

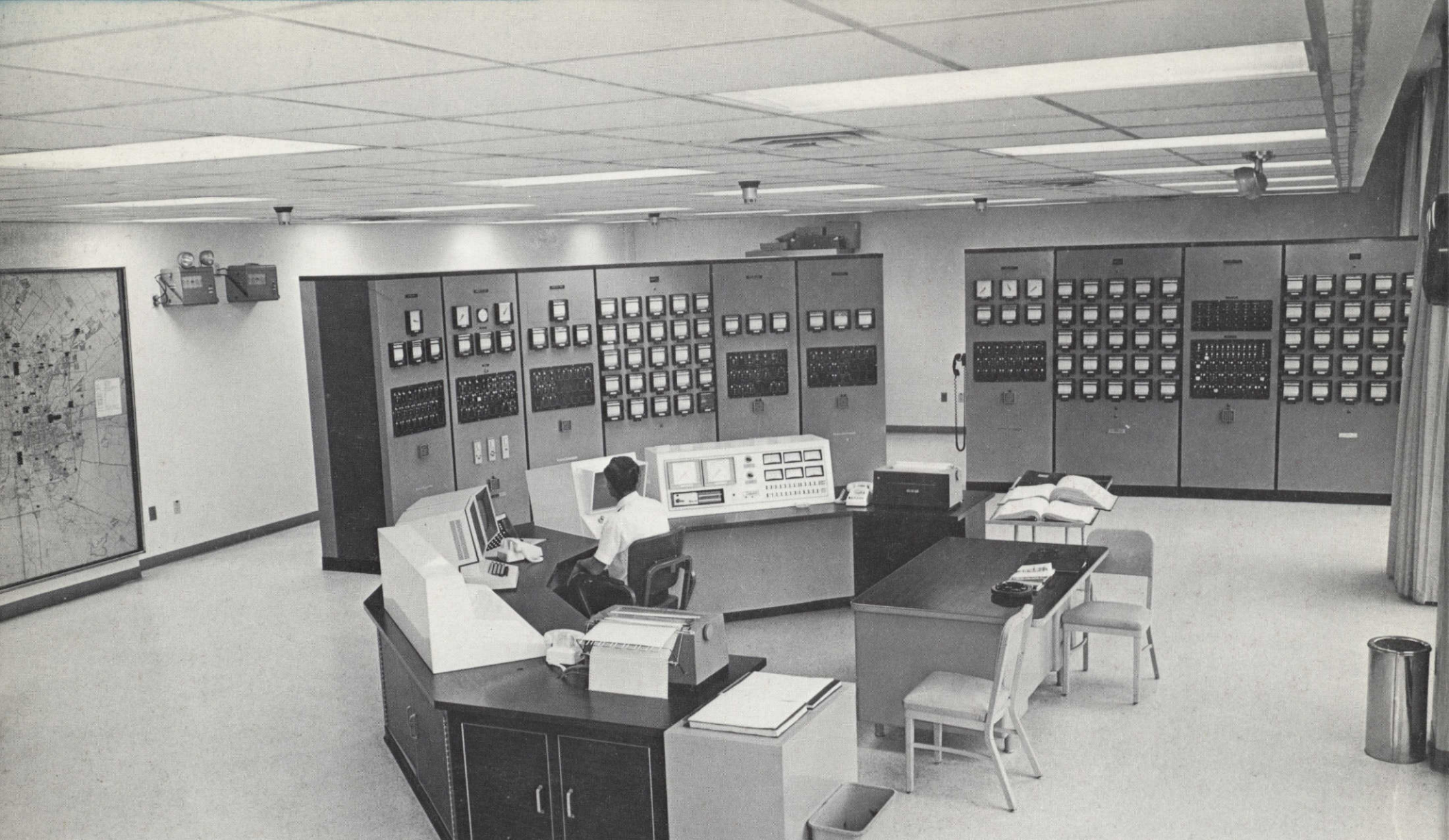
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CITY WATER BOARD OF SAN ANTONIO • ANNUAL REPORT • 1970



From its computerized control center the City Water Board maintains automated control of three separate systems: water, steam and chilled water. This advanced concept achieves lower operating costs by improved operating efficiency, reduced labor costs and extended equipment life.

City Water Board

of San Antonio, Texas

1970 ANNUAL REPORT

HIGHLIGHTS OF 1970

	1969		1970
Revenue increased from	\$ 9,479,574	to \$	9,970,966
Operating cost increased from	3,863,165	to	4,343,638
Construction from revenue decreased from	3,624,224	to	2,834,477
Municipal equity rose from	53,868,335	to	57,409,423
Debt coverage increased from	3.54	to	3.57
Operating cost per customer increased from	\$ 26.44	to \$	29.26
Miles of main in use went up from	1,958	to	1,982
Fire hydrants in service increased from	7,904	to	8,065
New services installed decreased from	3,136	to	2,914
Number of customers increased from	146,089	to	148,452
Investment in gross utility plant per customer increased from	\$ 619	to \$	637
Number of budgeted employees increased from	568	to	589

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THE COVER: Artist's sketch of the San Antonio City Water Board's new administration building located at 1001 East Market Street. This new facility will be completed in May 1971, providing the public with greatly improved customer service facilities, adequate parking and a location easily accessible from all points of the city.

A Message
from the Board of Trustees
to the Citizens of San Antonio

Board of Trustees

Dr. D. Leo Galindo

Roland C. Bremer

Walter W. McAllister
Mayor

Mike Passur
Chairman

Jack H. Kaufman
Vice-Chairman



A primary objective always of the Trustees, the Management Staff and the dedicated employees of the City Water Board is to render the best and most efficient service possible to our customers and the community.

We are proud to report that in 1970 a number of major improvements in service were achieved:

- With construction work three-quarters completed the City Water Board's new office building at 1001 East Market Street will be ready for occupancy in May offering such conveniences to the public as efficient new customer service facilities, adequate parking space and easy accessibility from all points in the city.
- The Board's entire computer operation was expanded and improved giving our employees instantaneous access to billing, consumption and accounting records in serving the public. Similar fast and accurate service is provided to the City Tax Office, the Municipal Courts, the Police Department and the City Accounting Department.

- New refinements and procedures were introduced in the separate computer operation through which the Board monitors and controls the vast water production and distribution system serving San Antonio. These improvements brought about a 10 per cent increase in the operating efficiency of the Control Center without any increase in personnel.
- A major water main replacement program was initiated for the Model Cities Area providing for replacement of eight miles of inadequate distribution mains and old services.
- Production facilities were expanded to stay abreast of San Antonio's growth with final construction on the Bitters Pump Station, with the installation of two four-million gallons per day booster pumps at the Medical Tank site, and with the installation of a new 5,000,000 gallons per day capacity pump at Wurzbach Pump Station.
- The distribution system was strengthened with the installation of large trunk mains to fully utilize Wurzbach Station's

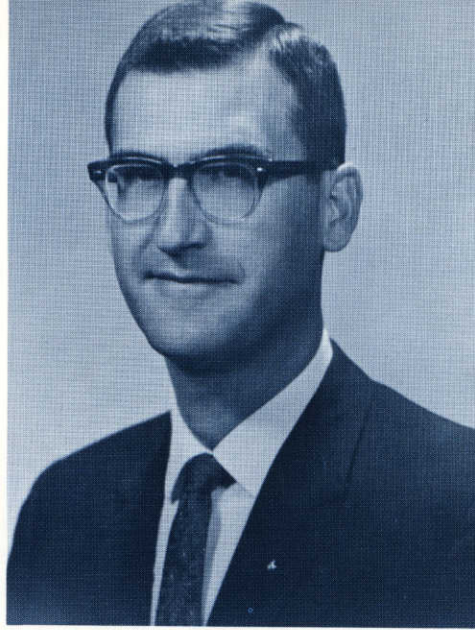
increased production facilities and to feed the distribution system needed to serve the new University of Texas area.

- A total of 118,152 feet of inadequate and corroded mains were replaced, 2,914 new water services were installed, and fire protection was improved with the installation of 161 additional fire hydrants.

These projects are a few of the many accomplished by your City Water Board in 1970 to provide the best possible service to the citizens of San Antonio. The employees of the City Water Board work full time to give full truth and meaning to the phrase "Service to the Community."



Mike Passur, Chairman
Water Works Board of Trustees



Robert P. Van Dyke
General Manager

A Report from the General Manager

The City Water Board in 1970 significantly improved and expanded its customer service facilities, continued the long-term planned program to upgrade and expand the city's water supply and distribution system and secured authorization of a \$10,000,000 bond issue to carry forward major capital improvements required to stay abreast of San Antonio's rapid growth.

The new City Water Board main office building at 1001 East Market Street was begun in 1970 and at year's end was three-quarters completed. The new building will provide many needed conveniences to the public including easy accessibility from all parts of the city, adequate space for customer parking and larger more efficient customer service facilities.

CUSTOMER REVENUE UP

The average revenue per customer showed a slight increase for the year from \$64.88 in 1969 to \$67.17 in 1970. The revenue per million gallons metered declined from \$320.17 the prior year to \$316.01 in 1970. Maintenance and Operation Fund expenses increased from the previous year by \$486,093 bringing the total to \$4,348,562. The operating cost per customer rose from \$26.44 in 1969 to \$29.26 in 1970, and the number of customers increased by 2,363 with a total of 148,452 customers served at the end of 1970.

COMPUTER SERVICES EXPAND

The City Water Board's computer facilities which provide service to many departments of the City of San Antonio as well as to its own operations experienced a very high degree of utilization during the past year. Implementation of the new City Water Board Customer Service programs in 1970 greatly aided Board person-

nel in providing better and faster service to the public.

Inquiries from the remote terminals during the latter half of the year averaged approximately 18,000 inquiries per week with the City Water Board's Customer Service portion accounting for an average in excess of 7,000 inquiries.

Despite the use of multi-programming and multi-processing, a three-shift operation was still required on a five-day per week basis with the weekends being utilized for new program testing and maintenance. The Customer Service system has materially increased the operating efficiency in that area with customer account information being available immediately to contact clerks.

The City Water Board continued to increase its utilization of the process control computer serving the Central Heating and Cooling Plant and the water distribution system. Four of the six service levels of the distribution system were under computer control at the end of 1970 with the two additional service levels being programmed for control during 1971.

UTILITY PLANT ADDITIONS

Total utility plant additions for the year amounted to \$4,312,835 of which \$759,576 were provided from bond funds, \$718,782 by contributions net of refunds, and \$2,834,477 from revenue funds. Additional outstanding commitments of \$3,201,130 at the end of the year bring the total charges and commitments to \$7,513,965. Utility plant in service combined with construction in progress increased from \$90,492,550 at 31 December 1969 to \$94,542,414 at the end of 1970. During the same period municipal equity increased from \$53,868,335 to \$57,409,423.

PUMPAGE AND RAINFALL

Total water pumpage for 1970 was 34,633 million gallons as compared with 33,829 million gallons for 1969. Metered water usage was 31,553 million gallons compared with 29,608 for 1969. The revenue from metered water sales for 1970 was \$8,993,204 and was \$297,303 more than 1969 sales. Rainfall for 1970 was only 22.74 inches as compared with 31.42 inches for 1969. Normal annual rainfall is 27.84 inches a year. During 1970 there were 144 days with rain or traces of rain as compared with 116 during 1969.

EMPLOYEE EDUCATION PROGRAMS

Seventy employees attended work-related specialized training courses sponsored in conjunction with Texas A & M University's Utility Extension Services. Twenty-six new water utility operators were certified by the State Board of Health, and eleven employees improved their level of certification. At the conclusion of the year there were 9 "A" operators, 58 "B" operators, and 66 "C" operators for a total of 133.

The College Tuition Refund Program introduced by the Board on 1 January 1970 is designed to encourage employees to develop and improve their knowledge and skills in work-related education fields and provides assistance to the employees for tuition fees. Twenty employees participated in the program during the first year, and their courses of study ranged from specialized technical to college level entry and graduate studies.

The Basic Education Program continued in 1970, and 9 of 13 students enrolled in the June class earned their high school equivalency certificates. Twenty-seven other employees were enrolled in preparatory classes, and upon successful completion these students will be offered the opportunity of enrolling in the high school equivalency course.

SAFETY RECORD RECOGNIZED

Continued interest in the field of safety resulted in the City Water Board receiving three awards in 1970 reflecting the 1969 safety work record. These awards included the "Award of Merit" from the National Safety Council, the "Award of Honor" from the American Water Works Association, and a First Place Industrial Safety Award from the Texas Safety Association. This was the 12th consecutive year that the organization has been awarded the AWWA "Award of Honor" and the Texas Safety Association's Industrial Safety Award.

WAGE AND SALARY PROGRAM

The annual review of the Board's Wage and Salary Program resulted in the Board's approval of a general increase effective 1 October 1970. This was the 7th consecutive year that the salary ranges were revised.

FEDERAL AID PROJECTS

Planning on a major water main replacement project within the San Antonio Model Cities Area was completed in 1970. The project provides for the replacement of 8 miles of undersized and inadequate distribution mains and services within the Model Neighborhood Area and will result in improved water pressures and flows which are necessary for adequate fire protection. Financing of the project will be shared by the United States Department of Housing and Urban Development, San Antonio Model Cities, and the City Water Board, and the total cost of the project will be approximately \$450,000. It is expected that additional similar projects will be constructed within the Model Cities Area in the future.

PRODUCTION FACILITIES EXPANDED

Continuing progress was made during 1970 on the Board's master planned expansion of production facilities. The final construction contract for Bitters Pump Station was awarded during the year. When completed the station will be capable of furnishing 6,000,000 gallons of water per day to the north-central part of the city.

Two new booster pumps with a total installed capacity of 4 million gallons per day were installed at the Board's Medical Tank site on Fredericksburg Road. This increased booster pumping capacity insures a dependable and adequate supply to San Antonio's expanding medical complex and other growth requirements in the northwest area of the city.

A new 5,000,000 gallons per day capacity pump was placed in service at the Wurzbach Pump Station. This brings the total pumping capacity of this station to 20,000,000 gallons of water per day.

TRUNK MAIN CONSTRUCTION

Construction was completed during the year on a series of 16-inch, 20-inch, and 30-inch mains which are located in the northwest section of the city and which are designed to permit the full utilization of the increased production facilities at Wurzbach Pump Station. These mains will also be a vital part of the Board's distribution system which will eventually be required to serve the University of Texas at San Antonio and surrounding area. A con-

tract was awarded on a 12-inch and 16-inch trunk main extending from the Board's present system southeast on U.S. Highway 181 approximately 34,000 feet to the City Public Service Board's power generating station at Calaveras Lake. This project was initiated primarily to serve the Calaveras power generating station, but when completed it will also facilitate growth of the city in the extreme southeast section by making available water supply in an area where potable water cannot be obtained from wells.

MAIN EXTENSIONS AND REPLACEMENTS

Progress was made during the year on the Board's continuing program of replacing substandard distribution mains, and 118,152 feet of these mains were replaced during 1970. In general these mains were both inadequate in size and badly corroded. Two of these projects were in the downtown area and involved mains which had been in service for over 85 years. With the completion of this replacement work 1,982 miles of water mains were in service at the end of 1970.

During 1970 a total of 2,914 new water services were installed, and fire protection was improved with the installation of 161 additional fire hydrants.

SURFACE WATER SUPPLY

A surface water supply for San Antonio came one step nearer during the year when the Board expressed its intent to enter into an agreement with the San Antonio River Authority for the acquisition of 20,000 acre-feet of water annually from the proposed Cibolo Reservoir and 16,000 acre-feet of water annually from the proposed Applewhite Reservoir. Following the initial agreement between the City Water Board and the San Antonio River Authority and following subsequent discussions with the U.S. Bureau of Reclamation, it was decided to initiate broad studies that would lead to the formulation of a comprehensive long-range plan for the coordinated integrated use of all water resources in the greater San Antonio area and that would recognize every conceivable beneficial use of these resources to provide the maximum benefits obtainable for our entire area.

A joint proposal signed by the City Water Board, the City of San Antonio, the Edwards Underground Water District, the Guadalupe-Blanco River Authority, and the San Antonio River Authority was sent to our Congressional delegation 25 August 1970 requesting their assistance to obtain Federal assistance from the U.S. Bureau of Reclamation to carry out the proposed studies. Our Congressional delegation enthusiastically received and supported our request, and we have been advised by the U.S. Bureau of Reclamation that monies have been made available to cover the entire investigation as presently programed for the City Water Board and the other cooperators involved in the study. It is anticipated that the studies will be commenced 1 July 1971.

The U.S. Bureau of Reclamation preliminary report on the Cibolo Project has almost been completed and should be submitted to the Congress in early 1971. It is hoped that Congressional authorization for the Cibolo Project can be obtained in 1971 and that it will be constructed and in operation during this decade. The feasibility of the Applewhite Reservoir immediately south of San Antonio will be investigated in the above mentioned U.S. Bureau of Reclamation study.

I want to give special recognition to the wisdom and leadership provided by our Trustees this past year and to the efficient and dedicated work throughout 1970 of the entire Board family of employees. It is through the close and united efforts of Trustees, Management Staff and all Employees that this citizen-owned utility continues to achieve high goals of service to the community and to merit the excellent support of the City Administration and our customers.



Robert P. Van Dyke
General Manager



The City Water Board Management Staff. J. W. Musgrave, Manager of Customer Service Branch; Robert P. Van Dyke, General Manager; Richard G. Toler, Manager of Operations Branch; Mel C. Binney, Manager of Personnel Branch; and John R. Shields, Comptroller.



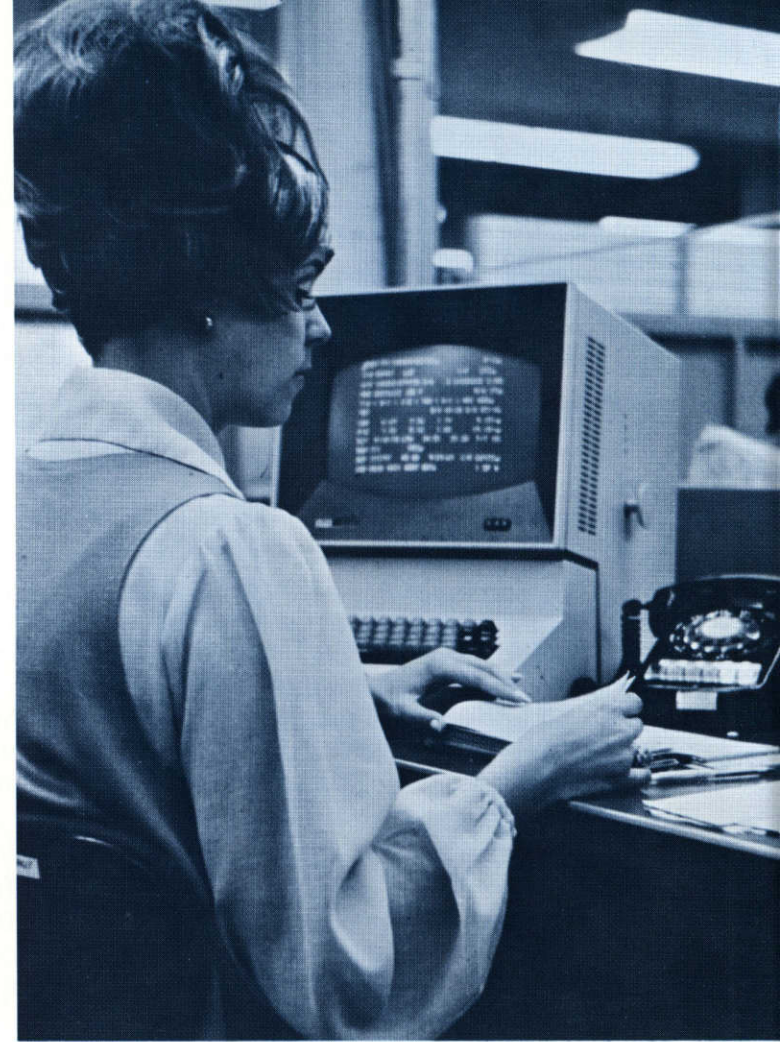
Speaking English and Spanish with equal facility, the City Water Board's attractive switchboard operators handle 210,000 incoming business calls each year with poise and pleasantness. The public will be served in the new main office with the latest and best telephone equipment.



Pay stations have been established at 84 locations in supermarkets and stores throughout the city for the easy convenience of customers in paying their water bills. More than 60,000 customers each month make use of these pay stations located throughout metropolitan San Antonio.



Board employees in serving the public employ the most modern equipment and methods to provide the prompt service and time-saving efficiency needed in today's complex world, and yet they retain the traditional friendliness and courtesy of an earlier Southwestern era.

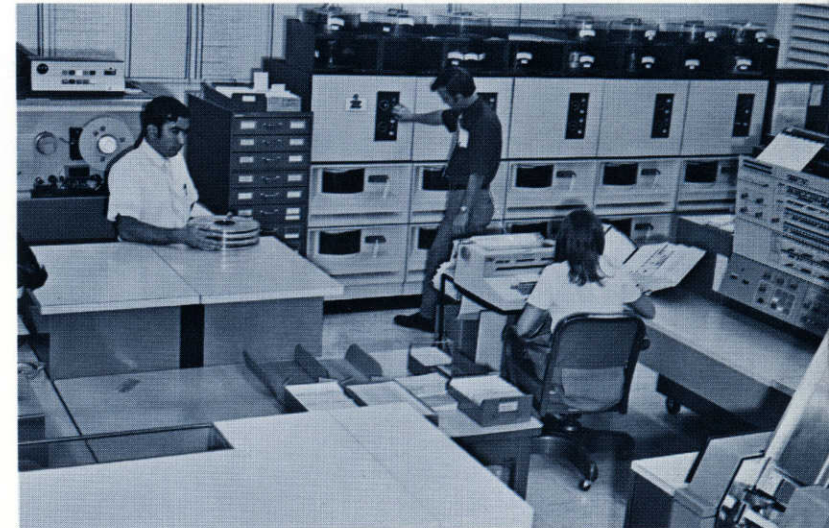


Instant information has proven to be one of the greatest advances in providing excellent service to our customers. Complete information concerning the customer's account is available in seconds displayed to Board employees on the video data terminal equipment.

(Top right) Pictured here is a data processing employee communicating with the 360/40 central processing unit to determine the particular status of a project in progress. This is the focal point of the Board's management information system and shows some of the equipment used in providing up-to-the-minute customer service.



(Center right) The computer's 2314 disc drive unit provides information at high speeds up to 60,000 characters a second from the various files pertaining to our customers. The computer system used is among the most advanced systems employed by any water utility in the nation.



(Lower right) An initial step in setting up a customer's account is the recording on magnetic tape all information relating to the account. This 6401 key-tape punch machine records the data on the customer's account for input into the daily billing system.



(Below) Through continual training programs City Water Board personnel keep abreast of the latest advances in computer service. The new computerized customer accounting procedure training program is only one of the Board's many on-the-job training sessions.



COMBINED FUNDS

Statement of Revenues and Their Disposition Compared to Budget Year Ended December 31, 1970

GROSS REVENUES

Operating revenues

Metered water sales	\$ 8,993,204	\$ 8,800,000
Customers' penalties	256,425	285,000
Central heating and cooling sales	434,483	450,000
Fire protection charges	47,361	45,000
Other operating revenues	62,646	52,000

	\$ 9,794,119	\$ 9,632,000
Deduct services provided to the City of San Antonio .	290,907	295,000

Total operating revenues	\$ 9,503,212	\$ 9,337,000
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Non-operating revenues

Interest on bank deposits and investments	459,099	353,750
Unclassified non-operating revenues	8,655	2,000

Total non-operating revenues	\$ 467,754	\$ 355,750
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TOTAL GROSS REVENUES	\$ 9,970,966	\$ 9,692,750
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DISPOSITION OF REVENUES

Operating expense

Maintenance and Operation Fund expense	\$ 4,348,562	\$ 4,313,690
Working Capital Fund expense or (gain)	4,004	- 0 -
Data Processing Fund expense or (gain)	(8,928)	- 0 -
Depreciation	2,082,923	2,062,600
Loss on sale of assets	5,784	- 0 -

Total operating expense	\$ 6,432,345	\$ 6,376,290
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Interest on bonds	870,955	870,955
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Prior year adjustments	20,518	
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Total expenses	\$ 7,323,818	\$ 7,247,245
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NET REVENUE	\$ 2,647,148	\$ 2,445,505
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Other requirements

Retirement of bonds	\$ 936,670	\$ 936,670
Improvement and Contingency Fund		
Minimum of 15% of gross revenue	1,539,281	
Reserve Fund reduction	(153,252)	

	\$ 2,322,699	\$ 936,670
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Additions to reserves	\$ 324,449	\$ 1,508,835
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	\$ 9,970,966	\$ 9,692,750
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The accompanying notes are an integral part of this statement.



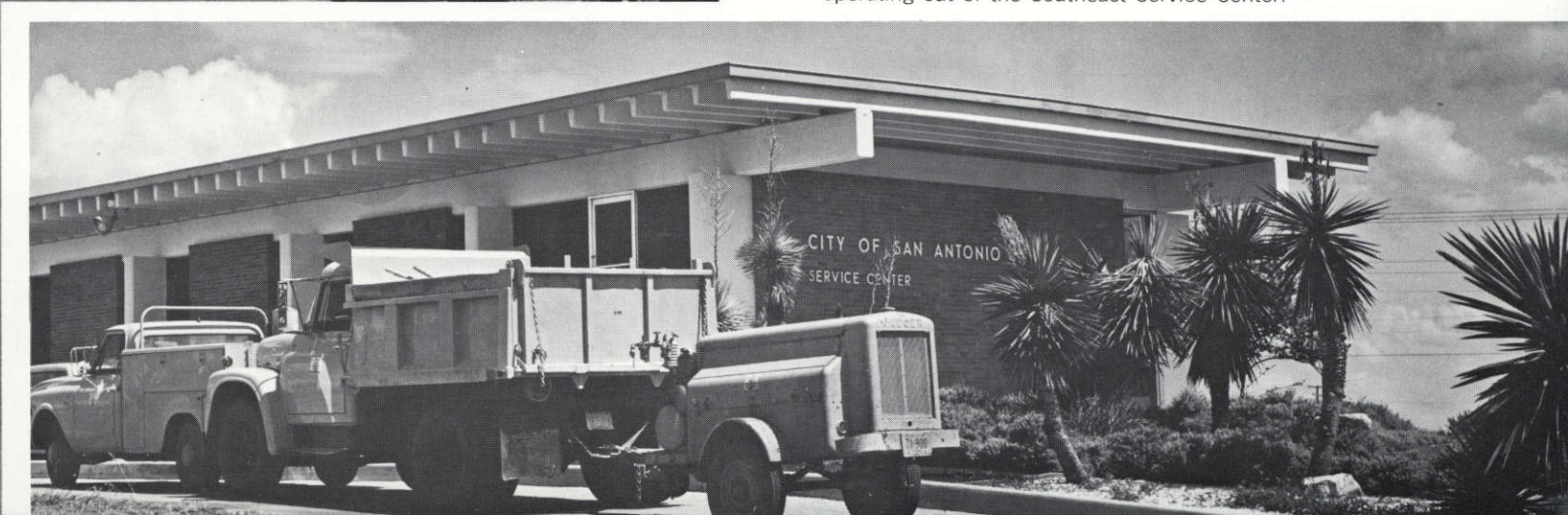
(Above) The City Water Board operates seven maintenance construction crews with two-way radio equipped vehicles from the Northeast Service Center at International Airport. Faster service rendered more economically is made possible by such strategically located service centers.



(Left) The East Side Yard at Cherry and Nevada Streets is the busy core of the Distribution Department's diversified activities. Located here also are such facilities as the radio control station, the meter shop, central stores and equipment maintenance. Forty-four crews in radio equipped vehicles operate out of this center.



(Below) The City Water Board provides the same efficiency in the southern quadrant of the city with fully equipped crews operating out of the Southeast Service Center.



COMBINED FUNDS

BALANCE SHEET

December 31, 1970 and 1969

ASSETS

CURRENT ASSETS

Cash

Accounts receivable (less allowance for doubtful accounts):
1970 — \$293,829 1969 — \$317,177 (Note B)

Materials and supplies inventory

Accrued interest receivable

Prepaid expenses

Interfund receivables (Note A)

RESTRICTED ASSETS (Notes A, C, D, E)

Maintenance and Operation Fund
Cash — Customer account deposits

Pledge to State Department of Public Welfare to
secure FICA payments, cash on time deposits

Interest and Sinking Fund — Cash

Reserve Fund
Cash

Investments — net

Interfund receivable

Improvement and Contingency Fund
Cash

Reimbursements receivable

Accounts receivable

Interfund receivable

Bond Construction Fund
Cash

Deferred expense

Interfund receivable

UTILITY PLANT

Utility Plant in service (Note F)

Construction in progress

Less accumulated depreciation

Notes referred to above are covered in Notes to Financial Statements on pages 20 and 21.

LIABILITIES, RESERVES, CONTRIBUTIONS AND RETAINED EARNINGS

1970	1969
\$ 1,635,283	\$ 1,750,322
846,911	775,342
458,533	475,240
36,833	36,833
135,647	51,499
1,013,858	1,087,418
<u>\$ 4,127,065</u>	<u>\$ 4,176,654</u>
\$ 739,401	\$ 717,477
240,000	240,000
776,580	755,655
323,128	132,724
1,720,000	1,545,000
- 0 -	190,404
1,946,000	1,024,663
- 0 -	4,736
3,601	132,576
743,958	1,989
- 0 -	725,000
- 0 -	79,211
- 0 -	2,595
<u>\$ 6,492,668</u>	<u>\$ 5,552,030</u>
\$91,261,206	\$87,386,527
3,281,208	3,106,023
<u>\$94,542,414</u>	<u>\$90,492,550</u>
21,160,443	19,405,427
<u>\$73,381,971</u>	<u>\$71,087,123</u>
<u>\$84,001,704</u>	<u>\$80,815,807</u>

CURRENT LIABILITIES

Note payable for water well	
Due City for acquisition of water district	
Sewer service charges due to City and Others	
Vouchers payable	
Sundry payables, accruals, and unearned income	
Interfund payables (Note A).....	

1970	1969
\$ 4,600	\$ 4,600
5,007	4,380
251,137	226,288
236,652	257,158
158,152	198,972
1,305,836	952,486
<u>\$ 1,961,384</u>	<u>\$ 1,643,884</u>
\$ 739,401	\$ 717,477
180,546	75,019
151,321	146,237
- 0 -	1,933
276,980	282,690
- 0 -	47,230
950,000	910,000
143,245	148,990
175,000	- 0 -
<u>\$ 2,616,493</u>	<u>\$ 2,329,576</u>
\$21,845,000	\$22,795,000
160,204	165,212
9,200	13,800
<u>\$22,014,404</u>	<u>\$22,974,012</u>
\$ 2,501,463	\$ 2,474,793
2,084,712	1,417,661
240,000	240,000
<u>\$ 4,826,175</u>	<u>\$ 4,132,454</u>
\$17,894,016	\$17,144,977
\$ 2,165,681	\$ 2,532,770
32,523,551	30,058,134
<u>\$34,689,232</u>	<u>\$32,590,904</u>
<u>\$84,001,704</u>	<u>\$80,815,807</u>

LIABILITIES OF RESTRICTED FUNDS (Note A)

Maintenance and Operation Fund	
Customer deposits	
Improvement and Contingency Fund	
Advances for Construction	
Maximum refundable to developers	
Construction contracts payable	
Interfund payable	
Bond Construction Fund	
Interfund payable	
Revenue Bonds payable within one year	
Accrued interest on long term debt	
Reserve Fund	
Interfund payable	

LONG TERM DEBT (Note G)

Revenue Bonds payable after one year	
Due to City for acquisition of water district	
Note payable for water well	

RESERVES

Retirement of bonds and interest	
Construction	
Pledge for Social Security payments	

CONTRIBUTIONS IN AID OF CONSTRUCTION (Note F)

RETAINED EARNINGS

Invested in working capital	
Invested in plant and other assets	

Combined Statement of Changes in Retained Earnings and Reserves

January 1, 1970 to
December 31, 1970

	RETAINED EARNINGS	RESERVES
BALANCES, January 1, 1970	\$32,590,904	\$ 4,281,444
ADDITIONS and (deductions)		
Total gross revenues	9,970,966	
Expenditures for plant additions by		
Improvement and Contingency Fund	3,553,259	(3,553,259)
Bond Fund	759,576	(759,576)
Bond principal retired by Interest and Sinking Fund ...	910,000	(910,000)
Contributions for construction by developers	(718,782)	718,782
Excess (deficiency) of the billings over cost		
Working Capital Fund	(4,004)	
Data Processing Fund	8,928	
Increase in market value of investment		153,252
	<u>\$47,070,847</u>	<u>\$ (69,357)</u>
(DEDUCTIONS) and additions		
Operating expenditures	(4,348,562)	
Depreciation	(2,082,923)	
Loss on sale of assets	(5,784)	
Prior year adjustment	(20,518)	
Interest on bonds		(876,700)
Interest on acquisition of plant		(8,351)
Fund transfers for requirements of restricted funds		
Interest and Sinking Fund	(1,807,625)	1,807,625
Reserve Fund	153,252	(153,252)
Improvement and Contingency Fund	(4,269,455)	4,269,455
BALANCES, December 31, 1970	<u>\$34,689,232</u>	<u>\$ 4,969,420</u>

The accompanying notes are an integral part of this statement.

Summary
of Debt Charges
Until Maturity

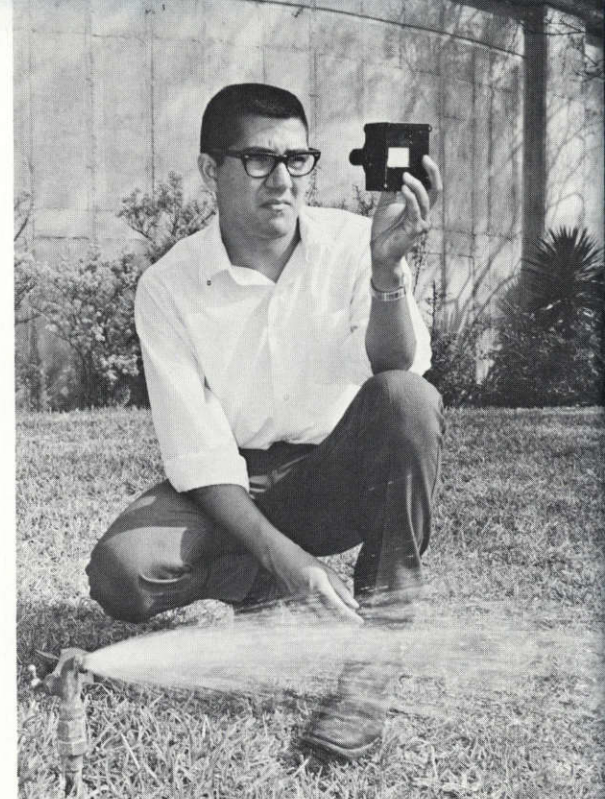
	ANNUAL REQUIREMENTS TO RETIRE			Principal Balance Outstanding
	Total	Interest	Principal	
Balance 12-31-70				\$22,795,000
1971	\$ 1,791,478	\$ 841,478	\$ 950,000	21,845,000
1972	1,868,127	803,127	1,065,000	20,780,000
1973	1,851,965	761,965	1,090,000	19,690,000
1974	1,835,219	720,219	1,115,000	18,575,000
1975	1,808,319	678,319	1,130,000	17,445,000
1976	1,796,065	636,065	1,160,000	16,285,000
1977	1,778,054	593,054	1,185,000	15,100,000
1978	1,754,318	549,318	1,205,000	13,895,000
1979	1,749,566	504,566	1,245,000	12,650,000
1980	1,743,413	458,413	1,285,000	11,365,000
1981	1,730,927	410,927	1,320,000	10,045,000
1982	1,824,930	359,930	1,465,000	8,580,000
1983	1,810,126	305,126	1,505,000	7,075,000
1984	1,842,069	247,069	1,595,000	5,480,000
1985	1,006,112	201,112	805,000	4,675,000
1986	1,072,538	167,538	905,000	3,770,000
1987	1,046,743	131,743	915,000	2,855,000
1988	1,010,781	95,781	915,000	1,940,000
1989	1,097,350	57,350	1,040,000	900,000
1990	918,450	18,450	900,000	None
	<u>\$31,336,550</u>	<u>\$ 8,541,550</u>	<u>\$22,795,000</u>	

Revenue Bond
Coverage
as Defined
by Revenue
Bond Ordinance

Calendar year	Revenues	Operating expenses as defined by the revenue bond ordinances	Revenue available for debt service and other requirements	Average annual debt service requirements	Times debt service
1961	\$5,992,920	\$2,720,234	\$3,272,686	\$1,088,311	3.01
1962	7,287,771	2,777,069	4,510,702	1,200,073	3.76
1963	7,782,993	2,916,476	4,866,517	1,204,842	4.04
1964	7,022,655	2,851,610	4,171,045	1,208,741	3.45
1965	6,934,183	2,837,848	4,096,335	1,213,321	3.38
1966	6,977,093	2,872,291	4,104,802	1,217,591	3.37
1967	9,492,767	2,987,686	6,505,081	1,599,318	4.07
1968	9,119,056	3,409,385	5,709,671	1,593,885	3.58
1969	9,479,574	3,863,165	5,616,409	1,587,721	3.54
1970	9,970,966	4,343,638	5,627,328	1,577,298	3.57



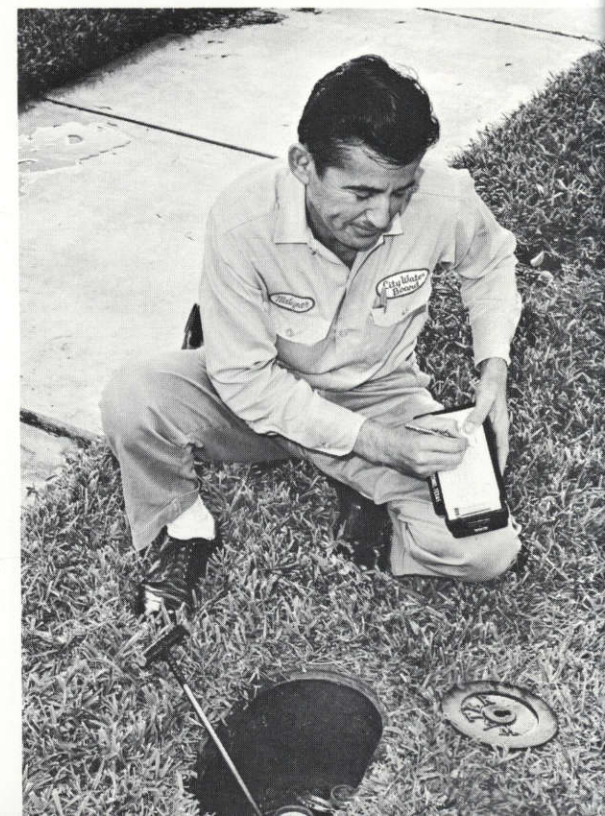
(Left) The 5,500,000 gallon reservoir at 4027 Willowbrook is one of many examples of the City Water Board's landscaped, attractively kept facilities. It has been the long established policy of the Board to design and maintain its many utilitarian structures located on 125 widely distributed acres so that they are pleasing additions to the surrounding areas.



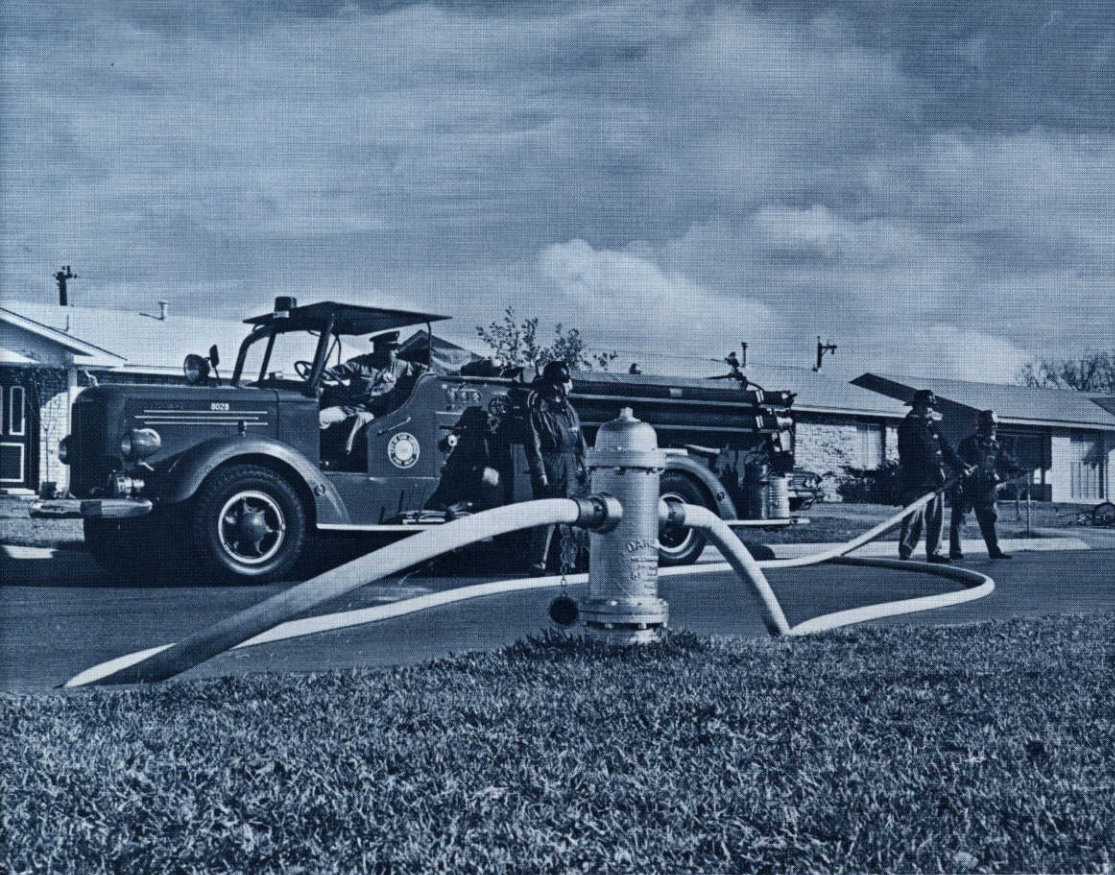
(Right) Board specialists maintain unending vigilance over the purity of San Antonio's water supply. Here, a laboratory technician tests for the amount of chlorine residual in the supply. Approximately 5,000 samples are taken from the distribution system annually, and an additional 1,000 job samples involving new main construction projects are tested.



(Left) The Board maintains an Investigation Section to assist customers in locating and solving problems within their own yard and house piping. Investigators in this photograph are conducting a water flow test to determine the cubic feet of water per minute being delivered to a customer.



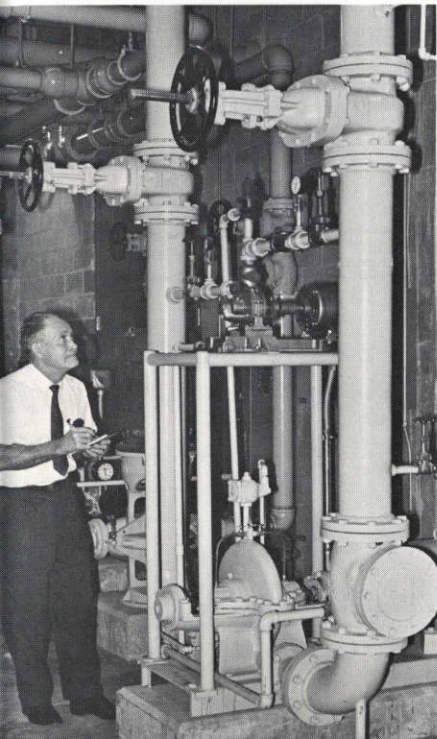
(Right) Probably the best known of the Boards employees are its Boys in Blue, its meter readers, a carefully trained and supervised group who read clockwise around the city, completing one cycle or area each working day. In 1970 they read a total of approximately 1,800,000 meters.



(Left) Fire protection is indispensable to every city, but a water utility's part in providing this protection seldom receives public attention or recognition. The Board ended 1970 with 8,065 fire hydrants strategically installed in its system. The water utility works closely with the City Fire Department to provide adequate fire protection to local citizens.



(Above, right) The Board provides service to more than 560 customers with standby private fire protection systems such as the widely used sprinkler system shown here.



(Left) Regular inspections of the various private fire protection systems are made by the City Water Board as part of its overall program to insure good service to all customers. In this photograph a check is made of the water pressure level.

(Right) This 10-foot tool trailer pulled by a $\frac{3}{4}$ -ton truck is one type of mobile unit used on main construction projects. This 10-man crew displays a variety of the tools and safety equipment used on construction projects.



Fixed Assets and Allowances for Depreciation

January 1, 1970 to
December 31, 1970

Utility Plant

	Balances 1-1-70	Additions	Deductions
Land	\$ 799,219	\$ 14,428	\$ 12,370
Structures and improvements.....	10,250,627	84,186	- 0 -
Pumping equipment	4,460,016	- 0 -	6,199
Purification equipment	135,524	- 0 -	- 0 -
Distribution mains and accessories	48,523,318	2,995,226	156,373
Services	8,111,969	591,437	75,236
Meters	6,129,461	254,460	51,156
Hydrants	1,851,290	110,191	11,428
Office furniture and equipment	249,285	10,269	3,520
Miscellaneous equipment	260,908	4,480	1,675
	<u>\$80,771,617</u>	<u>\$ 4,064,677</u>	<u>\$ 317,957</u>
Central Heating and Cooling Plant:			
Land, structures and improvements	\$ 1,770,950	\$ - 0 -	- 0 -
Heating and cooling equipment	1,753,589	- 0 -	- 0 -
Mains and metering devices	1,548,763	- 0 -	- 0 -
Furniture and equipment	322,084	899	- 0 -
	<u>\$ 5,395,386</u>	<u>\$ 899</u>	<u>- 0 -</u>
Working Capital Fund—Equipment and vehicles ..	\$ 1,161,583	\$ 241,801	\$ 118,139
Data Processing equipment	57,941	3,398	- 0 -
Revenue construction in progress	3,106,023	3,253,486	4,052,266
Bond construction in progress	- 0 -	973,965	- 0 -
	<u>\$ 4,325,547</u>	<u>\$ 4,472,650</u>	<u>\$ 4,170,405</u>
	<u>\$90,492,550</u>	<u>\$ 8,538,226</u>	<u>\$ 4,488,362</u>

Allowances for Depreciation

	Balances 12-31-70	Balances 1-1-70	Additions	Deductions	Balances 12-31-70	Book Value 12-31-70	Years of Life
	\$ 801,277	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ 801,277	—
	10,334,813	1,987,141	205,088	63,775	2,128,454	8,206,359	50
	4,453,817	692,072	89,385	644	780,813	3,673,004	25-50
	135,524	135,524	- 0 -	- 0 -	135,524	- 0 -	10
	51,362,171	9,154,118	996,319	171,371	9,979,066	41,383,105	50
	8,628,170	3,146,523	332,002	97,874	3,380,651	5,247,519	25
	6,332,765	2,911,898	249,236	49,061	3,112,073	3,220,692	25
	1,950,053	210,677	37,805	17,562	230,920	1,719,133	50
	256,034	157,132	12,701	1,059	168,774	87,260	20
	263,713	182,952	4,695	- 0 -	187,647	76,066	10-20
	<u>\$84,518,337</u>	<u>\$18,578,037</u>	<u>\$ 1,927,231</u>	<u>\$ 401,346</u>	<u>\$20,103,922</u>	<u>\$64,414,415</u>	
	\$ 1,770,950	\$ 46,747	\$ 31,306	- 0 -	\$ 78,053	\$ 1,692,897	0-50
	1,753,589	104,753	70,143	- 0 -	174,896	1,578,693	25
	1,548,763	23,922	32,957	- 0 -	56,879	1,491,884	25-50
	322,983	31,157	21,286	- 0 -	52,443	270,540	15-20
	<u>\$ 5,396,285</u>	<u>\$ 206,579</u>	<u>\$ 155,692</u>	<u>- 0 -</u>	<u>\$ 362,271</u>	<u>\$ 5,034,014</u>	
	\$ 1,285,245	\$ 611,802	\$ 144,210	\$ 75,650	\$ 680,362	\$ 604,883	5-10
	61,339	9,009	4,879	- 0 -	13,888	47,451	20
	2,307,243	- 0 -	- 0 -	- 0 -	- 0 -	2,307,243	—
	973,965	- 0 -	- 0 -	- 0 -	- 0 -	973,965	—
	<u>\$ 4,627,792</u>	<u>\$ 620,811</u>	<u>\$ 149,089</u>	<u>\$ 75,650</u>	<u>\$ 694,250</u>	<u>\$ 3,933,542</u>	
	<u>\$94,542,414</u>	<u>\$19,405,427</u>	<u>\$ 2,232,012</u>	<u>\$ 476,996</u>	<u>\$21,160,443</u>	<u>\$73,381,971</u>	

Notes to Financial Statements

NOTE A — BASIS OF ACCOUNTING

The fund structure of accounting is required under City Ordinance No. 24819. It specifically requires the use of a System Fund, Maintenance and Operation Fund, Interest and Sinking Fund, Reserve Fund, Improvement and Contingency Fund, and a Surplus Fund. The fund names specified in Ordinance 24819 have been used in this report.

In addition to these funds, the City Water Board has added other funds which are used for internal management purposes. These funds are the Working Capital Fund, Data Processing Fund, Bond Fund and Central Heating and Cooling Plant Fund. The latter fund is combined with the Maintenance and Operation Fund in these statements.

The accounting for all funds is on the accrual basis.

The principles followed in combining the funds for the combined funds balance sheet consisted of combining the assets and liabilities of all the funds into two categories of restricted funds and non-restricted funds. Inter-fund receivable and payable accounts were not offset in this statement.

The City Water Board has consistently expensed interest charges during construction of plant.

NOTE B — ACCOUNT RECEIVABLE — CITY OF SAN ANTONIO

It has been the practice of the City Water Board to charge the City of San Antonio for water sales as required by the bond ordinance. The City Water Board subsequently writes off this account if the requirements of the bond ordinance funds are met.

NOTE C — MAINTENANCE AND OPERATION FUND

The bond ordinance requires that on or before the 10th day of each month while any bonds are outstanding, there shall be withdrawn from the System Fund and deposited in this fund an amount of money estimated by the Board to be sufficient to pay reasonable expenses of operation and maintenance of the System for the next succeeding month.

NOTE D — INTEREST AND SINKING FUND

The bond ordinance requires that on or before the 10th day of each month and thereafter until paid, the Board of Trustees shall withdraw from the System Fund, and deposit in the Interest and Sinking Fund, an amount of money not less than the total of: 1/12th of the next maturing installment of principal of the bonds outstanding payable from the revenues of the System and; 1/6th of the next semi-annual installment of interest on the bonds outstanding. The monies shall be used solely for the purpose of paying interest and principal of the bonds. When the total amount of money in this fund is equal to the aggregate principal amount of the bonds outstanding, plus all unpaid coupons pertaining thereto, no further payments need be made into the Interest and Sinking Fund.

NOTE E — IMPROVEMENT AND CONTINGENCY FUND

The bond ordinance requires that after all of the requirements have been met for the Maintenance and Operation, Interest and Sinking and Reserve Fund, the Board shall transfer from the System Fund to this fund to the extent money is available a sum equal to not less than 15% of the gross revenue of the System which may be used for the following purposes: (a) extensions and improvements to the System, (b) to meet contingencies of any kind in connection with the operation and maintenance of the System and (c) the payment of interest or principal, or both, of bonds when other funds of the Board are insufficient for such purpose. After setting aside of said minimum amount of 15% of gross revenues in this fund, there shall be paid out of the monies remaining in the System Fund after the end of each operating year to the General Fund of the City or to such other fund of the City as the Council may direct, a sum sufficient to reimburse the City for all money which has been paid by the City to the Board during such year for services rendered by the Board to the City for municipal purposes during such operating year.

As of December 31, 1970 estimated commitments of this fund on incompleting projects were approximately \$242,365 in excess of funds available for construction.

NOTE F — UTILITY PLANT IN SERVICE

Fixed assets acquired by the City Water Board through contributions, such as from land developers, are capitalized and recorded in the plant records.

All depreciation is on a straight line method. Useful lives are reflected in statements included with this report.

NOTE G — BONDS PAYABLE

These bonds are secured by an irrevocable first lien on and pledge of the income and revenues derived and to be derived from the operation of the System after deduction therefrom of the amount necessary to pay all operating, maintenance, replacement and betterment charges of the System as required by applicable statutes of the State of Texas.

The System is also required to maintain rates sufficient (a) to pay all maintenance, depreciation, replacement, betterment and interest charges, (b) to establish and maintain the Interest and Sinking Fund, and Reserve Fund, (c) to pay in addition all outstanding indebtedness against the System other than bonds as and when due, and (d) to provide for the payments into the Improvement and Contingency Fund.

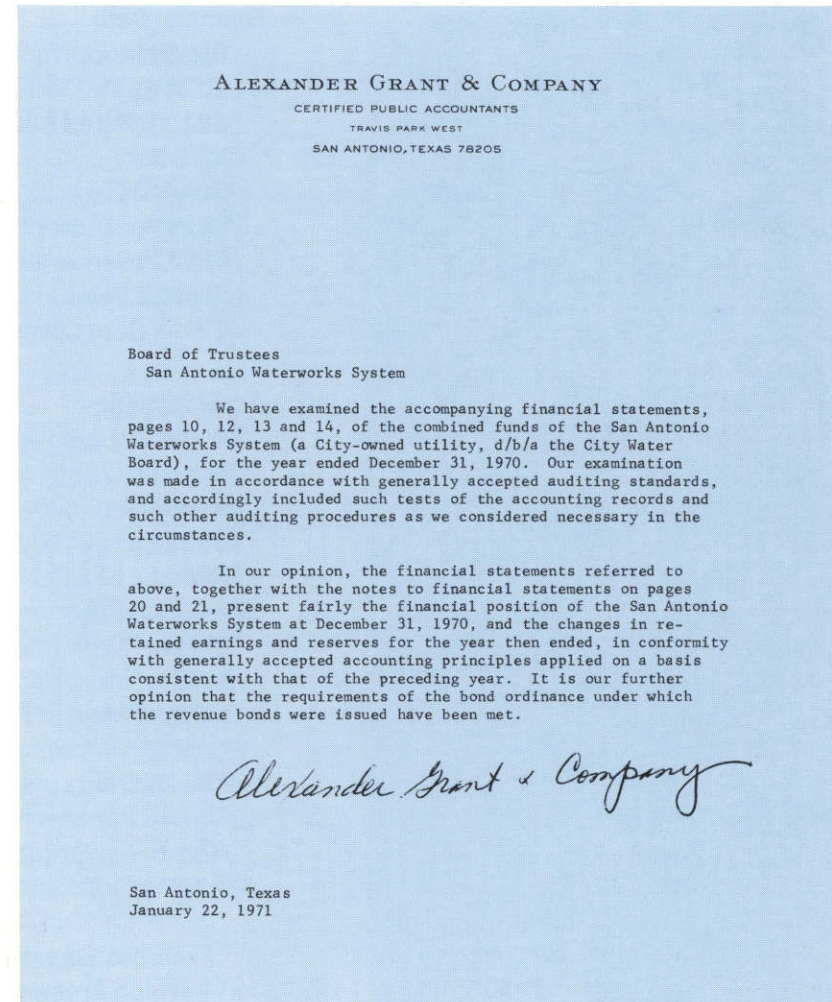
NOTE H — PENSION AND RETIREMENT PLANS

The City Water Board's Retirement Program includes benefits provided by Social Security and the Texas Municipal Retirement System (T.M.R.S.) supplemented by a contract (GA 5477) with Bankers Life Company. Provisions of the program apply to regular full time employees after six months of service. The Bankers Life portion of the plan has a Spouses Annuity provision (GA 7999) to cover eligible employees married one year or more.

The total pension expense for the year was \$222,396, which includes as to certain of the plans, amortization deposits of prior service costs over a period of twelve to twenty years. The actuarially computed value of vested benefits as of December 31, 1970 was not determinable.

NOTE I — REVENUE BOND ISSUE

The San Antonio Waterworks System proposes to issue \$10,000,000 of 1971 Revenue Bonds dated February 1, 1971.



Financial and Statistical Information

	1970	1969	1968
Operating Results			
Total Revenue*	\$ 9,970,966	\$ 9,479,574	\$ 9,119,056
Operating Expense	4,343,638	3,863,165	3,409,385
Depreciation and Amortization	2,082,923	1,995,885	1,819,214
Interest on Bonded Debt	870,955	905,717	939,431
Provision for Bond Principal and Reserve	783,418	1,192,245	858,334
Revenue Available for Plant Additions	\$ 1,890,032	\$ 1,522,562	\$ 2,092,692
Revenue Per 1,000 Gallons Pumped—Cents	28.8	28.0	29.6
Operating Expense Per 1,000 Gallons Pumped—Cents	12.5	11.4	11.1
Financial Data			
Expenditures for Plant Additions	\$ 4,312,835	\$ 6,068,765	\$ 6,512,713
Total Utility Plant	94,542,414	90,492,550	84,804,487
Accumulated Allowances for Depreciation	21,160,443	19,405,427	17,907,237
Inventory	458,533	475,240	467,888
Bonded Debt	22,795,000	23,705,000	24,600,000
Municipal Equity (including Reserves)	57,409,423	53,868,335	49,325,945
Total Revenue less Operating Expense	5,627,328	5,616,409	5,709,671
Average Annual Debt Requirements	\$ 1,577,298	\$ 1,587,721	\$ 1,593,885
Times Debt Coverage	3.57	3.54	3.58
Other Statistics			
Water Pumped—Million Gallons	34,633	33,829	30,758
Metered Usage—Million Gallons	31,553	29,608	26,365
Annual Rainfall—Inches	22.74	31.42	30.39
Customers at End of Year	148,452	146,089	144,335
Average Use Per Customer—Thousands of Gallons	212.5	202.7	182.7
Average Revenue Per Customer	\$ 67.17	\$ 64.88	\$ 63.17
Miles of Main Installed	45.95	69.14	75.46
Miles of Main Replaced and Abandoned	22.38	26.88	30.28
Miles of Main in Place	1,981.52	1,957.95	1,915.68
New Services Installed	2,914	3,136	3,441
Fire Hydrants Installed	161	228	415
Fire Hydrants in Place	8,065	7,904	7,676
Number of Employees	589	568	557
Total Salaries and Wages Paid	\$ 3,609,922	\$ 3,226,248	\$ 2,903,808
*Excludes Services Provided City of San Antonio			
Which Amount To	\$ 290,907	\$ 309,363	\$ 288,041

<u>1967</u>	<u>1966</u>	<u>1965</u>	<u>1964</u>	<u>1963</u>	<u>1962</u>	<u>1961</u>	<u>1960</u>
\$ 9,492,768	\$ 6,977,094	\$ 6,934,184	\$ 7,022,656	\$ 7,782,993	\$ 7,287,770	\$ 5,992,920	\$ 5,051,126
2,987,687	2,872,292	2,837,848	2,851,611	2,916,476	2,777,069	2,720,234	2,783,691
1,668,810	1,590,363	1,495,754	1,393,805	1,309,439	1,240,997	1,163,177	1,090,588
969,432	785,302	774,788	792,487	808,803	808,129	733,165	716,949
1,026,094	807,961	619,551	521,831	513,094	489,697	469,044	420,855
\$ 2,840,745	\$ 921,176	\$ 1,206,243	\$ 1,462,922	\$ 2,235,181	\$ 1,971,878	\$ 907,300	\$ 39,043
27.2	23.6	24.1	23.7	23.9	23.6	22.1	18.8
8.6	9.7	9.9	9.6	9.0	9.0	10.0	10.4
\$ 8,208,918	\$ 4,566,969	\$ 5,083,408	\$ 4,996,017	\$ 4,554,048	\$ 4,350,702	\$ 2,485,908	\$ 4,093,047
78,929,855	71,347,711	67,614,106	63,534,640	59,230,517	55,140,023	51,436,982	50,218,695
16,640,528	15,485,257	14,755,150	14,143,130	13,279,767	12,278,250	11,503,260	11,411,740
363,657	355,344	402,525	311,353	382,953	355,970	452,484	458,504
25,385,000	26,135,000	20,885,000	21,218,000	21,517,000	21,809,000	20,115,000	18,380,000
45,476,898	40,850,355	37,756,828	34,815,490	32,013,349	28,495,101	25,395,667	23,245,511
6,505,081	4,104,802	4,096,336	4,171,045	4,866,517	4,510,701	3,272,686	2,267,435
\$ 1,599,318	\$ 1,217,591	\$ 1,213,322	\$ 1,208,741	\$ 1,204,843	\$ 1,200,074	\$ 1,088,311	\$ 1,178,182
4.07	3.37	3.38	3.45	4.04	3.76	3.01	1.92
34,868	29,538	28,721	29,631	32,549	30,930	27,098	26,861
30,402	24,768	25,430	25,577	28,861	26,690	22,555	22,262
29.26	21.44	36.65	31.88	18.65	23.90	26.46	29.76
141,138	138,498	136,902	134,724	132,181	129,301	127,190	124,962
215.4	178.8	185.8	189.8	220.7	206.4	177.3	178.2
\$ 67.26	\$ 50.38	\$ 50.65	\$ 52.13	\$ 58.88	\$ 56.36	\$ 47.12	\$ 40.42
48.14	93.40	86.82	95.76	66.91	60.69	63.02	48.86
25.72	41.25	51.85	52.88	18.83	27.46	26.26	9.20
1,870.50	1,848.07	1,795.92	1,760.95	1,718.07	1,669.99	1,636.76	1,600.00
3,126	3,310	3,534	3,192	3,237	3,189	2,815	3,131
281	435	574	508	307	316	316	189
7,381	7,207	6,879	6,563	6,279	6,046	5,888	5,720
536	537	527	532	536	542	553	604
\$ 2,599,033	\$ 2,378,744	\$ 2,330,274	\$ 2,220,369	\$ 2,124,314	\$ 2,024,613	\$ 2,045,006	\$ 2,101,298
\$ 268,705	\$ 194,749	\$ 200,619	\$ 197,129	\$ 189,119	\$ 190,472	\$ 155,619	\$ 130,009



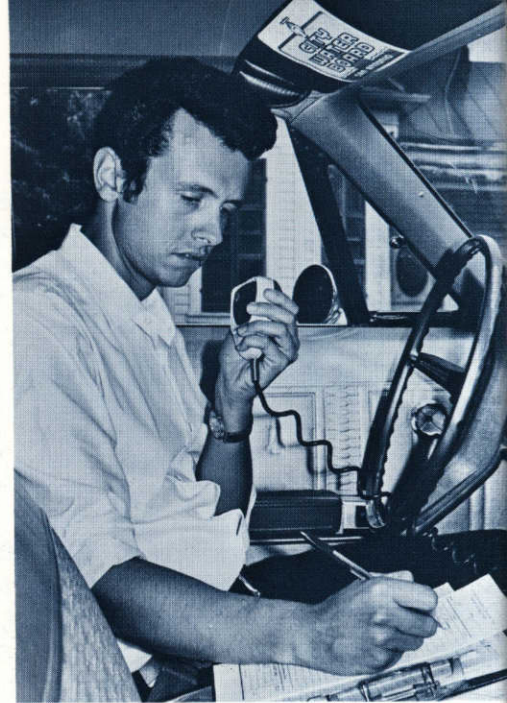
(Left) The radio dispatcher's area is the busy nerve center through which orders and information are dispensed to and received from crews manning the City Water Board's fleet of 128 radio equipped vehicles. This constant radio contact with all field units provides for efficiency, mobility and great savings in time to the daily benefit of the community.

(Left, center) Emergency crews were called on to handle over 1,000 water main breaks in 1970. No matter the hour of the night, no matter the weather, these indispensable crews of dedicated men rush to restore service to the Board's customers. Alternating wet and dry periods cause soil shifting which contributes to San Antonio's incidence of main breaks.

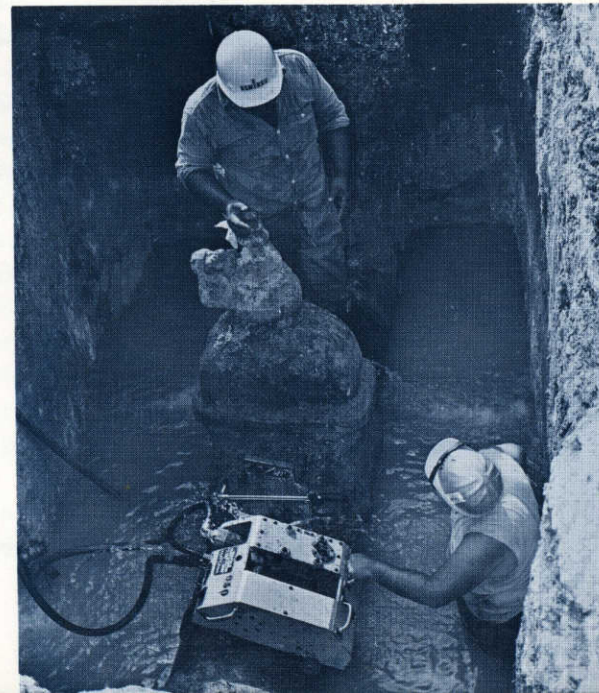
(Lower Left) One of the City Water Board's continuing major projects is the upgrading of the water service in older areas of the city, which is being accomplished with a long term replacement program. Since 1961 special emphasis has been given to this program and the Board has replaced 324 miles of inadequate sized or badly corroded water mains within the system.

(Lower, center) A 20-inch gate valve is salvaged in an urban renewal area project. The pneumatic metal saw moves on a chain around the large main as it saws through the thick pipe. This gate valve will be reconditioned and then reused in the water distribution system.

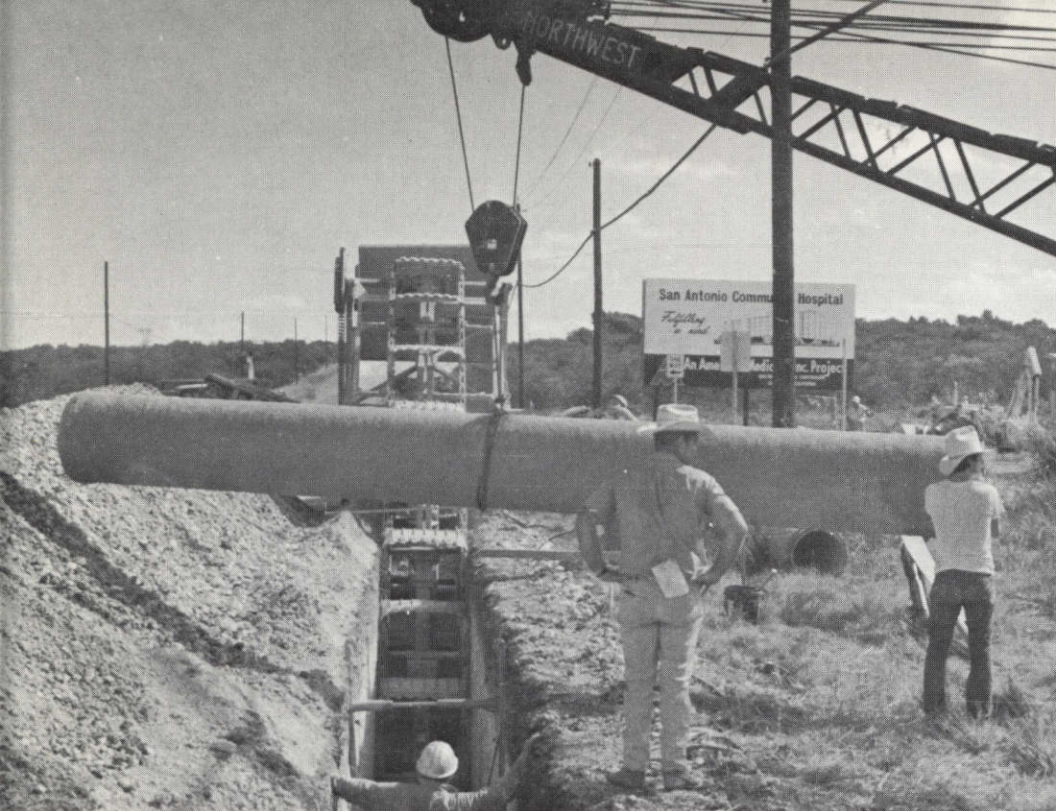
(Lower right) Continued expansion of distribution, storage and pumping facilities are required to serve metropolitan San Antonio's ever-expanding boundaries. Shown here is a 6-inch distribution main being connected to a 24-inch trunk main to bring water to a new residential area.



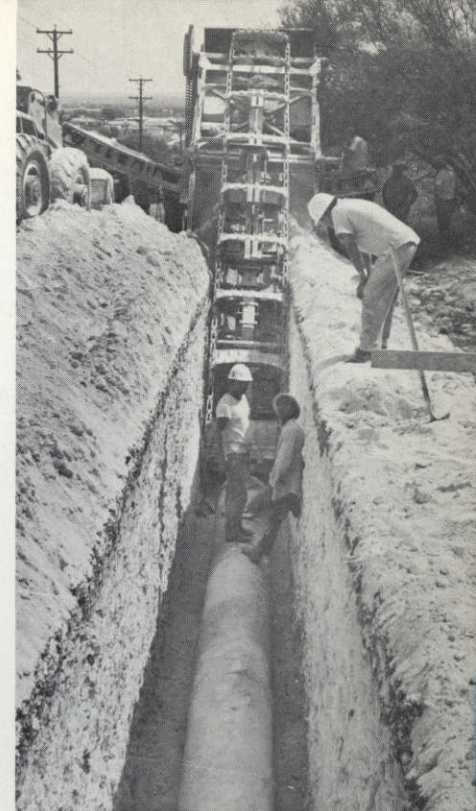
Two-way radio communication is constantly maintained by the Board with its field contact men to speed the turning on of water service to new customers. Nearly 50,000 water "turn-on" and "turn-off" orders are handled annually.



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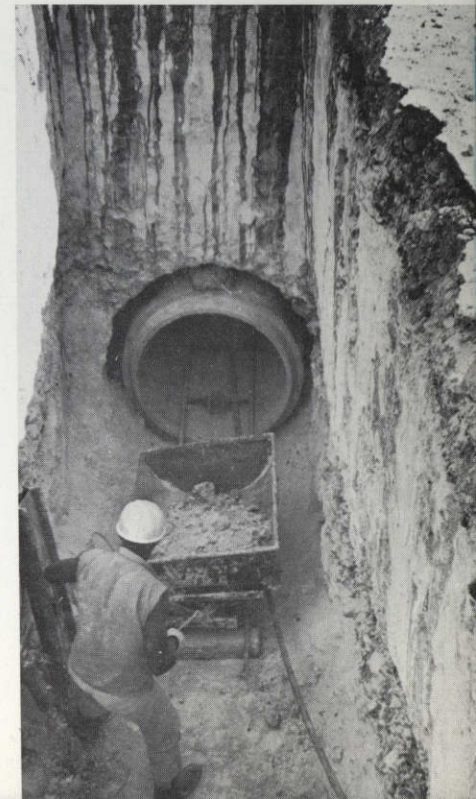
(Left) The rapid growth of the vast medical complex in the northwest area of the city illustrates the expanding water service requirements which the City Water Board anticipates in its long range planning and meets on time with adequate facilities. The Board this year installed 11,000 feet of 16 and 20-inch mains to meet the water needs of this important new section of the city.



(Right) The City Water Board utilizes the services each year of many contractors in addition to using its own forces on main construction projects. In this photograph is shown heavy equipment used by a contractor to install 20-inch water main.



(Left) As part of the Board's Master Plan, old and inadequate mains are replaced to meet the changing growth patterns and water service requirements of the community. New mains and services are installed by the Board in these older urban areas upgrading the distribution system and individual services to today's high standards.



(Right) The Board uses specialized equipment to handle varying construction problems. In cases where normal trenching methods cannot be used to cross major highways, railroad tracks or expressways the Board tunnels under the barrier to lay its mains.



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