FIFTY-SECOND ANNUAL REPORT

NINETEEN HUNDRED SIXTY-TWO

IMPERIAL IRRIGATION DISTRICT

Picturesque Coachella Valley, long recognized as one of Southern California's outstanding agricultural areas and the center of date production in the United States, is now becoming equally well known as a winter resort. This year marks the completion of twenty years' power service to this area in co-operation with the Coachella Valley County Water District.

F O R E W O R D

RAYMOND L. (LOM) THOMPSON
President
Board of Directors

The District's 1962 operation might be summarized briefly as one of continued growth and modernization. Capital additions of approximately $3½ million were made to our power and water systems from revenue. Plant facilities at our Headquarters Yard were renewed. Reserves were strengthened, and bonded indebtedness decreased. Customer increases were recorded in almost all power divisions, and gross revenue from the sale of electric energy exceeded $10 million. Major improvements were made in our employee compensation system.

Looking ahead, the Board of Directors authorized the purchase of additional property in the Civic Center zone of the City of El Centro for a new Executive Office building. Construction on the new building is expected to start next year.

During the year, significant tests of the second geothermal well were made. The developers reported that preliminary results of the "IID No. 1" tests indicated that the 5,330-foot well could produce steam in sufficient quantity to operate a 10,000-kilowatt generator. Also, minerals in solution appear to have commercial value.

Receipts for the year totaled $17,419,932 as compared to disbursements of $17,243,520. Receipts from the sale of electric energy totaled $10,038,166, an increase of $632,121 over the previous year. Receipts from the sale of water, gate service charges, and pipe service charges totaled $4,454,782.

As of December 31, the District's bonded indebtedness totaled $33,325,000, including $6,182,000 in General Obligation Bonds and $27,143,000 in Electric Revenue Bonds.

Development of lands within the District boundary on the East and West Mesas at this time appears to be many years in the future. However, tests are being conducted at two 640-acre desert farms leased from the United States and sub-leased to private farming companies.

The Drop 2 farm, subleased to Brock Ranches Inc., has been planted in many varieties of citrus, sugar cane, grapes, ornamental shrubs and trees, apricots, grapes, and other miscellaneous crops. The Drop 3 farm, subleased to D. M. Haggard of Phoenix, has been planted in permanent pasture, with some 1,500 cattle being fed.

We would particularly like to thank the Board of Directors, management and personnel for their loyal support and co-operation in making possible the many accomplishments detailed in various sections of the report.

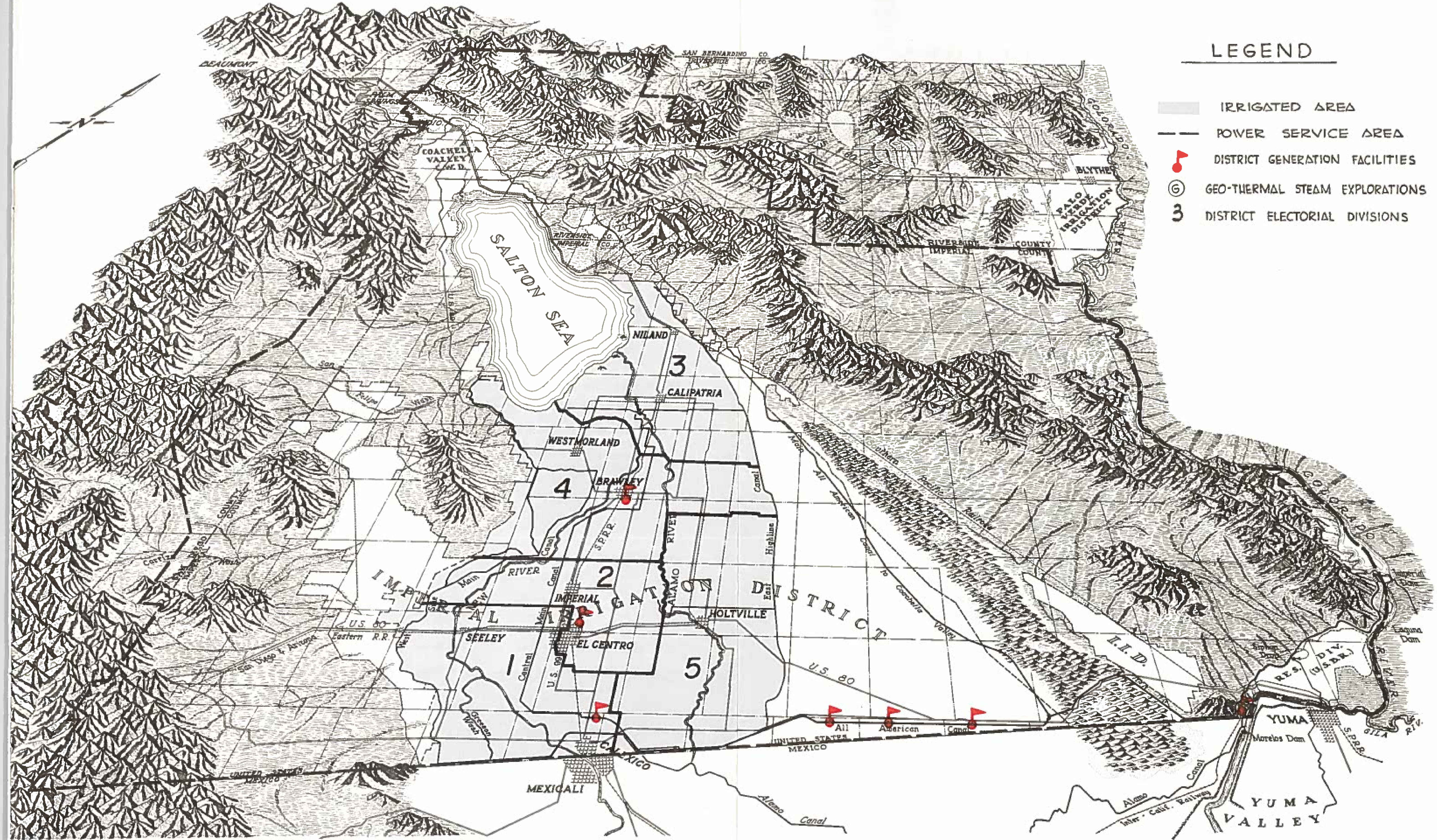
ROBERT F. CARTER
General Manager

Lom Thompson

President, Board of Directors

R. F. Carter

General Manager



LEGEND
IRRIGATED AREA
POWER SERVICE AREA
DISTRICT GENERATION FACILITIES
GEO-THERMAL STEAM EXPLORATIONS
DISTRICT ELECTORIAL DIVISIONS
N
BEAUMONT
SAN BERNARDINO CO.
RIVERSIDE CO.
COACHELLA VALLEY C.W.D.
SALTON SEA
RIVERSIDE CO.
IMPERIAL CO.
BLYTHE
PALO VERDE IRRIGATION DISTRICT
RIVERSIDE
IMPERIAL
COUNTY
COLORADO
RIVER
NILAND
3
CALIPATRIA
WESTMORLAND
4
BRAWLEY
S.P.R.R.
2
IMPERIAL
IMPERIAL IRRIGATION DISTRICT
ALAMO
RIVER
HOLTVILLE
Highline
East
Canal
Main
All
American
Canal
to
Coachella
Valley
Southern
Pacific
Railroad
U.S. 80
SEELEY
EL CENTRO
Eastern R.R.
San Diego & Arizona
West
1
5
Central
U.S. 99
Greeson Wash
CALEXICO
MEXICALI
UNITED STATES
MEXICO
All
American
Canal
Alamo
Canal
I.I.D.
YUMA
Morelos Dam
S.P.R.R.
GILA RIV.
RES. DIV. (U.S.B.R.)
Imperial Dam
Laguna Dam
Siphon Drop
Inter-Calif. Railway
YUMA VALLEY
San
Felipe
Wash
Carrizo
Wash

BOARD OF DIRECTORS

RAYMOND L. (Lom) THOMPSON
PRESIDENT
Division 1

JOSEPH D. MOORE
Division 2

PAUL A. MITCHELL
Division 4

H. FRANK HOWINGTON
Division 3

CARL C. BEVINS
Division 5

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

FINANCIAL

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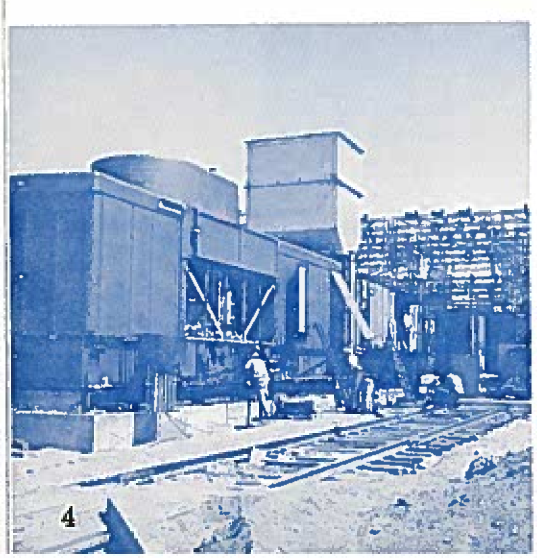
POWER

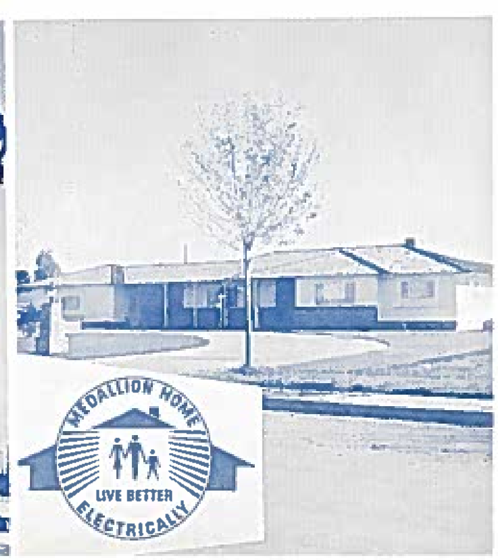
The District's Power Department Earned		$10,451,320
From: Power Sales	$10,038,166	
Interest on Reserves	277,112	
Rental of Electric Property	42,796	
Other Sources	93,246	
Which Was Used or Set Aside For:		
Operating Expenses	$ 5,610,036	
Interest on Bonds	827,295	
Lease of Power Rights	25,392	
Taxes	16,382	
Accounting for Operating Expenses and Income Deductions of	$ 6,479,105	
Leaving Net Earnings of	3,972,215	
Which were Used For:		
Retirement of Electric Revenue Bonds	$ 1,180,000	
Additions to Plant	1,182,019	
Increase of Materials and Supplies	66,389	
Payment into Bond Reserve Funds	24,727	
Payment into Special Electric Plant Construction Fund	966,699	
Additions to Other Reserve Funds	50,332	
Deposit with the United States on All-American Canal Contract	118,283	
Payment into Contract Fund — All-American Canal	91,717	
Additions to Operating Funds	292,049	
	$ 3,972,215	
Which Accounts in Full for		$10,451,320

One of two new 11,500-kw generators



New Homes . . . New Distribution Lines

Many District customers prefer the Medallion Home



HIGHLIGHTS

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WATER

The District's Water Department Earned		$ 6,356,420
From: Assessments, Penalties and Costs	$ 1,516,956	
Sales and Rentals of Land Held Under Assessment Deeds	9,667	
Interest on Redemption of Delinquent Assessments	3,439	
Water Deliveries, Gate and Pipe Service Charges	4,454,782	
Interest on Reserves	164,822	
Rental of Land, Buildings and Equipment	83,154	
Other Sources	123,600	
Which was Used or Set Aside For:		
Operating Expense	$ 3,684,091	
Interest on Bonds	212,874	
Taxes	6,877	
Accounting for Operating Expenses and Income Deduction of	$ 3,903,842	
Leaving Net Earnings of	2,452,578	
Which were Used For:		
Retirement of Bonds	$ 548,000	
Additions to Canal System	562,234	
Additions to Drainage System	346,152	
Additions to Buildings and Land	385,700	
New Equipment	233,681	
Additions to Operating Funds	376,811	
	$ 2,452,578	
Which Accounts in Full For		$ 6,356,420

New and Alamo Rivers are the backbone of the drainage system

Survey crew locates new lateral drain

Slip-form concrete ditch installation

WALTER E. LANCASTER
(left)
Assessor-Collector

LEON F. BAKER
Deputy Assessor

ASSESSOR-COLLECTOR'S OFFICE

Assessed valuation of land within the boundaries of the District increased $34,364 for 1961-62 due to land improvements, such as tiling and leveling, which increased productivity of the land.

Total valuation for the assessment year was $50,338,080 as compared to $50,303,716 for 1960-61.

Collections totaled $1,461,924.04 or 96.38 per cent of the total assessment – by June 20, 1962, the date after which assessments became delinquent. The unpaid $54,975.32 or 3.62 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 makes available to the public the following services:

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 1961-62 assessment year.

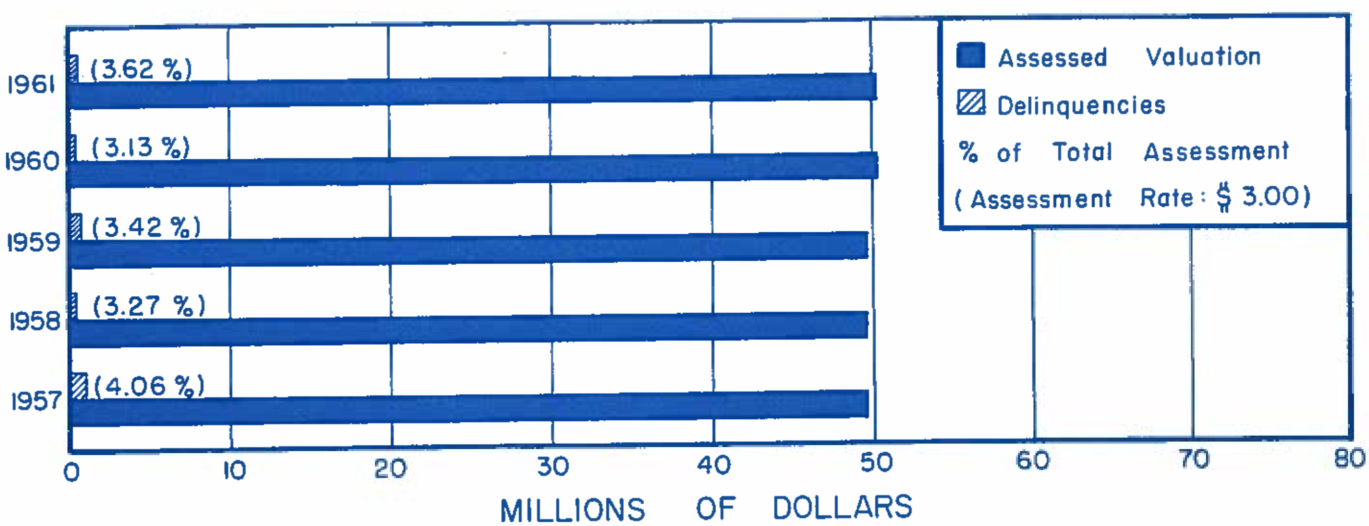
As required by the Water Code of the State of California, in fixing the rate, a 15 per cent deduction for anticipated delinquencies was applied to the equalized aggregate assessed value of $50,338,080. Thus the net equalized assessed valuation for the year 1961-62 was $42,787,368.

The amount to be raised for the 1961-62 assessment year was classified by the Board of Directors as follows:

Redemption Fund: 15.20 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: 11.29 mills on the dollar to raise $483,069.38. This amount combined with other revenues will provide funds to meet current expenses of the District for the year 1962.



Anna T. McManus
Treasurer

TREASURER'S OFFICE

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, earned-interest on investments and miscellaneous sources flow into the Treasurer's office and is retained in specified funds until such time as expenditures are approved by the Board of Directors.

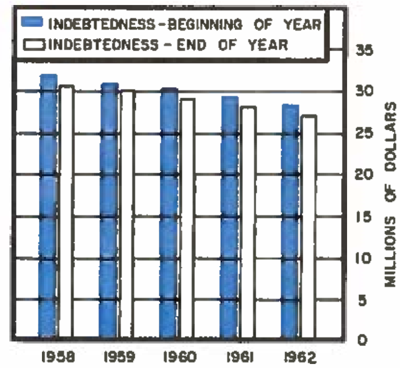
The income from all sources during 1962 totalled $17,419,932 – an increase of $621,738 over the previous year. Of this amount, $17,243,520 was expended for payment of bond principal and interest, payrolls, operating expenses, and construction work, consisting of approximately $3½ million capital additions to the power and irrigation systems.

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 needed for current expenses were placed in interest-bearing accounts with banks in Imperial and Coachella Valleys. Those accounts, together with government bonds purchased in previous years with reserve funds, provided the District with a total earned-interest income of $438,926.

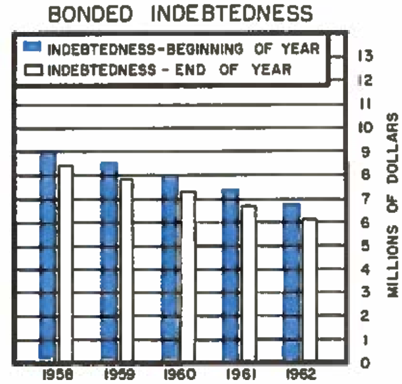
The Treasurer's office maintains contact with investment companies in the major financial centers throughout the United States. Daily studies are made of the government bond market in order to secure the highest possible return on District funds held in 112 separate treasury accounts.

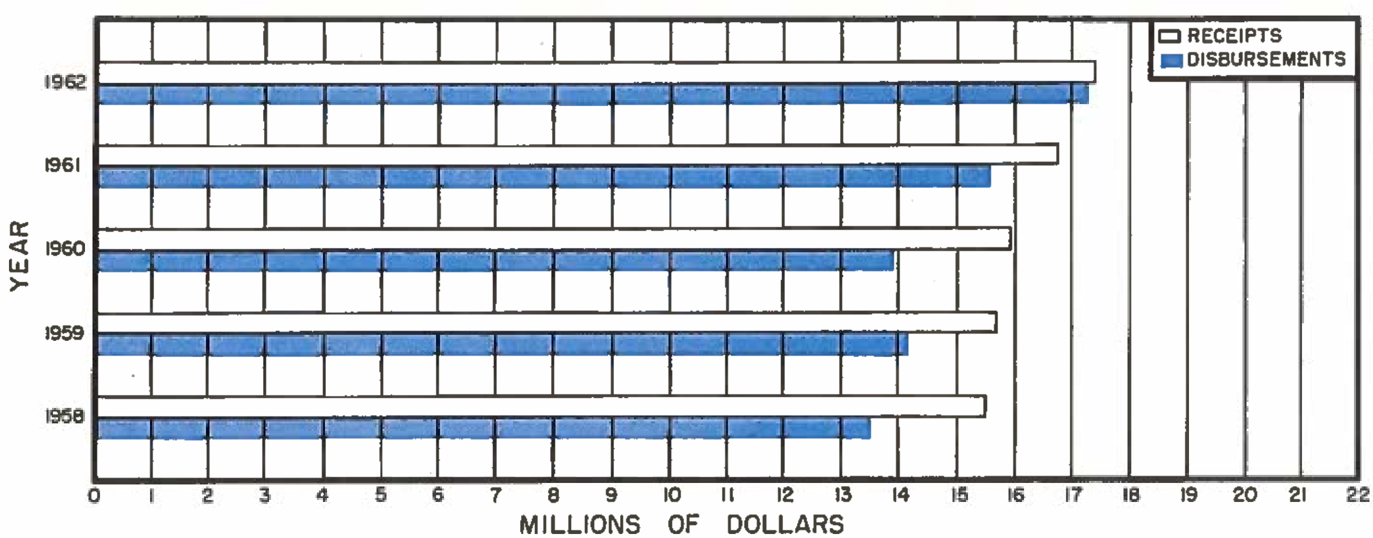
During 1962 payments amounting to $1,583,000 substantially reduced the bonded indebtedness of the District to a new low of $33,325,000, comprised of $6,182,000 in General Obligation Bonds and $27,143,000 in Electric Revenue Bonds. The bond work of the Treasurer's office is one of the important parts of its operation.

ELECTRIC REVENUE
BONDED INDEBTEDNESS



GENERAL OBLIGATION
BONDED INDEBTEDNESS





M. J. Dowd
(right)
Executive Officer to the Board of Directors

Stanley Mosk
Attorney General State of California

EXECUTIVE OFFICER T(

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 of California

The Colorado River Board of California was created by State law in 1937 to protect the rights of California in and to the waters of the Colorado River. Board membership consists of a representative, appointed by the Governor, from each of six public agencies in the State having Colorado River water or power rights.

These agencies are Imperial Irrigation District, Palo Verde Irrigation District, Coachella Valley County Water District, The Metropolitan Water District of Southern California, Department of Water and Power of the City of Los Angeles, and the San Diego County Water Authority.

The representative of Imperial Irrigation District, its Executive Officer, was elected Chairman of the Board in March 1962.

The Chairman of the Board also serves Ex-Officio as Colorado River Commissioner of California, representing the State in all communications or negotiations with other states and governmental agencies in connection with Colorado River problems.

A brief discussion of some of the more important matters in which the Board took an active part during the year follows:

Arizona vs. California

Oral argument before the United States Supreme Court on the exceptions to the findings of the Special Master was held in January and further argument was called for by the Court in June and held in November. In preparation for these hearings, the Board's staff prepared much data relative to water supply, appropriative rights and related matters for use by the Colorado River Litigation Division of the Attorney General's office. Also, Board members and staff participated in the regular Legal Committee meetings and many other conferences.

The decision of the Court had not been received as of the end of the year.

Marble Canyon Power Project

In connection with the application of Arizona Power Authority to the Federal Power Commission for a license to construct a power project on the Colorado River at Marble Canyon site, the Board's staff co-operated with its legal counsel in the preparation of a brief, which was filed in April, protesting the granting of a license to APA and requesting the Commission to refer the project to Congress for further investigations using a regional concept.

In September, the Presiding Examiner recommended that the Arizona Power Authority be granted the license and that the Commission reject the California proposal. Exceptions to this decision were filed on behalf of the California Intervenors in November.

Following the Examiner's decision, the Secretary of the Interior sought to intervene and tendered a motion that FPC re-open the record for further evidence. This petition and motion were supported by California and also by the Navajo Indian Tribe and the Colorado River Commission of Nevada.

FPC granted the Secretary of the Interior permission to file exceptions to the Examiner's decision and to present oral arguments when scheduled.

Glen Canyon Filling Criteria

On April 2, 1962, the Secretary of the Interior approved criteria for the operation of Lake Mead and Lake Powell (to be formed by the closing of Glen Canyon Dam) during the initial filling period of the latter. The same criteria are to be applied during the filling period of other new Upper Basin reservoirs. As the announced criteria lacked clarity in places and failed to include some of the recommendations made by Lower Basin interests, a conference of Arizona, Nevada and California water and power users was held in May. The Chief Engineer of the Colorado River Board of California was selected to act as coordinator to present to the Secretary of the Interior for answer, questions sent to him by the various water and power users.

The Chief Engineer met with representatives of the Secretary on August 6, at which time some of the points were clarified; however, it was impossible to obtain full satisfaction, so it will be necessary for the Board's staff to keep close watch on the filling procedures, which are scheduled to start at Glen Canyon in January 1963.

Salinity Problem — Lower Colorado River Area

Much work was performed by the Board in connection with efforts to find a solution to the problem of the salinity of the water delivered to Mexico during the winter months, against which Mexico had protested in late 1961.

The State Department, acting through the United States Section of the International Boundary and Water Commission, requested the Governor of each of the Colorado River Basin States to appoint two representatives to serve on a Committee of Fourteen, to work with a panel of experts selected by the Department, to study the problem and suggest possible remedies. California is represented on this Committee by William E. Warne, Director of the Department of Water Resources, and M. J. Dowd, Colorado River Commissioner. The Committee met with the panel of experts a number of times. The panel presented its proposals in draft form, which were carefully reviewed by the Committee. However, it was found that the problems — physical, legal and political — were so complicated, that it was impossible to reach general agreement. The panel submitted its report to the Secretary of State on August 1, 1962, with the recommendation for further detailed investigations.

The Bureau of Reclamation was directed by the Congress and money appropriated to investigate the problem and prepare a report, which has not yet been released. Certain restrictions were placed on use of the money, to which the Board protested but to no avail.

Results of the Colorado River Board staff's research and investigations were used to prepare a report entitled "Salinity Problems in the Lower Colorado River Area," dated September 1962. It has had widespread distribution and much favorable comment has been received.

Proposed Projects

Three large Upper Colorado River Basin projects — Fryingpan-Arkansas, Navajo, and the initial stage of the San Juan-Chama — were authorized by the Congress. The bills were reviewed by the Board's staff and previous water supply studies were updated to determine the effect of these authorizations on the basinwide water budget.

Feasibility reports by the Bureau of Reclamation on a number of other projects were reviewed and comments prepared for inclusion in the reports of the Director of Water Resources of California to the Secretary of the Interior.

The Appraisal Report of the Bureau of Reclamation for the Central Arizona Project, dated January 1962, was received and reviewed by the staff. This matter will, no doubt, become very active in the coming year.

Collection of Hydrologic Data

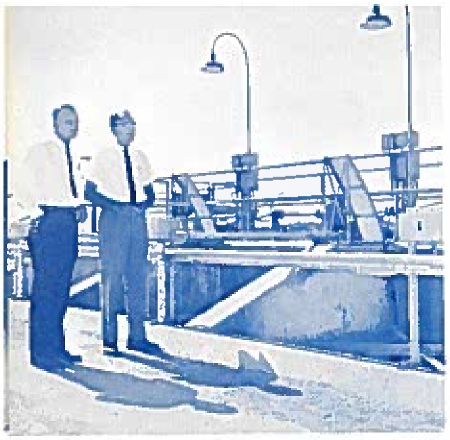
With the filling of the reservoirs behind the three Colorado River Storage Project dams (Navajo, Flaming Gorge, and Glen) beginning, and with the introduction of bills in Congress for the authorization of new projects, the problem of water supply becomes more and more critical. In recognition of this situation, the Board continued its collection, collation, and analysis of information from all available sources.

Governor Edmund G. Brown, at the request of the Colorado River Board, wrote to the Secretary of the Interior and the other Governors of the Colorado River Basin States relative to the need for a comprehensive inventory of the water resources of the Colorado River Basin by the Secretary's office. The Secretary and several of the Governors quesitoned the timeliness of the suggestion, and it was finally agreed that the matter would not be pressed until a decision is rendered by the Supreme Court in Arizona v. California.

Miscellaneous

Again this year, the Board and staff had a very close and co-operative working relationship with the Director of the Department of Water Resources and his staff.

Board members and staff attended many meetings throughout the year in various parts of the West and in Washington, D. C., concerning problems affecting the Colorado River and its uses.



Oscar L. Fudge
(left)
Manager

J. Melvin Sheldon
General Superintendent

WATER DEPARTMENT

Water is diverted from the Colorado River into the District's All-American Canal System at Imperial Dam. In addition to water for Imperial Valley, the All-American transports water for the Yuma Project and Coachella Valley. The District is responsible for water delivery only to Imperial Valley; water for Coachella Valley and Yuma Project is delivered by other agencies.

The District's gravity-flow canal and drainage systems serve an area of 429,557 acres of irrigated farm land. Total gross areas within the District boundaries are 908,978 acres, including: undeveloped area; cities, towns, airports, feed lots, etc.; area below the -230-foot contour Salton Sea Reserve Boundary and areas covered by Salton Sea; and area in canals, drains, rivers and railroads.

Water Department 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 1,657-mile network of other main canals and laterals, and a 1,375-mile system of main and lateral drains.

The irrigated region served by the District comprises the major portion of the productive area in Imperial County. In 1962, Imperial County farms produced $213,967,120 in food and fibre – ranking fourth nationally in value of agricultural production.

Water carried in the District's canal system serves both agricultural and domestic purposes. All cities and towns in Imperial Valley receive bulk water supplies from District canals.

Departmental 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.

The All-American Canal Section, which is divided into the River Division and the Western Division, is responsible for the operation and maintenance of Imperial Dam, headworks, desilting basins, the entire All-American Canal, and the Southern portion of the Coachella Branch of the All-American Canal.

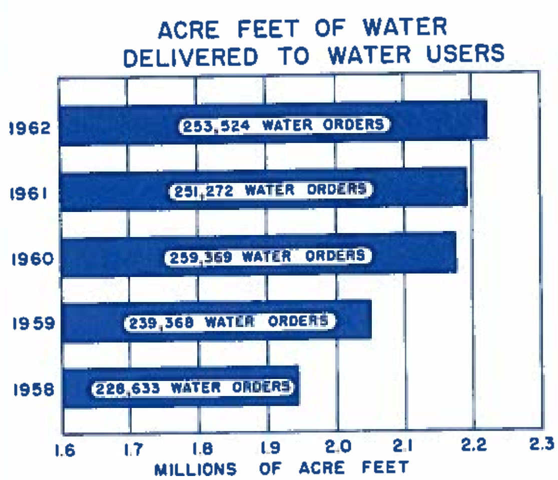
The Water Engineering Section, under the Supervision of the Chief Civil Engineer, is responsible for planning and design of irrigation and drainage facilities, and other related functions.

The Drainage Construction and Maintenance Section is responsible for the operation and maintenance of the main drainage system. In addition this section provides technical assistance to farmers in connection with field drainage problems, and correlates drainage data with the U. S. Soil Conservation Service.

There are seven operational divisions responsible for operation and maintenance of the lateral canal and drainage systems as well as delivery of water to individual users, including bulk deliveries to cities and towns. Supervision of the several divisions is the responsibility of North and South-End Irrigation and Drainage Section.

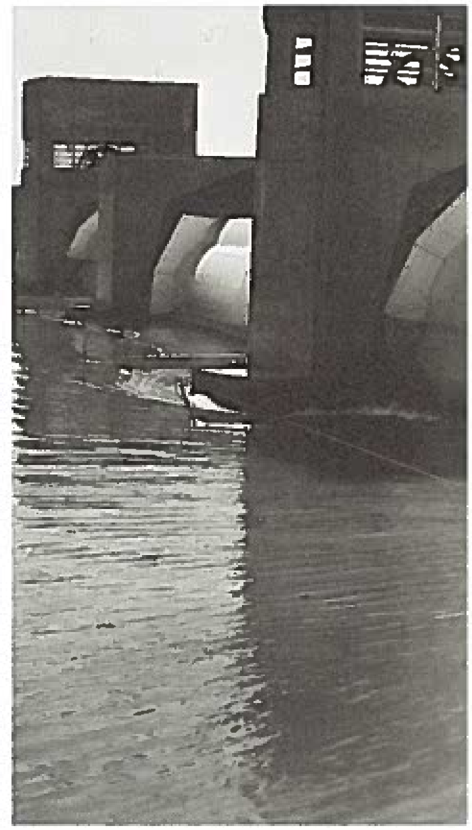
The Water Control Section, under the supervision of the Watermaster, is responsible for maintaining statistical data used in placing the weekly order with the U. S. Bureau of Reclamation for water. The section is also responsible for distribution of water into the main and lateral canal systems.

Preventive maintenance assures trouble-free operation



Remote-controlled Dahlia Check on the Central Main Canal

Hoover Dam, an invaluable resource for the entire Southwest



Roller Gates, Imperial Dam

In March, 1957, a telemetering system was installed at the Nectarine (Vail) Check on the East Highline Canal, permitting operation of the canal from the Watermaster's Office at Operating Headquarters in Imperial. Since this original installation new remote-control stations have been added at Wisteria Check and New River Siphon on the All-American Canal and Dahlia Check on the Central Main Canal. All have proved highly successful, and have made a reduction in water department personnel possible.

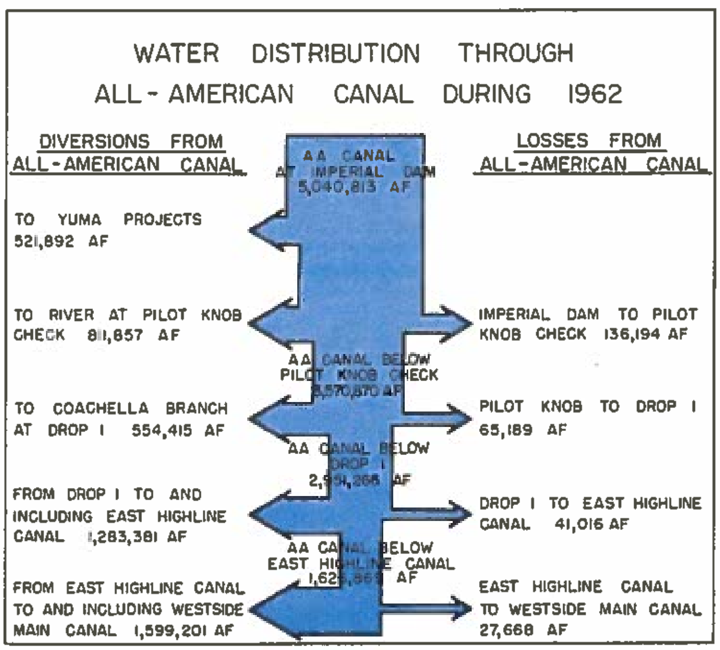
During the year, installation was completed at an additional remote-control location on the All-American Canal—the East Highline Check and Turnout structure — making a total of four remote-control structures in the Western Division section of the All-American Canal.

The Heavy Equipment Operations Section is responsible for the operation and maintenance of a pool of draglines, dredges, motor graders, trucks, and other equipment for use in construction and maintenance of the canal system.

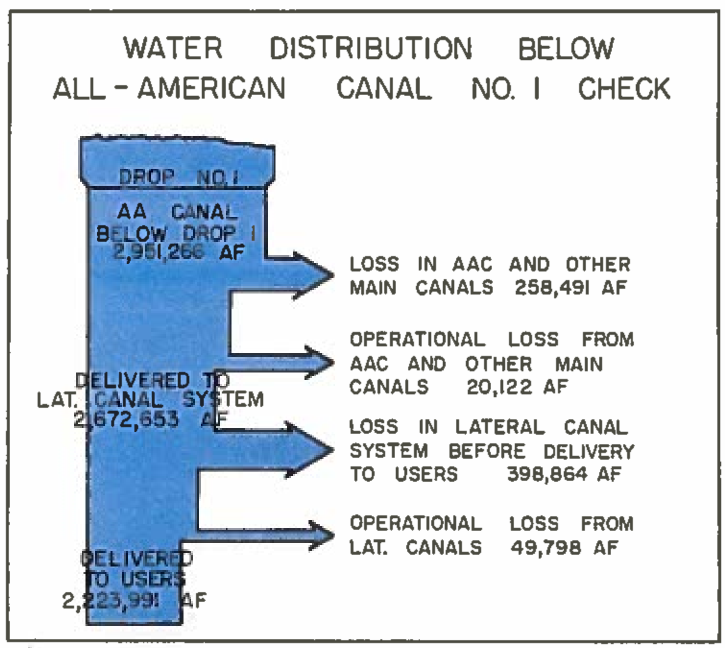
DEPARTMENTAL HIGHLIGHTS

During 1962 there were 430 full-time employees assigned to the Department, a reduction of 15 employees over 1961.

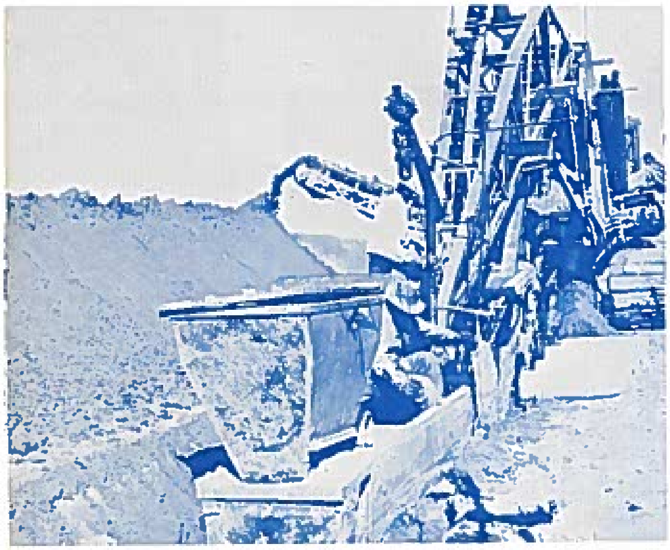
Approximately three days are required to transport water from Parker Dam to Imperial Dam. Parker is the last point of storage on the river. In 1956, the Board of Directors authorized the Water Department, if necessary, to pass this three-day transit period along to users.



Water diverted to the Yuma Project and its proportionate share of losses are not charged to or considered 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 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.



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 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.



Monster-like machines install field drainage tile

Impounded water leaches salt from low-producing soil

Deep plowing (48-50 inches) improves soil permeability

In 1962, 85.11 per cent of the total water orders were delivered on the day requested by the user, 13.91 were carried over one day, and .98 per cent were carried over two days.

Water diversions in 1962 for all agencies served by Imperial Dam (metered at Station 60) totalled 5,040,813 acre feet, an increase of 1,824 acre feet over 1961. Total diversion through the All-American Canal headworks was 5,200,165 acre feet, including 159,352 acre feet used in desilting operations.

Water delivered to Imperial Valley users totalled 2,223,991 acre feet, an increase of 28,316 acre feet over 1961.

The same growing conditions which produce food and fibre in abundance in Imperial Valley also are ideal for the production of weeds and brush along canals and drains. The battle to control this unwanted growth has been constant since the District was organized. However, by using chemical control wherever possible, it appears that the battle is slowly being won.

Control measures were required on all canals and drains in the system. Burning and three types of chemicals were applied according to the type of growth and the season. Formerly, burning has been used as a major control measure. However, in 1962 the principal burning operations were confined to removal of debris following chemical application and on mature annual growth in the channels.

Another phase of the weed control program is concerned with moss and aquatic growth primarily in the lateral canal and drainage system. Normally, drying the canals for a period of three days will control the water weeds. Since canals carry domestic as well as agricultural water, use of chemicals is kept to a minimum. However, in more severe cases it is necessary to use chemical and mechanical control measures.

Since drains are constantly carrying water and drying is impossible, mechanical and chemical methods are used exclusively in controlling aquatic growth.

During the year a total of 12,607 acre-miles of canals and drains was treated with chemicals, as compared to 12,462 acre-miles in 1961. A total of 2,591 miles of the lateral canal system, main and lateral drainage systems was treated for aquatic growth.

The use of bucket rakes for channel work is proving very efficient on moss and cattails in the drainage system, permitting a reduction in amount of chemicals needed to control aquatic growth.

The program of substituting reinforced concrete for wood structures and deliveries as they become inoperative was continued. Approximately 97 per cent of the wooden checks and deliveries have been replaced.

Salton Sea collects drainage and run-off water from an area of about 8,500 square miles in Imperial, Riverside Counties, and Mexicali Valley, Baja California. The present salinity of the sea is approximately equal to that of ocean water, with 47.43 tons of salt per acre foot of water — ocean water averages 47.80 tons per acre foot.

Major tributaries of Salton Sea are the New and Alamo Rivers, which serve as the main trunk of the District's drainage system. The water surface elevation on December 31, 1962 was -232.65, a rise of .70 foot during the preceding year.

There was an apparent gain of 10.16 per cent in the removal of salt from Imperial Valley farm land through the drainage system to Salton Sea. A major portion of the salt was removed as a result of the installation of underground drainage tile in individual fields, as outlined in the Soil Conservation section of this report.

ALL-AMERICAN CANAL SECTION

This section is responsible for operation and maintenance of headworks and desilting basins at Imperial Dam; 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 near Niland, and the New Briar Canal from its turnout structure at Drop 5 to the Boundary Bridge – a distance of 2.6 miles.

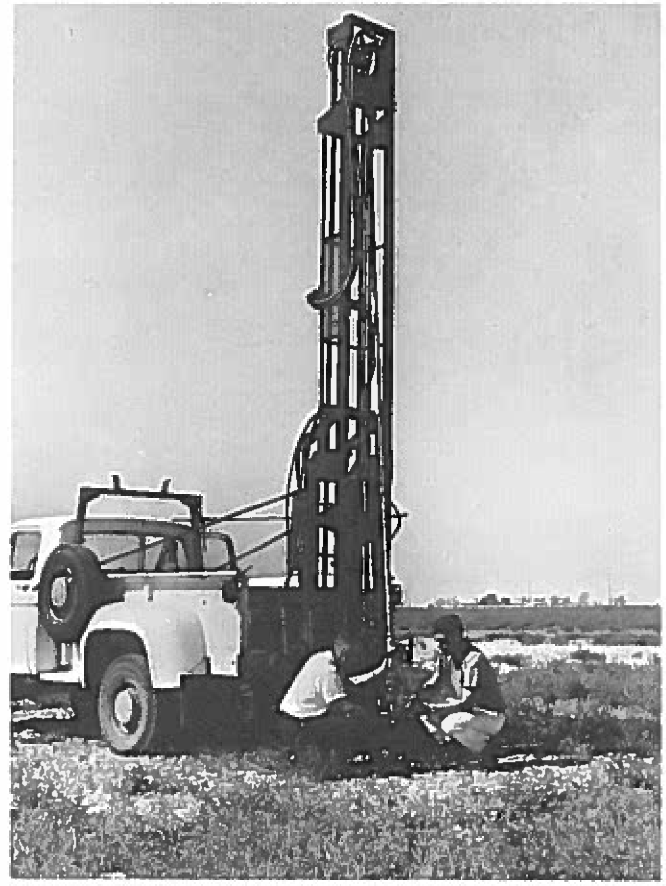
In addition the section maintains 39.4 miles of open drain channels and 11.4 miles of tile drains appurtenant to the All-American Canal.

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 10,700 second-feet was made at All-American Canal Station 60 on November 6. The minimum diversion of 1,650 second-feet for the year was made on December 25.

The District's order to the U. S. Bureau of Reclamation at Station 60 was 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 811,857 acre-feet during 1962. Of this



Survey teams determine soil profile

IRRIGATION AND DRAINAGE SYSTEM MAINTENANCE AT A GLANCE

	All-American Canal	*Other Main Canals*	*Lateral Canals*	*All-American Drains*	*Main Drains*	*Lateral Drains*
Total Miles	131	153	1,501	51	555	819
Number of Operational Structures	144	562	10,415	-	1,600	642
Concrete	144	464	9,188	-	1,524	431
Rubble	-	60	714	-	-	54
Wood	-	38	500	-	76	100
Combination	-	-	13	-	-	57
MAINTENANCE OPERATIONS						
Draglines	245 Oper. Hours .10 Mile	2,346 Oper. Hrs. 20.95 Miles	4,747 Oper. Hrs. 131.55 Miles	347 Oper. Hours 18.20 Miles	3,206 Oper. Hrs. 212.29 Miles	5,448 Oper. Hrs. 303.10 Miles
Bucket-line dredges	- -	- -	1,211 Oper. Hrs. 136.75 Miles	- -	- -	41 Oper. Hours 5.75 Miles
Bulldozers	563 Oper. Hours 14.6 Miles	2,436 Oper. Hrs. 84.75 Miles	5,335 Oper. Hrs. 610.85 Miles	36 Oper. Hours 8.10 Miles	1,310 Oper. Hrs. 422.25 Miles	1,356 Oper. Hrs. 271.95 Miles
Motor Graders	670 Oper. Hours 285.1 Miles	542 Oper. Hours 223.25 Miles	2,233 Oper. Hrs. 1,637.55 Miles	56 Oper. Hours 41.3 Miles	- -	97 Oper. Hours 40.00 Miles
Miscellaneous Equipment	1,198 Oper. Hrs.	730 Oper. Hours	3,715 Oper. Hrs.	28 Oper. Hours	1,990 Hours	322 Oper. Hours
Weed & Brush Control	857.10 Acre-Miles	1,704 Acre-Miles	6,105 Acre-Miles	318 Acre-Miles	1,792 Acre-Miles	1,831 Acre Miles
Moss Control Mechanical	- -	- -	2,218 Man-Hours 766.75 Miles	- -	24 Man-Hours 2.50 Miles	253.50 Man-Hrs. 88.75 Miles
Chemical	- -	- -	9,494 Man-Hours 1,104.75 Miles	- -	1,105 Man-Hours 365.75 Miles	2,480 Man-Hrs. 262.25 Miles
Rodent Control	876 Man-Hours 356 Miles	2,384 Man-Hrs.* 5,345 Miles*	* *	- -	- -	- -

***Other Main Canals and Lateral Canals combined**

Mechanical sugar beet harvest

amount 538,230 acre-feet were transferred from Siphon Drop Hydro Plant under a contract between Imperial Irrigation District, Yuma County Water Users' Association, and Bureau of Reclamation.

Since the construction of Hoover Dam and other river control structures, the sediment load has been substantially reduced. In general, silts arriving at Imperial Dam are the result of rains and flash floods between Parker and Imperial Dam.

A total of 337,927 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 81,120 tons; December was the low month with 338 tons.

Demand for water during the year was slightly greater than in 1961. The average daily departure from the estimated discharge at Pilot Knob Check was 1.65 per cent.

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

Mechanical maintenance required a total of 29,892 man-

Imperial Dam diverts water from the Colorado River through desilting works (foreground) into the All-American Canal

hours; canal, drain, and other maintenance required 10,446 man-hours.

A total of nineteen radial gates and three steel bulkheads for major structures were sandblasted and painted during the year.

IRRIGATION CONSTRUCTION

MAIN CANALS

In the absence of major construction projects, work was confined during the year to replacement of existing points of control along the main canal system for improvement and betterment of the system.

This work consisted of replacement of two headings on the East Highline Canal, replacement of a bridge and a delivery on the West Side Main Canal, and replacement of two headings on the Vail Canal.

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 221 structures installed during the year.

Of the structures installed, 30 were new and 191 were replacements, including 16 new deliveries, 84 replacement deliveries, 6 new concrete checks, 80 checks and headings replaced, 7 new concrete control structures, 20 control structures replaced, 1 siphon installed, 1 replaced, and 6 bridges replaced.

Where the rearrangement or elimination of lateral canal termini mutually benefit the District and the landowner, the landowner may initiate a request to the Board of Directors. Under this regulation, it is possible for the District to eliminate maintenance costs and right-of-way requirements because the landowner assumes this responsibility.

Costs for rearrangement and/or concrete lining of the canal section are shared equally by the landowner and the District.

During the year 19.1 miles of lateral canal termini were concrete lined, resulting in a slight decrease in District-operated and maintained canals.

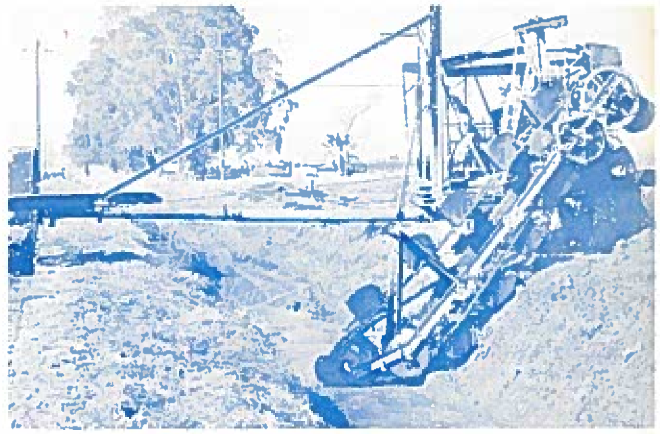
Imperial Valley farmers have installed a total of 1,144.8 miles of concrete-lined ditches on the land since 1949. For the protection of both the District and the landowner, to provide uniformity of installation, and to assure a proper flow of water, the Water Engineering Section provides the design prior to installation of concrete-lined ditches.

	MILES				
	1958	1959	1960	1961	1962
Private Concrete Head Ditches Installed	105.4	126.9	130.4	102.9	112.6*
Field Investigations	259	269	294	195	252

*To date a total of 1,144.8 miles.

In 1947 the County Board of Supervisors and the District Board of Directors entered into a co-operative agreement to replace wood or metal canal or drain crossings under county roads with concrete siphons. Under the terms of the agreement, the District pays installation costs and the County of Imperial pays material costs.

In 1962, 97 crossings were completed. Since the agreement was negotiated in 1947, 1,746 road crossings have been replaced.



Ruth dredge cleaning lateral canal

District crews, using prefabricated forms, pour concrete check

Trash racks upstream from Imperial Dam

Winter lettuce harvest

DRAINAGE CONSTRUCTION

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

The 1962 rate of expansion of this system system was somewhat less than in previous years because a large percentage of the land is presently served. The Drainage Design Unit received 42 requests for tile drainage investigations and recommendations, completing a total of 56 requests for this and prior years.

During the year, to provide a more efficient drainage system, .50 of a mile of laterals and 1.27 miles of main drains were reconstructed, and 1.52 miles of lateral and 1.31 miles of main drains were deepened.

Erosion control on the drainage system required installation of 28 concrete siphons to replace 10 old metal flumes and 16 bridges.

The New River channel at the International Boundary was straightened and deepened at the site of the meter station. A new steel meter bridge replaced the existing meter station.

The meter station on New River at the outlet to Salton Sea was replaced.

The State Division of Highways requested the District to extend their U. S. Highway 80 crossing over the Holtville Main Drain, and the Pear Lateral Canal crossing under U. S. Highway 80 was also extended.

In instances where it was impractical to provide gravity outlets for tile drains, the District installed tile effluent sump pump outlets. The total in operation as of December 31 was 197, of which 23 were installed during the year. None were installed under Salton Sea classification (between -224 and -230 contours) – thus the total tile drain sumps under this class remained at 25.

The year's total installation of farm tile for landowners by private contractors was 611.01 miles, as compared to 857.51 in 1961, and 794.05 in 1960. To date a total of 9,639.94 miles of farm tile drains has been installed. On these installations the District and Soil Conservation Service interchange information.

For additional information on drainage and conservation practices, see Soil Conservation section of this report, page 31.

Just 20 years ago, the All-American Canal became the sole source of water for Imperial Valley

ANNUAL INVENTORY OF AREAS RECEIVING WATER SERVICE

CROP SURVEYS

GARDEN CROPS	Acres Being Served: Gross	Dup.	Net
Broccoli	210	36	174
Cabbage	1,897	1,369	528
Cantaloupes	5,817	1,246	4,571
Cantaloupes (Seed)	4		4
Carrots	5,479	3,904	1,575
Carrots (Seed)	30		30
Cauliflower	7		7
Celery	41	35	6
Cucumbers	35	35	
Endive	9		9
Fava Beans	55		55
Garlic	135		135
Lettuce	35,323	26,115	9,208
Lettuce (Seed)	40		40
Melons (Mixed)	80	60	20
Mustard	93	60	33
Okra	35		35
Okra (Seed)	15		15
Onions	3,132	2,304	828
Onions (Seed)	282	32	250
Peppers	10	10	
Radishes	4		4
Romaine	100	20	80
Safflower	281		281
Squash	1,121	212	909
Table Beets	11		11
Tomatoes	1,479	564	915
Vegetables (Mixed)	56	38	18
Watermelons	3,814	9	3,805
Total	59,595	36,049	23,546

FIELD CROPS	Gross	Dup.	Net
Alfalfa	176,728	29,664	147,064
Alfalfa (Seed)	8,207	7,735	472
Anise	20	20	
Barley	70,371	423	69,948
Bermuda	4,870	340	4,530
Blue Panicum Grass	373		373
Cane	542	255	287
Clover	844		844
Cotton	69,359	4,432	64,927
Ear Corn	532	222	310
Flax	26,359	126	26,233
Head Corn	35,639	14,965	20,674
Oats	1,850	74	1,776
Rice	280	119	161
Sesbania	1,432	706	726
Silage	159	159	
Sorghum Cane	167	75	92
Soy Beans	5		5
Sudan	6,531	4,372	2,159
Sugar Beets	55,616	185	55,431
Sula	114		114
Wheat	869	159	710
Total	460,867	64,031	396,836

PERMANENT CROPS	Gross	Dup.	Net
Apricots	20		20
Asparagus	1,626		1,626
Citrus (Mixed)	391		391
Dates	106		106
Grapefruit	857		857
Grapes	3		3
Lemons	117		117
Nursery	16		16
Oranges	688		688
Palms (Decorative)	12		12
Pasture (Permanent)	535	75	460
Pecans	97		97
Tangerines	360	4	356
Total	4,828	79	4,749
GRAND TOTAL	525,290	100,159	425,131

Average No. of Farm Units Reported	6,070
Average No. of Owner-Operated (44%)	2,646
Average No. of Tenant-Operated (56%)	3,424
Average Area—Acres	79.95

SUMMARY OF AREA SERVED

CROPS	Gross	Dup.	Net
Field Crops	460,867	64,031	396,836
Garden Crops	59,595	36,049	23,546
Permanent Crops	4,828	79	4,749
Totals	525,290	100,159	425,131
Area Being Reclaimed (Leaching)			4,426
Net Area Irrigated			429,557
Area Farmable but not Farmed during 1962 (Fallow Land)			41,094
Total Area Farmable			470,651
Area of Farms in Homes, Feed Lots, Corrals, etc.			13,710
Area in Cities, Towns, and Airports			11,041
Area of Farms having less than Two Acres			948
Total Area Receiving Water			496,350
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			300,712
Total			908,978

J. Fred Hesse
(right)
Manager

Paul G. Post
General Superintendent
Power Sales and Service

POWER DEPARTMENT

The District's power service area includes three widely spaced population centers – Coachella Valley in Riverside County, Imperial Valley, and Winterhaven area along the Colorado River. Approximately 80 per cent of the service area is unpopulated desert. However, the remainder includes some of the most productive farm land in the United States and a fast-growing recreational area.

District-owned and operated generating units with a total name-plate rating of 196,460 kilowatts include Pilot Knob Hydroelectric Plant, hydroelectric 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, the Brawley Diesel Plant, and two new gas turbine generating units for reserve power and peaking also located at 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 1962 District-owned and operated generation plants supplied 51 per cent of the system requirements as compared with 54 per cent the previous year. The remainder of the power requirement was supplied by purchases from Davis Dam, the Axis Plant and other sources.

Operation and Maintenance

Total costs of operation and maintenance of the system during 1962 were $5,610,036. More than 80 per cent of the $383,799 increase over 1961 is accounted for by increased production costs.

The 1962 costs for transmission and distribution, sales promotion, accounting and collecting, administrative and general expenses were somewhat higher, reflecting the general increase in kilowatt-hour and dollar sales and number of customers.

As of December 31, 1962 there was a total of 18,203 distribution transformers in service for a total of 309,267 KVA. The transformer shop painted and reconditioned 740 transformers and rewound 44 during the year. As of year-end the system watt-hour meter inventory totaled 36,612. During the year, the meter shop tested a total of 4,321 meters of which 403 were tested in the field.

System Additions and Improvements

Two 11,250 kilowatt gas turbine generators were added to the system during the year for peaking and reserve power. Representing a major capital expenditure from revenue of $2,175,348, the self-contained units were installed at the Brawley Diesel Plant.

Construction by District crews was completed on the "N" transmission line from Niland to Coachella, a distance of 53 miles. The 92,161-kv line was completed at a cost of $681,995.

Additional construction work included extension of a 33-kv line to Oasis in the Coachella Section and a major street lighting installation in the City of Calexico.

During 1961 a total of $1,154,692 was spent on current additions and improvements. Included were distribution plant, $966,758; transmission plant,

COST OF OPERATION AND MAINTENANCE

	1962	1961	Increase
Steam Generation	$1,228,107	$1,205,332	$ 22,775
Hydro Generation	146,032	127,171	18,861
Brawley Diesel Plant	57,612	45,221	12,391
Purchased Power and Other	2,184,262	1,927,889	256,373
Transmission	196,920	188,740	8,180
Distribution	671,562	654,269	17,293
Customer Accounting – Collecting	362,661	331,079	31,582
Sales Promotion	127,431	117,428	10,003
Administrative and General	635,449	629,108	6,341
Total	$5,610,036	$5,226,237	$383,799

80% of the $383,799 increase over 1961 is accounted for by increased production costs.

Highly trained servicemen are on duty at each division office

$87,628; general plant, $24,414; engineering and supervision, $75,228.

Of the distribution plant expenditures, $262,501 was for transformers; $260,410 for poles and fixtures; $154,845 for conductors and devices; $79,120 for meters; and $57,395 for services.

Construction of five substations during the year provided the system with a total of 79 substations with 212 transformers having a capacity of 750,685 kva.

Miles of Power Lines in Service
December 31, 1962

	Number of Miles	Miles Added 1962
Transmission	519.6	54.0
Sub-transmission	358.0	3.0
Primary distribution	2,440.0	62.0

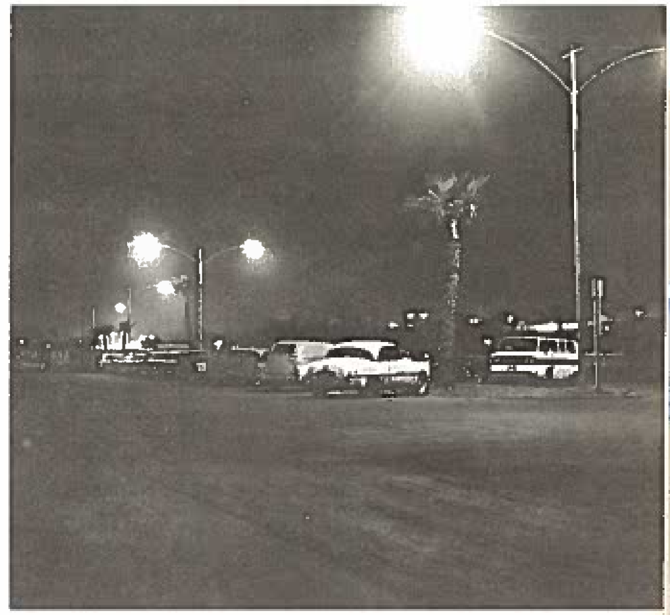
Sales and Service

From the standpoint of dollar revenue, kilowatt-hour sales, customer growth and peak power consumption, 1962 could be considered as an outstanding year.

Revenue from the sale of electric energy exceeded $10 million for the first time since the District's entry into the power business in 1936. Gross revenue totaled $10,038,166 – an increase of $632,121 over 1961. Equally significant, revenue from the sale of electric energy to the ultimate customer totaled $8,867,842 – an increase of $697,740 over the previous year.

Kilowatt-hour sales totaled 623,084,500 – an increase of 25,962,400 kwh over 1961. A load peak of 167,200 kilowatts was recorded on July 11.

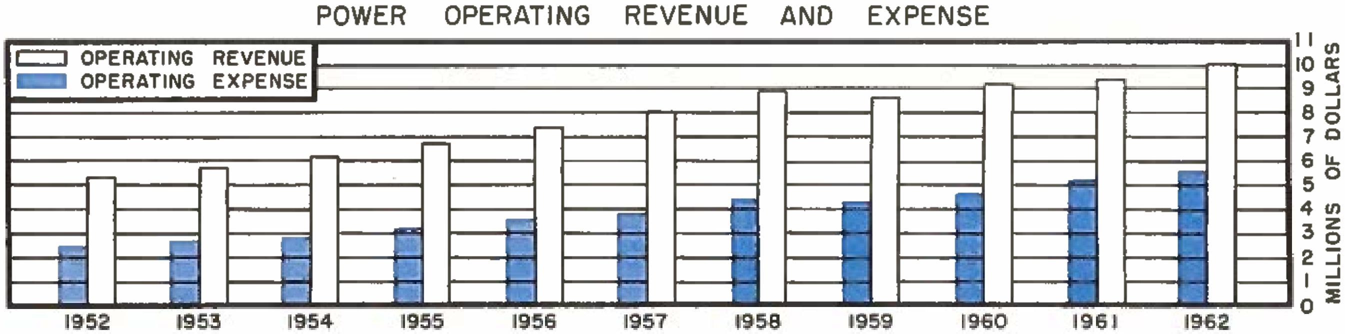
Sales promotion efforts of the past three years to stimulate greater winter consumption of electric

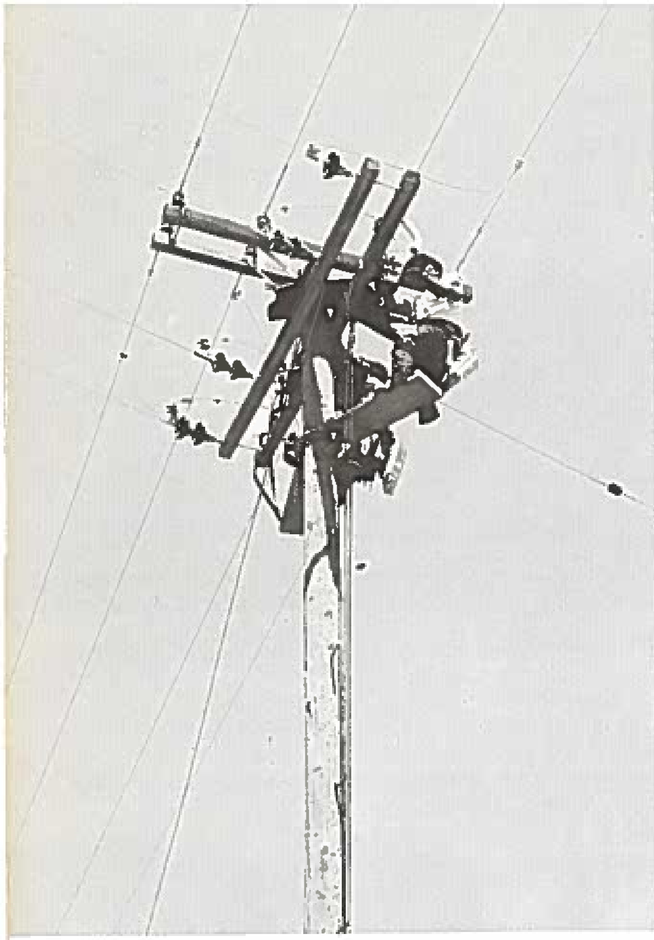


Many communities have added ornamental street lights for safety and beauty

Medallion Homes and Apartments are increasingly popular

POWER OPERATING REVENUE AND EXPENSE





Distribution system extended to serve new area

energy are proving highly effective. The peak load during the month of December was 110,500 kilowatts, an increase of almost 10,000 kilowatts over December 1961.

The sales promotional program has been designed to assist dealers in the increased sales of the electric range, water heater, dryer, and heat pump. New All-Electric and Medallion homes and apartments are being built in increasing numbers throughout the service area.

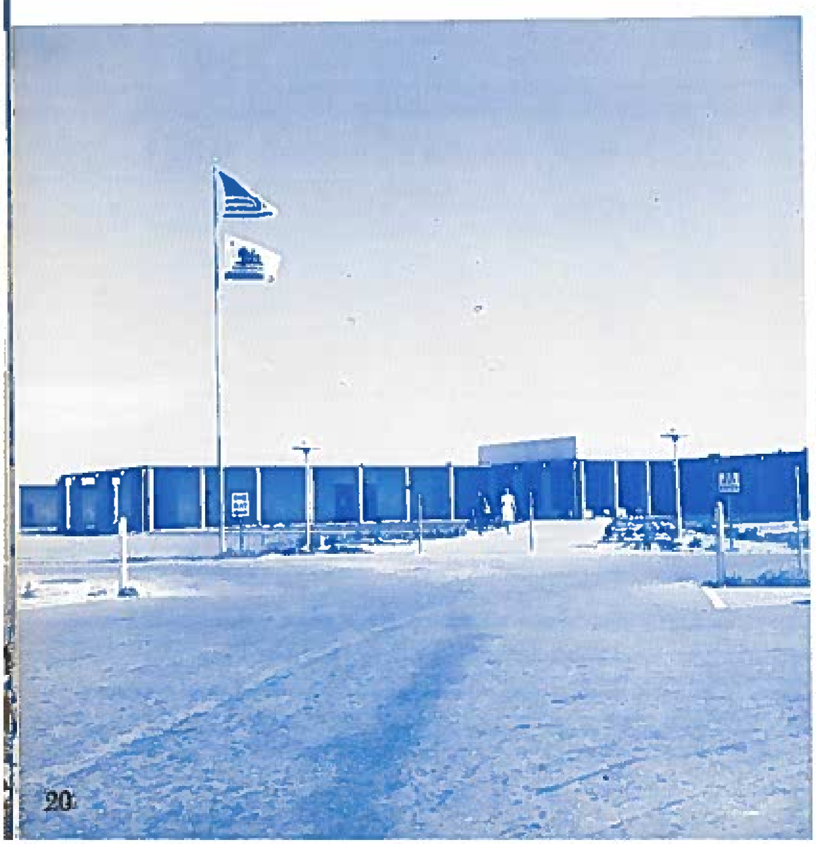
The average number of customers served during the year totaled 31,818, an increase of 1,068 customers over 1961. This customer increase was almost equally divided between Imperial Valley and Coachella Valley.

Sales efforts by division superintendents and commercial representatives were augmented by the balanced use of all local advertising media. Dealers selling the particular products being promoted were encouraged to tie in with the advertising and promotion program.

The Home Service section, by contacting buyers of major appliances, provided the dealers with important after-the-sale home demonstrations. In addition, numerous programs were presented at the Demonstration Kitchen, and homemaking columns were prepared for newspapers.

The Board of Directors approved a program of providing new electric ranges to home economics departments of junior high and high schools within the service area desiring to participate in the program. As of the end of the year 12 schools in the Imperial and Coachella Valleys had been provided with 39 ranges.

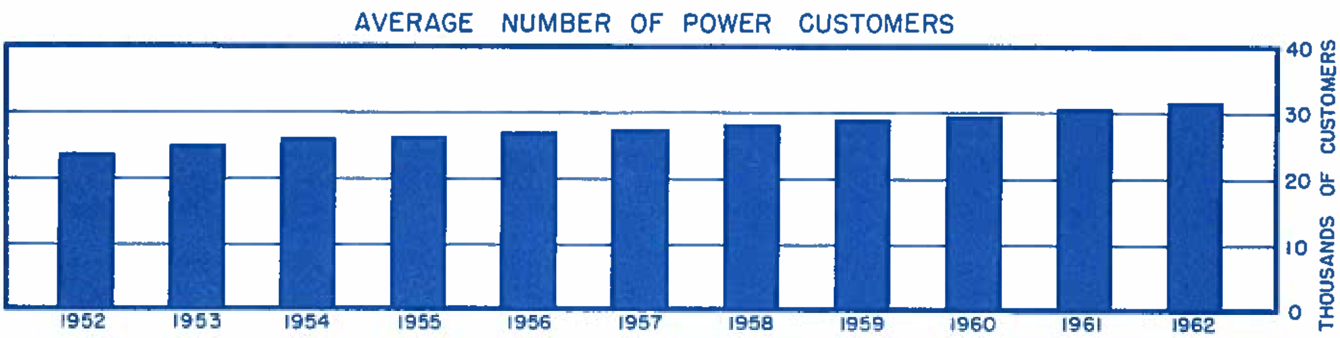
Imperial Valley College moved to new campus during the year

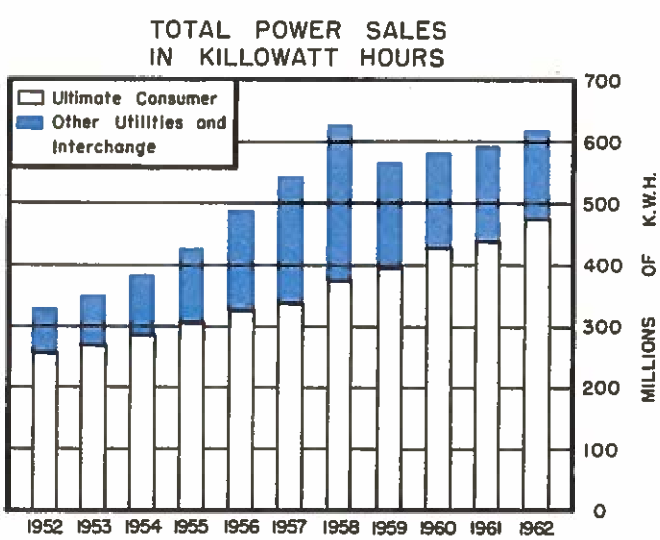


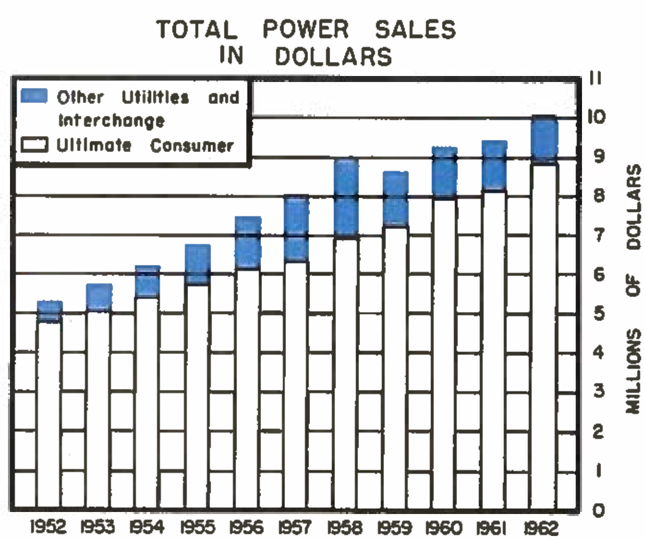
New 11,500-kw generators supply reserve power

POWER SALES — 1962-1961

Ultimate Consumers	1962	Per Cent	1961	Per Cent
Domestic	$ 3,844,843	38.3	$ 3,546,486	37.7
Commercial	2,937,836	29.2	2,649,776	28.2
Industrial	1,153,630	11.5	1,094,358	11.7
Agricultural	650,044	6.4	615,493	6.5
Street Lighting, Public Authority, Interdepartmental	281,489	2.8	263,988	2.8
Total Ultimate Consumer	$ 8,867,842	88.2	$ 8,170,101	86.9
Other Utilities	1,170,324	11.8	1,235,944	13.1
Total Sales	$10,038,166	100.0	$ 9,406,045	100.0







Robert D. Reynolds
(left)
Manager

Dolph W. Kelsey
Purchasing Agent

OPERATIONS SERVICES DEPARTMENT

The responsibility for providing the necessary "housekeeping" and logistics to operating departments is assigned to Operations Services Department. The department includes Right-of-Way Section, Building and Grounds Section, Mechanical Section, and Purchasing and Stores Section.

The Right-of-Way Section continued their work of leasing District-owned land in the Salton Sea area for recreational purposes; negotiated a number of right-of-way agreements and encroachment permits; and other agreements essential to the District's operation.

The Building and Grounds Section completed the new Imperial Division Office building at the corner of South Imperial Avenue and Seventh Street in the City of Imperial. In addition, the section continued the program of building modernization at the Operating Headquarters Yard. During the year construction was completed on the following new buildings: service station, electrical repair shop and construction dock, and transformer shop. Construction on these buildings had been started in mid-1961, and the buildings were ready for occupancy in the spring and early summer of 1962.

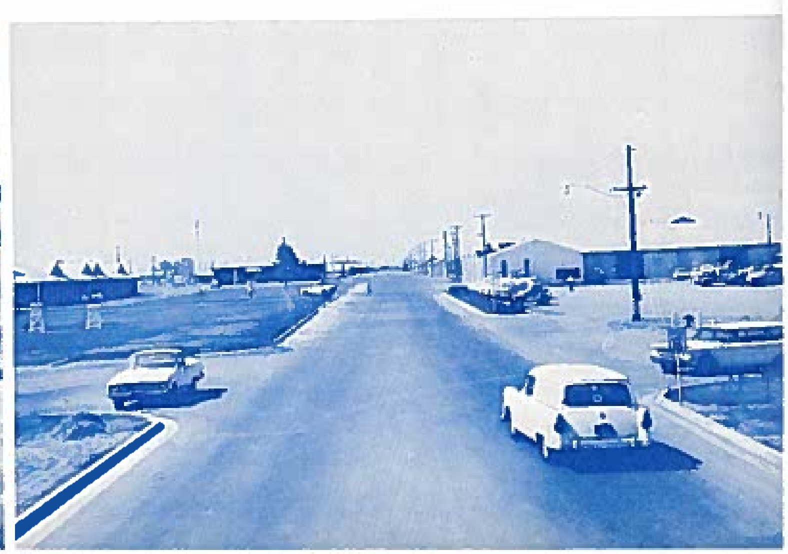
The Headquarters Yard was paved with asphalt surfacing, including an additional 164 unit parking lot to serve the employees in the northern portion of the Yard. Curbs and gutters were installed to provide drainage in all major areas. In addition to these major construction works a new watchman house, ice house, addition to carpenter shop, steam wash rack, remodeling of old carpenter shop for storage warehouse, and addition to heavy equipment operations building were completed. Construction of the new buildings necessitated dismantling the old service station, electric shop, agricultural chemical warehouse and steam wash rack facilities.

In connection with the Power Department's addition of two gas turbine units at the Brawley Diesel Plant, the Building and Grounds Section arranged for the extension of the railroad siding, grading of the site and construction of foundations. Upon completion of this project a new asphalt-surface entrance was provided, grounds cleared of debris, and new turbines and water reservoir were painted.

The Mechanical Section maintained an automotive fleet of 411 vehicles. This increase over the previous year was due to the expansion by the Water Department of night patrolling and relief zanjero work. This fleet traveled in excess of 4,400,000 miles. The heavy equipment fleet, including draglines, Ruth dredges, bulldozers and graders, operated in excess of 53,000 hours.

The Purchasing and Stores Section, by careful planning, maintained a balanced material and supply inventory. There were 221 obsolete items removed from stores and 21 new items, due to usage, were placed in stock, resulting in a total of 9,518 items in stock in combined stores as compared to 11,511 at the close of business in 1958. Suppliers within the District's service area furnished material and services in excess of $2,789,000. Additional studies and compilations of electrical equipment purchases were developed in connection with the antitrust suits against certain manufacturers.

Modernization of buildings and grounds at our Operating Headquarters has been a major departmental function



James Lloyd
(right)
Personnel Manager

Lawrence Eager
Assistant Personnel Manager

PERSONNEL DEPARTMENT

The Personnel Department might be best described as the District's "human engineering" department, responsible for over-all manpower planning and administration. The Department duties include recruitment, selection, development, utilization, and compensation of employees.

In September the job evaluation system — detailing the skills, mental, and physical requirements for each of the District's 257 classifications — was implemented. A committee of section heads from various departments, in co-operation with the Personnel Department, worked approximately one year developing the job evaluation system.

The specifications provide excellent data for organizational study and appraisal of employee performance. In addition, the data provided the basis for a new wage structure permitting each position to be compensated in direct relation to responsibilities and skills required.

In an effort to attract outstanding students the Department has made a concentrated effort to work in close co-operation with counselors and guidance personnel at the several schools within our service area. Members of the Personnel staff have appeared at various "career day" activities at local schools, highlighting the opportunities available with the District.

Starting in early 1962 all applicants for employment were screened by aptitude and performance test batteries. Test batteries for clerical positions are now considered particularly satisfactory. However, there are many positions peculiar to the District for which standardized tests are not readily available.

Regular monthly meetings with representatives of the Employees' Association were inaugurated in February to consider problems relating to general employment conditions. These meetings have proved highly satisfactory in solving employee relations problems, and have also been invaluable in developing better employee communications.

For many years zanjeros and hydrographers — comprising approximately ten per cent of the work force — have worked on a seven-day per week basis. A new program in effect reduced these employees to the equivalent of a six-day work week, through improved utilization of manpower and better over-all control of the irrigation system.

Group insurance administration is another important and active function of the Department. During the year, an average of 93 per cent of the eligible employees and 60 per cent of the eligible dependents were enrolled under the plan. The insurance section processed approximately 2,500 claims for dependents and employees in the amount of $178,914.96 in 1962.

Dept. Distribution of Employees	Dec. 31, 1962 *Full Time*	*Temp. and Part Time*	*Total*	Dec. 31, 1961 *Total*
Executive	28	3	31	32
General Manager's	7	-	7	7
Water	429	1	430	445
Power	300	1	301	308
Operations Services	126	2	128	123
Finance & Accounting	70	13	83	86
Personnel	7	-	7	7
TOTAL	967	20	987	1,008

A portion of the job evaluation committee

All applicants for employment are aptitude-tested

JACK B. BROCKETT
(left)
Controller

RICHARD W. WHEELER
Assistant Controller

FINANCE AND ACCOUNTING DEPARTMENT

The Finance and Accounting Department, which is under the management of the Controller, is divided into five sections: General Accounting, Internal Auditing, Customer Accounting and Billing, Cost Accounting, and Administrative Services.

The General Accounting Section follows the uniform system of accounts, as prescribed for utilities by the Federal Power Commission, and the standard accounting procedures in keeping the general ledger, accounts receivable, and accounts payable. General Accounting Section also prepares monthly financial statements, the detail balance sheet, and all published financial reports.

The Internal Auditing Section audits cash and accounts receivable at Headquarters and all division offices monthly. The section verifies monthly journal entries and all financial reports. Physical inventories of all stores are made annually. In addition, the section exercises a forms control function over all published forms.

In the Customer Accounting Section power meter readings are checked, calculated and approximately 32,000 bills are prepared, under the 20-cycle system, and mailed each month. Water deliveries are reported three times each month, checked, calculated, and billed monthly.

In Cost Accounting Section, payroll checks are issued semi-monthly by using the NCR Computronic Machine which posts the earnings record card, payroll journal and payroll check at one operation. The machine is also used in labor distribution, District assessment rolls and billing, and preparation of State and Federal payroll reports.

Administrative Services Section supervises division office personnel, collectors, adjustment agents, property-record custodian, Mail and General Files, and reproduction units.

CERTIFICATE

We have examined the balance sheet of the Imperial Irrigation District as of December 31, 1962, 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 Revenue and Surplus present fairly the financial position of the Imperial Irrigation District at December 31, 1962, 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

CONSOLIDATED STATEMENT OF ASSETS AND LIABILITIES AND NET WORTH

December 31, 1962

ASSETS

FUNDS FOR:

Operation and Maintenance	$ 7,212,721	
Payment of Bond Principal and Interest	4,190,367	
New Construction	2,171,803	
Reserve Funds for Replacements & Emergencies	2,634,559	
Other Special Funds	319,154	
Total Funds	$ 16,528,604	
Accounts Receivable & Current Assessments	1,708,151	
Notes Receivable	218,000	
Materials and Supplies	923,082	
Delinquent Assessments and Tax Deed Land	77,009	
Prepayments on All-American Canal Contract	2,431,603	
Deferred Charges and Prepaid Expenses	750,321	
Properties (Water and Power Systems)	105,506,164	
Total Assets	$128,142,934	

LIABILITIES

Current Liabilities	$ 1,495,126	
Outstanding Bonds	33,310,000	
Deferred Contract Installments	22,267,800	
Reserves	34,869	
Deferred Credits	1,906,427	$ 59,014,222
NET WORTH		69,128,712
Total Liabilities		$128,142,934

The Net Worth is 53.9% of Total Assets

COMPARATIVE INCOME AND EXPENSE STATEMENT AND BALANCE SHEET

WATER DEPARTMENT

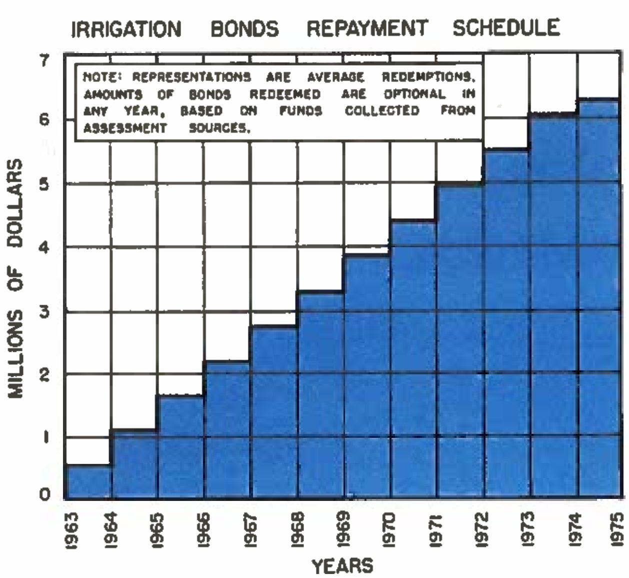
	1962	OVER 1961	UNDER 1961
Operating Revenue	$ 6,191,598	$ 56,403	
Operating Deductions	3,846,426	120,963	
Operating Income	$ 2,345,172		$ 64,560
Other Income	164,822	$ 25,147	
Gross Income	$ 2,509,994		39,413
Income Deductions	219,922		19,797
Net Income	$ 2,290,072		$ 19,616
BALANCE SHEET			
Current Assets	$ 5,585,344	$ 890,655	
Investment and Fund Accounts	2,859,975		$ 101,741
Fixed Assets	57,060,138	1,285,687	
Other Assets and Deferred Charges	3,002,039		497,461
Total Assets	$68,507,496	$1,577,140	
Current Liabilities	$ 680,902	$ 1,467	
Long-Term Liabilities	27,239,380		$1,004,200
Deferred Credits and Reserves	1,701,437	5,340	
Surplus	38,885,777	2,574,533	
Total Liabilities and Surplus	$68,507,496	$1,577,140	

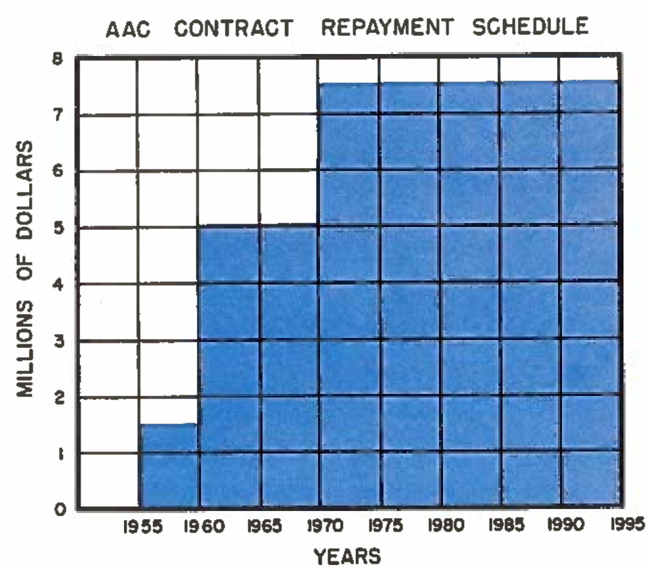
POWER DEPARTMENT

	1962	OVER 1961	UNDER 1961
Operating Revenue	$10,174,208	$ 646,708	
Operating Deductions	7,546,358	536,491	
Operating Income	$ 2,627,850	$ 110,217	
Other Income	277,112	30,178	
Gross Income	$ 2,904,962	$ 140,395	
Income Deductions	852,687		$ 38,383
Net Income	$ 2,052,275	$ 178,778	
BALANCE SHEET			
Current Assets	$ 5,701,206		$ 755,230
Investments and Fund Accounts	5,481,301	$ 8,324	
Fixed Assets—Electric Plant	48,443,453	1,596,779	
Other Assets and Deferred Charges	9,478		446
Total Assets	$59,635,438	$ 849,427	
Current Liabilities	$ 814,224		$ 13,768
Long-Term Liabilities	28,338,420		1,082,201
Deferred Credits and Reserves	239,859	$ 6,610	
Surplus	30,242,935	1,938,786	
Total Liabilities and Surplus	$59,635,438	$ 849,427	

	December 31 1962	December 31 1961	Increase or Decrease*
WATER OPERATING FUNDS:			
Assessments Collected for Following Year	$ 392,389	$ 375,063	$ 17,326
Other Cash Balances	3,214,845	2,226,720	988,125
Total Cash Balances	$3,607,234	$2,601,783	$1,005,451
WATER BOND FUNDS:			
Assessments Collected for Following Year	$ 517,318	$ 505,034	$ 12,284
Other Cash Balances	282,410	278,300	4,110
Total Cash Balances	$ 799,728	$ 783,334	$ 16,394
WATER CONSTRUCTION FUNDS:			
Assessments Collected for Following Year	$ 119,374	$ 116,615	$ 2,759
Other Cash Balances	989,680	1,250,022	260,342*
Total Cash Balances	$1,109,054	$1,366,637	$ 257,583*
MISCELLANEOUS WATER FUNDS:			
Total Cash Balances	$1,413,274	$1,292,570	$ 120,704
TOTAL WATER DEPARTMENT CASH	$6,929,290	$6,044,324	$ 884,966

* Decrease





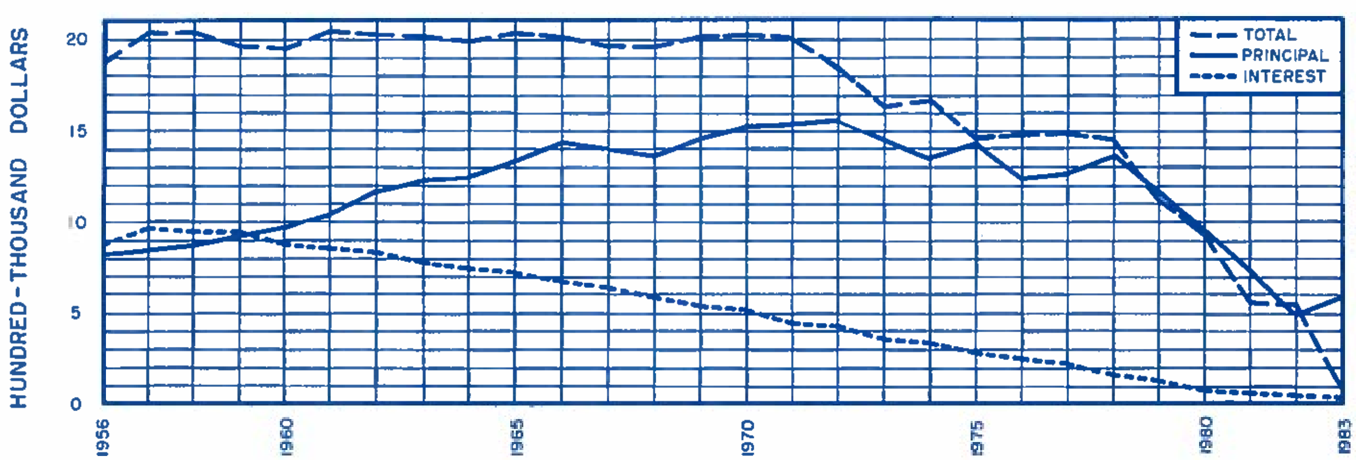
31, 1962, AND DECEMBER 31, 1961

	December 31 1962	December 31 1961	Increase or Decrease*
POWER OPERATING REVENUE FUNDS:			
Cash Balances	$ 3,605,487	$ 4,300,567	$ 695,080*
POWER BOND FUNDS:			
Cash Balances	3,390,639	3,248,334	142,305
POWER CONSTRUCTION FUNDS:			
Cash Balances	1,062,749	1,255,292	192,543*
MISCELLANEOUS POWER RESERVE FUNDS:			
Cash Balances	1,540,439	1,503,672	36,767
TOTAL POWER DEPARTMENT CASH BALANCES	$ 9,599,314	$10,307,865	$ 708,551*
ALL FUNDS:			
Assessments Collected for Following Year	$ 1,029,081	$ 996,712	$ 32,369
Other Cash Funds	15,499,523	15,355,477	144,046
Total Cash Balances	$16,528,604	$16,352,189	$ 176,415

* Decrease

Note: Cash and Fund Balances Include Securities Held.

ELECTRIC REVENUE BONDS



CONSOLIDATED REVENUE AND EXPENDITURE S

IMPERIAL IRR

OPERATING REVENUES:

Realized Revenue from:	CONSOLIDATED	POWER DEPT.	WATER DEPT.
Current Year Assessments	$ 1,473,737		$ 1,473,737
Penalties and Costs on Assessments	3,930		3,930
Redemption of Delinquent Assessments	39,289		39,289
Interest Collected on Redemptions	3,439		3,439
Total Collected by Assessor-Collector	$ 1,520,395		$ 1,520,395
Sales of Land Held under Assessment Deeds	7,307		7,307
Equivalent of Current Assessments on Tax Deed Land	550		550
Rental of Land Held under Assessment Deeds	772		772
Interest on Land Sales Contracts	1,038		1,038
Total Revenues Derived from Assessments	$ 1,530,062		$ 1,530,062
Water Sales	4,353,963		4,353,963
Gate Service Charges	63,493		63,493
Pipe Service Charges	37,326		37,326
Rental of Buildings	91,668	$ 42,796	48,872
Rental and Sales of Operative Land	13,162		13,162
Rental of Equipment	21,120		21,120
Contributions for Operation and Maintenance of All-American Canal	114,950		114,950
POWER SALES:			
Residential or Domestic Sales	$ 3,844,844	$ 3,844,844	
Rural Sales — Agricultural Power	650,043	650,043	
Commercial Sales	2,937,836	2,937,836	
Industrial Sales	1,153,629	1,153,629	
Public Street and Highway Lighting	100,488	100,488	
Other Sales to Public Authorities	94,633	94,633	
Sales to Other Electric Utilities	1,170,324	1,170,324	
Interdepartmental Sales	86,369	86,369	
Total Power Sales	$10,038,166	$10,038,166	
Miscellaneous Revenue	101,896	93,246	8,650
TOTAL OPERATING REVENUES	$16,365,806	$10,174,208	$ 6,191,598

TEMENT — JANUARY 1, 1962 - DECEMBER 31, 1962

ATION DISTRICT

	Consolidated	Power Dept.	Water Dept.
Total Operating Revenue—*Brought Forward*	$16,365,806	$10,174,208	$ 6,191,598
OPERATING REVENUE DEDUCTIONS:			
Operating Expenses:			
Operation and Maintenance of Water System	$ 2,917,708		$ 2,917,708
Operation and Maintenance of All-American Canal	706,827		706,827
Operation and Maintenance of Imperial and Laguna Dams	52,411		52,411
Operation and Maintenance of Power System:			
Production Expenses	1,456,868	$ 1,456,868	
Power Purchase	2,159,145	2,159,145	
Transmission Expenses	196,920	196,920	
Distribution Expenses	671,562	671,562	
Accounting and Collecting Expense	362,661	362,661	
Sales Promotion Expenses	127,431	127,431	
Administrative and General Expenses	635,449	635,449	
Total Power Operation and Maintenance	$ 5,610,036	$ 5,610,036	
Miscellaneous Expenses	7,145		7,145
Total Operating Expenses	$ 9,294,127	$ 5,610,036	$ 3,684,091
Depreciation and Amortization:			
Depreciation of Equipment and Facilities	$ 53,330		$ 53,330
Depreciation of Buildings	52,565		52,565
Depreciation of Power System	1,883,974	$ 1,883,974	
Amortization of Plant Acquisition Adjustment	35,966	35,966	
Losses on Sales and Retirements of Assets	49,563		49,563
Taxes	23,259	16,382	6,877
Total Operating Revenue Deductions	$11,392,784	$ 7,546,358	$ 3,846,426
Net Operating Revenue	$ 4,973,022	$ 2,627,850	$ 2,345,172
OTHER INCOME:			
Interest on U. S. Securities	$ 37,063	$ 34,573	$ 2,490
Interest on Bank Deposits	389,357	233,145	156,212
Miscellaneous Interest	15,514	9,394	6,120
Total Other Income	$ 441,934	$ 277,112	$ 164,822
GROSS INCOME	5,414,956	$ 2,904,962	$ 2,509,994
INCOME DEDUCTIONS:			
Interest on District Bonds	$ 1,040,169	$ 827,295	$ 212,874
Amortization of Debt Discount	7,048		7,048
Lease of Power Rights	25,392	25,392	
Total Income Deductions	$ 1,072,609	$ 852,687	$ 219,922
NET INCOME	$ 4,342,347	$ 2,052,275	$ 2,290,072

Reginald L. Knox, Jr.
(left)
Chief Counsel

James H. Carter
Assistant Counsel

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 Department 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 still pending in the United States Supreme Court at the end of the year.

Hearings were held during the period 1956 through 1959 at which time the matter was submitted to the Honorable Simon H. Rifkind, the Special Master appointed by the United States Supreme Court, for his recommended decree. In the latter part of 1960, this decree was filed as a part of a report with the Court.

In 1961, all of the California defendants filed exceptions to the report and the recommended decree. Separate exceptions were prepared for the District and filed. Thereafter, briefs were filed jointly on behalf of all of the California defendants and the District, in addition thereto, filed a separate closing brief in support of its position.

Thereafter, the matter was calendared for oral argument before the Supreme Court and beginning January 8, 1962, and continuing for four days, the matter was thoroughly argued by all parties. Thereafter, the Court requested further argument and the matter was set down for hearing November 13, 1962. The matter was again argued by all parties, each presenting their arguments in favor of and in opposition to the Special Master's report and recommended decree. The hearing was concluded on November 14, 1962.

It is anticipated that the Supreme Court of the United States will render its decision in this matter at an early date; however, due to the complexities and nature of this matter, it is difficult to determine precisely when this will be or when this case may be concluded.

SALTON SEA DAMAGE CLAIMS

There is presently pending an action brought by six plaintiffs 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 and are pending.

During the year, additional claims totaling $20,000.00 were filed by some of the plaintiffs, in the pending action, for additional damages occurring since 1956.

ANTI-TRUST SUITS

The eleven anti-trust lawsuits filed during 1961 on behalf of the District in the United States District Court of California, Southern District, Southern Division in San Diego, were transferred to Los Angeles in the Central Division. There have been various hearings, preliminarily, in the anti-trust suits during the year and these matters are presently pending.

CONDEMNATION ACTIONS

During the year, no additional condemnation actions were filed; however, the condemnation action presently on file for the acquisition of rights of way for the "N" transmission line, Riverside County, has substantially been concluded with one remaining parcel to be determined and settled.

MISCELLANEOUS LITIGATION

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

The Legal Department actively participated in proceedings and hearings involving the District's interest 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.

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

Jerome J. Molof
(left)
Work Unit Conservationist
U.S. Department of Agriculture
Soil Conservation Service

Bill T. Simpson
Agricultural Engineer
U.S. Department of Agriculture
Soil Conservation Service

SOIL AND WATER CONSERVATION

Silt and salt through the years have presented the most serious problems to the continued productivity of irrigated lands.

With the construction of Imperial Dam, and the desilting works, silt is no longer a problem. However, water entering the All-American Canal system carries approximately one ton of dissolved salts — 750 to 800 parts per million. Obviously, for the lands to remain productive, salts must be removed and not allowed to accumulate in the soil.

In the early 1940's, the District requested the U. S. Department of Agriculture, Soil Conservation Service, to provide engineers and soil scientists to conduct research studies of Imperial Valley drainage and salt control problems. Formulae developed as a result of this early research are universally used as the basis of drainage design.

Under a special Memorandum of Understanding at that time between the USDA and the District, Imperial Irrigation District became the Soil Conservation District for Imperial Valley. The District Board of Directors sets policy for soil conservation engineers, both organizations assist local farmers with soil surveys and drainage tile designs. Survey and design data developed by either agency are freely exchanged.

Through scientific conservation practices, land which had gone out of production due to inadequate drainage and excessive salt accumulation in the soils, has been returned to production. It is noteworthy that the dollar-value agricultural production in Imperial County was $213,198,764 for the year 1962, the major portion of which was produced within the boundaries of the District.

During 1962, eighty Farm Plans were prepared by the Work Unit covering 9,180 acres. The plans, based on soil analysis and other data, provide the farmer with a suggested land-use program.

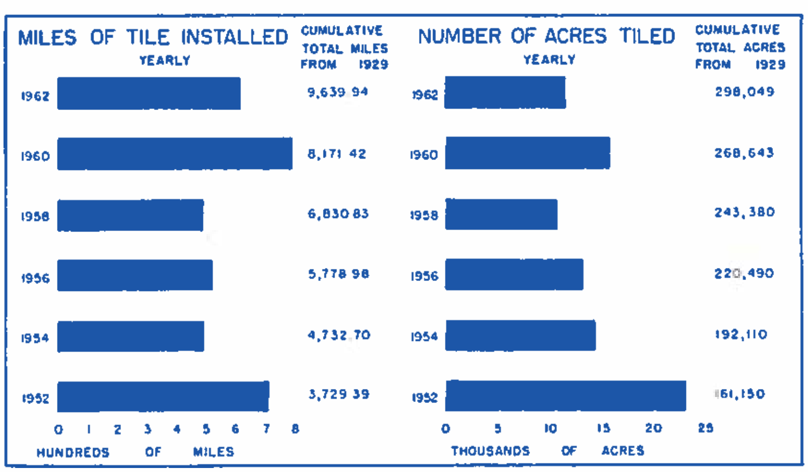
To date, 1,057 completed farm plans have been developed covering 145,180 acres within the boundaries of the Imperial Irrigation District.

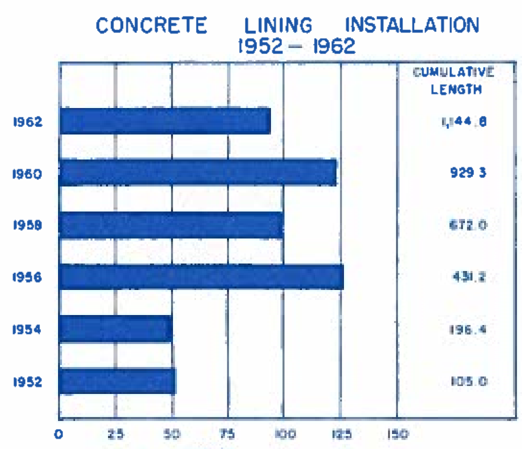
It was apparent in the late 1920's that soil surveys of the irrigated lands were essential to continued production. At that time the District Drainage Department started making surveys on a limited basis, and since the 1940's both agencies have co-operated on this vital project.

In 1962, soil surveys were completed on 28,978 acres by both SCS and IID. Since the inception of the soil survey program, approximately 434,687 acres have been surveyed.

During the year, the work unit initiated studies on irrigation water management which should prove extremely helpful. A field study has also been set up to determine the consumptive use with cotton.

Foreign agricultural specialists visiting Imperial Valley gain a far greater insight into water control and efficient water usage as a result of a joint training program with the District Public Information Office.





WILLIAM J. STADLER
(left)
Public Information Officer

ORVILLE L. FREEMAN
Secretary of Agriculture
United States of America

PUBLIC INFORMATION

The Public Information Officer is responsible to the Executive Officer to the Board of Directors for developing and maintaining a flow of communications between the District and its employees, the general public, and various community groups.

The Public Information Officer is also responsible for the development of advertising and promotional programs in co-operation with the various operational department heads.

The Public Information Officer, William J. Stadler, serves as a technical advisor to the Colorado River Board for public relations matters.

During 1962, we were especially proud to receive third place in the Nationwide American Public Power Association Public Relations Contest for our Canal and Power Line Safety Programs. The Canal Safety Program, first started in May, 1959 in co-operation with the schools in Imperial County, has been responsible for dramatically reducing the number of deaths by drowning by building a "psychological fence" around the District's canal network.

The safety programs include a brochure, "Don't Go Near the Water – In Canals," and a similar brochure, "Don't Go Near the Power Lines – Unless You Are a Bird," which outline not only hazards but also defensive measures. In addition, each contains a section on mouth-to-mouth resuscitation.

Another interesting and important function of the Public Information Office – international in nature – was the continuing co-operation with the Department of State and various governmental agencies in arranging local programs for official visitors from many foreign countries. During the year agricultural engineers, engineers and technicians from numerous countries of the free world studied the District's irrigation system.

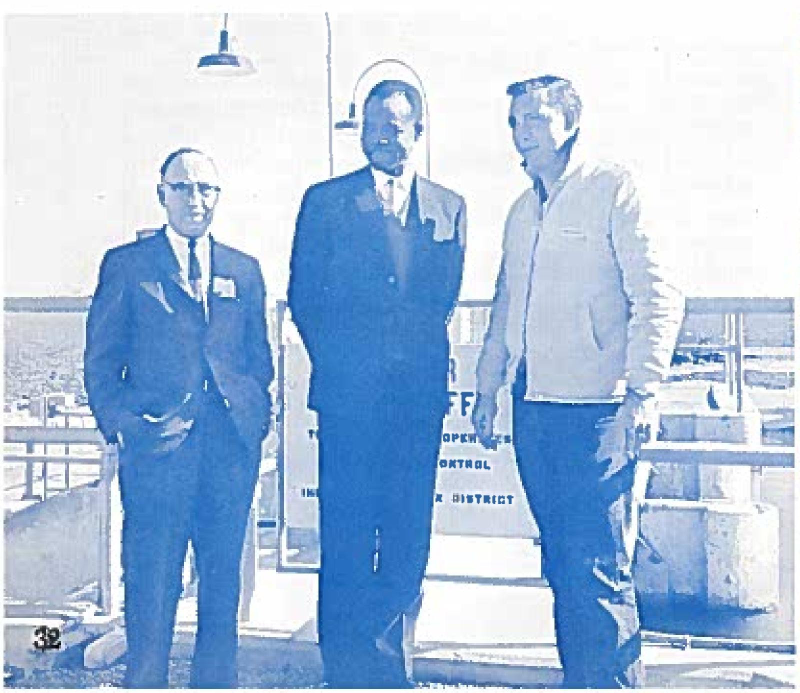
During the year editorial material and photographs, supplied by the office, were published in various national and local media. A regular monthly four-page customer paper, the DISTRICT NEWS, was edited and distributed to District customers and firms and individuals located outside the service area interested in maintaining a file of current information on Imperial and Coachella Valleys.

News of particular interest to District employees is contained in a monthly paper – HERE'S THE SCOOP – edited and published by the Public Information Office.

From time to time as public interest indicates, new publications are prepared to meet the needs. During 1962, a Pictorial Fact Sheet, a brochure on Imperial Dam and the All-American Canal, and a Quarterly Weather Summary of Imperial Valley were published.

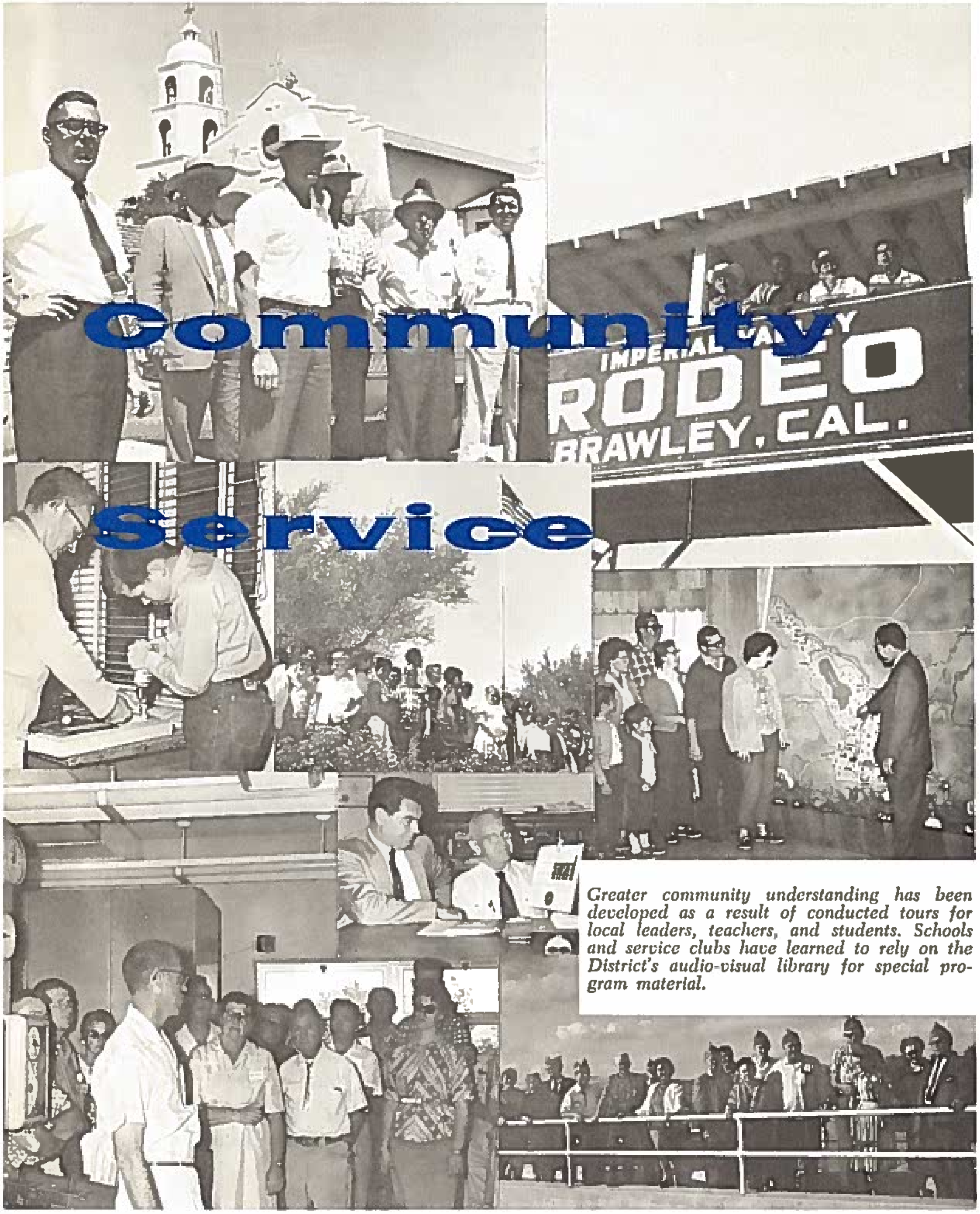
The results of the District's power advertising and sales promotional program, developed in co-operation with the power sales department, have been especially gratifying. For the past three years particular attention has been paid to stimulating dealer sales of appliances with greatest usage in off-season periods.

U. N. Ambassador Abdoulaye Konate (center), Republic of Upper Volta, was one of many high officials visiting the District



Local school children found District tours informative

Community Service



Greater community understanding has been developed as a result of conducted tours for local leaders, teachers, and students. Schools and service clubs have learned to rely on the District's audio-visual library for special program material.

Prepared and Published by
IMPERIAL IRRIGATION DISTRICT
OFFICE OF PUBLIC INFORMATION
Box 499, El Centro, California

IMPERIAL PRINTERS LITHO