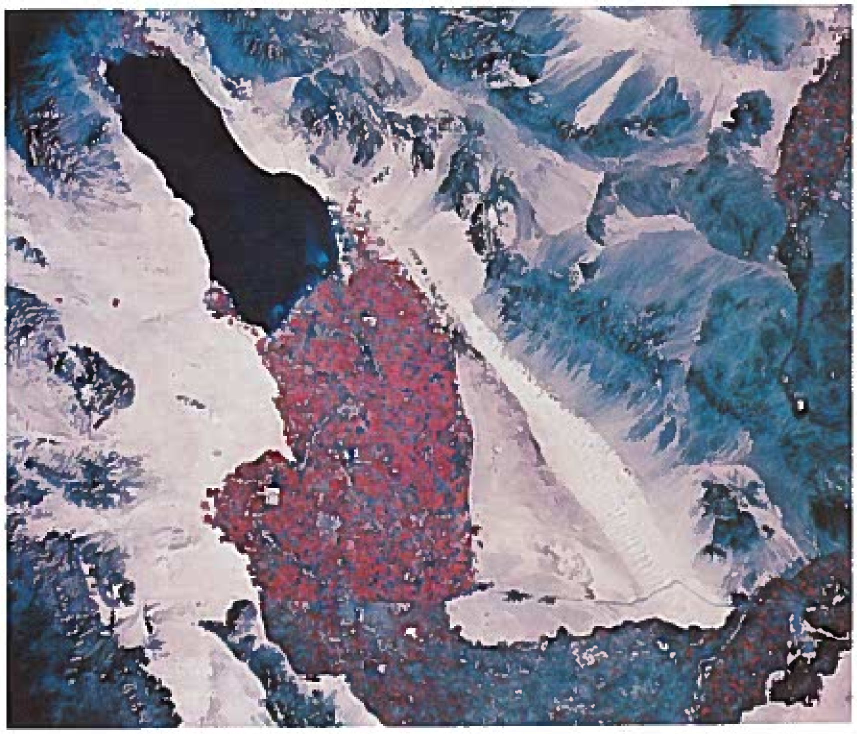


ANNUAL REPORT 1969

IMPERIAL IRRIGATION DISTRICT

THE YEAR 1969

BOARD OF DIRECTORS

Carl C. Bevins, *President*
Division 5

Raymond L. (Lom) Thompson, *Vice-President*
Division 1

Joseph D. Moore, *Division 2*

Bernard Galleano, *Division 3*

A. Neal Jack, *Division 4*

G. L. Dermody
Secretary to the Board

Anna T. McManus
Treasurer

MANAGEMENT

Robert F. Carter, *General Manager*

J. Fred Hesse, *Power Manager*

J. Melvin Sheldon, *Water Manager*

Robert D. Reynolds, *Operations Manager*

Richard W. Wheeler, *Finance Manager*

L. R. McGlocklin, *Personnel Manager*

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

William J. Stadler, *Public Information Officer*

COVER PHOTO

From 145 miles straight up the Imperial Valley is a hot bed . . . a hot bed of growing things. This remarkable photograph, taken from the Apollo 9 spaceship last March 12, used infrared film in a terrain photographic experiment. As a result, growing areas, which are warmer, reflect red on the finished print. The cooler areas — uncultivated land, sand dunes, rivers and canals — reflect in varying shades of grays and blues. The photograph also is remarkable in its coverage: Virtually every inch of the 4,241-square-mile Imperial Valley is shown, with the exception of a small area at the southwestern corner. The photo covers about 85 miles from top to bottom and 90 miles from side to side, or 7,650 square miles. It was taken at 8:28 a.m. (PST) with the sun 30 degrees above the horizon. The croplands revealed in red by the infrared film are largely alfalfa and sugar beets. The U.S.-Mexico border stands out sharply at the bottom of the photo, separating the irrigated reddish U.S. acreage from the non-irrigated Mexican land. The gray squares are unplanted land. Light blue spots at the Salton Sea indicate sediment patterns. The smallest red squares in the view cover 40 acres.

PROGRESS – KEYNOTE TO DISTRICT OPERATIONS

Carl C. Bevins
President
Division 5

The basic goals of Imperial Irrigation District are to provide reliable power and water service to our customers at the lowest possible cost, and the maximum development of the area we serve.

To attain these goals the total dedication to service of all our employees is necessary, even vital. No organization is better than its people, and we point with pride and confidence to our employees who make the Imperial Irrigation District the positive force it is.

The service we render to our customers is sometimes unseen by them because it happens at night or in a remote area, or many times it is happening in front of them and they are not aware of it – but it is always there. It may be a line crew called out in a storm to repair a downed line, or a water crew to repair a broken ditch, or it may be as unspectacular as a polite greeting on the telephone. It is still service, and important.

We are proud of this long-standing record of service, and our heritage that goes back to the formation of the District.

Thus, it is with considerable pleasure that I herewith submit the Imperial Irrigation District's Annual Report for 1969. It reflects another year of progress.

The record of achievements in 1969 is a tribute to the District's excellent team of employees. It is through their combined efforts that the District is successfully meeting the challenges of accelerated growth. With the help of all the employees, officers and Directors, we will do our utmost to meet these challenges.

We look forward to the future with confidence that both Imperial and Coachella Valleys will continue to grow and prosper.

BOARD OF DIRECTORS – Members of the Board of Directors have diversified business experience such as farming, cattle feeding, real estate, banking and transportation. Elected for four-year terms, each has a record of outstanding accomplishment in his own business or profession and civic relationships. Shown at a regular session at the Executive Building in El Centro, Directors are, from left, A. Neal Jack, Bernard Galleano, Joseph D. Moore, Vice-President Raymond L. (Lom) Thompson and President Carl C. Bevins.

ROBERT F. CARTER
GENERAL MANAGER

Review of Progress 1969

Since the beginning of man, no mind has been able to achieve greatness unless it continued to search and to go forward.

This is true for individuals as well as for business entities, and to an increased degree for a young company in a young country.

The Imperial Irrigation District has been part of the Imperial Valley practically from its inception as a home for enterprising people. There could be no standing still for the District in the early days, and there can be none now. That the District has been living up to this concept is borne out by statistics of the last decade, and again in progress figures of 1969.

The Power Department reports another increase in sales. Kilowatt-hour sales to ultimate customers stood at 819,466,400, a gain of 86,559,100 kilowatt-hours over 1968.

The distribution of power sales reveals that Imperial Valley has kept step with progress, as 47.9 per cent of the power accounts were commercial and industrial, while 44.1 per cent were domestic and 4.9 per cent agricultural. The rest were street lighting, public authorities and inter-departmental accounts.

The Water Department's responsibilities include operation and maintenance of the All-American Canal headworks and desilting basins at Imperial Dam, the 80 miles of the canal, 49 miles of the Coachella Branch of the canal, three miles of New Briar Canal, a 1,642-mile network of other main canals and laterals, and the 1,385-mile system of main and lateral drains.

Water in the District's canal system serves agricultural, industrial and domestic purposes. All cities and towns in Imperial Valley receive raw water supplied from District canals.

The administration of this tremendous organization and the enormous amount of work done at practically all hours of night and day require the wholehearted cooperation of more than 900 employees. Mindful of this, management in 1969 instituted a revised pension plan for employees, the finest such plan available. The results of the District's progressive policies toward its employees were evidenced by an awards banquet at which 249 employees were honored for service varying from 10 to 45 years, representing a cumulative total of 4,460 years.

The District's concern with progress is also manifested in a series of experiments undertaken in 1969 and continuing for some time in the future. Among them is a determination of the properties of an African fish which may be used in weed control — one of two such experiments conducted in the United States — as well as installation of a lysimeter to measure water consumption of different plants and a monitoring program of water pollutants.

The District's contribution to the local economy, too, is considerable. Purchases of materials and services from local vendors during the year amounted to about $5 million. As for the District's total payroll, it is in excess of $7.5 million per year.

A DECADE OF PROGRESS

With the beginning of a new decade, it may be well to pause briefly for a review of the progress in capsule form made during the past 10 years. Our annual reports tell a story of the tremendous, steady growth in all departments while, at the same time, pointing out the concern shown by the District for the public as evidenced by several rate cuts put into effect.

1959

Assessed value of the land within District boundaries amounted to $49,484,622 for the 1958-59 assessment year, almost $8 million above the previous year. Looking into the future, the District discussed possible measures to be applied in erosion control of the Alamo and New Rivers. Studies resulted in construction of additional structures on both rivers. Feasibility study of low-head hydroelectric plants at various points on the main canal system was initiated.

1960

Revenue from power sales set a new record of $9,228,204 during the year, an increase of $562,596 over the previous year. Sales to ultimate consumers were even more impressive, showing an increase of $721,334.

1961

Capital expansion of the power and water systems, authorized, construction started or completed during the year, totaled $3,827,000. Major improvements included completion of the Double-Weir Combination Check-Hydroelectric Plant on the Central Main Canal, construction of additional transmission lines to serve Coachella Valley. Board of Directors liquidated the assets of its Mexican subsidiary, the Compania de Terrenos y Aguas de la Baja California, S.A., after 50 years of operation under a concession.

1962

District expended $2.1 million for gas peaking turbines at the Brawley diesel plant. Additions of approximately $3.5 million were made from revenue to the power and water systems. Receipts for the year were $17,419,932, disbursements were $17,243,520.

1963

Total District income from all sources rose to $17,935,511. Beginning that year, all water arriving in both Imperial and Coachella Valleys was controlled by the Watermaster's Office in Operating Headquarters after remote control equipment was installed at Drop 1 and the Coachella turnout of the All-American Canal. Board of Directors liberalized regulations permitting District participation with landowners for canal concrete lining.

1964

A new Calexico Division office was constructed. A 9,200-square-foot addition to the Headquarters J-2 building was made to accommodate operating personnel, as well as a 4,800-foot extension to the headquarters blacksmith and welding shops. Turnip Hydroelectric Plant, a low-head structure on the West Side Main Canal, was placed in service.

1965

New Calexico Division office constructed. Dedication of new executive building complex including El Centro Division offices. Average number of customers served was 36,040. Drainage system in Calipatria improved with installation of 13¾ miles of underground pipeline drains. Three erosion control structures were built in New River. Completion of work improving environmental aspect of the City of Brawley; some canals eliminated or placed in underground pipelines.

1966

Peak electric power demand reached an all-time high of 182,000 kilowatts in June while kilowatt-hour sales to the ultimate consumer totaled almost $11.5 million, a gain of more than $1 million over 1965. District Dippy Duck program of water safety made its debut. Alamo River Drop 3 was constructed to replace North End Dam, with a built-in feature to accommodate future power development.

1967

January saw completion of Generating Unit No. 2 — a 5,000 kilowatt hydroturbine — at Drop 3 on the All-American Canal. Division office in Westmorland dedicated. Board voted to suspend District taxes on land within its boundaries, representing $1.5 million annually. The Board also paid off property bonded indebtedness of $2,932,000. Power demands in Imperial Valley reached a new all-time high in August as power consumption climbed to 24,338,399 kilowatt-hours. Lower power rates for municipalities on mercury-vapor street lighting went into effect December 1, a saving to cities of more than $30,000. Foxglove Check on the West Side Main Canal was installed and work proceeded on new structures on Oak Creek Canal and the Alamo River.

1968

Power generation was boosted when the new $10.5 million 75-megawatt fourth unit of the El Centro Steam Plant was put in operation, increasing the plant's capacity from 94 to 169 megawatts. Power rate revisions authorized by the directors went into effect May 1, meaning a saving of about $300,000 annually for customers. This was the fifth rate cut by the District in 10 years. Final payment of the irrigation bonds, an indebtedness of over 52 years, was consummated when bond principal and interest totaling $4,956,707 were paid during the year. Principal payments amounted to $2,866,000 of irrigation bonds and $1,430,000 of electric revenue bonds.

FINANCIAL REVIEW

ANNA T. MCMANUS
TREASURER

Cash receipts from all sources during 1969 totaled $20,906,260 — an increase of $945,844 over the previous year. An assessment on the lands of the District was not levied during 1969; therefore the income from that source was eliminated. Expenditures amounted to $19,800,975 for payment of bond principal and interest, payrolls and operating expenses including material and services.

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 19 banks in Imperial and Coachella Valleys. These accounts, together with government bonds purchased in previous years with reserve funds, provided the District with a total earned-interest income of $596,231 during the year 1969.

Bank interest on public funds continued at a maximum rate of 6¾ per cent on inactive deposits of $100,000 and over, for 180 days, with renewal privileges after that period.

Electric revenue bond principal and interest totaling $1,961,559 were paid during 1969 which included $1,390,000 principal and $571,559 interest.

Electric revenue bonds, issued from 1937 to 1954, amounted to $37,963,000 and the total remaining unpaid on December 31, 1969, amounted to $17,841,000. These bonds were issued to aid in financing the District's long-range power development program, including additions and improvements to its expanding power system.

FIVE-YEAR FINANCIAL COMPARISON

1965 - 1969

Year	*Receipts*	*Expenditures*
1965	$18,663,772	$17,697,301
1966	20,487,399	19,478,056
1967	19,944,036	23,444,055*
1968	19,960,416	27,321,999*
1969	20,906,260	19,800,975

**Steam Plant Construction*

GENERAL OBLIGATION BONDED INDEBTEDNESS

Year	*Indebtedness Beginning of Year*	*Bonds Retired*	*Indebtedness End of Year*
1965	$5,010,000	$ 601,000	$4,409,000
1966	4,409,000	736,000	3,673,000
1967	3,673,000	805,000	2,868,000
1968	2,868,000	2,866,000	2,000
1969	2,000	2,000	— 0 —

ELECTRIC REVENUE BONDED INDEBTEDNESS

Year	*Indebtedness Beginning of Year*	*Bonds Retired*	*Indebtedness End of Year*
1965	$24,699,000	$1,251,000	$23,448,000
1966	23,448,000	1,355,000	22,093,000
1967	22,093,000	1,433,000	20,660,000
1968	20,660,000	1,430,000	19,230,000
1969	19,230,000	1,389,000	17,841,000

Fund Balances—December 31, 1969, and December 31, 1968

POWER FUNDS	December 31, 1969	December 31, 1968	Increase or Decrease*
POWER OPERATING REVENUE FUNDS:			
Cash Balances	$ 1,344,361	$ 1,499,539	$ 155,178*
POWER BOND FUNDS:			
Cash Balances	3,260,297	3,204,372	55,925
POWER CONSTRUCTION FUNDS:			
Cash Balances	1,701,729	487,620	1,214,109
MISCELLANEOUS POWER RESERVE FUNDS:			
Cash Balances	168,256	167,186	1,070
TOTAL POWER DEPARTMENT CASH BALANCES	$ 6,474,643	$ 5,358,717	$1,115,926
WATER FUNDS			
WATER OPERATING FUNDS:			
Cash Balances	$ 2,848,741	$ 2,964,964	$ 116,223*
WATER BOND FUNDS:			
Cash Balances		4,155	4,155*
WATER CONSTRUCTION FUNDS:			
Cash Balances	713,477	902,295	188,818*
MISCELLANEOUS WATER FUNDS:			
Cash Balances	2,809,126	2,508,444	300,682
TOTAL WATER DEPARTMENT CASH BALANCES	$ 6,371,344	$ 6,379,858	$ 8,514*
ALL FUNDS			
TOTAL CASH BALANCES	$12,845,987	$11,738,575	$1,107,412

**Decrease*

NOTE: Cash Balances Include Securities Held

COMPARATIVE FINANCIAL ANALYSIS

Water

Water Department Earned	*1969*	*1968*	*1967*	*1966*	*1965*
From: Assessments, Penalties and Costs			$1,569,961	$1,589,382	$1,573,418
Redemption of Delinquent Assessments	$ 6,248	$ 26,743			
Interest on Redemption of Delinquent Assessments	1,119	2,545	2,119	5,436	3,504
Sales and Rentals of Land Held Under Assessment Deeds	9,583	8,471	8,063	21,185	13,582
Water Deliveries and Gate and Pipe Service Charges	5,786,741	6,090,877	5,060,117	4,944,431	4,632,483
Rental of Land, Buildings and Equipment	148,642	186,809	184,731	129,235	104,743
Other Sources	125,014	114,382	117,302	117,011	130,604
Earned from Operations	$6,077,347	$6,429,827	$6,942,293	$6,806,680	$6,458,334
Interest on Reserves	313,367	254,465	346,878	309,820	250,293
Total Earned from All Sources	$6,390,714	$6,684,292	$7,289,171	$7,116,500	$6,708,627
Which Was Used or Set Aside for:					
Operating Expenses	$4,730,587	$4,393,004	$4,153,185	$3,957,819	$3,877,577
Interest on Bonds			100,306	125,775	150,380
Taxes	13,076	10,517	9,978	9,246	11,282
Accounting for Operating Expenses and Income Deductions of	$4,743,663	$4,403,521	$4,263,469	$4,092,840	$4,039,239
Leaving a Differential of	1,647,051	2,280,771	3,025,702	3,023,660	2,669,388
Which Was Used for:					
Retirement of Bonds			$ 795,000	$ 736,000	$ 606,000
Additions to Canal System	$ 874,761	$1,252,899	1,251,772	1,283,368	813,148
Additions to Drainage System	506,189	536,116	563,543	516,907	399,860
Additions to Buildings and Land	3,096	19,978	51,108	29,500	435,693
New Equipment	159,106	326,244	317,843	328,401	391,245
Additions to Operating Funds	103,899	145,534	46,436	129,484	23,442
	$1,647,051	$2,280,771	$3,025,702	$3,023,660	$2,669,388
Which Accounts in Full for	$6,390,714	$6,684,292	$7,289,171	$7,116,500	$6,708,627

COMPARATIVE FINANCIAL ANALYSIS

Power

Power Department Earned	*1969*	*1968*	*1967*	*1966*	*1965*
From: Power Sales	$13,147,188	$12,150,519	$11,861,881	$11,486,319	$10,354,633
Rental of Electric Property	25,749	22,507	21,492	21,883	20,400
Other Sources	126,769	129,852	124,503	133,030	120,783
Earned from Operations	$13,299,706	$12,302,878	$12,007,876	$11,641,232	$10,495,816
Interest on Reserves	282,864	302,548	540,607	553,239	449,557
Total Earned from All Sources	$13,582,570	$12,605,426	$12,548,483	$12,194,471	$10,945,373
Which Was Used or Set Aside for:					
Operating Expenses	$ 7,921,612	$ 7,250,647	$ 6,728,891	$ 6,293,130	$ 5,780,157
Interest on Bonds	551,203	591,538	632,887	676,120	716,358
Lease of Power Rights	81,950	39,445	31,157	19,662	33,802
Taxes	21,464	20,848	19,371	17,329	16,715
Accounting for Operating Expenses and Income Deductions of	$ 8,576,229	$ 7,902,478	$ 7,412,306	$ 7,006,241	$ 6,547,032
Leaving a Differential of	5,006,341	4,702,948	5,136,117	5,188,230	4,398,341
Which Was Used for:					
Retirement of Electric Revenue Bonds	$ 1,460,000	$ 1,380,000	$ 1,350,000	$ 1,340,133	$ 1,330,000
Additions to Plant	1,522,959	1,993,964	1,568,749	1,638,122	1,657,222
Increase of Material and Supplies		113,541	48,959	86,615	22,878
Payment into Special Electric Plant Construction Fund	1,569,342	388,918	1,226,959	1,361,910	930,585
Additions to Other Reserve Funds	12,038	28,748	93,529	77,376	66,698
Deposit with the United States on All-American Canal Contract	237,117	171,837	140,555	110,131	145,679
Payment into Contract Fund — All-American Canal	182,883	218,163	219,445	219,869	154,321
Additions to Operating Fund	22,002	407,777	487,981	354,074	90,958
	$ 5,006,341	$ 4,702,948	$ 5,136,177	$ 5,188,230	$ 4,398,341
Which Accounts in Full for	$13,582,570	$12,605,426	$12,548,483	$12,194,471	$10,945,373

CONSOLIDATED REVENU

(January 1, 1969

OPERATING REVENUES:	Power Dept.	Water Dept.	Consolidated
Realized Revenue from:			
Redemption of Delinquent Assessments		$ 6,248	$ 6,248
Interest Collected on Redemptions		1,119	1,119
Total Collected by Assessor-Collector		$ 7,367	$ 7,367
Sales of Land Held Under Assessment Deeds		8,576	8,576
Rental of Land Held Under Assessment Deeds		1,007	1,007
Total Revenues Derived from Delinquent Assessments		$ 16,950	$ 16,950
Water Sales		5,694,449	5,694,449
Gate Service Charges		57,638	57,638
Pipe Service Charges		34,654	34,654
Rental of Buildings		88,146	88,146
Rental of Electrical Property	$ 25,749		25,749
Rental and Sales of Operative Land		34,368	34,368
Rental of Equipment		26,128	26,128
Contributions for Operation and Maintenance of All-American Canal		121,942	121,942
Power Sales:			
Residential or Domestic Sales	$ 5,815,127		$ 5,815,127
Rural Sales — Agricultural Power	589,272		589,272
Commercial Sales	5,298,374		5,298,374
Industrial Sales	1,049,239		1,049,239
Public Streets and Highway Lighting	141,070		141,070
Other Sales to Public Authorities	155,768		155,768
Interdepartmental Sales	98,338		98,338
Total Power Sales	$13,147,188		$13,147,188
Miscellaneous Revenue	126,769	3,072	129,841
TOTAL OPERATING REVENUES	$13,299,706	$6,077,347	$19,377,053

AND EXPENSE STATEMENT

cember 31, 1969)

	Power Dept.	Water Dept.	Consolidated
Total Operating Revenue — Brought Forward	$13,299,706	$6,077,347	$19,377,053
OPERATING REVENUE DEDUCTIONS:			
Operating Expenses:			
Operation and Maintenance of Water System		$3,937,647	$ 3,937,647
Operation and Maintenance of All-American Canal		737,822	737,822
Operation and Maintenance of Imperial and Laguna Dams		51,140	51,140
Operation and Maintenance of Power System:			
Production Expenses	$ 2,814,436		2,814,436
Power Purchased	2,090,120		2,090,120
Transmission Expenses	271,699		271,699
Distribution Expenses	1,183,565		1,183,565
Accounting and Collecting Expenses	496,604		496,604
Sales Promotion Expenses	131,589		131,589
Administrative and General Expenses	933,599		933,599
Total Power Operation and Maintenance	$ 7,921,612		$ 7,921,612
Miscellaneous Expenses		3,978	3,978
Total Operating Expenses	$ 7,921,612	$4,730,587	$12,652,199
Depreciation and Amortization:			
Depreciation of Equipment and Facilities		$ 60,448	$ 60,448
Depreciation of Buildings		78,089	78,089
Depreciation of Canal Structures		323,749	323,749
Depreciation of Power System	2,579,353		2,579,353
Losses on Sales and Retirements of Assets		19,143	19,143
Taxes	21,464	13,076	34,540
Total Operating Revenue Deductions	$10,522,429	$5,225,092	$15,747,521
Net Operating Revenue	$ 2,777,277	$ 852,255	$ 3,629,532
OTHER INCOME:			
Interest on Securities		$ 1,752	$ 1,752
Interest on Bank Deposits	$ 281,302	310,044	591,346
Miscellaneous Interest	1,562	1,571	3,133
Total Other Income	$ 282,864	$ 313,367	$ 596,231
GROSS INCOME	$ 3,060,141	$1,165,622	$ 4,225,763
INCOME DEDUCTIONS:			
Interest on District Bonds	$ 551,203		$ 551,203
Lease of Power Rights	81,950		81,950
Total Income Deductions	$ 633,153		$ 633,153
INCOME RETAINED FOR PLANT EXPANSION	$ 2,426,988	$1,165,622	$ 3,592,610

Comparative Income and Expense Statement and Balance Sheet

WATER

	1969	1968
Operating Revenue	$ 6,077,347	$ 6,429,827
Operating Deductions	5,225,092	4,986,931
Operating Income	$ 852,255	$ 1,442,896
Other Income	313,367	254,465
Gross Income	$ 1,165,622	$ 1,697,361
Retained for Plant Expansion	$ 1,165,622	$ 1,697,361

BALANCE SHEET

	1969	1968
Current Assets	$ 3,910,293	$ 4,212,622
Investment and Fund Accounts	3,522,603	3,412,739
Fixed Assets	69,640,916	67,888,558
Other Assets and Deferred Charges	641,705	821,911
Total Assets	$77,715,517	$76,335,830
Current Liabilities	$ 785,686	$ 719,245
Long-Term Liabilities	17,744,983	18,218,183
Deferred Credits and Reserves	115,749	131,169
Net Worth	59,069,099	57,267,233
Total Liabilities and Net Worth	$77,715,517	$76,335,830

POWER

	1969	1968
Operating Revenue	$13,299,706	$12,302,878
Operating Deductions	10,522,429	9,561,931
Operating Income	$ 2,777,277	$ 2,740,947
Other Income	282,864	302,548
Gross Income	$ 3,060,141	$ 3,043,495
Income Deductions	633,153	630,983
Retained for Plant Expansion	$ 2,426,988	$ 2,412,512

BALANCE SHEET

	1969	1968
Current Assets	$ 3,693,776	$ 3,755,671
Investments and Fund Accounts	4,796,290	3,502,338
Fixed Assets — Electric Plant	57,285,405	57,817,868
Other Assets and Deferred Charges	11,100	10,245
Total Assets	$65,786,571	$65,086,122
Current Liabilities	$ 667,525	$ 621,881
Long-Term Liabilities	18,855,017	20,277,218
Deferred Credits and Reserves	428,854	435,967
Net Worth	45,835,175	43,751,056
Total Liabilities and Net Worth	$65,786,571	$65,086,122

CONSOLIDATED STATEMENT OF ASSETS, LIABILITIES AND NET WORTH

DECEMBER 31, 1969

ASSETS

Funds for:		
Operation and Maintenance	$ 4,193,103	
Payment of Bond Principal and Interest	3,260,296	
New Construction	2,415,206	
Reserve Funds for Replacements and Emergencies	1,705,458	
Other Special Funds	1,271,924	
Total Funds		$ 12,845,987
Accounts Receivable		1,762,485
Notes Receivable		955
Materials and Supplies		1,297,121
Certificates of Sale and Tax Deed Land		5,176
Deferred Charges and Prepaid Expenses		664,043
Properties (Water and Power Systems)		126,926,321
Total Assets		$143,502,088

LIABILITIES

Current Liabilities	$ 1,447,211	
Outstanding Bonds	17,841,000	
Deferred Contract Installments	18,765,000	
Reserves	33,720	
Deferred Credits	510,883	$ 38,597,814
NET WORTH		104,904,274
Total Liabilities and Net Worth		$143,502,088

The Net Worth is 73.1 per cent of Total Assets

CERTIFICATE

(From Audit Report)

We have examined the balance sheet of the Imperial Irrigation District as of December 31, 1969, and the related statements of revenue and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, except as noted, and accordingly included such tests of the accounting records and such other auditing procedures that we considered necessary in the circumstances. The verification of the physical inventories of materials and supplies was limited to a sampling of the counts shown by the perpetual inventory card records and a test of the reconciliation thereof to the general ledger balance. 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, 1969, 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

By Paul G. Taylor
Certified Public Accountant

WATER

The District's water system serves an area of 503,133 acres of irrigated farm land. The total gross area within the District's boundaries is 974,433 acres, including rural, urban and undeveloped areas, and also the area below the –230 contour Salton Sea Reserve Boundary and areas covered by Salton Sea.

Total diversion through the All-American Canal headworks was 4,640,488 acre-feet, including 163,834 acre-feet used in desilting operations.

Water diversions in 1969 for all agencies served by Imperial Dam totaled 4,476,654 acre-feet, a decrease of 110,323 acre-feet from 1968.

Of 2,714,487 acre-feet of water received at Pilot Knob, 86.63 per cent was delivered to water users.

Water delivered to water users in Imperial Valley totaled 2,351,578 acre-feet, a decrease of 124,247 acre-feet from 1968.

The same growing conditions which produce food and fibre in abundance in Imperial Valley are also ideal for growth of weeds and brush along canals and drains. The battle to control this unwanted growth has been constant since the District was organized. The use of chemical weed control wherever possible is progressively gaining each year in control of brush and weeds on our network of over 3,100 miles of supply and drainage ditches.

Salton Sea collects drainage and storm run-off water from an area of about 7,500 square miles in Imperial and Riverside Counties, and Mexicali Valley, Baja California. The present salinity of the sea is slightly greater than ocean water, with 53.34 tons of salt per acre-foot of water, as compared to ocean water average of 47.80 tons per acre-foot. However, ocean water contains other mineral components in excess of Salton Sea water.

Major tributaries to Salton Sea from this system are the New and Alamo Rivers, which serve as the main collecting channels of the District's drainage system. The water surface elevation on December 31, 1969, was –231.95, a decrease of .15 of a foot during the preceding year.

There was a gain of approximately 10.55 per cent (excluding Mexico) in the removal of salt from Imperial Valley farm land through the drainage system into Salton Sea. A major portion of the salt was removed as a result of installation of underground drainage tile in individual fields, as outlined in the chart.

During the year 467,052 tons of sediment were removed by the desilting basins at Imperial Dam. April was the high month with 8,345 tons of sediment per day, and December was the low month with 30 tons of sediment per day.

Research and Development

In keeping with its policy of improving operations, the District began three research projects in 1969. They are centered around the use of an African fish in combating weeds, measuring water consumption of various crops and monitoring pollutants.

Perhaps the most interesting of these activities concerns a fish known as Tilapia Mossambica, originally brought to Arizona from Africa as a food fish. The experiments conducted by the District seek to determine the effectiveness of introducing this fish into our canal and drainage system to control aquatic weed growth.

Approximately 385 tilapia were transferred from drains in Yuma, Arizona, to All-American Canal Drain No. 1-C during June and July by the Department of Fish and Game, and isolated by construction of a gravel filter across the drain to prevent their escape.

To date, there has been good progress in the propagation of tilapia as well as the control of aquatic weeds by these fish. It is expected that future transfer of tilapia into the District's canal and drainage system will prove very beneficial in controlling the serious problems of restriction of water flow in the canal and drain channels by aquatic weed growth.

The lysimeter experiment is being conducted in association with the U.S. Department of Agriculture. The equipment will be used to measure water consumption of various crops in the Valley to determine their requirements.

Certain drainage studies, including those concerning salinity levels, will also be possible in this type of lysimeter housing as the bottom of the tank is accessible.

Briefly, a lysimeter consists of an area of soil which is an exact duplicate of soil found in Imperial Valley, but is suspended on a large-size scale.

The reinforced concrete housing for the lysimeter installation was completed in 1969 at the Southwest Field Station at Brawley. Results of the tests on different crops will be available in the latter part of 1970.

The third research activity concerns a program undertaken in association with the U.S. Geological Survey. Under the program, pollutants in the incoming irrigation water and drainage outflow have been monitored since July 1, 1969.

The tests will be used to establish a record of any of the various nutrients and pesticides that may be present in irrigation and drainage waters.

DISPOSITION OF WATER DIVERTED AT IMPERIAL DAM AND TRANSPORTED THROUGH ALL-AMERICAN CANAL DURING 1969

	Acre-Feet	*Total Acre-Feet*
Diverted at Imperial Dam, metered at Station 60		4,476,654
*Diversions at Yuma Projects	523,947	
Diverted to River at Pilot Knob Check	676,223	
Conveyance Loss from Imperial Dam to Pilot Knob Check	76,001	
Total		1,276,171
All-American Canal Below Pilot Knob Check		3,200,483
Diversions to Coachella Branch at Drop No. 1	478,634	
Conveyance Loss from Pilot Knob to Drop No. 1	46,016	
Total		524,650
All-American Canal Below Drop No. 1		2,675,833
Diversions from All-American Canal from Drop No. 1 to and including East Highline Canal	1,163,786	
Conveyance Loss from Drop No. 1 to East Highline Canal	30,197	
Total		1,193,983
All-American Canal Below East Highline Canal		1,481,850
Diversions from All-American Canal from East Highline Canal to and including Central Main Canal	797,654	
Conveyance Loss from East Highline Canal to Central Main Canal	12,940	
Total		810,594
All-American Canal Below Central Main Canal		671,256
Diversions from Central Main Canal to and including West Side Main Canal	664,624	
Conveyance Loss from Central Main Canal to and including West Side Main Canal	6,632	
Total		671,256

**Water diverted to the Yuma Project and its proportionate share of losses are not charged to nor is it a part of water diverted from Imperial Irrigation District and Coachella Valley County Water District. Imperial Irrigation District diverts and transports through the upper section of All-American Canal the Yuma, Arizona, Project's water, in accordance with terms of the All-American Canal Contract.*

MILES OF FARM TILE DRAINS INSTALLED

Year	*Miles*	*Cumulative Total Miles from 1929*
1969	808.64	14,858.80
1968	754.33	14,050.16
1967	634.00	13,295.83
1966	527.38	12,661.83
1965	734.52	12,134.45
1964	993.97	11,399.93
1963	766.02	10,405.96
1962	611.01	9,639.94
1961	857.51	9,028.93
1960	794.05	8,171.42

NUMBERS OF ACRES TILED

Year	*Acres*	*Cumulative Total Acres from 1929*
1969	6,010	354,022
1968	6,046	348,012
1967	6,419	341,966
1966	6,634	335,547
1965	7,958	328,913
1964	12,707	320,955
1963	10,129	308,248
1962	11,485	298,119
1961	17,921	286,634
1960	15,713	268,713

INVENTORY OF AREAS RECEIVING WATER SERVICE
CROP SURVEYS

PERMANENT CROPS

	Acres 1969	Acres 1968
Asparagus	3,093	2,736
Citrus:		
Grapefruit	555	434
Lemons	306	227
Mixed Citrus	366	304
Oranges	752	653
Tangerines	463	310
Dates	93	86
Fish, Frog Farms	305	
Mixed Fruit	22	
Ornamental Shrubs	5	
Pasture, Permanent	922	930
Pecans	72	77
TOTAL	6,954	5,757

GARDEN CROPS

	1969	1968
Black-Eyed Peas	96	121
Broccoli	712	526
Cabbage	664	1,307
Carrots	4,690	4,991
Carrots (Seed)		93
Cauliflower	10	
Cucumbers	444	266
Ear Corn	155	77
Endive	17	16
Fava Beans	85	130
Garlic	223	391
Lettuce	47,722	48,339
Lettuce, Butter	31	27
Lettuce, Red	31	33
Lettuce, Romaine	227	165
Melons:		
Cantaloupe	14,900	11,762
Casabas	50	
Crenshaw	30	237
Honeydew	84	62
Mixed Melons	284	63
Watermelons	4,059	4,897
Mustard	108	
Mustard (Seed)		16
Okra	51	90
Onions	4,707	4,295
Onions (Seed)	775	862
Peas	74	77
Peas (Seed)		40
Potatoes		97
Repina	144	144
Squash	1,086	575
Squash, Banana		19
Tomatoes	2,663	2,621
Vegetables (Mixed)	69	74
Vegetables (Mixed, Seed)	57	23
Water Lilies	12	18
TOTAL	84,260	82,454

FIELD CROPS

	Acres 1969	Acres 1968
Alfalfa	171,062	167,981
Alfalfa (Seed)	2,119	3,767
Barley	73,806	100,576
Bermuda Grass	1,019	1,266
Berseem Clover (Seed)	48	
Broom Corn		
Castor Beans		20
Clover		121
Cotton	48,282	49,253
Flax	2,351	2,017
Grass (Mixed)	398	
Oats	3,205	1,050
Rice	1	
Rye Grass	16,742	13,827
Safflower		380
Sesbania	253	71
Sorghum, Grain	54,829	60,075
Sorghum, Silage	951	771
Soy Beans		
Sudan Grass	4,066	4,085
Sugar Beets	80,350	63,522
Sugar Cane	2	2
Wheat	9,896	4,372
TOTAL	469,380	473,156
GRAND TOTAL	560,594	561,367

	1969	1968
Number of Farm Accounts Reported	5,160	4,914
Number of Owner-Operated Farm Accounts Reported	(45.9%) 2,368	(43.9%) 2,156
Number of Tenant-Operated Farm Accounts Reported	(54.1%) 2,792	(56.1%) 2,758
Average Area of Farm Accounts in Acres	94.46	98.87

Asparagus is readied for shipment to Italy.

1969 CROP SUMMARY

		Acres	
Field Crops	469,380		
Garden Crops	84,260		
Permanent Crops	6,954		
Total Acres of Crops	560,594		
Less Total Duplicate Crops		126,860	
Total Acreage			433,734
Area Being Reclaimed			8,560
Net Area Irrigated			442,294
Fallow Land			33,742
Total Area Farmable			476,036
Area of Farms in Homes, Feed Lots, Corrals, Cotton Gins, Experimental Farms and Industrial Areas			14,218
Area in Cities, Towns, Airports, Cemeteries, Fairgrounds, Golf Courses, Recreational Parks and Lakes, and Rural Schools, Less Area Being Farmed			12,879
Total Area Receiving Water			503,133
Area in Drains, Canals, Rivers, Railroads and Roads			71,563
Area Below —230 Salton Sea Reserve Boundary and Area covered by Salton Sea, Less Area Receiving Water			36,257
Area in the Imperial Unit not Entitled to Water			63,933
Undeveloped Area of Imperial Unit, West Mesa, East Mesa and Pilot Knob Mesa Units			299,547
GRAND TOTAL			974,433

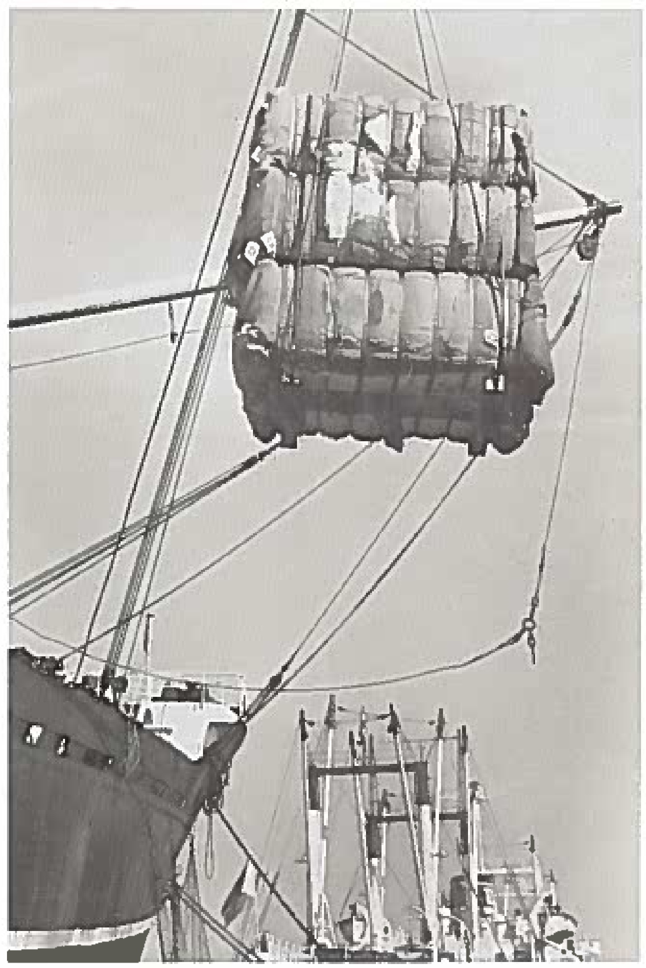
CROP RECAPITULATION

	1968	1969
Field Crops	$88,590,000	$88,551,000
Vegetable Crops	66,231,000	66,522,000
Livestock and Dairy	72,892,900*	88,393,000
Fruit and Nut Crops	785,000	988,000
Seed Crops	3,667,000	1,939,000
Apiary	273,500	338,000
TOTAL	$232,439,400*	$246,731,000

**Revised by Office of Imperial County Agricultural Commissioner*

GROSS VALUATIONS OF LEADING CROPS

Lettuce	$38,683,000
Hay, Alfalfa	27,608,000
Sugar Beets	22,876,000
Cotton Lint	16,410,000
Cantaloupes	10,000,000
Barley	7,696,000
Sorghum	7,350,000
Carrots	4,150,000
Tomatoes	3,414,000
Pasture	3,062,000
Asparagus	2,523,000
Onions	2,055,000
Watermelons	1,613,000
Wheat	1,300,000
Cotton Seed	1,274,000
Melons (Other)	1,100,000



Imperial Valley cotton being loaded at Long Beach Harbor for export to Japan and other foreign markets.

POWER

Further gains in revenue, number of customers served and power consumption were scored in 1969 by the District's Power Department.

Kilowatt-hour sales totalled 819,466,400, up 86,559,100 over 1968. During the same period, dollar sales were $13,147,188, a gain of $996,738.

Commercial and industrial accounts were 48 per cent of total power sales. Domestic use accounted for 44 per cent. The balance included agricultural, street lighting and public authorities.

There were 30,866 residential accounts, 6,698 commercial and industrial, 804 agricultural and 566 others for a total of 38,934, a modest gain of 860 customers over the previous year.

The average annual residential kilowatt-hour usage in 1969 was 10,951, a gain of 1,079 over 1968, proving that not only is the number of customers growing, but that each customer consumes more electricity.

Residents of Imperial and Coachella Valleys have learned that modern electric air conditioning can make desert living a pleasure despite the hottest days. Temperatures recorded during the year by the District showed the hottest day was August 4 with a maximum of 117 degrees. The average maximum for August was 109 degrees; July, with an average of 106 degrees, was not far behind.

The total capital expenditure on current additions and improvements was $2,067,643 of which more than half was for the distribution plant. Main expenditures were for poles and fixtures, transformers, conductors and devices.

The El Centro steam plant supplied 44 per cent of the District's power needs, with the balance coming from hydroelectric plants and contract allotments.

The power sales and service section continued its program of supplying electric appliance and air-conditioning dealers with material to encourage the use of electricity. Contacts were also made with building groups to assure the greatest use of electricity and participation in the Gold Medallion Home program.

The Electric Living Center personnel conducted cooking schools during the year and gave electrical appliance demonstrations in stores, schools and clubs. Instruction in the use of electrical appliances was given in homes.

POWER SALES

Ultimate Consumers		*Per Cent 1969*	*Per Cent 1968*
Domestic	$ 5,815,127	44.2	44.1
Commercial and Industrial	6,347,613	48.3	47.9
Agricultural	589,272	4.5	4.9
Street Lighting	141,070	1.1	1.1
Public Authorities	155,768	1.2	1.1
Inter-Departmental	98,338	0.7	0.9
Total Ultimate Consumers	$13,147,188	100.0	100.0
Other Utilities		.0	.0
Total Revenue	$13,147,188	100.0	100.0

POWER REVENUE

Division	*1969*	*1968*	*Increase*
Coachella Section	$ 4,355,637	$ 4,026,481	$329,156
El Centro	3,733,395	3,360,001	373,394
Brawley	1,631,922	1,522,620	109,302
Calexico	1,032,066	940,369	91,697
Holtville	684,894	651,368	33,526
Imperial	636,490	620,200	16,290
Calipatria	439,027	426,147	12,880
Westmorland	254,839	251,140	3,699
Colorado River	231,296	198,107	33,189
Salton Sea	147,622	154,017	(6,395)
Total to Ultimate Consumers	$13,147,188	$12,150,450	
Other Utilities	0	69	
Total Revenue	$13,147,188	$12,150,519	$996,669

POWER LINES

Transmission Lines	538.0
Subtransmission Lines	378.6
Distribution Lines	2,774.0
Total	3,690.6

SUBSTATIONS

Transmission	14
Distribution	45
Customers' (Commercial)	40
Total	99

POWER

SOURCE OF POWER REQUIREMENTS

	Per Cent
Hydroelectric	24
Steam Generation	44
U.S. Bureau of Reclamation	24
Axis Plant, Yuma	6
Arizona Public Service	2

CAPITAL EXPENDITURES ON CURRENT ADDITIONS AND IMPROVEMENTS

Production Plant	$ 23,419
Distribution Plant	1,176,611
Transmission Plant	295,614
Engineering and Supervision	144,086
General Plant	47,566
El Centro - Niland Transmission	380,347
TOTAL	$2,067,463

MAJOR DISTRIBUTION PLANT EXPENDITURES

Transformers	$318,250
Poles and Fixtures	337,150
Conductors and Devices	202,304
Meters	65,686
Services	50,464

SOURCES OF POWER

District Owned	*Nameplate Rating in Kilowatts*	
El Centro Steam Plant		186,000
Brawley Diesel Plant		
Diesel	12,000	
Gas Turbine	22,500	
Total Diesel Plant		34,500
Hydroelectric Plants		
Pilot Knob	33,000	
Drop No. 2	10,000	
Drop No. 3	9,800	
Drop No. 4	19,600	
Double Weir	560	
Turnip	420	
Total Hydro		73,380
Total District Owned		293,880
Other Power Sources		
U.S. Bureau of Reclamation		
Glen Canyon (CRSP)	23,200	
Davis Dam	30,000	
Total USBR		53,200
Axis Plant		25,000
Total Other Sources		78,200
TOTAL ALL SOURCES		372,080

Night view of Valley Nitrogen Producers, Inc., El Centro manufacturers of commercial chemical fertilizers. This is one of the comparatively new industries of Imperial Valley which considerably increased the District's industrial power load.

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