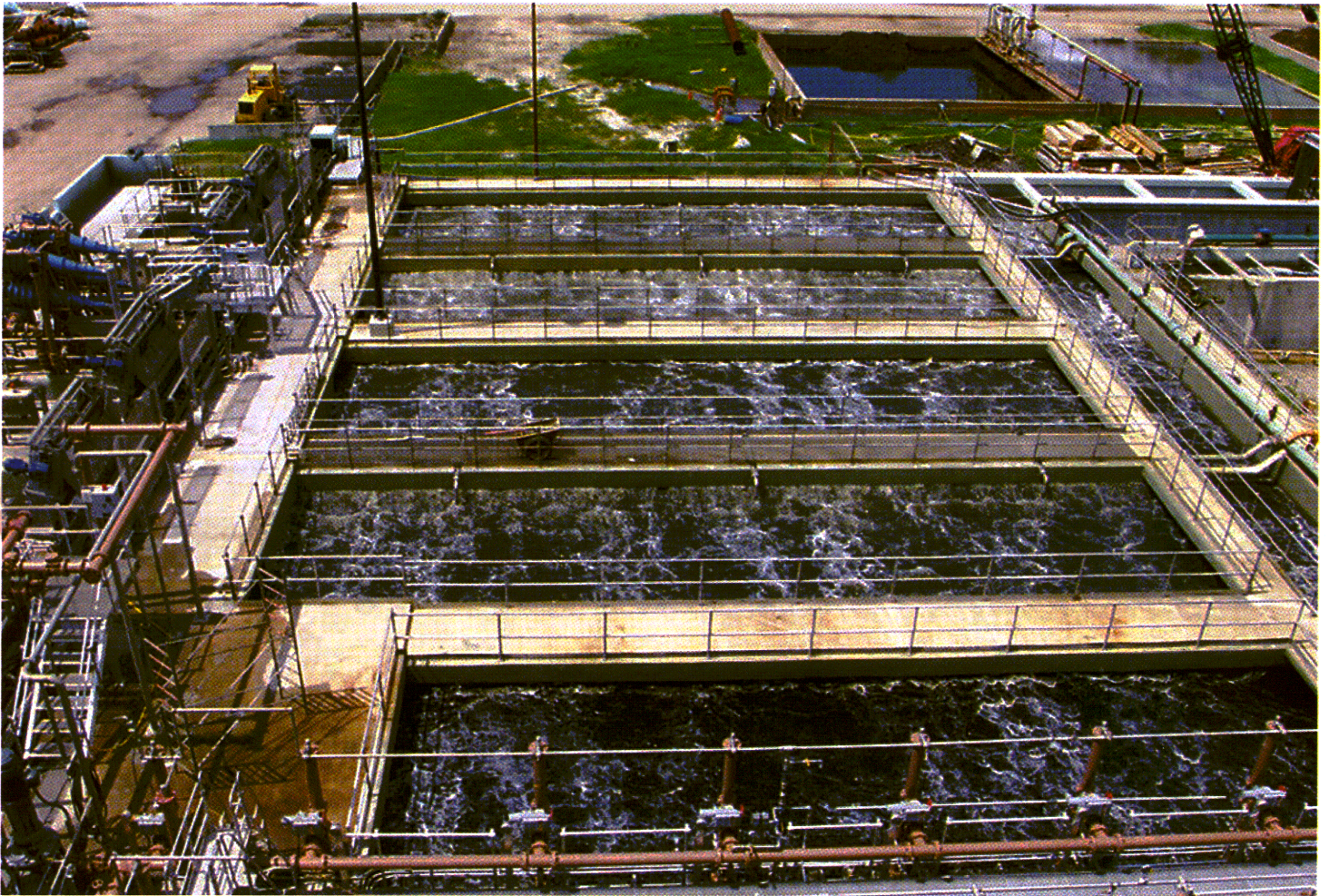


***Sewerage and Water Board***  
**OF NEW ORLEANS, LA.**



**COMPREHENSIVE ANNUAL  
FINANCIAL REPORT**

**FOR THE YEAR ENDED  
DECEMBER 31, 2002**

**About the Cover:**

The headworks at the East Bank Sewage Treatment Plant was recently renovated with major structural rehabilitation and new mechanical components at a cost of \$5.9 million. The headworks, the first step in the treatment process, removes large solids and grit from raw sewage and transports the effluent to the biological treatment processes. The improvements are part of the Sewerage and Water Board's overall program to upgrade the sewage treatment plants on both sides of the river.

## **MISSION STATEMENT**

*To be one of the best and most respected suppliers of sewer, water, and drainage services in the south-central United States by providing quality, reliable, and cost effective services to our Customers while maintaining fair and ethical treatment of our well-trained and highly motivated employees.*

## **OUR VALUES**

*Open, honest communication*

*Trust and respect for each other*

*Offering and encouraging education and opportunity to employees*

*Fostering enthusiasm among employees through example of the managers/supervisors*

*Providing direction and planning and encouraging interdepartmental team work*

*Assuring reliability in providing services to customers*

## **KEY RESULT AREAS**

*Customer Satisfaction*

*Cost Effectiveness*

*Employee Satisfaction*

*Capabilities Improvement through Training*

SEWERAGE AND WATER BOARD OF NEW ORLEANS

Comprehensive Annual Financial Report

Year ended December 31, 2002

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**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

**Comprehensive Annual Financial Report  
For the Year Ended  
December 31, 2002**

**Prepared by:  
Finance Administration  
Ethel H. Williams  
Utility Financial Administrator**

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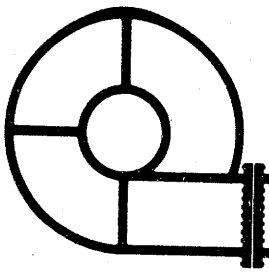


The Nashville Canal, at South Claiborne Avenue, is shown under construction in 1926. New subsurface canals in the Uptown area are nearing completion in Hollygrove and on South Claiborne and Napoleon Avenues as part of the Southeast Louisiana Flood Control Program (SELA).

The Sewerage and Water Board uses large and powerful vacuum trucks to maintain sewer lines throughout the City. Well-trained crews perform maintenance jobs on a regular basis and are on duty for emergencies, such as blockages or chokes in sewer lines, on a 24-hour basis.



# INTRODUCTORY SECTION



"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21st CENTURY"

## **Sewerage & Water Board OF NEW ORLEANS**

C. RAY NAGIN, *President*  
HENRY A. DILLON, JR., *President Pro-Tem*

April 11, 2003

625 ST. JOSEPH STREET  
NEW ORLEANS, LA., 70165 • 585-2000  
[www.swbnola.org](http://www.swbnola.org)

### **TO: THE HONORABLE PRESIDENT AND MEMBERS OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS**

We are pleased to present the Comprehensive Annual Financial Report of the Sewerage and Water Board of New Orleans for the year ended December 31, 2002. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rest solely with the Sewerage and Water Board. It is our belief that the data, as presented, is accurate in all material aspects and is presented in a manner designed to fairly set forth the financial position, results of operations, and cash flows of the Board's Enterprise and Pension Trust Funds. All disclosures necessary to enable the reader to gain an understanding of the Sewerage and Water Board's financial activities have been included.

The Comprehensive Annual Financial Report is presented in four (4) major sections: Introductory, Financial, Statistical and Supplemental. The Introductory Section includes the transmittal letter and listings of the officers, members and committees of the Board of Directors. This section also includes the Board's organizational chart and a reproduction of the 2001 Certificate of Achievement for Excellence in Financial Reporting awarded by the Government Finance Officers Association. The Financial Section includes the independent auditors' report, along with the basic financial statements, required supplementary information, the accompanying notes, and other supplementary information. The combined and individual fund statements for the Enterprise and Pension Trust Funds are included. Required supplementary includes management's discussion and analysis and a schedule of pension funding progress and contributions. The Statistical Section includes selected financial and demographic information, generally in a multi-year presentation. Additional information relative to the Sewerage and Water Board's operations is included in a Supplemental Section.

The Sewerage and Water Board meets the criteria for classification as an "other stand-alone government" as described in Governmental Accounting Standards Board Statement No. 14. The reporting entity includes the Enterprise Fund and the Pension Trust Fund. The Enterprise Fund is composed of three (3) independent systems: Water, Sewerage and Drainage. The Board adopted Governmental Accounting Standard Board Statement No. 34 – Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Government in 2002. The effects of adopting this new standard are included in its financial statements.

Sewerage and Water Board of New Orleans is a political subdivision created in 1899 by Louisiana State Statutes. The Board is charged with construction, operation, and maintenance of Water, Sewerage and Drainage Systems for the City of New Orleans. By agreement, approximately 2,550 acres of adjoining Jefferson Parish is served by the Board's drainage facilities for which Jefferson Parish pays its pro rata share of expenses. In addition, the Board provides sewerage

services to Jefferson Parish businesses, the majority of which are restaurants located in the West End neighborhood near the Lakefront. Additionally, the Board provides water and sewerage services to the Plaquemines Parish Industrial Park. The Sewerage and Water Board was established as a "special board" operating independently of city government. The Mayor of New Orleans serves as the President of the Board of Directors which is composed of three (3) representatives of the City Council, two (2) representatives of the Board of Liquidation, City Debt and seven (7) appointees as designated by the State statutes.

## ECONOMIC CONDITION AND OUTLOOK

The Board's service area includes the Civil Parish of Orleans in the state of Louisiana and covers 364 square miles. Based on the 2000 census, the population of Orleans Parish was 484,674. Major industries include tourism, oil and gas, transportation, health and other services, such as legal, education and entertainment.

According to the January 2003 issue of the Metropolitan Report, Economic Indicators for the New Orleans Area (UNO Report), published by the Division of Business and Economic Research, University of New Orleans, the New Orleans metropolitan area experienced a net loss of 3,650 jobs in the third quarter of 2002 as compared to the third quarter of 2001, a decrease of 0.6%. Almost every major industrial sector lost jobs during this period.

The price of oil was up almost 10% in the third quarter of 2002, compared to the third quarter of 2001. In contrast, the price of natural gas fell 5.9%. The Louisiana rig count was significantly lower over the four quarters and production of oil and natural gas was down slightly. Employment in Louisiana in both chemical manufacturing and petroleum refining was down during the same time.

Tourist activity in the third quarter of 2002 was mixed as compared to the third quarter of 2001. In analyzing tourism measures for this period, it is important to recall that the significant negative impact of the September 11<sup>th</sup> disaster began in the third quarter of 2001. Employment in the tourism sector has suffered over the past year, but has slowly been recovering.

Convention bookings in the third quarter of 2002 posted a loss of 6.7% compared to the same quarter in 2001. The number of attendees fell by 23,900 to 331,700 in the third quarter of 2002 from 355,600 attendees in the same quarter in 2001.

Total gaming revenues includes riverboat casino revenue and Harrah's casino revenue. From the third quarter of 2001 to the third quarter of 2002, this figure grew 2.1% to \$136.1 million. Harrah's Casino was the force behind this growth.

The value of construction contracts awarded in the third quarter of 2002 was substantially higher than the value in the third quarter of 2001. The overall increase was led by residential contracts awarded; this indicator surged 72.6% or \$77.7 million to \$184.7 million. In the third quarter of 2002, housing starts were up a sizeable 82.9% compared to the third quarter of 2001.

## MAJOR INITIATIVES

**For the year:** The Board budgeted approximately \$207 million for capital improvements in 2002. Highlights of this program included:

**Water:** The Board awarded a contract and began the data collection process of developing a water distribution system hydraulic model. The model will predict capital requirements in the distribution system. Work continues on the master planning for advanced water treatment for both the Algiers and Carrollton Water Purification Plants. Continued program of rehabilitation of water filters.

**Sewerage:** Work continues on the \$593.1 million city-wide sewer rehabilitation program. The Sewerage and Water Board of New Orleans (S&WB) has undertaken a multi-year program, the Sewer System Evaluation and Rehabilitation Program (SSERP), to identify and address structural and mechanical deficiencies in the wastewater collection system and to ensure that the system has adequate capacity. These improvements, currently estimated at \$593.1 million, are required to comply with Section XV-Clean Water Act Remedial Measures: Comprehensive Collection System Remedial Program of the Consent Decree between the S&WB, the City of New Orleans, the State of Louisiana, plaintiff intervenors, and the United States of America, entered into in June 1998. Eighty-four million dollars has been expended to date for evaluation & repairs. Sewer system basins are divided into 10 basins for study, design and construction. Through December 31, 2002, the Board has inspected 4.8 million feet of sanitary sewer lines, rehabilitated more than 253,800 feet of sewer lines, inspected 17,800 sewer manholes and repaired or renovated 2,470 manholes. Work continues on the major renovations at the East Bank Waste Water Treatment Plant.

Congress approved federal grant funding for 2002, the sixth in anticipated series of grants from the Environmental Protection Agency (EPA) for planning, design, construction, and rehabilitation of the sanitary sewer system. This grant award was \$2,000,000 and must be matched by approximately \$1,636,364 of Board funds.

**Drainage:** The expansion of Drainage Pumping Station #1 work is approximately 100% complete. Other Southeast Louisiana Flood Control Projects, 75% funded by the Corps of Engineers are complete as follows: The Napoleon Avenue Canal is 99% complete and on schedule. The South Claiborne Avenue (Nashville Avenue to Jena Street) Canal is 100% complete, and the South Claiborne Avenue (Jena Street to Louisiana Avenue) work is 76% complete. The Dwyer Road Drainage Pump Station is 45% complete, and the Dwyer Road Discharge Tubes and Outfall Canal are 52% complete. The Hollygrove #1 Railroad Right-of-Way Canal from Monticello to Eagle Streets is 68% complete, and the Hollygrove # 2 Canal between Forshey and Dublin Streets is 68% complete. The Pritchard Street Drainage Pump Station is 73% complete and on schedule.

A five (5) year capital program budget of \$1,196,903,000 was approved by the Sewerage and Water Board in December 2002. The approved amount for Drainage projects was \$515,738,000, of that amount \$291,437,000 is *participation by others*.

## FINANCIAL INFORMATION

Management of the Sewerage and Water Board is responsible for designing and maintaining internal control sufficient to safeguard the Board's assets against loss, theft or misuse and to ensure the reliability of financial records for preparing financial statements in conformity with generally accepted accounting principles. The internal control is designed to provide reasonable, but not

absolute assurance that these goals are met. The concept of reasonable assurance recognizes that: (1) the cost of internal control should not exceed the benefits to be derived and (2) the valuation of costs and benefits required the exercise of judgment by management.

The Enterprise Fund's Water and Sewerage Systems are financed by user fees. The unique characteristics of the services provided by the Drainage System of New Orleans requires the use of Enterprise Fund accounting in order to obtain a meaningful measure of the cost of providing the services and capital maintenance. Revenues for the Drainage System are financed by property taxes. Revenues from the three- (3) mill, six- (6) mill and nine- (9) mill ad valorem taxes, which are restricted exclusively for drainage services, finance the Drainage System. These ad valorem taxes provide the major revenues of the drainage system.

**Budgetary Control:** The Sewerage and Water Board maintains an internal budgetary control through the preparation and monitoring of an annual operating and capital budget for the Water, Sewerage and Drainage Funds. Monthly budget reports are provided to department level managers to assist them in their fiscal responsibilities.

**General Operations:** There was a 5.0% increase in total system operating revenues from 2001 to 2002 primarily due to a full year of sewer rate increases and a partial year of water rate increases. Operating expenses decreased by 2.8% primarily due to the reduction in consulting fees in 2002 related to a privatization request for proposals, reduction in claims expense and the reduction in natural gas and electricity costs.

**Pension Trust Fund Operations:** The contributions to the Pension Trust Funds are based on annual actuarial valuations.

**Debt Administration:** The Board of Liquidation, City Debt has responsibility for the administration of the Board's debt. Drainage debt services payments are supported by ad valorem tax collections, while user fees are used to provide debt services for the Water and Sewerage System bonds. The Sewerage and Water Board's bonds outstanding as of December 31, 2002 totaled \$259,285,000.

**Cash Management:** Cash temporarily idle in the Enterprise Fund during the year was invested in commercial bank certificates of deposit, repurchase agreements, and U. S. Treasury Bills. Effective January 1998, investments were recorded at fair value. Investment income on these idle funds was \$3,252,629.

**Risk Management:** The Sewerage and Water Board uses both insured and retained risk programs to manage exposures to loss. The Board administers self-insured programs for property and automobile liability exposures. Also, retained risk programs for general liability and workers' compensation losses and claims are administered by the Board. Improved claims management and administration have facilitated more timely and better decision making on a case-by-case basis. The updating of risk management procedures and information systems is ongoing with the objective of improving loss control efforts and risk assessment capabilities.

Further analysis of the Board's financial position and operations are provided in the Management's Discussion and Analysis Section of the financial report beginning at page II-3 of this report.

**Other Information:** State Statutes and covenants governing outstanding bond issues require an annual audit of the Board's financial records by independent certified public accountants.

The accounting firms of Postlethwaite & Netterville and Bruno & Tervalon were selected by the Board to perform this audit. The independent auditors' report on the basic financial statements is included in the Financial Section of the report.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Sewerage and Water Board of New Orleans for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2001. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents conform to program standards. Such CAFR must satisfy both accounting principles generally accepted in the United States and applicable legal requirements.

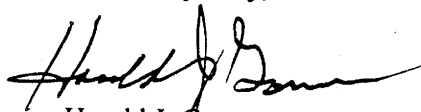
A Certificate of Achievement is valid for a period of one (1) year only. The Sewerage and Water Board of New Orleans has received a Certificate of Achievement for the last twenty (20) years. We believe our current report continues to conform to the Certification of Achievement Program requirements and we are submitting it to GFOA.

For the fiscal year 2002, the Board has implemented GASB 33, Accounting and Financial Reporting for Nonexchange Transactions, and GASB 34, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments. Management's Discussion and Analysis is included in the financial section of this report.

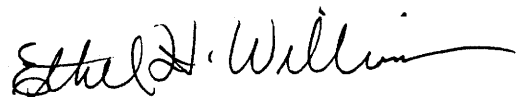
**Acknowledgments:** The Comprehensive Annual Financial Report was prepared by the dedicated staff of the Board's Management Services Administration, particularly the Accounting and Printing Departments.

We also wish to thank the members of the Board for their interest and support in our efforts to achieve greater fiscal efficiency and accountability.

Yours very truly,



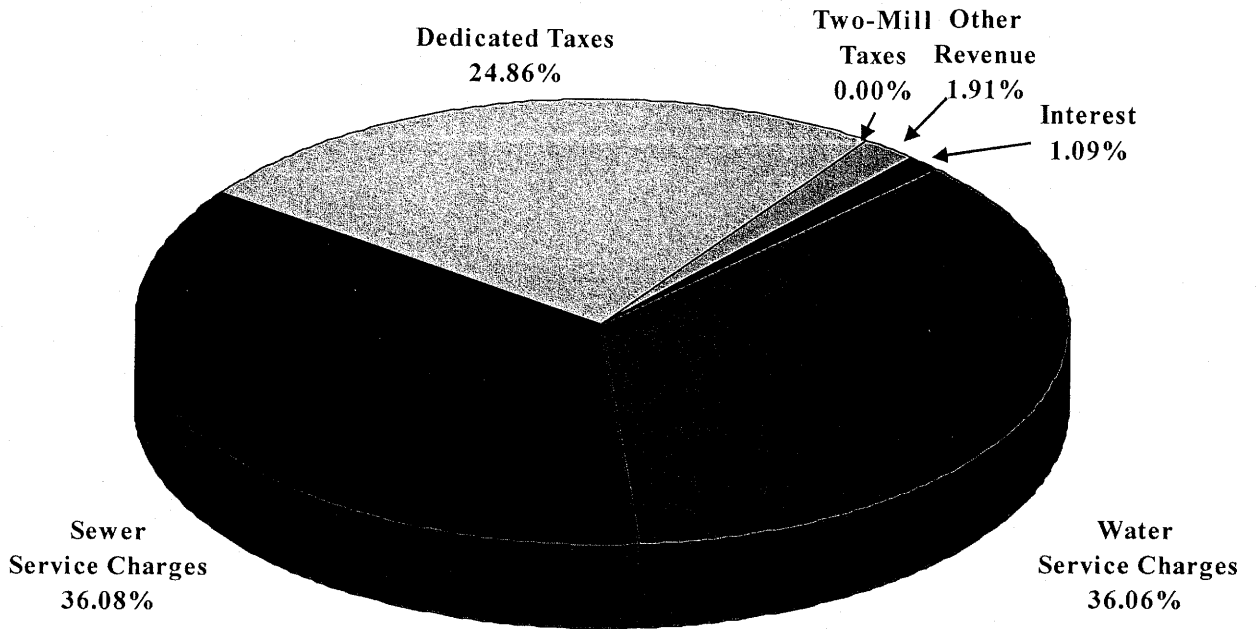
Harold J. Gorman  
Executive Director



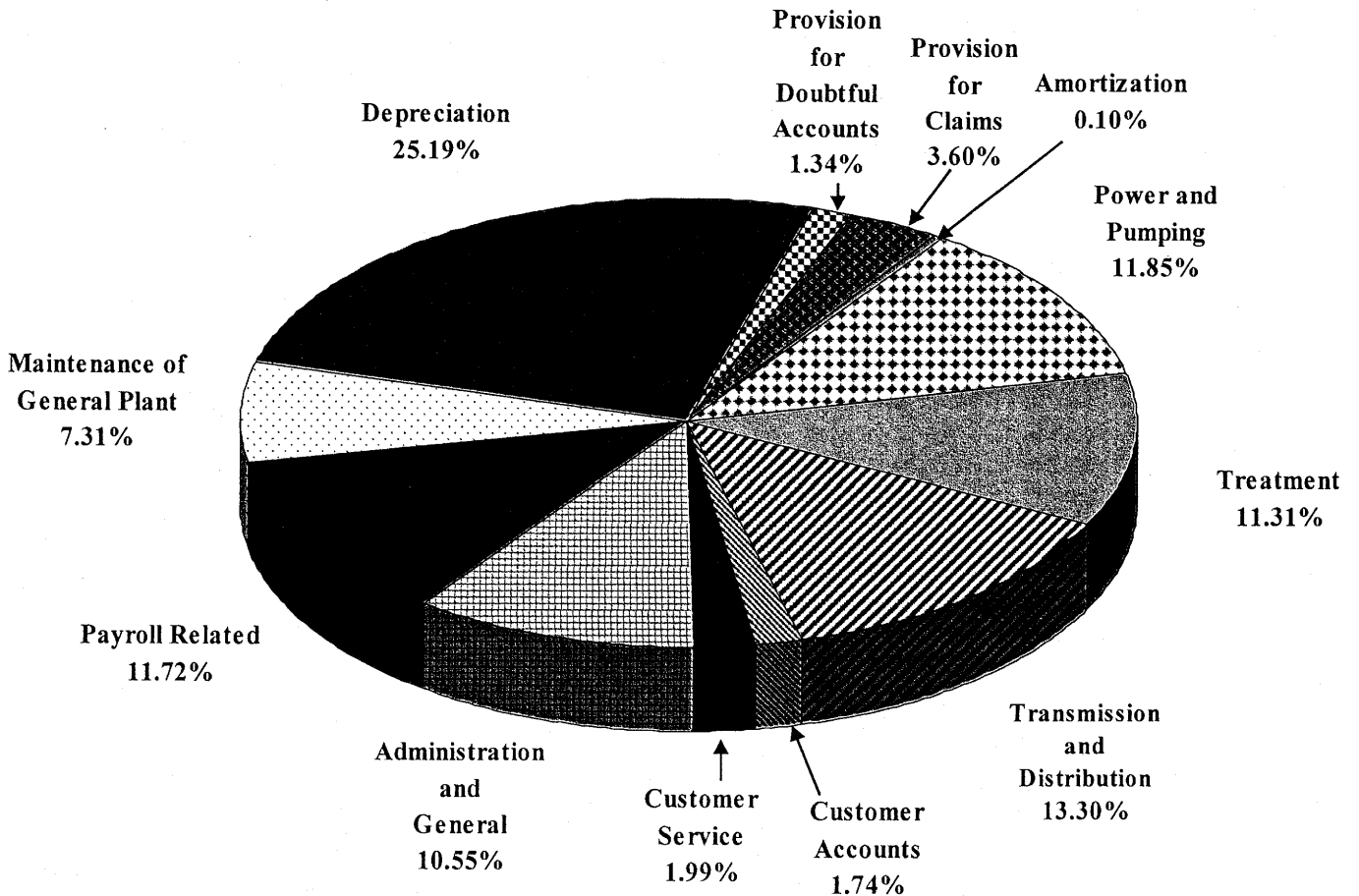
Ethel H. Williams  
Utility Financial Administrator

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# 2002 Revenues

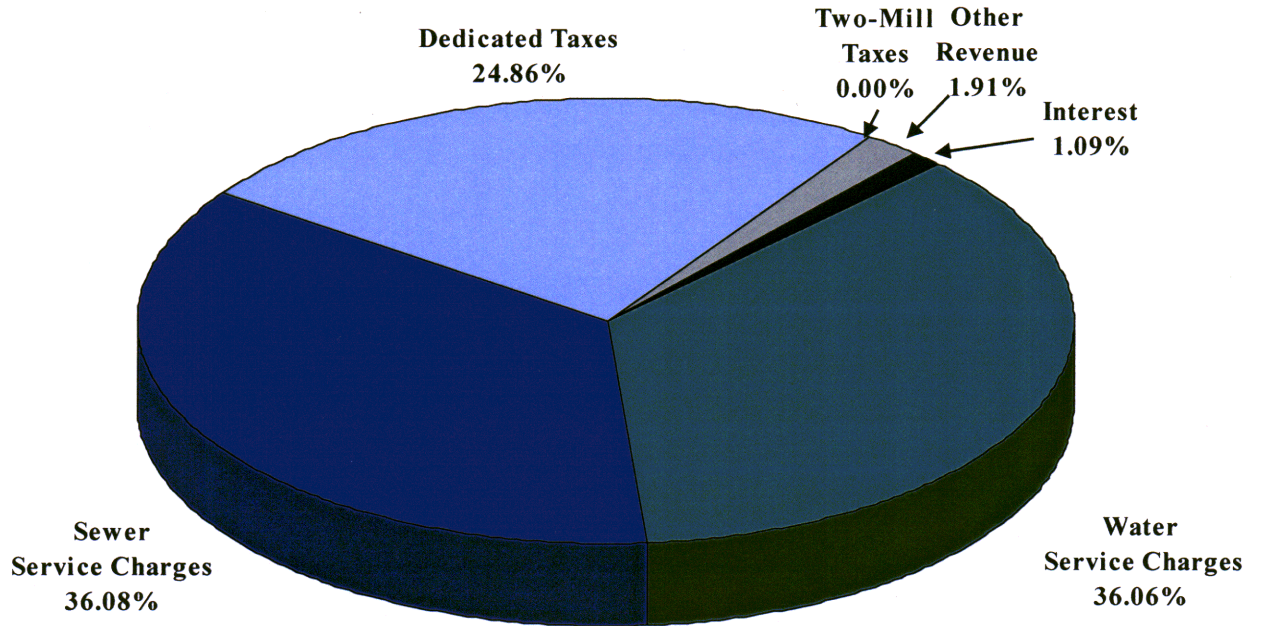


# 2002 Expenses

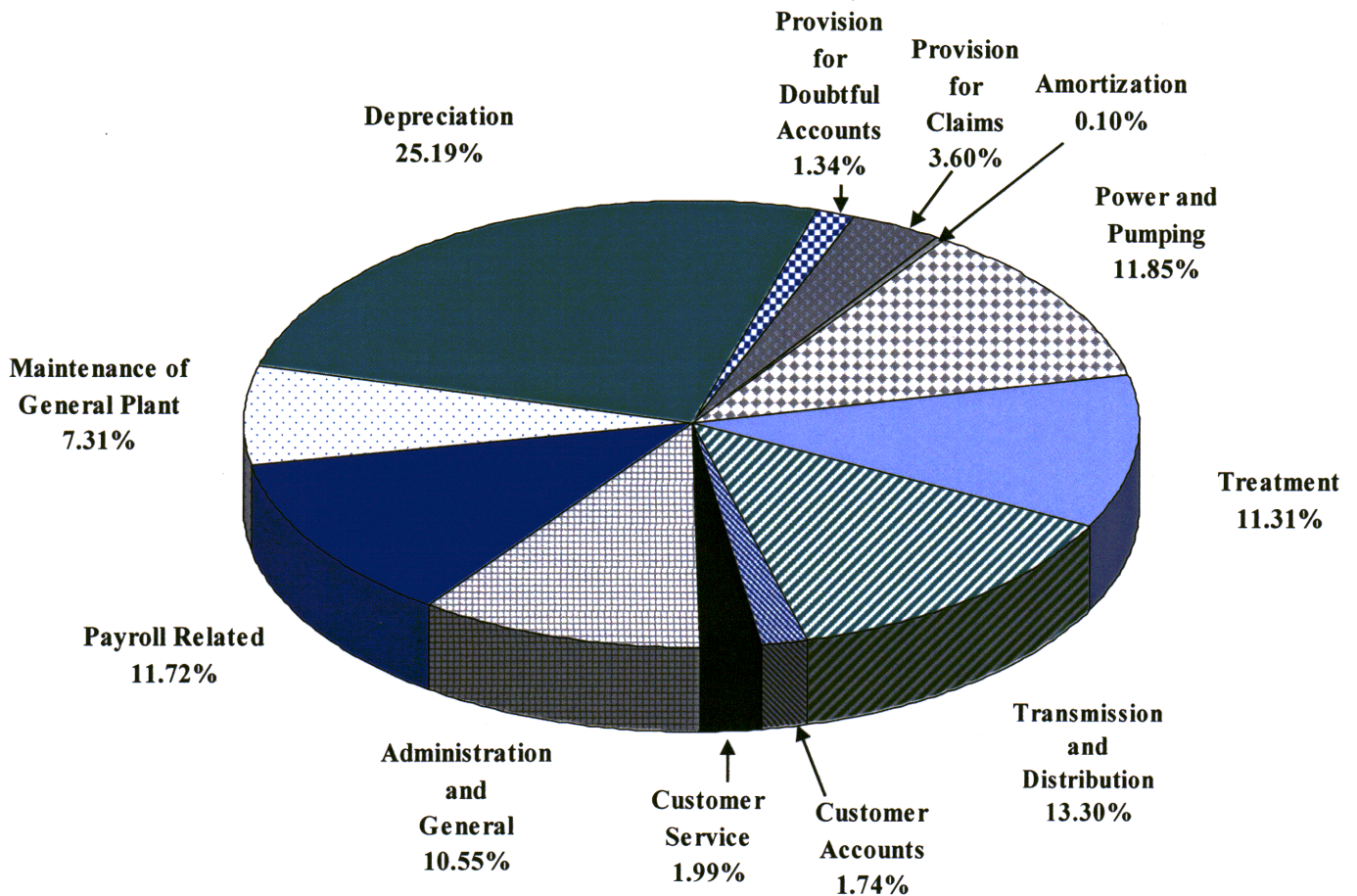




# 2002 Revenues



# 2002 Expenses



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# Certificate of Achievement for Excellence in Financial Reporting

Presented to

Sewerage and Water Board  
of New Orleans, Louisiana

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
December 31, 2001

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



President

Executive Director



OFFICERS  
of the  
SEWERAGE AND WATER BOARD  
OF NEW ORLEANS

---

---

December 31, 2002

- C. RAY NAGIN .....President  
Mayor, City of New Orleans
- HENRY A. DILLON, JR. .... President Pro Tem
- HAROLD J. GORMAN ..... Executive Director
- MARCIA A. ST. MARTIN ..... Deputy Director
- G. JOSEPH SULLIVAN ..... General Superintendent
- CHARLES G. MCKINNEY .....Deputy General Superintendent
- JOHN D. LAMBERT, JR. .... Special Counsel

MEMBERS OF  
SEWERAGE AND WATER BOARD OF NEW ORLEANS

December 31, 2002

---

---

C. RAY NAGIN ..... Mayor

EDDIE L. SAPIR ..... Councilmember-at-Large

OLIVER M. THOMAS ..... Councilmember-at-Large

MARLIN N. GUSMAN ..... Councilman District D

SIDNEY H. EVANS, JR. .... Member - Board of Liquidation, City Debt

NORMA E. GRACE ..... Member - Board of Liquidation, City Debt

PENELOPE RANDOLPH ..... Councilmanic District A

WILLIAM F. GRACE JR. .... Councilmanic District B

TOMMIE A. VASSEL ..... Councilmanic District C

GARY N. SOLOMON ..... Councilmanic District D

HENRY A. DILLON, JR. .... Councilmanic District E

BENJAMIN L. EDWARDS, SR. .... At-Large Member

BARBARA LAMONT ..... At-Large Member

**COMMITTEES  
OF THE  
SEWERAGE AND WATER BOARD  
OF  
NEW ORLEANS  
December 31, 2002**

---

**EXECUTIVE COMMITTEE**

HENRY A. DILLON, JR. - Chairperson

BENJAMIN L. EDWARDS, SR.	OLIVER M. THOMAS
EDDIE L. SAPIR	

**FINANCE COMMITTEE**

EDDIE L. SAPIR - Vice Chairperson

SIDNEY H. EVANS JR.

**COMMITTEE ON SEWERAGE AND WATER**

EDDIE L. SAPIR - Chairperson

HENRY A. DILLON, JR.	BARBARA LAMONT
NORMA E. GRACE	

**DRAINAGE COMMITTEE**

OLIVER THOMAS - Chairperson

BENJAMIN L. EDWARDS, SR.	PENELOPE RANDOLPH
WILLIAM F. GRACE, JR.	

**PENSION COMMITTEE**

HENRY A. DILLON, JR. - Chairperson

SIDNEY H. EVANS, JR.	PATRICIA W. CAMPBELL
NORMA E. GRACE	WARREN J. LAWRENCE
	HOWARD E. NOLAND
	MARVIN R. RUSSELL, JR.

PALMER & CAY CONSULTING GROUP, Actuary

**COMMITTEE ON SEWERAGE AND WATER BOARD OPERATIONS**

BENJAMIN L. EDWARDS - Chairperson

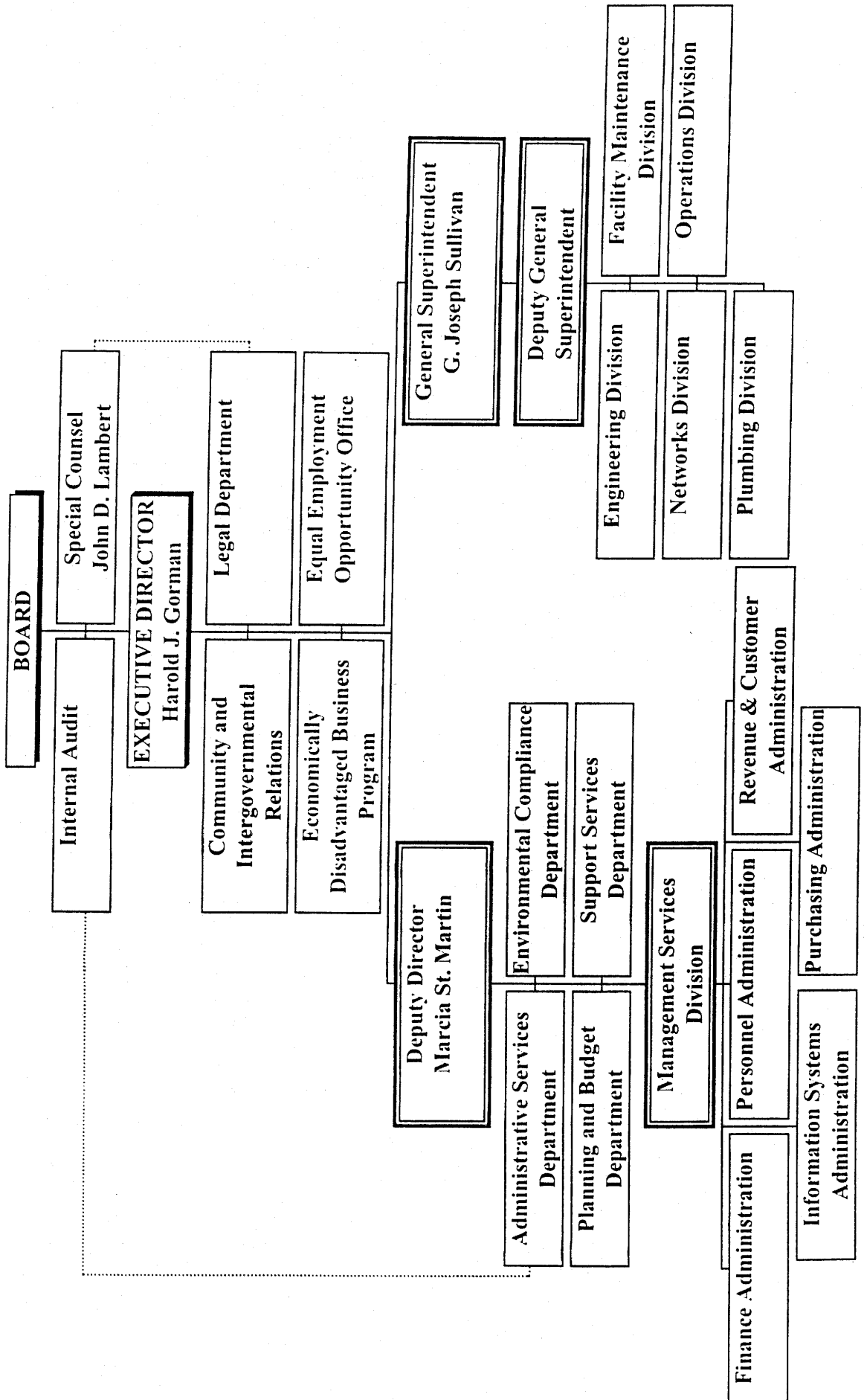
WILLIAM F. GRACE, JR.	BARBARA LAMONT
	PENELOPE RANDOLPH

**PLUMBING CONFERENCE COMMITTEE**

VACANT - Chairperson

JAMES J. ARONLD	JAMES C. FINLEY
RONNIE CROSBY	G. JOSEPH SULLIVAN
BENJAMIN L. EDWARDS, SR.	

# SEWERAGE AND WATER BOARD OF NEW ORLEANS 2002 ORGANIZATION CHART





**THE SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**DIVISION HEADS OF DEPUTY DIRECTOR**

December 31, 2002

**MARCIA A. ST. MARTIN**  
DEPUTY DIRECTOR

---

**ADMINISTRATIVE SERVICES DIVISION**

Vacant

**ENVIRONMENTAL AFFAIRS DIVISION**

Gordon C. Austin

**MANAGEMENT SERVICES DIVISION**

Martin F. Comer, Jr.

**PLANNING AND BUDGET DIVISION**

Lawrence J. Federico, Jr.

**SUPPORT SERVICES DIVISION**

Howard E. Noland

**THE SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**DIVISION HEADS OF GENERAL SUPERINTENDENT**

December 31, 2002

**G. JOSEPH SULLIVAN**  
GENERAL SUPERINTENDENT

**CHARLES G. McKINNEY**  
DEPUTY GENERAL SUPERINTENDENT

---

**ENGINEERING DIVISION**

Rudolph S. St. Germain

**FACILITY MAINTENANCE DIVISION**

Glenn M. Semel

**NETWORKS DIVISION**

Eric M. Kelly

**OPERATIONS DIVISION**

John R. Huerkamp

**PLUMBING DIVISION**

James J. Arnold

**THE SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**DEPARTMENT HEADS OF MANAGEMENT SERVICES DIRECTOR**

December 31, 2002

**MARTIN F. COMER, JR.**  
**MANAGEMENT SERVICES DIRECTOR**

---

**FINANCE ADMINISTRATION**

Ethel H. Williams

**INFORMATION SYSTEMS ADMINISTRATION**

Sue D. Mitchell

**PERSONNEL ADMINISTRATION**

Kevin F. Walsh

**PURCHASING ADMINISTRATION**

Willie M. Mingo Jr.

**REVENUE AND CUSTOMER SERVICES ADMINISTRATION**

Carol W. Warren

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The Networks Division of the Sewerage and Water Board makes thousands of repairs to sewer and water lines and fire hydrants each year. The City is divided into six work zones, with each zone's team responsible for maintenance and repair in its designated area.

Smoke tests to detect leaks in the sewer system are being conducted throughout the City as part of the S&WB's Sewer System Evaluation and Rehabilitation Program (SSERP). The news media helps notify citizens that tests are being conducted in their neighborhoods.





Postlethwaite & Netterville

A Professional Accounting Corporation  
Associated Offices in Principal Cities of the United States



## INDEPENDENT AUDITORS' REPORT

Members of the Board  
Sewerage and Water Board of New Orleans:

We have audited the basic financial statements of the Sewerage and Water Board of New Orleans as of and for the years ended December 31, 2002 and 2001, as listed in the table of contents. These basic financial statements are the responsibility of the Board's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the financial position of the Sewerage and Water Board of New Orleans as of December 31, 2002 and 2001, and the results of its operations and its cash flows for the years ended in conformity with accounting principles generally accepted in the United States of America.

As discussed in note 1 to the financial statements, the Sewerage and Water Board of New Orleans adopted the provisions of Governmental Accounting Standards Board Statement No. 34 – *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, and Government Accounting Standards Board Statement No. 33 – *Accounting and Financial Reporting for Non-Exchange Transactions* in 2002.

The Management's Discussion and Analysis and the Schedules of Funding Progress and Employer Contributions as listed on the accompanying table of contents, are not a required part of the basic financial statements but are supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

In accordance with *Government Auditing Standards*, we have also issued a report, dated April 9, 2003, on our consideration of the Board's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audits.

Our audits were made for the purpose of forming an opinion on the 2002 and 2001 basic financial statements of the Board taken as a whole. The accompanying information included in Schedules 1 through 6 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The Statistical Information and Supplemental Information sections as listed in the table of contents are also presented for purposes of additional analysis and are not a required part of the basic financial statements of the Board. Such additional information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we express no opinion on it.

*Postlethwaite & Mitcheville*

*Bruno & Jervais, LLP*

New Orleans, Louisiana  
April 9, 2003

**Sewerage & Water Board of New Orleans  
Management's Discussion and Analysis  
Year Ended December 31, 2002**

This section of the Sewerage & Water Board of New Orleans' (the Board) annual financial report presents a discussion and analysis of the Board's financial performance during the fiscal year that ended December 31, 2002. Please read it in conjunction with the Board's financial statements, which follow this section.

**FINANCIAL HIGHLIGHTS**

**Enterprise Fund**

The major highlights in the Board's enterprise fund were as follows:

- The Board's additions to its major systems totaled \$114.2 million.
- The SELA project which is a major upgrade to the drainage system by the Corps of Engineers continued during 2002; \$28,914,829 of additions to work in progress were recorded during the year.
- The Board issued three bond issues during 2002 totaling \$111,000,000; the proceeds of each issue are to be used to fund capital projects in the water, sewerage and drainage departments.
- Capital contributions by others to finance construction of the Board's capital assets totaled \$35.8 million.

**Pension Trust Fund**

The major highlight in the Board's pension trust fund was the continued weakness in the public securities market and the resulting depreciation of \$21.0 million in the market value of the investments held by the plan during 2002.

**OVERVIEW OF THE FINANCIAL STATEMENTS**

This financial report consists of five parts: management's discussion and analysis (this section), the financial statements, the notes to the financial statements, required supplementary information, and other supplementary information.

**Government-wide Financial Statements – Enterprise Fund**

The Board's principal activities of providing water, sewerage, and drainages services are accounted for in a single proprietary fund – the enterprise fund. Enterprise funds are used to report business activities. Since the enterprise fund is the Board's single activity, its financial statements are presented as the Board's government-wide financial statements.

The financial statements provide both long-term and short-term information about the Board's overall financial status. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The statements are followed by a sections of required supplementary information and other supplementary information that further explain and support the information in the financial statements.



The Board's financial statements are prepared on an accrual basis in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to government units. Under this basis of accounting, revenues are recognized in the period in which they are earned, expenses are recognized in the period in which they are incurred, and depreciation of assets is recognized in the Statements of Revenues, Expenses, and Changes in Net Assets. All assets and liabilities associated with the operation of the Authority are included in the Statements of Net Assets.

The Statement of Net Assets reports the Board's net assets. Net assets-the difference between the Board's assets and liabilities-are one way to measure the Board's financial health or position. The increase in the Board's net assets during 2002 is an indicator of its positive financial health.

### Fund Financial Statements – Pension Trust Fund

The Board's fund financial statements consist of its pension trust fund. As a fiduciary fund, the pension trust fund is held for the benefit of employees and retirees of the Board. The pension trust fund is not reflected in the government wide financials because the resources are not available to the Board for its activities. The accounting for the pension trust fund is much like that used by the enterprise fund.

## FINANCIAL ANALYSIS OF THE BOARD'S

### ENTERPRISE FUND

#### Net Assets

The Board's total assets at December 31, 2002 reached approximately \$1,403 million, a 12.3% increase over December 31, 2001 (see Table A-1).

	2002	2001	Increase (Decrease)	Increase (Decrease)
Current assets	\$ 28,650,463	\$ 29,563,959	\$ (913,496)	-3.1%
Restricted assets	268,643,569	193,093,779	75,549,790	39.1%
Property, plant and equipment - net	1,097,145,242	1,017,483,087	79,662,155	7.8%
Other assets	8,766,332	9,858,297	(1,091,965)	-11.1%
<b>Total assets</b>	<b>\$ 1,403,205,606</b>	<b>\$ 1,249,999,122</b>	<b>\$ 153,206,484</b>	<b>12.3%</b>
Current liabilities	\$ 71,643,566	\$ 68,409,198	\$ 3,234,368	4.7%
Long-term liabilities	264,347,671	161,167,429	103,180,242	64.0%
<b>Total liabilities</b>	<b>335,991,237</b>	<b>229,576,627</b>	<b>106,414,610</b>	<b>46.4%</b>
Net assets:				
Invested in capital assets, net of related debt	967,763,496	948,808,901	18,954,595	2.0%
Restricted	99,450,873	71,613,594	27,837,279	38.9%
<b>Total net assets</b>	<b>1,067,214,369</b>	<b>1,020,422,495</b>	<b>46,791,874</b>	<b>4.6%</b>
<b>Total liabilities and net assets</b>	<b>\$ 1,403,205,606</b>	<b>\$ 1,249,999,122</b>	<b>\$ 153,206,484</b>	<b>12.3%</b>

The increase in total assets of the Board resulted primarily from a \$75.5 million increase in restricted assets at December 31, 2002 which resulted from a \$46.6 million increase in construction funds on hand from bond issues during 2002, a \$22.9 million increase in capital projects funds on hand at 2002 which were generated through bonds of the Board and other minor changes. Property plant and equipment increased in 2002 by \$79.7 million due to \$114.2 million in construction funds expended less the annual provision for depreciation of \$34.5 million. Long-term liabilities increased by \$103.2 million in 2002 as compared to 2001 due primarily to the issuance of \$111.0 million in new bonds payable less normal payments on funds payable existing at the beginning of the year.

### Changes in Net Assets

Net assets at December 31, 2002 were approximately \$46.8 million or 11.4% less than at December 31, 2001. The Board's total operating revenues increased by 5.0% to approximately \$108.9 million, and total operating expenses decreased 2.8% to approximately \$137.1 million. The changes in net assets are detailed in Table A-2; operating expenses are detailed in Table A-3.

	2002	2001	Increase (Decrease)	Increase (Decrease)
Operating revenues:				
Charges for services	\$ 107,087,709	\$ 101,387,729	\$ 5,699,980	5.6%
Other	1,814,951	2,349,046	(534,095)	-22.7%
<b>Total operating revenues</b>	<b>108,902,660</b>	<b>103,736,775</b>	<b>5,165,885</b>	<b>5.0%</b>
Operating expenses (Table A-3)	137,137,210	141,015,867	(3,878,657)	-2.8%
Operating loss	(28,234,550)	(37,279,092)	9,044,542	-24.3%
Non-operating revenues:				
Property taxes	36,831,327	38,032,608	(1,201,281)	-3.2%
Other taxes	792,883	785,640	7,243	-4.0%
Investment income	1,616,307	3,956,010	(2,339,703)	-59.1%
<b>Total non-operating revenues</b>	<b>39,240,517</b>	<b>42,774,258</b>	<b>(3,533,741)</b>	<b>-8.3%</b>
Income before capital contributions	11,005,967	5,495,166	5,510,801	100.3%
Capital contributions	35,785,907	47,291,828	(11,505,921)	-24.3%
<b>Change in net assets</b>	<b>46,791,874</b>	<b>52,786,994</b>	<b>(5,995,120)</b>	<b>-11.4%</b>
Net assets, beginning of year	1,020,422,495	967,635,501	52,786,994	5.5%
Net assets, end of year	<b>\$ 1,067,214,369</b>	<b>\$ 1,020,422,495</b>	<b>\$ 46,791,874</b>	<b>4.6%</b>

Operating revenues increased primarily as a result of an increase in charges for service due to a sewerage rate increase effective 2002 and water rate increase effective in July, 2001.

Capital revenue from federal grants and construction of Board property by other agencies decreased by 24.3% to \$35.8 million. Principal capital contributions relate to the U.S. Corps of Engineers' construction of major drainage system improvements.

Table A-3				
Sewerage & Water Board of New Orleans				
Operating Expenses				
	2002	2001	Increase (Decrease)	Increase (Decrease)
Power and pumping	\$ 16,255,368	\$ 19,886,007	\$ (3,630,639)	-18.3%
Treatment	15,515,582	15,749,585	(234,003)	-1.5%
Transmission and distribution	18,233,083	17,517,122	715,961	4.1%
Customer accounts	2,384,744	2,771,609	(386,865)	-14.0%
Customer service	2,731,763	2,687,794	43,969	1.6%
Administration and general	14,463,064	14,593,405	(130,341)	-0.9%
Payroll related	16,073,673	14,368,516	1,705,157	11.9%
Maintenance of general plant	10,020,846	9,824,994	195,852	2.0%
Depreciation	34,551,459	34,378,585	172,874	0.5%
Amortization	130,304	124,473	5,831	4.7%
Provision for doubtful accounts	1,842,958	1,661,267	181,691	10.9%
Provision for claims	4,934,366	7,452,510	(2,518,144)	-33.8%
<b>Total operating expenses</b>	<b>\$ 137,137,210</b>	<b>\$ 141,015,867</b>	<b>\$ (3,878,657)</b>	<b>-2.8%</b>

The decrease of \$3.6 million or 18.3% in 2002 in power and pumping is primarily due to a decrease in the price of natural gas purchased by the Board and in the price per kilowatt hour of purchased electricity as compared to 2001.

Payroll related expense increased by \$1.7 million or 11.9% due to the increased pension expense.

Provisions for claims decreased by \$2.5 million or 33.8% in 2002 as compared to 2001. Claims expense varies due to the number and severity of the claims during any period. The decrease is due primarily due to a decrease in the number of large dollar claims in 2002 as compared to 2001.

## PENSION TRUST FUND

### Plan Net Assets

The Board's total plan net assets of its pension trust fund at December 31, 2002 was approximately \$153.8 million, an 11.3% decrease over December 31, 2001 (see table A-4). Total assets decreased 10.8% to \$156.1 million.

Table A-4				
Sewerage & Water Board of New Orleans				
Plan Net Assets				
	2002	2001	Increase (Decrease)	Increase (Decrease)
Cash	\$ 552,943	\$ 78,639	\$ 474,304	603.1%
Investments	154,481,539	173,695,292	(19,213,753)	-11.1%
Other assets	1,114,019	1,234,994	(120,975)	-9.8%
<b>Total assets</b>	<b>156,148,501</b>	<b>175,008,925</b>	<b>(18,860,424)</b>	<b>-10.8%</b>
Due to funds	200,000	-	200,000	100.0%
DROP participant payable	2,131,025	1,649,967	481,058	29.2%
<b>Total liabilities</b>	<b>2,331,025</b>	<b>1,649,967</b>	<b>681,058</b>	<b>41.3%</b>
<b>Plan net assets</b>	<b>\$ 153,817,476</b>	<b>\$ 173,358,958</b>	<b>\$ (19,541,482)</b>	<b>-11.3%</b>

Plan net assets decreased by \$19.5 or 11.3% in 2002 primarily due to realized and unrealized losses on investments recognized in 2002.

### Changes in Plan Net Assets

Plan net assets for the year ended December 31, 2002 decreased to approximately \$153.8 million or 11.3% over December 31, 2001 (see Table A-5).

	2002	2001	Increase (Decrease)	Increase (Decrease)
<b>Additions:</b>				
Contributions	\$ 4,020,608	\$ 6,458,532	\$ (2,437,924)	-37.7%
Net loss on investments	(15,496,265)	(1,709,327)	(13,786,938)	806.6%
<b>Total additions</b>	<b>(11,475,657)</b>	<b>4,749,205</b>	<b>(16,224,862)</b>	<b>-341.6%</b>
<b>Deductions:</b>				
Benefits	(6,827,949)	(6,634,821)	(193,128)	2.9%
Employee refunds	(220,932)	(290,494)	69,562	-23.9%
Employee DROP contributions	(1,016,944)	(1,034,682)	17,738	-1.7%
<b>Total deductions</b>	<b>(8,065,825)</b>	<b>(7,959,997)</b>	<b>(105,828)</b>	<b>1.3%</b>
<b>Change in net assets</b>	<b>(19,541,482)</b>	<b>(3,210,792)</b>	<b>(16,330,690)</b>	<b>508.6%</b>
Plan net assets, beginning of year	173,358,958	176,569,750	(3,210,792)	-1.8%
Plan net assets, end of year	<b>\$ 153,817,476</b>	<b>\$ 173,358,958</b>	<b>\$ (19,541,482)</b>	<b>-11.3%</b>

Contributions to the pension plan decreased in 2002 as compared to 2001 due to a reduction in the Board's contribution rate to the plan to 8% of covered payroll in 2002 from 16% of covered payroll in 2001.

The decrease in the change in plan net assets of \$19.5 million resulted from an increase in the net loss on investments of \$13.8 million, reduced by plan contributions of \$2.4 million and increased benefits of \$2.2 million in 2002 as compared to 2001.

### CAPITAL ASSET AND DEBT ADMINISTRATION

#### Capital Assets

As of December 31, 2002, the Board had invested approximately \$1.6 billion in capital assets. Net of accumulated depreciation, the Board's net capital assets at December 31, 2002 totaled approximately \$1.1 billion. This amount represents a net increase (including additions and disposals, net of depreciation) of approximately \$79.7 million or 7.8% over December 31, 2001. Detailed changes is provided in footnote 4 to the financial statements.

At December 31, 2002, the Board's budget for its five-year capital improvements program totaled \$1,196,903,000 including \$274,946,000 for water, \$406,219,000 for sewerage and \$515,738,000 for

drainage. Due to certain regulatory and legislative changes, additional capital improvements will probably be required. Future capital improvement program expenditures may require the issuance of additional debt depending on the amount and timing of expenditures. As of December 31, 2002, the Board has committed or appropriated \$96,788,416 in investments for use in future capital projects and has \$132,983,127 of bond proceeds remaining for construction. The capital project investments are included in restricted assets.

The capital improvements budget for 2003 is \$268,299,000, including \$86,647,000 in projects, which is to fund the federal grants and programs. The Board continues significant construction projects in its water, sewerage, and drainage systems as follows:

Southeast Louisiana Flood Control Program  
Sewer System Sanitation Evaluation and Rehabilitation Program  
Drainage Pumping Station #1  
Eastbank Sewer Treatment Plant  
Westbank Sewer Treatment Plant

### **Debt Administration**

The Board continues to make its regularly scheduled payments on its bonds. During 2002, \$111,000,000 in new bonds were issued by the Board. Net proceeds of the bond issues are to be used for construction. During 2002, \$6,735,000 in principal payments were made.

All bond debt covenants have been met.

Additional detailed information relating to capital assets and debt is presented in the financial statements and related notes.

### **ECONOMIC FACTORS AND RATES**

The Board continues to explore creative measures to reduce cost of service while improving customer services and care for the environment. During 2002 the Board raised potable water rates by 12%. The rate adjustment was the first since April 1990. Due to the compliance factors mandated by the 1998 consent decree, the Board recommended and received a 15% sewerage system rate adjustment in November 2002. The Board is requesting sewerage system rate adjustments of 15% in 2003, 15% in 2004, 14% in 2005 and, 14% in 2006. The Board is recommending a system of long-term municipal bonds and short-term bond anticipation notes. Due to market conditions, long-term interest rates remain favorable. The Board developed two pilot bottled water projects and is exploring the sale of bottled water. The Board continues to invest in upgrading its power production plant. Through the generation of power the Board has been able to deliver water and drainage services to its customers during periods when commercial power has been unavailable.

### **CONTACTING THE BOARD'S FINANCIAL MANAGEMENT**

This financial report is designed to provide our bondholders, patrons, and other interested parties with a general overview of the Board's finances and to demonstrate the Board's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Sewerage & Water Board of New Orleans at (504) 585-2356.

# **BASIC FINANCIAL STATEMENTS**

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## STATEMENTS OF NET ASSETS

December 31, 2002 and 2001

ASSETS	2002	2001
Property, plant and equipment	\$ 1,576,704,951	\$ 1,464,845,626
Less: accumulated depreciation	479,559,709	447,362,539
Property, plant and equipment, net	1,097,145,242	1,017,483,087
Restricted assets:		
Capital projects	96,788,416	73,904,548
Construction funds	132,983,127	86,345,814
Debt service reserve	19,424,365	14,597,376
Customer deposits	5,137,096	5,579,473
Health insurance reserve	9,000,000	9,000,000
Debt service	5,098,565	3,454,568
Other	212,000	212,000
Total restricted assets	268,643,569	193,093,779
Current assets:		
Cash	4,387,750	2,948,437
Accounts receivable:		
Customers (net of allowance for doubtful accounts)	10,795,677	11,533,632
Taxes	3,943,592	5,391,875
Interest	242,225	488,388
Grants	965,551	214,529
Miscellaneous	815,444	1,245,677
Due from City of New Orleans, current	200,000	200,000
Due from other fund	200,000	-
Inventory of supplies	6,570,193	6,869,065
Prepaid expenses	530,031	672,356
Total current assets	28,650,463	29,563,959
Due from City of New Orleans, less current portion	790,428	898,586
Other assets:		
Bond issue costs	1,593,034	1,073,541
Deposits	51,315	51,315
Net pension asset	6,331,555	7,834,855
Total other assets	7,975,904	8,959,711
Total assets	\$ 1,403,205,606	\$ 1,249,999,122

(Continued)

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

STATEMENTS OF NET ASSETS  
(Continued)

NET ASSETS AND LIABILITIES	2002	2001
Net Assets:		
Invested in capital assets - net of related debt	\$ 967,763,496	\$ 948,808,901
Restricted For:		
Debt service	23,291,960	17,405,879
Capital projects	76,158,913	54,207,715
Total restricted for net assets	99,450,873	71,613,594
Total net assets	1,067,214,369	1,020,422,495
Liabilities:		
Long-term liabilities:		
Claims payable	11,352,798	12,882,429
Bonds payable (net of current maturities)	252,994,873	148,285,000
	264,347,671	161,167,429
Current liabilities (payable from current assets):		
Accounts payable	14,485,982	17,473,006
Due to City of New Orleans	25,658	231,636
Retainers and estimates payable	923,058	533,278
Due to pension trust fund	79,998	23,272
Accrued salaries	1,341,891	1,316,709
Accrued vacation and sick pay	9,621,649	9,711,873
Claims payable	26,305,507	22,881,841
Other liabilities	5,756	33,439
	52,789,499	52,205,054
Current liabilities (payable from restricted assets):		
Accrued interest	1,294,598	701,678
Bonds payable	9,370,000	6,735,000
Retainers and estimates payable	3,052,373	3,187,993
Customer deposits	5,137,096	5,579,473
	18,854,067	16,204,144
Total current liabilities	71,643,566	68,409,198
Total liabilities	335,991,237	229,576,627
Total net assets and liabilities	\$ 1,403,205,606	\$ 1,249,999,122

See accompanying notes to financial statements.



SEWERAGE AND WATER BOARD OF NEW ORLEANS  
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

For the years ended December 31, 2002 and 2001

	2002	2001
Operating revenues:		
Sales of water and delinquent fees	\$ 53,413,048	\$ 51,871,210
Sewerage service charges	53,455,291	49,302,683
Plumbing inspection and license fees	219,370	213,836
Other revenue	1,814,951	2,349,046
Total revenues	108,902,660	103,736,775
Operating Expenses:		
Power and pumping	16,255,368	19,886,007
Treatment	15,515,582	15,749,585
Transmission and distribution	18,233,083	17,517,122
Customer accounts	2,384,744	2,771,609
Customer service	2,731,763	2,687,794
Administration and general	14,463,064	14,593,405
Payroll related	16,073,673	14,368,516
Maintenance of general plant	10,020,846	9,824,994
Depreciation	34,551,459	34,378,585
Amortization	130,304	124,473
Provision for doubtful accounts	1,842,958	1,661,267
Provision for claims	4,934,366	7,452,510
Total operating expenses	137,137,210	141,015,867
Operating loss	(28,234,550)	(37,279,092)
Non-operating revenues:		
Two-mill tax	5,058	10,726
Three-mill tax	10,312,636	10,772,176
Six-mill tax	10,567,048	10,906,914
Nine-mill tax	15,946,585	16,342,792
Other taxes	792,883	785,640
Investment income	1,616,307	3,956,010
Total non-operating revenues	39,240,517	42,774,258
Income before capital contributions	11,005,967	5,495,166
Capital contributions	35,785,907	47,291,828
Change in net assets	46,791,874	52,786,994
Net assets:		
Beginning of year	1,020,422,495	967,635,501
End of year	\$ 1,067,214,369	\$ 1,020,422,495

See accompanying notes to financial statements.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## STATEMENTS OF CASH FLOWS

## ENTERPRISE FUND

For the years ended December 31, 2002 and 2001

	2002	2001
Cash flows from operating activities		
Cash received from customers	\$ 105,557,358	\$ 100,672,724
Cash payments to suppliers for goods and services	(53,224,728)	(57,329,098)
Cash payments to employees for services	(46,664,094)	(47,798,347)
Other revenue	2,464,554	2,349,046
Net cash provided by (used in) operating activities	<u>8,133,090</u>	<u>(2,105,675)</u>
Cash flows from noncapital financing activities - proceeds from property taxes	<u>39,072,493</u>	<u>37,451,284</u>
Cash flows from capital and related financing activities		
Acquisition and construction of capital assets	(107,319,128)	(82,197,537)
Proceeds of bond issue	114,079,873	32,720,000
Bond issuance costs	(649,797)	(200,000)
Principal payments on bonds payable	(6,735,000)	(5,285,000)
Interest paid on bonds payable	(7,683,728)	(6,600,151)
Capital contributed by developers and federal grants	35,034,885	14,422,342
Net cash provided by (used in) capital and related financing activities	<u>26,727,105</u>	<u>(47,140,346)</u>
Cash flows from investing activities		
Payments for purchase of investments	(472,959,848)	(502,967,155)
Proceeds from maturities of investments	450,168,616	506,181,234
Investment income	3,498,792	9,997,589
Net cash provided by (used in) investing activities	<u>(19,292,440)</u>	<u>13,211,668</u>
Net increase in cash	54,640,248	1,416,931
Cash at the beginning of the year	3,288,103	1,871,172
Cash at the end of the year	<u>\$ 57,928,351</u>	<u>\$ 3,288,103</u>

(Continued)

SEWERAGE AND WATER BOARD OF NEW ORLEANS

STATEMENTS OF CASH FLOWS  
(Continued)

ENTERPRISE FUND

For the years ended December 31, 2002 and 2001

	<u>2002</u>	<u>2001</u>
Reconciliation of cash and restricted cash (note 2)		
Current assets - cash	\$ 4,387,750	\$ 2,948,437
Restricted assets -cash	53,540,601	339,666
Total cash	<u>\$ 57,928,351</u>	<u>\$ 3,288,103</u>
Reconciliation of operating loss to net cash provided by (used in) operating activities is as follows:		
Operating loss	\$ (28,234,550)	\$ (37,279,092)
Adjustments to reconcile net operating loss to net cash provided by (used in) operating activities:		
Depreciation	34,551,459	34,378,585
Provision for claims	4,934,366	7,452,510
Provision for doubtful accounts	1,842,958	1,661,267
Amortization	130,304	124,473
Change in operating assets and liabilities:		
Increase in customer and other receivable	(766,612)	(1,410,979)
(Increase) decrease in inventory	298,872	(612,926)
Decrease in prepaid expenses	142,325	-
(Increase) decrease in net pension asset	1,503,300	(1,686,845)
Increase (decrease) in accounts payable	(2,987,024)	1,725,698
Decrease in accrued salaries, due to pension and accrued vacation and sick pay	(8,316)	(566,801)
Decrease in other liabilities	<u>(3,273,992)</u>	<u>(5,891,565)</u>
Net cash provided by (used in) operating activities	<u>\$ 8,133,090</u>	<u>\$ (2,105,675)</u>

Noncash investing, capital and financing activities:

The acquisition and construction of capital assets and capital contributed by developers and federal grants do not include non-cash amounts resulting from the construction by the U.S. Corps of Engineers of \$28,914,829 and \$32,876,567 in drainage projects during the years ended December 31, 2002 and 2001, respectively.

In addition, the Board recognized unrealized losses on investments in 2002 and 2001 of \$356,336 and \$709,333, respectively.

See accompanying notes to financial statements.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## STATEMENTS OF PLAN NET ASSETS

## PENSION TRUST FUND

December 31, 2002 and 2001

	<u>2002</u>	<u>2001</u>
Assets:		
Cash	\$ 552,943	\$ 78,639
Receivables:		
Investment income	994,052	1,200,516
Employee contributions receivable	39,969	11,206
Due from other fund	79,998	23,272
Investments	<u>154,481,539</u>	<u>173,695,292</u>
Total assets	<u>156,148,501</u>	<u>175,008,925</u>
Liabilities:		
Due to other fund	200,000	-
DROP participants payable	<u>2,131,025</u>	<u>1,649,967</u>
Total liabilities	<u>2,331,025</u>	<u>1,649,967</u>
Plan net assets available for pension benefits	<u>\$ 153,817,476</u>	<u>\$ 173,358,958</u>

See accompanying notes to financial statements.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## STATEMENTS OF CHANGES IN PLAN NET ASSETS

## PENSION TRUST FUND

For the years ended December 31, 2002 and 2001

	<u>2002</u>	<u>2001</u>
Additions:		
Contributions:		
Employee contributions	\$ 1,089,543	\$ 1,040,680
Employer contributions	2,147,449	4,548,324
City annuity and other transfers in	783,616	869,528
Total contributions	<u>4,020,608</u>	<u>6,458,532</u>
Investment income:		
Interest income	4,091,097	5,060,994
Dividend income	1,556,648	1,565,255
Net depreciation	<u>(20,963,455)</u>	<u>(8,254,471)</u>
	(15,315,710)	(1,628,222)
Less investment expense	<u>(180,555)</u>	<u>(81,105)</u>
Net loss on investments	<u>(15,496,265)</u>	<u>(1,709,327)</u>
Total additions	<u>(11,475,657)</u>	<u>4,749,205</u>
Deductions:		
Benefits	(6,827,949)	(6,634,821)
Employee refunds	(220,932)	(290,494)
Employee contributions to DROP	<u>(1,016,944)</u>	<u>(1,034,682)</u>
Total deductions	<u>(8,065,825)</u>	<u>(7,959,997)</u>
Change in plan net assets	(19,541,482)	(3,210,792)
Plan net assets at beginning of year	<u>173,358,958</u>	<u>176,569,750</u>
Plan net assets at end of year	<u>\$ 153,817,476</u>	<u>\$ 173,358,958</u>

See accompanying notes to financial statements.

**NOTES TO BASIC  
FINANCIAL STATEMENTS**

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
NOTES TO FINANCIAL STATEMENTS

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(1) Summary of Significant Accounting Policies

History and Organization

The major operation of the Sewerage and Water Board of New Orleans (the Board) is providing water, sewerage and drainage services for the City of New Orleans (City). The Sewerage and Water Board of New Orleans was created by Act 6 of the Louisiana Legislature of 1899 as a special board independent of the City's government to construct, maintain and operate a water treatment and distribution system and a public sanitary sewerage system for the City. In 1903, the Legislature gave the Board control of and responsibility for the City's major drainage system and relieved the City of the duty of providing in its annual operating budget or otherwise for the maintenance and operations of the water, sewerage and drainage systems.

In accordance with the Louisiana Revised Statutes (LRS) 33:4096 and 4121, the Board has the authority to establish the water and sewerage rates to charge to its customers. The rates are based on the actual water consumed and on the costs of maintenance and operation of the water and sewerage systems, including the costs of improvements and replacements. The collections of water and sewerage revenues are to be used by the Board for the maintenance and operation of the systems, the cost of improvements, betterments, and replacements, and to provide for the payments of interest and principal on the bonds payable. The Board has also been given the authority to levy and collect various tax millages which are used for the operation and maintenance of the drainage operations. All excess revenues collected are made available for capital development of the system. The proceeds of the rate collections and tax millages are invested in such investments as authorized by the LRS. These investments are reflected in the combined statement of net assets, as "restricted assets," as they are restricted to the purposes as described above.

The Board is composed of thirteen members, including the Mayor of the City, the two Councilmembers-at-Large, and one District Councilmember selected by the City Council, two members of the Board of Liquidation and seven citizens appointed by the Mayor. The appointed members of the Board serve staggered nine year terms.

The Board's accounting policies conform to accounting principles generally accepted in the United States of America as applicable to utilities and to governmental units. The following is a summary of the more significant policies.

(A) Reporting Entity

In conformity with the Governmental Accounting Standards Board's definition of a reporting entity, the Board includes an enterprise fund and a pension trust fund for financial reporting purposes. The Board is considered a reporting entity based on the following criteria:

- (a) Responsibility for surpluses/deficits. The Board is solely responsible for its surpluses/deficits. In accordance with Louisiana Revised Statutes, no other governmental unit is responsible for the Board's deficits or has a claim to its surpluses. The Board's operations are self-sustaining; revenues are generated through charges to customers and dedicated property taxes. Other than grants, no funding is received from the State of Louisiana or the City of New Orleans.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS

(Continued)

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### (1) Summary of Significant Accounting Policies (continued)

- (b) **Budget Approval.** The Board is solely responsible for reviewing, approving and revising its budget.
- (c) **Responsibility for Debt.** The Louisiana Revised Statutes authorize the Board to issue bonds; such bonds must bear on their face a statement that they do not constitute a debt of the City. The Board is solely responsible for payments to the bondholders. No other governmental unit is required by statute to make any payments to bondholders nor have any payments to bondholders ever been made by any governmental unit, except the Board.
- (d) **Designation of Management.** The Board controls the hiring of management and employees.
- (e) **Special Financial Relationship.** The Board has no special financial relationships with any other governmental unit.
- (f) **Statutory Authority.** The Board's statutory authority was created by the State of Louisiana as an independent governmental unit. Only an amendment to state statutes can change or abolish the Board's authority.

The Board is a stand-alone entity as defined by Governmental Accounting Standards Board Statement 14, *The Financial Reporting Entity*. The Board is a legally-separate governmental organization that does not have a separately elected governing body and does not meet the definition of a component unit. As a result of a Louisiana Supreme Court decision on March 21, 1994, the Board was declared to be an autonomous or self-governing legal entity, legally independent of the city, state and other governments, created and organized pursuant to Louisiana Revised Statutes 33:4071 as a board, separate and independent of the governing authorities of the City and vested with autonomous or self governing authority. No other government can mandate actions of the Board nor impose specific financial burdens. The Board is fiscally independent to operate under its bond covenant and the provisions of Louisiana Revised Statute provisions.

The City of New Orleans includes the Board as a component unit in the City's financial statements; the Board considers itself a stand-alone entity and not includable in the City's report.

### (B) Change in Accounting and Financial Statement Presentation

#### Change in Accounting

The Board adopted the provisions of Governmental Accounting Standards Board Statement No. 34 – *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* (Statement 34), in 2002, effective January 1, 2001. Statement 34 establishes financial reporting standards for all state and local governments and related entities. Statement 34 primarily relates to presentation and disclosure requirements and had no impact on the net assets of the Board. The statement requires a different presentation of net assets and the inclusion of



# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS

(Continued)

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(1) Summary of Significant Accounting Policies (continued)

management's discussion and analysis. Amounts in the 2001 financial statements have been reclassified to conform to this presentation and net assets have been adjusted for contributed capital.

The Board also adopted Government Accounting Standards Board Statement No. 33 – *Accounting and Financial Reporting for Non-Exchange Transactions*. For the Board, the principal effect of this change in accounting principle results in the recognition of derived tax revenues from property taxes on the accrual basis of accounting. The change in accounting was accounted for by a retroactive restatement of prior periods. Net assets and property taxes receivable at December 31, 2000 were increased by \$3,390,552. For 2001, net assets increased by \$1,308,132 and property taxes receivable increased by \$4,698,684.

The Board's basic financial statements consist of the government-wide statements which include the proprietary fund (the enterprise fund) and the fund financial statements which includes the fiduciary fund (the pension trust fund). The operations of the Board are accounted for in the following fund types:

### Proprietary Fund Type

The proprietary fund is used to account for the Board's ongoing operations and activities which are similar to those often found in the private sector. The proprietary fund is accounted for using a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operation of these funds are included on the statement of net assets. Net assets are segregated into amounts invested in capital assets (net of related debt), restricted for debt service, restricted for capital projects and unrestricted. The Board's restricted assets are expandable for their purposes. The Board utilizes available restricted assets before utilizing unrestricted assets. The operating statements present increases (revenues) and decreases (expenses) in net assets. The Board maintains one proprietary fund type – the enterprise fund. The enterprise fund is used to account for operations (a) that are financed and operated in a manner similar to private business enterprises-- where the intent of the governing body is that the cost (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance. The presentation of the financial statements of the enterprise fund follows the format recommended by the National Association of Regulatory Utility Commissioners (NARUC).

The statement of net assets arrangement for a utility reflects the relative importance of the various accounts. "Property, plant and equipment" is the first major category on the asset side, and long-term capitalization categories of net assets are listed first on the liability side. Current assets and current liabilities are assigned a relatively less important position in the center of the statement of net assets, rather than being placed first as in the statement of net assets of commercial and industrial enterprises.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS

(Continued)

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(1) Summary of Significant Accounting Policies (continued)

Operating revenues include all charges for service; other revenues include reconnection fees and other miscellaneous charges. Operating expenses include the costs associated with providing water, sewerage and drainage services. Interest income, interest expense and tax revenues are presented non-operating items.

The enterprise fund is presented in the government-wide financial statements.

Fiduciary Fund Type

The fiduciary fund is used to account for assets held by the Board in a trustee capacity or as an agent for individuals, private organizations, other governmental units and/or other funds. The Board maintains one fiduciary fund type - the pension trust fund. The pension trust fund uses the flow of economic resources measurement focus. All assets and liabilities associated with the operation of this fund are included in the statement of plan net assets. The pension trust fund is used to account for the activity of the Board's employee retirement plan.

The pension trust fund is presented in the fund financial statements.

The Board applies all applicable FASB pronouncements issued on or before November 30, 1989 in accounting for its enterprise fund and pension trust fund operations unless those pronouncements conflict with or contradict GASB pronouncements.

(C) Basis of Accounting

The enterprise fund and the pension trust fund prepare their financial statements on the accrual basis of accounting. Unbilled utility service charges are not recorded as management considers the effect of not recording such unbilled receivables as not material. Property taxes are recorded as revenue in the year for which they are levied. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the pension plan are recognized when due and the employer has made a commitment to provide the contributions. Benefits and refunds are recognized when due and are payable in accordance with the terms of the plan.

(D) Investments

Investments are reported at fair value, except for short-term investments (maturity of one year or less) which are reported at amortized cost, which approximates fair value. Securities traded in a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair value.

(E) Inventory of Supplies

Inventory of supplies is stated at the lower of cost or market. Cost is determined by the first-in, first-out method.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

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(1) Summary of Significant Accounting Policies (continued)

(F) Property, Plant and Equipment

Property, plant and equipment are carried at historical cost. The Board capitalizes moveable equipment with a value of \$10,000 or greater, stationary, network and other equipment with a value of \$5,000 or greater, and all real estate. The cost of additions includes contracted work, direct labor, materials and allocable cost. Donated fixed assets are recorded at their estimated fair value at the date of donation.

Interest is capitalized on fixed assets acquired and/or constructed with tax exempt debt. Depreciation is computed using the straight-line method over the estimated useful life of the asset. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in revenue for the period. The cost of maintenance and repairs is charged to operations as incurred and significant renewals and betterments are capitalized. Deduction is made for retirements resulting from renewals or betterments.

(G) Vacation and Sick Pay

Vacation (annual leave) and sick pay (sick leave) are accrued when earned. Annual leave is accrued at the rate of .6923 of a workday for each bi-weekly accrual period for all employees on the payroll as of December 31, 1978. Employees hired after that date earn leave at a rate of .5 of a workday per bi-weekly pay period.

All employees on the payroll as of December 31, 1978 receive three bonus days each year; all employees hired after that date receive three bonus days each year for five through nine calendar years of continuous service; six bonus days each year for ten through fourteen years; nine bonus days each year for fifteen through nineteen years; and, twelve days for twenty or more years of continuous service. Civil Service's policy permits employees a limited amount of earned but unused annual leave which will be paid to employees upon separation from the Board. The amount shall not exceed ninety days for employees hired before January 1, 1979, and forty-five days for employees hired after December 31, 1978.

Sick leave is accumulated on a bi-weekly basis by all employees hired prior to December 31, 1978 at an accrual rate of .923 of a workday. For employees hired subsequent to December 31, 1978, the accrual rate is .5 of a workday for each bi-weekly period, plus a two day bonus each year for employees with six through fifteen calendar years of continuous service, and seven bonus days each year for employees with sixteen or more calendar years of continuous service.

Upon separation from the Board, an employee can elect to convert unused sick leave for retirement credits or cash. The conversion to cash is determined by a rate ranging from one day of pay for five days of leave for the 1st through 100th leave day to one day of pay for one day of leave for all days in excess of the 400th leave day. The total liability for unconverted sick leave as December 31, 2002 and 2001 is approximately \$12,484,000 and \$12,621,000, respectively. The amount included in the statements of net assets as of December 31, 2002 and 2001 is \$9,621,649 and \$9,711,873, respectively, which represents the annual leave and the converted sick leave since virtually all employees convert their sick leave to cash. The amounts for compensated absences

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

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(1) Summary of Significant Accounting Policies (continued)

include the salary cost as well as certain salary related costs, such as the Board's share of social security expense.

(H) Pension

The Board funds the accrued pension cost for its contributory pension plan which covers substantially all employees. Annual costs are actuarially computed using the entry age normal cost method.

(I) Drainage System

In 1903, the Legislature gave the Board control of and responsibility for the City's drainage system. The Drainage System was established as a department of the enterprise fund to account for the revenues from three-mill, six-mill and nine-mill ad valorem taxes designated exclusively for drainage services. These revenues have been supplemented by inspection and license fees collected by the Board. There exists a potential for additional financing by additional user service charges. Expenditures from the system are for the debt service of three-mill, six-mill and nine-mill tax bonds and drainage related operation, maintenance and construction.

(J) Self-Insurance/Risk Management

The Board is self-insured for general liability, worker's compensation, unemployment compensation and hospitalization benefits and claims. The accrued liability for the various types of claims represents an estimate by management of the eventual loss on the claims arising prior to year-end, including claims incurred and not yet reported including estimates of both future payments of losses and related claims adjustment and expense. Estimated expenses and recoveries are based on a case by case review.

(K) Capital Contributions

Contributions from developers and others, and receipts of Federal, State and City grants for acquisition of property, plant and equipment are recorded as a capital contributions in the statement of revenues, expenses and changes in net assets.

(L) Bond Issue Cost and Refinancing Gains (Losses)

Costs related to issuing bonds are capitalized and amortized based upon the methods used to approximate the interest method over the life of the bonds. Beginning with fiscal years in 1994 and thereafter, gains and losses associated with refundings and advance refundings are being deferred and amortized based upon the methods used to approximate the interest method over the life of the new bonds or the remaining term on any refunded bond, whichever is shorter. Premiums associated with bond issues are amortized over the interest yield method.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(1) Summary of Significant Accounting Policies (continued)

(M) Cash Flows

For purposes of the statement of cash flows, only cash on hand and on deposit at financial institutions are considered to be cash equivalents. Certificates of deposits, treasury bills and other securities are considered investments.

(2) Cash and Investments

The following are the components of the Board's cash and investments as of December 31:

	<u>Unrestricted</u>	<u>Restricted</u>	<u>Total</u>
<u>2002</u>			
Enterprise Fund:			
Cash and money market funds	\$ 4,387,750	\$ 53,540,601	\$ 57,928,351
Certificates of deposit	-	<u>113,635,187</u>	<u>113,635,187</u>
	<u>4,387,750</u>	167,175,788	171,263,538
Investments	-	<u>101,467,781</u>	<u>101,467,781</u>
	<u>\$ 4,387,750</u>	<u>\$ 268,643,569</u>	<u>\$ 273,031,319</u>
<u>2001</u>			
Enterprise Fund:			
Cash	\$ 2,948,437	\$ 339,666	\$ 3,288,103
Certificates of deposit	-	<u>129,357,457</u>	<u>129,357,457</u>
	<u>2,948,437</u>	129,697,123	132,645,560
Investments	-	<u>63,396,656</u>	<u>63,396,656</u>
	<u>\$ 2,948,437</u>	<u>\$ 193,093,779</u>	<u>\$ 196,042,216</u>

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(2) Cash and Investments (continued)

The composition and carrying value of investments is as follows:

	2002	2001	Category
Enterprise Fund:			
U.S. Government Securities and Instrumentalities	\$ 101,467,781	\$ 63,396,656	2
Pension Trust Fund:			
Money Market	\$ 9,670,116	\$ 6,789,816	-
Corporate Bonds	45,278,455	29,786,439	2
U.S. Government Securities and Instrumentalities	32,933,600	45,068,322	2
Foreign Obligations	-	1,248,965	2
Equities	66,599,368	90,657,308	2
	\$ 154,481,539	\$ 173,695,292	

Cash and Certificates of Deposit - At December 31, 2002, the bank balances of the Board's cash totaled \$5,803,065, money market funds held by an agent totaled \$53,540,601, and certificates of deposit totaled \$113,635,187. Statutes require that the Board's cash and certificates of deposit be covered by federal depository insurance or collateral. Of the cash bank balance, \$391,419 is covered by federal depository insurance. At December 31, 2001, the bank balances of the Board's cash totaled \$5,150,639 and certificates of deposit totaled \$129,357,457. Of the cash bank balance, \$604,702 is covered by federal depository insurance. The remaining amount of the Board's cash bank balances and all certificates of deposit for 2002 and 2001 were covered by collateral held by custodial agents of the financial institutions in the name of the Board. Money market funds held by the Board's agent were not collateralized and/or insured as of December 31, 2002 or 2001.

Investments - Statutes authorize the Board to invest in obligations of the U.S. Treasury, agencies, and instrumentalities, commercial paper rated A-1 by Standard & Poors Corporation or P-1 by Moody's Commercial Paper Record, bankers' acceptances and repurchase agreements. In addition, the pension trust fund is authorized to invest in corporate bonds rated A or better by Standard & Poors Corporation or AAA or better by Moody's Investors Service, and equity securities.

The Board's investments at December 31, 2002 and 2001 are categorized above to give an indication of the level of risk assumed by the Board at year-end. Category 1 includes investments that are insured or registered or securities which are held by the Board or its agents in the Board's name. Category 2 includes uninsured and unregistered investments with the securities held by the counterparty's trust department or agent in the Board's name. Category 3 includes uninsured and unregistered investments where the securities are held by the counterparty or by its trust department or agent but not in the Board's name.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(2) Cash and Investments (continued)

Under the provisions of its benefit plan and state law, the Board's pension benefit trust engages in securities leading to broker dealers and other entities for cash collateral that will be returned for the same securities in the future. The cash collateral cannot be liquidated by the Board unless the borrower defaults. Cash collateral is initially pledged at 102% of the market value of securities lent and additional collateral is provided by the next business day if the value falls to less than 100% of the market value of the securities lent. No collateral exposure existed as of December 31, 2002 and 2001. The value of securities lent at December 31, 2002 and 2001 was \$20,076,000 and \$13,257,000. The market value of the cash collateral at December 31, 2002 and 2001 was \$20,669,000 and \$13,933,049. All securities lent were classified as Category 2 custodial risk.

(3) Defined Benefit Pension Plan

The Board has a single-employer contributory retirement plan covering all full-time employees, the Pension Trust Fund (PTF). The Board's payroll for current employees covered by PTF for the years ended December 31, 2002 and 2001 was \$28,886,538 and \$28,855,551, respectively; such amounts exclude overtime and standby payroll. Total payroll, including overtime and standby payroll, was \$34,997,924 and \$35,357,068 for the years ended December 31, 2002 and 2001, respectively. At December 31, the PTF membership consisted of:

	<u>2002</u>	<u>2001</u>
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	598	584
Current employees:		
Vested	993	793
Nonvested	<u>131</u>	<u>381</u>
	<u>1,124</u>	<u>1,174</u>
Total	<u>1,722</u>	<u>1,758</u>

The benefit provisions were established by action of the Board in 1956 in accordance with Louisiana statutes. The Board retains exclusive control over the plan through the Pension Committee of the PTF. Effective January 1, 1996, the plan became qualified under Internal Revenue Code Section 401(a) and thus is tax exempt.

The plan provides for retirement benefits as well as death and disability benefits. All benefits vest after ten years of service. Employees who retire at or after age sixty-two with ten years of credited service are entitled to an annual retirement benefit, payable biweekly for life, in an amount equal to two percent of their average compensation for each year of credited service up to ten years, increasing by (1) one-half percent per year for service years over ten years, (2) an additional one-half percent per year for service years over twenty years and (3) an additional one percent per year for service years over thirty years, for a maximum of four percent for each year of credited service. Average compensation is the average annual earned compensation (prior to 2002, less \$1,200) for the period of thirty-six successive months of service during which the employee's compensation was

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

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(3) Defined Benefit Pension Plan (continued)

the highest. Employees with thirty years or more of credited service may retire without a reduction in benefits. Employees may retire prior to age sixty-two without thirty years of service with a reduction in benefits of three percent for each year of age below the age of sixty-two. If an employee leaves covered employment or dies before three years of credited service, the accumulated employee contributions plus related investment earnings are refunded to the employee or designated beneficiary.

The retirement allowance for retirees over age sixty-five is subject to a cost of living adjustment each January 1, provided that the member retired on or after January 1, 1984. The adjustment is based on the increase in the Consumer Price Index for all urban wage earners published by the U.S. Department of Labor, but is limited to an annual maximum of two percent on the first \$10,000 of initial retirement benefits.

Effective September 23, 1993, employers may transfer credit between the Board's plan and the City of New Orleans retirement system with full credit for vested service. The Board and its employees are obligated under plan provisions to make all required contributions to the plan. The required contributions are actuarially determined. Level percentage of payroll employer contribution rates is determined using the entry age normal actuarial funding method. Employees are required to contribute four percent of their regular salaries or wages.

The Board had attained full funding of the actuarially computed pension liability in 2000. Effective June 19, 2002, however, as a result of the adoption of several plan changes in accordance with the Board's reciprocity agreement with the City of New Orleans, the plan became unfunded. These changes impacted the plan's funding requirements by \$20,333,835, which is being amortized over a 10 year period. Key changes adopted included: (a) amendment to benefit formula; (b) adoption of a "Rule of 80" retirement; (c) change in the years of service required for a terminating employee to qualify for a later separation benefit from 10 years to 5 years; and (d) elimination of the exclusion of the first \$1,200 of earnings from benefits and contributions.

The annual required contribution for the current year was determined as part of the December 31, 2002 actuarial valuation using the entry age normal cost method. The actuarial assumptions included (a) 7.0% investment rate of return (net of administrative expenses) and (b) projected salary increase of 5.0% per year. Both (a) and (b) included an inflation component of 2.0%. The actuarial value of assets was determined using a seven-year weighted market average.



SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(3) Defined Benefit Pension Plan (continued)

The Board's net pension asset for the years ended December 31 was as follows:

	<u>2002</u>	<u>2001</u>
Annual required contribution	\$ 3,190,707	\$ -
Interest on net pension obligation	(548,440)	(430,361)
Adjustments to annual required contribution	<u>1,088,480</u>	<u>3,291,840</u>
Annual pension cost	3,730,747	2,861,479
Contributions made	<u>2,227,447</u>	<u>4,548,324</u>
Increase (decrease) in net pension asset	(1,503,300)	1,686,845
Net pension asset, beginning of year	<u>7,834,855</u>	<u>6,148,010</u>
Net pension asset, end of year	<u>\$ 6,331,555</u>	<u>\$ 7,834,855</u>

The net pension asset is being amortized over 11 years as of December 31, 2002, using the level dollar closed method and using the same interest, salary increase and inflation factors as the plan.

Trend information for Board and employee contributions is as follows:

Fiscal year ending:	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Asset</u>
December 31, 2002	\$ 3,730,747	87%	\$ 6,331,555
December 31, 2001	\$ 2,861,479	195%	\$ 7,834,855
December 31, 2000	\$ 1,721,759	316%	\$ 6,148,010

The actuarially determined contribution requirement for the Board was 15.76 percent through 2001 and 8% through 2002; the requirement for employees is 4.0 percent. The actual Board's and employees' contributions (including contributions for transferred employees from other pension plans) for years ended December 31 were as follows:

	<u>2002</u>	<u>2001</u>
Employer and other transfers	\$ 2,931,065	\$ 5,417,852
Employee	<u>1,089,543</u>	<u>1,040,680</u>
Total Contributions	<u>\$ 4,020,608</u>	<u>\$ 6,458,532</u>

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

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(3) Defined Benefit Pension Plan (continued)

DROP

Beginning in 1996, the Board offered employees a "Deferred Retirement Option Plan" (DROP), an optional retirement program which allows an employee to elect to freeze his or her retirement benefits, but continue to work and draw a salary for a minimum period of one year to a maximum period of five years. While continuing employment, the retirement benefits are segregated from overall plan assets available to other participants. As of December 31, 2002 and 2001, 56 and 72 employees, respectively, participated in the plan. The amount of plan assets segregated for these individuals was \$2,131,025 and \$1,649,967 as of December 31, 2002 and 2001, respectively.

A separate report on the pension trust fund is not issued.

(4) Property, Plant and Equipment

The useful lives of property, plant and equipment consisted of the following:

Pumping station buildings	57 years
Pumping station machinery	40 years
Canals and subsurface drains	75 to 100 years
Power transmission	50 years
General plan items	12 years
General buildings	25 years

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(4) Property, Plant and Equipment (continued)

Property, plant and equipment consisted of the following as of December 31:

	2002			
	Beginning Balance	Additions	Deletions	Ending Balance
Real estate rights, non depreciable	\$ 8,572,900	\$ -	\$ -	\$ 8,572,900
Power and pumping stations - buildings	192,245,612	6,634,843	-	198,880,455
Power and pumping stations - machinery	228,888,362	18,068	-	228,906,430
Distribution systems	118,926,916	84,077	51,171	118,959,822
Sewerage collection	166,129,147	-	1,551,495	164,577,652
Canals and subsurface drainage	211,453,485	1,163	-	211,454,648
Treatment plants	112,967,536	7,921	-	112,975,457
Connections and meters	40,451,522	1,562,240	486,355	41,527,407
Power transmission	25,584,083	-	-	25,584,083
General plant	188,629,150	331,531	265,224	188,695,457
General buildings	9,277,481	-	-	9,277,481
Total in service	1,303,126,194	8,639,843	2,354,245	1,309,411,792
Construction in progress	161,719,432	114,213,570	8,639,843	267,293,159
Total	1,464,845,626	122,853,413	10,994,088	1,576,704,951
Accumulated depreciation	447,362,539	34,551,415	2,354,245	479,559,709
Net	<u>\$ 1,017,483,087</u>	<u>\$ 88,301,998</u>	<u>\$ 8,639,843</u>	<u>\$ 1,097,145,242</u>
	2001			
	Beginning Balance	Additions	Deletions	Ending Balance
Real estate rights, non - depreciable	\$ 7,354,576	\$ 1,218,324	\$ -	\$ 8,572,900
Power and pumping stations, buildings	167,065,095	25,180,517	-	192,245,612
Power and pumping stations, machinery	220,431,638	8,456,724	-	228,888,362
Distribution systems	108,722,113	10,356,013	151,210	118,926,916
Sewerage collection	125,765,173	41,746,277	1,393,303	166,118,147
Canals and subsurface drainage	200,128,562	11,324,923	-	211,453,485
Treatment plants	97,052,632	15,914,904	-	112,967,536
Connections and meters	36,046,593	4,555,082	150,153	40,451,522
Power transmission	24,576,308	1,009,245	1,470	25,584,083
General plant	148,156,632	40,747,500	263,982	188,640,150
General buildings	6,881,214	2,396,267	-	9,277,481
Total in service	1,142,180,536	162,905,776	1,960,118	1,303,126,194
Construction in progress	205,992,397	118,632,811	162,905,776	161,719,432
Total	1,348,172,933	281,538,587	164,865,894	1,464,845,626
Accumulated depreciation	414,950,619	34,372,038	1,960,118	447,362,539
Net	<u>\$ 933,222,314</u>	<u>\$ 247,166,549</u>	<u>\$ 162,905,776</u>	<u>\$ 1,017,483,087</u>

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(4) Property, Plant and Equipment (continued)

Interest capitalized was as follows for the years ended December 31:

		<u>2002</u>		<u>2001</u>
Interest income	\$	1,636,322	\$	4,249,491
Interest expense		<u>(8,276,648)</u>		<u>(6,627,168)</u>
Net interest capitalized	\$	<u>(6,640,326)</u>	\$	<u>(2,377,677)</u>

(5) Customer Receivables

Customer receivables as of December 31 consist of the following:

		<u>Customer</u>		<u>Allowance</u>		<u>Net</u>
		<u>Accounts</u>		<u>for Doubtful</u>		<u>Accounts</u>
						<u>Net</u>
2002	Water	\$ 9,006,727	\$	2,704,386	\$	6,302,341
	Sewer	<u>6,445,204</u>		<u>1,951,868</u>		<u>4,493,336</u>
		<u>\$ 15,451,931</u>	\$	<u>4,656,254</u>	\$	<u>10,795,677</u>
2001	Water	\$ 9,171,584	\$	2,196,033	\$	6,975,551
	Sewer	<u>6,196,233</u>		<u>1,638,152</u>		<u>4,558,081</u>
		<u>\$ 15,367,817</u>	\$	<u>3,834,185</u>	\$	<u>11,533,632</u>

(6) Due from the City of New Orleans

In accordance with the terms of an agreement with the City of New Orleans, the Board and the City agreed to offset \$2,098,687 (net of unearned discount \$285,696) owed by the City to the Board at the rate of \$200,000 annually in lieu of civil service charges through 2009. As of December 31, 2002 and 2001, \$990,428 and \$1,098,586, respectively, was due from the City of New Orleans.

(7) Bonds Payable

Bonds payable consisted of the following as of December 31:

	<u>Principal Balances</u>	
	<u>2002</u>	<u>2001</u>
7.00% water revenue bonds, series 1986 (initial average interest cost 6.73%), due in an annual principal installment of \$500,000; final payment due December 1, 2003	\$ 500,000	\$ 965,000
5.00% to 6.25% sewerage revenue bonds, series 1997 (initial average interest cost 5.36%), due in annual principal installments ranging from \$1,100,000 to \$2,425,000; final payment due June 1, 2017	25,435,000	26,465,000

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(7) Bonds Payable (continued)

	<u>Principal Balances</u>	
	<u>2002</u>	<u>2001</u>
5.15% drainage system bonds, series 1994 (average interest cost 5.06%), due in an annual principal installment \$1,140,000; final payment due November 1, 2003	\$ 1,140,000	\$ 2,220,000
4.125% to 6.125% water revenue bonds, series 1998 (initial average interest cost 4.82%), due in annual principal final payment due final payment due \$625,000 to \$1,220,000; final payment due December 1, 2018	14,080,000	14,665,000
4.125% to 6.000% sewer revenue bonds, series 1998 (initial average interest cost 4.82%), due in annual principal installments ranging from \$950,000 to \$1,910,000; final payment due June 1, 2018	22,000,000	22,915,000
4.10% to 6.10% drainage system bonds, series 1998 (initial average interest cost 4.84%), due in annual principal installments ranging from \$370,000 to \$760,000; final payment due December 1, 2018	8,690,000	9,045,000
5.25% to 6.50% sewer revenue bonds, series 2000 (initial average interest cost 5.48%), due in annual principal installments ranging from \$820,000 to \$2,205,000; final payment due June 1, 2020	25,300,000	26,070,000
5.00% to 7.00% sewer revenue bonds, series 2000B (initial average interest cost 5.43%), due in annual principal installments ranging from \$640,000 to \$1,660,000; final payment due June 1, 2020	19,350,000	19,955,000
4.40% to 6.70% sewer revenue bonds, series 2001 (initial average interest cost 5.02%), due in annual principal installments ranging from \$1,100,000 to \$2,455,000; final payment due December 1, 2021	31,790,000	32,720,000
3.00% to 5.00% water revenue bonds, series 2002 (initial average interest cost 4.57%), due in annual principal installments ranging from \$945,000 to \$3,658,000; final payment due December 1, 2022.	34,000,000	-

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(7) Bonds Payable (continued)

	Principal Balances	
	2002	2001
3.00% to 5.00% sewerage service revenue bonds, series 2002 (initial average interest cost 4.36%; due in annual principal installments ranging from \$1,635,000 to \$4,520,000; final payment due June 1, 2022.	\$ 57,000,000	\$ -
3.45% to 6.00% drainage system bonds, series 2002 (initial average interest cost 4.46%), due in annual principal installments ranging from \$510,000 to \$2,155,000; final payment due December 1, 2022.	20,000,000	-
	259,285,000	155,020,000
Plus bond premiums	3,079,873	-
	262,364,873	155,020,000
Total	9,370,000	6,735,000
Less current maturities	252,994,873	148,285,000
Bond payable, long-term	\$	\$

The changes in long-term debt were as follows:

	2002	2001
Balance, beginning of year	\$ 155,020,000	\$ 127,585,000
Issuances	111,000,000	32,720,000
Payments	(6,735,000)	(5,285,000)
Balance, end of year	\$ 259,285,000	\$ 155,020,000

The annual requirements to amortize all bonds payable as of December 31, 2002, are as follows:

Year	Principal	Interest	Total
2003	\$ 9,370,000	\$ 13,176,180	\$ 22,546,180
2004	9,075,000	12,252,995	21,327,995
2005	9,545,000	11,781,510	21,326,510
2006	10,060,000	11,281,927	21,341,927
2007	10,605,000	10,787,962	21,392,962
2008-2012	62,000,000	45,743,557	107,743,557
2013-2017	79,660,000	28,584,803	108,244,803
2018-2022	68,970,000	8,261,758	77,231,758
Total	\$ 259,285,000	\$ 141,870,692	\$ 401,155,692

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(7) Bonds Payable (continued)

The amount of revenue bonds and tax bonds payable as of December 31, 2002, are as follows:

<u>Year</u>	<u>Revenue Bonds</u>	<u>Tax Bonds</u>	<u>Total</u>
2002	\$ 7,350,000	\$ 2,020,000	\$ 9,370,000
2003	8,150,000	925,000	9,075,000
2004	8,580,000	965,000	9,545,000
2005	9,045,000	1,015,000	10,060,000
2006	9,535,000	1,070,000	10,605,000
2007-2011	55,795,000	6,205,000	62,000,000
2012-2016	71,860,000	7,800,000	79,660,000
2017-2021	59,140,000	9,830,000	68,970,000
<b>Total</b>	<b>\$ 229,455,000</b>	<b>\$ 29,830,000</b>	<b>\$ 259,285,000</b>

The indentures under which these bonds were issued provide for the establishment of restricted funds for debt service as follows:

1. Debt service funds are required for the payment of interest and principal on the revenue and tax bonds. Monthly deposits on revenue bonds are required to be made into this fund from operations in an amount equal to 1/6 of the interest falling due on the next interest payment date, and an amount equal to 1/12 of the principal falling due on the next principal payment date. All debt service funds are administered by the Board of Liquidation. The required amount to be accumulated in this fund was \$2,234,935 and \$2,091,524 at December 31, 2002 and 2001, respectively; the accumulated balance at December 31, 2002 and 2001 was \$5,098,565 and \$3,454,568, respectively.
2. A debt service reserve is required for an amount equal to but not less than fifty percent of the amount required to be credited in said month to the debt service fund until there shall be accumulated in the debt service reserve account the largest amount required in any future calendar year to pay the principal and interest on outstanding bonds, except for the water, sewer and 1986 drainage 9 mill tax bonds. The water, sewer and 1986 drainage 9 mill tax bonds require an amount equal to the largest amount required in any future calendar year to pay the principal of and interest on outstanding bonds. There is no debt service reserve required for the 1994 drainage 6 mill and 1998 drainage 9 mill tax bonds. The required amount to be accumulated in this fund was \$19,424,365 and \$14,597,376 at December 31, 2002 and 2001, respectively; the accumulated balance at December 31, 2002 and 2001 was \$19,424,365 and \$14,597,376, respectively.

The net operating revenues of the Water Department and the Sewerage Department of the Board for the year ended December 31, 2002 were adequate to meet the bond indenture required debt service coverage of 130 percent. The Board is in compliance with the requirements of its long-term debt agreements at December 31, 2002.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

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(7) Bonds Payable (continued)

The statutory limit of tax bonds at December 31, 2002, is \$86,000,000 providing a debt margin for tax bonds of \$56,170,000.

(8) Bond Refinancing

In August 1986, the Board defeased water and sewer bonds. The amount of defeased water revenue bonds remaining outstanding as of December 31, 2002 and 2001 was \$420,000 and \$875,000, respectively.

(9) Due to City of New Orleans

The Board bills and collects sanitation charges on behalf of the City of New Orleans (City). The Board is not liable for any uncollected sanitation charges. The amount due the City for sanitation fees collected was \$25,658 and \$231,636 at December 31, 2002 and 2001, respectively.

(10) Property Taxes

Property taxes are levied by the City of New Orleans. Taxes on real and personal property attach as an enforceable lien on the property as of January 1. Taxes are levied on January 1, are payable on January 1, and are delinquent on February 1.

The assessed value of the property is determined by an elected Board of Assessors. The assessed value for 2002 was \$1,776,168,628. The combined tax rate dedicated for the Board for the years ended December 31, 2002 and 2001 was \$22.59 per \$1,000 of assessed valuation. These dedicated funds are available for operations, maintenance, construction and extension of the drainage system (except for subsurface systems).

(11) Commitments

a. Capital Improvements

At December 31, 2002, the Board's budget for its five year capital improvements program totaled \$1,196,903,000 including \$274,946,000 for water, \$406,219,000 for sewerage and \$515,738,000 for drainage. Due to certain regulatory and legislative changes, additional capital improvements will probably be required. Future capital improvement program expenditures may require the issuance of additional debt depending on the amount and timing of expenditures. As of December 31, 2002, the Board has committed or appropriated \$96,788,416 in investments for use in future capital projects and has \$132,983,127 of bond proceeds remaining for construction. The capital project investments are included in restricted assets.

The capital improvements budget for 2003 is \$268,299,000, including \$86,647,000 for projects, which are expected to be funded by federal grants and programs. Significant projects included in property, plant and equipment in progress as of December 31, 2002 include the following:



SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(11) Commitments (continued)

Southeast Louisiana Flood Control Program  
 Sewer System Sanitation Evaluation and Rehabilitation Program  
 Drainage Pumping Station #1  
 Eastbank Sewer Treatment Plant  
 Westbank Sewer Treatment Plant

b. Self-insurance

The Board is self-insured for general liability, worker's compensation, and hospitalization benefits and claims. Settled claims have not exceeded excess coverage in any of the past three fiscal years. Hospitalization benefits are charged to payroll related expense.

General liability claims are segregated internally by "claims" and "suits" depending on the scope and type of claim, and are handled by the Office of the Special Counsel and Administrative Services. Individual general liability losses have ranged from \$100 to \$7,500,000, illustrating the volatility of this exposure. The provision for claims expense for 2002 and 2001 amounted to \$1,070,514 and \$4,982,174, respectively.

Worker's compensation expense provision for 2002 and 2001 amounted to \$3,863,852 and \$2,470,336, respectively.

The hospitalization self-insurance benefits are administered by Blue Cross of Louisiana. The Board's expense provision in excess of employee contributions for 2002 and 2001 was approximately \$8,800,000 and \$7,700,000 respectively, and is included in payroll related expenses.

Changes in the claims payable amount are as follows (health payments are reflected net):

Fiscal Year	Beginning of Year	Current Year Claims and Estimate Change	Claim Payments	End of Year
2002	\$ 35,764,270	14,142,725	12,248,690	37,658,305
2001	\$ 34,038,890	15,152,510	13,427,130	35,764,270

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS

(Continued)

(11) Commitments (continued)

The composition of claims payable is as follows:

	<u>2002</u>	<u>2001</u>
Short-term:		
Workers' Compensation	\$ 1,279,728	\$ 1,004,564
Health Insurance	2,097,360	1,714,091
General Liability	<u>22,928,419</u>	<u>20,163,186</u>
Total short-term	<u>26,305,507</u>	<u>22,881,841</u>
Long-term:		
Workers' Compensation	6,852,798	6,182,430
General Liability	<u>4,500,000</u>	<u>6,699,999</u>
Total long-term	<u>11,352,798</u>	<u>12,882,429</u>
Total	<u>\$ 37,658,305</u>	<u>\$ 35,764,270</u>

c. Regulatory Matters

The Board, as well as other utilities, is subject to environmental standards imposed by federal, state and local environmental laws and regulations. The Board has entered into a consent decree with the United States which allows the Board to go forward with its major program to repair and rehabilitate the sewerage system while drawing on a \$100 million commitment from the United States. The Board expended \$29,845,171 and \$27,413,314 of the commitment at December 31, 2002 and 2001, respectively. The overall costs of the program are estimated at \$593 million over a period ending in 2010.

The Board is also participating in Federal financial award programs which are subject to financial and compliance audits by various agencies. No disallowed costs have been identified. As part of Federal and other governmental agency funding, the Board is required to match a portion of funding received. The Board believes it has sufficient funds to meet its matching requirements.

d. Postemployment Healthcare Benefits

In addition to providing pension benefits, the Board provides certain health care benefits for retired employees in accordance with its pension plan provisions. All of the Board's employees may become eligible for those benefits if they reach normal retirement age while working for the Board. The cost of retiree health care is recognized when incurred including an estimate for the amount incurred but not yet reported. For 2002 and 2001, the costs incurred by the Board for those benefits were approximately \$2,953,001 and \$2,895,306, respectively, net of retiree contributions of \$188,985 and \$188,878, respectively. The number of participants eligible to receive health care benefits was 688 and 634 as of December 31, 2002 and 2001, respectively.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(12) Deferred Compensation Plan

The Board offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. This plan, available to all employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. All amounts of compensation deferred under the plan, all property, and rights purchased with those amounts, and all income attributable to those amounts, property or rights are held in trust for the employees, therefore the assets of the plan are not included in these financial statements.

(13) Budgets

Operating and capital expenditure budgets are adopted by the Board on a basis consistent with accounting principles generally accepted in the United States. While not legally required, this budgetary information is employed as a management control device during the year. Comparison between actual and budgeted expenses is not a required presentation for an Enterprise Fund.

(14) Segment Information

The Board issued revenue bonds to finance its water and sewerage departments which operate the Board's water and sewerage treatment plants and distribution and collection systems. These bonds are accounted for in a single fund; however, investors in the revenue bonds rely solely on the revenue generated by the individual activities for repayment. Summary financial information for these departments as of and for the year ended December 31 is as follows:

	<u>Condensed Statements of Net Assets</u>			
	<u>Water</u>		<u>Sewer</u>	
	<u>2002</u>	<u>2001</u>	<u>2002</u>	<u>2001</u>
	(amounts in thousands)			
<b>Assets:</b>				
Property, plant and equipment	\$ 235,817	\$ 237,021	\$ 377,533	\$ 343,299
Restricted assets	57,827	27,596	127,048	95,994
Current	15,262	14,629	7,738	7,605
Other assets	3,856	4,490	3,212	3,475
Total assets	<u>\$ 312,762</u>	<u>\$ 283,736</u>	<u>\$ 515,531</u>	<u>\$ 450,373</u>
<b>Net assets:</b>				
Invested in capital assets, net of related debt	\$ 196,733	\$ 224,315	\$ 288,367	\$ 282,907
Restricted	37,483	13,900	21,337	12,386
Total net assets	<u>234,216</u>	<u>238,215</u>	<u>309,704</u>	<u>295,293</u>
<b>Liabilities:</b>				
Current	21,501	19,588	16,446	19,281
Current liabilities payable from restricted assets	6,691	7,059	9,982	7,630
Noncurrent liabilities	50,354	18,874	179,399	128,169
Total liabilities	<u>78,546</u>	<u>45,521</u>	<u>205,827</u>	<u>155,080</u>
Total liabilities and net assets	<u>\$ 312,762</u>	<u>\$ 283,736</u>	<u>\$ 515,531</u>	<u>\$ 450,373</u>

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

(14) Segment Information (continued)

Condensed Statements of Revenues, Expenses and Changes in Net Assets

	Water		Sewer	
	2002	2001	2002	2001
	(amounts in thousands)			
Service charges, pledged against bonds	\$ 54,441	\$ 53,069	\$ 53,584	\$ 49,709
Depreciation expense	(13,046)	(12,943)	(10,824)	(10,872)
Other operating expenses	(47,044)	(48,899)	(32,126)	(36,694)
Operating income	(5,649)	(8,773)	10,634	2,143
Nonoperating revenues:				
Investment earnings	-	477	716	654
Other	354	350	439	436
Capital contributions	1,296	908	2,622	8,735
Change in net assets	(3,999)	(7,038)	14,411	11,968
Beginning net assets	238,215	245,253	295,293	283,325
Ending net assets	\$ 234,216	\$ 238,215	\$ 309,704	\$ 295,293

Condensed Statements of Cash Flows

	Water		Sewer	
	2002	2001	2002	2001
	(amounts in thousands)			
Net cash provided by (used in):				
Operating activities	\$ 8,447	\$ (3,095)	\$ 17,459	\$ 19,346
Noncapital financing activities	354	350	429	436
Capital and related financing activities	22,372	(13,622)	11,166	(15,902)
Investing activities	(30,359)	16,470	23,998	(2,829)
Net increase	814	103	53,052	1,051
Cash and cash equivalents:				
Beginning of year	1,019	916	1,672	621
End of year	\$ 1,833	\$ 1,019	\$ 54,724	\$ 1,672

(15) Subsequent Event

In April 1999, the Sewerage and Water Board adopted a resolution authorizing its advisors to develop a plan for the managed competition procurement of the Water and Sewer Systems (the "Procurement Plan"), including provisions for its scope, time-line, evaluation and procedures. Under the Procurement Plan, all private proposers and the employees of Sewerage and Water Board submitted in September 2001 to the Financial Advisory Team alternative proposals for both management only and the management, operations and maintenance through a combined Request for Qualifications/Request for Proposals (RFQ/RFP) process. In December 2001, the Board issued a final Request for Proposals. On February 13, 2002, the Sewerage and Water Board received proposals from three bidders who were responding to its final Request. Additionally, an election was held on March 2, 2002, which authorized an amendment to the City Charter to require prior approval by a majority of the electorate of any decision to enter into any contract(s) in excess of \$5,000,000 relating to the privatization of any management of the Sewerage and Water Board.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS

(Continued)

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(15) Subsequent Event (continued)

In September 2002, the Sewerage and Water Board met with three bidders and heard oral presentations regarding their proposals. On October 16, 2002, the Sewerage and Water Board met and voted in a six to five vote (with two members absent) to reject all proposals submitted with respect to the Procurement Plan. February, 2003 the Sewerage and Water Board adopted a resolution authorizing its advisors to release for public comment a Request for Proposal for the management, operations and maintenance of its water treatment and transmission; sewer treatment and pumping, all underground pipe repair, meter reading, billing and collections, customer service, water and waste water capital improvement program, and all overhead functions required to support the Drainage department, contract compliance and administration. Following the public comment period, the proposed scope is expected to be modified and released for competition.

**REQUIRED SUPPLEMENTARY INFORMATION  
(GASB STATEMENT NO. 25)**

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SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 Required Supplementary Information Under GASB Statement No. 25

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	(Overfunded) Unfunded AAL	Funded Ratio	Covered Payroll	Unfunded AAL as a Percentage of payroll
12/31/2002	\$ 187,892,716	\$ 197,323,094	\$ 9,430,378	95.22%	\$ 28,886,538	32.65%
12/31/2001	180,737,126	167,062,451	(13,674,675)	108.19%	28,855,551	(47.39%)
12/31/2000	164,845,672	160,568,317	(4,277,355)	102.66%	30,235,213	(14.15%)
12/31/1999	149,976,441	156,520,350	6,543,909	95.82%	31,276,546	20.92%
12/31/1998	134,901,231	148,431,620	13,530,389	90.88%	31,544,198	42.89%
12/31/1997	120,911,255	141,228,850	20,317,595	85.61%	32,772,094	62.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended	Annual Required Contribution	Actual Contribution	Percentage Contribution
12/31/2002	\$ 3,190,707	\$ 2,931,065	91.86%
12/31/2001	-	5,417,852	-
12/31/2000	891,032	5,444,048	610.98%
12/31/1999	3,304,992	5,270,098	159.46%
12/31/1998	4,696,092	5,315,197	113.18%
12/31/1997	5,701,361	5,522,097	96.86%

See accompanying notes to financial statements.



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**SUPPLEMENTARY INFORMATION**

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SEWERAGE AND WATER BOARD OF NEW ORLEANS  
STATEMENTS OF NET ASSETS BY DEPARTMENT

ENTERPRISE FUND

As of December 31, 2002 and 2001

	Water System		Sewerage System		Drainage System		Total	
	2002	2001	2002	2001	2002	2001	2002	2001
<b>ASSETS</b>								
Property, plant and equipment	\$ 424,918,469	\$ 413,377,655	\$ 521,435,898	\$ 478,166,276	\$ 630,350,584	\$ 573,301,695	\$ 1,576,704,951	\$ 1,464,845,626
Less accumulated depreciation	189,101,183	176,356,421	143,902,803	134,866,940	146,555,723	136,139,178	479,559,709	447,362,539
	235,817,286	237,021,234	377,533,095	343,299,336	483,794,861	437,162,517	1,097,145,242	1,017,483,087
<b>Restricted assets:</b>								
Capital projects	34,929,176	12,078,527	9,900,000	11,050,000	51,959,240	50,776,021	96,788,416	73,904,548
Construction funds	10,090,129	2,924,169	94,194,408	67,732,927	28,698,590	15,688,718	132,983,127	86,345,814
Debt service reserve	3,928,380	3,613,436	15,495,985	10,983,940	-	-	19,424,365	14,597,376
Customer deposits	5,137,096	5,579,473	-	-	3,000,000	3,000,000	5,137,096	5,579,473
Health insurance reserve	3,000,000	3,000,000	3,000,000	3,000,000	-	-	9,000,000	9,000,000
Debt service	648,491	306,095	4,378,206	3,148,473	71,868	-	5,098,565	3,454,568
Other	94,000	94,000	79,000	79,000	39,000	39,000	212,000	212,000
	57,827,272	27,595,700	127,047,599	95,994,340	83,768,698	69,503,739	268,643,569	193,093,779
<b>Current assets:</b>								
Cash	1,827,586	1,002,377	1,492,100	1,575,639	1,068,064	370,421	4,387,750	2,948,437
Accounts receivable:								
Customers, net of allowance	6,302,341	6,975,551	4,493,336	4,558,081	-	-	10,795,677	11,533,632
Taxes	-	-	-	-	3,943,592	5,391,875	3,943,592	5,391,875
Interest	37,881	77,061	26,339	60,493	178,005	350,834	242,225	488,388
Grants	102,582	-	862,969	214,529	-	-	965,551	214,529
Miscellaneous	170,807	223,385	314,713	462,808	329,924	559,484	815,444	1,245,677
Due from City of New Orleans, current	96,000	96,000	70,000	70,000	34,000	34,000	200,000	200,000
Due from (to) other internal departments/other fund	1,816,466	1,178,345	(1,434,009)	(1,471,324)	(182,457)	292,979	200,000	-
Inventory of supplies	4,670,188	4,773,461	1,727,304	1,899,362	172,701	196,242	6,570,193	6,869,065
Prepaid expenses	238,514	302,560	185,511	235,325	106,006	134,471	530,031	672,356
	15,262,365	14,628,740	7,738,263	7,604,913	5,649,835	7,330,306	28,650,463	29,563,959
<b>Total current assets</b>	<b>379,405</b>	<b>431,321</b>	<b>276,650</b>	<b>314,505</b>	<b>134,373</b>	<b>152,760</b>	<b>790,428</b>	<b>898,586</b>
Due from City of New Orleans, less current portion								
Other assets:								
Bond issue costs	350,098	196,736	1,018,400	791,459	224,536	85,346	1,593,034	1,073,541
Deposits	22,950	22,950	17,965	17,965	10,400	10,400	51,315	51,315
Pension Asset	3,102,461	3,839,078	1,899,467	2,350,457	1,329,627	1,645,320	6,331,555	7,834,855
	3,475,509	4,058,764	2,935,832	3,159,881	1,564,563	1,741,066	7,975,904	8,959,711
	\$ 312,761,837	\$ 283,735,759	\$ 515,531,439	\$ 450,372,975	\$ 574,912,330	\$ 515,890,388	\$ 1,403,205,606	\$ 1,249,999,122

(Continued)

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
STATEMENTS OF NET ASSETS BY DEPARTMENT, CONTINUED

ENTERPRISE FUND

As of December 31, 2002 and 2001

	Water System		Sewerage System		Drainage System		Total	
	2002	2001	2002	2001	2002	2001	2002	2001
<b>NET ASSETS AND LIABILITIES</b>								
Net assets								
Invested in capital assets - net of related debt	\$ 196,732,662	\$ 224,315,403	\$ 288,367,383	\$ 282,907,263	\$ 482,663,451	\$ 441,586,235	\$ 967,763,496	\$ 948,808,901
Restricted for:								
Debt service	4,368,411	3,843,568	18,923,549	13,562,311	-	-	23,291,960	17,405,879
Capital Projects	33,114,739	10,055,694	2,412,772	(1,176,581)	40,631,402	45,328,602	76,158,913	54,207,715
Total net assets	234,215,812	238,214,665	309,703,704	295,292,993	523,294,853	486,914,837	1,067,214,369	1,020,422,495
Long-term liabilities:								
Claims payable	2,284,266	4,294,143	2,284,266	4,294,143	6,784,266	4,294,143	11,352,798	12,882,429
Bonds payable (net of current maturities)	48,069,753	14,580,000	177,115,120	123,875,000	27,810,000	9,830,000	252,994,873	148,285,000
	50,354,019	18,874,143	179,399,386	128,169,143	34,594,266	14,124,143	264,347,671	161,167,429
Current liabilities (payable from current assets):								
Accounts payable	5,376,803	5,909,606	6,203,500	8,446,932	2,905,679	3,116,468	14,485,982	17,473,006
Due to City of New Orleans	25,658	231,636	-	-	-	-	25,658	231,636
Retainers and estimates payable	105,606	150,561	107,724	19,567	709,728	363,150	923,058	533,278
Due to other fund	18,400	11,403	39,199	6,749	22,399	5,120	79,998	23,272
Accrued salaries	663,382	623,951	379,251	384,689	299,258	308,069	1,341,891	1,316,709
Accrued vacation and sick pay	4,681,732	4,734,498	2,786,860	2,867,491	2,153,057	2,109,884	9,621,649	9,711,873
Claims payable	10,624,514	7,895,822	6,928,487	7,553,003	8,752,506	7,433,016	26,305,507	22,881,841
Other liabilities	4,906	30,824	850	2,615	-	-	5,756	33,439
	21,501,001	19,588,301	16,445,871	19,281,046	14,842,627	13,335,707	52,789,499	52,205,054
Current liabilities (payable from restricted assets):								
Accrued interest	208,460	75,963	950,642	570,102	135,496	55,613	1,294,598	701,678
Bonds payable	1,105,000	1,050,000	6,245,000	4,250,000	2,020,000	1,435,000	9,370,000	6,735,000
Retainers and estimates payable	240,449	353,214	2,786,836	2,809,691	25,088	25,088	3,052,373	3,187,993
Customer deposits	5,137,096	5,579,473	9,982,478	7,629,793	2,180,584	1,515,701	5,137,096	5,579,473
	6,691,005	7,038,650	19,842,627	13,335,707	14,842,627	13,335,707	18,854,067	16,204,144
Total current liabilities	28,192,006	26,646,951	26,428,349	26,910,839	17,023,211	14,851,408	71,643,566	68,409,198
Total liabilities	78,546,025	45,521,094	205,827,735	155,079,982	51,617,477	28,975,551	335,991,237	229,576,627
Total fund equity and liabilities	\$ 312,761,837	\$ 283,735,759	\$ 515,531,439	\$ 450,372,975	\$ 574,912,330	\$ 515,890,388	\$ 1,403,205,606	\$ 1,249,999,122

See accompanying independent auditors' report.

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
REVENUES, EXPENSES AND CHANGES IN NET ASSETS BY DEPARTMENT

ENTERPRISE FUND

For the years ended December 31, 2002 and 2001

	Water System		Sewerage System		Drainage System		Total	
	2002	2001	2002	2001	2002	2001	2002	2001
<b>Operating revenues:</b>								
Sales of water and delinquent fees	\$ 53,413,048	\$ 51,871,210	\$ -	\$ -	\$ -	\$ -	\$ 53,413,048	\$ 51,871,210
Sewerage service charges	-	-	53,455,291	49,302,683	-	-	53,455,291	49,302,683
Plumbing inspection and license fees	109,685	106,918	109,685	106,918	-	-	219,370	213,836
Other revenues	917,829	1,091,055	19,100	299,604	878,022	958,387	1,814,951	2,349,046
<b>Total revenues</b>	<b>54,440,562</b>	<b>53,069,183</b>	<b>53,584,076</b>	<b>49,709,205</b>	<b>878,022</b>	<b>958,387</b>	<b>108,902,660</b>	<b>103,736,775</b>
<b>Operating Expenses:</b>								
Power and pumping	7,890,696	10,096,276	2,282,744	2,713,134	6,081,928	7,076,597	16,255,368	19,886,007
Treatment	4,548,836	5,168,999	10,966,746	10,580,586	-	-	15,515,582	15,749,585
Transmission and distribution	9,746,266	8,654,532	5,307,214	5,511,353	3,179,603	3,351,237	18,233,083	17,517,122
Customer accounts	1,192,374	1,385,807	1,192,370	1,385,802	-	-	2,384,744	2,771,609
Customer service	1,365,884	1,343,899	1,365,879	1,343,895	-	-	2,731,763	2,687,794
Administration and general	6,929,101	7,122,913	5,285,070	5,286,598	2,248,893	2,183,894	14,463,064	14,593,405
Payroll related	7,778,891	6,865,602	4,716,852	4,323,641	3,577,930	3,179,273	16,073,673	14,368,516
Maintenance of general plant	4,844,853	4,720,953	2,547,827	2,475,371	2,628,166	2,628,670	10,020,846	9,824,994
Depreciation	13,045,978	12,943,331	10,823,668	10,872,406	10,681,813	10,562,848	34,551,459	34,378,585
Amortization	58,712	56,061	48,058	46,912	23,534	21,500	130,304	124,473
Provision for doubtful accounts	1,182,640	880,310	660,318	780,957	-	-	1,842,958	1,661,267
Provision for claims	1,505,051	2,603,310	(2,246,496)	2,245,897	5,675,811	2,603,303	4,934,366	7,452,510
<b>Total operating expenses</b>	<b>60,089,282</b>	<b>61,841,993</b>	<b>42,950,250</b>	<b>47,566,552</b>	<b>34,097,678</b>	<b>31,607,322</b>	<b>137,137,210</b>	<b>141,015,867</b>
<b>Operating income (loss)</b>	<b>(5,648,720)</b>	<b>(8,772,810)</b>	<b>10,633,826</b>	<b>2,142,653</b>	<b>(33,219,656)</b>	<b>(30,648,935)</b>	<b>(28,234,550)</b>	<b>(37,279,092)</b>
<b>Non-operating revenues:</b>								
Two-mill tax	-	-	-	-	5,058	10,726	5,058	10,726
Three-mill tax	-	-	-	-	10,312,636	10,772,176	10,312,636	10,772,176
Six-mill tax	-	-	-	-	10,567,048	10,906,914	10,567,048	10,906,914
Nine-mill tax	-	-	-	-	15,946,585	16,342,792	15,946,585	16,342,792
Other taxes	354,156	349,610	438,727	436,030	-	-	792,883	785,640
Interest income	-	476,716	715,773	654,241	900,534	2,825,053	1,616,307	3,956,010
<b>Total non-operating revenues</b>	<b>354,156</b>	<b>826,326</b>	<b>1,154,500</b>	<b>1,090,271</b>	<b>37,731,861</b>	<b>40,857,661</b>	<b>39,240,517</b>	<b>42,774,258</b>
<b>Income before capital contributions</b>	<b>(5,294,564)</b>	<b>(7,946,484)</b>	<b>11,788,326</b>	<b>3,232,924</b>	<b>4,512,205</b>	<b>10,208,726</b>	<b>11,005,967</b>	<b>5,495,166</b>
<b>Capital contributions</b>	<b>1,295,711</b>	<b>907,694</b>	<b>2,622,385</b>	<b>8,734,923</b>	<b>31,867,811</b>	<b>37,649,211</b>	<b>35,785,907</b>	<b>47,291,828</b>
<b>Change in net assets</b>	<b>(3,998,853)</b>	<b>(7,038,790)</b>	<b>14,410,711</b>	<b>11,967,847</b>	<b>36,380,016</b>	<b>47,857,937</b>	<b>46,791,874</b>	<b>52,786,994</b>
<b>Net assets, beginning of year, restated</b>	<b>238,214,665</b>	<b>245,253,455</b>	<b>295,292,993</b>	<b>283,325,146</b>	<b>486,914,837</b>	<b>439,056,900</b>	<b>1,020,422,495</b>	<b>967,635,501</b>
<b>Net assets, end of year</b>	<b>\$ 234,215,812</b>	<b>\$ 238,214,665</b>	<b>\$ 309,703,704</b>	<b>\$ 295,292,993</b>	<b>\$ 523,294,853</b>	<b>\$ 486,914,837</b>	<b>\$ 1,067,214,369</b>	<b>\$ 1,020,422,495</b>

See accompanying independent auditors' report.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

Schedule 3

## SCHEDULE OF PROPERTY, PLANT, AND EQUIPMENT BY DEPARTMENT

DECEMBER 31, 2002 AND 2001

	2002			
	Water	Sewer	Drainage	Total
Real estate rights, non depreciable	\$ 2,898,138	\$ 905,876	\$ 4,768,886	\$ 8,572,900
Power and pumping stations - buildings	52,384,607	25,561,288	120,934,560	198,880,455
Power and pumping stations - machinery	109,541,642	28,925,136	90,439,652	228,906,430
Distribution systems	118,959,822	-	-	118,959,822
Sewerage collection	-	164,577,652	-	164,577,652
Canals and subsurface drainage	-	-	211,454,648	211,454,648
Treatment plants	-	112,975,457	-	112,975,457
Connections and meters	28,590,806	12,936,601	-	41,527,407
Power transmission	8,817,200	5,358,903	11,407,980	25,584,083
General plant	84,596,276	58,650,351	45,448,874	188,695,501
General buildings	3,088,455	1,336,972	4,852,010	9,277,437
<b>Total property, plant and equipment in service</b>	<b>408,876,946</b>	<b>411,228,236</b>	<b>489,306,610</b>	<b>1,309,411,792</b>
Construction in progress	16,041,523	110,207,662	141,043,974	267,293,159
<b>Total property, plant and equipment</b>	<b>424,918,469</b>	<b>521,435,898</b>	<b>630,350,584</b>	<b>1,576,704,951</b>
Accumulated depreciation	189,101,183	143,902,803	146,555,723	479,559,709
<b>Net property, plant and equipment</b>	<b>\$ 235,817,286</b>	<b>377,533,095</b>	<b>483,794,861</b>	<b>1,097,145,242</b>
	2001			
	Water	Sewer	Drainage	Total
Real estate rights, non depreciable	\$ 2,898,138	\$ 905,876	\$ 4,768,886	\$ 8,572,900
Power and pumping stations - buildings	52,384,607	25,526,896	114,334,109	192,245,612
Power and pumping stations - machinery	109,523,574	28,925,136	90,439,652	228,888,362
Distribution systems	118,926,916	-	-	118,926,916
Sewerage collection	-	166,955,586	-	166,955,586
Canals and subsurface drainage	-	-	211,453,485	211,453,485
Treatment plants	-	112,967,536	-	112,967,536
Connections and meters	27,278,611	13,172,911	-	40,451,522
Power transmission	8,817,200	5,358,903	11,407,980	25,584,083
General plant	83,859,860	58,527,451	45,415,400	187,802,711
General buildings	3,088,499	1,336,972	4,852,010	9,277,481
<b>Total property, plant and equipment in service</b>	<b>406,777,405</b>	<b>413,677,267</b>	<b>482,671,522</b>	<b>1,303,126,194</b>
Construction in progress	6,600,250	64,489,009	90,630,173	161,719,432
<b>Total property, plant, and equipment</b>	<b>413,377,655</b>	<b>478,166,276</b>	<b>573,301,695</b>	<b>1,464,845,626</b>
Accumulated depreciation	176,356,421	134,866,940	136,139,178	447,362,539
<b>Net property, plant, and equipment</b>	<b>\$ 237,021,234</b>	<b>343,299,336</b>	<b>437,162,517</b>	<b>1,017,483,087</b>

See independent auditors' report.

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 SCHEDULE OF BONDS PAYABLE  
 December 31, 2002

	Average Annual Interest Rates	Interest Payment Dates	Issue Date	Final Maturity Date	Outstanding as of 12/31/2001	New Debt in 2002	Payments in 2002	Outstanding 12/31/2002
Drainage System Refunding Bonds, Series 1994 (6-Mills)	5.06%	(5/1;11/1)	04/01/94	11/01/03	2,220,000	-	1,080,000	1,140,000
Drainage System Bonds Series 1998 (9-Mills)	4.84%	(6/1;12/1)	12/01/98	12/01/18	9,045,000	-	355,000	8,690,000
Drainage System Bonds Series 2002 (9-Mills)	4.46%	(6/1;12/1)	10/01/02	12/01/22	-	20,000,000	-	20,000,000
					11,265,000	20,000,000	1,435,000	29,830,000
Sewer Revenue Bonds, 1997	5.36%	(6/1;12/1)	06/01/97	06/01/17	26,465,000	-	1,030,000	25,435,000
Sewer Revenue Bonds, 1998	4.82%	(6/1;12/1)	12/01/98	06/01/18	22,915,000	-	915,000	22,000,000
Sewer Revenue Bonds, 2000	5.48%	(6/1;12/1)	05/01/00	06/01/20	26,070,000	-	770,000	25,300,000
Sewer Revenue Bonds, 2000-B	5.43%	(6/1;12/1)	11/01/00	06/01/20	19,955,000	-	605,000	19,350,000
Sewer Revenue Bonds, 2001	5.02%	(6/1;12/1)	12/01/01	06/01/21	32,720,000	-	930,000	31,790,000
Sewer Revenue Bonds, 2002	4.36%	(6/1;12/1)	12/01/02	06/01/22	-	57,000,000	-	57,000,000
					128,125,000	57,000,000	4,250,000	180,875,000
Water Revenue Bonds, 1986	6.73%	(6/1;12/1)	08/01/86	12/01/03	965,000	-	465,000	500,000
Water Revenue Bonds, 1998	4.82%	(6/1;12/1)	12/01/98	12/01/18	14,665,000	-	585,000	14,080,000
Water Revenue Bonds, 2002	4.57%	(6/1;12/1)	10/01/02	12/01/22	-	34,000,000	-	34,000,000
					15,630,000	34,000,000	1,050,000	48,580,000
<b>TOTAL</b>					155,020,000	111,000,000	6,735,000	259,285,000

See independent auditors' report.



SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS  
 DEBT SERVICE AND DEBT SERVICE RESERVE  
 REQUIRED BY BOND RESOLUTION

For the year ended December 31, 2002

	Debt Service Account				Debt Service Reserve Accounts		
	Water Revenue Bonds	Sewer Revenue Bonds	Drainage System Bonds	Total	Water Revenue Bonds	Sewer Revenue Bonds	Total
Cash and investments at beginning of year	\$ 306,095	\$ 3,148,473	\$ -	\$ 3,454,568	\$ 3,613,436	\$ 10,983,940	\$ 14,597,376
Cash receipts:							
Interest received	-	-	-	-	122,606	312,519	435,125
Bond proceeds and accrued interest	-	-	71,868	71,868	2,483,260	5,006,983	7,490,243
Transfers from operating cash and debt service reserve	2,309,602	12,249,961	-	14,559,563	-	-	-
Total cash and investments	2,615,697	15,398,434	71,868	18,085,999	6,219,302	16,303,442	22,522,744
Cash disbursements:							
Principal and interest payments, cost of issuance and transfers	1,967,206	11,020,228	-	12,987,434	-	-	-
Returned to operating cash	-	-	-	-	2,290,922	807,457	3,098,379
Total cash disbursements	1,967,206	11,020,228	-	12,987,434	2,290,922	807,457	3,098,379
Cash and investments at end of year	\$ 648,491	\$ 4,378,206	\$ 71,868	\$ 5,098,565	\$ 3,928,380	\$ 15,495,985	\$ 19,424,365

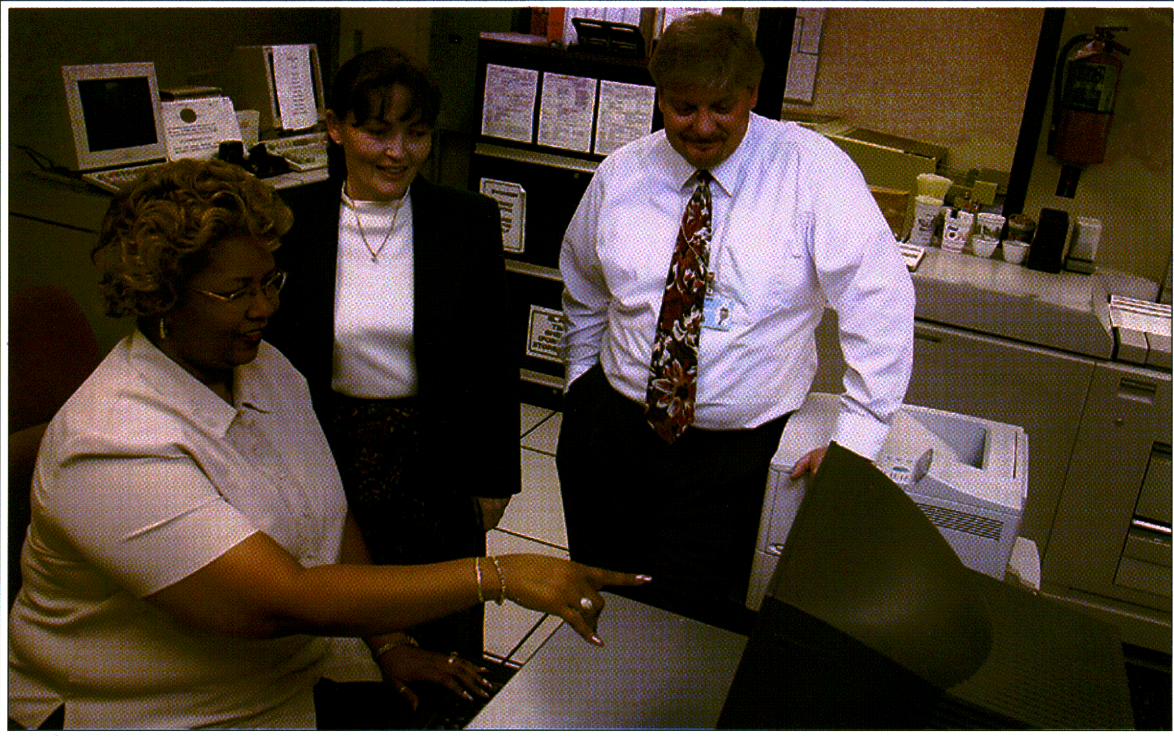
See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**Changes in Self-Insurance Liabilities By Department**  
**For the Year ended December 31, 2002**

	<u>Beginning of Year</u>	<u>Current Year Claims and Estimate Change</u>	<u>Payments</u>	<u>End of Year</u>
<b><u>WATER</u></b>				
Short-term:				
Workers' compensation	\$ 334,854	\$ 1,064,492	\$ 972,770	\$ 426,576
Health insurance	839,906	4,512,095	4,324,294	1,027,707
General liability	6,721,062	2,450,436	1,267	9,170,231
Total short-term	<u>7,895,822</u>	<u>8,027,023</u>	<u>5,298,331</u>	<u>10,624,514</u>
Long-term:				
Workers' compensation	2,060,810	223,456	-	2,284,266
General liability	2,233,333	(2,233,333)	-	-
Total long-term	<u>4,294,143</u>	<u>(2,009,877)</u>	<u>-</u>	<u>2,284,266</u>
Total	<u>\$ 12,189,965</u>	<u>\$ 6,017,146</u>	<u>\$ 5,298,331</u>	<u>\$ 12,908,780</u>
<b><u>SEWERAGE</u></b>				
Short-term:				
Workers' compensation	\$ 334,854	\$ 1,064,500	\$ 972,778	\$ 426,576
Health insurance	497,087	2,670,425	2,559,278	608,234
General liability	6,721,062	(1,301,119)	(473,734)	5,893,677
Total short-term	<u>7,553,003</u>	<u>2,433,806</u>	<u>3,058,322</u>	<u>6,928,487</u>
Long-term:				
Workers' compensation	2,060,810	223,456	-	2,284,266
General liability	2,233,333	(2,233,333)	-	-
Total long-term	<u>4,294,143</u>	<u>(2,009,877)</u>	<u>-</u>	<u>2,284,266</u>
Total	<u>\$ 11,847,146</u>	<u>\$ 423,929</u>	<u>\$ 3,058,322</u>	<u>\$ 9,212,753</u>
<b><u>DRAINAGE</u></b>				
Short-term:				
Workers' compensation	\$ 334,854	\$ 1,064,492	\$ 972,770	\$ 426,576
Health insurance	377,100	2,025,839	1,941,520	461,419
General liability	6,721,062	2,121,196	977,747	7,864,511
Total short-term	<u>7,433,016</u>	<u>5,211,527</u>	<u>3,892,037</u>	<u>8,752,506</u>
Long-term:				
Workers' compensation	2,060,810	223,456	-	2,284,266
General liability	2,233,333	2,266,667	-	4,500,000
Total long-term	<u>4,294,143</u>	<u>2,490,123</u>	<u>-</u>	<u>6,784,266</u>
Total	<u>\$ 11,727,159</u>	<u>\$ 7,701,650</u>	<u>\$ 3,892,037</u>	<u>\$ 15,536,772</u>
<b><u>TOTAL</u></b>				
Short-term:				
Workers' compensation	\$ 1,004,562	\$ 3,193,484	\$ 2,918,318	\$ 1,279,728
Health insurance	1,714,093	9,208,359	8,825,092	2,097,360
General liability	20,163,186	3,270,513	505,280	22,928,419
Total short-term	<u>22,881,841</u>	<u>15,672,356</u>	<u>12,248,690</u>	<u>26,305,507</u>
Long-term:				
Workers' compensation	6,182,430	670,368	-	6,852,798
General liability	6,699,999	(2,199,999)	-	4,500,000
Total long-term	<u>12,882,429</u>	<u>(1,529,631)</u>	<u>-</u>	<u>11,352,798</u>
Total	<u>\$ 35,764,270</u>	<u>\$ 14,142,725</u>	<u>\$ 12,248,690</u>	<u>\$ 37,658,305</u>

See accompanying independent auditors' report.

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The Information Systems Department is constantly upgrading programs to improve customer service. Customers will soon have on-line access to personal billing information and will be able to pay bills electronically.

The Engineering Department designs major infrastructure improvement projects and oversees the construction process. Records of the improvements are carefully documented.



SEWERAGE AND WATER BOARD OF NEW ORLEANS

CAPITAL EXPENDITURES BY DEPARTMENT

ENTERPRISE FUND

Last Ten Fiscal Years  
(Unaudited)

Year	Water	Sewer	Drainage	Total
1993	\$ 20,628,162	\$ 11,614,008	\$ 17,177,080	\$ 49,419,250
1994	9,943,739	11,213,412	10,342,235	31,499,386
1995	11,783,818	14,238,109	9,014,933	35,036,860
1996	16,800,825	13,987,572	6,891,995	37,680,392
1997	17,123,523	20,385,974	10,339,467	47,848,964
1998	16,150,082	22,236,831	9,162,998	47,549,911
1999	15,396,620	29,211,401	8,758,788	53,366,809
2000	13,001,122	21,609,266	12,976,071	47,586,459
2001	12,586,744	51,226,639	52,859,310 <sup>1</sup>	116,672,693
2002	11,540,814	43,269,622	57,048,889	111,859,325

<sup>1</sup> Includes contributed assets

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
REVENUE AND EXPENSES BY SOURCE  
ENTERPRISE FUND  
Last Ten Years  
(Unaudited)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>Revenues</b>										
Charges for service	\$ 93,371,441	\$ 93,835,767	\$ 93,746,543	\$ 93,288,660	\$ 91,931,554	\$ 93,640,920	\$ 94,838,488	\$ 104,136,436	\$ 101,387,729	\$ 107,087,709
Dedicated taxes	27,857,245	28,163,565	28,144,310	28,939,562	30,216,975	32,120,157	32,857,027	36,294,103	38,021,882	36,826,269
Two-mill tax	132,238	86,103	94,551	17,676	17,366	20,017	11,811	6,348	10,726	5,058
Interest on investments	5,554,696	5,556,027	7,813,226	6,729,404	7,949,404	5,877,860	3,468,929	6,087,145	3,956,010	1,616,307
Other taxes and revenue	2,184,581	1,911,706	2,091,070	1,930,732	2,051,846	2,709,878	1,975,775	2,508,502	3,134,686	2,607,834
	<u>\$ 129,100,201</u>	<u>\$ 129,553,168</u>	<u>\$ 131,889,700</u>	<u>\$ 130,906,034</u>	<u>\$ 132,167,145</u>	<u>\$ 134,368,832</u>	<u>\$ 133,152,030</u>	<u>\$ 149,032,534</u>	<u>\$ 146,511,033</u>	<u>\$ 148,143,177</u>
<b>Expenses</b>										
Personnel services*	\$ 44,876,241	\$ 46,636,948	\$ 45,053,530	\$ 47,873,886	\$ 51,540,718	\$ 48,316,625	\$ 46,924,868	\$ 45,955,695	\$ 45,544,701	\$ 47,719,045
Services and utilities	27,825,642	28,627,619	29,956,993	32,732,388	32,518,005	31,368,417	33,564,383	40,576,321	43,554,817	40,228,571
Materials and supplies	7,458,111	8,215,530	8,301,900	9,423,809	9,714,832	8,711,943	9,562,704	8,098,236	8,299,514	7,730,507
Miscellaneous	353,098	389,525								
Depreciation and amortization	19,299,433	22,661,580	23,651,539	25,098,375	26,058,333	26,898,861	27,628,934	28,581,624	34,503,058	34,681,763
Provision for doubtful accounts	1,275,290	1,654,355	1,024,383	1,185,345	995,435	837,177	1,002,267	1,071,194	1,661,267	1,842,958
Provision for claims	1,572,098	2,738,881	3,862,241	5,265,081	7,154,016	7,199,793	7,165,150	11,379,397	7,452,510	4,934,366
Interest	5,997,197	3,691,800	2,834,930	2,244,315	2,599,896	2,858,224				
	<u>\$ 108,657,110</u>	<u>\$ 114,616,238</u>	<u>\$ 114,685,516</u>	<u>\$ 123,823,199</u>	<u>\$ 130,581,235</u>	<u>\$ 126,191,040</u>	<u>\$ 125,848,306</u>	<u>\$ 135,662,467</u>	<u>\$ 141,015,867</u>	<u>\$ 137,137,210</u>

Note: Years prior to 2001 have not been restated for impact of GASB 33.  
\* - 1991 to 1997 restated for the adoption of GASB Statement No. 27.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

Property Tax  
Levies and Collections by the City of New Orleans

Last Ten Fiscal Years  
(Unaudited - Amounts in Thousands)

Fiscal Year	Total Levied	Collected Through December 31, 2001 (2)		Balance Outstanding at December 31, 2001 (2)		Collected during 2001 (2) Amount
		Amount	Percent	Amount	Percent	
1992	\$ 153,070	\$ 151,176	98.76	\$ 1,894	1.24	\$ 202
1993	149,627	147,610	98.65	2,017	1.35	221
1994	146,451	144,357	98.57	2,094	1.43	229
1995	145,005	142,529	98.29	2,476	1.71	1,269
1996	155,297	152,484	98.19	2,813	1.81	593
1997	157,517	153,598	97.51	3,919	2.49	1,274
1998	163,715	159,060	97.16	4,655	2.84	1,541
1999	172,016	166,683	96.90	5,333	3.10	3,636
2000	199,666	189,124	94.72	10,542	5.28	7,224
2001	209,441	195,395	93.29	14,046	6.71	195,395

Personal Property Taxes:

1992	\$ 75,053	\$ 70,385	93.78	\$ 4,668	6.22	\$ 11
1993	72,866	68,296	93.73	4,570	6.27	5
1994	74,955	71,142	94.91	3,813	5.09	11
1995	79,258	75,418	95.16	3,840	4.84	42
1996	85,470	78,091	91.37	7,379	8.63	356
1997	88,126	83,113	94.31	5,013	5.69	163
1998	94,777	88,376	94.08	6,401	6.75	325
1999	98,467	92,633	92.18	5,834	5.92	432
2000	105,951	97,665	92.18	8,286	7.82	2,132
2001	110,058	91,086	82.76	18,972	17.24	91,086

(2) The latest date available for Property Tax Levies and Collections by the City of New Orleans is the year ended December 31, 2001

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**Assessed and Estimated Actual Value of Taxable Property**

**Last Ten Fiscal Years  
(Unaudited)**

(Amount in thousands)

Fiscal Year	Net Assessed Value		Total Net Assessed Value	Total Estimated Actual Value(1)	Ratio of Total Net Assessed to Total Estimated Actual Value
	Real Estate	Personal Property			
1993	918,234	456,806	1,375,040	10,915,928	12.6%
1994	894,733	467,805	1,362,538	10,787,818	12.6%
1995	885,899	467,699	1,353,598	10,711,391	12.6%
1996	948,777	533,300	1,482,077	11,687,684	12.7%
1997	960,554	548,893	1,509,447	11,892,583	12.7%
1998	977,783	578,256	1,556,039	12,236,013	12.7%
1999	1,013,240	592,741	1,605,981	12,636,496	12.7%
2000	1,159,821	628,860	1,788,681	14,133,694	12.7%
2001	1,214,098	651,744	1,865,842	14,751,485	12.6%
2002	1,231,764	619,368	1,851,132	14,687,067	12.6%

Source: City of New Orleans Annual Financial Report.

2001 - Latest year for which information is available.

(1) Amounts are net of the homestead exemption.



**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**Property Tax Rates - Direct and Overlapping Governments**

Number of Mills  
(Per \$1,000 of assessed value)

Last Ten Fiscal Years  
(Unaudited)

<u>Fiscal Year</u>	<u>City of New Orleans</u>	<u>Orleans Levee Board</u>	<u>Sewerage &amp; Water Board of New Orleans</u>	<u>Orleans Parish School Board</u>	<u>Audubon Park &amp; Zoo Aquarium</u>	<u>Total</u>
1993	75.90	11.29	22.59	45.10	4.55	160.62
1994	75.90	12.01	22.59	45.10	4.55	161.34
1995	75.90	12.01	22.59	45.10	4.55	161.34
1996	77.09	12.01	22.59	45.40	4.55	161.64
1997	77.09	12.01	22.59	45.40	4.55	161.64
1998	77.09	12.01	22.59***	45.40	4.55	161.64
1999	77.09	12.01	22.59***	51.10	4.55	167.26
2000	77.09	12.76	22.59***	52.70	4.55	172.69
2001	77.09	12.76	22.59***	53.05*	4.55	170.04
2002	77.09	12.76	22.59***	53.05*	4.55	170.04

Source: City of New Orleans

\*The Homestead Exemption is not allowed for the new 9-Mill Police and Fire Tax.

\*\*\*3 mills adopted in 1967 Expires in 2017

\*\*\*6 mills adopted in 1978 Expires in 2027

\*\*\*9 mills adopted in 1982 expires in 2032

SEWERAGE AND WATER BOARD OF NEW ORLEANS

Computation of Direct and Overlapping Debt

December 31, 2002  
(Unaudited)

	<u>Net Outstanding Debt</u>	<u>Percentage Overlapping</u>	<u>Overlapping Debt</u>
Direct debt:			
Sewerage and Water Board, net of debt service funds (tax bonds only)	<u>\$29,830,000</u>	100%	<u>\$29,830,000</u>
Overlapping debt:			
City of New Orleans	645,271,000	100%	645,271,000
Audubon Park Commission	56,410,000	100%	56,410,000
Orleans Parish School Board (1)	337,376,749	100%	337,376,749
Orleans Levee District (1)	<u>356,364,000</u>	<u>100%</u>	<u>356,364,000</u>
Total overlapping debt	<u>1,395,421,749</u>	<u>100%</u>	<u>1,395,421,749</u>
Total direct and overlapping debt	<u><u>\$1,425,251,749</u></u>	<u><u>100%</u></u>	<u><u>\$1,425,251,749</u></u>

- (1) The fiscal year of the Orleans Parish School Board and Orleans Levee District ends on June 30th; overlapping debt is based on June 30, 2002 financial information.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

REVENUE BONDS DEBT SERVICE COVERAGE

WATER BONDS

Last Nine Fiscal Years<sup>1</sup>  
(Unaudited)

Fiscal Year	Operating Revenue	Direct Operating Expenses*	Net Revenue Available for Debt Services	Debt Service Requirement*			Total	Coverage
				Principal	Interest			
1994	\$ 57,711,009	\$ 41,566,638	\$ 16,144,371	\$ 2,205,000	\$ 1,137,360		3,342,360	4.83
1995	58,722,644	41,011,216	17,711,428	2,385,000	989,625		3,374,625	5.25
1996	58,585,014	45,625,080	12,959,934	2,405,000	827,445		3,232,445	4.01
1997	57,147,602	47,868,432	9,279,170	2,335,000	661,500		2,996,500	3.10
1998	57,884,614	44,254,625	13,629,989	1,760,000	498,050		2,258,050	6.04
1999	58,504,855	46,370,835	12,134,020	2,140,000	1,168,436		3,308,436	3.67
2000	59,374,827	49,712,488	9,662,339	2,590,000	1,023,436		3,613,436	2.67
2001	54,444,486	47,962,301	6,482,185	995,000	846,818		1,841,818	3.52
2002	55,870,142	45,801,952	10,068,190	1,050,000	782,068		1,832,068	5.50

\* Current year annual debt service payment

<sup>1</sup> Data for years prior to 1994 is not readily available.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

REVENUE BONDS DEBT SERVICE COVERAGE

SEWER BONDS

Last Nine Fiscal Years<sup>1</sup>  
(Unaudited)

Fiscal Year	Operating Revenue	Direct Operating Expenses	Net Revenue Available for Debt Services	Debt Services Requirements*		Coverage	
				Principal	Interest		
1994	39,273,218	28,633,005	10,640,213	4,400,000	294,800	4,694,800	2.27
1995	No outstanding bonds; not applicable						
1996	No outstanding bonds; not applicable						
1997	No outstanding bonds; not applicable						
1998	40,034,619	31,703,857	8,330,762	800,000	1,574,550	2,374,550	3.51
1999	41,082,524	32,359,817	8,722,707	1,230,000	2,761,973	3,991,973	2.19
2000	49,677,971	35,549,015	14,128,956	1,745,000	2,682,686	4,427,686	3.19
2001	51,902,479	35,863,277	16,039,202	2,920,000	5,254,696	8,174,696	1.96
2002	54,195,717	31,418,205	22,777,512	4,250,000	6,766,471	11,016,471	2.07

\* Annual debt services payment

<sup>1</sup> Data for years prior to 1994 is not readily available.

SEWERAGE & WATER BOARD OF NEW ORLEANS  
SCHEDULE OF FUTURE DEBT PAYMENTS  
DECEMBER 31, 2002  
(Unaudited)

		Water Revenue Bonds			
		Series 1986	Series 1998	Series 2002	All Bond Issues
2003	Principal	\$ 500,000	\$ 605,000	\$ -	\$ 1,105,000
	Interest	35,000	678,686	1,791,373	2,505,059
2004	Principal		630,000	945,000	1,575,000
	Interest		641,630	1,535,463	2,177,093
2005	Principal		660,000	995,000	1,655,000
	Interest		603,043	1,507,113	2,110,156
2006	Principal		690,000	1,045,000	1,735,000
	Interest		562,618	1,477,263	2,039,881
2007	Principal		725,000	1,095,000	1,820,000
	Interest		534,155	1,445,913	1,980,068
2008	Principal		770,000	1,150,000	1,920,000
	Interest		504,068	1,413,063	1,917,131
2009	Principal		810,000	1,210,000	2,020,000
	Interest		471,728	1,377,125	1,848,853
2010	Principal		845,000	1,270,000	2,115,000
	Interest		436,493	1,334,775	1,771,268
2011	Principal		885,000	1,335,000	2,220,000
	Interest		398,468	1,287,150	1,685,618
2012	Principal		925,000	1,400,000	2,325,000
	Interest		358,643	1,233,750	1,592,393
2013	Principal		965,000	1,470,000	2,435,000
	Interest		315,630	1,177,750	1,493,380
2014	Principal		1,015,000	1,530,000	2,545,000
	Interest		269,793	1,104,250	1,374,043
2015	Principal		1,060,000	1,595,000	2,655,000
	Interest		221,580	1,027,750	1,249,330
2016	Principal		1,110,000	1,665,000	2,775,000
	Interest		170,700	948,000	1,118,700
2017	Principal		1,165,000	1,740,000	2,905,000
	Interest		116,865	864,750	981,615
2018	Principal		1,220,000	1,820,000	3,040,000
	Interest		59,780	777,750	837,530
2019	Principal			3,195,000	3,195,000
	Interest			686,750	686,750
2020	Principal			3,345,000	3,345,000
	Interest			527,000	527,000
2021	Principal			3,510,000	3,510,000
	Interest			359,750	359,750
2022	Principal			3,685,000	3,685,000
	Interest			184,250	184,250
Total Principal		500,000	14,080,000	34,000,000	48,580,000
Total Interest		35,000	6,343,880	22,060,988	28,439,868
		<u>\$ 535,000</u>	<u>\$ 20,423,880</u>	<u>\$ 56,060,988</u>	<u>\$ 77,019,868</u>

SEWERAGE & WATER BOARD OF NEW ORLEANS  
 SCHEDULE OF FUTURE DEBT PAYMENTS  
 DECEMBER 31, 2002  
 (Unaudited)

**Sewer Revenue Bonds**

	Series 1997	Series 1998	Series 2000A	Series 2000B	Series 2001	Series 2002	All Bond Issues
2003 Principal	\$ 1,100,000	\$ 950,000	\$ 820,000	\$ 640,000	\$ 1,100,000	\$ 1,635,000	\$ 6,245,000
Interest	1,348,045	1,031,548	1,493,400	1,048,717	1,579,855	2,614,725	9,116,290
2004 Principal	1,170,000	985,000	870,000	680,000	1,145,000	1,725,000	6,575,000
Interest	1,291,295	973,498	1,442,700	1,002,518	1,512,618	2,564,325	8,786,954
2005 Principal	1,245,000	1,030,000	920,000	715,000	1,195,000	1,820,000	6,925,000
Interest	1,223,139	913,048	1,389,000	953,692	1,448,267	2,511,150	8,438,296
2006 Principal	1,330,000	1,075,000	975,000	760,000	1,250,000	1,920,000	7,310,000
Interest	1,142,670	859,976	1,332,150	902,068	1,381,030	2,445,450	8,063,344
2007 Principal	1,415,000	1,135,000	1,035,000	800,000	1,305,000	2,025,000	7,715,000
Interest	1,056,889	813,969	1,271,850	855,467	1,317,293	2,366,550	7,682,018
2008 Principal	1,490,000	1,200,000	1,095,000	850,000	1,360,000	2,135,000	8,130,000
Interest	975,420	764,634	1,207,950	814,218	1,242,370	2,283,350	7,287,942
2009 Principal	1,570,000	1,265,000	1,160,000	895,000	1,420,000	2,255,000	8,565,000
Interest	898,135	711,462	1,140,300	769,474	1,164,860	2,195,550	6,879,781
2010 Principal	1,655,000	1,320,000	1,230,000	950,000	1,485,000	2,380,000	9,020,000
Interest	815,070	654,750	1,068,600	721,042	1,100,240	2,102,850	6,462,552
2011 Principal	1,745,000	1,380,000	1,305,000	1,005,000	1,545,000	2,510,000	9,490,000
Interest	726,234	594,660	992,550	670,980	1,032,808	1,992,500	6,009,732
2012 Principal	1,840,000	1,445,000	1,385,000	1,060,000	1,615,000	2,645,000	9,990,000
Interest	632,128	530,194	911,850	619,355	960,092	1,863,625	5,517,244
2013 Principal	1,940,000	1,510,000	1,465,000	1,120,000	1,685,000	2,790,000	10,510,000
Interest	532,903	461,294	826,350	564,295	881,700	1,727,750	4,994,292
2014 Principal	2,050,000	1,585,000	1,555,000	1,185,000	1,760,000	2,945,000	11,080,000
Interest	426,884	388,165	735,750	504,925	798,140	1,584,375	4,438,239
2015 Principal	2,170,000	1,655,000	1,645,000	1,255,000	1,840,000	3,110,000	11,675,000
Interest	313,200	310,801	639,750	440,858	709,940	1,433,000	3,847,549
2016 Principal	2,290,000	1,735,000	1,745,000	1,325,000	1,930,000	3,280,000	12,305,000
Interest	192,780	228,791	538,050	371,825	616,610	1,273,250	3,221,306
2017 Principal	2,425,000	1,820,000	1,850,000	1,400,000	2,020,000	3,460,000	12,975,000
Interest	65,475	141,000	430,200	297,550	517,860	1,104,750	2,556,835
2018 Principal		1,910,000	1,960,000	1,480,000	2,120,000	3,650,000	11,120,000
Interest		47,750	315,900	218,350	414,360	927,000	1,923,360
2019 Principal			2,080,000	1,570,000	2,225,000	3,850,000	9,725,000
Interest			194,700	134,475	304,344	739,500	1,373,019
2020 Principal			2,205,000	1,660,000	2,335,000	4,060,000	10,260,000
Interest			66,150	45,650	187,494	541,750	841,044
2021 Principal					2,455,000	4,285,000	6,740,000
Interest					63,830	333,125	396,955
2022 Principal						4,520,000	4,520,000
Interest						113,000	113,000
Total Principal	11,640,267	22,000,000	25,300,000	19,350,000	31,790,000	57,000,000	180,875,000
Total Interest	11,640,267	9,425,540	15,997,200	10,935,459	17,233,711	32,717,575	97,949,752
	<u>\$ 23,280,534</u>	<u>\$ 31,425,540</u>	<u>\$ 41,297,200</u>	<u>\$ 30,285,459</u>	<u>\$ 49,023,711</u>	<u>\$ 89,717,575</u>	<u>\$ 278,824,752</u>

SEWERAGE & WATER BOARD OF NEW ORLEANS  
SCHEDULE OF FUTURE DEBT PAYMENTS  
DECEMBER 31, 2002  
(Unaudited)

		<b>Drainage Revenue Bonds</b>			
		<b>Series 1994</b>	<b>Series 1998</b>	<b>Series 2002</b>	<b>All Bond Issues</b>
2003	Principal	\$ 1,140,000	\$ 370,000	\$ 510,000	\$ 2,020,000
	Interest	58,710	418,102	1,078,019	1,554,831
2004	Principal		390,000	535,000	925,000
	Interest		395,532	893,416	1,288,948
2005	Principal		405,000	560,000	965,000
	Interest		371,742	861,316	1,233,058
2006	Principal		425,000	590,000	1,015,000
	Interest		350,986	827,716	1,178,702
2007	Principal		450,000	620,000	1,070,000
	Interest		333,560	792,316	1,125,876
2008	Principal		475,000	650,000	1,125,000
	Interest		314,660	755,116	1,069,776
2009	Principal		500,000	685,000	1,185,000
	Interest		294,472	716,116	1,010,588
2010	Principal		520,000	715,000	1,235,000
	Interest		272,722	675,016	947,738
2011	Principal		545,000	755,000	1,300,000
	Interest		249,582	647,310	896,892
2012	Principal		570,000	790,000	1,360,000
	Interest		224,786	621,263	846,049
2013	Principal		595,000	830,000	1,425,000
	Interest		198,280	593,218	791,498
2014	Principal		625,000	865,000	1,490,000
	Interest		170,018	560,018	730,036
2015	Principal		655,000	900,000	1,555,000
	Interest		140,018	525,418	665,436
2016	Principal		685,000	940,000	1,625,000
	Interest		108,250	489,418	597,668
2017	Principal		720,000	985,000	1,705,000
	Interest		74,000	450,878	524,878
2018	Principal		760,000	1,030,000	1,790,000
	Interest		38,000	38,000	76,000
2019	Principal			1,870,000	1,870,000
	Interest			365,218	365,218
2020	Principal			1,960,000	1,960,000
	Interest			282,938	282,938
2021	Principal			2,055,000	2,055,000
	Interest			194,738	194,738
2022	Principal			2,155,000	2,155,000
	Interest			100,208	100,208
Total	Principal	1,140,000	8,690,000	20,000,000	29,830,000
Total	Interest	58,710	3,954,710	11,467,653	15,481,073
		<u>\$ 1,198,710</u>	<u>\$ 12,644,710</u>	<u>\$ 31,467,653</u>	<u>\$ 45,311,073</u>

SEWERAGE & WATER BOARD OF NEW ORLEANS  
SCHEDULE OF FUTURE DEBT PAYMENTS  
DECEMBER 31, 2002  
(Unaudited)

		All Departments			
		Water	Sewer	Drainage	Total
2003	Principal	\$ 1,105,000	\$ 6,245,000	\$ 2,020,000	\$ 9,370,000
	Interest	2,505,059	9,116,290	1,554,831	13,176,180
2004	Principal	1,575,000	6,575,000	925,000	9,075,000
	Interest	2,177,093	8,786,954	1,288,948	12,252,995
2005	Principal	1,655,000	6,925,000	965,000	9,545,000
	Interest	2,110,156	8,438,296	1,233,058	11,781,510
2006	Principal	1,735,000	7,310,000	1,015,000	10,060,000
	Interest	2,039,881	8,063,344	1,178,702	11,281,927
2007	Principal	1,820,000	7,715,000	1,070,000	10,605,000
	Interest	1,980,068	7,682,018	1,125,876	10,787,962
2008	Principal	1,920,000	8,130,000	1,125,000	11,175,000
	Interest	1,917,131	7,287,942	1,069,776	10,274,849
2009	Principal	2,020,000	8,565,000	1,185,000	11,770,000
	Interest	1,848,853	6,879,781	1,010,588	9,739,222
2010	Principal	2,115,000	9,020,000	1,235,000	12,370,000
	Interest	1,771,268	6,462,552	947,738	9,181,558
2011	Principal	2,220,000	9,490,000	1,300,000	13,010,000
	Interest	1,685,618	6,009,732	896,892	8,592,242
2012	Principal	2,325,000	9,990,000	1,360,000	13,675,000
	Interest	1,592,393	5,517,244	846,049	7,955,686
2013	Principal	2,435,000	10,510,000	1,425,000	14,370,000
	Interest	1,493,380	4,994,292	791,498	7,279,170
2014	Principal	2,545,000	11,080,000	1,490,000	15,115,000
	Interest	1,374,043	4,438,239	730,036	6,542,318
2015	Principal	2,655,000	11,675,000	1,555,000	15,885,000
	Interest	1,249,330	3,847,549	665,436	5,762,315
2016	Principal	2,775,000	12,305,000	1,625,000	16,705,000
	Interest	1,118,700	3,221,306	597,668	4,937,674
2017	Principal	2,905,000	12,975,000	1,705,000	17,585,000
	Interest	981,615	2,556,835	524,878	4,063,328
2018	Principal	3,040,000	11,120,000	1,790,000	15,950,000
	Interest	837,530	1,923,360	76,000	2,836,890
2019	Principal	3,195,000	9,725,000	1,870,000	14,790,000
	Interest	686,750	1,373,019	365,218	2,424,987
2020	Principal	3,345,000	10,260,000	1,960,000	15,565,000
	Interest	527,000	841,044	282,938	1,650,982
2021	Principal	3,510,000	6,740,000	2,055,000	12,305,000
	Interest	359,750	396,955	194,738	951,443
2022	Principal	3,685,000	4,520,000	2,155,000	10,360,000
	Interest	184,250	113,000	100,208	397,458
Total Principal		48,580,000	180,875,000	29,830,000	259,285,000
Total Interest		28,439,868	97,949,752	15,481,073	141,870,693
		<u>\$77,019,868</u>	<u>\$ 278,824,752</u>	<u>\$45,311,073</u>	<u>\$401,155,693</u>



**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**Property Value, New Construction and Bank Deposits**

Last Ten Fiscal Years  
(Unaudited)

Fiscal Year (3)	New Commercial Construction (1)		New Residential Construction (1)		Bank deposits (2) (in thousands)	Estimated actual Property value (1)
	Number of units	Value (in thousands)	Number of units	Value (in thousands)		
1992	1033	77,116	10,203	54,735	6,154,171	11,145,422
1993	233	70,176	11,358	99,151	6,224,997	10,915,928
1994	904	77,500	2,993	98,675	6,068,343	10,787,818
1995	627	219,679	2,595	105,590	6,267,311	10,711,391
1996	160	28,921	2,163	79,469	7,011,280	11,688,518
1997	900	97,325	2,131	62,761	7,642,589	11,892,583
1998	184	49,028	1,962	104,227	7,965,886	12,237,720
1999	294	78,293	2,089	122,342	7,977,504	12,636,496
2000	325	135,665	2,223	136,686	7,984,473	14,133,694
2001	333	52,103	2,170	11,804	8,225,073	14,751,485
2002					7,858,864	

(1) City of New Orleans (2001 latest year for which information is available).

(2) Summary of Deposits (as of June 30, 2002) - bank branches located in New Orleans, source Federal Depository Insurance Corporation.

(3) Information for the year ended December 31, 2002 is unavailable.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**Ten Largest Taxpayers**

**December 31, 2002 \***  
**(Unaudited)**

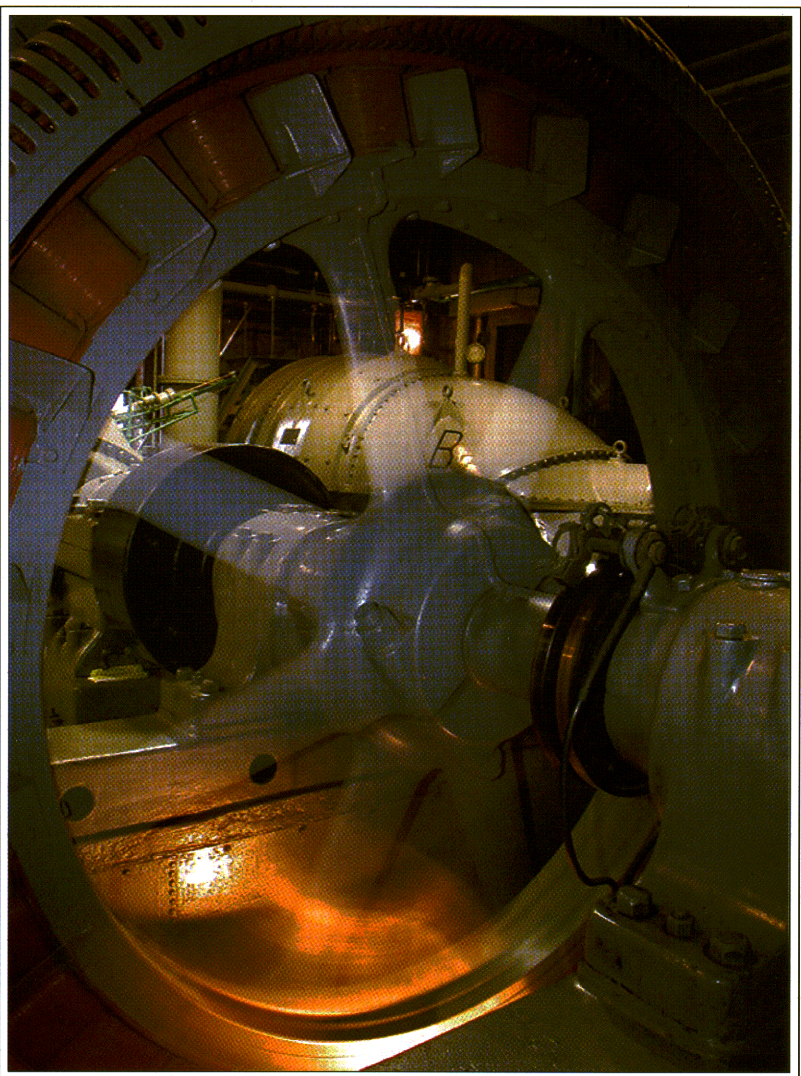
<u>Name of Taxpayer</u>	<u>Type of Business</u>	<u>2001 Assessed Value</u>	<u>Percentage of Total Assessed Value</u>
Entergy Service	Electric and gas utilities	\$72,612	3.89%
BellSouth Telecommunications	Telephone utilities	61,875	3.32
Banc One	Financial Institution	37,504	2.01
Hibernia National Bank	Financial Institution	30,972	1.66
Whitney National Bank	Financial Institution	26,610	1.42
Harrah's Entertainment	Hospitality and gaming	22,688	1.22
Jazzland	Theme Park	14,811	0.79
AT&T	Telecommunications	14,688	0.79
International River Center	Real Estate	14,241	0.76
Tenet	Managed Care	13,328	0.71
		<u>\$309,329</u>	

Source: City of New Orleans

(\*) The latest date available for the Ten Largest Taxpayers in the City of New Orleans is for the year ended December 31, 2001

When it rains, massive drainage pumps like this one go into action at 22 drainage pumping stations throughout the City, staffed by Sewerage and Water Board employees.

The S&WB operates a state-of-the-art Water Quality Laboratory capable of detecting 100,000 compounds. Chemists and technicians are on duty 24 hours a day to ensure that the water produced is of the highest quality.



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## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## 2002 ACTUAL CAPITAL EXPENDITURES

WATER DEPARTMENT

<u>C.P.#</u>	<u>WATERWORKS</u>		
110	Normal Extension & Replacement	\$	396,576.03
118	Modernization of Steam System		64,748.93
122	Filter Rehabilitation		236,820.61
135	Improvement of Chemical System		772,107.34
156	Advanced Carrollton Water Treatment		653,404.48
	<b>TOTAL WATERWORKS</b>	<b>\$</b>	<b>2,123,657.39</b>
	 <u>WATER DISTRIBUTION</u>		
214	Normal Extensions and Replacements	\$	1,648,757.15
215	Rehabilitation - Mains, Hydrants & Services		134,257.35
216	Water System Replacement Program		1,153,030.00
221	Feeder Main Extension, General		65,106.58
239	Mains in Street Department Contracts		1,575,259.69
	<b>TOTAL WATER DISTRIBUTION</b>	<b>\$</b>	<b>4,576,410.77</b>
	 <u>POWER PROJECTS EMERGENCY AND GENERAL BUDGET</u>		
600	Water Share of Power Projects	\$	44,808.25
700	Water Emergency Reserve		327,584.24
800	Water Share of General Budget Items		4,316,838.17
	<b>TOTAL POWER PROJECTS, EMERGENCY AND GENERAL BUDGET</b>	<b>\$</b>	<b>4,689,230.66</b>
	<b>TOTAL WATER DEPARTMENT</b>	<b>\$</b>	<b>11,389,298.82</b>

NOTE: These figures do not include proration of interest expense.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

2002 ACTUAL CAPITAL EXPENDITURES

SEWERAGE DEPARTMENT

<u>C.P.#</u>	<u>SEWERAGE SYSTEM</u>	
313	Force Mains	\$ 154,467.49
317	Normal Extensions & Replacement of Gravity Mains	16,023,740.53
318	Rehabilitation Gravity Sewer System	1,337,186.74
326	Extensions & Replacement to Sewer Pumping Stations	520,125.68
339	Main in Streets Dept. Contracts	1,985,977.29
347	Second Raw Sewage Channel , EBSTP	3,466,035.77
348	Normal Extensions & Replacements	5,611,228.95
367	Collection System Eval/Survey Uptown	<u>2,441,510.36</u>
	TOTAL SEWERAGE SYSTEM	\$ 31,540,272.81
	<u>SEWAGE TREATMENT</u>	
381	Modification & Expansion of WBSTP to MGD	<u>\$ 3,438,576.33</u>
	TOTAL SEWAGE TREATMENT	\$ 3,438,576.33
	<u>POWER PROJECTS AND GENERAL BUDGET</u>	
600	Sewerage Share of Power Projects	\$ 16,238.29
800	Sewerage Share of General Budget Items	<u>3,914,473.66</u>
	TOTAL POWER PROJECTS AND GENERAL BUDGET	\$ 3,930,711.95
	TOTAL SEWERAGE DEPARTMENT	<u>\$ 38,909,561.09</u>

NOTE: These figures do not include proration of interest expense.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

## 2002 ACTUAL CAPITAL EXPENDITURES

DRAINAGE DEPARTMENT

<u>C.P.#</u>	<u>CANALS</u>		
403	Improvements to Vehicular Bridges	\$	25,741.90
418	Normal Extension & Replacements		98,574.22
439	SWB Part Drng Tchoupitoulas Paving Project		375,031.68
463	Stormwater Management Plan		70,416.71
466	Louisiana Avenue Canal		474,999.99
471	C.O.E. Drainage Study		2,898,030.74
474	Terpsichore Canal		490,087.08
476	Hollygrove Canals		3,309,116.72
477	Eng. Design-Claiborne Manifold		3,045,715.47
478	S. Claiborne - Lowerline to Monticello Street		516,995.13
486	Napoleon Canal Improvements		1,441,690.95
497	Florida Ave. Canal - Mazant to Peoples		1,234,411.01
498	Dwyer Canal (St. Charles to Dwyer DPS)		74,225.97
499	Jefferson Avenue Canal		661,780.56
			<hr/>
	TOTAL DRAINAGE CANALS	\$	14,716,818.13
	<u>PUMPING STATIONS</u>		
511	Normal Extension & Rep./Stations	\$	2,039,030.51
520	Suction Canal DPS # 19		1,959,687.98
546	DPS#4 West-Build A 1000 CFS Station		146,034.63
550	Additions to Drainage Pumping Station #1		1,990,530.23
554	Expansion of Dwyer DPS		2,452,479.19
555	Design Services for Improvement		51,879.52
570	Pritchard DPS		223,894.20
			<hr/>
	TOTAL DRAINAGE PUMPING STATIONS	\$	8,863,536.26
	<u>POWER PROJECTS AND GENERAL BUDGET</u>		
600	Drainage Share of Power Projects	\$	2,037,006.29
800	Drainage Share of General Budget Items		1,829,149.79
			<hr/>
	TOTAL POWER PROJECTS AND GENERAL BUDGET	\$	3,866,156.08
	TOTAL DRAINAGE DEPARTMENT	\$	<u>27,446,510.47</u>

NOTE: These figures do not include proration of interest expense.

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
2002 ACTUAL CAPITAL EXPENDITURES

		<u>POWER PROJECTS</u>				
<u>C.P.#</u>	<u>POWER PROJECTS</u>	<u>Water</u>	<u>Sewerage</u>	<u>Drainage</u>	<u>Total</u>	
601	Earhart Blvd. Corridor	\$ 277.44	-	1,109.76	1,387.20	
609	Normal Extensions & Replacements Radio Equipment	2,158.44	5,645.21	105,846.16	113,649.81	
610	Underground Power Feeders	34,490.69	8,622.67	1,770,826.64	1,770,826.64	
613	Modification of Steam System	7,881.68	1,970.41	129,340.14	172,453.50	
624	Normal Extensions & Replacements			29,556.36	39,408.45	
684	DPS #19 - Emergency Power			401.54	401.54	
696	Switchgear and Motor Control - OPS #12			55.00	55.00	
701	Water Reserve for Emergencies	327,584.24			327,584.24	
<b>TOTAL POWER PROJECTS</b>		<b>\$ 372,392.49</b>	<b>\$ 16,238.29</b>	<b>\$ 2,037,135.60</b>	<b>\$ 2,425,766.38</b>	

NOTE: These figures do not include proration of interest expense.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

2002 ACTUAL CAPITAL EXPENDITURES

GENERAL BUDGET ITEMS

<u>C.P.#</u>	<u>General Budget Items</u>	<u>Water</u>	<u>Sewerage</u>	<u>Drainage</u>	<u>Total</u>
801	Office Equipment	\$ 1,185.21	\$ 1,185.18	\$ 1,185.21	\$ 3,555.60
803	Property Acquisition			36,862.53	36,862.53
807	Central Yard Improvement	51,425.08	51,425.04	11,427.80	114,277.92
810	Major Equipment Purchases	5,943.20	5,943.20	2,971.60	14,858.00
812	Computer Systems Development	274,668.55	274,668.51	274,668.55	824,005.61
820	Department, Yard and Administrative Expense Charge to Capital	3,375,587.17	2,759,710.71	1,267,978.79	7,403,276.67
823	Purchase of Water Meters	371,767.48	371,767.43		743,534.91
843	Minor Equipment Purchases	233,891.48	232,870.09	232,870.31	699,631.88
859	Plant Maintenance W/O System	2,370.00	395.00	1,185.00	3,950.00
860	Supplemental Environmental Projects		216,508.50		216,508.50
	<b>TOTAL GENERAL BUDGET ITEMS</b>	<b>\$ 4,316,838.17</b>	<b>\$ 3,914,473.66</b>	<b>\$ 1,829,149.79</b>	<b>\$ 10,060,461.62</b>

NOTE: These figures do not include proration of interest expense.



**ANALYSIS OF PUMPING AND POWER DEPARTMENT  
POWER PURCHASED AND PRODUCED  
NATURAL GAS AND FUEL OIL CONSUMED  
TEN YEARS 1993 THROUGH 2002**

YEAR	ELECTRIC POWER PURCHASED		ELECTRIC & STEAM POWER GENERATED BY THE S&WB		NATURAL GAS & FUEL OIL USED TO GENERATE ELECTRIC & STEAM POWER			
	KW-HRS	\$ AMOUNT	KW-HRS	\$ AMOUNT	NATURAL GAS		FUEL OIL	
					MCF	\$ AMOUNT	GALLONS	\$ AMOUNT
1993	93,652,501	\$6,765,428	60,070,029	\$7,309,564	1,265,415	\$5,967,060	72,784	\$61,866
1994	93,704,141	\$6,676,939	54,855,609	\$7,595,021	1,245,108	\$5,793,025	2,303	\$1,958
1995	55,977,302	\$3,775,458	53,028,000	\$7,537,164	1,284,761	\$5,569,915	4,614	\$3,922
1996	56,941,034	\$4,397,111	48,751,200	\$9,540,981	1,392,980	\$7,721,145	2,169	\$1,844
1997	54,669,463	\$4,299,727	52,999,200	\$8,289,555	1,288,540	\$6,463,536	2,652	\$2,254
1998	67,067,145	\$4,765,576	57,715,200	\$8,731,839	1,487,450	\$6,925,346	27,043	\$22,987
1999	64,070,706	\$4,576,866	36,511,704	\$8,860,755	1,487,610	\$6,836,117	9,550	\$8,118
2000	66,150,146	\$5,278,313	33,126,311	\$11,535,367	1,331,330	\$9,646,417	1,239	\$1,053
2001	71,250,220	\$6,290,661	36,569,748	\$10,699,776	1,547,560	\$8,738,028	1,739	\$1,478
2002	67,060,158	\$5,057,629	37,576,656	\$8,175,530	1,455,440	\$6,370,341	17,481	\$14,859
<b>TOTAL</b>	<b>690,542,816</b>	<b>\$40,535,417</b>	<b>397,057,253</b>	<b>\$69,400,246</b>	<b>10,783,194</b>	<b>\$54,922,561</b>	<b>122,354</b>	<b>\$104,001</b>

**POWER PURCHASED AND PRODUCED  
NATURAL GAS AND FUEL OIL CONSUMED - 2002**

	KW-HOURS	COST
ELECTRIC POWER PURCHASED	67,060,158	\$5,057,628.66
ELECTRIC AND STEAM POWER GENERATED BY THE S. & W.B.*	37,576,656	\$8,175,529.99
TOTAL	104,636,814	\$13,233,158.65

NOTE: \*NATURAL GAS CONSUMED IN OPERATION WAS 1,455,440 MCF  
AT A COST OF \$6,370,341. FUEL OIL CONSUMED WAS 17,481  
AT A COST OF \$14,859.

SEWERAGE AND WATER BOARD

OF NEW ORLEANS

GALLONS METERED - PAY WATER CONSUMPTION 2002

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<u>Month</u>	<u>Monthly Consumption</u>
January	1,942,393,400
February	1,655,605,000
March	1,750,548,400
April	1,727,555,500
May	1,776,780,200
June	2,031,071,200
July	1,955,032,800
August	2,153,755,000
September	1,773,405,100
October	1,932,711,100
November	1,764,965,700
December	<u>1,803,461,200</u>
Gross Total	<u><u>22,267,284,600</u></u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
MONTHLY WATER CHARGES COLLECTED - 2002**

<u>Months</u>	<u>Water Service Charges &amp; Fees</u>	<u>Delinquent Fees</u>	<u>Total</u>
January	\$4,536,611.90	\$65,928.25	\$4,602,540.15
February	4,026,414.24	82,262.19	4,108,676.43
March	4,639,907.26	85,326.76	4,725,234.02
April	4,397,796.74	75,517.44	4,473,314.18
May	4,273,521.61	79,367.67	4,352,889.28
June	4,113,258.37	69,536.98	4,182,795.35
July	4,839,875.71	80,389.61	4,920,265.32
August	4,702,336.36	89,371.42	4,791,707.78
September	4,402,925.78	85,080.72	4,488,006.50
October	5,349,294.46	105,155.26	5,454,449.72
November	4,132,884.25	77,996.23	4,210,880.48
December	4,172,235.46	72,473.90	4,244,709.36
	<u>\$53,587,062.14</u>	<u>\$968,406.43</u>	<u>54,555,468.57</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
MONTHLY SEWERAGE CHARGES COLLECTED - 2002**

<u>Months</u>	<u>Sewerage Service Charges</u>	<u>Delinquent Fees</u>	<u>Total</u>
January	\$4,472,325.22	\$44,072.85	\$4,516,398.07
February	4,157,045.56	54,990.60	4,212,036.16
March	4,585,872.86	57,028.65	4,642,901.51
April	4,428,834.95	50,482.70	4,479,317.65
May	4,440,762.38	53,059.96	4,493,822.34
June	3,994,395.13	46,493.75	4,040,888.88
July	4,731,683.69	53,747.64	4,785,431.33
August	4,474,776.28	59,732.46	4,534,508.74
September	4,077,444.81	56,874.15	4,134,318.96
October	4,957,569.64	70,278.33	5,027,847.97
November	3,690,784.25	52,138.56	3,742,922.81
December	3,875,445.20	48,445.97	3,923,891.17
	<u>\$51,886,939.97</u>	<u>\$647,345.62</u>	<u>\$52,534,285.59</u>

TABLE I  
CARROLLTON TURBIDITIES

	River (NTU)					Effluent Settling Reservoirs (NTU)					Filters (NTU)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Maximum	253	276	261	294	312	10	18	10	16	9	0.52	0.28	0.28	0.88	0.49
Minimum	7	6	5	5	8	0.7	0.8	1.1	2.0	0.4	0.07	0.07	0.08	0.07	0.07
Average	86.4	71	52	91	62	2.2	4.2	3.5	5.0	1.8	0.13	0.12	0.13	0.15	0.16

TABLE II  
CARROLLTON ALKALINITIES  
PARTS PER MILLION

	River					Effluent Settling Reservoirs					Filters				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Maximum	156	172	159	158	155	130	163	154	150	144	120	140	129	125	141
Minimum	80	84	82	78	79	58	72	65	70	61	64	65	61	55	55
Average	116	132	120	116	111	91	122	111	109	86	91	103	93	91	85

TABLE II A  
CARROLLTON HARDNESS  
PARTS PER MILLION

	NON-CARBONATE HARDNESS										TOTAL HARDNESS									
	RIVER					FILTERS					RIVER					Filters				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Maximum	68	70	72	59	66	73	83	79	75	68	200	221	203	202	187	173	194	184	173	190
Minimum	16	15	21	15	11	24	35	37	31	24	111	118	118	103	108	101	113	115	107	105
Average	37	44	43	38	34	49	55	56	51	48	153	175	164	155	144	135	157	149	142	133

TABLE III  
CARROLLTON BACTERIAL CHARACTERISTICS  
Total Coliform Analysis

2002	River	Plant Tap	Distribution System
Maximum (Colonies / 100 ml)	13,600	0	6
Minimum (Colonies / 100 ml)	200	0	0
Average (colonies / 100 ml)	1,400	0	0
Number of Samples	356	358	2,248
Number of Samples Negative	0	358	2,241
Number of Samples Positive	356	0	7*

\* None of these seven total coliform positive samples were fecal coliform positive, and none resulted in a violation of the Total Coliform Rule.

TABLE IV-A

PRINCIPLE RESULTS OF OPERATION OF THE G3 CONVENTIONAL UNIT AT THE CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING:  
December 31, 2002

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Month		Total Million Gallons of Water Treated During Month	Amount of Water Treated Million Gallons Per 24 Hours	Total pounds of Polymer used at Intake	Polymer at Intake Parts Per Million	Total Pounds of Polymer used in Plant	Polymer in Plant Parts Per Million	Total Pounds of Pure Iron (Fe) used During Month	Pure Iron (Fe) Parts Per Million	Total Pounds of Lime During Month	Lime Parts Per Million	NTU Turbidity of River Water	PPM Alkalinity of River Water	NTU Turbidity of Unit Effluent
January	Max.		80.92		1.67		5.21		5.74		0.00		260	155
	Min.	2,269.40	66.71	27,596	0.97	71,933	2.18	79,730	2.60	0	0.00	29	77	82
	Avg.		73.21		1.47		3.82		4.23		0.00	77	106	106
February	Max.	1,919.04	75.00	16,456	1.16	57,179	4.25	63,798	4.60	0	0.00	312	119	28.3
	Min.		62.50		0.65		2.79		3.25		0.00	65	79	3.2
	Avg.		68.54		1.03		3.57		3.99		0.00	134	94	6.3
March	Max.	2,129.89	75.13	17,132	1.57	69,181	4.09	78,204	4.68	0	0.00	213	128	6.4
	Min.		63.38		0.71		3.03		3.42		0.00	32	91	2.0
	Avg.		68.71		0.97		3.89		4.40		0.00	84	112	3.4
April	Max.	2,027.64	73.88	16,112	1.03	67,021	4.19	75,412	4.72	0	0.00	140	105	6.4
	Min.		62.50		0.88		3.22		3.63		0.00	33	81	1.5
	Avg.		67.59		0.95		3.96		4.46		0.00	73	91	3.3
May	Max.	2,101.38	81.00	14,717	0.98	68,803	4.12	77,805	4.57	0	0.00	160	114	7.1
	Min.		60.71		0.00		3.25		3.70		0.00	35	94	1.6
	Avg.		70.40		0.83		3.91		4.42		0.00	84	101	3.7
June	Max.	2,143.41	81.50	15,788	1.04	77,551	4.58	86,839	5.16	0	0.00	138	119	11.8
	Min.		60.58		0.72		3.89		4.08		0.00	34	94	2.7
	Avg.		71.45		0.89		4.34		4.86		0.00	63	107	5.4
July	Max.	1,111.23	73.41	5,449	0.72	36,618	4.46	41,206	4.94	0	0.00	133	146	16.2
	Min.		61.46		0.00		3.68		4.12		0.00	9	113	2.9
	Avg.		65.37		0.60		4.01		4.51		0.00	38	132	6.8
August	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	47	151	
	Min.		0.00		0.00		0.00		0.00		0.00	8	124	
	Avg.		0.00		0.00		0.00		0.00		0.00	15	134	
September	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	23	141	
	Min.		0.00		0.00		0.00		0.00		0.00	8	110	
	Avg.		0.00		0.00		0.00		0.00		0.00	12	132	
October	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	66	141	
	Min.		0.00		0.00		0.00		0.00		0.00	17	91	
	Avg.		0.00		0.00		0.00		0.00		0.00	41	103	
November	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	100	114	
	Min.		0.00		0.00		0.00		0.00		0.00	33	96	
	Avg.		0.00		0.00		0.00		0.00		0.00	57	106	
December	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	280	120	
	Min.		0.00		0.00		0.00		0.00		0.00	30	84	
	Avg.		0.00		0.00		0.00		0.00		0.00	72	110	
Total		13,701.99		113,250		448,286		502,994		0				
General	Max.	2,143.41	81.50	17,132	1.57	77,551	4.58	86,839	5.16	0	0.00	312	155	33.6
	Min.	0.00	60.00	0	0.00	0	0.00	0	0.00	0	0.00	8	79	1.5
	Avg.	1,905.43	69.28	14,276	0.85	62,726	3.84	70,544	4.30	0	0.00	62	111	4.9

TABLE IV-B

PRINCIPLE RESULTS OF OPERATION OF THE G4 CONVENTIONAL UNIT AT THE CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING:  
December 31, 2002

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Month		Total Million Gallons of Water Treated During Month	Amount of Water Treated Million Gallons Per 24 Hours	Total pounds of Polymer used at Intake	Polymer at Intake Parts Per Million	Total Pounds of Polymer used in Plant	Polymer in Plant Parts Per Million	Total Pounds of Pure Iron (Fe) During Month	Pure Iron (Fe) Parts Per Million	Total Pounds of Lime During Month	Lime Parts Per Million	NTU Turbidity of River Water	PPM Alkalinity of River Water	NTU Turbidity of Unit Effluent
January	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	260	155	
	Min.													
	Avg.													
February	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	312	119	
	Min.													
	Avg.													
March	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	134	94	
	Min.													
	Avg.													
April	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	213	128	
	Min.													
	Avg.													
May	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	32	91	
	Min.													
	Avg.													
June	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	140	105	
	Min.													
	Avg.													
July	Max.	1,019.44	91.00	7,341	1.12	20,442	4.02	22,895	4.55	0	0.00	133	146	10.0
	Min.		63.42		0.47		1.29		1.48		0.00		9	1.8
	Avg.		72.23		0.93		2.59		2.91		0.00	38	132	3.6
August	Max.	2,054.52	76.42	12,750	1.14	25,311	1.54	28,710	1.74	0	0.00	47	151	6.6
	Min.		59.75		0.47		1.41		1.60		0.00	8	124	2.0
	Avg.		66.75		0.55		1.47		1.67		0.00	15	134	4.0
September	Max.	1,816.00	71.71	7,995	1.09	22,250	1.60	25,197	1.82	0	0.00	23	141	7.3
	Min.		52.75		0.37		1.39		1.56		0.00	8	110	2.3
	Avg.		60.53		0.53		1.47		1.66		0.00	12	132	3.8
October	Max.	1,803.46	68.88	8,479	0.68	29,492	2.73	33,629	3.41	0	0.00	66	141	8.8
	Min.		55.00		0.00		1.88		2.12		0.00	17	91	2.8
	Avg.		61.32		0.56		2.26		2.59		0.00	41	103	5.2
November	Max.	1,880.76	71.58	8,774	0.63	52,952	3.57	58,569	4.02	0	0.00	100	114	11.6
	Min.		57.87		0.47		2.38		2.57		0.00	33	96	2.6
	Avg.		62.69		0.56		3.37		3.74		0.00	57	106	5.4
December	Max.	2,209.29	95.67	13,409	0.99	64,521	4.32	72,412	4.84	0	0.00	280	120	14.9
	Min.		60.87		0.74		3.04		3.41		0.00	30	84	3.5
	Avg.		86.17		0.89		3.57		4.00		0.00	72	110	7.9
Total	Max.	10,783.47	58,748	58,748	1.14	214,969	4.32	241,412	4.84	0	0.00	312	155	14.9
	Min.	2,209.29	95.67	13,409	0.47	64,521	0.00	72,412	0.00	0	0.00	8	79	1.8
	Avg.	1,952.81	67.51	10,281	0.66	38,905	2.41	43,703	2.74	0	0.00	62	111	5.1

TABLE IV-C

PRINCIPLE RESULTS OF OPERATION OF THE L3 CONVENTIONAL UNIT AT THE CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING:  
December 31, 2002

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Month	Max. Min. Avg.	Total Million Gallons of Water Treated During Month	Amount of Water Treated Million Gallons Per 24 Hours	Total pounds of Polymer used at Intake	Polymer at Intake Parts Per Million	Total Pounds of Polymer used in Plant	Polymer in Plant Parts Per Million	Total Pounds of Pure Iron (Fe) used During Month	Pure Iron (Fe) Parts Per Million	Total Pounds of Lime During Month	Lime Parts Per Million	NTU Turbidity of River Water	PPM Alkalinity of River Water	NTU Turbidity of Unit Effluent
January	50.00 37.96 40.98	1,270.31	50.00 37.96 40.98	15,793	1.68 1.00 1.50	0	0.00	103,159	4.89 9.78	1,318,957	165.85 94.30 125.43	260	155	34.4 82 16.7
February	40.00 37.71 39.60	1,108.87	40.00 37.71 39.60	9,424	1.10 0.70 1.02	0	0.00	75,917	10.14 6.02 8.21	1,013,239	162.42 81.17 109.64	312	119	25.6 6.0 13.7
March	42.50 35.83 39.76	1,232.46	42.50 35.83 39.76	9,806	0.70 0.95	0	0.00	64,835	6.51 5.84 6.31	1,291,523	146.27 103.88 125.83	134	128	26.0 91 15.1
April	45.54 35.92 40.63	1,218.97	45.54 35.92 40.63	9,221	1.02 0.80 0.91	0	0.00	63,790	6.44 5.96 11.73	1,136,850	150.67 91.68 111.73	140	105	16.7 3.9 10.1
May	48.21 33.38 41.27	1,234.60	48.21 33.38 41.27	8,424	1.10 0.00 0.82	0	0.00	63,587	6.65 5.08 6.14	1,300,834	158.26 104.65 126.06	138	119	13.2 2.5 5.5
June	51.00 31.29 40.75	1,222.63	51.00 31.29 40.75	9,032	1.18 0.67 0.90	0	0.00	62,756	6.70 5.31 6.16	1,297,634	166.39 101.05 129.04	34	107	3.7 1.2 3.7
July	51.00 36.83 44.83	1,338.78	51.00 36.83 44.83	7,321	1.03 0.00 0.66	0	0.00	61,099	6.46 2.38 5.36	1,480,217	177.30 91.54 132.21	133	9	11.7 0.8 2.7
August	51.00 29.75 43.34	1,300.18	51.00 29.75 43.34	7,298	1.26 0.41 0.68	0	0.00	26,793	2.58 2.27 2.47	1,412,211	175.12 112.74 132.10	47	151	9.8 1.1 3.0
September	50.38 35.04 42.41	1,272.17	50.38 35.04 42.41	4,477	0.57 0.33 0.43	0	0.00	26,213	2.59 2.19 2.47	1,299,250	144.42 99.91 123.30	23	141	12.1 1.1 3.1
October	50.55 35.13 42.76	1,282.77	50.55 35.13 42.76	4,854	0.64 0.00 0.45	0	0.00	45,488	7.54 2.06 4.25	1,137,423	144.93 64.31 107.91	66	91	8.2 1.8 4.5
November	45.22 27.25 37.94	1,138.18	45.22 27.25 37.94	5,016	0.71 0.44 0.54	0	0.00	70,142	8.24 5.76 7.40	1,149,458	162.24 90.23 122.86	100	114	18.3 2.4 8.5
December	46.75 22.58 33.32	999.67	46.75 22.58 33.32	7,665	2.01 0.42 0.97	0	0.00	58,804	7.74 4.98 7.05	1,008,570	167.76 86.51 121.32	280	120	49.5 2.2 13.6
Total	14,619.57 1,338.78 999.67 1,218.30	14,619.57 1,338.78 999.67 1,218.30	98.331 51.00 22.58 40.51	98,331 15,793 4,477 8,194	2.01 0.00 0.00 0.81	0	0.00	722,582 103,159 26,213 60,215	10.22 4.89 2.06 5.73	14,846,166 1,480,217 1,008,570 1,237,181	177.30 94.30 64.31 125.31	312	155	49.5 8.3 8.3
General	Max. Min. Avg.	1,218.30	40.51	8,194	0.81	0	0.00	60,215	5.73	1,237,181	125.31	62	111	8.3



TABLE IV-D

PRINCIPLE RESULTS OF OPERATION OF THE L4 CONVENTIONAL UNIT AT THE CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING:  
December 31, 2002

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Month		Total Million Gallons of Water Treated During Month	Amount of Water Treated Million Gallons Per 24 Hours	Total pounds of Polymer used at Intake	Polymer at Intake Parts Per Million	Total Pounds of Polymer used in Plant	Polymer in Plant Parts Per Million	Total Pounds of Pure Iron (Fe) used During Month	Pure Iron (Fe) Parts Per Million	Total Pounds of Lime During Month	Lime Parts Per Million	NTU Turbidity of River Water	PPM Alkalinity of River Water	NTU Turbidity of Effluent
January	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	260	155	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	29	82	
February	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	312	119	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	65	79	
March	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	134	94	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	213	128	
April	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	32	91	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	84	112	
May	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	140	105	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	33	81	
June	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	73	91	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	160	114	
July	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	35	94	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	84	101	
August	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	138	119	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	38	132	
September	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	47	151	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	124	
October	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	15	134	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	23	141	
November	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12	132	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	66	141	
December	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	17	91	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	41	103	
Total	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	100	114	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	33	96	
General	Max.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	57	106	
	Min.													
	Avg.	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	280	120	

TABLE IV-E

MONTHLY SUMMARY OF COMBINED OPERATION OF CONVENTIONAL UNITS AT THE CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING:  
December 31, 2002

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
																	Total M.G.	Estimated High Lift Pumpage
January	Max.		128.67	43,389	71,933	26,648	1.02	182,889	1,318,957	176,597	6.15		1.28		0.55	103	142.30	
	Min.	3,526.60	106.71				0.71				5.88	35,488	1.19	15,841	0.52	65	3,952.38	118.63
	Avg.		113.76				0.81				6.00		1.21		0.53	78		127.50
February	Max.		115.00	25,880	57,179	23,312	1.38	139,715	1,013,239	144,513	6.04	29,004	1.07	13,409	0.55	98	133.46	
	Min.	3,023.21	102.50				0.76				5.26		1.15		0.51	55	3,394.59	115.21
	Avg.		107.97				0.91				5.73		1.15		0.53	74		121.24
March	Max.		115.13	26,938	69,181	25,327	1.01	143,040	1,291,523	153,593	5.57	30,787	1.12	14,842	0.54	101	131.46	
	Min.	3,362.34	102.08				0.79				5.26		1.05		0.50	67	3,803.88	113.79
	Avg.		108.46				0.89				5.48		1.10		0.53	85		122.71
April	Max.		115.00	25,333	67,021	23,748	0.88	139,202	1,136,850	148,143	5.54	29,689	1.11	14,337	0.55	86	128.08	
	Min.	3,246.61	102.50				0.73				5.23		1.07		0.50	58	3,582.01	110.92
	Avg.		108.22				0.80				5.46		1.10		0.53	69		119.40
May	Max.		123.13	23,141	68,803	24,230	0.88	141,392	1,300,834	151,579	5.57	30,567	1.41	14,869	0.56	100	132.08	
	Min.	3,335.98	99.50				0.71				5.04		1.01		0.50	66	3,641.54	110.63
	Avg.		110.82				0.80				5.45		1.11		0.53	77		121.04
June	Max.		123.04	24,820	77,551	24,594	0.83	149,595	1,297,634	159,251	6.05	32,036	1.21	14,901	0.54	99	139.29	
	Min.	3,353.01	95.63				0.69				5.44		1.09		0.51	72	3,784.58	113.50
	Avg.		111.77				0.78				5.70		1.15		0.53	82		126.15
July	Max.		119.33	20,111	57,060	25,697	0.84	125,199	1,480,217	175,110	7.16	35,241	1.48	14,959	0.56	136	139.21	
	Min.	3,363.08	103.96				0.70				5.90		1.18		0.50	74	3,978.33	125.50
	Avg.		112.19				0.77				6.26		1.26		0.53	97		132.41
August	Max.		125.96	20,048	25,311	25,618	0.86	55,503	1,412,211	195,319	7.11	39,046	1.43	14,959	0.55	121	135.08	
	Min.	3,349.75	97.96				0.73				6.89		1.38		0.52	88	3,903.38	122.92
	Avg.		111.66				0.79				6.99		1.40		0.54	102		130.11
September	Max.		115.58	12,472	22,250	21,754	0.78	51,410	1,299,250	179,373	7.10	35,900	1.42	13,803	0.56	122	135.08	
	Min.	3,078.58	90.42				0.66				6.79		1.38		0.48	86	3,695.00	111.67
	Avg.		102.62				0.71				6.99		1.40		0.54	98		123.17
October	Max.		112.29	13,333	29,492	21,191	0.76	79,117	1,137,423	179,444	7.15	35,893	1.43	13,981	0.56	111	126.33	
	Min.	3,074.13	94.88				0.61				6.88		1.37		0.52	69	3,628.83	112.46
	Avg.		102.47				0.70				7.00		1.40		0.55	82		120.96
November	Max.		111.00	13,790	52,952	20,395	0.76	128,711	1,149,458	173,577	7.08	34,745	1.42	13,537	0.56	94	121.88	
	Min.	3,008.17	90.33				0.63				6.47		1.29		0.53	72	3,477.38	109.46
	Avg.		100.21				0.70				6.92		1.39		0.54	80		115.91
December	Max.		127.58	21,074	64,521	19,693	0.75	131,216	1,008,570	163,077	6.63	32,608	1.33	14,412	0.56	141	123.42	
	Min.	3,202.04	87.00				0.66				5.47		1.09		0.53	75	3,354.67	101.17
	Avg.		106.73				0.70				6.15		1.23		0.54	94		111.82
Total				270,329	663,255	282,207		1,466,988	14,846,166	1,999,576		401,002		173,450			44,196.6	
General	Max.		128.67	43,389	71,933	26,648	1.38	182,889	1,480,217	195,319	7.16	39,046	1.48	15,641	0.56	141	3,978.33	142.30
	Min.	3,526.60	90.33				0.61				5.04		1.01		0.48	55	3,354.67	101.17
	Avg.		106.63				0.87				6.16		1.24		0.53	85		121.09

TABLE V

PRINCIPLE RESULTS OF OPERATION OF THE ALGIERS WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2002

1 Month	2 Max. Min. Avg.	3 Low Lift Total Million Gallons of Water Treated During Month	4 Amount of Water Treated Million Gallons Per 24 Hours	5 Total Pounds of Polyelec- trolyte Used During Month	6 Polyelec- trolyte Parts Per Million	7 Total Fluoride Pounds (100%) Used During Month	8 Fluoride Parts Per Million	9 Total Pounds of Pure Iron (Fe) used During Month	10 Pure Iron (Fe) Parts Per Million	11 Total Pounds of Lime Used During Month	12 Lime Parts Per Million	13 Total Pounds of Anhydrous Ammonia Used During Month	14 Total Pounds of Anhydrous Ammonia Parts Per Million	15 Total Pounds Chlorine Used During Month	16 Chlorine Parts Per Million	17 Calgon Total Pounds Polyphos- phate Used During Month	18 Calgon Polyphos- phate Parts Per Million	19 NTU Turbidity of Clarifier Effluent	20 PPM Clear Well Alkalinity of Filter Effluent	21 High Lift Pumpage	
																				Total M.G.D.	M.G.D.
January	Max. 9.02 Min. 8.00 Avg. 8.95	308.44	12.25 8.00 9.95	9,471	3.89 3.13 3.68	2,056	1.11 0.73 0.80	15,949	8.41 4.71 6.46	80,969	22.56 31.72	2,721	1.29 0.85 1.06	15,038	4.82 5.88	1,420	0.80 0.33 0.58	2.0 0.8 1.2	102 77 90	303.86	10.86 9.02 9.80
February	Max. 9.30 Min. 8.00 Avg. 8.33	261.32	12.00 8.00 9.33	8,252	3.89 3.68 3.79	1,804	1.05 0.61 0.84	15,603	8.38 5.60 7.23	50,442	35.60 14.99 23.23	2,164	1.14 0.90 1.01	12,239	6.31 4.80 5.45	983	0.60 0.34 0.46	1.1 0.5 0.7	102 78 89	257.74	8.30 9.90 9.21
March	Max. 9.44 Min. 8.00 Avg. 8.77	292.53	11.00 8.00 9.44	9,265	3.96 3.76 3.80	1,627	0.81 0.55 0.67	17,307	7.91 6.25 7.12	63,343	30.75 20.14 26.10	2,453	1.16 0.90 1.01	13,555	6.38 4.80 5.58	1,358	0.89 0.34 0.56	1.3 0.8 1.0	116 78 99	285.99	8.77 9.18 9.90
April	Max. 9.72 Min. 8.00 Avg. 8.86	292.62	11.00 8.00 9.72	9,229	3.82 3.75 3.79	1,497	0.75 0.55 0.62	17,354	8.39 6.09 7.17	61,841	35.11 19.72 24.17	2,656	1.25 1.00 1.10	14,745	6.90 5.55 6.08	1,040	0.66 0.34 0.43	1.2 0.3 0.6	91 69 81	297.13	11.01 9.18 9.90
May	Max. 10.62 Min. 8.00 Avg. 9.31	329.20	14.00 10.62 9.31	10,752	3.85 3.79 3.81	1,686	0.71 0.51 0.60	17,975	6.82 4.93 6.40	103,153	40.00 31.57 36.64	3,138	1.22 1.02 1.12	17,368	6.69 5.70 6.17	1,610	1.11 0.44 0.57	1.8 0.5 1.1	92 78 111	346.39	12.83 9.81 11.17
June	Max. 10.38 Min. 8.00 Avg. 9.58	311.36	13.58 8.00 10.38	9,741	3.85 3.28 3.75	1,721	0.91 0.56 0.67	17,040	8.02 4.72 6.63	114,508	58.99 21.34 44.34	3,067	1.37 1.04 1.19	16,855	7.30 5.81 6.52	1,600	1.13 0.44 0.65	1.4 0.5 0.8	94 66 79	325.02	11.90 9.95 10.83
July	Max. 10.20 Min. 8.00 Avg. 9.53	316.23	11.66 8.00 10.20	10,503	4.36 3.79 3.99	1,729	0.88 0.48 0.66	17,974	7.84 5.88 6.84	166,857	87.88 34.94 63.04	3,301	1.55 1.02 1.25	19,579	8.93 6.24 7.42	1,750	0.90 0.53 0.67	0.9 0.8 3.3	87 46 69	324.60	12.55 8.10 10.47
August	Max. 12.08 Min. 8.00 Avg. 9.58	296.90	12.08 6.66 9.58	11,398	5.15 4.35 4.61	1,795	0.90 0.54 0.73	18,181	10.48 5.78 7.43	148,882	163.90 24.82 64.01	3,261	1.81 1.19 1.32	18,160	9.17 5.92 7.36	1,450	0.92 0.33 0.60	4.7 1.7 2.4	100 61 79	328.90	11.70 9.80 10.61
September	Max. 9.45 Min. 8.00 Avg. 8.66	283.56	12.00 7.50 9.45	11,214	5.63 4.23 4.61	1,610	0.83 0.50 0.69	16,142	8.52 4.75 6.89	126,300	69.95 45.04 53.20	3,387	1.81 0.91 1.44	18,300	9.48 6.60 7.75	1,400	0.94 0.56 0.60	5.0 2.3 3.4	96 73 84	308.27	11.47 8.82 10.28
October	Max. 9.47 Min. 8.00 Avg. 8.79	293.42	13.08 8.00 9.47	11,156	4.66 4.10 4.55	1,545	0.79 0.41 0.64	17,759	6.50 5.64 7.32	98,503	65.11 29.91 40.48	3,028	1.72 1.09 1.26	18,194	9.35 6.60 7.39	1,600	0.95 0.46 0.66	6.7 1.8 2.9	92 74 84	323.27	11.20 9.78 10.48
November	Max. 9.80 Min. 8.00 Avg. 8.90	288.04	11.50 8.00 9.80	11,009	4.79 4.52 4.58	1,422	0.71 0.47 0.60	16,947	8.60 5.98 7.13	70,703	38.94 24.93 30.01	2,764	1.44 1.02 1.16	16,761	8.63 6.08 7.02	825	0.75 0.30 0.43	4.0 1.8 2.5	110 88 100	281.39	10.36 8.47 9.38
December	Max. 9.80 Min. 8.00 Avg. 8.90	303.82	12.00 8.00 9.80	11,616	6.73 4.43 4.65	1,467	0.82 0.46 0.59	16,999	8.33 5.39 6.81	84,205	40.49 20.15 33.46	2,659	1.17 0.91 1.05	15,912	7.07 4.17 6.29	1,141	0.94 0.29 0.46	5.0 1.0 1.9	102 83 92	299.27	10.47 7.83 9.65
Total		3,577.44		123,606		19,959		205,230		1,169,706		34,519		196,706		16,187				3,681.83	
General	Max. 10.08 Min. 8.00 Avg. 8.85	329.20	14.00 6.66 9.80	116,116	6.73 4.10 4.55	2,056	1.11 0.41 0.67	181,811	10.48 4.71 6.88	1,668,571	163.90 14.99 39.20	3,387	1.81 0.85 1.16	19,579	9.48 4.17 6.59	1,750	1.13 0.29 0.54	9.6 0.3 2.2	116 46 85	346.39	12.83 7.83 10.08

TABLE VI-A

MONTHLY SUMMARY OF NEW ORLEANS FILTER OPERATIONS FOR THE YEAR ENDING: December 31, 2002

1 Month	2 Total Million Gallons Water Filtered During Month		3 Total Number of Runs		4 Length of Runs in Hours		5 Million Gallons of Water Filtered Per Run		6 Million Gallons Per Day Per Filter		7 Total Amount in Million Gallons of Wash Water Used		8 Million Gallons of Wash Water Used Per Run		9 Percentage of wash Water Used Per Run		10 Million Gallons Filtered Per Acre Per Day	
	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
January	Max. 1,926.553	2,024.385	146	82	197	189	21,000	49,974	2,262	3,898	52,102	54,600	0.357	0.650	7.79	13.00	68,855	64,685
	Min. 1,764.152	1,678.504	122	68	140	152	4,583	4,987	2,280	4,421	40,264	44,200	0.327	0.650	1.70	2.63	69,403	73,362
	Avg. 1,862.668	1,874.052	124	72	151	134	13,196	24,686	2,341	4,662	41,024	48,000	0.266	0.649	3.83	8.40	71,260	77,361
February	Max. 1,709.705	1,893.238	121	68	157	136	26,250	52,446	2,160	4,913	40,267	44,000	0.333	0.647	1.22	1.50	65,750	81,526
	Min. 1,774.457	1,948.468	125	64	153	154	8,545	7,738	2,228	4,745	42,675	43,200	0.341	0.675	10.51	4.79	67,820	78,739
	Avg. 1,798.677	2,234.710	123	78	160	153	14,343	24,684	2,193	4,494	42,532	53,100	0.346	0.681	2.36	2.32	66,755	74,575
March	Max. 1,854.101	2,179.779	126	74	192	236	21,834	44,649	2,293	4,842	44,642	52,600	0.354	0.692	5.38	11.92	69,799	80,348
	Min. 1,821.991	2,187.563	124	74	154	146	3,834	7,517	2,260	4,762	44,599	53,380	0.360	0.702	2.41	2.35	68,794	79,021
	Avg. 1,647.990	2,032.530	122	72	166	149	14,196	30,445	2,147	4,517	43,140	53,660	0.354	0.706	9.19	8.47	65,955	74,955
April	Max. 1,673.889	2,070.776	119	76	214	237	23,625	42,681	2,046	4,448	43,678	59,400	0.367	0.691	5.93	6.22	62,280	73,810
	Min. 1,593.562	1,854.668	121	68	165	147	29,000	45,463	2,066	4,169	40,928	47,900	0.338	0.665	2.62	2.50	62,889	69,180
	Avg. 1,523.289	1,864.849	109	62	182	204	3,583	3,938	2,058	4,127	40,680	44,560	0.373	0.675	1.47	1.47	62,645	68,483
May	Max. 20,951.034	23,843.522	1,482	858	5,213	5,024	524,596	1,003,129	26,334	53,998	516,531	598,600	4.116	8.083	129.65	182.10	801,605	896,045
	Min. 1,926.553	2,234.710	146	82	247	335	29,000	56,960	2,341	4,913	52,102	59,400	0.373	0.706	10.51	22.93	71,260	81,526
	Avg. 1,523.289	1,678.504	109	62	32	9	3,167	2,900	2,046	3,898	40,264	43,200	0.266	0.647	1.22	1.20	62,280	64,685
June	Max. 1,749.920	1,986.960	124	72	155	149	14,196	27,907	2,195	4,500	43,044	49,883	0.343	0.674	2.43	2.42	66,900	74,670
	Min.																	
	Avg.																	

TABLE VI-B

MONTHLY SUMMARY OF ALGIERS FILTER OPERATIONS FOR THE YEAR ENDING: December 31, 2002

1	2	3	4	5	6	7	8	9	10			
Month	Total Million Gallons Water Filtered During Month of Runs	Total Number of Runs	Length of Runs in Hours	Million Gallons of Water Filtered Per Run	Million Gallons Per Day Per Filter	Total Amount in Million Gallons of Wash Water Used	Million Gallons of Wash Water Used Per Run	Percentage of Wash Water Used Per Run				
January	Max.	280.400	48	213	9,692	0.75	9.050	0.188	5.98			
	Min.									164	3,150	1.94
	Avg.									171	5,841	3.23
February	Max.	261.259	48	174	9,083	0.78	9.290	0.194	9.38			
	Min.									163	2,063	2.13
	Avg.									167	5,443	3.56
March	Max.	279.301	51	171	11,234	0.75	9.440	0.185	6.73			
	Min.									163	2,750	1.65
	Avg.									167	5,476	3.38
April	Max.	303.453	54	169	9,859	0.84	9.850	0.182	5.37			
	Min.									164	3,396	1.85
	Avg.									167	5,620	3.25
May	Max.	336.989	54	171	7,750	0.91	10.000	0.185	5.35			
	Min.									163	3,459	2.39
	Avg.									167	6,240	2.97
June	Max.	292.166	48	164	7,959	0.81	8.090	0.168	3.85			
	Min.									171	4,376	2.10
	Avg.									167	6,087	2.77
July	Max.	337.106	57	171	7,375	0.91	10.610	0.186	4.03			
	Min.									163	4,625	2.52
	Avg.									167	5,914	3.15
August	Max.	285.084	51	171	6,396	0.77	9.030	0.177	4.25			
	Min.									150	4,170	2.77
	Avg.									157	5,589	3.17
September	Max.	279.966	51	171	6,895	0.78	8.590	0.168	3.71			
	Min.									163	3,688	2.57
	Avg.									167	5,489	3.07
October	Max.	300.667	55	175	7,209	0.81	10.270	0.186	5.06			
	Min.									143	3,479	2.71
	Avg.									167	5,466	3.41
November	Max.	279.131	50	193	7,167	0.78	9.260	0.185	5.32			
	Min.									148	3,730	2.57
	Avg.									155	5,582	3.31
December	Max.	306.841	54	190	7,167	0.82	9.680	0.179	4.81			
	Min.									143	3,730	2.50
	Avg.									167	5,682	3.16
Total	3,542.36	621				9.71	113.160	2.183				
General	Max.	337.106	57	213	11,234	0.91	10.610	0.194	9.38			
	Min.									143	2,063	1.65
	Avg.									167	5,801	3.61

TABLE VII  
FIVE YEAR ANALYSIS COMPOSITE DATA (1998-2002) FOR NEW ORLEANS  
DRINKING WATER PURIFICATION SYSTEM

PARAMETER	MISSISSIPPI RIVER (Before Purification)			FINISHED WATER (After Purification)		
	MAX	MIN	AVG	MAX	MIN	AVG
Total Alkalinity (ppm as CaCO <sub>3</sub> )	172	78	119	136	60	92
Total Hardness (ppm as CaCO <sub>3</sub> )	221	103	158	192	107	145
Noncarbonate Hardness (ppm as CaCO <sub>3</sub> )	72	11	39	90	26	53
Calcium Hardness (ppm as CaCO <sub>3</sub> )	153	71	108	138	73	107
Magnesium Hardness (ppm as CaCO <sub>3</sub> )	98	8	49	90	11	38
Nephelometric Turbidity (N.T.U.)	312	5	72	0.49	0.07	0.15
Jackson Turbidity (J.T.U.)	410	25	109			
pH	8.59	7.01	7.94	9.81	7.96	8.91
Chloride (ppm)	59	16	34	54	21	34
Fluoride (ppm)	0.48	0.11	0.25	1.35	0.26	0.97
Total Dissolved Solids (ppm)	401	95	243	351	96	229
Total Suspended Solids (ppm)	312	39	123			
Free Chlorine Residual (ppm as CL <sub>2</sub> )				0.75	0.00	0.13
Total Chlorine Residual (ppm as CL <sub>2</sub> )				4.64	0.12	3.11
Ammonia (ppm as N)				1.20	0.02	0.19
Ortho Phosphate (ppm as PO <sub>4</sub> )	0.46	0.08	0.26	0.39	0.06	0.23
Total Phosphate (ppm as PO <sub>4</sub> )	0.56	0.22	0.36	0.62	0.24	0.40
Sulfate (ppm as SO <sub>4</sub> )	50.2	26.5	37.1	49.8	27.1	36.8
Silica (ppm as SiO <sub>2</sub> )	8.2	2.6	5.7	5.6	4.1	4.8
Nitrate (ppm as N)	3.76	0.29	1.52	3.09	0.30	1.49
Nitrite (ppm as N)	0.21	0.00	0.03	0.91	0.00	0.05
Color (Scale Units)	25	10	18	20	5	12
Conductivity (umhos/cm)	573	179	355	537	194	347
Temperature (Deg. F.)	89	36	66	92	50	73
Aluminum (ppb)	182	0	24	63	0	6
Antimony (ppb)	1.2	0.0	0.2	0.4	0.0	0.1
Arsenic (ppb)	5.1	0.0	1.4	4.8	0.0	0.7
Barium (ppb)	201	7	53	126	7	39
Beryllium (ppb)	0.0	0.0	0.0	0.1	0.0	0.0
Cadmium (ppb)	5.4	0.0	0.0	0.7	0.0	0.0
Chromium (ppb)	11	0.0	0.7	8.0	0.0	0.8
Copper (ppb)	29	0.0	3.1	198	0.0	13.7
Iron (ppb)	216	0.0	22.4	100	0.0	13.7
Lead (ppb)	1.5	0.0	0.1	2.8	0.0	0.2
Manganese (ppb)	21	0.0	1.8	15.0	0	2.5
Mercury (ppb)	0.1	0.0	0.0	0.6	0.0	0.0
Nickel (ppb)	6.6	0.1	3.1	10	0.0	2.4
Selenium (ppb)	3.3	0.0	0.7	3.1	0.0	0.7
Silver (ppb)	0.4	0.0	0.0	0.2	0.0	0.0
Zinc (ppb)	46	0.0	3.1	162	0.0	4.4
Potassium (ppm)	13.4	1.9	4.0	8.8	1.2	3.8
Sodium (ppm)	55.5	8.5	27.9	55	9.1	25.8
Thallium (ppb)	0.1	0.0	0.0	0.2	0.0	0.0
Total Trihalomethanes (ppb)	0.3	0.0	0.0	53.2	6.0	21.0
Total Organic Carbon (ppm)	8.3	2.7	4.7	3.9	1.6	3.0
1, 2-Dichloroethane (ppb)	38.0	0.0	0.1	2.4	0.0	0.0
Chloroform (ppb)	0.2	0.0	0.0	42.9	5.7	14.6
Carbon Tetrachloride (ppb)	0.1	0.0	0.0	1.0	0.0	0.0
Bromodichloromethane (ppb)	0.1	0.0	0.0	11.0	0.2	5.1
Tetrachloroethene (ppb)	1.1	0.0	0.0	0.2	0.0	0.0
BTX (Benzene, Toluene & Xylenes) (ppb)	11.4	0.0	0.0	2.4	0.0	0.0
Total Coliforms (colonies/100 ml)	13600	100	1189	12	0	0
Heterotrophic Plate Count (CFU's/ 1.0ml)	34000	1200	4880	320	0	3
Fecal coliforms (colonies/100 ml)	1630	0	139	100	0	0

## TABLE VIII

### CARROLLTON OPERATION

CHEMICAL	CHEMICAL COST	CHEMICAL COST PER MILLION GALLONS
Lime	\$530,156.59	\$13.62
Ferric Coagulant	\$516,233.19	\$13.26
Chlorine	\$352,925.22	\$9.07
Sodium Polyphosphate	\$34,516.50	\$0.89
Polyelectrolyte	\$149,373.44	\$3.84
Fluoride (100%)	\$79,751.77	\$2.05
Ammonia	\$60,070.13	\$1.54
Carbon	\$0.00	\$0.00
<b>TOTAL CHEMICALS</b>	<b>\$1,723,026.83</b>	<b>\$44.27</b>

Purification Plant Operating Cost: \$4,793,704.00  
 Total Water TREATED 2002: 38,921,502,762 Gallons

### TOTAL COST PER MILLION GALLONS

YEAR	TOTAL WATER TREATED MILLION GALLONS	OPERATING COST	COST PER MILLION GALLONS
2002	38,921.50	\$4,793,704.00	\$123.16
2001	41,493.67	\$4,727,852.00	\$113.94
2000	46,758.31	\$4,627,313.00	\$98.96
1999	46,302.82	\$5,010,887.00	\$108.22
1998	46,987.48	\$4,960,716.00	\$105.58

- NOTE: (1) Operating costs since 1996 include Pension, FICA and FICA-MED which were charged in previous years to payroll related groups.  
 (2) Beginning with the 2002 report, operating costs include the costs of the Purification Superintendent's office and the costs of the Laboratory. These costs are prorated between the Carrollton and Algiers Water Plants.

**TABLE IX**  
**ALGIERS OPERATION**

CHEMICAL	CHEMICAL COST	CHEMICAL COST PER MILLION GALLONS
Lime	\$60,590.78	\$16.94
Ferric Coagulant	\$72,220.43	\$20.19
Chlorine	\$22,870.50	\$6.39
Sodium Polyphosphate	\$8,286.90	\$2.32
Polyelectrolyte	\$23,855.97	\$6.67
Fluoride (100%)	\$5,239.25	\$1.46
Ammonia	\$6,916.88	\$1.93
Carbon	\$0.00	\$0.00
<b>TOTAL CHEMICALS</b>	<b>\$199,980.71</b>	<b>\$55.90</b>

Purification Plant Operating Cost: \$1,189,556.00  
 Total Water TREATED 2002: 3,577,440,000 Gallons

**TOTAL COST  
PER MILLION GALLONS**

YEAR	TOTAL WATER TREATED MILLION GALLONS	OPERATING COST	COST PER MILLION GALLONS
2002	3,577.44	\$1,189,556.00	\$332.52
2001	3,839.54	\$1,284,487.00	\$334.54
2000	4,425.96	\$1,362,279.00	\$307.79
1999	5,971.82	\$1,373,072.00	\$229.93
1998	4,402.11	\$1,340,745.00	\$304.57

NOTE: (1) Operating costs since 1996 include Pension, FICA and FICA-MED which were charged in previous years to payroll related groups.  
 (2) Beginning with the 2002 report, operating costs include the costs of the Purification Superintendent's office and the costs of the Laboratory. These costs are prorated between the Carrollton and Algiers Water Plants.



### TABLE X

#### SLUDGE REMOVED FROM THE "G" BASINS PRIMARY TREATMENT UNITS DOOR MONORAKE CONVENTIONAL SYSTEM 2002

Total Million Gallons Water Treated	24,485.45
Total Tons Dry Sludge Deposited in Basins Including suspended and Dissolved Solids Removed and Reacting Chemicals	20,630
Total Million Gallons Wet Sludge Withdrawn from Basins	966.09
Average Percent solids in Wet Sludge	0.51
Total Million Gallons Water Used in withdrawing Sludge	964.03
Percent of Total Water Treated Used in Withdrawing Wet Sludge	3.95

### TABLE X-A

#### SLUDGE REMOVED FROM THE "L" BASINS PRIMARY TREATMENT UNITS DOOR MONORAKE CONVENTIONAL SYSTEM 2002

Total Million Gallons Water Treated	14,619.57
Total Tons Dry Sludge Deposited in Basins Including suspended and Dissolved Solids Removed and Reacting Chemicals	26,228
Total Million Gallons Wet Sludge Withdrawn from Basins	343.16
Average Percent solids in Wet Sludge	1.80
Total Million Gallons Water Used in withdrawing Sludge	340.54
Percent of Total Water Treated Used in Withdrawing Wet Sludge	2.35

TABLE XI  
2002 ANALYSIS DATA FOR NEW ORLEANS DRINKING WATER PURIFICATION SYSTEM

PARAMETER	MISSISSIPPI RIVER (Before Purification)			FINISHED WATER (After Purification)		
	MAX	MIN	AVG	MAX	MIN	AVG
Total Alkalinity (ppm as CaCO3)	155	79	111	126	62	85
Total Hardness (ppm as CaCO3)	187	108	144	165	111	134
Noncarbonate Hardness (ppm as CaCO3)	66	11	34	72	26	50
Calcium Hardness (ppm as CaCO3)	130	72	99	126	73	99
Magnesium Hardness (ppm as CaCO3)	72	9	45	63	11	35
Nephelometric Turbidity (N.T.U.)	312	8	62	0.49	0.09	0.17
Jackson Turbidity (J.T.U.)	370	25	97	—	—	—
pH	8.24	7.01	7.85	9.57	7.96	8.88
Chloride (ppm)	43	16	29	45	21	30
Fluoride (ppm)	0.38	0.13	0.22	1.25	0.73	0.94
Total Dissolved Solids (ppm)	315	114	236	274	105	208
Total Suspended Solids (ppm)	140	39	93	—	—	—
Free Chlorine Residual (ppm as CL2)	—	—	—	0.68	0.00	0.12
Total Chlorine Residual (ppm as CL2)	—	—	—	4.31	0.42	2.97
Ammonia (ppm as N)	—	—	—	0.80	0.05	0.19
Ortho Phosphate (ppm as PO4)	0.32	0.20	0.25	0.36	0.14	0.21
Total Phosphate (ppm as PO4)	0.43	0.22	0.28	0.47	0.24	0.31
Sulfate (ppm as SO4)	38.8	29.3	34.0	39.1	29.0	33.5
Silica (ppm as SiO2)	7.2	4.8	5.7	5.2	4.2	4.8
Nitrate (ppm as N)	1.49	1.19	1.31	1.46	0.30	1.35
Nitrite (ppm as N)	0.10	0.05	0.08	0.08	0.05	0.07
Color (Scale Units)	20	10	15	15	10	12
Conductivity (umhos/cm)	373	179	270	412	194	269
Temperature (Deg. F.)	85	42	64	89	52	73
Aluminum (ppb)	19	2.2	8.3	13	0.0	4.7
Antimony (ppb)	0.2	0.0	0.0	0.1	0.0	0.0
Arsenic (ppb)	1.2	0.0	0.5	1.0	0.0	0.2
Barium (ppb)	56	26	36	50	12	27
Beryllium (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
Cadmium (ppb)	0.1	0.0	0.0	0.1	0.0	0.0
Chromium (ppb)	0.7	0.0	0.1	1.2	0.0	0.1
Copper (ppb)	5.6	0.0	2.9	13	0.0	3.9
Iron (ppb)	54	18	32.8	77	8.0	26.6
Lead (ppb)	0.1	0.0	0.0	0.4	0.0	0.0
Manganese (ppb)	4.6	0.3	1.9	7.7	0.0	1.5
Mercury (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
Nickel (ppb)	6.2	1.8	3.5	5.8	0.4	2.7
Selenium (ppb)	0.8	0.0	0.3	0.6	0.4	0.2
Silver (ppb)	0.2	0.0	0.0	0.0	0.0	0.0
Zinc (ppb)	5.8	0.0	3.5	5.2	0.1	2.6
Potassium (ppm)	5.8	2.8	4.1	5.9	2.6	3.8
Sodium (ppm)	49	14	30.4	40	13	24.3
Thallium (ppb)	0.1	0.0	0.0	0.0	0.0	0.0
Total Trihalomethanes (ppb)	0.0	0.0	0.0	40.5	8.3	19.1
Total Organic Carbon (ppm)	6.68	3.36	4.95	3.27	2.43	2.86
1, 2-Dichlorethane (ppb)	1.0	0.0	0.0	0.7	0.0	0.0
Chloroform (ppb)	0.0	0.0	0.0	32.4	5.7	13.4
Carbon Tetrachloride (ppb)	0.1	0.0	0.0	0.3	0.0	0.0
Bromodichloromethane (ppb)	0.0	0.0	0.0	11.0	1.5	4.6
Tetrachloroethene (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes) (ppb)	11.4	0.0	0.0	0.7	0.0	0.0
Benzene (ppb)	0.0	0.0	0.0	0.1	0.0	0.0
Total Coliforms (colonies/100 ml)	13600	200	1400	6	0	0
Heterotrophic Plate Count (CFU's/ 1.0 ml)	5600	2200	3400	110	0	3
Fecal coliforms (colonies/100 ml)	570	10	100	100	0	0

**TABLE XII**

**EXTRACTS FROM TABLES IV-E AND V  
20 Year Period, 1983 to 2002 Inclusive  
Maximum, Minimum, and Average Amount of  
Water Treated Per Day  
(M.G. per 24 Hours)**

YEAR	CARROLLTON			ALGIERS		
	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.
1983	231.70	107.60	128.30	15.00	8.50	11.02
1984	166.71	113.08	130.37	15.42	9.50	11.07
1985	210.04	99.75	124.08	14.96	8.54	10.49
1986	175.77	89.12	121.50	13.71	8.04	10.29
1987	137.63	95.08	116.42	13.46	7.45	10.42
1988	146.38	94.71	118.38	13.71	8.34	10.19
1989	240.00	93.83	119.54	18.75	7.00	9.80
1990	162.50	100.46	119.61	14.78	8.00	10.46
1991	133.29	98.92	114.79	12.50	8.00	9.60
1992	139.00	97.00	115.22	13.88	8.00	9.88
1993	140.38	103.25	117.41	15.42	7.62	10.18
1994	128.88	103.88	113.71	17.00	8.00	11.47
1995	142.83	104.67	121.40	18.14	9.00	11.55
1996	198.42	91.59	128.97	18.27	9.00	11.47
1997	156.53	112.70	128.73	18.83	9.58	12.06
1998	152.96	98.48	126.86	22.96	12.00	12.36
1999	168.25	122.55	140.26	22.00	8.90	15.19
2000	152.50	126.71	128.10	18.83	7.58	12.13
2001	153.93	107.75	126.70	15.76	6.00	10.90
2002	128.67	87.00	108.39	14.00	6.66	9.80

TABLE XIII

Monthly Temperature (Degrees Farenheit) of the  
Mississippi River Water at the Carrollton Plant

MONTHLY	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
January	37	35	40	45	46	64	45	50	39	45
February	38	36	38	48	50	50	50	49	44	46
March	38	42	43	52	57	52	50	55	49	49
April	48	53	55	57	61	61	60	60	57	56
May	60	62	62	68	63	70	67	69	69	67
June	71	71	77	76	75	80	77	78	75	74
July	76	77	82	83	83	85	82	83	82	82
August	76	77	85	83	87	85	87	86	84	84
September	75	76	84	82	83	83	83	84	83	82
October	62	66	73	72	77	76	74	72	73	73
November	51	57	60	62	67	65	66	63	63	62
December	41	46	50	51	59	57	56	47	56	53
Maximum	80	80	88	84	90	87	89	87	87	85
Minimum	35	32	36	40	39	47	42	39	36	42
Average	56	58	62	65	67	68	66	66	65	64

Ten Year Period

Maximum: 90  
Minimum: 32  
Average: 64

**TABLE XIV**

**Monthly Temperature (Degrees Farenheit) of the Tap Water at the Carrollton Plant**

	1998	1999	2000	2001	2002
January	64	65	60	54	61
February	66	66	60	63	63
March	68	63	67	68	65
April	73	70	70	74	72
May	79	77	76	78	77
June	82	80	80	79	82
July	83	82	85	82	83
August	84	86	85	84	83
September	81	83	83	82	84
October	80	75	78	77	79
November	72	70	72	71	72
December	67	63	60	64	64
Maxiumum	89	89	92	89	87
Minimum	58	56	50	49	52
Average	75	74	72	73	74

<u>Five Year Period</u>	
Maximum	92
Minimum	49
Average	74

# New Orleans East Bank Sewage Treatment Plant Yearly Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2002
<b>PLANT FLOW (MGD)</b>													
Average	97	89	102	117	69	96	97	105	124	133	113	105	104
Maximum	158	197	150	187	112	168	136	176	215	218	176	175	218
<b>INFLUENT BOD (mg/l)</b>													
Average	94	119	123	192	159	117	121	147	125	92	90	122	125
Maximum	142	173	180	420	313	159	160	356	362	385	148	236	420
<b>INFLUENT TSS (mg/l)</b>													
Average	120	160	189	283	182	171	225	291	230	156	99	155	188
Maximum	192	255	347	852	386	287	446	578	630	598	174	328	852
<b>INFLUENT BOD (lbs/day)</b>													
Average	74,292	85,706	103,497	185,397	91,690	93,170	97,258	123,887	115,304	94,985	82,057	104,468	104,309
Maximum	133,485	181,365	159,506	455,956	154,597	165,928	153,834	243,416	310,835	341,030	151,531	215,811	455,956
<b>INFLUENT TSS (lbs/day)</b>													
Average	96,211	121,457	163,760	269,430	108,337	143,482	189,029	258,314	220,566	167,024	93,381	134,858	163,872
Maximum	178,202	349,599	348,435	751,781	307,437	316,493	447,845	517,784	540,657	529,155	229,503	322,007	751,781
<b>EFFLUENT BOD (mg/l)</b>													
Average	57	49	40	37	36	25	21	17	21	20	18	22	30
Weekly Maximum	77	59	43	42	44	28	26	20	26	21	24	23	77
<b>EFFLUENT TSS (mg/l)</b>													
Average	53	42	31	29	30	30	25	28	30	33	26	29	32
Weekly Maximum	71	61	38	37	31	30	29	33	35	36	39	31	71
<b>EFFLUENT BOD (lbs/day)</b>													
Average	44,602	36,528	34,053	36,333	20,866	19,894	16,816	14,794	21,109	22,323	17,851	23,211	25,698
Maximum	99,548	78,126	71,784	67,510	45,474	46,288	31,868	31,863	42,182	56,169	51,197	152,256	152,256
<b>EFFLUENT TSS (lbs/day)</b>													
Average	42,564	32,827	27,839	29,347	17,275	21,780	20,038	25,892	29,965	39,158	24,748	25,328	28,230
Maximum	106,735	84,920	103,429	90,057	33,160	48,759	38,987	91,663	93,150	176,828	86,694	63,694	176,828
<b>EFFLUENT CL2 (mg/l)</b>													
Average	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3
Maximum	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4
<b>EFFLUENT COLIFORM (col/100 ml)</b>													
Average (Geo)	34	111	18	30	53	12	99	8	6	13	16	19	35
Wkly Maximum (Geo)	232	624	67	1,024	319	136	269	29	23	12	52	28	1,024
<b>EFFLUENT pH (SU)</b>													
Minimum	6.45	6.21	6.26	6.45	6.34	6.33	6.27	6.19	6.26	6.30	6.31	6.33	6.19
Maximum	6.89	6.73	6.84	6.68	6.70	6.70	6.68	6.73	6.65	6.63	6.69	6.58	6.89
<b>BURNED SLUDGE (tons)</b>													
Average per day	4	11	27	17	25	27	23	31	21	28	23	21	22
Total	113	295	847	503	768	814	726	949	638	877	683	653	7,866
<b>AUXILIARY FUEL (MMBTU's)</b>													
Average per ton	5.5	8.5	6.7	7.5	9.1	8.9	10.9	9.6	8.4	9.0	10.3	11.0	2.5
Total	3,900	3,387	6,360	6,888	8,550	8,143	7,687	8,886	6,504	7,857	6,965	7,317	19,540
<b>ELECTRICITY (kwhr)</b>													
Average per day	54,735	53,400	55,006	58,520	58,529	69,440	71,806	68,826	74,760	78,581	71,120	64,761	64,957
Total	1,696,800	1,495,200	1,705,200	1,755,600	1,814,400	2,083,200	2,226,000	2,133,600	2,242,800	2,436,000	2,133,600	2,007,600	23,730,000
<b>RAINFALL (inches)</b>													
Total	4.0	2.2	4.8	3.5	2.3	5.5	5.8	5.6	22.4	9.8	4.0	5.0	74.8

**New Orleans West Bank Sewage Treatment Plant  
Yearly Summary**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2002
<b>PLANT FLOW (MGD)</b>													
Average	12.0	11.0	12.0	13.0	7.0	7.0	11.0	11.0	14.0	17.0	13.0	11.0	11.6
Maximum	22.6	18.4	19.9	27.3	16.8	13.9	12.6	21.0	37.7	36.6	22.0	23.9	37.7
<b>INFLUENT BOD (mg/l)</b>													
Average	69	91	90	86	118	101	88	89	68	50	64	71	82
Maximum	103	115	128	127	139	136	169	219	124	85	94	104	219
<b>INFLUENT TSS (mg/l)</b>													
Average	71	86	104	99	131	114	103	107	94	71	64	75	93
Maximum	109	130	182	173	209	195	178	211	192	138	143	130	211
<b>INFLUENT BOD (lbs/day)</b>													
Average	6,023	6,943	7,399	5,729	7,574	6,600	6,109	6,006	6,178	5,870	5,508	5,471	6,284
Maximum	9,883	9,137	10,126	12,820	18,136	9,634	12,529	12,809	12,213	9,737	10,759	11,106	18,136
<b>INFLUENT TSS (lbs/day)</b>													
Average	6,482	6,664	8,442	6,998	8,667	7,647	7,104	7,614	8,946	8,842	5,225	5,952	7,382
Maximum	14,636	13,227	14,420	26,981	27,192	17,737	12,210	20,891	22,676	15,653	11,449	14,551	27,192
<b>EFFLUENT BOD (mg/l)</b>													
Average	23	28	27	43	34	25	17	23	24	27	22	29	27
Maximum	36	49	39	63	81	45	30	50	45	49	51	47	81
<b>EFFLUENT TSS (mg/l)</b>													
Average	27	28	25	27	23	20	15	17	20	28	27	28	24
Maximum	41	40	37	44	35	40	31	31	28	44	49	38	49
<b>EFFLUENT BOD (lbs/day)</b>													
Average	2,042	2,129	2,311	2,966	2,170	1,655	1,219	1,638	2,600	3,700	2,088	2,365	2,239
Maximum	3,556	4,113	3,516	9,403	5,907	4,312	2,962	4,291	7,915	8,577	5,670	7,435	9,403
<b>EFFLUENT TSS (lbs/day)</b>													
Average	2,499	2,205	2,120	2,034	1,509	1,349	1,085	1,283	2,257	3,906	2,561	2,241	2,088
Maximum	5,692	4,788	4,072	10,018	4,492	4,579	1,944	5,359	8,158	10,013	7,652	6,677	10,018
<b>EFFLUENT CL2 (mg/l)</b>													
Maximum	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
<b>EFFLUENT COLIFORM (col/100 ml)</b>													
Average (Geo)	8	7	12	14	5	9	6	4	14	13	21	21	11
Maximum	140	68	110	330	50	100	360	16	335	64	370	2,200	2,200
<b>EFFLUENT pH (SU)</b>													
Minimum	7.20	7.10	7.10	6.90	6.50	7.00	6.80	7.00	6.80	7.00	6.80	7.30	6.50
Maximum	7.70	7.50	7.60	7.40	7.30	7.40	7.30	7.50	7.80	7.40	7.80	7.90	7.90
<b>DISPOSED SLUDGE (tons)</b>													
Total	132	169	144	195	100	68	111	102	99	151	205	137	1,613
<b>ELECTRICITY (kwhr)</b>													
Average per day	10,071	9,550	9,574	9,193	9,124	8,950	8,219	8,310	9,567	10,941	10,360	8,400	9,173
Total	312,200	267,400	296,800	275,800	264,600	250,600	254,800	257,600	287,000	295,400	259,000	260,400	3,281,600
<b>RAINFALL (inches)</b>													
Total	10.1	1.7	4.6	6.6	5.1	2.5	6.0	6.7	6.8	5.3	1.1	4.9	61.4

**ANNUAL REPORT - 2002  
WATER TABULATION NO. 1**

**WATER LINES LAID DURING 2002  
QUANTITIES OF PIPE MEASURED IN FEET**

ITEMS	BY CONTRACT	BY OTHERS	TOTAL FEET	TOTAL MILES
2" P.V.C.	453.50	2,295.20	2,749.00	0.520
4" P.V.C.	40.00	80.40	120.40	0.020
6" P.V.C.	877.00	774.50	1,651.50	0.310
8" P.V.C.	24,505.90	8,221.60	32,727.50	6.190
8" D.I.	470.00	664.00	1,134.00	0.210
10" P.V.C.	0.00	143.00	143.00	0.020
10" IRON	0.00	60.00	60.00	0.010
12" P.V.C.	2,912.00	4,610.20	7,522.20	1.420
12" D.I.	80.00	596.20	676.20	0.120
18" P.V.C.	0.00	0.00	0.00	0.000
16" P.V.C.	1,641.00	0.00	1,641.00	0.310
16" D.I.	40.00	0.00	40.00	0.007
<b>TOTAL FEET</b>	<b>31,019.40</b>	<b>17,445.40</b>	<b>48,464.80</b>	<b>9.13</b>
FIRE HYDRANTS	5	48	53 Total Fire Hydrants in 2002	
VALVES	66	83	149 Total Valves in 2002	
MANHOLES	86	95	181 Total Manholes in 2002	

Total feet removed or abandoned      14,042 ft                  2.66 miles

**WATER VALVES AS OF 2002**

INSTALLED IN 2002	REMOVED IN 2002	TOTAL VALVES REMAINING IN 2002
132	51	24,433

**FIRE HYDRANTS AS OF 2002**

INSTALLED IN 2002	REMOVED IN 2002	TOTAL FIRE HYDRANTS REMAINING IN 2002
82	17	24,369

**WATER MANHOLES AS OF 2002**

INSTALLED IN 2002	REMOVED IN 2002	TOTAL MODIFICATIONS IN 2002
162	2	160

**WATER LINES IN SYSTEM AS OF 2002**

INSTALLED	ABANDONED & REPLACED	ADDED	TOTAL FEET	TOTAL MILES
48,464.80	30,485.00		4,578,859.20	867.20



ANNUAL REPORT 2002  
 WATER TABULATION NO. 2  
 WATER MAINS, VALVES, AND HYDRANTS INSTALLED BY EACH AGENCY AND  
 QUANTITIES REMOVED OR ABANDONED IN THE PRESENT EXISTING WATER DISTRIBUTION SYSTEM  
 AT THE END OF 2002

CONTRACTOR	WATER MAINS				VALVES				HYDRANTS			
	Existing	Total Linear Feet Installed	Total Linear Feet Removed or Abandoned	Total Linear Feet Remaining in System	Existing	Installed	Removed	Remaining	Existing	Installed	Removed	Remaining
Algiers Water Works	49,510.00	0.00	680.00	48,830.00	72	0	0	72	281	0	1	280
Ordinary Contracts	4,601,920.20	0.00	443,372.70	4,158,547.50	7,055	0	412	6,643	1,958	1,463	0	495
S&WB Forces	814,618.00	0.00	91,271.20	723,346.80	2,070	0	143	1,927	1,731	0	0	1,731
By L-M-P Contracts	1,178,883.80	0.00	58,854.30	1,120,029.50	2,141	0	128	2,013	9,617	0	0	9,617
By P-W-A Contracts	66,574.60	0.00	1,657.30	64,917.30	38	0	2	36	52	0	0	52
C-W-A & E-R-A Contracts	33,860.20	0.00	1,705.70	32,154.50	50	0	6	44	86	0	0	86
By W-P-A Contracts	258,848.90	0.00	9,649.20	249,199.70	420	0	19	401	441	0	0	441
By F-W-A Contracts	52,649.60	0.00	0.00	52,649.60	31	0	0	31	19	0	0	19
By Various War Agencies	3,158.00	0.00	0.00	3,158.00	0	0	0	0	0	0	0	0
Under HANO	2,753.00	0.00	2,753.00	0.00	0	0	0	0	0	0	0	0
Under F-P-H-A	1,176.40	0.00	0.00	1,176.40	0	0	0	0	0	0	0	0
By Orleans Levee Board	147,667.80	0.00	0.00	147,667.80	375	0	18	357	863	0	0	863
By Others	1,920,171.50	0.00	26,899.00	1,893,272.50	3,237	0	29	3,208	4,227	0	51	4,176
By Dock Board	9,508.20	0.00	0.00	9,508.20	121	0	0	121	0	0	0	0
Total Linear Feet	9,141,300.22	0.00	636,842.40	8,504,457.82	15,610	0	757	14,853	19,275	1,515	0	17,760
Total Miles	1,731.30	0.00	120.61	1,610.69								



**ANNUAL REPORT - 2002**  
**SEWER TABULATION NO. 1**  
**SEWER LINES LAID DURING 2002**  
**QUANTITIES OF PIPE MEASURED IN FEET**

ITEMS	BY CONTRACT	BY OTHERS	TOTAL FEET	TOTAL MILES
6" P.V.C.	12,259.90	17,298.50	29,558.40	5.60
8" P.V.C.	27,492.00	17,926.90	45,418.90	8.60
8" D.I.	0.00	0.00	0.00	0.00
10" P.V.C.	460.00	1,191.30	1,651.30	0.31
12" P.V.C.	1,070.50	279.00	1,349.50	0.26
15" P.V.C.	1,571.40	600.00	2,171.40	0.41
18" P.V.C.	4,410.40	0.00	4,410.40	0.84
21" P.V.C.	329.00	0.00	329.00	0.06
4" P.V.C./S.F.M.	697.00	2,415.60	3,112.60	0.59
36" P.V.C.	0.00	0.00	0.00	0.00
<b>TOTALS</b>	<b>48,290.20</b>	<b>39,711.30</b>	<b>88,001.50</b>	<b>16.67</b>
M.H.'S	48	75	123 Total Manholes Constructed in 2002	

**SEWER LINES LAID IN 2002**

ORIGINAL CONSTRUCTION (IN FEET)	REMOVED & REPLACED (IN FEET)	TOTAL REMAINING (IN FEET)	TOTAL REMAINING (IN MILES)
8,287,302.10	48,290.20	4,388,822.10	831.22

**SEWER MANHOLE PROJECTS FOR 2002**

BUILT IN 2002	REMOVED IN 2002	TOTAL MODIFICATIONS IN 2002
123	9	114

ANNUAL REPORT - 2002  
SEWER TABULATION NO. 2  
SEWER MANHOLE AND FLUSH TANKS BUILT BY EACH CONTRACT FOR 2002  
THE QUANTITIES DESTROYED OR ABANDONED AND THE EXTENT OF THE SEWERAGE AT THE END OF 2002

	SEWER PIPE			ALL SEWERS			MANHOLES		
	ORIGINAL BUILT	REMOVED & REPLACED	REMAIN	ORIGINAL BUILT	ABANDONED	REMAINING	ORIGINAL BUILT	ABANDONED	REMAINING
Bought from N.O. Sewer Co.	21,307.50	14,498.30	6,809.20	24,908.20	18,099.00	6,809.20	73.00	15.00	58.00
Built Under Ordinary Contracts	3,612,594.20	276,730.90	3,335,863.50	3,654,238.20	102,584.20	3,551,654.20	9,875.00	258.00	9,617.00
Built by S&WB Forces	1,353,426.20	75,235.20	1,278,191.00	1,357,727.70	63,968.80	1,293,758.90	3,998.00	142.00	3,856.00
Built by Dock Board	5,839.70	0.00	5,839.70	6,874.30	0.00	6,874.30	19.00	0.00	19.00
Built Under CWA & ERA Contracts	25,662.60	360.00	25,302.60	25,662.60	360.00	25,302.60	76.00	3.00	73.00
Built Under WPA Contracts	138,903.60	26,168.40	112,735.20	112,735.20	26,168.40	112,735.20	504.00	3.00	501.00
Built Under PWA Contracts	177,599.30	14,095.40	163,503.90	163,503.90	14,095.40	163,503.90	474.00	5.00	469.00
Built Under FWA Contracts	9,120.80	0.00	9,120.80	9,120.80	0.00	9,120.80	32.00	0.00	32.00
Built by Orleans Levee Board	126,348.70	7,503.00	118,845.70	126,348.70	7,503.00	118,845.70	675.00	6.00	669.00
Built by FPHA	4,253.10	340.50	3,912.60	4,253.10	340.50	3,912.60	17.00	1.00	16.00
Built Under L.M.P. Contracts	733,963.50	16,352.40	717,611.10	743,801.80	22,809.40	720,992.40	2,192.00	60.00	2,132.00
Built by Others	1,958,576.30	40,206.40	1,918,369.90	1,937,292.80	40,206.40	1,897,086.40	5,508.00	81.00	5,427.00
	8,167,596.30	471,490.50	7,696,105.00	8,166,467.30	296,135.10	7,870,332.20	23,443.00	574.00	22,869.00
<b>TOTAL MILES</b>	1,546.89	89.30	1,457.60	1,546.89	56.08	1,490.60			

ANNUAL REPORT - 2002  
SEWER TABULATION NO. 3  
LENGTH OF SEWER OF EACH SIZE AND MATERIAL BUILT, DISCARDED AND NOW REMAINING IN THE SYSTEM

SIZE & MATERIAL OF SEWER	TOTAL LENGTH BUILT INCLUDING SUBSTITUTES	DESTROYED OR ABANDONED	ADDED	NOW REMAINING IN THE SYSTEMS
72" Steel	29,182.40			29,182.40
68" Steel	9,061.90			9,061.90
66" Concrete	13,740.70			13,740.70
66" Steel	28,979.70			28,979.70
60" Steel	2,577.70			2,577.70
60" Concrete	748.90			748.90
57" Concrete	1,766.80			1,766.80
54" Concrete	7,030.40			7,030.40
54" Steel	44,014.50			44,014.50
51" Concrete	928.30			928.30
50" Steel	135.00			135.00
48" Concrete	13,791.00			13,791.00
48" FRP	10,900.20			10,900.20
48" Steel	21,147.20			21,147.20
45" Concrete	3,048.40			3,048.40
42" Concrete	20,170.10			20,170.10
42" Steel	3,580.20			3,580.20
39" Brick	884.80			884.80
39" Concrete	3,871.80			3,871.80
36" Vitrified Clay	2,433.70			2,433.70
36" Prestressed Concrete	11,617.20			11,617.20
36" Reinforced Concrete	9,392.70			9,392.70
36" Steel	150.00			150.00
36" Cast Iron	10,674.00			10,674.00
36" P.V.C.	10,604.00			10,604.00
33" Brick	3,150.40			3,150.40
33" Reinforced Concrete	1,450.90			1,450.90
30" Vitrified Clay	1,672.20			1,672.20
30" Brick	3,006.60			3,006.60
30" Prestressed Concrete	484.00			484.00
30" Reinforced Concrete	34,449.70			34,449.70
30" Vitrified Clay	11,732.20			11,732.20
30" Cast Iron	4,305.90			4,305.90
30" Steel	3,255.20			3,255.20
30" ERP	16,400.00			16,400.00
29" P.V.C.	887.00			887.00
28" P.V.C.	541.00			541.00
27" Vitrified Clay	29,134.80			29,134.80
27" Terra Cotta	11.00			11.00
27" P.V.C.	11.00			11.00
27" Reinforced Concrete	13,738.40			13,738.40
26" P.V.C.	2,277.00			2,277.00
Subtotal Linear Feet	384,661.90	0.00		384,661.90
Total Miles	72.85	0.00		72.85

SIZE & MATERIAL OF SEWER	TOTAL LENGTH BUILT INCLUDING SUBSTITUTES	DESTROYED OR ABANDONED	ADDED	NOW REMAINING IN THE SYSTEMS
24" Vitrified Clay	31,911.40			31,911.40
24" Cast Iron	17,638.10			17,638.10
24" Asbestos Cement	4,942.20			4,942.20
24" Reinforced Concrete	28,377.00			28,377.00
24" P.V.C.	162.00			162.00
24" Steel	110.00			110.00
21" P.V.C.	373.60	0.00	329.00	702.60
21" Reinforced Concrete	14,994.50	329.00	0.00	14,615.50
20" Ductile Iron Pipe	143.80			143.80
18" P.V.C.	3,121.50	0.00	3,650.00	6,771.50
16" Steel	120.00			120.00
16" Asbestos Cement	28,894.90			28,894.90
16" Plastic	1,913.10			1,913.10
15" P.V.C.	5,294.00	0.00	2,171.00	7,465.00
15" Plastic Truss	1,766.80			1,766.80
15" Vitrified Clay	117,050.00	659.00	0.00	116,391.00
10" Vitrified Clay	194,748.80	870.00	0.00	194,748.80
10" Concrete	54,095.80			54,095.80
10" Steel	130.00			130.00
10" Asbestos Cement	27,660.40			27,660.40
10" P.V.C.	101,967.30	0.00	1,651.30	103,618.50
10" Plastic Truss	6,102.50	30.00	0.00	6,072.50
8" Plastic	706,265.50			706,265.50
8" Concrete	364,846.60	877.00	0.00	363,969.60
8" Terra Cotta	375,838.30	250.00	0.00	375,588.30
8" Cast Iron	32,887.40			32,887.40
8" Vitrified Clay	4,503,185.40	27,342.00	0.00	4,475,843.40
8" Asbestos Cement	3,895.90			3,895.90
8" Plastic Truss	78,885.90	3,751.80	0.00	75,134.10
8" P.V.C.	77,751.30	362.00	45,418.90	122,808.20
6" Concrete	2,324.60	100.00	0.00	2,224.60
6" Asbestos Cement	4,493.90			4,493.90
6" Cast Iron	4,204.40	340.00	0.00	3,864.40
6" Vitrified Clay	136,631.60	8,682.50	0.00	127,949.10
6" Plastic	371,272.70			371,272.70
6" Plastic Truss	7,354.60	255.00	0.00	7,099.60
6" Terra Cotta	13,274.20	2,250.00	0.00	10,024.20
6" P.V.C.	35,009.10	60.00	29,558.40	64,507.50
4" Cast Iron	874.20			874.20
4" Ductile Iron	180.40			180.40
4" Plastic	126.00			126.00
4" P.V.C.	1,389.00			1,389.00
Subtotal Linear Feet	7,364,478.70	46,158.30	82,778.60	7,401,027.90
Total Linear Feet	7,749,140.90	46,158.30	82,178.60	7,765,715.40
Total Miles	1,467.84	8.74	15.67	1,471.45

TABLE OF RAINFALL IN NEW ORLEANS SINCE ESTABLISHMENT OF RAIN GAGES IN 1894  
RAINFALL AND AVERAGES FOR "YEAR 1894 TO DATE"

YEAR No.	YEAR	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL MONTHLY AVERAGE	EXCESS OR DEFICIT	
		AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE			
1	1894	2.11	13.27	15.38	4.48	19.86	4.27	24.13	2.36	26.49	4.10	30.59	8.15	36.74	7.46	46.20	1.37	47.57	0.76	48.33	1.19	49.52	1.84	51.46	1.84	51.46	4.29	
2	1895	7.65	3.76	11.41	2.48	17.52	10.36	17.52	10.36	17.52	10.36	28.90	14.48	36.97	15.12	84.09	14.78	98.87	3.53	102.40	1.28	104.48	2.07	106.55	6.74	113.29	5.15	
	total	9.76	17.03	26.79	6.11	34.90	6.75	41.65	12.74	54.39	14.58	68.97	29.10	105.17	30.24	158.21	29.26	173.74	7.06	180.80	2.56	183.38	4.13	187.52	12.49	195.81	10.30	
	avg.	4.88	8.52	13.40	4.06	17.45	3.38	20.83	6.37	27.20	7.29	34.49	7.56	42.05	7.39	49.44	4.77	51.20	1.04	52.24	1.04	53.28	0.87	54.65	3.37	56.65		
3	1896	2.52	3.07	5.59	5.27	10.86	3.25	14.11	17.22	9.11	17.22	26.83	3.96	30.39	4.05	34.44	5.80	40.24	6.69	46.93	3.73	50.66	3.59	54.25	4.52	57.77	4.52	
	total	12.28	20.10	32.38	13.38	45.76	10.00	55.78	15.85	71.61	24.19	95.80	18.68	114.48	18.83	133.31	9.33	142.64	12.53	155.11	7.46	162.64	6.91	170.03	16.75	186.84	11.80	
	avg.	4.09	6.70	10.79	4.46	15.25	3.33	18.59	5.28	23.87	8.06	31.93	6.23	38.16	6.28	44.34	3.11	47.55	3.77	50.47	1.93	52.40	3.44	55.85	4.10	59.85		
4	1897	2.02	5.10	7.12	5.38	12.50	5.57	18.07	10.58	18.07	10.58	24.86	6.21	31.07	6.90	37.97	3.56	41.53	3.85	45.38	3.11	48.49	3.22	51.71	4.10	55.81	4.10	
	total	14.30	25.20	39.50	18.76	58.26	15.57	73.83	16.43	90.26	30.40	120.66	23.58	144.24	22.39	166.63	13.18	179.81	12.53	192.34	9.02	201.36	15.42	216.78	4.10	232.19	14.86	
	avg.	3.58	6.30	9.88	4.69	14.57	3.89	18.46	4.11	22.57	7.60	30.17	5.90	36.06	5.60	41.66	3.90	44.95	3.13	48.08	2.26	50.34	3.96	54.70		59.95		
5	1898	2.00	7.30	9.30	1.23	10.53	3.20	13.73	0.10	13.83	3.56	17.39	5.70	23.09	5.48	28.57	16.01	44.58	1.50	46.08	6.32	52.40	3.06	55.46	4.62	60.08	4.62	
	total	16.30	32.50	48.80	19.99	68.79	18.77	87.56	16.53	104.09	33.96	138.05	29.28	167.33	27.87	195.20	29.19	224.39	14.03	238.42	15.34	253.76	18.48	272.24		301.62		
	avg.	3.26	6.50	9.76	4.00	13.76	3.75	17.51	3.31	20.92	6.79	27.61	5.86	33.47	5.57	39.04	5.84	44.88	2.81	47.68	3.07	50.75	3.70	54.45		58.74		
6	1899	2.61	3.43	6.04	2.89	8.93	1.68	10.61	0.15	10.76	6.62	20.38	5.70	26.08	3.01	29.09	0.39	29.48	1.69	31.17	2.02	33.19	3.43	36.62	3.05	40.67	3.05	
	total	18.91	35.93	54.84	22.88	77.72	20.45	98.17	16.68	114.85	43.58	158.43	34.98	193.41	30.88	224.29	29.50	253.87	15.72	269.59	17.36	286.95	21.91	308.86		330.72		
	avg.	3.15	5.99	9.14	3.81	12.95	3.41	16.36	2.78	19.14	7.26	26.41	5.83	32.24	4.93	37.38	4.33	42.31	2.62	44.93	2.89	47.83	3.85	51.48		54.48		
7	1900	3.88	5.98	9.87	4.50	14.37	12.39	26.88	3.38	30.04	6.78	36.82	8.42	45.24	4.98	50.22	3.53	53.85	2.63	56.48	1.26	57.74	6.44	64.10	5.34	70.44	5.34	
	total	22.79	41.92	64.71	27.38	92.09	32.74	124.03	20.06	144.89	50.38	195.25	43.40	238.65	35.86	274.51	33.21	307.72	18.25	325.97	18.24	344.61	28.35	372.98		409.62		
	avg.	3.26	5.99	9.24	3.91	13.18	4.68	17.83	2.87	20.70	7.19	27.89	6.20	35.38	4.99	43.92	3.74	43.96	2.61	46.57	2.68	49.23	4.05	53.28		56.76		
8	1901	3.33	5.72	9.05	3.81	12.86	7.75	20.61	1.79	22.40	3.56	25.96	9.42	35.38	4.69	40.07	3.24	43.61	3.25	46.86	2.53	49.39	4.54	53.93	4.48	57.41	4.48	
	total	26.12	47.64	73.76	31.19	104.95	40.49	145.44	21.85	167.29	53.92	221.21	52.82	274.03	40.85	314.86	36.45	351.33	21.50	372.83	21.17	394.00	32.89	426.89		459.78		
	avg.	3.27	5.96	9.22	3.90	13.12	5.06	18.18	2.73	20.91	6.74	27.65	6.60	34.25	5.11	39.36	4.56	43.92	2.69	46.60	2.65	49.25	4.11	53.36		56.80		
9	1902	0.75	5.16	7.03	3.08	11.11	4.90	15.70	23.89	18.00	55.13	23.63	29.33	29.33	29.33	44.06	33.52	42.38	37.80	23.88	40.18	24.42	42.60	38.72	46.82		50.44	
	total	2.99	5.68	8.67	3.90	12.57	4.88	17.45	2.85	20.10	6.13	26.23	6.15	32.37	4.90	37.27	4.71	41.98	2.65	44.63	2.71	47.34	4.30	51.65		55.95		
	avg.	3.94	9.81	13.75	11.77	25.52	0.66	26.18	1.37	27.55	3.94	31.49	6.57	38.06	5.78	43.85	2.47	46.32	0.60	48.92	0.21	47.13	3.58	50.71	4.23	54.94	4.23	
10	1903	30.81	60.97	91.78	46.85	136.63	44.56	183.19	25.26	208.45	59.07	267.52	61.90	329.42	49.85	379.27	44.85	424.12	24.48	448.60	24.63	473.23	42.30	515.53		557.06		
	total	3.08	6.10	9.18	4.69	13.86	4.46	18.32	2.53	20.85	5.91	26.75	6.19	32.94	4.99	37.93	4.48	42.41	2.45	44.86	2.46	47.32	4.23	51.04		54.95		
	avg.	1.59	4.74	6.04	2.32	6.92	2.28	9.16	1.26	10.43	2.96	13.38	3.11	14.82	2.51	17.33	3.21	20.54	5.93	26.47	2.38	28.85	3.25	32.10	5.83	37.93	3.16	
11	1904	33.96	62.56	96.52	50.89	147.41	46.33	193.74	29.09	222.83	62.94	285.77	68.50	354.27	55.42	409.69	48.25	457.94	25.62	483.56	26.23	509.79	44.78	554.57		599.14		
	total	3.09	5.69	8.77	4.21	11.40	4.63	13.40	4.21	17.61	2.84	20.28	5.72	25.98	4.23	32.21	3.04	37.24	4.39	41.63	3.33	43.96	2.36	46.34	4.07	50.42		
	avg.	6.38	4.97	11.35	7.13	18.48	5.57	24.05	4.21	28.26	5.79	34.05	6.28	38.33	3.48	41.02	9.12	51.10	6.23	57.33	4.02	61.35	13.18	74.53	6.21	82.11	22.11	
12	1905	40.34	67.53	107.87	58.02	165.89	51.90	217.79	33.30	251.09	68.73	319.82	72.76	392.60	58.91	451.51	57.53	509.04	31.85	540.89	30.25	571.14	57.96	629.10		678.00		
	total	3.36	5.63	8.99	4.84	13.82	4.33	18.15	2.78	20.92	5.73	26.65	6.07	32.72	4.81	37.63	4.78	42.42	2.65	45.07	2.52	47.60	4.83	52.43		56.88		
	avg.	2.05	2.03	4.08	5.95	10.03	1.31	11.34	0.76	12.10	4.02	16.12	6.28	22.40	5.09	27.49	8.32	35.81	1.25	37.06	0.91	37.97	3.02	40.99	3.42	45.56	10.56	
13	1906	42.36	69.56	111.95	63.97	175.92	53.21	229.13	34.06	263.19	72.75	335.94	79.06	415.00	64.00	479.00	65.85	544.85	33.10	577.95	31.18	609.11	60.98	670.09		720.00		
	total	3.26	5.35	8.61	4.82	13.53	4.09	17.63	2.62	20.25	5.60	25.84	6.08	31.92	4.92	36.85	5.07	41.91	2.55	44.46	2.40	46.85	4.69	51.55		56.16		
	avg.	2.22	4.61	8.63	1.58	8.41	12.64	21.05	13.98	35.03	1.42	36.45	2.84	39.29	4.78	44.07	6.21	50.28	1.33	51.61	4.90	56.51	7.69	64.16	5.35	71.71	11.71	
14	1907	44.61	74.17	118.78	65.55	184.33	65.85	250.18	48.04	298.22	74.17	372.39	81.90	454.29	68.78	523.07	72.06	595.13	34.33	629.56	36.06	665.62	68.63	734.25		783.00		
	total	3.19	5.30	8.48	4.36	13.17	4.70	17.87	3.43	21.30	5.30	26.60	5.85	32.45	4.91	37.36	5.15	42.51	2.46	44.87	2.58	47.54	4.90	52.45		57.14		
	avg.	4.28	4.10	8.42	3.38	11.80	1.41	13.21	5.06	18.27	3.08	21.35	10.93	32.28	4.60	36.86	11.26	48.14	0.75	49.89	0.44	49.33	1.79	51.12	4.26	54.43	1.24	
15	1908	48.80	78.31	127.20	68.93	186.13	67.26	263.39	53.10	316.49	77.25																	

TABLE OF RAINFALL IN NEW ORLEANS SINCE ESTABLISHMENT OF RAIN GAGES IN 1884  
RAINFALL AND AVERAGES FOR "YEAR 1884 TO DATE"

YEAR No.	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL AVERAGE	EXCESS OR DEFICIT			
	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE					
21	1.06	6.00	7.06	3.93	15.92	4.93	10.89	4.93	15.92	4.93	10.89	4.93	20.37	6.88	26.95	9.21	36.16	4.87	41.03	1.26	42.29	4.15	46.44	3.92	50.38	4.20	-4.29		
total	67.95	100.62	168.77	98.23	374.78	85.37	460.15	110.67	570.82	131.35	702.17	115.06	817.23	120.11	937.34	51.06	988.40	54.30	1,042.70	104.90	1,147.60	54.30	1,199.80	1,147.60	54.30	1,147.60	54.30		
avg.	3.24	4.80	8.04	4.73	12.76	5.08	17.85	4.07	21.91	5.27	27.18	6.25	33.44	34.92	5.72	44.64	2.43	47.07	2.43	47.07	2.43	47.07	2.43	47.07	5.00	54.65	5.00		
1915	7.42	4.16	11.58	2.11	13.69	0.08	13.75	3.54	17.29	5.27	22.56	6.49	29.05	7.81	36.96	9.94	46.90	12.14	59.04	17.04	76.08	1.94	60.96	4.68	65.66	5.47	10.51		
total	75.37	104.98	180.35	101.34	388.53	88.91	477.44	115.94	593.38	137.64	731.22	122.97	854.19	130.05	984.24	63.20	1,047.44	56.24	1,103.68	109.58	1,213.26	56.24	1,270.00	1,213.26	56.24	1,213.26	56.24		
avg.	3.43	4.77	8.20	4.61	12.80	0.86	17.66	5.44	21.70	6.27	29.39	6.93	34.63	35.91	44.74	28.47	47.61	2.56	50.17	4.98	55.15	1.50	50.17	4.98	55.15	4.98	55.15		
1916	9.43	2.01	6.24	0.67	6.81	2.66	9.57	7.89	11.46	5.93	24.39	5.30	29.69	3.69	34.62	3.57	38.19	6.92	45.11	70.12	1,092.55	58.93	1,149.48	115.52	1,265.00	115.52	3.26		
total	79.80	106.99	186.59	102.01	268.80	109.50	398.10	122.87	617.77	143.14	760.91	127.90	888.81	133.62	1,022.43	70.12	1,092.55	58.93	1,149.48	115.52	1,265.00	115.52	1,321.00	1,265.00	115.52	1,265.00	115.52	3.26	
avg.	3.66	4.65	8.11	4.44	12.55	4.76	17.31	4.21	21.52	5.34	26.66	6.22	33.08	33.08	38.64	5.81	44.45	3.05	47.50	2.46	49.98	5.02	55.00	55.00	55.00	55.00	55.00	55.00	
1917	3.67	2.87	6.54	2.94	9.48	3.66	13.14	1.30	14.44	1.69	16.13	5.84	21.97	5.34	27.31	3.28	30.59	0.68	31.27	0.68	31.27	0.26	31.53	1.98	33.51	2.79	-20.59		
total	83.27	109.86	193.13	104.95	288.08	113.16	411.24	124.14	509.34	124.56	633.90	148.98	782.68	133.24	916.12	105.02	1,013.82	57.19	1,068.82	115.52	1,184.34	115.52	1,299.80	1,184.34	115.52	1,184.34	115.52	3.26	
avg.	3.47	4.58	8.05	4.37	12.42	4.72	17.14	4.09	21.22	5.19	26.41	6.21	32.62	5.55	36.17	5.70	43.88	2.95	46.83	2.38	49.21	4.80	54.10	54.10	54.10	54.10	54.10	54.10	54.10
1918	4.14	1.65	5.79	1.62	7.41	10.28	17.69	2.08	19.77	2.49	22.26	2.34	24.60	5.63	30.23	4.21	34.44	10.69	45.13	3.98	48.12	3.98	48.12	3.98	48.12	3.98	48.12	3.98	
total	87.41	111.51	198.92	106.57	305.49	123.44	428.93	100.16	529.11	127.05	656.16	151.32	807.48	138.87	946.35	141.11	1,097.46	81.49	1,168.95	61.18	1,230.13	61.18	1,291.31	1,230.13	61.18	1,230.13	61.18	2.76	
avg.	3.50	4.46	7.96	4.26	12.22	4.94	17.16	4.01	21.16	5.08	26.25	6.05	32.30	5.55	37.85	5.64	43.50	3.28	46.76	2.45	49.21	5.01	54.22	54.22	54.22	54.22	54.22	54.22	54.22
1919	6.78	6.11	12.89	3.24	16.13	7.25	23.38	7.87	31.25	5.27	36.52	6.98	43.48	5.40	48.98	3.21	52.09	5.78	57.87	7.68	65.55	0.90	66.45	5.54	66.45	5.54	11.76		
total	94.19	117.62	211.81	109.81	321.62	130.69	452.31	108.05	560.36	132.32	692.68	158.28	850.96	144.27	995.23	144.32	1,139.55	87.27	1,228.82	68.86	1,296.86	68.86	1,365.82	1,296.86	68.86	1,296.86	68.86	2.76	
avg.	3.62	4.52	8.15	4.22	12.37	5.03	17.40	4.16	21.55	5.09	26.64	6.09	32.73	5.55	38.28	5.55	43.83	3.36	47.19	2.85	49.83	4.86	54.69	54.69	54.69	54.69	54.69	54.69	54.69
1920	5.34	3.73	9.07	2.85	11.92	6.31	18.23	5.24	23.47	7.51	30.96	5.47	36.45	5.00	40.45	4.73	43.82	3.01	50.83	2.93	53.76	2.93	53.76	2.93	53.76	2.93	53.76	2.93	
total	99.53	121.35	220.88	112.66	333.54	137.00	470.54	113.29	593.83	139.83	723.66	163.75	897.41	148.27	1,035.68	151.69	1,167.37	90.28	1,277.65	71.79	1,349.44	71.79	1,421.22	1,349.44	71.79	1,349.44	71.79	2.76	
avg.	3.69	4.49	8.16	4.17	12.35	5.07	17.43	4.20	21.62	5.16	26.80	6.06	32.87	5.49	38.36	5.62	43.98	3.34	47.32	2.66	49.38	4.99	54.87	54.87	54.87	54.87	54.87	54.87	54.87
1921	1.17	1.97	3.14	4.50	7.64	4.28	11.92	1.80	13.72	8.56	22.38	7.17	29.45	4.18	33.63	3.57	37.20	1.66	38.86	3.86	42.72	3.35	46.07	46.07	46.07	46.07	46.07	46.07	46.07
total	100.70	123.32	224.02	117.16	341.18	141.28	492.46	115.09	597.55	148.39	745.94	170.92	916.86	152.45	1,069.51	152.45	1,224.57	91.94	1,316.51	75.65	1,392.16	75.65	1,467.82	1,392.16	75.65	1,392.16	75.65	2.76	
avg.	3.80	4.40	8.00	4.18	12.19	5.05	17.23	4.11	21.34	5.30	26.64	6.10	32.75	5.44	38.19	5.55	43.73	3.28	47.02	2.70	49.72	4.93	54.65	54.65	54.65	54.65	54.65	54.65	54.65
1922	4.54	3.55	8.09	8.22	16.31	4.17	20.48	6.20	26.68	4.45	31.13	4.68	35.81	6.50	42.31	1.31	43.62	4.11	47.73	3.55	51.28	6.85	56.13	4.84	56.13	4.84	3.36		
total	105.24	126.87	232.11	125.38	357.49	145.45	502.94	121.29	624.23	152.84	777.07	175.60	952.67	158.95	1,111.62	156.57	1,268.19	96.05	1,364.24	79.20	1,443.44	79.20	1,522.64	1,443.44	79.20	1,443.44	79.20	2.76	
avg.	3.63	4.37	8.00	4.32	12.33	5.02	17.34	4.16	21.55	5.27	26.80	6.06	32.85	5.48	38.33	5.40	43.73	3.31	47.04	2.73	49.77	5.00	54.77	54.77	54.77	54.77	54.77	54.77	54.77
1923	3.99	2.26	6.25	4.46	10.71	5.13	14.84	9.71	24.55	6.17	30.72	9.03	40.55	7.48	48.03	2.60	50.63	4.94	58.03	4.94	58.03	4.94	58.03	4.94	58.03	4.94	6.66		
total	109.23	129.13	238.36	129.84	368.20	149.58	517.78	131.00	648.78	159.01	807.79	185.43	993.22	165.43	1,159.65	159.17	1,318.82	98.51	1,417.33	84.14	1,501.47	84.14	1,585.61	1,501.47	84.14	1,501.47	84.14	8.66	
avg.	3.64	4.30	7.95	4.33	12.27	4.89	17.28	4.37	21.63	5.30	26.93	6.18	33.11	5.55	38.68	5.31	43.99	3.28	47.24	2.80	50.05	4.95	55.00	55.00	55.00	55.00	55.00	55.00	
1924	5.59	5.24	10.83	2.11	12.94	2.67	15.61	5.89	21.50	3.56	25.06	1.51	26.57	2.29	28.86	2.83	31.69	3.00	31.69	3.00	31.69	3.00	31.69	3.00	31.69	3.00	15.67		
total	114.82	134.37	249.19	131.95	381.14	152.25	533.39	136.89	670.28	162.57	832.85	186.94	1,019.79	168.72	1,188.51	162.00	1,350.51	98.51	1,449.02	84.35	1,533.37	84.35	1,617.73	1,533.37	84.35	1,533.37	84.35	15.67	
avg.	3.70	4.33	8.04	4.26	12.91	4.91	17.21	4.42	21.62	5.24	26.87	6.03	32.90	5.44	38.34	5.23	43.56	3.18	46.74	2.72	49.48	5.01	54.47	54.47	54.47	54.47	54.47	54.47	54.47
1925	5.47	1.67	7.14	0.91	8.05	0.81	8.86	4.12	16.98	3.68	16.66	6.98	23.64	2.61	26.25	6.10	32.35	7.37	39.62	4.86	44.42	4.86	44.42	4.86	44.42	4.86	-5.50		
total	120.29	136.04	256.33	132.86	389.19	153.06	542.25	141.01	693.26	166.25	849.52	193.92	1,043.43	171.33	1,214.76	168.10	1,382.86	105.76	1,488.64	89.15	1,577.79	89.15	1,666.93	1,577.79	89.15	1,577.79	89.15	3.96	
avg.	3.76	4.25	8.01	4.15	12.16	4.78	16.95	4.41	21.35	5.20	26.95	6.06	32.61	5.35	37.96	5.25	43.11	3.31	46.52	2.79	49.31	4.85	54.26	54.26	54.26	54.26	54.26	54.26	54.26
1926	5.90	2.84	8.34	14.38	22.72	5.92	26.84	11.31	39.95	3.26	43.21	4.96	48.17	6.48	54.65	5.51	60.16												

TABLE OF RAINFALL IN NEW ORLEANS SINCE ESTABLISHMENT OF RAIN GAGES IN 1894  
 RAINFALL AND AVERAGES FOR "YEAR 1894 TO DATE"

YEAR No.	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL AVERAGE	EXCESS OR DEFICIT
	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE		
1934	5.66	3.47	9.13	5.40	14.53	4.81	19.34	9.09	28.43	4.88	33.31	6.01	39.32	10.88	50.20	2.01	52.21	2.73	54.94	5.87	60.81	1.90	62.71	1.90	62.71	6.54
total	162.54	180.97	343.51	186.87	530.38	206.02	736.40	201.35	937.75	207.12	1,144.87	251.78	1,396.65	235.32	1,631.97	213.64	1,845.61	141.92	1,987.53	125.67	2,113.20	189.67	2,302.87	2,302.87		
avg.	3.96	4.41	6.38	4.56	12.94	5.02	17.96	4.91	22.87	5.05	27.92	6.14	34.06	5.74	39.80	5.21	45.01	3.46	48.48	3.07	51.54	4.63	56.17	56.17		
1935	2.35	3.08	5.43	8.91	14.34	7.63	21.97	4.02	25.99	3.57	29.56	7.70	37.26	4.66	41.92	2.64	44.56	0.61	45.17	1.50	46.67	6.66	53.33	53.33	4.44	
total	164.89	184.05	348.94	195.78	544.72	213.65	756.37	205.37	963.74	210.68	1,174.43	259.48	1,433.91	239.98	1,673.89	216.28	1,890.17	142.53	2,032.70	127.17	2,159.87	196.33	2,356.20	2,356.20		
avg.	3.93	4.38	6.31	4.66	12.97	5.09	18.08	4.89	22.95	5.02	27.96	6.18	34.14	5.71	39.85	5.15	45.00	3.39	48.40	3.03	51.43	4.87	56.10	56.10		
1936	8.25	5.11	13.36	2.11	15.47	5.55	21.02	4.36	25.38	0.70	26.08	6.81	34.18	4.59	38.95	3.78	42.73	3.22	46.50	2.94	49.44	3.48	52.92	52.92	-3.11	
total	173.14	189.16	362.30	197.89	560.19	219.20	779.39	209.73	989.12	211.39	1,200.51	266.40	1,466.40	245.87	1,712.27	221.18	1,933.45	145.75	2,079.20	130.11	2,209.31	199.81	2,409.12	2,409.12		
avg.	3.83	4.40	6.43	4.60	13.03	5.10	18.13	4.88	23.00	4.92	27.92	6.18	34.11	5.72	39.25	5.19	44.96	3.38	48.36	3.03	51.36	4.65	56.03	56.03		
1937	3.04	2.00	5.43	6.08	11.52	6.95	17.57	3.57	21.44	3.57	25.01	7.12	32.13	5.14	39.25	5.19	44.44	24.82	69.26	1.29	70.35	3.57	73.92	73.92	17.49	
total	176.98	191.16	366.14	202.97	571.11	226.15	797.28	213.30	1,010.56	220.34	1,230.90	269.61	1,500.51	251.01	1,751.52	226.37	1,977.89	170.37	2,148.26	131.40	2,279.66	203.38	2,483.04	2,483.04		
avg.	4.02	4.54	6.37	4.61	12.98	5.14	18.12	4.85	22.97	5.01	27.98	6.13	34.10	5.70	39.81	5.14	44.95	3.87	48.82	2.98	51.81	4.82	56.43	56.43		
1938	4.65	1.70	6.35	1.08	7.43	2.86	10.29	2.40	12.69	3.33	16.02	8.30	24.32	4.16	28.50	5.08	33.56	0.65	34.21	2.07	36.28	4.29	40.57	40.57	3.38	
total	181.63	192.86	374.49	204.05	578.54	229.01	807.55	215.70	1,023.25	223.67	1,246.92	277.91	1,524.83	255.19	1,780.02	231.43	2,011.45	171.02	2,182.47	133.47	2,315.84	207.67	2,523.81	2,523.81		
avg.	4.04	4.29	6.32	4.53	12.96	5.09	17.95	4.79	22.74	4.97	27.71	6.18	33.89	5.87	39.76	5.14	44.70	2.78	48.56	2.93	51.40	4.61	56.08	56.08		
1939	2.06	3.87	5.93	1.24	7.17	2.99	10.16	10.51	20.67	3.75	24.42	4.80	29.02	5.54	38.56	5.14	44.70	3.80	48.50	2.97	51.47	4.61	56.08	56.08	-12.27	
total	183.69	196.73	380.42	205.29	585.71	232.00	817.71	226.21	1,043.92	227.42	1,271.34	282.51	1,563.85	260.73	1,814.58	234.61	2,049.18	171.38	2,220.57	136.55	2,357.12	210.03	2,567.15	2,567.15		
avg.	3.99	4.28	6.27	4.46	12.73	5.04	17.78	4.92	22.69	4.94	27.64	6.14	33.78	5.67	39.45	5.10	44.55	3.73	48.27	2.97	51.24	4.57	56.81	56.81		
1940	4.59	7.97	12.51	4.23	16.74	10.11	26.85	0.86	27.71	6.83	34.54	9.92	44.46	8.57	54.03	7.79	61.82	1.08	62.91	1.09	64.00	7.64	71.64	71.64	5.97	
total	188.28	204.65	392.53	209.52	602.45	242.11	844.56	227.07	1,071.63	234.25	1,305.88	292.43	1,598.31	270.30	1,868.61	242.40	2,111.01	172.47	2,283.48	137.64	2,421.12	217.67	2,638.79	2,638.79		
avg.	4.01	4.35	6.36	4.46	12.82	5.15	17.97	4.83	22.80	4.96	27.78	6.22	34.79	5.97	39.76	5.14	44.72	3.67	48.56	2.93	51.40	4.63	56.14	56.14		
1941	3.90	2.66	6.56	2.64	9.20	2.74	11.94	2.55	14.48	12.77	27.26	7.53	34.79	5.87	44.62	6.16	44.92	0.68	45.60	2.56	48.16	4.59	52.75	52.75	1.15	
total	192.18	207.31	399.49	212.16	611.65	244.85	856.50	229.82	1,086.12	247.02	1,333.14	289.96	1,633.10	278.27	1,908.37	248.43	2,157.80	178.01	2,335.81	138.31	2,475.12	220.99	2,696.11	2,696.11		
avg.	4.00	4.32	6.32	4.42	12.74	5.10	17.84	4.78	22.63	5.15	27.77	6.25	34.02	5.76	39.78	5.18	44.95	3.71	46.66	2.90	51.57	4.60	56.17	56.17		
1942	1.18	10.13	11.31	7.13	18.44	1.36	19.80	5.83	25.63	14.29	39.92	6.57	46.49	12.08	58.56	4.82	63.40	4.18	67.56	2.22	69.78	3.78	73.57	73.57	6.13	
total	193.36	217.44	410.80	219.29	630.09	246.21	878.30	235.65	1,111.25	261.31	1,373.08	306.53	1,679.59	288.36	1,967.95	253.25	2,221.20	182.17	2,403.37	141.53	2,544.80	224.78	2,769.58	2,769.58		
avg.	3.95	4.44	6.38	4.48	12.86	5.02	17.88	4.81	22.69	5.33	28.02	6.28	34.28	5.88	40.16	5.17	45.33	3.72	48.05	2.89	51.94	4.58	56.52	56.52		
1943	2.29	1.39	3.68	7.86	11.54	1.47	13.01	2.67	15.68	3.11	18.79	6.73	25.52	3.80	29.32	13.20	42.52	0.76	43.28	1.40	44.68	5.04	49.72	49.72	-6.67	
total	195.65	218.83	414.48	227.15	641.63	247.68	889.31	238.12	1,127.43	264.42	1,381.85	313.26	1,705.11	292.16	1,987.27	266.45	2,263.72	182.83	2,446.55	142.93	2,589.58	229.82	2,819.40	2,819.40		
avg.	3.91	4.36	6.29	4.54	12.83	5.05	17.79	4.76	22.55	5.29	27.84	6.27	34.10	5.84	39.00	5.33	45.27	3.66	48.93	2.86	51.78	4.60	56.39	56.39		
1944	8.02	4.70	12.72	5.93	18.65	9.21	27.88	4.27	32.13	3.29	35.42	4.39	39.81	6.19	46.00	5.66	51.66	0.68	52.34	12.12	64.74	2.37	67.11	67.11	10.51	
total	203.67	223.53	427.20	233.08	660.28	256.89	917.17	242.39	1,159.56	267.71	1,427.27	317.65	1,744.92	298.35	2,043.27	272.11	2,315.38	183.69	2,499.07	185.05	2,684.32	232.19	2,916.51	2,916.51		
avg.	3.99	4.36	6.38	4.57	12.95	5.04	17.98	4.73	22.74	5.25	27.99	6.23	34.81	5.85	40.06	5.34	45.40	3.61	48.01	3.04	52.05	4.95	56.28	56.28		
1945	4.69	4.69	9.38	2.30	11.68	5.35	17.03	2.82	19.85	4.02	23.87	12.01	35.88	5.18	47.74	5.18	50.32	2.63	52.95	5.31	58.26	5.31	63.57	63.57	1.83	
total	208.36	228.22	436.58	235.38	671.96	262.24	934.20	245.21	1,179.41	271.73	1,451.14	328.68	1,780.80	303.51	2,064.31	278.81	2,363.12	186.47	2,549.59	157.66	2,707.27	237.50	2,944.77	2,944.77		
avg.	4.01	4.39	6.40	4.53	12.92	5.04	17.97	4.72	22.68	5.23	27.91	6.34	34.25	5.84	40.08	5.36	45.44	3.59	48.03	3.03	52.08	4.57	56.63	56.63		
1946	5.13	3.82	8.95	15.10	24.05	3.28	27.33	8.53	35.86	7.22	43.06	6.30	48.78	4.50	53.28	8.25	61.53	0.21	61.74	3.31	65.05	2.37	67.42	67.42	5.62	
total	213.49	232.04	445.53	250.48	686.01	265.52	951.53	253.74	1,215.27	278.95	1,494.22	335.36	1,829.58	308.01	2,137.59	287.06	2,424.65	186.68	2,611.33	180.89	2,772.32	239.87	3,012.19	3,012.19		
avg.	4.03	4.38	6.41	4.73	13.13	5.01	18.14	4.79	22.83	5.26	28.19	6.33	34.52	5.81	46.45	5.42	45.75	3.52	49.27	3.04	52.31	4.53	56.63	56.63		
1947	7.50	2.60	10.10	7.48	17.58	8.09	25.67	5.47	31.14	6.66	37.80	3.14	40.94	5.51	46.45	3.22	49.67	3.21	52.88	12.58	65.46	7.65	73.11	73.11	15.97	
total	220.99	234.64	455.63	257.96	713.59	273.61	987.20	259.21	1,246.41	285.61	1,532.02	338.50	1,870.52	313.52	2,164.04											



TABLE OF RAINFALL IN NEW ORLEANS SINCE ESTABLISHMENT OF RAIN GAGES IN 1864  
RAINFALL AND AVERAGES FOR "YEAR 1864 TO DATE"

YEAR	MONTHS												TOTAL		EXCESS OR DEFICIT													
	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY			AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER				
	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE		AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE			
1864 total	3.58	3.58	1.57	5.15	2.64	7.79	1.00	8.79	12.74	3.95	12.74	3.58	16.32	8.04	24.36	3.75	28.11	5.96	34.07	3.67	37.74	2.81	40.55	5.08	45.63	3.80	-11.28	
	avg.	242.72	239.57	502.29	717.86	1,213.02	1,930.47	3,181.59	4,392.58	5,603.53	6,815.48	8,027.43	9,239.28	10,451.13	11,663.00	12,874.85	14,086.70	15,298.55	16,510.40	17,722.25	18,934.10	20,145.95	21,357.80	22,569.65	23,781.50			
1865 total	3.08	3.08	4.26	6.23	3.11	9.34	1.35	10.69	18.41	4.53	15.22	3.18	18.40	6.38	24.78	5.89	30.59	5.36	35.95	4.50	40.45	3.33	43.78	4.86	48.64	5.44	6.20	
	avg.	6.09	5.62	11.71	16.96	11.71	28.67	14.86	43.53	29.91	14.86	58.39	17.41	75.80	42.13	117.93	59.50	177.43	124.07	248.14	171.55	319.69	208.64	528.33	353.78			682.02
1866 total	2.02	2.02	4.24	6.29	5.03	13.32	3.96	18.46	4.54	22.72	5.10	23.82	6.87	30.69	8.79	39.48	5.41	44.89	5.78	50.67	4.78	55.45	3.33	58.78	7.15	65.93	5.45	8.20
	avg.	251.03	273.63	524.66	749.31	1,273.96	1,897.92	2,521.88	3,145.84	3,770.68	4,395.52	5,020.36	5,645.20	6,270.04	6,894.88	7,519.72	8,144.56	8,769.40	9,394.24	10,019.08	10,643.92	11,268.76	11,893.60	12,518.44	13,143.28	13,768.12		
1867 total	3.94	3.94	4.31	6.26	5.09	13.34	5.08	18.42	4.52	22.94	3.86	32.80	8.68	41.48	8.81	50.29	4.81	55.10	5.57	60.67	3.21	63.88	3.31	67.19	4.85	72.04	4.59	-2.08
	avg.	258.36	279.66	538.02	800.32	1,158.31	1,700.53	2,348.86	3,097.20	3,845.54	4,593.88	5,342.22	6,090.56	6,838.90	7,587.24	8,335.58	9,083.92	9,832.26	10,580.60	11,328.94	12,077.28	12,825.62	13,573.96	14,322.30	15,070.64	15,818.98		
1868 total	3.85	3.85	10.83	14.08	4.29	18.37	3.77	22.14	1.80	23.94	5.99	29.93	14.24	44.18	21.42	65.60	3.78	69.38	5.38	74.76	4.16	78.92	3.30	82.22	6.09	88.31	6.09	15.61
	avg.	261.81	290.29	552.10	814.29	1,176.48	1,638.67	2,100.86	2,563.05	3,025.24	3,487.43	3,949.62	4,411.81	4,874.00	5,336.19	5,798.38	6,260.57	6,722.76	7,184.95	7,647.14	8,109.33	8,571.52	9,033.71	9,495.90	9,958.09	10,420.28		
1869 total	3.97	3.97	4.40	6.37	5.12	13.49	5.04	18.53	4.67	23.20	3.18	31.38	8.28	42.66	8.28	50.94	4.81	55.75	5.78	61.53	3.21	64.74	3.21	67.95	4.86	72.81	4.87	-1.41
	avg.	266.21	295.69	561.90	843.80	1,205.70	1,747.92	2,390.14	3,032.36	3,674.58	4,316.80	4,959.02	5,601.24	6,243.46	6,885.68	7,527.90	8,170.12	8,812.34	9,454.56	10,096.78	10,739.00	11,381.22	12,023.44	12,665.66	13,307.88	13,950.10		
1870 total	8.66	8.66	6.63	15.29	6.84	22.13	4.26	26.39	6.56	32.95	10.76	43.71	7.75	51.46	5.24	56.70	5.67	62.37	5.67	68.04	3.25	71.29	3.25	74.54	4.51	79.05	6.54	20.78
	avg.	4.01	4.48	6.49	9.51	6.03	13.90	10.30	16.68	23.07	34.44	45.91	57.38	68.85	80.32	91.79	103.26	114.73	126.20	137.67	149.14	160.61	172.08	183.55	195.02			
1871 total	3.40	3.40	1.75	5.15	1.18	6.33	3.12	9.45	6.83	16.28	6.83	23.11	12.54	35.65	12.54	48.19	4.81	53.00	5.52	58.52	3.25	61.77	3.25	65.02	4.51	69.53	4.51	-3.37
	avg.	276.27	306.02	582.34	868.68	1,250.83	1,722.17	2,193.51	2,664.85	3,136.19	3,607.53	4,078.87	4,550.21	5,021.55	5,492.89	5,964.23	6,435.57	6,906.91	7,378.25	7,849.59	8,320.93	8,792.27	9,263.61	9,734.95	10,206.29	10,677.63		
1872 total	4.01	4.01	4.55	8.47	5.03	13.50	4.98	18.47	4.59	22.97	5.40	28.37	6.87	35.24	5.74	41.00	5.74	46.74	5.74	52.48	3.28	55.76	3.28	59.04	4.51	63.55	5.03	Sov. Years
	avg.	10.52	11.99	15.91	21.84	15.50	30.49	21.84	43.68	55.92	68.16	80.40	92.64	104.88	117.12	129.36	141.60	153.84	166.08	178.32	190.56	212.80	235.04	257.28	279.52			
1873 total	4.11	4.11	4.47	6.57	5.05	13.62	5.03	18.64	4.55	23.19	5.38	28.57	6.80	35.36	5.73	41.09	5.52	46.61	5.22	51.83	3.28	55.11	3.28	58.39	4.82	62.21	4.82	-2.05
	avg.	6.00	5.18	12.08	18.04	13.04	27.08	18.04	41.12	54.16	67.20	80.24	93.28	106.32	119.36	132.40	145.44	158.48	171.52	184.56	197.60	210.64	223.68	236.72	249.76			
1874 total	2.98	2.98	4.02	6.22	3.81	10.03	3.58	13.61	2.99	16.60	3.98	20.58	2.99	23.57	2.99	26.56	2.99	29.55	2.99	32.54	1.99	34.53	1.99	36.52	4.82	41.34	4.82	-2.05
	avg.	4.14	4.48	6.62	9.76	6.62	13.94	9.76	16.61	23.28	30.00	36.72	43.44	50.16	56.88	63.60	70.32	77.04	83.76	90.48	97.20	103.92	110.64	117.36	124.08			
1875 total	12.20	12.20	9.14	21.34	3.41	24.75	6.88	31.63	7.75	39.38	2.30	41.68	9.24	50.92	7.82	58.74	6.54	65.28	2.95	68.23	0.52	68.75	0.52	69.27	6.10	75.37	6.10	10.40
	avg.	310.60	331.43	642.03	984.06	1,326.09	1,706.77	2,087.45	2,468.13	2,848.81	3,229.49	3,610.17	3,990.85	4,371.53	4,752.21	5,132.89	5,513.57	5,894.25	6,274.93	6,655.61	7,036.29	7,416.97	7,797.65	8,178.33	8,559.01			
1876 total	3.60	3.60	4.54	8.15	1.54	12.28	5.00	18.79	4.58	23.37	3.34	28.70	6.81	35.51	5.81	41.32	5.55	46.87	3.17	50.04	3.28	53.32	3.28	56.60	4.51	60.11	4.51	-3.37
	avg.	314.20	338.58	652.78	987.18	1,321.58	1,701.98	2,082.38	2,462.78	2,843.18	3,223.58	3,603.98	3,984.38	4,364.78	4,745.18	5,125.58	5,505.98	5,886.38	6,266.78	6,647.18	7,027.58	7,407.98	7,788.38	8,168.78	8,549.18			
1877 total	4.25	4.25	4.56	8.22	1.86	6.09	3.99	9.46	5.06	14.54	6.71	21.25	28.46	49.71	3.08	52.79	5.88	58.67	3.20	61.87	3.20	65.07	3.20	68.27	5.08	73.35	5.08	-6.86
	avg.	315.15	341.86	657.01	1,018.87	1,375.73	1,732.59	2,089.45	2,446.31	2,803.17	3,160.03	3,516.89	3,873.75	4,230.61	4,587.47	4,944.33	5,301.19	5,658.05	6,014.91	6,371.77	6,728.63	7,085.49	7,442.35	7,799.21	8,156.07			
1878 total	4.20	4.20	4.56	6.70	4.91	13.87	4.95	18.82	4.56	23.38	3.34	28.52	6.80	35.32	5.86	41.18	5.52	46.70	3.21	50.91	3.27	54.18	3.27	57.45	4.23	61.68	4.23	-6.86
	avg.	318.28	346.28	684.54	1,020.78	1,361.98	1,703.18	2,044.38	2,385.58	2,726.78	3,067.98	3,409.18	3,750.38	4,091.58	4,432.78	4,773.98	5,115.18	5,456.38	5,797.58	6,138.78	6,479.98	6,821.18	7,162.38	7,503.58	7,844.78			
1879 total	4.19	4.19	4.56	6.74	4.94	13.88	4.95	18.83	4.56	23.39	3.34	28.53	6.81	35.34	5.87	41.21	5.55	46.76	3.21	50.97	3.27	54.24	3.27	57.51	4.23	62.74	4.23	-6.86
	avg.	319.27	348.73	677.49	1,016.98	1,358.47	1,700.96	2,043.45	2,385.94	2,728.43	3,070.92	3,413.41	3,755.90	4,098.39	4,440.88	4,783.37	5,125.86	5,468.35	5,810.84	6,153.33	6,495.82	6,838.31	7,180.80	7,523.29	7,865.78			
1880 total	1.15	1.15	4.64	6.49	3.53	10.02	0.85	10.87	2.06	12.93	4.41	17.34	8.48	25.82	5.53	29.35	2.93	32.28	4.41	36.69	3.12	39.81	3.12	42.93	4.63	47.56	4.63	-2.00
	avg.	324.12	353.37	677.49	1,016.98	1,358.47	1,700.96	2,043.45	2,385.94	2,728.43	3,070.92	3,413.41	3,755.90	4,098.39	4,440.88	4,783.37	5,125.86	5,468.35	5,810.84	6,153.33	6,495.82	6,838.31	7,180.80	7,523.29	7,865.78			
1881 total	4.16	4.16	4.53	8.69	4.96	13.64	4.84	18.48	4.58	23.06	5.28	28.32	6.82	35.14	5.82	40.96	5.52	46.48	3.20	50.68	3.23	53.91	3.23	57.14	5.02	62.16	5.02	2.80
	avg.	320.29	358.66	698.95	1,047.90	1,397.85	1,747.80	2,097.75	2,447.70	2,797.65	3,147.60	3,497.55	3,847.50	4,197.45	4,547.40	4,897.35	5,247.30	5,597.25	5,947.20	6,297.15	6,647.10	6,997.05	7,347.00	7,696.95	8,046.90			
1882 total	4.18	4.18	4.54	8.72	4.96	13.89	4.80	18.68	4.60	23.28	5.14	28.42	6.84	35.26	5.81	41.07	5.50	46.57	3.21	50.78	3.29	54.07	3.29	57.57	4.74	62.31	4.74	5.81
	avg.	332.56	363.52	696.08	1,042.56	1,388.12	1,733.68	2,079.24	2,424.80	2,770.36	3,115.92	3,461.48	3,807.04	4,152.60	4,498.16	4,843.72	5,189.28	5,534										

TABLE OF RAINFALL IN NEW ORLEANS SINCE ESTABLISHMENT OF RAIN GAGES IN 1884  
RAINFALL AND AVERAGES FOR "YEAR 1884 TO DATE"

YEAR No.	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		EXCESS OR DEFICIT		
	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE	AMOUNT	TOTAL TO DATE		AMOUNT	TOTAL TO DATE
1874 total	7.48	4.56	12.04	5.04	17.08	5.49	22.57	10.98	33.55	1.93	35.48	5.70	41.18	7.87	49.05	5.99	55.04	0.53	55.57	6.83	62.40	5.00	67.40	5.00	67.40	5.62	9.43
avg.	3.40	3.68	7.08	4.07	11.52	3.95	15.21	3.79	43.92	4.19	23.02	3.63	28.55	7.87	32.33	4.58	34.92	3.16	43.07	5.18	43.08	3.00	46.86	3.00	46.86	4.82	3.75
1875 total	4.20	4.54	8.74	5.03	13.77	4.98	18.06	4.69	23.34	5.18	28.52	6.93	35.45	5.88	41.04	5.96	46.69	3.16	46.69	3.35	53.19	4.78	57.97	4.78	57.97	6.02	14.03
avg.	3.59	4.89	6.48	5.10	13.58	5.72	19.30	7.67	26.97	13.08	40.06	7.89	47.95	6.60	56.55	5.38	61.92	2.76	64.69	4.15	68.84	3.39	72.23	3.39	72.23	6.02	14.03
1876 total	3.43	3.72	7.18	4.00	11.29	4.01	15.30	3.87	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	2.23	4.35	5.78	2.93	13.77	4.80	18.66	4.72	23.39	6.27	28.66	6.45	35.31	5.92	41.22	5.68	46.86	3.16	46.86	3.16	53.96	4.71	58.25	4.71	58.25	5.45	3.58
1877 total	3.45	3.76	7.22	4.15	11.39	4.02	15.40	3.93	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.17	4.54	8.71	5.01	13.71	4.84	18.56	4.75	23.30	5.28	28.59	6.93	35.23	5.89	41.22	5.96	46.73	3.17	46.73	3.35	53.19	4.78	57.97	4.78	57.97	6.02	14.03
1878 total	3.51	3.79	7.30	4.22	11.52	4.05	15.58	3.96	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.18	4.52	8.70	5.02	13.72	4.83	18.55	4.72	23.27	5.23	28.50	6.83	35.13	6.01	41.13	5.63	46.78	3.19	46.78	3.19	49.97	3.44	53.41	3.44	53.41	5.45	3.58
1879 total	3.62	3.91	7.44	4.25	11.69	4.05	15.78	3.91	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.49	8.75	5.01	13.76	4.81	18.57	4.78	23.35	5.27	28.62	6.83	35.25	6.02	41.22	5.62	46.89	3.15	46.89	3.15	50.08	3.46	53.51	3.46	53.51	5.45	3.58
1880 total	3.67	3.95	7.61	4.30	11.91	4.07	16.03	3.91	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.28	4.57	8.85	5.00	13.81	4.79	18.64	4.78	23.43	5.22	28.65	6.86	35.31	6.00	41.31	5.62	46.89	3.14	46.89	3.14	50.08	3.46	53.51	3.46	53.51	5.45	3.58
1881 total	3.73	4.02	7.98	4.34	12.32	4.10	16.47	4.01	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.29	4.56	8.85	5.06	13.91	4.85	18.86	4.83	23.69	5.16	28.86	6.85	35.15	5.98	41.48	5.61	47.10	3.16	47.10	3.16	50.28	3.47	53.75	3.47	53.75	5.45	3.58
1882 total	3.75	4.07	8.02	4.41	12.43	4.13	16.66	4.01	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.22	4.61	8.83	5.01	13.84	4.94	18.78	4.90	23.57	5.21	28.78	6.82	35.41	5.98	41.36	5.58	46.86	3.15	46.86	3.15	50.10	3.45	53.55	3.45	53.55	5.45	3.58
1883 total	3.80	4.13	8.14	4.44	12.58	4.15	17.06	4.04	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.25	4.60	8.84	5.03	13.87	4.91	18.78	4.81	23.59	5.23	28.82	6.81	35.43	5.97	41.44	5.59	46.89	3.14	46.89	3.14	50.13	3.44	53.57	3.44	53.57	5.45	3.58
1884 total	3.79	4.06	8.00	4.39	12.48	4.14	16.87	4.01	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.22	4.58	8.84	5.01	13.84	4.89	18.84	4.86	23.53	5.24	28.77	6.86	35.35	5.98	41.33	5.53	46.86	3.27	46.86	3.27	50.13	3.45	53.58	3.45	53.58	5.45	3.58
1885 total	3.82	4.10	8.07	4.42	12.50	4.16	17.18	4.05	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.22	4.58	8.84	5.01	13.84	4.89	18.84	4.86	23.53	5.24	28.77	6.86	35.35	5.98	41.33	5.53	46.86	3.27	46.86	3.27	50.13	3.45	53.58	3.45	53.58	5.45	3.58
1886 total	3.92	4.20	8.17	4.57	12.74	4.21	17.31	4.08	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.22	4.58	8.84	5.01	13.84	4.89	18.84	4.86	23.53	5.24	28.77	6.86	35.35	5.98	41.33	5.53	46.86	3.27	46.86	3.27	50.13	3.45	53.58	3.45	53.58	5.45	3.58
1887 total	3.95	4.23	8.22	4.68	12.86	4.24	17.48	4.10	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75	3.56	53.75	5.45	3.58
1888 total	4.02	4.30	8.31	4.77	12.99	4.27	17.61	4.13	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75	3.56	53.75	5.45	3.58
1889 total	4.05	4.33	8.36	4.81	13.11	4.30	17.84	4.16	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75	3.56	53.75	5.45	3.58
1890 total	4.08	4.36	8.42	4.85	13.24	4.33	18.00	4.17	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75	3.56	53.75	5.45	3.58
1891 total	4.12	4.40	8.48	4.91	13.32	4.34	18.18	4.18	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75	3.56	53.75	5.45	3.58
1892 total	4.15	4.43	8.51	4.94	13.45	4.35	18.36	4.19	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75	3.56	53.75	5.45	3.58
1893 total	4.18	4.46	8.56	4.97	13.56	4.36	18.54	4.21	21.76	4.32	23.50	6.85	30.35	4.85	36.40	3.60	40.02	2.87	40.02	2.87	48.84	4.10	53.94	4.10	53.94	5.45	3.58
avg.	4.26	4.59	8.86	5.04	13.91	4.92	18.96	4.89	23.62	5.28	28.81	6.86	35.47	5.99	41.46	5.53	46.89	3.20	46.89	3.20	50.19	3.56	53.75				

TABLE OF RAINFALL IN NEW ORLEANS SINCE ESTABLISHMENT OF RAIN GAGES IN 1864  
RAINFALL AND AVERAGES FOR "YEAR 1864 TO DATE"

YEAR No.	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL MONTHLY AVERAGE	EXCESS OR DEFICIT	
	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE	AMOUNT	TOTAL DATE			
1864	3.22	0.43	3.65	5.14	6.79	1.44	10.23	6.21	16.44	7.88	24.32	9.14	33.46	4.00	37.46	7.00	44.46	3.27	47.73	2.40	50.13	3.75	53.88	4.49	59.88	5.41	
1865	4.58	4.73	9.31	5.13	14.44	5.02	19.46	4.80	24.26	5.45	29.71	6.54	36.25	5.96	42.21	5.51	47.72	3.16	50.88	3.65	54.53	4.77	59.29	5.78	64.84	7.47	
1866	3.53	4.96	8.49	9.79	18.28	5.17	23.45	20.91	44.36	1.98	46.34	7.67	54.01	2.99	57.00	1.20	58.20	2.05	60.25	2.99	63.24	3.60	66.84	5.57	71.47	7.47	
1867	4.96	3.91	8.87	5.11	13.98	5.11	19.09	5.11	24.20	5.42	29.62	6.88	36.42	5.93	42.35	5.47	47.82	3.15	50.97	3.64	54.61	4.78	59.37	5.48	64.84	7.47	
1868	4.57	4.73	9.31	5.17	14.48	5.02	19.50	4.96	24.45	5.42	29.87	6.55	36.42	5.93	42.35	5.47	47.82	3.15	50.97	3.64	54.61	4.78	59.37	5.48	64.84	7.47	
1869	3.52	2.55	6.07	4.47	10.54	4.92	15.46	2.41	17.87	5.90	23.77	7.27	31.04	5.82	36.86	3.11	39.97	0.97	40.94	3.42	44.36	4.66	49.02	4.09	53.71	5.41	
1870	4.69	4.65	9.34	5.37	14.71	5.18	20.04	4.43	25.12	5.90	31.04	7.27	31.04	5.82	36.86	3.11	39.97	0.97	40.94	3.42	44.36	4.66	49.02	4.09	53.71	5.41	
1871	4.58	4.71	9.29	5.17	14.44	5.02	19.46	4.93	24.39	5.42	29.81	6.56	36.37	5.93	42.30	5.44	47.74	3.13	50.87	3.84	54.51	4.75	59.27	5.41	64.84	7.47	
1872	5.04	3.76	8.80	3.30	12.30	5.43	17.73	5.48	23.21	4.84	28.05	4.90	32.35	1.92	34.27	0.52	34.79	1.21	36.00	2.26	43.26	1.80	45.16	3.78	53.97	5.41	
1873	4.74	4.89	9.63	5.35	14.98	5.22	20.24	4.77	25.01	5.41	29.79	6.54	36.33	5.89	42.22	5.39	47.62	3.11	50.73	3.67	54.40	4.73	59.13	5.41	64.84	7.47	
1874	4.57	4.70	9.27	5.15	14.42	5.02	19.44	4.94	24.38	5.41	29.79	6.54	36.33	5.89	42.22	5.39	47.62	3.11	50.73	3.67	54.40	4.73	59.13	5.41	64.84	7.47	
1875	4.85	4.71	9.56	5.19	14.75	5.11	20.04	4.43	25.12	5.90	31.04	7.27	31.04	5.82	36.86	3.11	39.97	0.97	40.94	3.42	44.36	4.66	49.02	4.09	53.71	5.41	
1876	4.63	4.71	9.42	5.18	14.60	5.01	19.53	4.80	24.33	5.39	29.83	6.52	36.35	5.91	42.26	5.60	47.86	3.09	50.95	3.67	54.62	4.70	59.32	5.41	64.84	7.47	
1877	3.06	0.45	3.51	4.18	7.69	0.03	7.72	4.86	12.58	10.37	22.95	2.84	25.78	3.97	29.76	4.00	33.76	4.07	37.83	0.16	37.99	2.76	40.75	3.40	48.40	5.41	
1878	4.88	4.71	9.59	5.49	15.08	5.28	20.36	4.96	25.32	5.44	29.76	6.49	36.25	5.89	42.14	4.66	47.72	3.10	50.83	3.64	54.47	4.68	59.15	5.41	64.84	7.47	
1879	4.61	4.87	9.28	5.21	14.46	4.96	19.42	4.90	24.32	5.44	29.76	6.49	36.25	5.89	42.14	4.66	47.72	3.10	50.83	3.64	54.47	4.68	59.15	5.41	64.84	7.47	
1880	2.80	0.86	3.46	1.75	5.21	1.36	6.57	0.37	6.94	6.69	13.63	1.71	15.34	3.27	18.61	6.39	25.00	2.53	27.53	13.43	40.96	3.27	44.23	3.89	51.16	5.41	
1881	4.91	4.95	9.90	5.50	15.40	5.27	20.67	4.93	25.60	5.44	29.76	6.49	36.25	5.89	42.14	4.66	47.72	3.10	50.83	3.64	54.47	4.68	59.15	5.41	64.84	7.47	
1882	3.02	1.04	4.06	1.44	5.50	0.53	6.03	1.90	7.93	18.05	19.08	37.13	7.47	44.60	7.04	51.64	5.62	57.26	4.35	61.61	3.29	64.90	3.02	67.92	5.66	73.58	8.03
1883	4.84	4.98	9.92	5.62	15.54	5.28	20.82	4.89	24.71	5.49	29.68	6.45	36.13	5.87	42.01	5.59	47.60	3.11	50.71	3.73	54.44	4.85	59.09	5.41	64.84	7.47	
1884	4.58	4.60	9.18	5.21	14.39	4.89	19.27	4.83	24.10	5.49	22.23	5.83	28.06	5.83	33.89	22.42	56.11	8.78	65.89	3.99	69.88	4.98	74.86	6.24	79.10	15.83	
1885	3.97	2.23	6.20	4.77	10.97	3.50	14.47	2.27	16.74	5.49	22.23	5.83	28.06	5.83	33.89	22.42	56.11	8.78	65.89	3.99	69.88	4.98	74.86	6.24	79.10	15.83	
1886	4.98	4.93	9.91	5.58	15.49	5.31	20.80	4.96	25.76	5.44	29.76	6.49	36.25	5.89	42.14	4.66	47.72	3.10	50.83	3.64	54.47	4.68	59.15	5.41	64.84	7.47	
1887	4.57	4.58	9.15	5.20	14.35	4.88	19.23	4.81	24.03	5.58	29.61	6.45	36.06	5.87	41.93	5.75	47.68	3.17	50.85	3.73	54.58	4.66	59.23	5.41	64.84	7.47	

BENCHMARKING 2002  
COST OF OPERATIONS IDENTIFICATION PROGRAM

ADMINISTRATIVE SERVICES DEPARTMENT

Insurance Cost per Employee:	
Workers' Compensation	\$ 2,296.00
Auto Liability	\$ 2,613.00
General Liability	\$ 1,349.00

ENGINEERING DEPARTMENT

Cost to Design a Project	5.8%
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ENVIRONMENTAL DEPARTMENT

Cost of Typical Industry Sampling Event	\$ 352.56
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FACILITY MAINTENANCE DEPARTMENT

Cost to set 5/8" water meter	\$ 64.98
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MANAGEMENT SERVICES DEPARTMENT

FINANCE:

Cost to Process a Miscellaneous Invoice	\$ 7.27
Cost to process a Vendor Invoice	\$ 5.74
Cost to process a Paycheck	\$ 3.39

INFORMATION SYSTEMS:

Cost to Image a Document	\$ 0.57
Cost to Retrieve a Document From the Imaging System	\$ 3.47
Cost to Retrieve a Document From the Microfiche Files/Storage	\$ 22.41

PERSONNEL:

Cost to Hire an Employee	\$ 468.93
Cost to complete a Voluntary Employee Termination	\$ 14.44
Employee Turnover Rate	13%
Cost to Train an Employee:	\$ 286.23

PURCHASING:

Cost to Process a Sundry Purchase Order	\$ 17.54
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REVENUE:

Cost to Read a Meter	\$ 0.35
Cost to Render a Bill (Less Meter Reading)	\$ 0.49
Cost to Manage a Customer by Phone	\$ 1.91
Cost to Manage a Customer by Mail	\$ 2.42
Cost to Manage a Walk-in Customer	\$ 3.28
Cost to Process a Mail-in Payment	\$ 0.28
Cost to Process a Walk-in Payment	\$ 1.19

SUPPORT SERVICES DEPARTMENT

Average Annual Maintenance Cost per Piece of Equipment	\$ 1,575.00
Average Percent of Fleet Down for 2002	22%