

WATER UTILITY FUND BUDGET

City of Anchorage
1954

WATER UTILITY BUDGET

REVENUE ESTIMATES

Code:	Estimated 1953	Estimated 1954
W 602 Flat Rate Sales	\$ 382,000	\$ 412,950
W 605 Public Fire Protection	—	6,600
W 607 Inter-Fund Sales	1,752	1,764
W 613 Miscellaneous	20,000	19,600
Total Service Revenue.	403,752	440,914
Plus: Reserve for Depreciation.	51,795	67,013
Cash Balance for Debt Re- quirement.	—	16,000
Total Revenues for Budget.	\$ 455,547	\$ 523,927

EXPLANATION OF WATER UTILITY REVENUES ESTIMATE

Flat rate water sales have been computed on the basis of the average water bill with 5,800 customers at the end of October 1953. This monthly average, which includes large consumers and domestic consumers, was applied to the estimated water consumers for each month during 1954. The estimate is based on 5,800 consumers for the first five months of the year; 5,850 in June, 5,925 in July, 6,025 in August, 6,125 in September, 6,125 in October, 6,100 in November and 6,075 in December. Applying the average rate to these estimated customers equals \$412,950 sales revenue for the year.

The Water Department has been spending considerable money to maintain fire hydrants especially during winter months. This budget for the first time has initiated a charge in the Fire Department budget of \$30 per hydrant per year to be paid to the Water Department fund as fire hydrant rental covering costs of water used and the minimum maintenance expenses for the 220 hydrants within the city limits. Miscellaneous revenue is calculated on 25 new water connections inside the city limits on which the \$165 in lieu of water assessment will be paid and 325 out-of-city connections at \$50 each, which represents reimbursing the Water Department for the costs of making the connection. The reserve for depreciation represents that portion of the depreciation charges for the water system which will be either spent for capital improvement on replacements or will be set aside as cash

in a depreciation reserve for future capital expenditures. It is noted that the revenues for the Water Department are not adequate to completely provide for debt services, operation and maintenance expenses and the depreciation charge. Revenues are short \$24,869 for the current fiscal year. The shortage, explained under the expenditure budget, means that the reserve for depreciation will not be set aside in the full amount but that the shortage of revenues will be considered as payable into the reserve at some future time.

WATER UTILITY FUND
EXPENDITURES

<u>Code</u>		<u>Estimated 1953</u>	<u>Estimated 1954</u>
OPERATING EXPENSES:			
<u>Source of Supply:</u>			
W 701	Supervision and Labor	\$ 12,136	\$ 14,614
W 702	Supplies and Expense	9,500	7,000
W 703	Repairs	4,000	10,862
	Total.	<u>25,636</u>	<u>32,476</u>
<u>Pumping Expense:</u>			
W 717	Supervision and Labor	8,587	750
W 718	Power Purchased	12,000	750
W 719	Supplies and Expense	1,500	1,000
W 720	Repairs	951	250
	Total.	<u>23,038</u>	<u>2,750</u>
<u>Purification Expense:</u>			
W 731	Supervision and Labor	6,287	10,605
W 732	Supplies and Expense	6,500	4,800
W 732-A	Fluoridation	3,500	3,500
W 733	Repairs	400	400
	Total.	<u>16,687</u>	<u>19,305</u>
<u>Transmission and Distribution:</u>			
W 741	Supervision and Labor	30,545	22,612
W 742	Supplies and Expense	500	500
W 743	Repairs	24,667	20,709
	Total.	<u>55,712</u>	<u>43,821</u>
<u>General Expense:</u>			
W 751	Accounting and Collection	33,454	37,646
W 764	Other General Expense	17,497	17,955
W 805	Stores Expense	6,000	9,000
W 806	Transportation	4,200	4,200
	Total.	<u>61,151</u>	<u>68,801</u>

<u>Code</u>		<u>Estimated 1953</u>	<u>Estimated 1954</u>
	<u>Other Expense:</u>		
W 241	Depreciation Reserve	\$ 51,795	\$ 99,332
W 505	Payments in Lieu of Taxes	29,731	64,187
W 521	Interest on long-term debt	39,844	53,419
	Bond Retirements	50,000	50,000
	Long-Term Contracts Payable	13,535	35,692
	Bond Redemption Reserve	12,000	12,000
	Contribution to General Fund	6,368	-
	Total	<u>203,273</u>	<u>314,630</u>
	<u>Capital Expenditures</u>	53,598	46,735
	<u>Budgeted Cash Depreciation</u>		
	<u>Reserve</u>	-	20,278
	Total (Capital & Cash Reserve)	53,598	67,013
	Total Budgeted Expenditures	439,095	548,796
	Surplus	16,444	-
	Budget Deficit applicable to Depreciation Reserve	-	<u>24,869</u>
	TOTAL BUDGET	\$ 455,539	\$ 523,927

1954 WCRK PROGRAM - WATER UTILITY

Source of Supply:

Work under this classification consists of the maintenance and operation of the intake structure and the gravity water line from the intake structure to 5th Avenue and Gambell Street. The gravity line has 2.8 miles of 20" spiral-weld steel pipe and 5.4 miles of 24" wood stave line. During 1953, there were 14 breaks on the 20" steel main. All of these breaks occurred in three lengths of pipe. Upon examination of sections of this pipe, it was found that the welding was defective and it may be necessary to replace the three lengths of pipe during 1954. \$12,000 is set aside to pay any contingencies for the City's share in operating expenses on the intake structure.

Pumping Expense:

This operation is to be an emergency operation only during 1954. It will be necessary to pump only when the gravity water line fails or is out of service for repair.

Purification Expense:

This includes all operating expenses for the chlorination and fluoridation of the water supply. It includes one-half of the salaries for two men. It is anticipated to install a residual recorder during 1954 under capital. It is hoped that this will improve the performance of our chlorinators.

Transmission & Distribution:

This account includes operation, maintenance and repair of 51.5 miles of water mains, of which 31.5 miles are within the City and 20 miles outside of the City. There are 220 fire hydrants within the City and 126 hydrants outside the City which will be inspected a minimum of four times a year. In the high-value area hydrants are checked daily during freezing periods. All valves in the system are checked a minimum of twice a year. There will be 18 blocks of old wood stave lines replaced during 1954 under APW Project 177 which should reduce repair costs in the future.

General Expense:

This account consists of four parts:

(a) Accounting and collection is the water utility's pro-rated share (19% of utility billing charges) of the Comptroller's office and Clerk's office plus one-half of the salary of the water rate adjuster. As of November 1, 1953 there were 5,808 water customers. This is below the anticipated number of customers at this time.

(b) Other general expense includes a portion of the costs of the Public Work's Office, engineering charges, portion of salaries for superintendent, timekeeper, and toolroom keepers. Social Security and Workmen's Compensation are also included.

(c) Stores expense has been increased in anticipation of the increased costs in moving the warehouse.

(d) Transportation costs cover the costs of maintenance and operation of water utility vehicles.

Other Expense:

A reserve for depreciation is charged against the water utility as an operating expense. This reserve is calculated in plant life of 35 years which gives a 2.85 percentage applied to the book value of the system. The book value includes the donated portion of the system that has been installed under Alaska Public Works Projects. Payment in lieu of taxes represents the payment to the general fund equal to taxes that would be levied against the utility if it were privately owned. The interest on long-term debts represents the interest on bond requirements, annual contract payments to the Alaska Public Works and various large housing projects that will be partly reimbursed for water utility installations in accordance to the contracts. A listing of these payments are found on page 106. The bond retirement of \$50,000 provides for the payment due on the Gravity Water Line Bond Issue of 1949. Bond redemption reserve is an annual amount set aside as required by ordinance.

Capital Expenditures:

Capital expenditures include:

- (1) Two-way radio equipment in Water Department vehicles is carried over from 1953. An attempt is being made to obtain this equipment through Civil Defense.
- (2) Water laboratory equipment is needed to carry on routine checks of the fluoridation of the water supply.
- (3) It will be necessary to provide insulation on the Riser pipe of the Government Hill water tank to replace the intermittent steaming which is now required. It is planned to use a blow-on type of insulation.
- (4) The Water Department plans to purchase two hydrant covers on an experimental basis. It is hoped that these covers will prevent the fire hydrants from freezing and will replace the costly thawing and maintenance of hydrants during freezing periods.
- (5) The hypo-chlorinator is carried over from 1953. There was not sufficient money budgeted for this item in the 1953 budget.

(6) It is planned to install a residual recorder in the water system. This recorder will give continuous record of the amount of chlorine in the water at all times. An alarm system will be attached to the recorder which will indicate when the chlorine is below the minimum requirements.

(7) It is necessary to replace the two electrical control panels for the two 1500 g. p. m. pumps in Pump Plant No. 2. The panels in use at present are completely worn out and the maintenance and repair to keep them operating has become prohibitive. It is very likely that in the event the Pump Plant were returned to the Alaska Railroad, they would require the replacement of the panels. This plant is to be on a stand-by basis only.

(8) A cyclone-type fence is to be placed around the chlorinating station to prevent outsiders from breaking and entering the plant. The new "Post" by-pass road passes by the plant now and there is greater opportunity for breaking into the plant. It is quite dangerous because of the presence of chlorine and fluorides.

(9) The 3/4 ton panel truck will replace an old vehicle.

(10) Because of the increased amount of water maintenance work, an additional portable pump is required.

(11) The pipe threading machine will save considerable man hours now used to thread pipe with hand dies.

(12) It is anticipated that there will be 250 new service connections during 1954 at approximately \$50 per connection, including labor and material.

These capital expenditures are items budgeted for replacements or new plant installation out of the depreciation charges which are shown as estimated revenue for budgetary convenience. The actual replacements and additions do not equal the \$67,013 as revenue; therefore, an actual cash depreciation reserve is appropriated in the amount of \$20,278. It is noted that only \$67,013 is requested in this budget against the \$99,332 depreciation expense. The reason for this undercharge is that revenues are not sufficient to provide for the necessary appropriation that would be applicable to the cash reserve for depreciation. This deficiency is \$24,869. Any over-runs of revenue in the Water Department or under-runs of expenditures would automatically decrease this deficiency and increase the cash depreciation reserve.