Imperial Irrigation District on the Board.

During the year, the activities of the Board and its staff were concerned with legislative and judicial matters affecting quality and quantity of water available for use in California.

Major legal and judicial work by the Board during the year included assisting the State of California Attorney General in preparation of exceptions to U.S. Supreme Court Special Master Simon F. Rifkind's report on findings in the Arizona vs. California Colorado River litigation. The Board also met with members of the California Congressional delegation to consider the impact of the report, if adopted by the Court.

Engineering criteria for filling Glen Canyon Dam are of extreme importance to all lower basin states, and California in particular. Staff engineers attended meetings held between Hoover Dam power allottees and Bureau of Reclamation officials to redraft filling criteria for Glen Canyon and other Colorado River Storage Project reservoirs. Later in the year, certain revisions to filling criteria recommended by the Commissioner of Reclamation were forwarded to California Senators for transmittal to the Board.

Limitation of transmountain diversion of Colorado River water which would be used in new Rio Grande River Basin projects was of particular interest to the Board. During current Congressional sessions, bills were introduced to construct the Fryingpan-Arkansas Project in Colorado and the Navajo San Juan-Chama Projects in New Mexico.

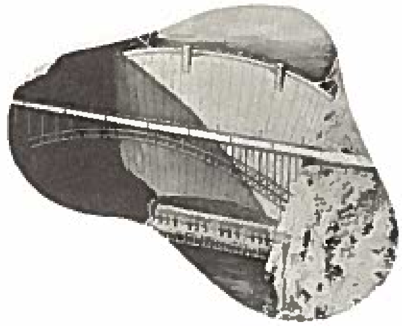
The Board, in cooperation with California Senators and Congressmen, was able to secure amendments to both bills protecting California users. As reported out of committee, both bills failed to include amendments for limitation of transmountain diversions. However, minority reports filed by various California Congressional members resulted in no further action being taken on either bill.

Several other Upper Basin project authorization bills were introduced, but no action was taken beyond routine requests for comment by Federal agencies. Late in the year, after the Mexicali salinity problem developed as a result of drainage discharge from the Wellton-Mohawk Project near Yuma, the Board started assembling and analysing data on water delivered to Mexico in the limitrophe section of the River.

PUBLIC INFORMATION OFFICE

The Public Information Office is the management function, under the Executive Officer, responsible for developing various methods to create a better understanding between the District and the public we serve. The Public Information Officer evaluates public attitudes, identifies the policies and procedures of both the Executive Department and management, and endeavors to execute a program of action to earn public understanding and acceptance.

In cooperation with the power sales department, the Public Information Officer is responsible for preparation of and campaigning all advertising.



Glen Canyon Dam

During 1961 we were especially proud to receive second place in the nationwide American Public Power Association Annual Report Contest for our 50th Anniversary 1960 District Report which was prepared by the Public Information Office.

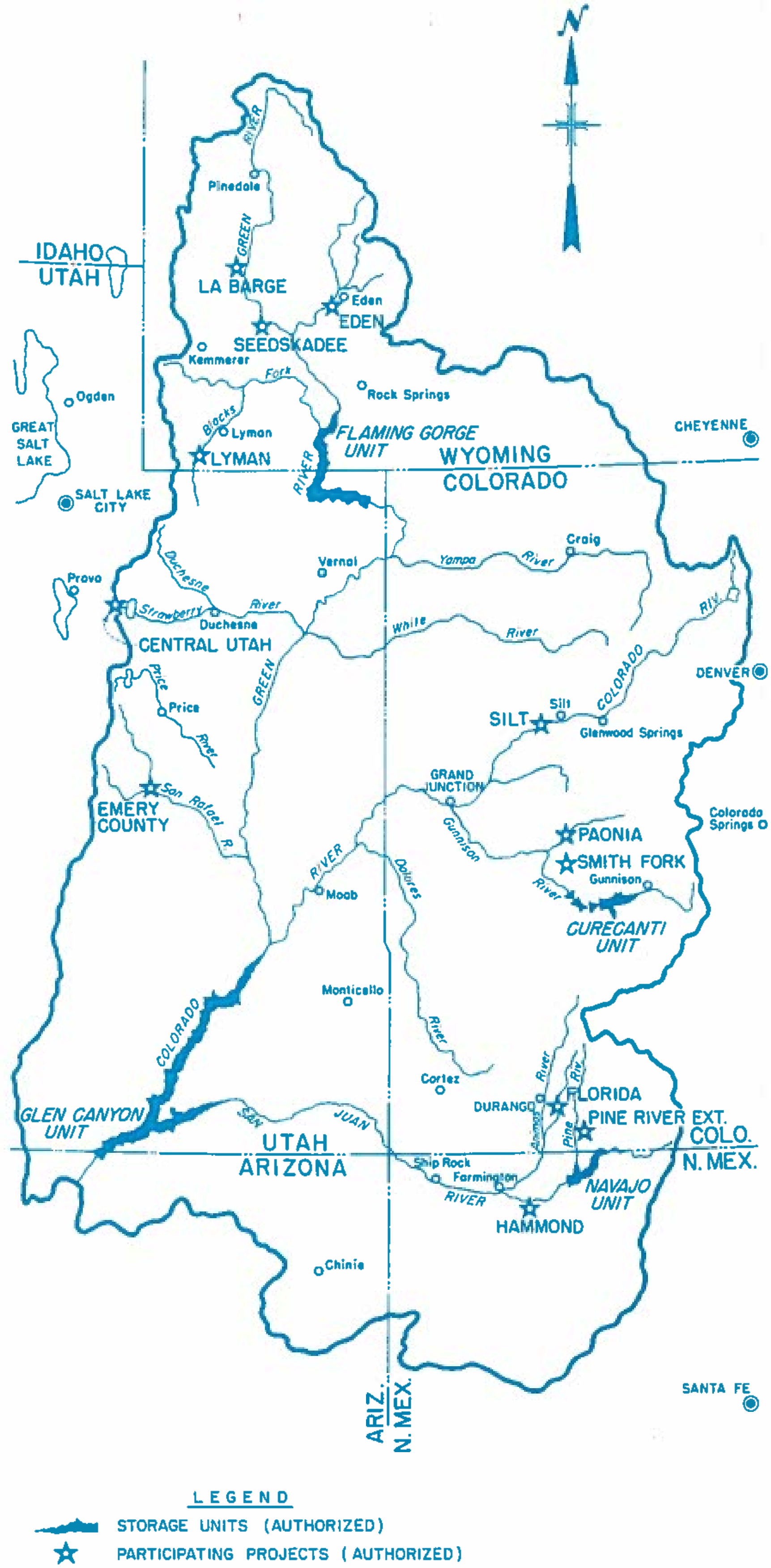
Numerous news and special feature articles were prepared and released to various local and national news media. A regular monthly four-page customer paper, the DISTRICT NEWS, was edited and distributed to water and power customers with their statements.

The District employee paper, HERE'S THE SCOOP, averaging eight pages, which was started by the Public Information Office in 1959, was edited, published and distributed.

Over 5,000 individual requests for information from students, interested individuals and firms about Imperial Irrigation District and the Imperial Valley were processed. Displays were installed at both the California Mid-Winter Fair and the Riverside County Fair.

The Canal Safety Program, first started in May 1959 and which has been so successful in alerting school children to canal hazards, was continued. "Don't Go Near the Water — If It's In a Canal," a brochure prepared for use in this program, was reproduced by other irrigation districts in Southern California and Arizona. A similar brochure, "Don't Go Near the Power Lines — Unless You're a Bird," was distributed to all customers as a safety precaution.

Large numbers of agricultural engineers, technicians, and high government officials from Asia, Africa, Europe, South America and Oceania were referred to this office by the Department of State, the United States Bureau of Reclamation, and Department of Agriculture to study irrigation and drainage and irrigation district operations and techniques.



COLORADO RIVER STORAGE PROJECT
AND PARTICIPATING PROJECTS

OSCAR L. FUDGE
Manager

WATER DEPARTMENT

The Water Department is responsible for the operation and maintenance of the District's canal and drainage systems and delivery of water to serve an irrigated area of 435,664 acres of farm land in Imperial Valley. Total gross area within the boundaries of the District is 908,698 acres, including undeveloped area; cities, towns, airports, feed lots, etc.; area below the -230 foot contour Salton Sea Reserve Boundary and area covered by Salton Sea; and area in canals, drains, rivers and railroads.

Departmental responsibility includes operation and maintenance of the All-American Canal headworks and desilting basins at Imperial Dam, the 80-mile All-American Canal, 49 miles of the Coachella Branch of the All-American Canal, a 1,659-mile network of other main canals and laterals, and a 1,375-mile system of main and lateral drains.

Water carried in the District's canal system serves both agricultural and domestic purposes. All cities and towns receive their water supplies wholesale from the District.

The Water Department organization includes the All-American Canal Section, Water Engineering Section, Drainage Construction and Maintenance Section, North and South-End Irrigation and Drainage Sections, Water Control Section, and Heavy Equipment Operations Section.

There are seven operational divisions responsible for operation and maintenance of the lateral canal and drainage systems, as well as delivery of water to users, including wholesale deliveries to cities and towns.

During 1961 there were a total of 453 full-time employees assigned to the Department.

Major improvements to the system during the year included the completion of construction of a combination check-hydroelectric plant to replace the existing check structure in the Central Main Canal at the Double Weir, and construction of Alamo River Control Drop No. 6.

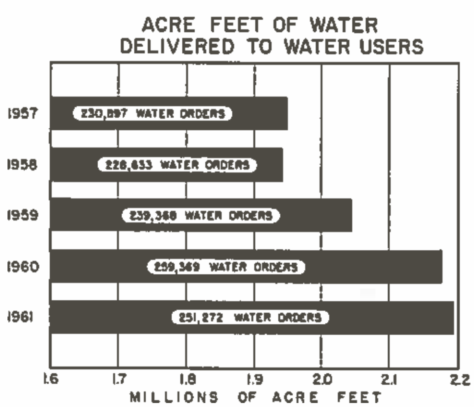
Under the regulation for delivery of water to users instituted in 1956, 87.75 per cent of the total water orders were delivered on the day requested by the user, 11.87 per cent were carried over one day and .38 per cent were carried over two days.

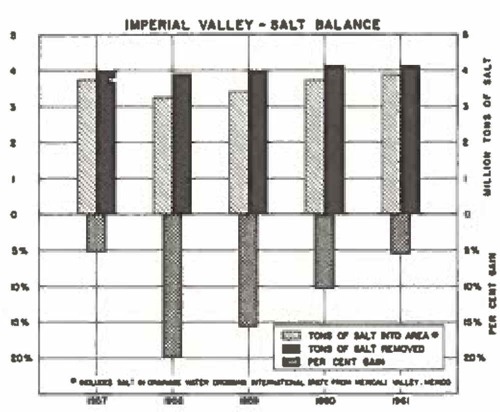
Water delivered to Imperial Valley users totaled 2,195,675 acre-feet, an increase of 17,562 acre-feet over 1960.

Water diverted at Imperial Dam – metered at Station 60 – during 1961 totaled 5,038,989 acre-feet, a decrease of 605,991 acre-feet over 1960. Total diversion through the All-American Canal Headworks was 5,202,328 acre-feet, which included 163,339 acre-feet used in desilting operations.

Water is diverted at Imperial Dam and transported in the All-American Canal not only for Imperial Valley, but also for the Yuma Project and for Coachella Valley.

The elevation of the Salton Sea on December 31, 1961 was 233.35 feet below sea level, higher by .40 foot than the same date the previous year.





At year-end installation was underway for remote control of the East Highline Check on the All-American Canal.

Backbone of the drainage system is the Alamo and New Rivers. The Alamo serves eastern Imperial Valley Farms.

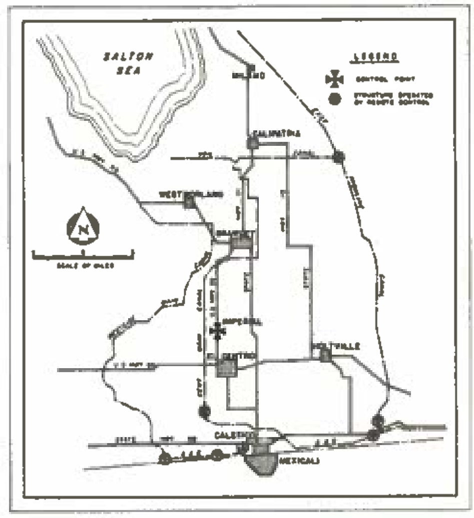
Remote control operation of the New River Check and Spillway, Wisteria Check, and West Side Main Check, all on the All-American Canal, has proven highly successful after three years of operation. Remote control facilities were installed at Dahlia Check this year. Work is in progress to provide remote control operation of the East Highline Check and Turnout and No. 1 Check on the East Highline Canal, with plans for completion by June, 1962.

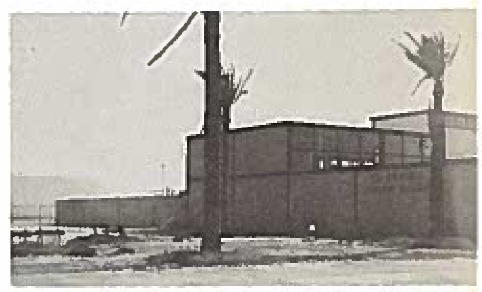
The program of substituting reinforced concrete for wood structures and deliveries as they become inoperative was continued. Approximately 96 per cent of the wooden checks and deliveries have been replaced.

Weed and brush control measures were required on all canals and drains in the system. Burning and three types of chemicals were used, according to the type of growth and the season. The principal burning operations were confined to removal of debris following chemical application and on mature annual growth on the channels.

During 1961 a total of 12,462 acre-miles was treated with chemicals by District crews, as compared to 13,617 acre-miles in 1960. Weed and brush control operations included: 967 acre-miles by the All-American Canal section; 1,682 acre-miles on other main canals; 6,790 acre-miles on lateral canals; 1,158 acre-miles on main drains, and 1,865 acre-miles on lateral drains.

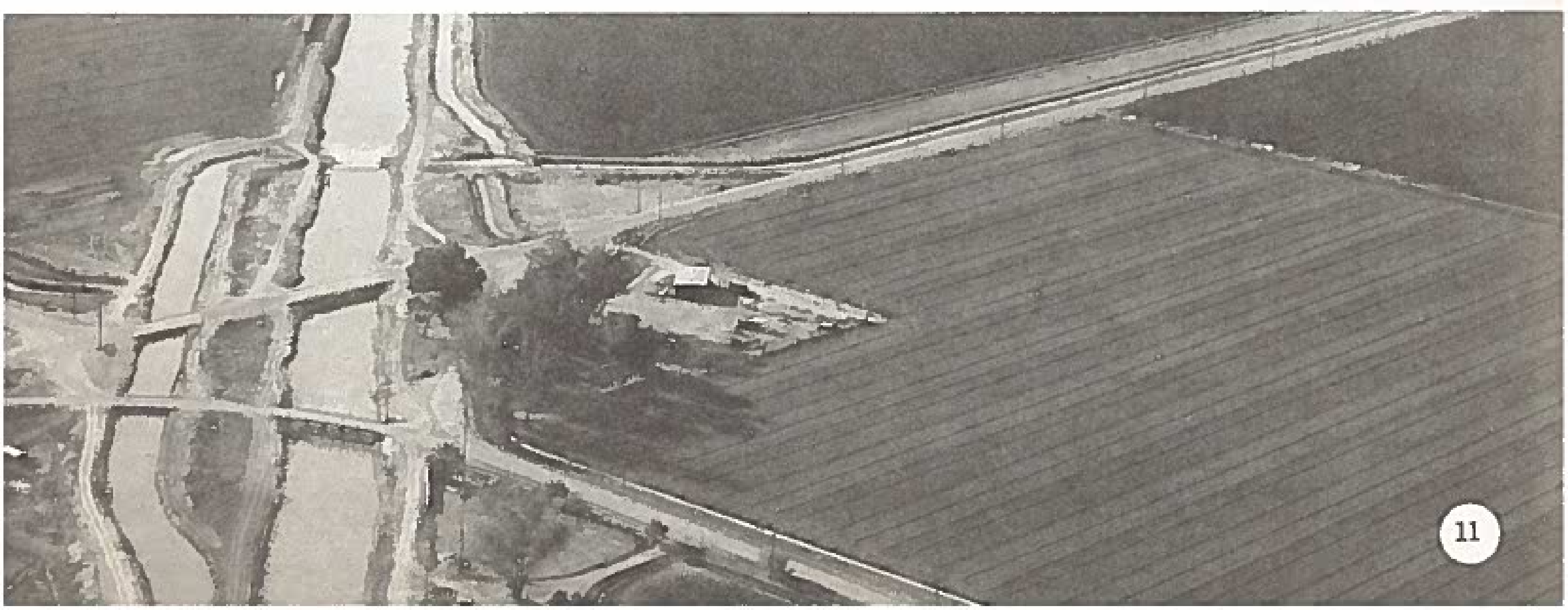
Moss control operations during the year were confined mainly to the lateral canal system, and main and lateral drains. During the year a total of 2,421 miles of the system was treated for aquatic growth.

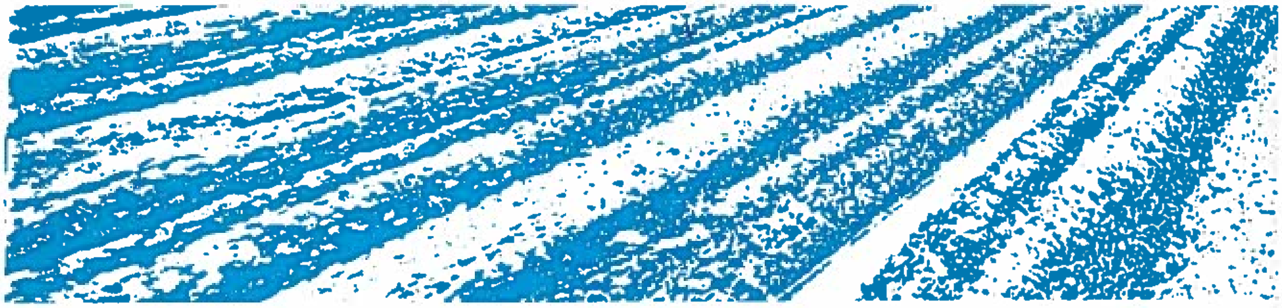




Water for distribution within city limits of Valley communities is delivered to city water plants for purification and retail sale.

Downstream view of Central Main Canal at Briar undercrossing.

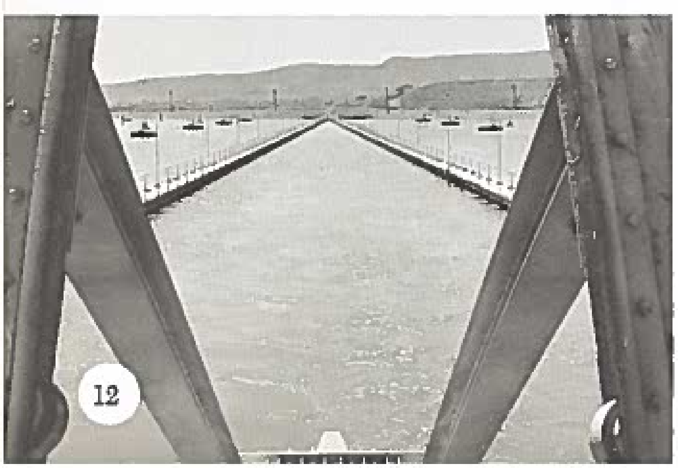




Staff industrial photographer maintains a continuous photographic record of construction jobs.

Preventive maintenance of radial gates on the All-American Canal.

Influent channel to one of the three desilting basins at Imperial Dam.



In the lateral canals, a total of 876 miles was treated chemically and 855 miles by mechanical equipment. In the drainage system, 318 miles of main drains and 92 miles of lateral drains were treated chemically and 26 miles of main drains and 254 miles of laterals by mechanical equipment.

During the year there was an apparent gain of 9.79 per cent in the removal of salt through the drainage system to Salton Sea.

ALL-AMERICAN CANAL SECTION

This section is responsible for operation and maintenance of headworks and desilting basins at Imperial Dam and 131.2 miles of canals, including the entire 79.7 miles of the All-American Canal, 48.9 miles of the Coachella Branch of the All-American Canal from its turnout structure to 6-A Check, and the New Briar Canal from its turnout structure at Drop 5 to the Boundary Bridge — a distance of 2.6 miles.

In addition the section maintains 36.1 miles of open drain channels and 11.4 miles of tile drains appurtenant to the All-American Canal.

The section is divided into two divisions. The River Division operates and maintains the headworks, desilting basins, the All-American Canal and appurtenant drains to and including Pilot Knob Check. Western Division operates and maintains the remainder of the All-American, Coachella Branch of the All-American, and the New Briar Canals.

With a capacity of 15,155 cubic feet per second, a maximum diversion of 11,500 second-feet was made at All-American Canal Station 60 on August 4. The minimum diversion of 1,700 second feet for the year was made on December 21.

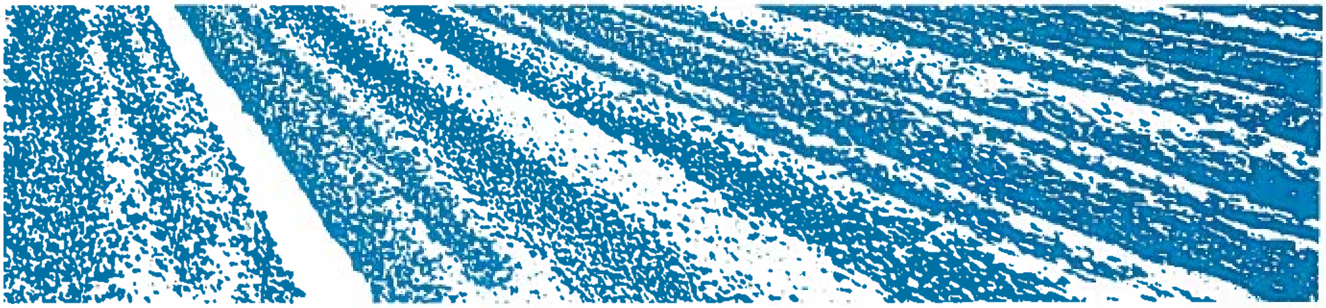
The District's order to the U.S. Bureau of Reclamation at Station 60 is the sum of irrigation water orders below Pilot Knob Check plus 8,000 second-feet for Pilot Knob Hydro Plant diversion back to the river, up to the All-American Canal Contract 13,000 second-foot limit.

Total water available for diversion through Pilot Knob Hydroelectric Plant was 444,241 acre-feet during 1961. Of this amount 117,634 acre-feet was water transferred from Siphon Drop Hydro Plant under a Contract between IID, Yuma County Water Users' Association, and Bureau of Reclamation, effective July 22, 1961.

A total of 196,553 tons of sediment was returned to the Colorado River during the year resulting from desilting operations at Imperial Dam. July was the peak month with 58,635 tons of sediment returned. Sediment load varied with the flow of the river; December was the low month with 144 tons.

Demand for water during the year was slightly greater than in 1960. The average daily departure from the estimated discharge at Pilot Knob Check was +1.83 per cent.

Maintenance operations included mechanical upkeep of structural equipment, electrical maintenance, sandblasting and painting radial gates, cathodic protection, and structural repairs. Other maintenance operations along the canals were road repairs, weed, brush, sandhill and erosion control.



Mechanical maintenance required a total of 23,678 man-hours; canal, drains, and other maintenance required 13,456 man-hours.

A total of 20 radial gates for major structures was sand-blasted and painted during the year. Three penstock gates for Drop 3 and four penstock gates for Drop 5 were installed. The new gates replace the original timber stop logs. The exterior of both barrels of New River Siphon was painted for the first time since the original installation.

Bank and Channel Maintenance
Statistical Summary — All-American Canal

Road Surfacing:		
Clay	560	CUBIC YARDS
Gravel	3,512	CUBIC YARDS
Routine Bank and Channel Maintenance using Draglines, Motor Graders, Bulldozers	3,650	HOURS
Equipment Operation:		
Draglines *(Cleaning and sloping 16 miles of berm, cleaning drains, loading trucks, and placing riprap.)*	691	HOURS
Bulldozers *(Grading along canal banks and drains, moving sand drifts, quarry development)*	902	HOURS
Motor Graders *(maintaining canal and drain roads)*	1,253	HOURS
Water truck *(Maintenance of roads along canals and drains)*	344	MILES
Miscellaneous Equipment *(Compressors, pumps, mixers, and generators used in general maintenance, canals and drains)*	804	HOURS

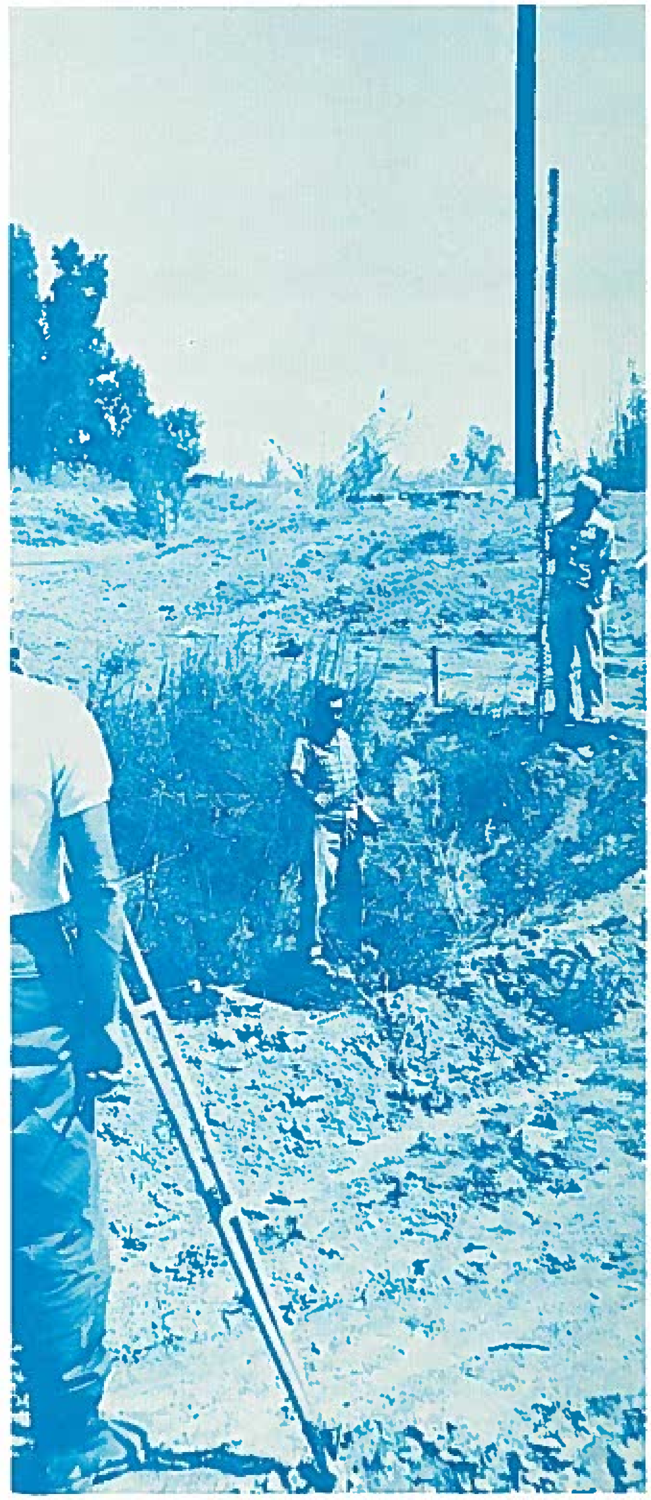
OTHER MAIN CANALS

1961 Statistics — Irrigation System

Total miles	153	
Other Main Canals consist of: *(Briar, East Highline, Rositas, Central Main, West Side Main, and Vail)*	6	
Total Number of Operational Structures	555	
Maintenance Operations		
Dragline Cleaning	17	MILES
Grading Canal Banks and Operational Roads	171	MILES
Weed and Brush Control	1,682	ACRE-MILES
Rodent Control Patrol	7,112	MILES

Lateral Canals

Total Miles		1,503	
Total Number of Operational Structures		10,408	
Concrete	9,072		
Rubble	738		
Wood	585		
Combination Materials	13		
General Maintenance			
Total Miles Cleaned		295	
Hand Labor	62 MILES		
Draglines	140 MILES		
Bucket-line Dredges	93 MILES		
Banks and Operational Road Maintenance		2,269	MILES
Weed and Brush Control		6,790	ACRE-MILES
Moss Control — Total Miles		1,731	
Chemical Treatment	876 MILES		
Mechanical Equipment	855 MILES		



Field survey party locating new wellbox in drainage system.

Onion acreage is expected to increase with a new onion dehydrating plant under construction in El Centro.

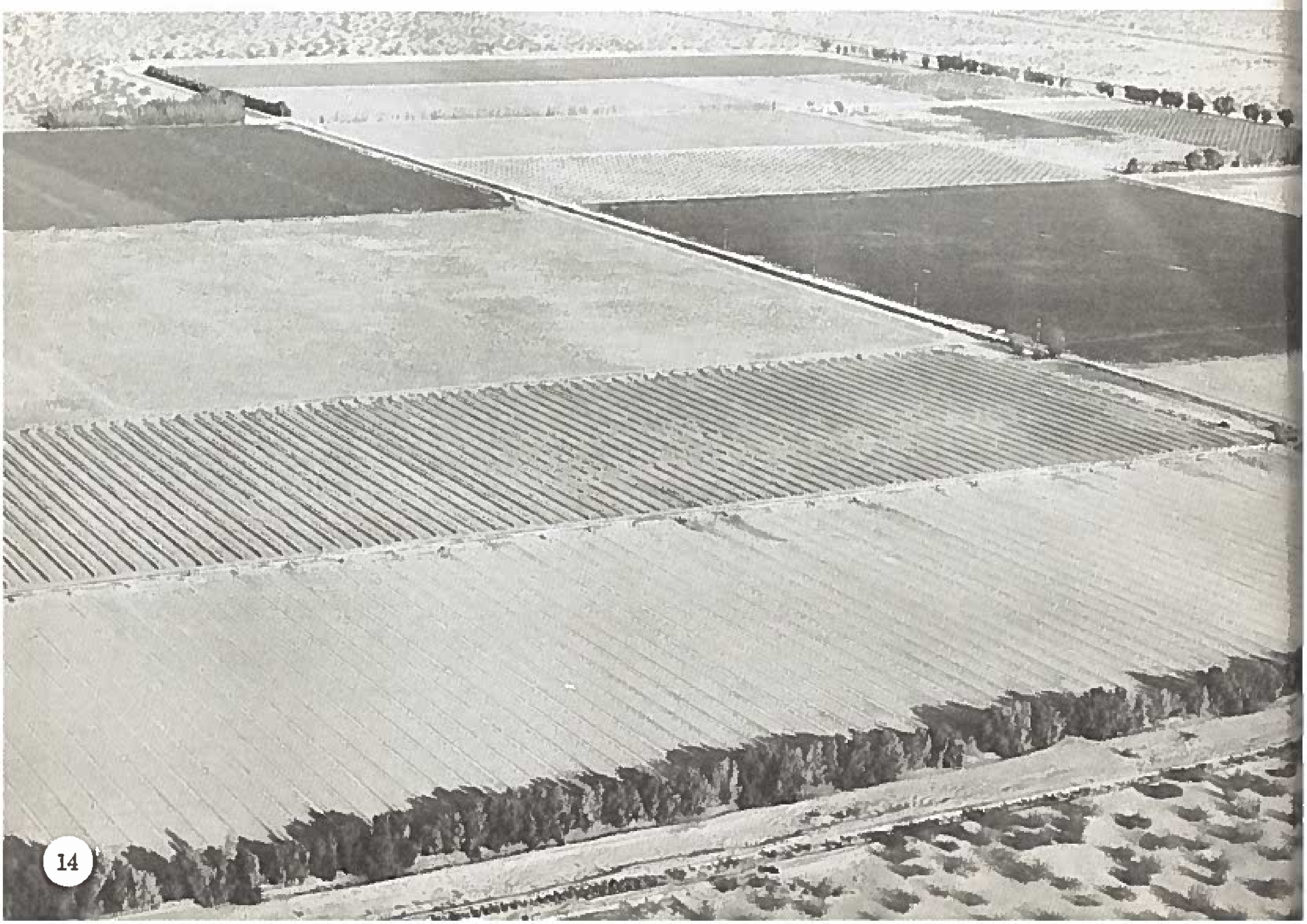
Irrigation Construction

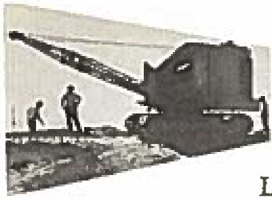
With the exception of the major construction work mentioned elsewhere in connection with the installation of the new Double Weir combination Check-Hydroelectric Plant, construction work was confined to replacement of existing points of control throughout the system.

This work consisted of:

East Highline	Replacement of Township, Mayflower, and Pomelo Headings, and one delivery.
Central Main	Replacement of old wood structures at Drops 4 and 5 with concrete, and concrete control structure at No. 4 Spillway.
West Side Main	Replacement of one delivery and one 3-bay check.

Production potentials on the undeveloped East Mesa are being tested at District Experimental Farms leased from the United States and subleased to local farmers.





LATERAL CANALS

The program of replacing existing wooden checks and deliveries in the lateral canal system as they became inoperative was continued with a total of 655 structures installed during the year.

Of the structures installed, 44 were new and 611 replacements including: 24 new deliveries and 322 replacement deliveries; 5 new concrete checks; 236 checks and headings replaced; 15 new concrete control structures, and 50 control structures replaced; 1 siphon was replaced.

The corrugated metal pipe for State Sign Route 98 crossing Woodbine Lateral Canal was replaced with 60-inch diameter pipe. The District made the installation and the State Division of Highways paid the total cost.

During the year, 13.76 miles of irrigation lateral termini were concrete lined with the District and adjacent land owners each paying 50 per cent of the cost. As a result of our participation in this program, there was a decrease of 3.18 miles of lateral canals to be operated by the District.

Rules and Regulations Governing the Distribution and Use of Water, Regulation 34, provides for the rearrangement or exclusion of irrigation lateral termini to reduce or eliminate costs where there is a mutual betterment of both District and landowners' facilities.

The District furnished engineering required prior to installation by private contractors of privately-owned concrete-lined ditches as follows:

	1957	1958	1959	1960	1961
		M I	L	E S	
Private Concrete Head Ditches Installed	135.4	105.4	126.9	130.4	102.9*
Field Investigations	308	259	269	294	195

Bringing to date a total of 1,032.2 miles.

Under the continuing program of County road crossing replacements, 106 crossings were replaced during the year, making a three-year total of 290 crossing replacements.

DRAINAGE SYSTEM

The District's drainage system development program, about 95 per cent complete, contemplates the operation and maintenance of a drainage outlet serving each Governmental Subdivision of approximately 160 acres.

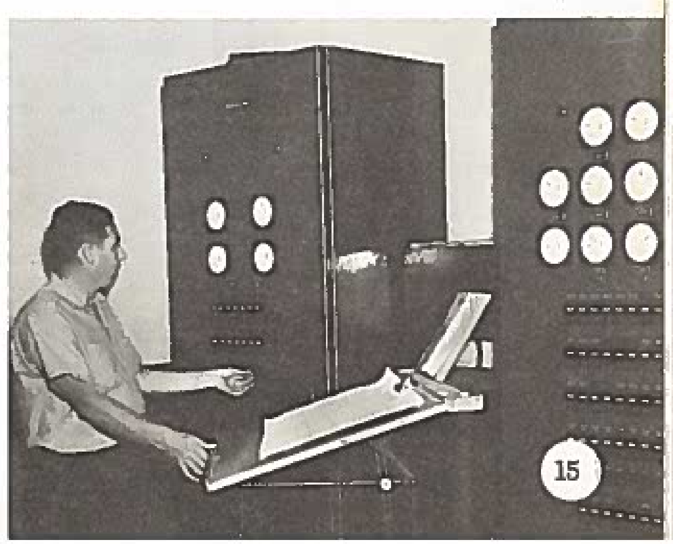
The 1961 rate of expansion of this system was somewhat less than in previous years because a large percentage of the land is presently served. The drainage design unit received 78 requests for tile drainage investigations and recommendations, completing a total of 89 requests for this and prior years.

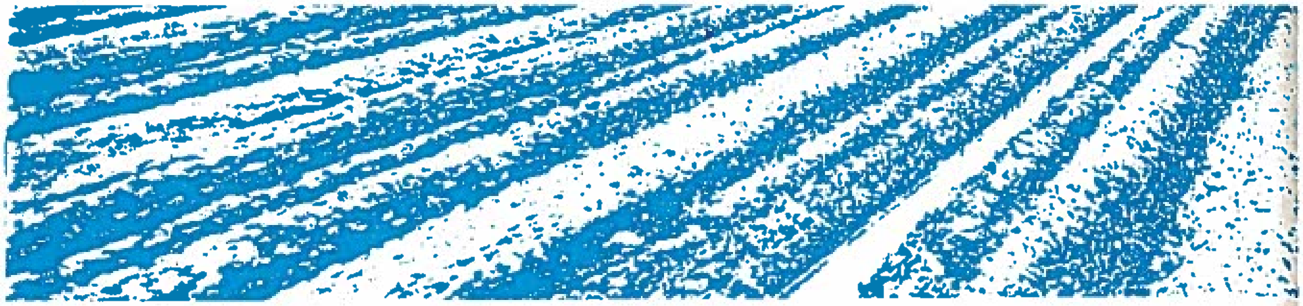
The Drainage Construction and Maintenance Unit is responsible for the operation and maintenance of the main drainage system and the seven operating divisions have the same responsibility for the lateral drainage system.

Mobile radio in vehicles provides constant communication between field units and Operating Headquarters.

Water Engineering Section includes design, drafting, blueprint and photographic units.

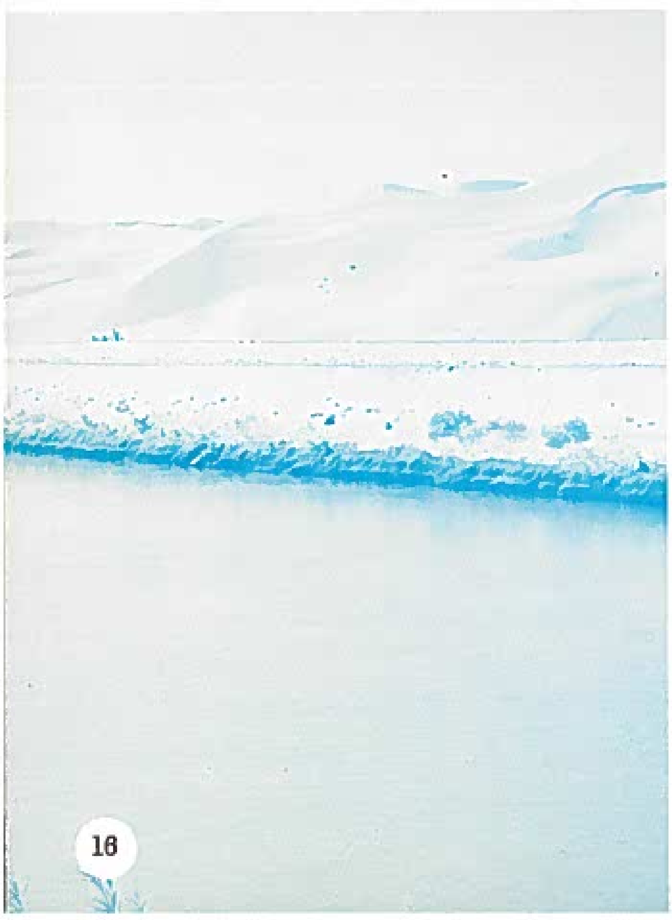
Distant canal gates are accurately adjusted by remote control units in the Watermaster's office.





Composite photo weed control 1961-1940 . . . chemicals vs. burning. Dahlia Canal at Central Main Drain.

A section of the All-American Canal passes through "Sahara-like" sand dunes enroute to the irrigated areas.



1961 MAINTENANCE STATISTICS

Main Drains

Total Miles (exclusive of New and Alamo Rivers)		556
Total Number of Structures		1,600
Concrete	1,499	
Wood	101	
General Maintenance		
Total Miles Cleaned		254
Hand Labor	36	
Draglines	218	
Banks & Operational Road Maintenance		
Total Miles Cleaned		333
Motor Graders and Bulldozers		
Weed and Brush Control		1,158 ACRE-MILES
Moss Control—Total Miles		344
Total Man-hours	2,365	
Method of Control		
Chemical	2,197 MAN-HOURS	318 MILES
Mechanical Equipment	168 MAN-HOURS	26 MILES

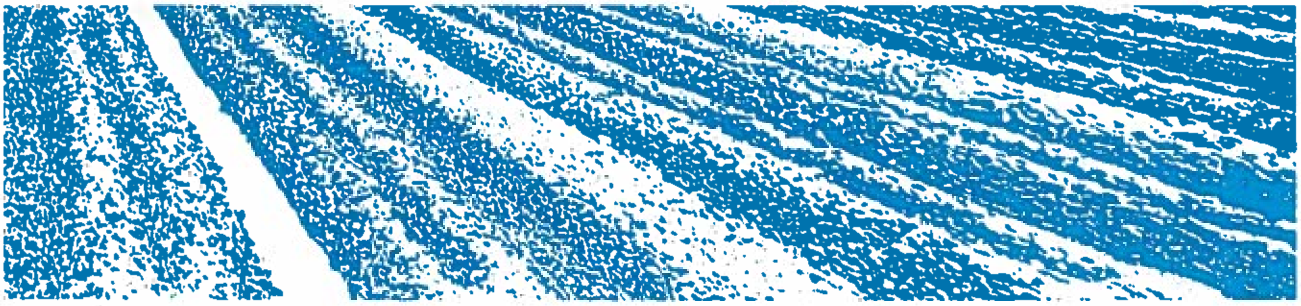
Lateral Drains

Total Miles		819
Total Number of Structures		642
Concrete	429	
Rubble	54	
Wood	102	
Combination Wood - Other Material	57	
General Maintenance		
Total Miles Cleaned		358
Hand Labor	24	
Draglines	302	
Bucket-line Dredges	32	
Banks and Operational Road Maintenance		
Total Miles Cleaned		279
Motor Graders and Bulldozers		
Weed and Brush Control		1,865 ACRE-MILES
Moss Control—Total Miles		346
Method of Control:		
Chemical	92 MILES	
Mechanical Equipment	254 MILES	

Drainage Construction

During the year, to provide a more efficient drainage system, an additional 2.09 miles of lateral drains and 1.88 miles of main drains were built. In addition, .42 miles of laterals were recon-

Lightweight asphalt pipe, perforated on top and installed in eight-foot tongue and groove sections by machine is a new innovation in field tiling.



structed, and 3.51 miles of lateral and .56 miles of main drains were deepened.

The erosion control program on the drainage system was vigorously prosecuted with the construction of Alamo River Drop No. 6, approved by the Board of Directors under Major Work Authorization.

Alamo River Drop No. 6

Location: In Alamo River channel near southwest corner of Section 30, 13-15.
Type of Structure: Reinforced concrete, overpour weir-type.
Weir Width: 70 feet Weir Height: 11 feet Length: 43 feet
Capacity: 3,150 cubic-feet per second
Purpose: Erosion control, Alamo River

Erosion control on the drainage system required installation of 31 concrete siphons to replace 24 old metal flumes and 17 bridges.

To prevent New River from cutting the high banks in the northwest corner of Tract 106, and Lot 3, Section 2, 16-12, a new channel was constructed and the flow of the water diverted away from the high bank of the river.

A wood bridge on U.S. Highway 80 over the Holtville Drain No. 4, in the northwest corner of Tract 39, 15-16, was replaced with 36-inch diameter pipe crossing. The District made the installation and the State Division of Highways paid the total cost.

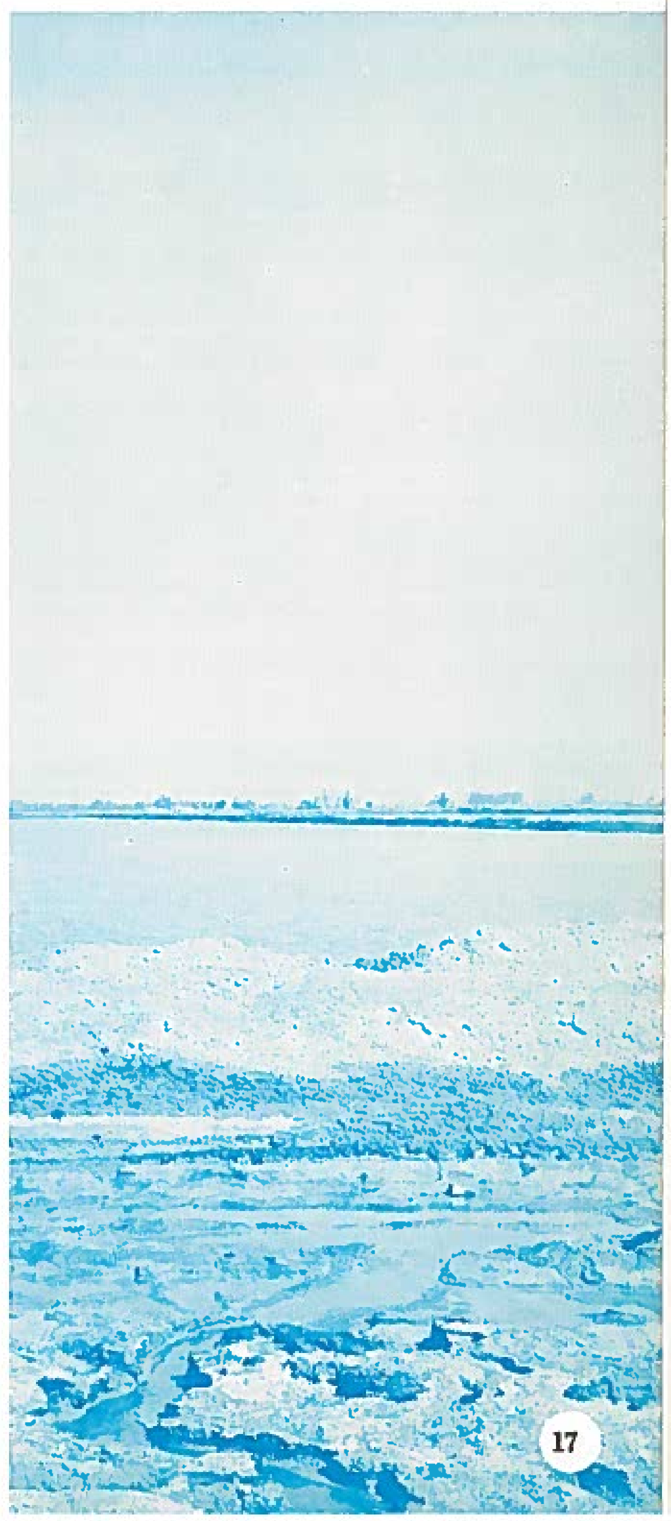
Railroad crossing on the Sandia Branch at the Maple Drain, in the northeast corner of Tract 73, 13-15, was replaced this year. The District paid for the labor and the Southern Pacific Railroad Company paid for the materials.

In instances where it was impractical to provide gravity outlets for farm tile drains, the District installed tile effluent sump pump outlets. The total in operation as of December 31 was 149, of which 22 were installed during the year. Three were installed under Salton Sea Classification, the total tile drain sumps under this class being 25.

A significant increase in installation of farm tile for landowners by private contractors was recorded during the year. The year's total was 857.51 miles, as compared to 794.05 in 1960, and 546.54 miles in 1959. To date a total of 9,028.93 miles of farm tile drains has been installed. On these installations the District and Soil Conservation Service interchange information.

Fiberglass filters are installed on top of the new asphalt drainage tile.

Leaching salts from land under reclamation after installation of drainage tile has returned thousands of acres of unproductive land to production.



DISPOSITION OF WATER DIVERTED AT IMPERIAL DAM AND TRANSPORTED THROUGH ALL-AMERICAN CANAL DURING 1961

	Acre-Feet	Total Acre-Feet
Diverted at Imperial Dam, metered at Station 60		5,038,989
*Diversions to Yuma Project	913,437	
Diverted to River at Pilot Knob Check	444,241	
Loss from Imperial Dam to Pilot Knob Check	123,659	1,481,337
All-American Canal Below Pilot Knob Check		3,557,652
Diversions to Coachella Branch at Drop No. 1	508,287	
Loss from Pilot Knob to Drop No. 1	92,165	600,452
All-American Canal Below Drop No. 1		2,957,200
Diversions from All-American Canal from Drop No. 1 to and including East Highline Canal	1,273,792	
Loss from Drop No. 1 to East Highline Canal	46,382	1,320,174
All-American Canal Below East Highline Canal		1,637,026
Diversions from All-American Canal from East Highline Canal to and including Central Main Canal	903,248	
Loss from East Highline Canal to Central Main Canal	15,280	918,528
All-American Canal Below Central Main Canal		718,498
Diversions from Central Main Canal to and including West Side Main Canal	710,154	
Loss from Central Main Canal to and including West Side Main Canal	8,344	718,498

**Water diverted to the Yuma Project and its proportionate share of losses are not charged to nor are a part of water diverted for Imperial Irrigation District and Coachella Valley County Water District. Imperial Irrigation District diverts and transports Yuma Project water through the upper section of the All-American Canal in accordance with terms of the All-American Canal Contract dated December 1, 1932, and the contract amendatory of and supplemental to the All-American Canal Contract of December 1, 1932, dated March 4, 1952. These figures represent the combined Imperial Irrigation District, U.S. Bureau of Reclamation, and U.S. Geological Survey check measurements, and shall be considered as provisional pending final reports.*

DISPOSITION OF WATER DIVERTED FROM ALL-AMERICAN CANAL TO OTHER MAIN CANALS DURING 1961

	Acre-Feet	Acre-Feet
Water Below Drop No. 1		2,957,200
Loss in All-American Canal and Other Main Canals Before Being Diverted to Lateral Canal System	275,475	
Operational Loss from All-American Canal and Other Main Canals	23,837	299,312
Delivered to Lateral Canal System		2,657,888
*Loss in Lateral Canal System Before Delivery to Users	408,008	
Operational Loss from Lateral Canals	54,205	462,213
Deliveries to Users		2,195,675

**Deliveries to users are based on gate measurements. Gate measurements are approximately 10 per cent low, resulting in the delivery of 10 per cent more water than is charged for. This difference and water for some 1,500 service pipes supplying farmsteads, outside subdivisions, etc., are included in the total shown as loss and unaccounted for in lateral canal system before delivery to users.*

ANNUAL INVENTORY OF AREAS RECEIVING WATER SERVICE DURING 1961

GARDEN CROPS	Acres Being Served Gross	Dup.	Net
Broccoli	245		245
Cabbage	2,237	1,693	544
Cantaloupes	4,237	207	4,030
Carrots	3,327	2,493	834
Carrots (Seed)	91		91
Celery	25	25	
Cucumbers	35	35	
Eggplant	3	3	
Endive	13	2	11
Garlic	548		548
Lettuce	30,699	24,368	6,331
Lettuce (Seed)	80	5	75
Melons (Mixed)	18	18	
Mustard	163		163
Okra	72	8	64
Okra (Seed)	2		2
Onions	2,608	1,823	785
Onions (Seed)	75		75
Radishes	4	2	2
Romaine	35	35	
Squash	954	268	686
Table Beets	10		10
Tomatoes	1,749	729	1,020
Vegetables (Mixed)	164	103	61
Watermelons	3,655		3,655
Total	51,049	31,817	19,232

FIELD CROPS	Acres Being Served Gross	Dup.	Net
Alfalfa	205,053	33,525	171,528
Alfalfa (Seed)	8,503	8,280	223
Anise (Seed)	4	4	
Barley	86,609	39	86,570
Bermuda	4,087	712	3,375
Cane	275		275
Clover	1,796		1,796

FIELD CROPS *(Continued)*	Acres Being Served Gross	Dup.	Net
Clover (Seed)	4		4
Cotton	53,562	2,563	50,999
Ear Corn	14	4	10
Flax	10,273		10,273
Flowers (Seed)	8	8	
Head Corn	37,031	12,847	24,184
Millet	700		700
Oats	2,632	10	2,622
Rice	65		65
Sargo	74	74	
Sesbania	1,673	817	856
Silage	321	246	75
Soil Bank	35	35	
Soy Beans	26	15	11
Sudan	6,764	4,629	2,135
Sugar Beets	49,562	327	49,235
Wheat	1,021		1,021
Total	470,092	64,135	405,957

PERMANENT CROPS	Acres Being Served Gross	Dup.	Net
Apricots	16		16
Asparagus	1,650		1,650
Citrus (Mixed)	172	3	169
Dates	104	2	102
Grapefruit	852		852
Grapes	60		60
Lemons	124		124
Nursery	16		16
Oranges	609		609
Palms (Decorative)	7		7
Pasture (Permanent)	575	20	555
Pasture (Blue Panicum)	600	5	595
Pecans	97	2	95
Tangerines	359		359
Total	5,241	32	5,209

	Gross	Dup.	Net
GRAND TOTAL	526,382	95,984	430,398

Average No. of Farms Reported	6,072
Average No. of Owner-Operated (55%)	3,353
Average No. of Tenant-Operated (45%)	2,719
Average Area — Acres	79.69

SUMMARY OF AREA SERVED

CROPS	Gross	Dup.	Net
Field Crops	470,092	64,135	405,957
Garden Crops	51,049	31,817	19,232
Permanent Crops	5,241	32	5,209
Totals	526,382	95,984	430,398
Area Being Reclaimed (Leaching)			5,266
Net Area Irrigated			435,664
Area Farmable but not Farmed During 1961 (Fallow Land)			33,820
Total Area Farmable			469,484
Area of Farms in Homes, Feed Lots, Corrals, Etc.			13,485
Area in Cities, Towns, and Airports			11,001
Area of Farms Having Less Than Two Acres			927
Total Area Receiving Water Service			494,897
Area in Drains, Canals, Rivers, and Railroads			69,916
Area Below - 230 Salton Sea Reserve Boundary and Area Covered by Salton Sea			42,000
Undeveloped Area of Imperial, West Mesa, East Mesa, and Pilot Knob Mesa Units			301,885
Total			908,698

J. Fred Hesse
Manager

POWER DEPARTMENT

The District's power service area covers approximately 6,600 square miles, including most of Imperial County and Coachella Valley in Riverside County. Approximately 80 per cent of the service area is unpopulated wasteland, with facilities confined to populated areas. Approximately 99 per cent of our potential customers are receiving electric service.

The District electrical system extends about 150 miles from the Mexican boundary to the extreme northern portions of Coachella Valley.

District owned and operated generating units with a total name plate capacity of 173,960 kilowatts include Pilot Knob Hydroelectric Plant, hydro plants at Drops 2, 3 and 4 on the All-American Canal, Double Weir Hydroelectric Plant on the Central Main Canal, El Centro Steam Plant, and the Brawley Diesel Plant.

Other power sources include purchases from the U. S. Bureau of Reclamation at Davis Dam, and joint participation under a three-party agreement with California Electric Power Company and Arizona Public Service Company for power produced at the Axis Steam Station near Yuma, Arizona.

During 1961 District owned and operated hydro plants supplied 33 per cent of the system's power requirements as compared to 36 per cent in 1960. El Centro Steam Plant and the Brawley Diesel Plant provided 21 per cent, the same as in 1960. Purchases from Davis Dam supplied 19 per cent of the power system needs, also the same as 1960. An increase in power received from the Axis plant found this source supplying 25 per cent of the District's power needs during the year as compared to 24 per cent in 1960. Other sources supplied the remaining 2 per cent.

Operation and Maintenance

Total costs of operation and maintenance of the system during 1961 were $4,721,756. More than three-fourths of the $504,481 increase over 1960 resulted from greater production costs.

The 1961 costs for distribution, sales promotion, accounting and collecting, and administrative and general expenses were somewhat higher than 1960. Transmission costs decreased.

During the year there was a total of 17,224 distribution transformers in service for a total of 283,821 kva. The transformer shop painted and reconditioned 889 transformers and rewound 55 during the year. The meter shop tested a total of 4,464 meters, of which 366 were tested in the field.

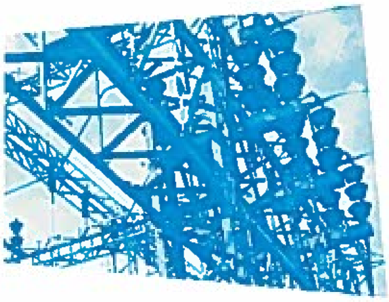
Construction

During the year the Hydroelectric Plant at the Double Weir structure on the Central Main Canal was completed and put into operation. The new Double Weir plant is not only the first to be engineered and constructed entirely by District personnel but, in addition, is the first hydro plant installed in the canal system other than the All-American Canal. The plant is fully automatic, feeding directly into the distribution system. It has a name plate capacity of 560 kilowatts.

Work was started in 1961 on the "N" Transmission line from Niland to Coachella. The 92/161-kv line will be 53 miles in length and will cost approximately $975,000.

Costs of Operation and Maintenance

	1961	1960	Increase+ Decrease−
Steam Generation	$1,205,332	$1,198,726	$ 6,606+
Hydroelectric Plants	127,171	128,113	942−
Brawley Diesel Plant	45,221	47,288	2,067+
Purchased Power and Other Expenses	1,927,889	1,533,979	393,910+
Transmission Expense	188,740	199,064	10,324−
Distribution Expense	654,269	611,387	42,882+
Customer Accounting and Collecting	331,079	296,384	34,695+
Sales Promotion	117,428	103,263	14,165+
Administrative and General	629,108	603,552	25,456+
Total	$5,226,237	$4,721,756	$ 504,481+



A new all-electric tract eclipsed all previous sales records.

New facilities for power construction crews and equipment.

America's Dateland, Coachella Valley.

The line was designed and is being constructed entirely by District personnel and is scheduled for completion before the summer of 1962, when it will be needed to accommodate the rapidly increasing load in Coachella Valley.

During 1961 a total of $1,159,674 was spent on current additions and improvements to the system, a decrease of $22,304 over the previous year. The major portion of these funds was spent on distribution plant.

Expenditures were distributed as follows: distribution plant, $947,488; transmission plant, $129,643; engineering and supervision, $66,327; general plant, $16,216.

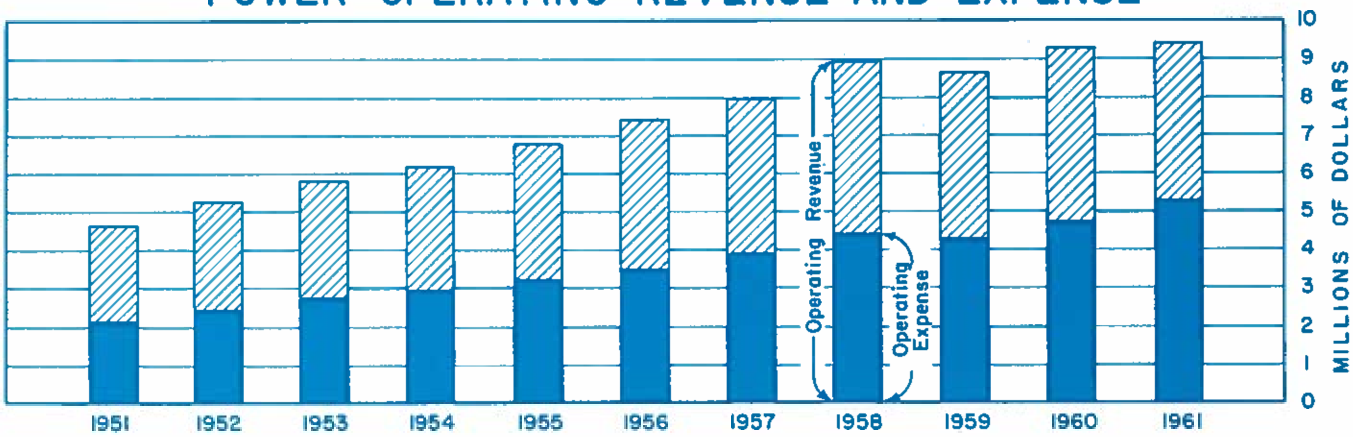
Of the distribution plant expenditures, $274,387 was spent for poles and fixtures; $178,428 for conductors and devices; $244,832 for transformers; $63,706 for services; and $52,314 for meters.

Construction of four substations during the year provided the system with a total of 74 substations with 196 transformers installed having a capacity of 720,935 kva.

Miles of Power Lines in Service December 31, 1961

	Number of Miles	Miles Added in 1961
Transmission	465.6	9.0
Sub-transmission	355.0	5.8
Primary Distribution	2,378.0	46.0

POWER OPERATING REVENUE AND EXPENSE



Numerous cooking schools were held for homemakers in the service area, promoting increased use of electrical appliances.

Appliance servicemen repair ranges and water heaters at no charge to the customer.

Sales and Service

Revenue from the sale of electrical energy set a new record in 1961 of $9,406,045, an increase of $177,840 over 1960. Revenue from sales to ultimate customers recorded a $187,974 increase.

From the standpoint of both kilowatt-hour sales and revenue, 1961 was not an outstanding year. A mild summer and the resultant lower air conditioning usage was reflected in only a small increase in sales and revenues over the 1960 totals. Total kilowatt-hour sales were 597,122,118, as compared to 585,529,375 in 1960.

The 1961 system load peak of 163,200 kilowatts was a substantial increase over the 1960 mark of 156,600. At the end of the year there were 32,350 active meters in service, as compared to 31,569 at the end of 1960.

In co-operation with the Public Information Office, an aggressive sales promotion program planned to increase the winter residential domestic load was continued. Promotional efforts were designed to stimulate dealer sales of the electric range, water heater, dryer, and heat pump. Excellent results were attained, particularly on sales of water heaters and heat pumps.

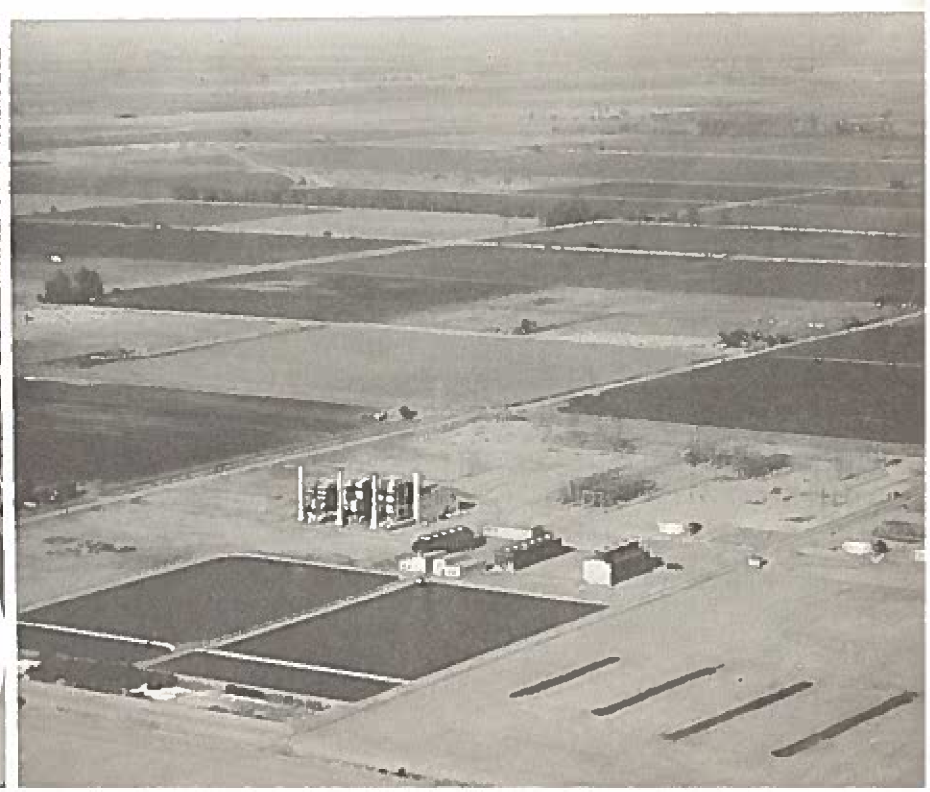
Sales efforts by division superintendents and commercial representatives were augmented by use of all media—newspapers, radio, television, outdoor posters, direct mail, and displays. All dealers were encouraged to tie-in with our advertising and promotion program.

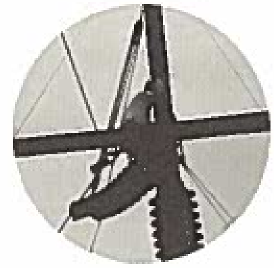
The Home Service section provided an important assistance to appliance dealers by making after-the-sale home demonstrations on major appliances. In addition, programs were presented at the Demonstration Kitchen, and at classroom demonstrations for various high school home economics classes.

The Home Service section prepared weekly homemaking columns for daily and weekly newspapers in the service area. The section also served as a clearing-house for a large number of mail and phone requests for recipes and similar information.

Medallion and All-Electric construction is a growing trend in Imperial and Coachella Valleys.

El Centro Steam Generating Plant has a name plate capacity of 94,000 kilowatts.

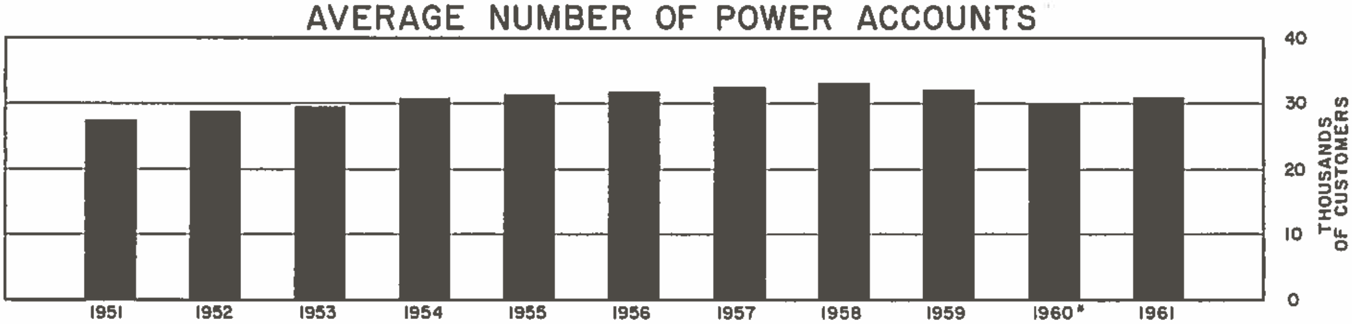




POWER SALES 1961-60

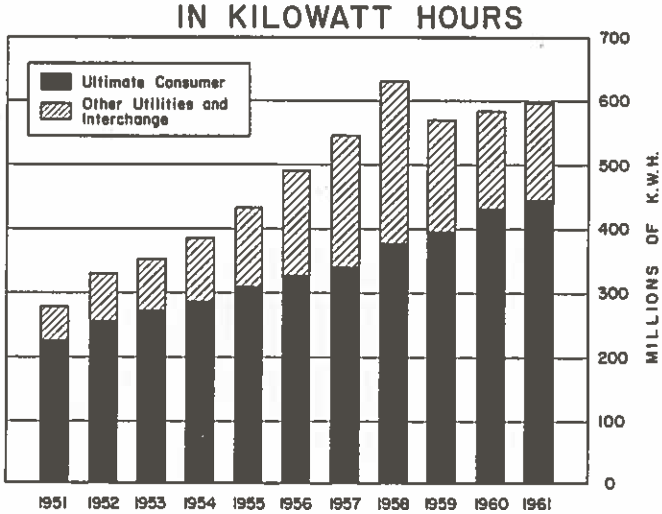
	1961		1960	
ULTIMATE CONSUMERS	Dollars	Per Cent	Dollars	Per Cent
Domestic	$3,546,486	37.7	$3,487,275	37.8
Commercial	2,649,776	28.2	2,537,347	27.5
Industrial	1,094,358	11.7	1,078,183	11.7
Agricultural	615,493	6.5	623,530	6.7
Street Lighting, Public Authority and Interdepartmental	263,988	2.8	255,792	2.8
TOTAL Ultimate Consumers	$8,170,101	86.9	$7,982,127	86.5
Other Utilities	$1,235,944	13.1	$1,246,077	13.5
TOTAL SALES	$9,406,045	100.0	$9,228,204	100.0

AVERAGE NUMBER OF POWER ACCOUNTS

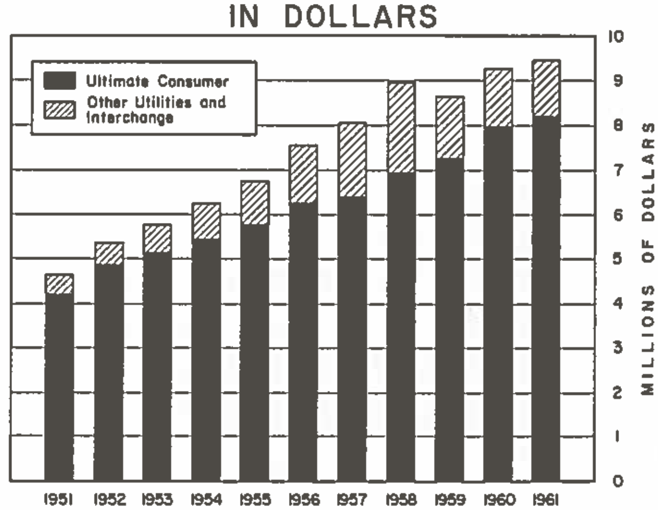


* DECREASE 1960 DUE TO ELIMINATION OF FLAT RATE WATER HEATER CUSTOMERS.

TOTAL POWER SALES IN KILOWATT HOURS



TOTAL POWER SALES IN DOLLARS



Jack B. Brockett
Controller

FINANCE AND ACCOUNTING DEPARTMENT

CONSOLIDATED STATEMENT OF ASSETS AND LIABILITIES AND NET WORTH

December 31, 1961

ASSETS

Funds For:	
Operation and Maintenance	$ 6,902,350
Payment of Bond Principal and Interest	4,031,668
New Construction	2,621,929
Reserve Funds for Replacements & Emergencies	2,551,233
Other Special Funds	245,009
Total Funds	$16,352,189
Accounts Receivable & Current Assessments	1,846,063
Notes Receivable	218,000
Materials and Supplies	874,664
Delinquent Assessments on Tax Deed Land	71,624
Prepayments on All-American Canal Contract	2,813,720
Deferred Charges and Prepaid Expenses	916,051
Properties (Water and Power Systems)	102,624,056
Total Assets	$125,716,367

LIABILITIES

Current Liabilities	$ 1,507,427	
Outstanding Bonds	34,896,000	
Deferred Contract Installments	22,768,201	
Reserves	34,775	
Deferred Credits	1,894,571	$ 61,100,974
NET WORTH		64,615,393
Total Liabilities		$125,716,367

The Net Worth is 51.5% of Total Assets

CERTIFICATE

We have examined the balance sheet of the Imperial Irrigation District as of December 31, 1961, and the related statements of revenue and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures that we considered necessary in the circumstances, except that the actual count of the physical inventories of materials and supplies was limited to a test check of the perpetual inventory card records, and no written confirmation of the receivables was made. We considered the systems of controls in effect adequate to properly reflect the balances of these accounts.

In our opinion, the accompanying Balance Sheet and Statements of Revenues and Surplus present fairly the financial position of the Imperial Irrigation District at December 31, 1961, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

HUTCHINSON AND BLOODGOOD

(Signed) By Paul G. Taylor
Certified Public Accountant

COMPARATIVE INCOME AND EXPENSE STATEMENT AND BALANCE SHEET

WATER DEPARTMENT

	1961	Over 1960	Under 1960
Operating Revenue	$ 6,135,195	$ 17,959	
Operating Deductions	3,725,463	223,194	
Operating Income	2,409,732		$ 205,235
Other Income	139,675	2,672	
Gross Income	2,549,407		202,563
Income Deductions	239,719		20,337
Net Income	$ 2,309,688		182,226

BALANCE SHEET

	1961	Over 1960	Under 1960
Current Assets	$ 4,694,689	$ 284,302	
Investment and Fund Accounts	2,961,716	326,379	
Fixed Assets	55,774,451	1,006,658	
Other Assets and Deferred Charges	3,499,500		186,506
Total Assets	$66,930,356	1,430,833	
Current Liabilities	679,435		8,956
Long-Term Liabilities	28,243,580		1,072,199
Deferred Credits and Reserves	1,696,097	14,246	
Surplus	36,311,244	2,497,742	
Total Liabilities and Surplus	$66,930,356	1,430,833	

POWER DEPARTMENT

	1961	Over 1960	Under 1960
Operating Revenue	$ 9,527,500	$ 208,685	
Operating Deductions	7,009,867	535,101	
Operating Income	2,517,633		$ 326,416
Other Income	246,934	28,624	
Gross Income	2,764,567		297,792
Income Deductions	891,070		21,577
Net Income	$ 1,873,497		276,215

BALANCE SHEET

	1961	Over 1960	Under 1960
Current Assets	$ 6,456,436	$ 418,996	
Investments and Fund Accounts	5,472,977	81,338	
Fixed Assets—Electric Plant	46,846,674	287,842	
Other Assets and Deferred Charges	9,924		39
Total Assets	$58,786,011	788,137	
Current Liabilities	827,992	9,081	
Long-Term Liabilities	29,420,621		1,002,200
Deferred Credits and Reserves	233,249	39,392	
Surplus	28,304,149	1,741,864	
Total Liabilities and Surplus	$58,786,011	788,137	

Customer Accounting Section services approximately 40,000 power and water accounts per month.

FUND BALANCES—DECEMBE

	December 31 1961	December 31 1960	Increase or Decrease*
WATER OPERATING FUNDS:			
Assessments Collected for Following Year	$ 375,063	$ 382,257	$ 7,194*
Other Cash Balances	2,226,720	1,852,154	374,566
Total Cash Balances	$2,601,783	$2,234,411	$ 367,372
WATER BOND AND WARRANT FUNDS:			
Assessments Collected for Following Year	$ 505,034	$ 515,437	$ 10,403*
Other Cash Balances	278,300	320,033	41,733*
Total Cash Balances	$ 783,334	$ 835,470	$ 52,136*
WATER CONSTRUCTION FUNDS:			
Assessments Collected for Following Year	$ 116,615	$ 118,947	$ 2,332*
Other Cash Balances	1,250,022	1,048,022	202,000
Total Cash Balances	$1,366,637	$1,166,969	$ 199,668
MISCELLANEOUS WATER FUNDS:			
Total Cash Balances	$1,292,570	$1,123,015	$ 169,555
TOTAL WATER DEPARTMENT FUND BALANCES	$6,044,324	$5,359,865	$ 684,459

, 1961, & DECEMBER 31, 1960

	December 31 1961	December 31 1960	Increase or Decrease*
POWER OPERATING REVENUE FUNDS:			
Cash Balances	$ 4,300,567	$ 3,876,980	$ 423,587
POWER BOND FUNDS:			
Cash Balances	3,248,334	3,103,364	144,970
POWER CONSTRUCTION FUNDS:			
Cash Balances	1,255,292	1,375,973	120,681*
MISCELLANEOUS POWER RESERVE FUNDS:			
Cash Balances	1,503,672	1,461,868	41,804
TOTAL POWER DEPARTMENT FUND BALANCES	$10,307,865	$ 9,818,185	$ 489,680
ALL FUNDS:			
Assessments Collected for Following Year	$ 996,712	$ 1,016,641	$ 19,929*
Other Cash Funds	15,355,477	14,161,409	1,194,068
TOTAL CASH BALANCES	$16,352,189	$15,178,050	$1,174,139

CONSOLIDATED REVENUE AND EXPENDITURE ST

IMPERIAL IRRI

OPERATING REVENUES:			
Realized Revenue from:	CONSOLIDATED	POWER DEPT.	WATER DEPT.
Current Year Assessments	$ 1,480,698		$ 1,480,698
Penalties and Costs on Assessments	3,437		3,437
Redemption of Delinquent Assessments	34,155		34,155
Interest Collected on Redemptions	3,665		3,655
Total Collected by Assessor-Collector	$ 1,521,955		$ 1,521,955
Sales of Land Held under Assessment Deed	13,462		13,462
Equivalent of Current Assessments on Tax Deed Land	572		572
Rental of Land Held under Assessment Deeds	688		688
Interest on Land Sales Contracts	1,080		1,080
Total Revenues Derived from Assessments	$ 1,537,757		$ 1,537,757
Water Sales	4,293,734		4,293,734
Gate Service Charges	62,738		62,738
Pipe Service Charges	37,589		37,589
Rental of Buildings	85,874	$ 37,194	48,680
Rental and Sales of Operative Land	19,994		19,994
Rental of Equipment	21,158		21,158
Contributions for Operation and Maintenance of All-American Canal	103,574		103,574
Total Water Sales and Misc.	$ 4,624,661		$ 4,587,467
POWER SALES:			
Residential or Domestic Sales	$ 3,546,485	$ 3,546,485	
Rural Sales—Agricultural Power	615,493	615,493	
Commercial Sales	2,649,777	2,649,777	
Industrial Sales	1,094,359	1,094,359	
Public Street and Highway Lighting	89,877	89,877	
Other Sales to Public Authorities	91,570	91,570	
Sales to Other Electric Utilities	1,235,943	1,235,943	
Interdepartmental Sales	82,541	82,541	
Total Power Sales	$ 9,406,045	$ 9,406,045	
Miscellaneous Revenue	94,232	84,261	9,971
TOTAL OPERATING REVENUES	$15,662,695	$ 9,527,500	$ 6,135,195

EMENT — JANUARY 1, 1961-DECEMBER 31, 1961

TION DISTRICT

	CONSOLIDATED	POWER DEPT.	WATER DEPT.
Total Operating Revenue—Brought Forward	$15,662,695	$ 9,527,500	$ 6,135,195
OPERATING REVENUE DEDUCTIONS:			
Operating Expenses:			
Operation and Maintenance of Water System	$ 2,746,439		$ 2,746,439
Operation and Maintenance of All-American Canal	688,898		688,898
Operation and Maintenance of Imperial and Laguna Dams	51,666		51,666
Operation and Maintenance of Power System:			
Production Expenses	1,402,019	1,402,019	
Power Purchased	1,903,594	1,903,594	
Transmission Expenses	188,740	188,740	
Distribution Expenses	654,269	654,269	
Accounting and Collecting Expense	331,079	331,079	
Sales Promotion Expenses	117,428	117,428	
Administrative and General Expense	629,108	629,108	
Total Power Operation and Maintenance	$ 5,226,237	$ 5,226,237	
Miscellaneous Expenses	33,422		33,422
Total Operating Expenses	$ 8,746,662	$ 5,226,237	$ 3,520,425
Depreciation and Amortization:			
Depreciation of Equipment and Facilities	$ 30,479		$ 30,479
Depreciation of Buildings	53,938		53,938
Depreciation of Power System	1,730,965	1,730,965	
Amortization of Plant Acquisition Adjustment	35,966	35,966	
Losses on Sales and Retirement of Assets	118,090		118,090
Taxes	19,230	16,699	2,531
Total Operating Revenue Deductions	$10,735,330	$ 7,009,867	$ 3,725,463
Net Operating Revenue	$ 4,927,365	$ 2,517,633	$ 2,409,732
OTHER INCOME:			
Interest on U.S. Securities	$ 40,289	$ 37,799	$ 2,490
Interest on Bank Deposits	316,400	200,507	115,893
Miscellaneous Interest	29,920	8,628	21,292
Total Other Income	$ 386,609	$ 246,934	$ 139,675
GROSS INCOME	$ 5,313,974	$ 2,764,567	$ 2,549,407
INCOME DEDUCTIONS:			
Interest on District Bonds	$ 1,092,016	$ 859,345	$ 232,671
Amortization of Debt Discount	7,048		7,048
Lease of Power Rights	31,725	31,725	
Total Income Deductions	$ 1,130,789	$ 891,070	$ 239,719
NET INCOME	$ 4,183,185	$ 1,873,497	$ 2,309,688

Robert D. Reynolds
Manager (right)

OPERATIONS SERVICES DEPARTMENT

The Operations Services Department provides other operating departments with services common to all of them. The department includes the Right-of-Way Section, Building and Grounds Section, Mechanical Section, and Purchasing and Stores Section.

During the year the Right-of-Way Section participated in the leasing of District-owned land in the Salton Sea area for recreational purposes, and negotiated a number of right-of-way agreements, encroachment permits, and other agreements essential to District operations, the major one being the completion of "N" transmission line.

The Building and Grounds Section completed construction of one new zanjero house and installation of tile drainage in Headquarters Yard. In addition the Building and Grounds Section supervised the planning and construction of the new Imperial Division Office building, and Service Station, Electrical Repair Shops and Construction Dock and Transformer Shop at Imperial headquarters.

The Mechanical Section maintained an automotive fleet of 388 units, driving 4½ million miles during the year. The heavy equipment fleet, including draglines, bulldozers and graders, operated in excess of 54,000 hours.

The Purchasing and Stores Section, by proper planning, maintained a balanced material and supply inventory of approximately $740,000, a reduction over the previous year. Purchases in the amount of $4,670,-000 were required for the District's operation, of which amount suppliers within the service area furnished materials and services in excess of $2,795,000. The balance of the purchases includes two gas turbine power units and other electrical equipment not available through local vendors.

Studies and computations of electrical equipment purchases were assembled in connection with the antitrust suits against certain manufacturers.

The new Imperial Power and Water Division Office was planned and contracted in 1961. The building was completed in early 1962.

A modern electric shop was included in the new Electrical Repair Shops and Construction Dock Building.

Reginald L. Knox, Jr., *left*
Chief Counsel

Harry J. Horton
Special Counsel on Water Matters

LEGAL DEPARTMENT

The Legal Department functions in an advisory capacity to the Board of Directors and executives of the District acting in their official capacities, supervises the preparation and handling of such matters as contracts, bids, purchases, acquisitions of land rights-of-way, annexations, assessments, and other legal matters.

The Department handles all litigation involving the District or litigation in which the District has a legal interest. Except in matters involving litigation, departmental activities are largely reflected in functions of other departments.

The Legal staff consists of the Chief Counsel, Assistant Counsel and a Special Counsel on Water Matters.

Arizona vs. California

This case was originally filed by Arizona in 1952, and was pending at the beginning of 1961. The Honorable Simon H. Rifkind, appointed Special Master by the Supreme Court of the United States, held hearings during the period from 1956 to 1959. In June 1959, the matter was submitted to the Master for his recommended decree. In December 1960, the Master filed his report, which included a recommended decree, with the Supreme Court of the United States.

In 1961, all California defendants filed exceptions to the Report and the District, Palo Verde Irrigation District, and Metropolitan Water District of Southern California, each filed a separate statement of exceptions. Briefs were subsequently prepared and filed jointly on behalf of all California defendants, and the District filed a separate closing brief in support of its position.

During the fall of 1961 this case was calendared for oral argument before the Supreme Court of the United States, beginning January 8, 1962, and continuing for four days. At the time scheduled for oral argument, the parties to this matter will present their arguments in favor of, and objections to, the Special Master's Report.

Salton Sea Damage Claims

During 1961 the Department was successful in negotiating a satisfactory settlement of the Desert Beach Corporation decision. This matter is presently being processed for final settlement. Prior to reaching a settlement in the case, six additional plaintiffs filed an action for damage against the District and the Coachella Valley County Water District based on claims heretofore filed in 1955 and 1956. These actions are presently at issue but the Court has not set them down for trial. All plaintiffs' claims as set forth in the respective causes of action, total $71,002.80.

Anti-Trust Suits

Eleven damage suits were filed in United States District Court against electrical equipment manufacturers who had sold equipment to the District during the periods covered in criminal anti-trust convictions of the manufacturers for violations of the Clayton Anti-Trust Act. The cases claim damages of $868,750, with the request that the amount be trebled as provided by the Clayton Anti-Trust Act.

Negotiations are being conducted among other publicly-owned utilities and public agencies to determine how and in what manner these matters will be brought to trial.

Condemnation Actions

During the year, four condemnation actions, filed on behalf of the District, were satisfactorily settled, concluded or dismissed. Negotiations are under way to settle an additional action filed during the year for the acquisition of twelve parcels as rights-of-way for the "N" transmission line in Riverside County. All rights-of-way for the "N" transmission line in Imperial County were satisfactorily negotiated. There were two condemnation actions filed naming the District as a defendant and both of these actions were satisfactorily settled.

Miscellaneous Litigation

Other types of litigation, including hearings and proceedings, were handled by the Legal Department during the 1961 year. A considerable number of quiet title actions, delinquent power accounts, damage claims as concerns personal injuries, crops and other property, and bankruptcy claims were handled.

The Department also actively participated in a number of proceedings and hearings involving the District's interests before administrative tribunals of the State of California including the Public Utilities Commission, the Districts Securities Commission, the State Department of Water Resources, as well as matters pending before administrative tribunals of the United States; including the Federal Power Commission, the Department of Interior, and the United States Land Office.

The Legal Department reviews Federal legislative work and activities of the National Reclamation Association and works with the Irrigation Districts Association of California, Colorado River Board, and other interested agencies in State legislative matters.

JEROME J. MOLOF, *left,*
Work Unit Conservationist,
U.S. Department of Agriculture
Soil Conservation Service

DONALD B. CLARK
Drainage Engineer
Imperial Irrigation District

SOIL CONSERVATION

1961 marks the completion of 21 years of joint co-operation between Imperial Irrigation District and the U.S. Department of Agriculture Soil Conservation Service in soil and water conservation practices.

In the early 1940's the District requested Soil Conservation Service to provide engineers and soil scientists to make research studies of Imperial Valley drainage and salt control problems. As a result of these studies various action programs were initiated jointly.

A unique partnership was created when Imperial Irrigation District also became the Soil Conservation District for Imperial Valley as a result of a Memorandum of Understanding between USDA-SCS and the District. The District Board of Directors sets policy for soil conservation engineers, both organizations assist local farmers in soil surveys and drainage tile designs, and correlate information on all surveys and designs.

Through these joint efforts tools, methods, procedures and facts become available which are used to answer questions such as which lands were feasible and economical to drain, the size and location of tile lines so as to provide maximum drainage, optimum depth and spacing of tile lines, leaching required to maintain salt balance in the soil, cropping system and other agronomic practices required for reclamation.

During 1961 a total of 103 Farm Plans was prepared covering 13,066 acres. To date, there are approximately 900 completed plans involving 136,000 acres in use in Imperial Valley.

Soil Surveys were completed by SCS and the District on a total of 29,770 acres during the year. Surveys have now been completed on approximately 405,770 acres in Imperial Valley.

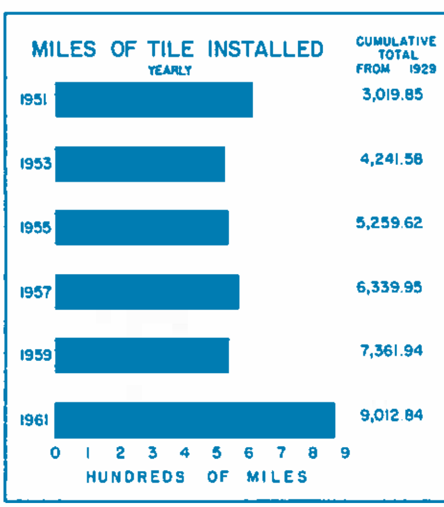
Studies are still in progress trying to find a practical method of eliminating bacterial deposits in drainage tile. In addition studies are still continuing to determine the practicability of eight-foot sections of perforated pipe using fiberglass filters. In addition, field studies were initiated to evaluate time and rate of drawdown in relation to depth and spacing of tile laterals.

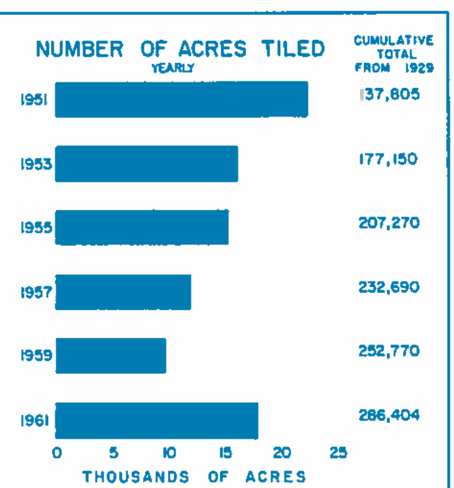
A coordinated information program was instituted about three years ago with the opening of the District Public Information Office. This program includes not only releases for general distribution, but also training curricula for foreign agricultural specialists.

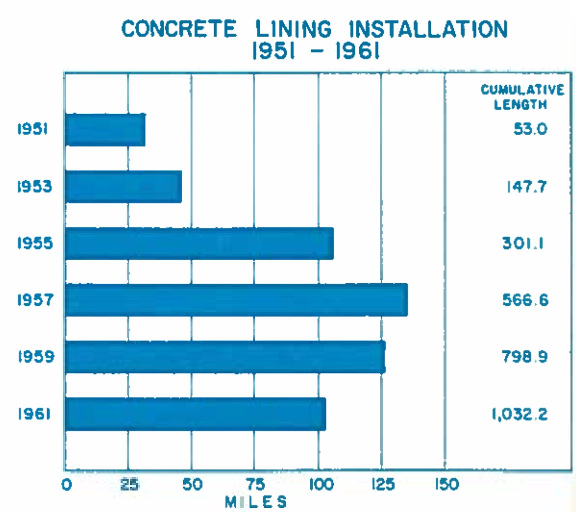
Technical assistance made available to the Imperial Irrigation District through an agreement with the Soil Conservation Service includes a work unit conservationist, one civil engineer, one agricultural engineer, three soil scientists, two conservation aids and one engineering aid.

Summary of Accomplishments

Conservation Crop Rotations	13,160	ACRES
Crop Residue Utilization	6,300	ACRES
Subsoiling	5,980	ACRES
Toxic Salt Reduction	9,125	ACRES
Drop Spillways	24	STRUCTURES
Tile Drainage	2,373,300	LINEAL FEET
Tile Drainage	11,716	ACRES
Canal Lining	549,246	LINEAL FEET
Land Leveling	9,172	ACRES
Improved Water Application	5,438	ACRES
Landowners Assisted	820	







Coachella Valley, a growing agricultural and resort area in Southern Riverside County is truly an "oasis" in the desert. The camel, ostrich, and Arab costumes have become the well-known symbol of the annual Riverside County Fair and National Date Festival, saluting the multi-million dollar date industry. The area is an important segment of the District's power service area.

LITHO BY IMPERIAL PRINTERS