



# ANNUAL COMPREHENSIVE FINANCIAL REPORT

**The Combined Utility System Fund**

An Enterprise Fund of The City of Houston, TX

FOR THE FISCAL YEARS ENDED  
June 30, 2023 and June 30, 2022







# HOUSTON PUBLIC WORKS

## Annual Comprehensive Financial Report

### The Combined Utility System Fund

An Enterprise Fund of City of Houston, Texas

For The Fiscal Years Ended  
June 30, 2023 and June 30, 2022

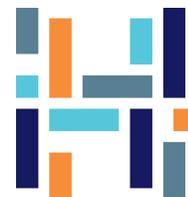


Prepared by:

Office of City Controller | Chris Brown | City Controller  
Office of City Controller | Beverly Riggans | Deputy City Controller  
HPW Financial Management Services | Samir Solanki | Chief Financial Officer  
City of Houston Combined Utility System | 611 Walker Street | Houston, Texas 77002



# ACKNOWLEDGMENTS



This acknowledgment is for those who assisted with the Combined Utility System's Annual Comprehensive Financial Report. This report was prepared by the Financial Reporting department of the Houston Public Works (HPW) Financial Management Services with assistance from other departments within the City of Houston.

## HPW Financial Management Services

Sabrina Jackson | Assistant Director | Financial Reporting | Fiscal Services |  
Richard Sousse | Deputy Assistant Director | Financial Reporting  
Jennifer Suh | Senior Staff Analyst | Financial Reporting

Jennifer Nguyen | Deputy Assistant Director | Fiscal Services  
Elijah Adeniyi | Division Manager | Department Fixed Asset Coordinator  
Betsy Varghese | Assistant Director | Budget and Debt Management  
David Wurdlow | Assistant Director | Capital Projects and Grant Management

## HPW Communications

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Daniel Perez | Senior Communications Specialist  
Rodrigo Vargas | Senior Graphic Designer

## City of Houston

Beverly Riggins | Deputy City Controller | Office of City Controller  
I-li (Conrad) Lin | Deputy Director | Office of City Controller

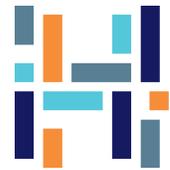
Special Appreciation To:  
All accounting and budget personnel of HPW Financial Management Services  
whose extra time and effort made this report possible.



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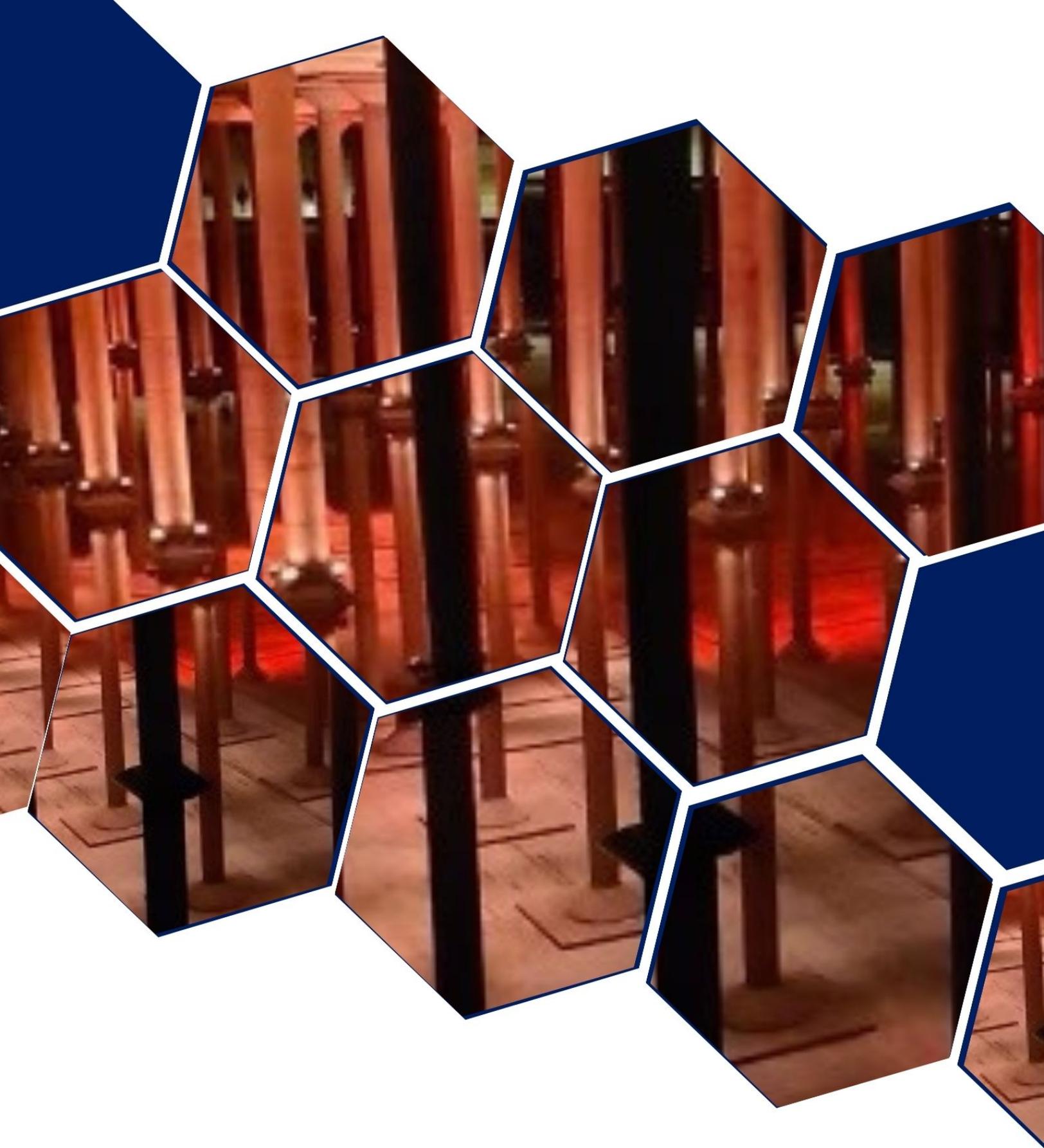
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# **INTRODUCTORY SECTION**

**Annual Comprehensive Financial Report**



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**TOGETHER  
WE CREATE  
A STRONG  
FOUNDATION  
FOR HOUSTON  
TO THRIVE.**

 **HOUSTON  
PUBLIC WORKS**



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**Office of the City Controller  
City of Houston, Texas**

Chris B. Brown

November 17, 2023

To the Honorable Mayor, City Council Members and the Citizens of Houston, Texas:

I am pleased to present you the Annual Comprehensive Financial Report ("ACFR") for the Combined Utility System Fund (the "Fund") of the City of Houston, Texas (the "City") for the fiscal years ended June 30, 2023 ("FY2023"), and June 30, 2022 ("FY2022") including the independent auditor's report on pages 1 through 3, prepared by McConnell and Jones/Banks, Finley, White & Co. The independent auditor concluded, based upon the audit, that there was a reasonable basis for rendering unmodified opinions on the Combined Utility System's basic financial statements as of and for the years ended June 30, 2023 and June 30, 2022.

This report consists of management's representations concerning the finances of the Fund. The Controller's Office and the Combined Utility System (the "CUS") share responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures. To provide a reasonable basis for making these representations, management of the City and the CUS have established a comprehensive internal control structure which is designed to ensure that the assets of the Fund are protected from loss, theft, or misuse and to ensure that adequate accounting data is compiled to allow for the preparation of the Fund's financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP"). The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the evaluation of costs and benefits requires estimates and judgements by management.

To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the Fund.

The ACFR is presented in three sections: Introductory, Financial, and Statistical. The Introductory Section includes this transmittal letter, a list of elected officials, and the CUS organizational chart. The Financial Section includes Management's Discussion and Analysis ("MD&A"), financial statements with accompanying notes, required supplementary information on the financial statements, as well as the independent auditor's report on the financial statements. MD&A immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it. The Statistical Section includes selected financial, demographic, and other information generally presented on a multi-year basis.

The Financial Section described above is prepared in accordance with GAAP for governments as prescribed by the Governmental Accounting Standards Board ("GASB"). In addition, the notes to the financial statements offer additional information and are essential to understand the financial statements fully.

## **THE REPORTING ENTITY**

Houston Public Works ("HPW"), as a department of the City of Houston, has three primary functional components: the Combined Utility System (the "CUS"), the Houston Permitting Center, and Transportation and Drainage Operations. The Combined Utility System is supported by multiple HPW service lines including Capital Projects, Houston Water and Customer Account Services.

The Mayor serves as the Chief Executive Officer of the City. The City Controller is the second-highest elected official within City Government and serves as the Chief Financial Officer. The City Controller, as the City's Chief Financial Officer, maintains the books of account, prepares financial statements, and, with the Mayor, co-signs all warrants, contracts, and orders for payment of any public funds or money relating to the Fund. Reporting directly

to the Mayor, the HPW Director manages the operations and administration of the Combined Utility System with a team of Directors which includes a HPW Chief Financial Officer dedicated to the administration of the HPW financial structure.

On September 3, 2003, City Council authorized creation of the Combined Utility System. The Combined Utility System is a self-sufficient enterprise fund of the City of Houston and is included in the City's Annual Comprehensive Financial Report. An enterprise fund is used to account for services provided to the general public on a continuing basis with costs recovered primarily through user charges. All CUS expenses including those relating to operation and maintenance, capital improvements, and debt service are paid for solely by rates and charges imposed on the CUS's customers. Under the Mayor's administrative control, the CUS manages and operates the Fund.

## COMBINED UTILITY SYSTEM (“CUS”) OVERVIEW

The Combined Utility System is the largest water/wastewater utility in Texas. CUS provides water and/or wastewater services that reach over 7 million people within the Houston-The Woodlands-Sugar Land Metropolitan area. CUS provides retail utility service to people inside the City and wholesale service to people in surrounding counties. CUS produces 148 billion gallons of water annually.

The CUS's water production and storage system includes the following: 3 surface water plants, 55 groundwater plants, 146 groundwater wells, 7 surface water re-pressurization plants and 157 water storage tanks and towers. The combined design production capacity for groundwater and surface water is 861 MGD (million gallons per day). The water distribution system comprises of 7,660 miles of pipes and 62,509 hydrants, while the wastewater collection system contains 6,192 miles of gravity sewer pipe, 39 wastewater treatment plants, 3 wet weather facilities and 377 lift stations. The wastewater treatment plants collect and treat an average of 242 million gallons of wastewater per day. The sanitary sewer collection system moves wastewater to treatment plants to be treated and safely returned to bayous and lakes.

Our business is managed in accordance with a threefold mission of protecting public health, protecting the environment, and providing superior customer service. These core missions are part of the larger Houston Public Works' purpose – Together we create a strong foundation for Houston to thrive. The Combined Utility System professionals proudly produce some of the best quality drinking water in the nation and continually meet or exceed state and federal drinking water regulations. The Texas Commission on Environmental Quality (TCEQ) rates the City of Houston's drinking water system as a “Superior Water Supply System,” the highest water quality rating awarded to a water utility.

## ECONOMIC CONDITIONS

The City is the nation's fourth most populous and lies within the fifth largest metropolitan statistical area in the United States - the nine-county, Houston-The Woodlands-Sugar Land metropolitan statistical area (the “MSA”). The City and the MSA continue to see year over year population growth. For the fiscal year ending June 30, 2023, the estimated population increased to 7.3 million. In addition, the overall business environment and available workforce in the State of Texas continues to attract multi-national enterprises and supporting industries to Texas. The MSA is home to several Fortune 500 companies, including Phillips 66, Sysco, KBR, ConocoPhillips, Huntsman, and Group 1 Automotive. As a result, the primary service region for the CUS entertains a diverse economic base. Leading industries include energy, petrochemical, engineering and construction, real estate, aerospace, medicine and health care, transportation, biotechnology, and computer technology.

Widely recognized as the “Energy Capital of the World,” the City is a global center for virtually every segment of the oil-and-gas industry. The City is also home to the Texas Medical Center, the world's largest concentration of biomedical research and healthcare institutions, and to the Lyndon B. Johnson Space Center, NASA's center for human spaceflight training, research, and flight control. The deep-water Port of Houston is the nation's busiest when ranked by foreign tonnage and the second-busiest by total tonnage.

## Fiscal Year 2023 in Review

Effective September 2021, the Combined Utility System finalized a Cost of Service Rate Study “the Rate Study,” and City Council authorized water and wastewater rate increases over a 5 year period that extends from FY2022-FY2026. The Rate Study will support major initiatives for building a strong foundation.

New connections for water for FY2023 were 3,956 compared to an average last ten years of new connections of 4,622. Water usage was 82.8 billion gallons in FY2023 compared to 80.2 billion gallons in FY2022. 71.7 billion gallons of wastewater were treated in 2023 compared to 71.4 billion gallons in 2022.

The City of Houston entered Stage 1 of the Drought Contingency Plan on June 21, 2022. The Fund encourages water conservation (see major initiatives section below) and will continue monitoring the impact on the CUS. Said impacts are referenced in our MD&A section. On August 27, 2023 the City of Houston subsequently entered Stage 2 of the Drought Contingency plan.

The COVID-19 pandemic had minimal to no immediate financial impact on the Houston Combined Utility System’s fiscal year 2023 financial statements. The Fund will continue to monitor any impacts on its financials and take additional steps, as deemed necessary, to respond to the pandemic.

### Major Initiatives

As previously indicated, Houston is anticipated to continue to grow in commerce and population, increasing demand for services for the Fund. As with the HPW purpose statement, “Together we create a strong foundation for Houston to thrive,” the Fund plans to build the necessary infrastructure for water and wastewater to supply the needed services for our current and future citizens. The initiatives include a One Water Plan, a Water Conservation Plan, a Ground Water Reduction Plan, a Capital Improvement Plan focusing on resilience and sustainability, and a Wastewater Consent Decree.

**One Water Plan:** The City is currently developing a One Water Plan (“Plan”), which will be conducted in two phases. Phase One began in August 2023 and involves engaging key stakeholders and community members to ensure the Plan addresses community needs and reflects our shared values and vision for Houston’s future. Through this phase, the City will identify the plan’s vision, objectives and guiding principles. Phase One will also include the development of a Water Equity Roadmap to ensure utility planners consider impacts on vulnerable communities and prioritize projects that deliver equitable outcomes, as well as creating a project website for project communication and engagement. Phase One is expected to take one year to complete. Phase Two will consist of developing, drafting, and delivering the One Water Plan, the Water Utility Strategic Master Plan and the Wastewater Utility Strategic Master Plan, and integrating the Stormwater Strategic Master Plan, which has already begun under a separate contract. Phase Two is expected to be a multi-year project.

The One Water Plan will establish the vision for how Houston will manage water for the benefit of our people, economy, and environment, and will provide a framework for coordinated planning across the City’s water, wastewater, and stormwater utilities. The One Water Plan will maximize the delivery of projects that achieve multiple benefits and align with the City’s existing master plans and initiatives, such as the Climate Action Plan, Reliant Houston, Build Houston Forward, and Complete Communities.

**Water Conservation Plan:** The City of Houston Water Conservation Plan was updated in year 2019 with the required five-year update to the 2014 City of Houston Water Conservation Plan. Houston’s 2014 Water Conservation Plan stated a total GPCD (Gallons Per Capita Per Day) baseline of 144, with the goal of reducing this number by 1.6% every five years, thereby establishing a total GPCD five-year target of 141.7 by 2019, and a ten-year target of 139.4 by 2024. As of 2019, Houston’s total GPCD (and new baseline) is 129, based on the five-year historical average. Houston will continue implementing a water reduction target of 1.6% every five years.

The City of Houston Water Conversation Plan includes the following strategies to achieve the goals:

1. **Water Main Replacement Program:** The aging water transmission system includes large water lines, valves, pumps, storage tanks and distribution system. This includes the rehabilitation and replacement of small diameter lines.

2. **Consumption Awareness Program:** The AMI Network (water consumption is measured through an automated system that transmits water usage data via radio waves) will provide real-time usage information across multiple communication platforms.
3. **Advanced Meter Infrastructure (AMI) Network:** The network will provide the City and its customers with enhanced ability to monitor near real-time water usage, forecast water consumption, and identify leaks earlier.
4. **Water Wise Building Standards:** Revised plumbing and building codes in 2011 and adopted Resolution No. 2004-15, establishing the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System.
5. **Houston PACE Program (Property Assessed Clean Energy):** This program is a proven financial tool that incentivizes Houston's commercial, industrial, and multifamily property owners to upgrade facility infrastructure with little or no capital outlay.

**Ground Water Reduction Plan:** The Harris-Galveston Subsidence District ("HGSD") is a special purpose district created by the Texas Legislature in 1975. HGSD was created to regulate groundwater withdrawal throughout Harris and Galveston to prevent land subsidence, which leads to increased flooding.

One of the City's largest capital projects ever implemented is CUS's expansion of the Northeast Water Purification Plant ("NEWPP") from an 80 MGD facility to a 400 MGD facility. The construction for the expansion began in 2018 using a progressive design-build approach. Phase One is expected to be completed in fiscal year 2024. Full completion of the NEWPP expansion is anticipated by 2025. The North Harris County Regional Water Authority (NHCRWA), the West Harris County Regional Water Authority (WHCRWA), the Central Harris County Regional Water Authority (CHCRWA), the North Fort Bend Water Authority (NFBWA), and the City of Houston – have joined together to share the cost of the entire project that includes transferring water from the Trinity River to Lake Houston (described below) and constructing transmission lines to each entity is projected to be \$2.0 billion. The guaranteed maximum price (GMP) for construction of the treatment plant expansion is \$1.765 billion.

A complimentary project is the Luce Bayou Interbasin Transfer Project ("LBITP"), constructed and operated by the Coastal Water Authority ("CWA"), which will transfer water from the Trinity River to Lake Houston. The LBITP was issued a certification of completion by the contractor in September of 2022, and it is anticipated that water from the canals will be available for the Northeast Water Purification Phase One Plant Expansion during fiscal year 2024. Both projects are funded by the City and its regional water partners, who will benefit from this increased capacity. By 2025, surface water must supply at least 60 percent of our water and 80 percent by 2035. Therefore, these projects provide increase the production and distribution of surface water for compliance with HGSD requirements.

**Wastewater Consent Decree:** In the late 1980s, the Federal government began a nationwide effort under the Clean Water Act to address sanitary sewer overflows. A sanitary sewer overflow (SSO) is a backup of raw wastewater that can contaminate our water, causing property damage, and threatening public health.

On April 1, 2021, the U.S. District Court for the Southern District of Texas approved a consent decree between the City of Houston, the United States Environmental Protection Agency (EPA) and the State of Texas to improve Houston's wastewater system. Refer to Note 10 for further information.

## Capital Improvement Program

The HPW Director will annually submit a five-year Capital Improvement Plan ("CIP") for the Combined Utility System to the Mayor and the City Council. The CUS five-year CIP for fiscal years 2024-2028 contains appropriation requirements of approximately \$4,847.5 million.

The largest upcoming capital investments in the CUS facilities will implement capacity remedial measures within the wastewater system, renew and expand wastewater treatment plants, renew and rehabilitate the wastewater collection system, replace significant portions of the East Water Purification Plant and construct additional large diameter water lines necessary to implement the Ground Water Reduction Plan. Planned investment in these activities over the 2024-2028 CIP totals \$850 million, \$695 million, \$530 million, \$486 million and \$416 million, respectively.

A copy of the published five-year Capital Improvement Plan ("CIP") is available on the City's website: <https://www.houstontx.gov/cip/>.

## FINANCIAL INFORMATION

The Fund's financial statements are maintained on the accrual basis of accounting to ensure the timely matching of revenue against the costs of providing services. Revenues and expenses are recorded in the period in which the revenues are earned, and the expenses are incurred. In developing and maintaining the accounting systems, the administration gives consideration to the adequacy of internal controls. Internal controls are designed to provide reasonable but not absolute assurance. The Fund is responsible for implementing and maintaining an internal control structure to ensure the integrity of the Fund operations and to allow for the preparation of financial statements in conformity with generally accepted accounting principles.

The Combined Utility System controls current expenses at all division levels. The CUS' Deputy Directors are responsible for the expenses approved by the managerial staff reporting to them; in turn, they are responsible for budgetary items that are controllable at their organizational level. Budgetary control is maintained at the expenditure category level (e.g., personnel services, supplies, other services, and capital outlay), through the encumbrance of estimated purchase amounts prior to the release of purchase orders or contracts to the vendors. This is accomplished primarily through an automated encumbrance and accounts payable system.

However, the Fund as a whole is not budgeted. The City Council approves the Fund's annual budget for operational expenses and authorizes capital project expenditures through individual appropriation ordinances based on a five-year CIP that is proposed by the Mayor and HPW Director. City Council can legally appropriate only those amounts of money that the City Controller has certified to be available for appropriation.

The Fund operates under established ordinances for investing, financing, rate setting and cash management. These policies are parameters for developing annual operating budgets as well as the five-year CIP. According to the Fund's current Master Ordinance, Ordinance No. 2004-299, (the "Master Ordinance"), the required reserves include 60 days of operation and maintenance expenses. Additional reserves are required for natural or man-made disasters, expected rollovers for capital equipment and 66.7% of the Fund General Purpose Fund as defined in the Master Ordinances.

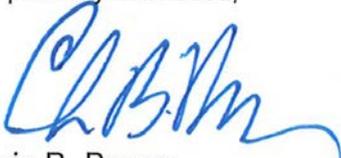
## OTHER INFORMATION

### Acknowledgments

The preparation of this ACFR was accomplished with the cooperation of the entire staff of the Fund, City Finance, and the Controller's office. We would like to express our appreciation to all who contributed to preparing this report. We also want to thank the Mayor and City Council members for their interest and support in enabling the Combined Utility System to fulfill its role in delivering a citywide integrated water and wastewater service to the community.

The Fund is committed to providing citizens with complete and relevant financial information. This ACFR reflects our commitment to meeting high accountability standards to uphold and maintain public trust and goodwill through the highest ethics and integrity.

Respectfully submitted,



Chris B. Brown  
**City Controller**



**INTRODUCTORY SECTION**

**City of Houston**

*Elected Officials as of June 30, 2023*



**SYLVESTER TURNER**  
MAYOR



**CHRIS BROWN**  
CONTROLLER



**AMY PECK**  
DISTRICT A



**TARSHA JACKSON**  
DISTRICT B



**ABBIE KAMIN**  
DISTRICT C



**CAROLYN EVANS-SHABAZZ**  
DISTRICT D



**DAVE MARTIN**  
DISTRICT E



**TIFFANY D. THOMAS**  
DISTRICT F



**MARY NAN HUFFMAN**  
DISTRICT G



**KARLA CISNEROS**  
DISTRICT H



**ROBERT GALLEGOS**  
DISTRICT I



**EDWARD POLLARD**  
DISTRICT J



**MARTHA CASTEX-TATUM**  
DISTRICT K



**MIKE KNOX**  
AT-LARGE POSITION 1



**DAVID ROBINSON**  
AT-LARGE POSITION 2



**MICHAEL KUBOSH**  
AT-LARGE POSITION 3



**LETITIA PLUMMER**  
AT-LARGE POSITION 4



**SALLIE ALCORN**  
AT-LARGE POSITION 5



# HOUSTON PUBLIC WORKS PRINCIPAL OFFICERS AS OF JUNE 30, 2023



**CAROL HADDOCK, PE**  
DIRECTOR OF HOUSTON PUBLIC WORKS



**ROEL GARCIA\***  
CHIEF OF STAFF



**RANDY MACCHI**  
CHIEF OPERATING OFFICER



**SAMIR SOLANKI**  
CHIEF FINANCIAL OFFICER



**KATELYNN BURNS**  
DIRECTOR  
COMMUNICATIONS



**ROBERTO MEDINA**  
DIRECTOR  
GOVERNMENT RELATIONS



**PERRI STOREY\***  
DEPUTY  
CHIEF OF STAFF



**MICHAEL ERETI, PE**  
DIRECTOR  
CAPITAL PROJECTS



**VERONICA O. DAVIS, PE**  
DIRECTOR  
TRANSPORTATION & DRAINAGE OPERATIONS



**YVONNE FORREST\*\***  
DIRECTOR  
HOUSTON WATER



**CHRIS BUTLER**  
DIRECTOR  
HOUSTON PERMITTING CENTER



**LISA GARRISON**  
DIRECTOR  
CUSTOMER ACCOUNT SERVICES

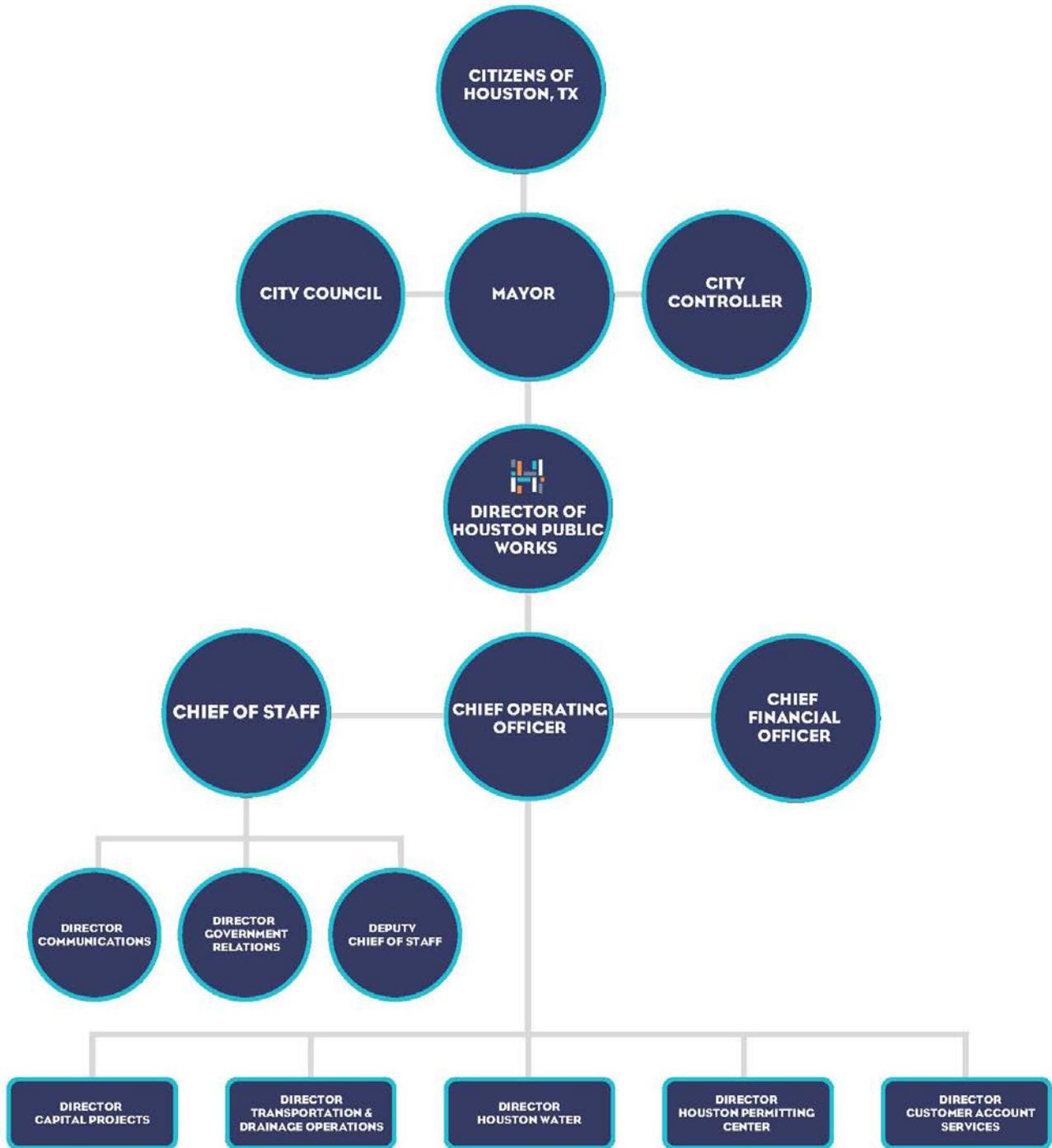
\*As of October 2023, Perri Storey was named Interim Chief of Staff.

\*\*As of November 2023, Greg Eyerly was appointed Director of Houston Water following Yvonne Forrest's retirement from HPW.





ORGANIZATIONAL CHART AS OF JUNE 30, 2023





## INTRODUCTORY SECTION

### Combined Utility System

#### Awards and Achievements

### Gold & Silver Awards

The Combined Utility System's wastewater system has consistently been awarded the Gold and Silver awards from the National Association of Clean Water Agencies in recognition of our ability to produce wastewater discharges in compliance with federal regulations that protect the public and the aquatic environment.

#### Gold Award No Violations

White Oak Wastewater Treatment Plant | Willowbrook Wastewater Treatment Plant | Tidwell Timbers Wastewater Treatment Plant | Northeast Wastewater Treatment Plant | Clinton Park Wastewater Treatment Plant | Imperial Valley Wastewater Treatment Plant | Intercontinental Airport Wastewater Treatment Plant | MUD #203 Wastewater Treatment Plant | Homestead Wastewater Treatment Plant | Park Ten Wastewater Treatment Plant | Keegans Bayou Wastewater Treatment Plant | Greenridge Wastewater Treatment Plant | Sims Bayou Wastewater Treatment Plant | Sims South Wastewater Treatment Plant

#### Silver Award

Northwest Wastewater Treatment Plant | FWSD #23 Wastewater Treatment Plant | Northbelt Wastewater Treatment Plant | Beltway Wastewater Treatment Plant | Chocolate Bayou Wastewater Treatment Plant | Southeast Wastewater Treatment Plant | WCID # 111 Wastewater Treatment Plant | Almeda Sims Wastewater Treatment Plant

### 2023 Awards Received

- **2023 WaterSense Promotional Partner of the Year Award:** The U.S. Environmental Protection Agency honored Houston Public Works' Water Service Line for successfully promoting water-reducing programs as a WaterSense Partner.
- **Water Environment Association of Texas:** HPW employee received OPS Challenge Riley Crocker Dedicated Volunteer Award.
- **Wyland National Mayors Challenge for Water Conservation:** For the second year in a row, Houston was one of the five cities nationwide to win the Wyland National Mayor's Challenge and took home the top prize for populations above 600,000, thus naming it a "Water-Wise City" by the Wyland Foundation.
- **Give Water a Break 2023 Platinum Winner for Excellence in Concept, Design, and Digital Communication:** This award was issued by the international AVA Digital Awards competition in recognition of excellence by creative professionals responsible for the planning, concept, direction, design, and production of digital communication.
- **TEXAS AMERICAN WATER WORKS ASSOCIATION 2023:**
  - Best Tasting Drinking Water: East Water Purification Plant | 1st Place
  - Top Ops Competition | 1st Place Houston Water
  - Top Ops Competition | 3rd Place Northeast Water Purification Plant
- **WATER ENVIRONMENT ASSOCIATION OF TEXAS:**
  - Houston Water Microbe Masters - 3rd place as a first time competitor during Texas Water 2023 in Houston, TX.

### AMERICAN WATER WORKS ASSOCIATION

The City of Houston is a member of the American Water Works Association (AWWA) and AWWA's Partnership for Safe Water program for treatment plant and distribution system optimization. This program is based on the voluntary commitment of water providers to go above and beyond regulatory requirements to improve the quality of water delivered to customers by optimizing water system operations.

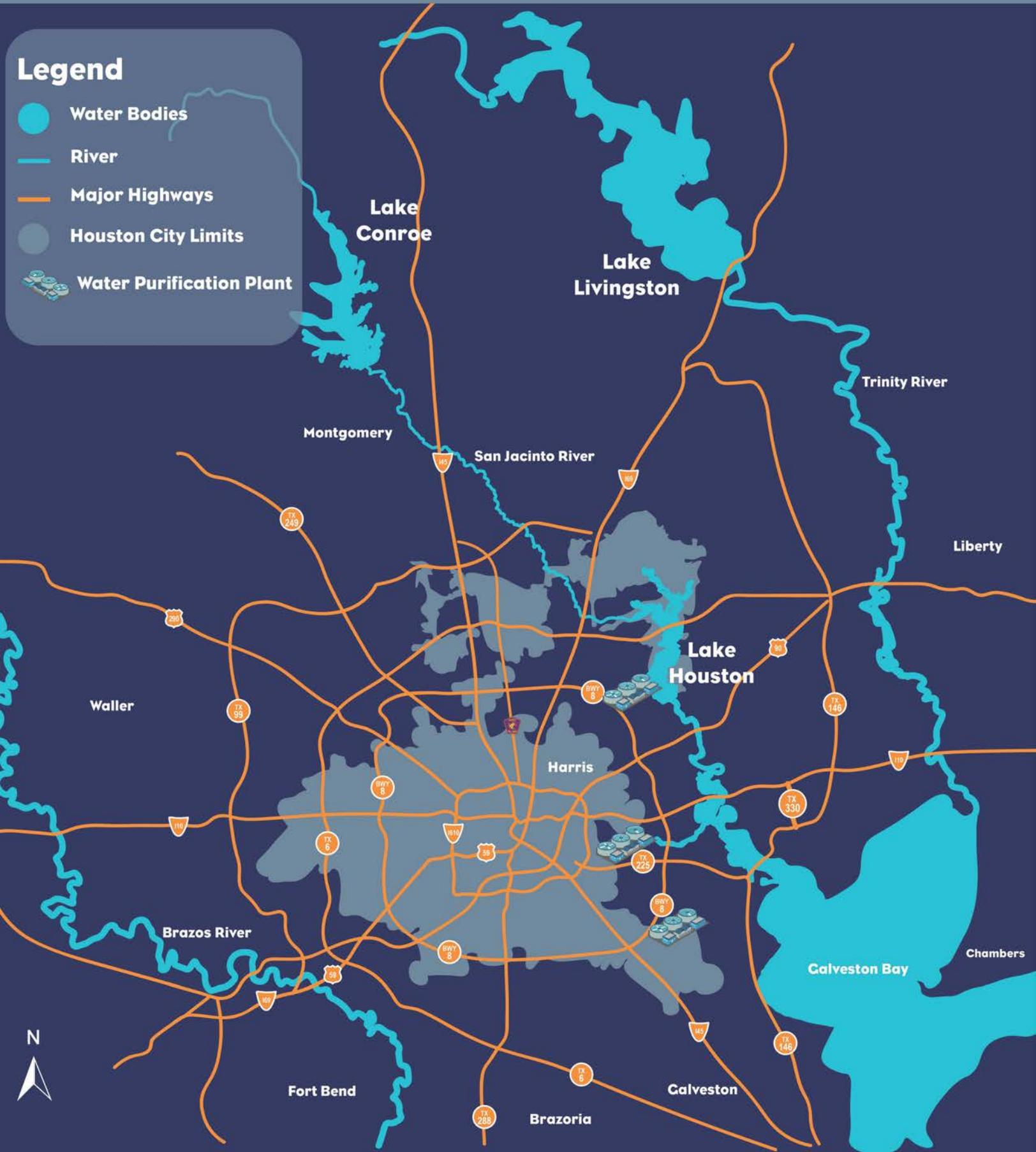
HPW Director Carol Haddock received the 2023 Engineer of the Year from the Texas Chapter of the American Water Works Association – Southeast Branch.



# WHERE DOES YOUR WATER COME FROM?

**Legend**

- Water Bodies
- River
- Major Highways
- Houston City Limits
- Water Purification Plant



Geospatial or map data maintained by Houston Public Works is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.





# FINANCIAL SECTION

Annual Comprehensive Financial Report



**5 TO THRIVE  
VALUES**

**INTEGRITY  
TEAMWORK  
OWNERSHIP  
COMMUNICATION  
RESPECT**



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## INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor,  
Members of the City Council and City Controller  
City of Houston, Texas

### Opinion

We have audited the financial statements of the Combined Utility System Fund of the City of Houston, Texas ( the "Combined Utility System Fund") as of and for the years ended June 30, 2023 and 2022, and the related notes to the financial statements, which collectively comprise the Combined Utility System Fund's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Combined Utility System Fund , as of June 30, 2023 and 2022, and the changes in its financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the City of Houston, Texas, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Emphasis of Matter

As discussed in Note 1, the financial statements present only the Combined Utility System Fund and do not purport to, and do not, present fairly the financial position of the City of Houston, Texas, as of June 30, 2023 and 2022, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

### Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

To the Honorable Mayor,  
Members of the City Council, and City Controller  
City of Houston, Texas  
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### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City of Houston, Texas' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (pages 4 through 14), the Schedule of Changes in the Fund's Net Pension Liability and Related Ratios (pages 75 through 77) and the Schedule of the Fund's Proportionate Share of OPEB Liability and Related Ratios (pages 78 through 81) be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing

To the Honorable Mayor,  
Members of the City Council, and City Controller  
City of Houston, Texas  
Page 3

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the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### **Other Information**

Management is responsible for the other information included in the annual report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

#### **Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated November 17, 2023, on our consideration of the City of Houston, Texas' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City of Houston, Texas' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Houston, Texas' internal control over financial reporting and compliance.

*McConnell Jones LLP Banks, Finley, White & Co.*

November 17, 2023

The Combined Utility System (“CUS”) is a self-sufficient department of the City of Houston, Texas (“the “City”). The Combined Utility System Fund (“The “Fund”) operates within Houston Public Works and is an enterprise fund of the City. CUS, under the administrative control of the Mayor, manages and operates the Fund. The following Management’s Discussion and Analysis (MD&A) of the Combined Utility System provides an introduction and overview of the financial activities for the fiscal years ended June 30, 2023 (“FY2023”) and June 30, 2022 (“FY2022”). We encourage readers to consider the information presented here in with the Letter of Transmittal included in the Introduction Section, financial statements and the notes to the financial statements that follow this section. All dollar amounts, unless otherwise indicated, are in thousands of dollars.

## Financial Highlights

- \* As of June 30, 2023, the assets and deferred outflows of resources of the Fund exceeded its liabilities and deferred inflows of resources by \$3,113.3 million as compared to \$2,478.1 million on June 30, 2022. Of the total \$3,113.3 million amount in net position as of June 30, 2023, \$2,271.6 million represented net investment in capital assets; \$193.9 million was restricted for maintenance and operations, debt service payments and capital improvements, the remaining balance of \$647.8 million represented unrestricted net portion and may be used to meet the Combined Utility System’s ongoing obligations.
- \* The Fund’s total net position increased by \$635.2 million in FY2023 compared to an increase of \$893.9 million in FY2022.
- \* Gross operating revenues for FY2023 increased by \$196.5 million or 15.03% to \$1,504.0 million compared to gross operating revenues for FY2022, which increased by \$214.8 million or 19.65% to \$1,307.5 million.

## Overview of Financial Statements

This discussion and analysis is an introduction to the Fund’s financial statements, which consists of the following components: management’s discussion and analysis (“MD&A”), financial statements, notes to the financial statements, and required supplementary information. The notes are essential to a full understanding of the financial statements. A statistical section is included for further analysis.

A fund is a group of related accounts used to maintain control over resources that have been segregated for specific activities or objectives. An enterprise fund is used to account for a business-like activity within a government. The Fund is an enterprise fund of the City; thus, it is included in the City’s Annual Comprehensive Financial Report.

The Statements of Net Position present information on the Fund’s assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference between these sections reported as net position. Changes in net position from year to year may serve as useful indicators of whether the financial position of the Fund is improving or deteriorating.

The Statements of Revenues, Expenses, and Changes in Net Position present information showing how the Fund’s net position changed during the two most recent fiscal years. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows.

The Statements of Cash Flows report how much cash was provided by or used for the Fund’s operations, investing activities, non-capital financing activities, and capital and related financing activities.

The financial statements also include note disclosures as well as required supplementary information that provide additional explanations and details on significant accounting policies and significant financial statement line items.

## Financial Analysis

The following comparative condensed financial statements and other selected information serve as the key financial data and indicators for management, monitoring, and planning:

**Net Position**  
**June 30, 2023, 2022, and 2021**  
(amounts expressed in thousands)

	<u>2023</u>	<u>2022</u>	<u>2021</u>
<b>Assets</b>			
Current assets	\$ 2,080,186	\$ 2,102,156	\$ 2,135,413
Noncurrent assets	503,557	679,882	652,439
Net capital assets	9,397,885	8,989,679	8,528,998
Total Assets	<u>11,981,628</u>	<u>11,771,717</u>	<u>11,316,850</u>
<b>Deferred outflows of resources</b>	<u>268,585</u>	<u>287,240</u>	<u>384,227</u>
<b>Liabilities</b>			
Current liabilities	735,057	679,877	640,867
Noncurrent liabilities	8,292,211	8,801,833	9,336,433
Total Liabilities	<u>9,027,268</u>	<u>9,481,710</u>	<u>9,977,300</u>
<b>Deferred inflows of resources</b>	<u>109,644</u>	<u>99,136</u>	<u>139,609</u>
<b>Net Position</b>			
Net investment in capital assets	2,271,605	1,601,742	978,565
Restricted net position	193,868	178,907	177,947
Unrestricted	647,828	697,462	427,656
<b>Total Net Position</b>	<u>\$ 3,113,301</u>	<u>\$ 2,478,111</u>	<u>\$ 1,584,168</u>

## **Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources, and Net Position**

The Combined Utility System employs forward-looking management principles to sustain a healthy debt coverage from revenues and continuously improve capital assets to provide clean drinking water and safely treat wastewater for Houston citizens. This approach has continued to build financial strength and stability for the future of our water supply. Net position may serve over time as a useful indicator of a government's financial position. At June 30, 2023, total net position was \$3,113.3 million, an increase of \$635.2 million or 25.6% from June 30, 2022. Total net position at June 30, 2022 was \$2,478.1 million, an increase of \$893.9 million or 56.4% from June 30, 2021. The largest portion of the Fund's net position, \$2,271.6 million or 73.0% in FY2023 and \$1,601.7 million or 63.7% in FY2022 reflects the investment in capital assets (e.g. land, reservoir facilities, water treatment facilities and wastewater disposal facilities) less any related outstanding debt used to acquire those assets. CUS uses capital assets to provide services to its citizens and customer cities; consequently, these assets are not available for future spending.

### **FY2023**

Total assets increased by \$209.9 million or 1.8% in FY2023 compared to FY2022. Decreases in cash and cash equivalents by \$61.7 million and 18.5% are predominantly attributable to the following: In FY2023 there were no new debt financing transactions, therefore, no borrowed cash was recorded. In FY2023, the annual pay-as-you-go (PAYGO) capital funding (financed by CUS cash) was increased from FY2022. Accounts receivable increased by \$35.8 million or 14.2%, primarily due to the rate increases implemented in April 2022 and April 2023 per rate study completed in FY2021. Capital assets increased by \$408.2 million or 4.5% in FY2023 compared to FY2022, as the nature of operating a water utility is capital-intensive. The Fund is continuously working on its capital improvement program, which is critical to the city's future and includes projects such as the Northeast Water Purification Plant (NEWPP) expansion project as a part of its City's groundwater reduction plan. Non-current restricted assets decreased by \$176.3 million or 25.9% primarily due to payments received during the year for the NEWPP expansion project.

Total liabilities decreased by \$454.4 million or 4.8% in FY2023 compared to FY2022, primarily due to a \$509.6 million or 5.8% decrease in non-current liabilities, offset by a \$55.2 million or 8.1% increase in current liabilities. Non-current bonds payable decreased by \$328.2 million or 4.6% due to principal payments made in FY2023. Furthermore, no new bonds issuances occurred during the year (refer to long-term debt section below for further information). Unearned revenue decreased by \$121.9 million or 25.1%, primarily due to the progression of the Northeast Expansion Project compared to FY2022 (refer to Capital Contributions section below for further information). Total other post-employment benefits - health benefit ("OPEB-HB") decreased by \$50.3 million or 27.3% primarily due to the change in discount rate. The increase in current liabilities was mainly due to a \$35.7 million or 15.3% increase in accounts payable due to significant work performed towards the NEWPP expansion and other projects.

Deferred outflows of resources decreased by \$18.7 million or 6.5% during FY2023 primarily due to a \$15.2 million or 5.9% decrease in deferred outflows related to unamortized cost on refunded debt. In addition, due to amortization of prior year deferred amounts for OPEB-HB, net of current year additions to the deferred amounts, deferred outflows decreased by \$2.9 million or 11.2%. Total deferred inflows of resources increased by \$10.5 million or 10.6%, mainly due to the change in discount rate from 2.16% in FY2022 to 3.54% in FY2023 for OPEB-HB resulting an increase to deferred inflows, offset by a decrease in deferred inflows for pension primarily due to amortization of prior year deferred amounts.

### **FY2022**

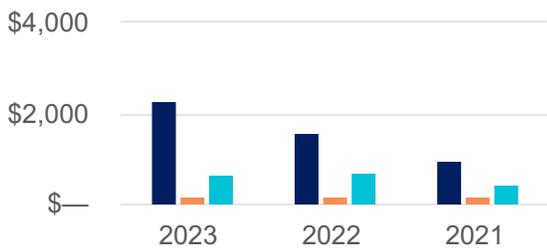
Total assets increased by \$454.9 million or 4.0% from \$11.3 billion at June 30, 2021 to \$11.8 billion at June 30, 2022. Decreases in cash and cash equivalents by \$265.1 million or 44.3% are mainly due to additional proceeds from revenue bonds and restoration of commercial paper in FY2021, partially offset by cash incurred for capital project acquisitions during FY2021. Accounts receivable increased by \$81.8 million or 47.8% mainly due to the rate increases implemented in September 2021 and April 2022 based on the rate study completed in FY2021. Capital assets increased by \$460.7 million or 5.4% in FY2022 compared to FY2021 as the nature of operating a water utility is capital-intensive. The Fund is continuously working on its capital improvement program, which is

critical to the city's future and includes projects such as the Northeast Water Purification Plant expansion project as a part of the City's ground water reduction plan. View the Capital Assets section in this MD&A for further discussion and analysis on current and future capital projects.

Total liabilities decreased by \$495.6 million or 5.0% in FY2022 compared to FY2021, primarily due to a \$534.6 million or 5.7% decrease in non-current liabilities, offset by a \$39.0 million or 6.1% increase in current liabilities. Non-current bonds payable decreased by \$189.1 million or 2.6% due to principal payments made in FY2022 that were partially offset by new bonds issued during the year (refer to long-term debt section below for further information). Unearned revenue decreased by \$209.9 million or 30.2%, primarily due to the progression of the Northeast Expansion Project compared to FY2021 (refer to Capital Contributions section below for further information). Total liability for OPEB-HB decreased by \$29.8 million or 13.9% primarily due to a change in benefit terms. The increase in current liabilities was mainly due to a \$18.5 million or 8.6% increase in accounts payable primarily attributable to the significant work performed towards the NEWPP expansion and other projects.

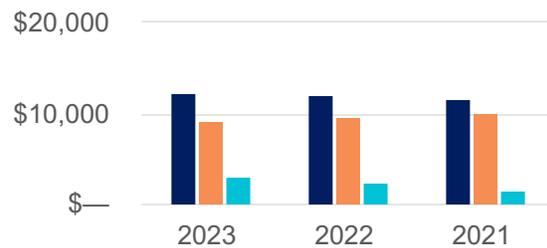
Deferred outflows of resources decreased by \$97.0 million or 25.2% during FY2022 due to a \$103.2 million or 28.6% decrease in deferred outflows related to the SWAP liability (refer to Note 7 for further information), offset by increases in pension and OPEB-HB related deferred outflows due to actuarial changes of assumptions. Total deferred inflows of resources decreased by \$40.5 million or 29.0% primarily due to amortization of prior year deferred amounts related to the pension plan.

**Total Net Position**



- Net Investment in Capital Assets
- Restricted Net Position
- Unrestricted (deficit)

**Financial Position**



- Total Assets & Deferred Outflows
- Total Liabilities & Deferred Inflows
- Total Net Position

## Change in Net Position

For FY2023 and FY2022, net position of the Fund increased by \$635.2 million or 25.6% and \$893.9 million or 56.4%, respectively.

**Changes in Net Position**  
**For the years ended June 30, 2023, 2022, and 2021**  
(amounts expressed in thousands)

	<u>2023</u>	<u>2022</u>	<u>2021</u>
Operating revenues	\$ 1,503,982	\$ 1,307,513	\$ 1,092,740
Operating expenses	867,412	746,203	803,718
<b>Operating Income</b>	<b>636,570</b>	<b>561,310</b>	<b>289,022</b>
Non-operating revenues	124,892	102,108	89,731
Non-operating expenses	(273,040)	(257,907)	(244,539)
<b>Non-operating Income (loss)</b>	<b>(148,148)</b>	<b>(155,799)</b>	<b>(154,808)</b>
Income before Contributions and Transfers	488,422	405,511	134,214
Capital contributions	201,164	546,307	408,344
Transfers	(54,396)	(57,875)	(61,984)
<b>Change in Net Position</b>	<b>635,190</b>	<b>893,943</b>	<b>480,574</b>
<b>Total net position, July 1</b>	<b>2,478,111</b>	<b>1,584,168</b>	<b>1,103,594</b>
<b>Total net position, June 30</b>	<b>\$ 3,113,301</b>	<b>\$ 2,478,111</b>	<b>\$ 1,584,168</b>

## FY2023

Operating revenue is primarily comprised of water and wastewater usage charges. In FY2023, total operating revenues were \$1.50 billion, an increase of \$196.5 million or 15.03% from FY2022, primarily due to the rate increases implemented in April 2022 and April 2023 per rate study completed in FY2021. Effective April 1, 2023, the Fund increased water rates by 15.2% in order to account for inflation and population increases, and to pay for necessary structural improvements, such as replacing old pipes, rehabilitating or replacing groundwater wells and lift stations, and improving water and wastewater treatment plants. Overall water consumption increased by 2.57 billion gallons in FY2023. The number of active water service accounts increased from 494,865 in FY2022 to 496,945 in FY2023.

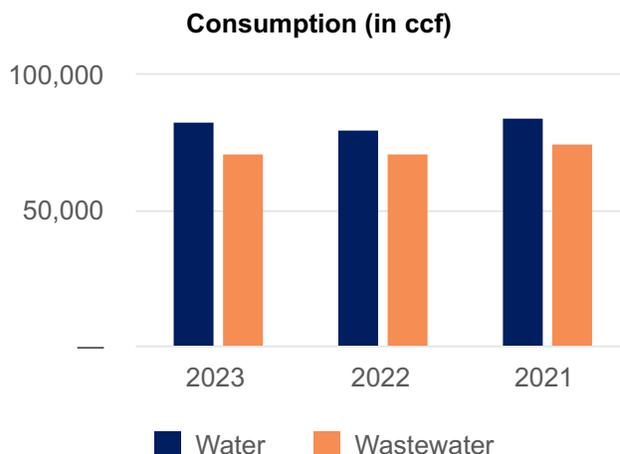
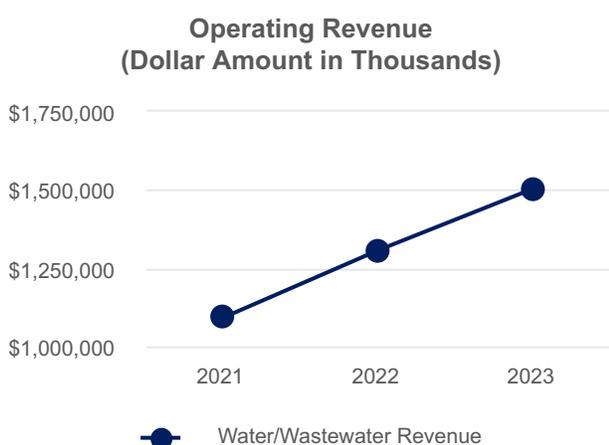
Non-operating revenues were \$124.9 million in FY2023, representing \$39.7 million of net investment income and \$85.1 million of other revenue, including impact fees.

Non-operating revenue increased by \$22.8 million or 22% in FY2023 compared to FY2022 primarily due to an increase in net investment income by \$90.5 million due to an increase in fair value of investments and a decrease in other revenue by \$67.7 million. The reduction in other revenue is primarily due to the Allen's Creek settlement of \$51.1 million (see Note 7) in FY2022.

**FY2022**

During FY2022, total operating revenues were \$1.3 billion, an increase of \$214.8 million or 19.7% from FY2021. This increase was mainly due to the rate increases implemented in September 2021 and April 2022 based on the rate study completed in FY2021. The Fund saw moderate customer growth for new water connections by 204 accounts, comprised of 4009 accounts in FY2022 compared to 3805 accounts in FY2021. Overall water consumption decreased by 4.6 billion gallons or 5.4% in FY2022 compared to FY2021.

Non-operating revenue increased by \$14.3 million in FY2022 primarily due to an increase of impact fee revenue of \$16.5 million and the Allen's Creek settlement of \$51.1 million (see Note 7) with an offset of net investment loss of \$54.0 million due to a decrease in fair value of investments.



**Total Expenses**

For the years ended June 30, 2023, 2022, and 2021  
(amounts expressed in thousands)

	<u>2023</u>	<u>2022</u>	<u>2021</u>
<b>Operating Expenses</b>			
Maintenance and operating	\$ 578,050	\$ 463,364	\$ 529,971
Depreciation and amortization	289,362	282,839	273,747
<b>Non-operating Expenses</b>			
Interest on long-term debt	270,085	257,907	242,569
Other expenses	2,955	—	1,970
<b>Total Expenses</b>	<u>\$ 1,140,452</u>	<u>\$ 1,004,110</u>	<u>\$ 1,048,257</u>

### FY2023

Total operating expenses were \$867.4 million in FY2023, an increase of \$121.2 million or 16.2% from FY2022. In FY2023, maintenance and operating expenses increased by \$114.7 million or 24.8%, primarily attributable to an increase in materials and supplies along with an increase in repairs in Q4 of FY2023. Record-setting high temperatures and lack of rainfall during FY2023 contributed to dry soil conditions that caused significant ground shifting resulting in increased water leaks and subsequent repair costs. Personnel expenses increased \$8.2 million or 6.28% due to a scheduled salary increase. Depreciation expense increased by \$6.5 million or 2.3% in FY2023, mainly due to increased infrastructure capital assets. OPEB benefit decreased by \$32.4 million or 81.9% due to a one-time benefit term change in FY2022, which resulted in a significant OPEB (benefit) in FY2022.

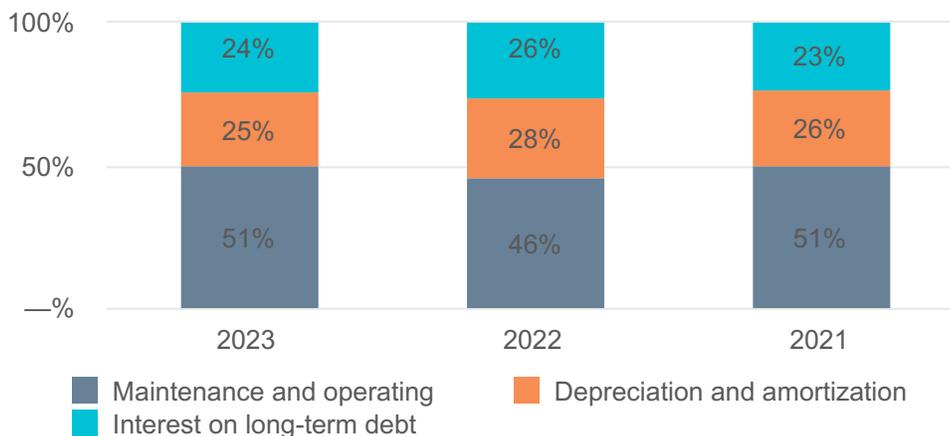
Non-operating expenses increased by \$15.1 million or 5.9% in FY2023 compared to FY2022, primarily due to increased interest payments related to variable rate debt.

### FY2022

Total operating expenses were \$746.2 million in FY2022, a decrease of \$57.5 million or 7.2% from FY2021. In FY2022, maintenance and operating expenses decreased by \$66.6 million or 12.6%, primarily attributable to a change in benefit terms related to the OPEB (Other Postemployment Benefit) and amortization of deferred amounts related to the pension plan. Significant appreciation in fair value of pension plan assets in FY2021 resulted in a large amount of deferred inflows to be amortized over five years, including FY2021. Depreciation expense increased by \$9.1 million or 3.3% in FY2022, mainly due increased infrastructure capital assets.

Non-operating expenses increased by \$13.4 million or 5.5% in FY2022 compared to FY2021, due to increases in interest expense and cost of issuance for debt.

**Composition of Total Expenses**



### Capital Contributions

Capital contributions were \$201.2 million in FY2023, a decrease of \$345.1 million or 63.2% from FY2022. Capital contributions were \$546.3 million in FY2022, an increase of \$138.0 million or 33.8% from FY2021. The majority of capital contributions during FY2022 and FY2023 represent funding for the Northeast Water Purification Plant expansion project "NEPE", Northeast Transmission Line project "NETL," and Southeast Transmission Line project "SETL." Recognition of capital contribution revenue is based on a percentage of completion method of revenue recognition for long-term joint venture construction contracts in accordance with GASB 62 (Refer to Note 1.G). The change in capital contributions recognized for FY2022 and FY2023 is mainly due to the progression of the NEPE.

## Capital Assets

The Fund's capital assets as of June 30, 2023 and 2022, amounted to \$9.4 billion and \$9.0 billion, respectively. This balance includes land, buildings, and intangible assets, in addition to infrastructure assets such as water and wastewater lines and water and wastewater treatment plants.

The Fund added approximately \$702.6 million of capital assets during FY2023. Construction in progress increased from \$2,224.6 million at the end of FY2022 to \$2,450.3 million at the end of FY2023. The increase was mainly due to expansion work at the Northeast Water Purification Plant, which accounted for approximately \$255.7 million of the \$679.9 million additions to construction in progress, along with \$44.3 million and \$21.6 million in additions related to the Wastewater Collection System Rehabilitation and East Water Purification Plant Improvements, respectively. In addition, various water and sewer projects were placed in service during the year, resulting in transfers totaling \$454.2 million from construction in progress to infrastructure and other capital assets. FY2023 depreciation and amortization expense was \$289.4 million.

The Fund added approximately \$757.1 million of capital assets during FY2022. Construction in progress increased from \$1,826.3 million at the end of FY2021 to \$2,224.6 million at the end of FY2022. The increase was mainly due to expansion work at the Northeast Water Purification Plant, which accounted for approximately \$324.5 million of the \$730.9 million additions to construction in progress. In addition, various water and sewer projects were placed in service during the year, resulting in transfers totaling \$332.7 million from construction in progress to infrastructure and other capital assets. FY2022 depreciation and amortization expense was \$282.8 million.

**Capital Assets**  
**As of June 30, 2023, 2022, and 2021**  
*(amounts expressed in thousands)*

	<u>2023</u>	<u>2022</u>	<u>2021</u>
Land	\$ 196,117	\$ 183,194	\$ 190,261
Buildings	202,088	190,197	175,238
Improvements and equipment	200,160	197,080	193,838
Infrastructure	12,346,005	11,966,989	11,669,779
Rights and intangibles	846,948	846,510	847,495
Lease right-of-use assets	—	42	42
Construction in progress	2,450,250	2,224,622	1,826,333
Less accumulated depreciation and amortization	<u>(6,843,683)</u>	<u>(6,618,955)</u>	<u>(6,373,988)</u>
<b>Total Capital Assets</b>	<u><u>\$ 9,397,885</u></u>	<u><u>\$ 8,989,679</u></u>	<u><u>\$ 8,528,998</u></u>

\*The depreciation policy can be found in Note 1 of the financial statements, and additional information concerning the Fund's capital assets can be found in Note 5.

## Long-Term Debt

As of June 30, 2023, the Fund had approximately \$7,605.5 million in long-term debt, a decrease of \$332.7 million from FY2022. As of June 30, 2022, the Fund had approximately \$7,938.2 million in long-term debt, a decrease of \$197.7 million from FY2021.

The Fund's total debt remained stable in FY2023, with no new debt issued during the year. New debt issued during FY2022 included \$130.0 million of Combined Utility System First Lien Revenue Bonds Series 2020E.

Face Value Outstanding Debt						
(amounts expressed in thousands)						
	2023		2022		2021	
Junior Lien Revenue Bonds	\$ 133,803	1.8 %	\$ 143,686	1.8 %	\$ 151,227	1.9 %
First Lien Revenue Bonds	6,537,881	86.0 %	6,835,066	86.1 %	6,984,887	85.9 %
Subordinate Lien Bonds	432,491	5.7 %	445,116	5.6 %	457,590	5.6 %
Long-Term Contracts	416,052	5.5 %	425,395	5.4 %	449,846	5.5 %
Pension Obligation Bonds	85,308	1.1 %	88,933	1.1 %	92,302	1.1 %
Lease and subscription liabilities	—	— %	12	— %	27	— %
<b>Total</b>	<b>\$ 7,605,535</b>	<b>100 %</b>	<b>\$ 7,938,208</b>	<b>100 %</b>	<b>\$ 8,135,879</b>	<b>100 %</b>

Standard & Poor's, Moody's, Fitch's and Kroll's underlying rating of the City's obligations as of June 30, 2023 are as follows:

	Standard & Poor's	Moody's	Fitch's	Kroll
Water & Sewer System Junior Lien	AA+	Aa1	AA+	N/R
Combined Utility System First Lien	AA	Aa2	AA	N/R
Combined Utility System - CWA	AA	N/R	AA+	N/R

\*Additional information on long-term debt can be found in Note 7 of this report.

## Debt Coverage

City of Houston Ordinance No. 2004-299, otherwise known as the Master Ordinance, requires the Fund to maintain a debt coverage ratio of 1.20 or greater in each fiscal year. This means that Net Revenues must minimally be equal to or greater than 120% of the total debt service of Junior Lien and First Lien Bonds each fiscal year.

Coverages of total debt service on Junior Lien Bonds under Previous Ordinance and First Lien Bonds under Master Ordinance by Net Revenues was 2.05 in FY2023 and 1.77 in FY2022.

The Fund maintains the debt coverage ratio above the minimum requirement. Please refer to the Statistical Section of this report.



## **Economic Factors and Future Planning**

The primary service area of the Combined Utility System is located in The Houston-The Woodlands-Sugar Land Metropolitan area. Continued growth is expected for the service area in the extended future. The average number of new water connections in the last ten years was 4,622 per year. In fiscal year 2023, the Fund treated an average of 475.9 million gallons per day (MGD) of water with a maximum daily capacity of 693.0 MGD. After treatment, water gets distributed to citizens in the Houston area through 7,000 miles of pipeline distribution. Throughout 39 wastewater treatment plants, an average of 241.8 million gallons of wastewater per day are collected and treated with a maximum daily treatment permitted capacity of 586.7 MGD. The sanitary sewer collection system moves wastewater to the local treatment plants to be treated and safely returned to bayous and lakes.

The executive team continues to focus on identifying and implementing necessary improvements to provide high-quality, cost-effective service to its member and customer cities. Under the City's Master Ordinance, the Combined Utility System has maintained project and financial planning to keep pace with its growth. Rate structures are reviewed consistently to ensure the Combined Utility System can meet the growing needs of its customer base.

## **Requests for Information**

This financial report is designed to provide a general overview of the Combined Utility System's finances to our citizens, taxpayers, customers, investors and creditors. Questions concerning any of the information provided in this report, or requests for additional financial information should be addressed to the Office of the City Controller, Attention: Financial Management Services, Combined Utility System, 611 Walker St., 24th Floor, Houston, Texas 77002.

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**Combined Utility System  
Statements of Net Position  
June 30, 2023 and 2022  
(amounts expressed in thousands)**

	2023	2022
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 271,737	\$ 333,406
Investments	1,484,994	1,485,175
Receivables, net of allowances		
Accounts receivable	288,539	252,749
Special assessments receivable	93	93
Due from other funds	9	2,665
Due from other governments	7,387	7,242
Inventory	19,128	14,028
Prepaid items	8,262	6,761
Restricted assets		
Cash and cash equivalents	37	37
Total current assets	2,080,186	2,102,156
Noncurrent Assets		
Investments	64,604	63,289
Prepaid items	2,438	2,557
Due from other governments	421,664	600,972
Amount held by other governments	14,851	13,064
Total noncurrent assets	503,557	679,882
Capital assets		
Land	196,117	183,194
Buildings	202,088	190,197
Improvements and equipment	200,160	197,080
Infrastructure	12,346,005	11,966,989
Construction in progress	2,450,250	2,224,622
Rights and intangibles	846,948	846,510
Lease right-of-use assets	—	42
Less accumulated depreciation and amortization	(6,843,683)	(6,618,955)
Net capital assets	9,397,885	8,989,679
Total noncurrent assets	9,901,442	9,669,561
<b>Total assets</b>	<b>11,981,628</b>	<b>11,771,717</b>
<b>Deferred outflows of resources</b>		
Deferred outflows on pension liability	2,957	3,443
Deferred outflows on OPEB liability	23,154	26,083
SWAP liability/Unamortized cost on refunded debt	242,474	257,714
<b>Total deferred outflows of resources</b>	<b>\$ 268,585</b>	<b>\$ 287,240</b>

(Continued)

\*The accompanying notes are an integral part of these financial statements.



**Combined Utility System**  
**Statements of Net Position**  
**June 30, 2023 and 2022**  
*(amounts expressed in thousands)*

	2023	2022
<b>Liabilities</b>		
Current Liabilities		
Accounts payable	\$ 269,003	\$ 233,321
Accrued payroll liabilities	3,730	8,451
Accrued interest payable	34,946	33,400
Contracts payable	9,200	8,866
Due to other funds	37,845	31,203
Due to other governments	3,393	3,295
Advances and deposits	66,931	59,439
Pension obligation bonds payable	3,901	3,625
Claims and judgments	1,218	1,818
Compensated absences	12,114	12,145
Arbitrage rebate	395	378
Bonds payable	292,381	283,924
Current Lease liability	—	12
Total current liabilities	735,057	679,877
Noncurrent liabilities		
Accrued interest payable	62,007	56,402
Bonds payable	6,811,794	7,139,944
Claims and judgments	4,813	5,016
Compensated absences	9,337	9,415
Contracts payable	406,852	416,529
Due to other governments	11,518	9,369
Arbitrage rebate	471	548
Net pension liability	283,407	284,899
Other post employment benefit payable	133,873	184,167
SWAP liability	123,043	124,651
Unearned revenue	363,689	485,585
Pension obligation bonds payable	81,407	85,308
Total noncurrent liabilities	8,292,211	8,801,833
<b>Total liabilities</b>	9,027,268	9,481,710
<b>Deferred inflows of resources</b>		
Deferred inflows on pension liability	43,532	68,619
Deferred inflows on OPEB liability	66,112	30,517
<b>Total deferred inflows of resources</b>	109,644	99,136
<b>Net Position</b>		
Net investment in capital assets	2,271,605	1,601,742
Restricted net position		
Restricted for maintenance and operations	101,839	91,281
Restricted for debt service	74,703	71,968
Restricted for capital improvements	17,326	15,658
Unrestricted	647,828	697,462
<b>Total net position</b>	\$ 3,113,301	\$ 2,478,111

\*The accompanying notes are an integral part of these financial statements.



**Combined Utility System**  
**Statements of Revenues, Expenses and Changes in Net Position**  
**For the Fiscal Years Ended June 30, 2023 and 2022**  
*(amounts expressed in thousands)*

	<b>2023</b>	<b>2022</b>
<b>Operating Revenues</b>		
Water/Sewer billing	\$ 1,503,982	\$ 1,307,513
Total operating revenue	1,503,982	1,307,513
<b>Operating Expenses</b>		
Maintenance and operating	578,050	463,364
Depreciation and amortization	289,362	282,839
Total operating expenses	867,412	746,203
Operating income	636,570	561,310
<b>Nonoperating Revenue (Expenses)</b>		
Investment income (loss)	39,748	(50,712)
Other revenue	75,709	138,428
Gain (loss) on disposal of assets	(2,955)	3,196
Interest expense	(269,535)	(254,149)
Cost of issuance for debt	(550)	(3,758)
Contributions in	9,435	11,196
Total nonoperating revenues (expenses)	(148,148)	(155,799)
Income before contributions and transfers	488,422	405,511
Capital contributions	201,164	546,307
Transfers out	(54,396)	(57,875)
Total transfers	(54,396)	(57,875)
Change in net position	635,190	893,943
Total net position, July 1	2,478,111	1,584,168
<b>Total net position, June 30</b>	<b>\$ 3,113,301</b>	<b>\$ 2,478,111</b>

\*The accompanying notes are an integral part of these financial statements.



**Combined Utility System**  
**Statements of Cash Flows**  
**For the Fiscal Years Ended June 30, 2023 and 2022**  
*(amounts expressed in thousands)*

	<b>2023</b>	<b>2022</b>
<b>Cash flows from operating activities</b>		
Receipts from customers	\$ 1,538,751	\$ 1,233,077
Payments to employees	(218,635)	(201,778)
Payments to suppliers	(325,616)	(230,103)
Internal activity-payments to other funds	(86,876)	(89,015)
Claims paid	(2,072)	43,188
Other receipts	79,288	86,651
Receipts from other governments	—	1,934
Net cash provided by operating activities	984,840	843,954
<b>Cash flows from investing activities</b>		
Interest income on investments	34,826	13,274
Purchases of investments	(2,447,001)	(3,239,326)
Sales of investments	2,450,790	3,031,117
Net cash provided by (used in) investing activities	38,615	(194,935)
<b>Cash flows from capital and related financing activities</b>		
Retirement of revenue bonds	(266,695)	(247,845)
Retirement of contracts payable	(8,865)	(8,580)
Proceeds from issuance of revenue bonds	—	130,000
Retirement of Junior Lien bonds	(4,604)	(15,480)
Interest expense on debt	(280,369)	(258,985)
Cost of Issuance for debt	(550)	(3,758)
Proceeds from disposition of assets	2,077	5,824
Retirement of subordinate lien bonds	(12,625)	(12,475)
Capital contributions from other governments	194,795	308,797
Acquisition of property, plant and equipment	(645,696)	(745,564)
Net cash used for capital and related financing activities	(1,022,532)	(848,066)
<b>Cash flows from noncapital financing activities</b>		
Interest expense on pension obligation bonds	(4,569)	(4,771)
Retirement of pension bonds	(3,625)	(3,369)
Transfers to debt service fund	(4,898)	(4,899)
Transfers to other funds	(49,497)	(52,977)
Net cash used in noncapital financing activities	(62,589)	(66,016)
Net increase (decrease) in cash and cash equivalents	(61,669)	(265,063)
Cash and cash equivalents, July 1	333,443	598,506
<b>Cash and cash equivalents, June 30</b>	<b>\$ 271,774</b>	<b>\$ 333,443</b>
<b>Cash and cash equivalents:</b>		
Pooled cash and cash equivalents (Note 2)	\$ 271,737	\$ 333,406
Non-pooled cash and cash equivalents (Note 2)	37	37
<b>Total cash and cash equivalents, June 30</b>	<b>\$ 271,774</b>	<b>\$ 333,443</b>

\*The accompanying notes are an integral part of these financial statements.



**Combined Utility System**  
**Statements of Cash Flows**  
**For the Fiscal Years Ended June 30, 2023 and 2022**  
*(amounts expressed in thousands)*

	<b>2023</b>	<b>2022</b>
<b>Reconciliation of operating income to net cash provided by operating activities</b>		
Operating Income	\$ 636,570	\$ 561,310
Depreciation and amortization	289,362	282,839
Changes in assets and liabilities		
Accounts Receivable	(38,899)	(81,780)
Due from other funds	2,656	(2,297)
Due from other governments	1,738	(1,167)
Inventory & prepaid insurance	(6,601)	(1,835)
Accounts payable	(12,660)	17,811
Other Long Term Liabilities	62,748	2,520
Accrued payroll liabilities	(4,721)	933
Due to other funds	6,642	(5,448)
Advances and deposits	7,492	5,789
Claims and judgments-workers' comp	(803)	2,640
Compensated absences	(109)	777
Other post employment benefits	(11,769)	(43,685)
Other revenues and expense	79,288	132,642
Receipts from other governments	—	1,934
Pension related payables and deferred amounts	(26,094)	(29,029)
<b>Net cash provided by operating activities</b>	<b>\$ 984,840</b>	<b>\$ 843,954</b>
 <b>Noncash Transactions</b>		
Capital additions included in liabilities	\$ (45,327)	\$ (32,725)
Amortization of premium and discount	(30,078)	(18,680)
Unrealized gain (loss) on investments	4,923	(63,985)
CAB accretion interest	7,462	7,940
Donated capital	(23,249)	(7,431)
Gain (loss) on disposal of assets	(2,955)	3,196
<b>Total non cash transactions</b>	<b>\$ (89,224)</b>	<b>\$ (111,685)</b>

\*The accompanying notes are an integral part of these financial statements





**IMAGINE A DAY  
WITHOUT WATER**

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The Combined Utility System Fund (the “Fund”), an enterprise fund of the City of Houston (the “City”), consists of the City’s groundwater and surface water sources as well as conveyance, treatment, and distribution facilities and its wastewater collection and treatment facilities.

The accompanying financial statements of the Combined Utility System have been prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”), as prescribed by the Governmental Accounting Standards Board (“GASB”). The GASB is the accepted standard setting body for establishing governmental accounting and financial reporting principles.

### **A. Reporting Entity**

The Combined Utility System Fund (the “Fund”), is an enterprise fund of the City of Houston, Texas. The Mayor and City Council members serve as the governing body that oversees operation of the Fund. The Fund is operated by the Combined Utility System (the “CUS”) as a self-sufficient enterprise and is administered by the Director of Houston Public Works, who reports to the Mayor.

The Fund is not financially accountable for any other operations of the City, and accordingly, is accounted for as a single major enterprise fund. The Fund is included in the City’s Annual Comprehensive Financial Report (“Financial Report”), which is a matter of public record.

The Combined Utility System’s financial statements are only of the operations of the Fund and are not intended to present the financial position, changes in financial position, or, where applicable, cash flows of the City. The Fund is not financially accountable for any other operations of the City.

### **B. Basis of Accounting**

The Combined Utility System is a proprietary fund of the City of Houston, Texas. According to GASB 34, proprietary funds are reported using economic resources measurement focus and the accrual basis of accounting. The accounting objective of this measurement focus is the determination of operating income, changes in net position, financial position, and cash flows. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the timing of the related cash flows. All assets and liabilities (whether current or non-current) are reported in the statements of net position. The City maintains two different types of proprietary funds: enterprise funds and internal service funds. The Combined Utility System is one of the major Enterprise Funds reported by the City of Houston, Texas. Enterprise funds are used to account for those operations that are financed and operated in a manner similar to private business or where the governing body has decided that the cost of operations including capital costs (such as depreciation, amortization or debt service) are to be recovered with fees and user charges.

Enterprise funds, like the Combined Utility System, distinguish operating revenue and expenses from non-operating revenues and expenses. The principal operating revenue of the Fund are charges to water and wastewater customers for sales and services. Operating expenses include the cost of sales and services, pension expense, administrative expense, and depreciation and amortization on capital assets. All revenues and expenses are not meeting this definition are reported as non-operating revenues and expenses.

### **C. New Accounting Pronouncements or Recent Accounting Pronouncements**

In May 2019, the GASB issued Statement No. 91, “Conduit Debt Obligations”. This statement is to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with 1) commitments extended by issuers, 2) arrangements associated with conduit debt obligations, and 3) related note disclosures. The requirements of this statement are effective for reporting periods beginning after December 15, 2021. The City and the Combined Utility System have implemented GASB Statement No. 91 in this annual report. There was no material effect to the Fund’s financial statements.

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

In March 2020, the GASB issued Statement No. 93, “Replacement of Interbank Offered Rates”. This Statement establishes accounting and financial reporting requirements related to the replacement of IBORs in hedging derivative instruments and leases. It also identifies appropriate benchmark interest rates for hedging derivative instruments. The requirements of this statement are effective for reporting periods ending after December 31, 2021. The City has identified two applicable hedging derivative instruments that utilize a London Interbank Offered Rate (“LIBOR”), and the agreements were amended as of July 2023 as the LIBOR tenor ceased to be published.

In March 2020, the GASB issued Statement No. 94, “Public-Private and Public-Public Partnerships and Availability Payment Arrangements”. This Statement establishes standards of accounting and financial reporting for Public-Public Partnerships and Availability Payment Arrangements for governments. The requirements of this statement are effective for reporting periods beginning after June 15, 2022. The City and the Combined Utility System have implemented GASB Statement No. 94 in this annual report. There was no material impact to the basic financial statements upon adoption.

In May 2020, the GASB issued Statement No. 96, “Subscription-Based Information Technology Arrangements”. This Statement provides guidance on accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. The requirements of this Statement are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. The Combined Utility System examined the impact of its information technology arrangements for applicability of this statement and determined that the agreements met the definition of a short term subscription based information technology arrangement. Therefore, no intangible asset or corresponding liability was recorded.

In April 2022, the GASB issued Statement No. 99, “Omnibus 2022”. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. Certain provisions of Statement No. 99 are effective upon issuance, while other provisions of Statement No. 99 are effective for fiscal years beginning after June 15, 2022 or 2023. The City and the Combined Utility System have implemented the provisions of Statement No. 99 that are effective upon issuance in fiscal year ended June 30, 2022, and the City and the Combined utility System have implemented the provisions of GASB Statement No. 99 that are effective as of July 1, 2022, in this annual report. The City and the Combined Utility System are evaluating the effect of other provisions not yet effective.

In June 2022, the GASB issued Statement No. 100, “Accounting Changes and Error Corrections – Amendment of GASB Statement No. 62”. This Statement prescribes the accounting and financial reporting for (1) each type of accounting change, and (2) error corrections. This Statement requires that (a) changes in accounting principles and error corrections be reported retroactively by restating prior period, (b) changes to or within the financial reporting entity be reported by adjusting beginning balances of the current period, and (c) changes in accounting estimates be reported prospectively by recognizing the change in the current period. The requirements of this statement are effective for financial statement for reporting period beginning after June 15, 2023. The City and the Combined Utility System are evaluating the impact that adoption of this Statement will have on its financial statements.

In June 2022, the GASB issued Statement No. 101, “Compensated Absences”. This Statement clarifies the recognition and measurement guidance for compensated absences. This Statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. The requirements of this Statement are effective for financial statements for reporting periods beginning after December 15, 2023. The City and the Combined Utility System are evaluating the impact that adoption of this Statement will have on its financial statements.

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

### **D. Cash, Cash Equivalents and Investments**

The City follows the practice of pooled concept for the majority of cash and investments, which combines the monies of various funds for investment purpose. The Fund participates in the City's program. Interest earnings of the pool are apportioned to each fund, unless otherwise required by bond covenants, based on the fund's relative share of the investment pool. Cash equivalents are considered all highly liquid investments with original maturities of three months or less at the time of purchase. All cash and investments are displayed on the statements of net position as "Cash and cash equivalents" and "Investments" and in accordance with GASB Statement No. 31, "Accounting and Financial Reporting for Certain Investments and for External Investment Pools."

Investments are carried at fair value as defined in GASB Statement No. 72 "Fair Value Measurement and Application". Consistent with GASB Statement No. 72, the Fund categorizes its fair value measurements within the fair value hierarchy. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. A detail of the fair value hierarchy of investments held by the Fund are disclosed in Note 2 to the financial statements. Similar disclosure for debt held by the Fund at fair values is disclosed in Note 7 to the financial statements "Cash and cash equivalents" and "Investments" are further split into current and non-current in accordance with GASB Statement No. 62, "Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements".

Investments authorized by the City's investment policy, which is guided by state laws and city ordinances, generally include: obligations of the United States of America or its agencies and instrumentalities; fully-collateralized Certificates of Deposit from City Council-approved public depositories; direct obligations of the State of Texas or its agencies and instrumentalities; other obligations, the principal and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of, the State of Texas or the United States or their respective agencies and instrumentalities; obligations of states, agencies, counties, cities, and other political subdivisions; no-load money market mutual funds registered and regulated by the Securities and Exchange Commission; corporate commercial paper; fully collateralized repurchase agreements; and reverse repurchase agreements within specific terms. Investments are carried at fair value based on quoted market prices.

### **E. Receivables**

The Fund renders bills to residential, commercial, and industrial customers on billing cycles that end on various days throughout the month. Receivables are recorded at their gross value when earned with collection term of 30 days. Included in accounts receivable are charges for services rendered but unbilled at June 30. The allowance, which includes accounts receivable balances aged past 180 days, is netted against the accounts receivable balances.

### **F. Inventories of Materials and Supplies**

Inventories of material and supplies are valued at average cost while fuel is carried at the lower of market or replacement cost. Inventories are presented under the consumption method. The cost of these inventories are expensed when consumed rather than when purchased. Certain payments to vendors reflect cost applicable to future accounting periods and are recorded as prepaid items and expensed as the items are used.

**Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

**G. Capital Assets**

Capital assets are defined as assets with an initial cost of \$5,000 or more, with an estimated useful life in excess of one fiscal year. Acquired property is recorded at historical cost or estimated historical cost if original cost is not available. Donated capital assets are recorded at acquisition value at the date of donation. Construction costs (excluding land and equipment) are added to construction in progress at historical cost or estimated historical cost until the assets are substantially complete. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend the asset’s life are not capitalized.

Once capital assets are placed in service, depreciation/amortization commences unless it is not applicable to a specific asset or class of asset. Land, water rights and conveyance system rights are not amortized. Depreciation/amortization is computed using the straight-line method on the asset base over the estimated useful lives as follows:

Asset	Years
Buildings and Improvement	15 - 50
Equipment	5 - 15
Infrastructure	6 - 50
Rights and Intangibles	Straight-line method; Nature of the asset

In accordance with GASB Statement No. 62, “Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements”, paragraphs 114-123, the City and CUS utilize the percentage-of-completion method for a long-term construction contract when estimates of costs to complete and extent of progress toward completion of long-term contracts are reasonably dependable.

**H. Leases**

**CUS as Lessee**

Leases are defined by the general government as the right to use an underlying asset. As a lessee, the Fund recognizes a lease liability and an intangible right-of-use lease asset at the beginning of a lease that have a term exceeding one year and the cumulative future payments on the contract exceeding \$100,000, unless the lease is considered a short-term lease or transfers ownership of the underlying asset. Right-of-use lease assets are measured based on the net present value of the future lease payments at inception, using the incremental borrowing rate or the weighted average cost of capital, which approximate the incremental borrowing rate. Re-measurement of a lease liability occurs when there is a change in the lease term and/or other changes that are likely to have a significant impact on the lease liability.

The Fund calculates the amortization of the discount on the lease liability and report that amount as outflows of resources. Payments are allocated first to accrued interest liability and then to the lease liability. Variable lease payments based on the usage of the underlying assets are not included in the lease liability calculations but are recognized as outflows of resources in the period in which the obligation was incurred.

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

### **CUS as Lessor**

As a lessor, the Fund recognizes a lease receivable. The lease receivable is measured using the net present value of future lease payments to be received for the lease term and deferred inflows of resources at the beginning of the lease term. Periodic amortization of the discount on the receivable are reported as interest revenue for that period. Deferred inflows of resources are recognized as inflows on a straight-line basis over the term of the lease. This recognition does not apply to short-term leases, contracts that transfer ownership, leases of assets that are investments, or certain regulated leases. Any initial direct costs are reported as an outflow of resources for that period.

Re-measurement of lease receivables occur when there are modifications, including but not limited to changes in the contract price, lease term, and adding or removing an underlying asset to the lease agreements. In the case of a partial or full lease termination, the carrying value of the lease receivable and the related deferred inflows of resources will be reduced and will include a gain or loss for the difference. There is no lease receivable for CUS at the end of fiscal year 2023.

For lease contracts that are short-term, the Fund recognizes short-term lease payments as inflows of resources (revenues) based on the payment provisions of the lease contracts. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

### **I. Subscription-Based Information Technology Arrangements**

Subscription based information technology arrangement (“SBITA”) assets are defined by the general government as the right to use vendor-provided information technology (“IT”) with access to vendors’ IT assets. The Fund recognizes a subscription liability and an intangible subscription right-of-use asset at the beginning of the subscription term that have a term exceeding one year and the cumulative future payments on the contract exceed \$100,000 unless the contract is considered a short-term SBITA. A SBITA asset is measured based on the net present value of subscription payments expected to be made during the subscription term, using the incremental borrowing rate, and is amortized using the straight-line method over the shorter of the subscription term or the useful life of the underlying IT assets. Re-measurement of a subscription liability occurs when there is a change in the contract term and/or other changes that are likely to have a significant impact on the subscription liability.

### **J. Compensated Absences**

Employee benefits are granted for vacation, sick leave, workers’ compensation, and health care. Employees earn vacation pay based on a prescribed formula.

Full-time civilian employees of the City are eligible for 10 days of vacation leave per year. After four years, employees receive 15 days. The amount of vacation time gradually increases after that, reaching a maximum of 25 days per year after 18 years of service. Employees may accumulate up to 105 days of vacation leave (60 days for employees with a computation date after December 31, 1999). However, upon termination or retirement, full-time civilian employees are paid a maximum of 90 days of unused vacation leave (45 days for employees with a computation date after December 31, 1999) which is based on the average rate of pay during the employee’s highest 60 days of employment. Part-time and temporary employees are not eligible for vacation or sick leave benefits.

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

Most full-time civilian employees are covered under the compensatory sick leave plan and receive a leave time allowance of 2.5 hours per payroll period (bi-weekly) up to a maximum of 65 hours per year. Employees who use fewer than 65 hours during the benefit year will receive a match of additional hours equal to the number of hours accrued minus the number of hours used. Once an employee's balance has reached 1,040 hours, no additional match for unused hours is given.

Upon termination, all unused sick leave time allowances in excess of 1,040 hours are payable to the employee at the employee's rate of pay at the time of termination. An employee who uses less than 16 hours of sick leave in any benefit year receives up to three days of personal leave in the next year. Personal leave may be used in place of vacation leave but will not accumulate and will not be paid out at termination. The balance of full-time civilian employees and firefighters are covered by a sick plan that was closed to employees in 1985. That plan accumulates a cash value for every sick day not used, which is payable upon resignation or retirement.

The City also has adopted policies of compensatory time to comply with the Fair Labor Standards Act as amended in 1985. These policies provide limits to the accumulation of compensatory time and provide that time not used will be paid in cash. Only classified employees and civilian employees in certain pay grades routinely earn compensatory time.

Vacation and other compensatory time benefits are accrued as liabilities as the benefits are earned, to the extent that the City's obligation is attributable to employees' services already rendered, and it is probable that the City will compensate the employees for the benefits through paid time off or some other means, such as cash payments.

### **K. Bond Premiums, Discounts and Issuance Costs**

Bond premiums, discounts and prepaid bond insurance costs are amortized over the term of the bonds using the effective interest or straight-line amortization method. Gains or losses on refundings are reported as deferred inflows or outflows, respectively, and are amortized over the term of the lesser of the new bonds or the refunded bonds using the straight-line or effective interest method. Debt issuance costs are recognized as expenditures/expenses when incurred.

### **L. Net Pension Liability**

For the purposes of measuring net pension liability, deferred outflows of resources, and deferred inflows of resources related to pension and pension expense, information about the fiduciary net position of the Houston Municipal Employees' Pension System, and additions to/deductions from the pension system's fiduciary net position have been determined on the same basis as they are reported by the pension system. For this purpose, benefit payments (including refunds of employee contribution) are recognized when due and payable in accordance with the benefit terms. Additional information regarding net pension liability can be found in Note 8.

### **M. Other Postemployment Liability**

For purposes of measuring total/net other postemployment liability (OPEB), deferred outflows of resources and deferred inflows of resources related to OPEB and OPEB expense have been determined on the same basis as they are reported by the OPEB Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Additional information regarding total/net other postemployment liability can be found in Note 9.

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

### **N. Deferred Inflows/Outflows of Resources**

#### **Refunded Debt**

Deferred outflows of resources represent a consumption of net assets that applies to future periods and so will not be recognized as an outflow of resources (expense) until then. Deferred inflows of resources represent an acquisition of net assets that applies to future periods. The deferred charge on refunding recorded on the statements of net position results from the difference in carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.

#### **Pension**

Deferred inflows and outflows have been recognized for the net difference between the projected and actual investment earnings, this amount is deferred and amortized over a period of five years.

#### **Pension and OPEB**

Deferred inflows and outflows have been recognized for the differences between the actuarial expectation and the actual economic experience and changes in actuarial assumptions related to the defined benefit pension plan and the other post-retirement benefit plan. These amounts are deferred and amortized over the average of the expected service lives of pension plan members. See Note 8 and Note 9 for additional information on deferred inflows and outflows related to the pension plan and the other post-retirement benefits plan, respectively.

#### **Leases**

Accounting policies for deferred inflows and outflows related to leases are described under the caption - 'Leases' in Note 1. For the years ended June 30, 2023 and 2022, there is no deferred inflows and outflows related to leases.

In accordance with GASB Statement No. 63, "Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position," the Fund reports deferred outflows of resources in the Statement of Net Position in a separate section following Assets. Similarly, the Fund reports deferred inflows of resources in the Statement of Net Position in a separate section following Liabilities.

### **O. Statement of Net Position | Net Position Classification**

Net position represents the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources in the Statement of Net Position. Net position is displayed in three separate categories based on the accessibility of the underlying assets: net investment in capital assets; restricted net position; and unrestricted net position.

- a. Net investment in capital assets consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any debt attributable to the acquisition, construction or improvement of those assets.
- b. Restricted net position represents constraints on resources that are imposed through enabling legislation or externally imposed by creditors, grantors, contributors, or laws or regulations of other governments.
  - i. Restricted for Debt Service: This category includes net position in the interest and sinking funds, debt service funds and debt reserve funds that pay principal and interest for the revenue bond, commercial paper note, SWAP Contract, and Subordinate Lien.

## **Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

- ii. Restricted for Maintenance and Operations: This category primarily costs of a reserve fund dedicated to operating and maintenance expense, mandated by the various City ordinances which authorized the issuance of revenue and revenue refunding bonds. At fiscal year end the reserve fund is required to hold a balance representing at least 60 days of operating expenses, based on the annual operating budget authorized by City Council for the next fiscal year.
  - iii. Restricted for Others' Capital Improvement: This category primarily consists of the Fund's amounts of due to other governments.
- c. Unrestricted net position consists of all other net position that does not meet the definition of "restricted" or "net investment in capital assets".
- d. Flow Assumption: when restricted and unrestricted resources are available to cover expenses, the Fund's policy is to apply restricted resources first, then unrestricted resources as needed.

### **P. Risk Management**

The City and the Fund are self-insured for a portion of workers' compensation, employee's health, employer's liability, public officials' liability, property damage and certain elements of general liability. A liability has been recorded for the estimated amount of eventual loss, which will be incurred on claims arising prior to the end of the period including incurred but not reported claims.

### **Q. Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles in the U.S. requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

### **R. Reclassifications**

Certain accounts in the prior-year financial statements have been reclassified for comparative purposes to conform to the presentation in the current-year financial statements. This reclassification had no effect on previously reported change in net position.

### **S. Related Organizations**

The following entities are related organizations to which the City and/or the Combined Utility System appoint board members but for which the City has no significant financial accountability. Some of these organizations are Coastal Water Authority, Employees Deferred Compensation Plan, and Metropolitan Transit Authority of Harris County. All transactions with these related organizations are conducted in the ordinary course of business. Further financial information is available from the respective organizations.

## Note 2. DEPOSITS AND INVESTMENTS

### Deposits

The City's Investment Policy (the "Investment Policy") requires all deposits to be fully collateralized with depository insurance; obligations of the United States of America or its agencies and instrumentalizes (excluding those mortgage-backed securities prohibited by the Public Funds Investment Act); or in any other manner and amount provided by law for the deposits of the City. At all times, such securities should have a fair value of not less than 102% of the amount of the deposits collateralized thereby, adjusted by the amount of applicable depository insurance. There were no deposits with custodial risk at the years ended June 30, 2023 and 2022.

### Cash and Cash Equivalents

The City maintains a cash and investment pool (the "Pool") that is available for use by all funds. On the Statement of Net Position, "Cash and Cash Equivalents" includes each fund's portion of the Pool and each fund's non-pooled cash; "Investments" represents each fund's portion of the Pool and non-pooled investment. Participation in the Pool is limited to normal operating activities of the fund and other funds that are restricted because of statutory or contractual considerations, but does not include cash on hand (petty cash and change funds) which is included in non-pooled cash. Earnings from the Pool are allocated to the funds based upon each fund's average daily balance in the Pool. Combined Utility System's balance in pooled and non-pooled cash accounts follows (in thousands):

Fiscal Year	Pooled Cash and Cash Equivalents	Pooled Investments	Total Pooled Cash and Investments	Non-Pooled Cash	Total Cash and Investments
2023	\$ 271,737	\$ 1,549,598	\$ 1,821,335	\$ 37	\$ 1,821,372
2022	333,406	1,548,464	1,881,870	37	1,881,907

### Investments and Risk Disclosure

The following describes the investment positions of the City's operating funds as of June 30, 2023 and June 30, 2022. The City held \$5.67 billion and \$5.35 billion, respectively, in high grade, fixed income investments. All investments are governed by state law and the City's Investment Policy, which dictates the following objectives, in order of priority:

#### 1. Safety | 2. Liquidity | 3. Return on Investment | 4. Legal Requirements

These funds are managed internally by City personnel within a citywide investment pool. The investments listed below do not include the City's three pension funds, which are described separately in this report as well as the City's ACFR.

### Fair Value Measurements

To the extent available, the City's investments are recorded at fair value. GASB Statement No. 72, "Fair Value Measurement and Application," defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This statement establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace.

## **Note 2. DEPOSITS AND INVESTMENTS (continued)**

Inputs are used in applying the various valuation techniques and take into account the assumptions that market participants use to make valuation decisions. Inputs may include price information, credit data, interest and yield curve data, and other factors specific to the financial instrument. Observable inputs reflect market data obtained from independent sources. In contrast, unobservable inputs reflect the entity's assumptions about how market participants would value the financial instrument. Valuation techniques should maximize the use of observable inputs to the extent available.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used for financial instruments measured at fair value on a recurring basis.

The framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the City has the ability to access at the measurement date.

Level 2: Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in inactive markets; inputs other than quoted prices that are observable for the asset or liability; inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement determined using model-based techniques that include option pricing models, discounted cash flow models, and similar techniques.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

### **A. General Investment Pool**

This General Investment Pool consists of all working capital, construction, and debt service funds not subject to yield restriction under Internal Revenue Service arbitrage regulations. The funds of the City's enterprise systems, which include the Combined Utility System, as well as the City's general fund, are commingled in this pool to gain operational efficiency. Approximately 98.7% and 98.7% of the City's total pooled investable funds are held in this portfolio as of June 30, 2023 and June 30, 2022, respectively.

## Note 2. DEPOSITS AND INVESTMENTS (continued)

City of Houston Investments As of June 30, 2023 and 2022	FY23 & FY22 Credit Quality Ratings <sup>(1)</sup> <sup>(2)</sup>	FY2023		FY2022	
		Fair Value (\$ in thousands)	WAM* (years)	Fair Value (\$ in thousands)	WAM* (years)
U.S. Treasury Securities	AAA	\$ 2,824,414	1.5	\$ 2,595,390	1.5
Agency Discount Notes	AAA	247,277	0.2	—	—
Government Agency Securities <sup>(3)</sup>	AAA	1,034,987	1.4	1,028,520	1.8
Govt. Agency Securities (State of Israel Bonds)	AA	9,978	0.1	9,754	1.1
Government Agency Securities <sup>(3)</sup> <sup>(4)</sup>	Not Rated	237,892	0.9	288,284	1.7
Government Mortgaged Backed Securities <sup>(3)</sup> <sup>(4)</sup>	Not Rated	160	0.6	654	0.7
MMF - TexSTAR Cash Reserves	AAA Short Term	268,853	—	293,080	—
Commercial Paper	A-1/P-1 Short Term	621,218	0.2	705,360	0.3
Municipal Securities	AAA Long Term	221,362	1.4	174,720	1.7
Municipal Securities	AA Long Term	203,713	1.6	199,860	2.1
Total Investments		<u>\$ 5,669,854</u>		<u>\$ 5,295,610</u>	

\* Weighted Average Maturity (WAM) is computed using average life of mortgage-backed securities and effective maturity of callable securities.

(1) Fitch Ratings Inc. has assigned an AAA credit quality rating and S1 volatility rating to the City's General Investment Pool. The AAA signifies the highest level of credit protection, and the S1 rating signifies volatility consistent with a portfolio of government securities maturing from one to three years.

(2) All credit ratings shown are either actual Fitch ratings, or if a Fitch credit rating is not available, the equivalent Fitch credit rating is shown to represent the actual Moody's or Standard & Poor's credit rating.

(3) These are securities issued by government sponsored enterprises, including the Federal Home Loan Bank, Federal Home Loan Mortgage Corporation (Freddie Mac), Federal National Mortgage Corporation (Fannie Mae), and Federal Farm Credit Bank.

(4) These securities were issued by the Federal Home Loan Bank, Freddie Mac, Fannie Mae, and Farmer Mac. While these individual issues were not rated, senior lien debt of these entities is rated AAA.

### Risk Disclosures:

**Interest Rate Risk.** In order to ensure the ability of the City to meet obligations and to minimize potential fair value losses arising from rising interest rate environments, the Investment Policy limits this investment portfolio's WAM to 2.5 years maximum. As of June 30, 2023 and 2022, this investment portfolio's WAM was 1.201 and 1.343 years. Modified duration was 1.177 and 1.305 years at June 30, 2023 and 2022, respectively. Modified duration can be used as a multiplier to determine the percent change in price of a bond portfolio for every 100 basis point (1%) change in yield. For example, a portfolio with a modified duration of 1.177 years would experience approximately a 1.177% change in market price for every 100 basis point change in yield.

**Credit Risk - Investments.** The U.S. Treasury Securities and Housing and Urban Development Securities are direct obligations of the United States government. Government Agency Securities and Mortgage Backed Securities were issued by government sponsored enterprises but are not direct obligations of the U.S. Government.

The Money Market Mutual Funds were rated AAA. Municipal Securities were rated at least AA. The City's Investment Policy limits investments in the General Investment Pool to high quality securities with maximum maturity of five years for all U.S. Treasuries, Government Agency, and Municipal Securities with the except for Government Mortgaged Backed Securities which can have maximum maturity of 15 years. Certificates of Deposit maximum maturity is two years, and Commercial Paper maximum maturity is 365 days. The General Investment

## Note 2. DEPOSITS AND INVESTMENTS (continued)

Pool maximum sector exposure are as follow: U.S. Treasuries up to 100%; Government Agency Securities up to 85% with maximum exposure to any one Agency issuer is 35%; Mortgage Backed Securities up to 20%; Municipal Securities up to 20% with a rating not less than A by a nationally recognized rating agency; Money Market Mutual Funds up to 25%; Certificates of Deposit up to 15%; and Commercial Paper up to 20%.

*Credit Risk – Securities Lending.* Under its securities lending program, the City receives 102% of fair value for its U.S. Treasury securities at the time the repurchase agreements are signed, and agreements are limited to 90 days by policy and have been less than 35 days by practice. At June 30, 2023 and 2022, there were no securities lending agreements outstanding.

*Custodial Credit Risk.* The custodial credit risk for investments is the risk that in the event of failure of a counterparty, the City will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not registered in the name of the City, and are held by either the counterparty or the counterparty's trust department or agent but not in the City's name. As of June 30, 2023 and 2022, none of the City's investments in the Pool were subject to custodial credit risk.

*Foreign Currency Risk.* Foreign currency risk is the risk that investments will change value due to changes in exchange rates between time of purchase and reporting or sale. The City's General Investment Pool investments are limited by policy to US dollar denominated investments and not subject to this risk.

A summary of the General Investment Pool's investment under the requirements of the fair value hierarchy follows:

Investments by Fair Value Level For Year Ended June 30, 2023	Fair Value Measurements in Use (\$ in thousands)			
	FY2023 Total	Quoted Prices (Level 1)	Other Significant Unobservable Inputs (Level 2)	Significant Observable Inputs (Level 3)
U.S. Treasury Securities	\$ 2,824,414	\$ 2,824,414	\$ —	\$ —
Agency Discount Notes	247,277	247,277	—	—
Government Agency Securities	1,272,879	—	1,272,879	—
Government Agency Securities (State of Israel Bd)	9,978	—	—	9,978
Government Mortgaged Backed Securities	160	—	160	—
Municipal Securities	425,075	—	425,075	—
Commercial Paper	621,218	—	621,218	—
<b>Total Investment by Fair Value Level</b>	<b>\$ 5,401,001</b>	<b>\$ 3,071,691</b>	<b>\$ 2,319,332</b>	<b>\$ 9,978</b>
Investments Measured at the Net Asset Value (NAV)				
MMF - TexSTAR Cash Reserves	268,853			
<b>Total Investments at Net Asset Value (NAV)</b>	<b>268,853</b>			
<b>Total Investments at Fair Value and NAV</b>	<b>\$ 5,669,854</b>			

**Note 2. DEPOSITS AND INVESTMENTS (continued)**

Investments by Fair Value Level For Year Ended June 30, 2022	Fair Value Measurements in Use (\$ in thousands)			
	FY2022 Total	Quoted Prices (Level 1)	Other Significant Unobservable Inputs (Level 2)	Significant Observable Inputs (Level 3)
U.S. Treasury Securities	\$ 2,595,390	\$ 2,595,390	\$ —	\$ —
Government Agency Securities	1,316,800	—	1,316,800	—
Government Agency Securities (State of Israel Bd)	9,750	—	—	9,750
Government Mortgaged Backed Securities	650	—	650	—
Municipal Securities	374,580	—	374,570	—
Commercial Paper	705,360	—	705,360	—
<b>Total Investment by Fair Value Level</b>	<b>\$ 5,002,530</b>	<b>\$ 2,595,390</b>	<b>\$ 2,397,380</b>	<b>\$ 9,750</b>
Investments Measured at the Net Asset Value (NAV)				
MMF - TexSTAR Cash Reserves	293,080			
<b>Total Investments at Net Asset Value (NAV)</b>	<b>293,080</b>			
<b>Total Investments at Fair Value and NAV</b>	<b>\$ 5,295,610</b>			

TexSTAR uses the fair value method to report its investments. Under the fair value method, fixed income securities are valued each day by independent or affiliated commercial pricing services or third-party broker-dealers. In instances where sufficient market activity exists, the pricing services or broker-dealers may utilize a market-based approach through which quotes from market makers are used to determine fair value. In instances where sufficient market activity may not exist or is limited, the broker-dealers or pricing services also utilize proprietary valuation models which may consider market transactions in comparable securities and the various relationships between securities in determining value and/or market characteristics such as benchmark yield curves, option adjusted spreads, credit spreads, estimated default rates, coupon-rates, anticipated timing of principal repayments, underlying collateral, and other unique security features in order to estimate the relevant cash flows, which are then discounted to calculate the fair values.

TexSTAR Cash Reserve Fund has not been classified in the fair value hierarchy table. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the Statement of Net Position. For additional information regarding TexSTAR, visit: [https://www.texstar.org/GetDocument.aspx?FileName=TexSTAR\\_InformationStatement.pdf](https://www.texstar.org/GetDocument.aspx?FileName=TexSTAR_InformationStatement.pdf).

**B. Miscellaneous Money Market Accounts**

In addition to its investment pools, the City maintains several money market accounts for various purposes. These accounts are considered cash and cash equivalents on the Statements of Cash Flows because they maintain a weighted average maturity of less than three months.

The account is described below:

First American US Treasury Money Market Fund	FY2023		FY2022		FY23 & FY22 Weighted Average Maturity
	Credit Quality Ratings	Market Value (\$ in thousands)	Credit Quality Ratings	Market Value (\$ in thousands)	
Balances held for Commercial Paper Debt Service	AAA	\$105	AAA	\$369	< 31.5 Days

**Note 2. DEPOSITS AND INVESTMENTS (continued)**

**Risk Disclosures**

*Interest Rate Risk.* These money market funds maintain an average maturity of less than 60 days and seek to maintain a stable net asset value of \$1.00. These funds are redeemable on a same day notice.

*Credit Risk.* These funds hold only US dollar denominated securities that present minimal credit risk. They have the highest credit ratings.

*Custodial Credit Risk.* As of June 30, 2023 and 2022, none of the City's investments in this pool were subject to custodial credit risk.

*Foreign Currency Risk.* The City's investments in this pool are all US dollar denominated and not subject to foreign currency risk.

A summary of the Pool's investment under the requirements of the fair value hierarchy follows:

Investments Measured at Net Asset Value (NAV)	NAV Measurements in Use (\$ in thousands)	
	FY2023	FY2022
First American U.S. Treasury MMF	\$105	\$369

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**Note 3. ACCOUNTS RECEIVABLE**

The following were the accounts receivable as of June 30, 2023 and 2022 (in thousands).

Receivables:	FY2023	FY2022
Accounts	\$ 582,361	\$ 507,289
Special assessment	93	93
Due from other governments (current)	7,387	7,242
Due from other governments (non-current)	421,664	600,972
Gross Receivables	1,011,505	1,115,596
Less allowances for doubtful accounts	(293,822)	(254,540)
Net total receivables	<u>\$ 717,683</u>	<u>\$ 861,056</u>

Activity between funds that are representative of lending/borrowing arrangements outstanding at the end of the fiscal year are referred to as “due to/from other funds” not included in this schedule. Accounts receivables are shown net of an allowance for uncollectible.

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## Note 4. TRANSACTIONS WITH THE CITY OF HOUSTON

### Interfund Receivables and Payables

The composition of interfund balances as of June 30, 2023 and June 30, 2022 were as follows (in thousands):

<b>Schedule of Amounts Due To and Due From Other Funds</b>					
	Due To		Due From		
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022	
General Fund	\$ 37,750	\$ 30,937	\$ 1	\$ 137	
Grants Revenue	—	—	—	797	
Non-major Governmental Funds	95	266	8	1,731	
CARES Act Fund	—	—	—	—	
Airport System	—	—	—	—	
<b>Total</b>	<b>\$ 37,845</b>	<b>\$ 31,203</b>	<b>\$ 9</b>	<b>\$ 2,665</b>	

The outstanding balances between funds result primarily from the time lag between the dates that (1) interfund goods and services are provided or reimbursable expenditures occur, (2) transactions are recorded in the accounting system, and (3) payments between funds are made.

### Transfers

Transfers as of June 30, 2023 and June 30, 2022 were as follows (in thousands):

<b>Schedule of Transfers In/Transfers Out</b>					
	Transfers Out		Transfers In		
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022	
General Fund	\$ 49,147	\$ 52,623	\$ —	\$ —	
Non-major Governmental Funds	350	350	—	—	
Debt Service Fund	4,899	4,898	—	—	
Capital Projects Fund	—	—	—	—	
Grant	—	4	—	—	
<b>Total</b>	<b>\$ 54,396</b>	<b>\$ 57,875</b>	<b>\$ —</b>	<b>\$ —</b>	

Transfers are used to (1) move receipts restricted to debt service from the funds collecting the receipts to the debt service fund and (2) use unrestricted revenues collected in the general fund to finance various programs accounted for in other funds in accordance with budgetary authorizations, (3) use unrestricted revenues in the Combined Utility System and non-major revenue fund to finance general fund programs.

## Note 5. CAPITAL ASSETS

A summary of changes in capital assets for the years ended June 30, 2023 and 2022 follows (in thousands):

For Year Ended June 30, 2023	July 1, 2022 Balance	Additions	Retirements	Transfers	June 30, 2023 Balance
Capital assets not being depreciated:					
Land	\$ 182,002	\$ 1,527	\$ (176)	\$ 11,569	\$ 194,922
Right of Way	1,192	—	—	3	1,195
Rights and Intangibles	844,785	—	—	—	844,785
Construction Work in Progress	2,224,622	679,855	—	(454,227)	2,450,250
Total capital assets not being depreciated	3,252,601	681,382	(176)	(442,655)	3,491,152
Depreciable capital assets:					
Buildings	190,197	—	—	11,891	202,088
Improvements and Equipment	197,080	6,873	(3,910)	117	200,160
Infrastructure	11,966,989	13,907	(65,538)	430,647	12,346,005
Rights and Intangibles	1,725	438	—	—	2,163
Lease right-of-use assets	42	—	(42)	—	—
Total depreciable capital assets	12,356,033	21,218	(69,490)	442,655	12,750,416
Less accumulated depreciation/amortization for:					
Buildings	(92,201)	(4,374)	—	—	(96,575)
Improvements and Equipment	(154,560)	(10,126)	3,853	—	(160,833)
Infrastructure	(6,371,134)	(274,559)	60,739	—	(6,584,954)
Rights and Intangibles	(1,030)	(291)	—	—	(1,321)
Lease right-of-use assets	(30)	(12)	42	—	—
Total accumulated depreciation/amortization	(6,618,955)	(289,362)	64,634	—	(6,843,683)
Depreciable capital assets, net	5,737,078	(268,144)	(4,856)	442,655	5,906,733
Total capital assets, net	\$ 8,989,679	\$ 413,238	\$ (5,032)	\$ —	\$ 9,397,885

For Year Ended June 30, 2022	July 1, 2021 Balance	Additions	Retirements	Transfers	June 30, 2022 Balance
Capital assets not being depreciated:					
Land	\$ 189,205	\$ 944	\$ (9,302)	\$ 1,155	\$ 182,002
Right of Way	1,056	—	—	136	1,192
Rights and Intangibles	845,785	—	(1,000)	—	844,785
Construction Work in Progress	1,826,333	730,941	—	(332,652)	2,224,622
Total capital assets not being depreciated	2,862,379	731,885	(10,302)	(331,361)	3,252,601
Depreciable capital assets:					
Buildings	175,238	—	(3,264)	18,223	190,197
Improvements and Equipment	193,838	7,522	(7,435)	3,155	197,080
Infrastructure	11,669,779	17,676	(30,449)	309,983	11,966,989
Rights and Intangibles	1,710	15	—	—	1,725
Lease right-of-use assets	42	—	—	—	42
Total depreciable capital assets	12,040,607	25,213	(41,148)	331,361	12,356,033
Less accumulated depreciation/amortization for:					
Buildings	(90,451)	(4,102)	2,352	—	(92,201)
Improvements and Equipment	(150,081)	(11,714)	7,235	—	(154,560)
Infrastructure	(6,132,783)	(266,636)	28,285	—	(6,371,134)
Rights and Intangibles	(658)	(372)	—	—	(1,030)
Lease right-of-use assets	(15)	(15)	—	—	(30)
Total accumulated depreciation/amortization	(6,373,988)	(282,839)	37,872	—	(6,618,955)
Depreciable capital assets, net	5,666,619	(257,626)	(3,276)	331,361	5,737,078
Total capital assets, net	\$ 8,528,998	\$ 474,259	\$ (13,578)	\$ —	\$ 8,989,679

## **Note 6. LEASES**

### **The Fund as Lessee**

The Combined Utility System has obtained equipment through long-term leases. All leases have fixed, periodic payments over the lease term, and do not contain variable payments or guaranteed residual values in the lease agreements. These leases are cancellable by the lessors or CUS with an advance notice or non-cancellable. For the years ended June 30, 2023 and 2022, no variable or other payments were made by CUS other than the periodic rental payments in accordance with lease agreements. In addition, there were no commitments under leases prior to the commencement of the lease term, and no impairment related loss was recognized by the Fund. At June 30, 2023, there were no long-term leases outstanding.

Amortization expense charged to the Fund was \$11,348 for the year ended June 30, 2023 compared to \$15,131 for the year ended June 30, 2022.

### **The Fund as Lessor**

At the end of fiscal year June 30, 2023 and 2022, there is no outstanding leases (as lessor) for the Fund.

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## Note 7. LONG-TERM LIABILITIES

### A. General Long-Term Liabilities

Changes in long-term liabilities for the years ended June 30, 2023 and 2022 are summarized as follows (\$ in thousands):

Long-Term Liabilities For Year Ended June 30, 2023	July 1, 2022 Balance	Additions	Reductions	June 30, 2023 Balance	Due Within One Year
First Lien Revenue Bonds	\$ 6,324,050	\$ —	\$ (266,695)	\$ 6,057,355	\$ 274,820
Plus Unamortized Premium	511,016	—	(30,490)	480,526	—
First Lien Revenue Bonds, Net	6,835,066	—	(297,185)	6,537,881	274,820
Junior Lien Revenue Bonds	38,946	—	(4,604)	34,342	4,766
Plus CAB Accretion	104,740	7,462	(12,741)	99,461	—
Junior Lien Revenue Bonds, Net	143,686	7,462	(17,345)	133,803	4,766
Commercial Paper	—	—	—	—	—
Subordinate Lien Bonds	445,116	—	(12,625)	432,491	12,795
Pension Obligation Bonds	88,933	—	(3,625)	85,308	3,901
Contracts Payable:					
Coastal Water Authority	48,870	—	(4,300)	44,570	4,515
Plus Unamortized Premium	3,369	—	(478)	2,891	—
Other Long Term Contracts	373,156	—	(4,565)	368,591	4,685
Plus CAB Accretion	—	—	—	—	—
Contracts Payable, Net	425,395	—	(9,343)	416,052	9,200
Total Bonds and notes payable	7,938,196	7,462	(340,123)	7,605,535	305,482
Claims and Judgements	6,834	79	(882)	6,031	1,218
Compensated Absences	21,560	11,973	(12,082)	21,451	12,114
Lease Liability	12	—	(12)	—	—
Arbitrage Rebate Liability	926	1,189	(1,249)	866	395
Net Pension Liability	284,899	—	(1,492)	283,407	—
Other Post Employment Benefits	184,167	—	(50,294)	133,873	—
Total Long Term Liabilities	\$ 8,436,594	\$ 20,703	\$ (406,134)	\$ 8,051,163	\$ 319,209

## Note 7. LONG-TERM LIABILITIES (continued)

Long-Term Liabilities For Year Ended June 30, 2022	July 1, 2021 Balance	Additions	Reductions	June 30, 2022 Balance	Due Within One Year
First Lien Revenue Bonds	\$ 6,441,895	\$ 130,000	\$ (247,845)	\$ 6,324,050	\$ 266,695
Plus Unamortized Premium	542,992	—	(31,976)	511,016	—
First Lien Revenue Bonds, Net	6,984,887	130,000	(279,821)	6,835,066	266,695
Junior Lien Revenue Bonds	43,293	—	(4,347)	38,946	4,604
Plus CAB Accretion	107,934	7,939	(11,133)	104,740	—
Junior Lien Revenue Bonds, Net	151,227	7,939	(15,480)	143,686	4,604
Commercial Paper	—	—	—	—	—
Subordinate Lien Bonds	457,590	—	(12,474)	445,116	12,625
Pension Obligation Bonds	92,302	—	(3,369)	88,933	3,625
Contracts Payable:					
Coastal Water Authority	52,995	—	(4,125)	48,870	4,300
Plus Unamortized Premium	3,848	—	(479)	3,369	—
Other Long Term Contracts	391,609	—	(18,453)	373,156	4,566
Plus CAB Accretion	1,394	—	(1,394)	—	—
Contracts Payable, Net	449,846	—	(24,451)	425,395	8,866
Total Bonds and notes payable	8,135,852	137,939	(335,595)	7,938,196	296,415
Claims and Judgements	4,194	3,643	(1,003)	6,834	1,818
Compensated Absences	20,783	12,893	(12,116)	21,560	12,145
Lease Liability	27	—	(15)	12	12
Arbitrage Rebate Liability	5,701	—	(4,775)	926	378
Net Pension Liability	281,091	3,808	—	284,899	—
Other Post Employment Benefits	213,959	—	(29,792)	184,167	—
Total Long Term Liabilities	\$ 8,661,607	\$ 158,283	\$ (383,296)	\$ 8,436,594	\$ 310,768

## B. Schedule of Changes in Bonds and Long-Term Contracts (\$ in thousands)

	Stated Interest Rate Range %	Face Value Outstanding 6/30/2022	Face Value Outstanding 6/30/2023	Adjustments (1)	Net Outstanding
First Lien Revenue Bonds	0.02 to 6.00	\$ 6,324,050	\$ 6,057,355	\$ 480,526	\$ 6,537,881
Junior Lien Revenue Bonds	1.25 to 6.90	38,946	34,342	99,461	133,803
Commercial Paper	0.12 to 10.00	—	—	—	—
Subordinate Lien Bonds	0.22 to 3.42	445,116	432,491	—	432,491
Pension Obligations Bonds	5.31 to 6.29	88,933	85,308	—	85,308
Coastal Water Authority	2.00 to 7.50	48,870	44,570	2,891	47,461
Other Long Term Contracts	3.22 to 5.85	373,156	368,591	—	368,591
		\$ 7,319,071	\$ 7,022,657	\$ 582,878	\$ 7,605,535

(1) Adjustments consist of unamortized bond premiums, discounts, and capital appreciation bond accretions.

## Note 7. LONG-TERM LIABILITIES (continued)

### C. Schedule for Debt Services Requirements To Maturity

Annual debt service payments to maturity as of June 30, 2023 as follows (\$ in thousands):

Water and Sewer Jr. Lien Revenue Bonds			Revenue Bonds		
Year Ending June 30	Principal	Interest	Year Ending June 30	Principal	Interest
2024	\$ 4,766	\$ 14,239	2024	\$ 274,820	\$ 244,152
2025	4,274	13,716	2025	285,975	233,374
2026	4,085	14,070	2026	292,200	221,777
2027	6,567	24,248	2027	296,460	209,559
2028	6,219	24,591	2028	309,005	197,014
2029-2033	8,431	35,664	2029-2033	1,843,460	121,173
2034-2038	—	—	2034-2038	1,418,050	51,983
2039-2043	—	—	2039-2043	732,360	24,954
2044-2048	—	—	2044-2048	466,880	6,528
2049-2053	—	—	2049-2053	138,145	6,816
<b>Total</b>	<b>\$ 34,342</b>	<b>\$ 126,528</b>	<b>Total</b>	<b>\$ 6,057,355</b>	<b>\$ 1,317,330</b>

SWAP Agreement		Commercial Paper		
Year Ending June 30	Net SWAP Payment	Year Ending June 30	Principal	Interest
2024	\$ 16,005	2024	\$ —	\$ —
2025	15,988	2025	—	—
2026	16,005	2026	—	—
2027	16,005	2027	—	—
2028	16,018	2028	—	—
2029-2033	55,151	2029-2033	—	—
2034-2038	2,900	2034-2038	—	—
2039-2043	—	2039-2043	—	—
2044-2048	—	2044-2048	—	—
2049-2053	—	2049-2053	—	—
<b>Total</b>	<b>\$ 138,072</b>	<b>Total</b>	<b>\$ —</b>	<b>\$ —</b>

**Note 7. LONG-TERM LIABILITIES (continued)**

Subordinate Lien Bonds			Pension Obligations Bonds		
Year Ending June 30	Principal	Interest	Year Ending June 30	Principal	Interest
2024	\$ 12,795	\$ 11,405	2024	\$ 3,901	\$ 4,353
2025	12,975	11,211	2025	4,195	4,121
2026	13,180	11,001	2026	4,503	3,872
2027	13,395	10,775	2027	4,837	3,605
2028	13,630	10,532	2028	5,184	3,319
2029-2033	72,555	48,171	2029-2033	28,694	11,266
2034-2038	82,340	38,310	2034-2038	8,720	6,092
2039-2043	95,030	25,587	2039-2043	12,031	4,124
2044-2048	104,760	9,982	2044-2048	13,243	1,357
2049-2053	11,831	229	2049-2053	—	—
<b>Total</b>	<b>\$ 432,491</b>	<b>\$ 177,203</b>	<b>Total</b>	<b>\$ 85,308</b>	<b>\$ 42,109</b>

Total Future Requirements				
Year Ending June 30	Principal	Interest	Net SWAP Payment	Total
2024	\$ 296,282	\$ 274,149	\$ 16,005	\$ 586,436
2025	307,419	262,422	15,988	585,829
2026	313,968	250,720	16,005	580,693
2027	321,259	248,187	16,005	585,451
2028	334,038	235,456	16,018	585,512
2029-2033	1,953,140	216,274	55,151	2,224,565
2034-2038	1,509,110	96,385	2,900	1,608,395
2039-2043	839,421	54,665	—	894,086
2044-2048	584,883	17,867	—	602,750
2049-2053	149,976	7,045	—	157,021
<b>Total</b>	<b>\$ 6,609,496</b>	<b>\$ 1,663,170</b>	<b>\$ 138,072</b>	<b>\$ 8,410,738</b>

**Note 7. LONG-TERM LIABILITIES (continued)**

**LONG-TERM CONTRACTS (\$ in thousands):**

Coastal Water Authority Maintenance and Operation Lien		
Year Ending June 30	Principal	Interest
2024	\$ 4,515	\$ 1,835
2025	4,735	1,604
2026	9,535	1,247
2027	2,430	948
2028	2,555	823
2029-2033	14,305	2,663
2034-2038	6,495	262
2039-2043	—	—
2044-2048	—	—
2049-2053	—	—
<b>Total</b>	<b>\$ 44,570</b>	<b>\$ 9,382</b>

U.S. Army Corps of Engineers		
Year Ending June 30	Principal	Interest
2024	\$ 160	\$ 255
2025	166	250
2026	171	244
2027	176	239
2028	182	233
2029-2033	1,002	1,074
2034-2038	1,175	902
2039-2043	1,376	700
2044-2048	1,613	464
2049-2053	1,892	187
<b>Total</b>	<b>\$ 7,913</b>	<b>\$ 4,548</b>

CWA Luce Bayou		
Year Ending June 30	Principal	Interest
2024	\$ 3,200	\$ 1,878
2025	3,280	2,325
2026	3,375	2,768
2027	3,460	2,675
2028	3,560	2,577
2029-2033	5,560	10,462
2034-2038	7,860	5,502
2039-2043	9,845	3,464
2044-2048	9,674	934
2049-2053	—	—
<b>Total</b>	<b>\$ 49,814</b>	<b>\$ 32,585</b>

CWA Luce Bayou ROW		
Year Ending June 30	Principal	Interest
2024	\$ 670	\$ 570
2025	697	542
2026	724	514
2027	753	484
2028	783	454
2029-2033	4,412	1,763
2034-2038	5,365	792
2039-2043	1,205	24
2044-2048	—	—
2049-2053	—	—
<b>Total</b>	<b>\$ 14,609</b>	<b>\$ 5,143</b>

CWA Luce Bayou SWIRFT		
Year Ending June 30	Principal	Interest
2024	\$ 655	\$ 6,815
2025	660	8,367
2026	670	9,918
2027	680	10,694
2028	695	10,889
2029-2033	3,695	89,999
2034-2038	32,310	79,738
2039-2043	85,865	42,199
2044-2048	102,410	24,542
2049-2053	68,615	5,390
<b>Total</b>	<b>\$ 296,255</b>	<b>\$ 288,551</b>

## Note 7. LONG-TERM LIABILITIES (continued)

Year Ending June 30	Other Contracts Total Future Requirements		
	Principal	Interest	Total
2024	\$ 9,200	\$ 11,353	\$ 20,553
2025	9,538	13,088	22,626
2026	14,475	14,691	29,166
2027	7,499	15,040	22,539
2028	7,775	14,976	22,751
2029-2033	28,974	105,961	134,935
2034-2038	53,205	87,196	140,401
2039-2043	98,291	46,387	144,678
2044-2048	113,697	25,940	139,637
2049-2053	70,507	5,577	76,084
<b>Total</b>	<b>\$ 413,161</b>	<b>\$ 340,209</b>	<b>\$ 753,370</b>

### D. TERMS OF LONG-TERM DEBT

#### 1. Junior Lien Revenue Bonds

The City's Water and Sewer System Junior Lien Revenue Bonds are all bonds outstanding under the Previous Ordinance (prior to the Master Ordinance). The Master Ordinance defines "Previous Ordinance" as, collectively, the City's ordinances that authorized the issuance of outstanding "Previous Ordinance Bonds." "Previous Ordinance Bonds" are defined as, on any date, all of the City's Water and Sewer System Junior Lien Revenue Bonds that are outstanding under the Previous Ordinance.

On September 3, 2003, City Council authorized creation of the Combined Utility System ("the CUS") which currently consists of the City's Water and Sewer System. On June 10, 2004, as part of the restructuring to the new Combined Utility System, the City refunded a substantial portion of its outstanding junior lien bonds and reissued bonds as Combined Utility System bonds. The only Previous Ordinance bonds that are currently outstanding are the Series 1998A Bonds. Debt service payments on remaining Water and Sewer Junior Lien Revenue Bonds ("Junior Lien Bonds") will be made after payment of operating expenses and prior to any "other" debt service payments on the Combined Utility System bonds. The final maturity date for the remaining Junior Lien Bonds is December 1, 2028. No additional Junior Lien Bonds may be issued. As of June 30, 2023 and 2022, the current principal balance outstanding totaled \$34.3 million and \$38.9 million, respectively.

#### 2. Pledge Revenues - First Lien Revenue Bonds

First Lien Revenue Bonds are special obligations payable from and secured solely by a pledge of net revenues after maintenance and operating expenses and junior lien debt service payments.

On April 21, 2004, City Council approved the Master Ordinance for issuance of City of Houston, Combined Utility System Revenue obligations. The Master Ordinance includes covenants and agreements relating to the operation and management of the Combined Utility System. The System's First Lien Revenue Bonds are special obligations of the City, payable from and secured by a lien on Net Revenues of the Combined Utility System, after payment of all required payments, including and not limited to, those defined as maintenance and operation expenses under Previous Ordinance, and debt service on Water and Sewer Junior Lien bonds. Therefore, the lien on Net Revenues securing these bonds is subordinate to the lien securing Junior Lien Bonds. So long as any Bonds remain outstanding, the Master Ordinance requires the System to generate Net Revenues in each fiscal year at least equal to the greater of 120% of the combined debt service on all Previous Ordinance and First Lien Revenue

**Note 7. LONG-TERM LIABILITIES (continued)**

Bonds outstanding, or 110% of the combined debt service on all Previous Ordinance, First Lien and Second Lien Revenue Bonds outstanding, in such fiscal year. As of June 30, 2023 and 2022, the current principal balance outstanding totaled \$6,057.4 million and \$6,324.1 million, respectively.

In June 2004, the Combined Utility System issued First Lien Revenue Refunding Bonds, Series 2004B and 2004C (Taxable) bonds as auction rate securities, each consisting of various sub-series, i.e., Series 2004B-1 through 2004B-6 and Series 2004C-1 through 2004C-5. In 2008, as a result of the credit/liquidity crisis, the series 2004B bonds were converted to variable rate demand bonds. In 2012, the Series 2004B-1 bonds were refunded by SIFMA Index Floating Rate Bonds, consisting of \$125 million and \$100 million of First Lien Revenue Refunding Bonds, Series 2012A and 2012B, respectively. In June 2018, the Series 2012B bonds were remarketed as variable rate demand bonds (VRDB) and continue to remain outstanding as VRDBS. In 2020, the Series 2012A were remarketed as VRDBs and continue to remain outstanding as such. The remaining Series 2004B-2, B-3, B-4, B-5, and B-6 remain outstanding as VRDBs.

With respect to the Series 2004C bonds, in May 2008, these bonds were refunded by \$249.08 million of First Lien Revenue Refunding Bonds, Series 2008A and \$205.3 million first Lien Revenue Refunding Bonds, Series 2008D Bonds (Taxable), both of which were issued as adjustable rate bonds in multiple subseries. The Series 2008D-1, D-2, and D-3 sub-series have since been refunded with fixed rate bonds. In 2010, the Series 2008A-1 and A-2 bonds were refunded by the Series 2010B bonds, which were direct purchase adjustable rate bonds issued in the Indexed Floating Rate mode, with a mandatory tender date (“MDT”) of March 22, 2013. In 2012, the Series 2010B bonds were refunded by the Series 2012C bonds, which were publicly offered SIFMA Index Floating Rate Bonds with a MDT of August 1, 2016. In 2016, the Series 2012C bonds were refunded by the Series 2016C bonds, which were a direct purchase by BAML. The 2016C bonds were issued as adjustable rate bonds with a MDT of August 1, 2019. In 2018, as a direct result of tax reform and the decrease in the corporate tax rate, the 2016C were refunded by the Series 2018C bonds, which as of July 30, 2023 are VRDBs.

**Combined Utility System Direct Placement First Lien Revenue Bonds**

On December 21, 2021, the City issued \$130.0 million of Combined Utility System, First Lien Revenue Bonds, Series 2021C, as a direct placement with Texas Water Development Board, with coupons ranging from 0.600% – 1.610%. Proceeds will be used to pay for projects, a debt service reserve fund and to pay costs of issuance of the Bonds. The Bonds mature in varying amounts from 2023 to 2041.

There are no unique default provisions, payment provisions, or collateral pledged to either of these loans. In the event of default, such as failing to make timely payments in accordance with the agreements, the outstanding balances, including accrued interest, may become due immediately. As of June 30, 2023 and 2022, the CUS is in compliance with terms and conditions of these loan agreements.

**3. SWAP Agreements**

In accordance with the Government Accounting Standards Board Statement No. 72 – Fair Value Measurement and Application, the City has determined the swap liability to be a level 2 measurement. The fair value below includes consideration of the City’s credit rating and an adjustment for nonperformance risk. The City has determined that the swaps are effective hedges and the change in the fair values are reported as deferred inflows/outflows on the statement of net position (GASB 53, para.75).

A summary of the total fair value is as follows:

Notional Amount	Change in Fair Value	Fair Value at June 30, 2023	Fair Value at June 30, 2022
\$902,400,000	\$(49,610,475)	\$123,043,331	\$124,651,010
	(Deferred Outflows)	(Reported in SWAP Liability)	(Reported in SWAP Liability)

## Note 7. LONG-TERM LIABILITIES (continued)

### General Terms:

Objective (GASB 53, para. 71): To manage interest rate exposure and to reduce the cost of capital related to the City's Combined Utility System First Lien Revenue Refunding Bonds, Series 2004B (the "Series 2004B Bonds"), the City entered into several interest rate swap agreements (the "Series 2004B Swaps").

Additionally, to manage interest rate exposure and to reduce the cost of capital related to the City's Combined Utility System First Lien Revenue Refunding Bonds, Series 2018C (the "Series 2018C Bonds"), the City entered into an interest rate swap agreement (the "Series 2018C Swap").

The Series 2004B Swaps and Series 2018C Swap are collectively referred to herein as the "Swaps". Moreover, the Series 2004B Bonds and the Series 2018C Bonds are collectively referred to herein as the "Bonds".

Hedging Relationship (GASB 53): Hedge accounting can be applied for derivative instruments that are found to be effective hedges under GASB 53. The City has determined that the swaps are effective hedges and the changes in fair values are reported as deferred inflows/outflows on the statement of net position.

Non-Performance Adjustments (GASB 72, para. 62): GASB 72 requires a government to consider nonperformance risk when measuring the fair value of a liability. The fair values include consideration of the City's credit rating and an adjustment for nonperformance risk.

Credit risk (GASB 53, para. 73(a)): As of June 30, 2023 and 2022, the City was not exposed to credit risk because the Swaps had a negative fair value. However, should interest rates change and the fair value of the Swaps become positive, then the City will be exposed to credit risk in the amount of the fair value of the Swaps. In accordance with the City's swap policy and as established the Swaps, if a counterparty's credit rating falls below AA, collateral must be posted in varying amounts, depending on the credit rating and the fair value of the Swaps. No collateral has been required to date.

Basis risk (GASB 53, para. 73(c)): Basis risk is measured by the difference between variable receipts on the Swaps and variable payments on the Bonds. In the case of the Series 2004B Bonds, the basis is the difference between the 1-Week Securities Industry and Financial Markets Association ("SIFMA") and 10-Year Constant Maturity Swap Rate ("10-Year CMS"). In the case of the Series 2018C Bonds, the basis is the difference between 1-Month London Interbank Offered Rate ("LIBOR") and 10-Year CMS.

As of July 1, 2023, the ICE Benchmark Administration ceased publishing any LIBOR setting using the methodology in place as of December 31, 2021. As a result, as of July 1, 2023, LIBOR is no longer an appropriate benchmark interest rate for a derivative instrument that hedges the interest rate risk of taxable debt for purposes of GASB Statement No. 53. The agreements have been amended in July 2023 to reflect this change.

Termination risk (GASB 53, para. 73(d)): The City retains the right to terminate the Swaps at any time and for any reason. If the City terminates any of the Swaps, then a termination payment reflecting the "then-current" market value of the Swaps will be payable to or receivable by the City. By comparison, the City's counterparties may only terminate the Swaps in the event that the City fails to perform under the terms of the swap agreement, e.g., the City defaults on any swap payments.

Hedged Debt (GASB 53, para. 74): As of June 30, 2023 and 2022, debt service requirements for the swap agreements are reported in Note 7C as if the swap was in effect, assuming current interest rates remain the same. As rates vary, variable rate bond interest payments and net swap payments will vary. Expected debt service payments on the associated bonds are included with other Combined Utility System Bonds on Note 7C.

## Note 7. LONG-TERM LIABILITIES (continued)

### a. Synthetic Fixed Rate SWAP Agreements

*Combined Utility System Synthetic Fixed Rate Swaps:* On June 10, 2004, the City entered into three identical pay-fixed, receive variable rate swap agreements. The City pre-qualified six firms to submit competitive bids on the swap. The bidding took place on June 7, 2004. The three firms selected all matched the lowest fixed rate bid of 3.7784%. On November 15, 2018, the City amended the swap by changing the floating rate index from one-month LIBOR to 10-year constant maturity swap rate (CMS).

Terms: The notional amount totals \$653,325,000, the principal amount of the associated 2004B Bonds. The City's swap agreements contain scheduled reductions to outstanding notional amounts that follow anticipated payments of principal of the 2004B Bonds in varying amounts during the years 2028 to 2034.

Under the initial terms of the swaps, the City will pay a fixed rate of 3.7784% and receive a floating rate equal to 57.6% of One-Month U.S. Dollar LIBOR plus 37 basis points. All agreements were effective June 10, 2004, the date of issuance of the 2004B Bonds, and will terminate on May 15, 2034.

However, effective November 15, 2018, as per the amended terms, the City will now receive variable payments based on 58.55% of 10-year CMS.

At June 30, 2023 and 2022, the effective rate on the 2004B Bonds associated with the swap was computed as follows:

2004B Bonds	Amended Terms	June 30, 2023 Rate % Received/(Paid)	June 30, 2022 Rate % Received/(Paid)
Variable rate payment from counterparties	58.55% 10Y CMS	2.0439	1.1551
SWAP Receipt		2.0439	1.1551
Fixed rate paid to counterparties		(3.7784)	(3.7784)
Net rate received/(paid) for SWAP		(1.7345)	(2.6233)
Average variable rate on 2004B bonds year-end		(2.4735)	(0.2114)
Plus: Dealer and credit fees on 2004B bonds		(0.5356)	(0.5356)
Effective rate of the 2004B bonds		(4.7437)	(3.3703)

In contrast, the fixed rate the City paid on its Combined Utility System Series 2004A fixed rate bonds, which have a comparable maturity, was 5.08%.

*Fair Value.* Because long-term interest rates have changed since inception of the swaps, the swaps had a negative fair value of \$95,443,410 and \$90,398,789 on June 30, 2023 and June 30, 2022, respectively. This value was calculated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. The fair value is recorded on the balance sheet of the Combined Utility System in the SWAP liability. These net payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

Counterparty	Notional Amount	Fair Value at June 30, 2023	Fair Value at June 30, 2022	Counterparty Rating (Moody's/S&P/Fitch)
Goldman Sachs	\$ 353,325,000	\$ (51,623,495)	\$ (48,894,808)	A1/A+/A+
JP Morgan Chase	150,000,000	(21,916,151)	(20,757,719)	Aa2/A+/AA
Wells Fargo	150,000,000	(21,903,764)	(20,746,262)	Aa2/A+/AA-
Total	\$ 653,325,000	\$ (95,443,410)	\$ (90,398,789)	

## Note 7. LONG-TERM LIABILITIES (continued)

### b. Forward Interest Rate SWAP

Combined Utility System Forward Starting Swap: On November 1, 2005, the City entered into a forward interest rate swap transaction with Royal Bank of Canada ("RBC"). The City pre-qualified eight firms to submit competitive bids on the swap. RBC submitted the lowest fixed rate bid of 3.761% and was selected. On September 1, 2015, the swap agreement was novated to Wells Fargo.

On November 15, 2018, the City amended the swap by changing the floating rate index from one-month LIBOR to 10-year constant maturity swap rate (CMS). The transaction was conducted through a competitive bid process.

Terms. Under the terms of the initial contract, the City will pay a fixed rate of 3.761% on a par value of \$249,075,000, and it will receive variable payments based on 70% of One-Month U.S. Dollar LIBOR. The City's scheduled net swap payments are insured by Ambac Assurance Corporation.

However, effective November 15, 2018, under the amended contract, the City will now receive variable payments based on 58.55% of 10-year CMS.

At June 30, 2023 and 2022, the effective rate on the 2018C Bonds associated with the swap was computed as follows:

2018C Bonds	Initial Terms	Amended Terms	June 30, 2023 Rate % Received/(Paid)	June 30, 2022 Rate % Received/(Paid)
Variable rate payment from counterparties		58.55% 10Y CMS	2.0439	1.1551
Swap Receipt			2.0439	1.1551
Fixed rate paid to counterparties	Fixed		(3.7610)	(3.7610)
Net rate received/(paid) for SWAP			(1.7171)	(2.6059)
Year-end variable rate on 2018C bonds			(2.5431)	(0.2701)
Effective rate of 2018C bonds			(4.2602)	(2.8760)

Fair value. The swap had a reported negative fair value of \$27,599,921 and \$34,252,221 on June 30, 2023 and June 30, 2022, respectively. The fair value is recorded on the balance sheet of the Combined Utility System in the SWAP liability. This value was calculated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These net payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

Counterparty	Notional Amount	Fair Value at June 30, 2023	Fair Value at June 30, 2022	Counterparty Rating (Moody's/S&P/Fitch)
Wells Fargo	\$249,075,000	(\$27,599,921)	(\$34,252,221)	Aa2/A+/AA-

## Note 7. LONG-TERM LIABILITIES (continued)

### 4. Commercial Paper

Effective December 17, 2009, the City established a \$700.0 million Series B Commercial Paper Note program that provides for the issuance of Commercial Paper Notes to finance costs of eligible projects, including acquisition, construction, improvements and additions or extension for the City's Combined Utility System, and pay costs of issuance. The program is structured as a revolving Commercial Paper Note program, whereby the Series B Notes may be issued for a period that does not exceed 270 days and the maximum interest rate may not exceed 10%. The Series B Commercial Paper Notes are issued as Third Lien Obligations and are payable from and secured by a lien on Net Revenues of the CUS which is subordinate to the lien securing payment of First Lien Bonds. The Combined Utility System's outstanding notes from credit agreements contain a two – four-year repayment provision in the event of default or material adverse change. Effective May 17, 2023, the City amended and restated the Series B Ordinance authorizing for issuance \$1.0 billion of Commercial Paper Notes.

A portion of the Series B Notes, in the amount of \$475.0 million, is secured by credit facilities from Bank of America (Series B-1 and Series B-6) with an expiration date of August 19, 2027, Sumitomo Mitsui Banking Corporation, acting through its New York Branch (Series B-3) with an expiration date of January 10, 2025, PNC Bank, N.A (Series B-4) with an expiration date of July 12, 2025 and JPMorgan (Series B-7) with an expiration date of May 30, 2025. The Series B-7 (\$100.0 million of principal) was established within the amended and restated ordinance of May 2023. As of June 30, 2023 and 2022, the CUS has no outstanding borrowings in Series B commercial paper notes, respectively.

In addition, the City has established an Extendable Commercial Paper ("ECP") Note program in the amounts of \$75.0 million and \$250.0 million, that provide for the issuance of Series B-2 and Series B-5 ECP Notes as Third Lien Obligations. During FY23, the City amended and restated the Supplemental Ordinance authorizing the issuance of Series B-2 ECP notes in the aggregate principal amount not to exceed \$275.0 million outstanding at any time and provide for the issuance of Series B-2 notes through December 15, 2039. The Series B-2 ECP Notes and Series B-5 ECP Notes may each be issued for a period not to exceed 90 days (which may be extended, but in no event later than 270 days following the date of issuance) and bear interest at an annual rate not to exceed 9%.

The Series B-2 and Series B-5 ECP Notes are (1) separately offered and remarketed by Morgan Stanley & Co. LLC, (2) issued as Third Lien Obligations, and (3) are separately payable from and secured by a lien on Net Revenues of the CUS, which is subordinate to the lien securing payment of First Lien Bonds. Proceeds of Series B-2 and B-5 ECP Notes may each be used to finance various capital projects of the Combined Utility System.

Series	Size (\$ in millions)
B-1	\$100.0
B-2	275.0
B-3	75.0
B-4	100.0
B-5	250.0
B-6	100.0
B-7	100.0
<b>Total</b>	<b>\$1,000.0</b>

## **Note 7. LONG-TERM LIABILITIES (continued)**

### **5. Subordinate Lien Bonds**

In December 2015 and December 2016, the City closed on a Texas Water Development Board “TWDB” subordinate lien State Water Implementation Fund for Texas (SWIFT) Loans of \$25.9 million and \$63.0 million, respectively. These loans were issued to fund the Northeast Plant Expansion and Northeast Transmission Line. Annual debt service is payable from the Combined Utility System, General Purpose Fund. The annual debt service payments began in May 2016 and May 2017, respectively. As of June 30, 2023 and 2022, \$4.6 million and \$3.9 million of the principal had been paid for the 2015 loan, respectively and \$10.1 million and \$8.4 million of the principal has been paid for the 2016 loan, respectively. These bonds mature on November 15, 2045 and November 15, 2046, respectively. Two new SWIFT loans were issued in November 2017 (2017C) and June 2018 (2018B) for \$83.2 million and \$106.9 million, respectively. The annual debt service payments began in May 2018 and November 2018, respectively, and the bonds mature in fiscal year 2047.

As of June 30, 2023 and 2022, \$10.8 million and \$8.6 million of principal has been paid for 2017C, respectively and \$10.8 million and \$8.1 million of principal has been made paid for 2018B, respectively. A new SWIFT loan was issued in November 2018 (2018F) for \$170.3 million. As of June 30, 2023 and 2022, \$16.3 million and \$12.1 million of principal was paid for this bond, respectively. This bond matures in fiscal year 2049. Additionally, a new SWIFT loan was issued in November 2020 (2020E) for \$38.0 million. As of June 30, 2023 and 2022, \$2.2 million and \$1.1 million of principal was paid for this bond. This bond matures in fiscal year 2050. The outstanding debt for Subordinate Lien as of June 30, 2023 and 2022 is \$432.5 million and \$445.1 million, respectively.

### **6. Coastal Water Authority (CWA)**

The contract payable relating to CWA represents the outstanding balance of \$44.6 million and \$48.9 million at June 30, 2023 and 2022 for Series 2010 and Series 2014 (both refunding) issued by CWA, a governmental agency of the State of Texas, to finance the construction of a water conveyance system. Pursuant to a series of exchange agreements with CWA, the City issued the Certificate and endorsed the bonds and is unconditionally obligated to pay from the gross revenues of the City's Combined Utility System all debt service payments on these Certificates and Bonds, as well as amounts necessary to restore deficiencies in funds required to be accumulated under the CWA bond resolutions. The outstanding bonds mature on December 15, 2025 and December 15, 2034, respectively.

#### **Luce Bayou**

In January 2009, the City entered into a contract with CWA for the project design, property acquisition, construction and financing of the Luce Bayou Interbasin Transfer Project. This would include the construction of infrastructure sized to transfer approximately 450,000 acre feet per year of the City's permitted surface water from Trinity River to Lake Houston. The funding for this project is to be financed and paid through the Texas Water Development Board (TWDB) financing program. The Water Infrastructure Fund (WIF) Bonds are secured by the City's pledged revenues to pay Debt Service.

The current contract payable out of the General Purpose Fund relating to Luce Bayou as of June 30, 2023 and 2022 represents \$28.8 million and \$28.8 million of State Participation Loan (maturing in 2047), respectively, \$28.0 million of Series 2009 WIF Loan (maturing in 2029, outstanding principal balance of \$17.7 million and \$20.3 million as of June 30, 2023 and 2022, respectively) and \$5.1 million of Series 2010 WIF Loan (maturing in 2030, outstanding principal balance of \$3.4 million and \$3.9 million as of June 30, 2023 and 2022, respectively). The annual debt service payments for the State Participation Loan started in FY2015, Series 2009 started in FY2019 and Series 2010 WIF Loan started in FY2020. In FY2017, two new State Water Implementation Revenue Fund for Texas (SWIRFT) bonds were issued in relation to Luce Bayou on November 2015 and December 2016 for \$66.6 million and \$136.5 million, respectively. The annual debt service payments for these bonds started in FY2019 and their maturity is in 2050 and 2051, respectively. Additionally in FY2018, two new State Water Implementation Revenue Fund for Texas (SWIRFT) bonds were issued in relation to Luce Bayou in November

## **Note 7. LONG-TERM LIABILITIES (continued)**

2017 for \$72.8 million and \$24.2 million, respectively. The annual debt service payments for the \$72.8 million bond started in FY2019. This bond matures in 2052. The annual debt service payments for the \$24.1 million bond started in FY2018, with a current outstanding principal balance of \$20.4 million and \$21.1 million as of June 30, 2023 and 2022, respectively. This bond matures in 2047.

### **Luce Bayou & Mitigation Costs - ROW**

Land and Mitigation Costs associated with the Luce Bayou Project relate to acquisition of land and costs of environmental mitigation. CWA advanced funds to pay for the City's share of Land and Mitigation costs from available CWA revenues in lump sums (\$6.4 million in 2009, \$3.2 million in 2010, \$3.2 million in 2012) for a total of \$12.8 million. Repayment of the loan started in FY 2019 with the accrued interest during 2009-2020 rolled into principal to be amortized over the next 20 years. At June 30, 2023 and 2022, the current principal balance is \$14.6 million and \$15.3 million, respectively.

### **7. Other Contracts**

Payments on the following contracts will be made only after the Combined Utility System has funded all maintenance and operation costs and debt service payments for the Combined Utility System, including required reserves.

#### **U.S. Army Corps of Engineers**

On June 20, 1967, the City, TRA, and Chambers-Liberty Counties Navigation District contracted with the United States of America to have the U.S. Army Corps of Engineers build a salinity control barrier and recreation facilities at Wallisville Lake. Because of legal actions, construction was blocked for a long period, and the project was not completed until April 2003. The City's share of the project cost was \$10.6 million, which will be paid to the U.S. government over 50 years at 3.222% interest with final payment due January 1, 2053. Current principal balance outstanding as of June 30, 2023 and 2022 is \$7.9 million and \$8.1 million, respectively.

#### **Allen's Creek**

In April 2000, the City, Brazos River Authority ("BRA"), and the ("TWDB") entered into an agreement to develop the Allen's Creek water supply reservoir in Fort Bend County as a regional water supply. TWDB paid \$14.0 million, or 50% of funding, to provide for construction of the project, and the City agreed to purchase TWDB's share. Interest payments on the lease-purchase began in 2005 at an average rate of 5.85%. Interest costs over the first eight years were partially deferred to later years. Principal payments will begin in 2023, and the final principal payment will be made in 2037. H.B. 2846, passed during the 86th Session of the Texas Legislature and signed into law on June 2, 2019, mandated that the City sell its ownership interest in Allen's Creek reservoir to the Brazos River Authority at or below a capped price of \$23.0 million. The City filed a suit in state district court in Travis County seeking a declaratory judgment that H.B. 2846 is invalid and unenforceable because it violated the Texas Constitution. In particular, H.B. 2846 required an unconstitutional forced sell of property and was an unconstitutional local law. In addition, it was a retroactive law and, in violation of the Texas Constitution, imposed debt on the Brazos River Authority. Finally, the City sought a declaratory judgment that H.B. 2846 was void because the state lacks legal authority to force the City to enter into a specific contract to sell vested water rights. The trial court granted the City's Motion for Summary Judgment and ruled that H.B. 2846 was unconstitutional and void. Brazos River Authority filed a Notice of Appeal however, both parties, the City and BRA, settled the case as of May 2, 2022. As of June 30, 2023 & 2022, the \$14.0 million TWDB loan was defeased.

## **Note 7. LONG-TERM LIABILITIES (continued)**

### **Bray's Bayou**

In response to repeated extreme rainfall and flooding events impacting the Brays Bayou watershed, the Harris County Flood Control District (HCFCD) and the United States Army Corp of Engineers (USACE) have partnered to implement the Brays Bayou Federal Flood Damage Reduction Project ("Project Brays"), with HCFCD assuming responsibility for planning and implementation in 1998. While the primary stormwater channel and detention basin improvements have been completed work remains to reconstruct bridges carrying thoroughfares across the bayous.

To accelerate the completion of the remaining bridge construction modifications and replacements approved by USACE as part of Project Brays the City has entered into an interlocal agreement with the HCFCD to advance up to \$43.0 million. The interlocal agreement provides that HCFCD will pass certain reimbursements received from USACE to pay back all or part of the City's advanced funding.

To provide the upfront funding, on October 17, 2017 the Texas Water Development Board (TWDB) approved a loan to the City at zero percent interest for \$43.0 million dollars. On June 27, 2018, City Council approved an ordinance approving and authorizing the Interlocal Agreement between the City and HCFCD. On August 7, 2018 City Council authorized Texas Public Improvement Bonds, Series 2018A for \$43.0 million dollars plus cost of issuance fees. The City will be responsible for repayment of the TWDB loan, regardless of the timing or amounts received by the City under the interlocal agreement with HCFCD. The debt service obligation will be shared 50/50 by the General Fund and the Combined Utility System. The General Fund and the Combined Utility System will be reimbursed by HCFCD upon their receipt of reimbursement from USACE. Debt service payments will begin March 2020 and end March 2041.

In FY 2021, the City received \$4.5 million dollars in reimbursements for construction invoices for the Project Brays. HCFCD informed the City the USACE now has the resources to fund the full project therefore the interlocal agreement was terminated. All Other Interfund receivables and Other Interfund payables were removed from the Combined Utility System Statement of Net Position. The balance of the loan proceeds was repaid to TWDB in February 2022.

### **Pension Obligation Bonds**

The City has issued several series of General Obligation Taxable Pension Bonds. The proceeds were used to reduce the unfunded actuarial accrued liability of the Houston Municipal Employees Pension System and the Houston Police Officers Pension System. Interest is payable semi-annually, and principal is payable in varying amounts through 2047. Although these obligations have an ad valorem tax pledge, the Combined Utility System records a portion of the liabilities because the liabilities are directly related and expected to be paid from those funds based on percentages of payroll. At June 30, 2023 and 2022, the pension obligation bonds have an outstanding balance of \$85.3 million and \$88.9 million, respectively.

## **Note 7. LONG-TERM LIABILITIES (continued)**

### **E. DEBT ISSUANCES AND REFUNDINGS**

#### **Prior Year Defeased Debt**

In fiscal year 2020, the City issued Combined Utility System First Lien Revenue Refunding Bonds Series 2019B and 2019C to defease \$690.8 million of Combined Utility System Bonds by placing new bond proceeds in an escrow to provide for the future debt payments on the defeased bonds. Accordingly, the escrowed assets and the liability for the defeased bonds are not included in the accompanying financial statements. At June 30, 2023 and 2022, \$0 and \$44.7 million of defeased bonds were still outstanding.

In fiscal year 2021, the City issued Combined Utility System First Lien Revenue and Refunding Bonds Series 2020C and Combined Utility System First Lien Revenue Refunding Bonds Series 2020D to defease \$208.9 million of Bonds by placing new bond proceeds in an escrow to provide for the future debt payments on the defeased bonds. Accordingly, the escrowed assets and the liability for the defeased bonds are not included in the accompanying financial statements. At June 30, 2023 and 2022, \$91.2 million and \$114.7 million of defeased bonds are still outstanding.

In fiscal year 2021, the City issued Combined Utility System First Lien Revenue Refunding Bonds Series 2021B to defease \$92.1 million of the CUS Series 2012D and 2013B Bonds, by placing new bond proceeds in an escrow to provide for the future debt payments on the defeased bonds. Accordingly, the escrowed assets and the liability for the defeased bonds are not included in the accompanying financial statements. At June 30, 2023 and 2022, \$41.6 million and \$92.1 million of defeased bonds are still outstanding.

### **F. ARBITRAGE REBATE**

Arbitrage rebate rules, under the Internal Revenue Code Section 148 and related Treasury Regulations, require generally that a tax-exempt bond issuer forward to the federal government any profits made from investing bond proceeds at a yield above the bond yield, when investing in a taxable market. Payments based on cumulative profits earned by bonds are due, in general, every five years. At June 30, 2023 and 2022, a yield restriction/arbitrage of \$866 thousand and \$926 thousand was accrued.

## Note 8. DEFINED BENEFIT PENSION PLAN

### A. General Information

#### Plan Description

The Combined Utility System participates in the Houston Municipal Employees' Pension System ("HMEPS"); a single-employer defined benefit pension plan administered by an independent Board of Trustees. HMEPS provides pension, disability, and death benefits for all municipal employees employed full-time by the City. The benefit provisions of the pension plan were established under the authority of Texas statutes (Vernon's Texas Civil Statutes, Articles 6243.e2 (1), 6243h, and 6243g-4), which establish the various benefit provisions. The fiscal year of each pension fund ends June 30.

The Municipal Employees' Pension System publishes its separate financial statements and included as a blended component unit in the Annual Comprehensive Financial Report of the City. A complete copy of the summary plan description and the stand-alone financial statements can be obtained from the Houston Municipal Employees' Pension System at 1201 Louisiana St., Suite 900, Houston, Texas 77002-2555 or via <http://hmepps.org>.

#### Benefits Provided

Houston Municipal Employees' Pension System includes three contributory groups (Groups A, B, and D) and provides for service-connected disability and death benefits to eligible members and surviving spouse and/or dependents, with no age or service eligibility requirements. Pension benefits are based on a participant's average monthly salary and years of debited service, as defined in the Pension Statute. Pension benefits are adjusted annually for a cost of living adjustment of between 0% and 2%, depending on investment returns. The maximum pension benefit is 90% of the participant's average monthly salary. A Deferred Retirement Option Plan (DROP) is available to eligible members.

#### Contributions

The Houston Municipal Employees' Pension System's employer and employee obligations to contribute, as well as employee contribution rates, are included in the enabling pension statutes. Additionally, these laws provide that employer funding be based on annual actuarial valuations, statutorily approved amounts or, in the cases of the Municipal Employees' Pension System, amounts agreed to in meet and confer agreements. All pension plans provide service, disability, death, and survivor benefits. In addition, each pension plan recognizes participant and employer contributions as revenues in the period in which they are due pursuant to formal commitments and recognizes benefits and refunds when they are due and payable in accordance with the terms of the pension statutes.

As of the most recent measurement date of the Net Pension Liability, membership data for the pension plans are as follows:

City (HMEPS)	
Retirees or beneficiaries currently receiving benefits	11,776
Former members vested but not receiving benefits	8,301
Active members	11,402
Total Participants	<u>31,479</u>

**Note 8. DEFINED BENEFIT PENSION PLAN (continued)**

**B. Net Pension Liability (Asset)**

The CUS Fund’s liability for the net pension liability in the City’s pension plan was allocated and reported on the statement of net position.

The Net Pension Liability (“NPL”) or Net Pension Asset (“NPA”) is the difference between the Total Pension Liability (“TPL”) and the plan’s Fiduciary Net Position (“FNP”). The TPL is the present value of pension benefits that are allocated to current members due to past service by entry age normal actuarial cost method. The TPL includes benefits related to projected salary and service, and automatic cost of living adjustments (“COLAs”). In addition, ad hoc COLAs are also included in the TPL to the extent they are substantively automatic. The FNP is determined on the same basis used by the pension plans. The City’s TPL, NPL and certain sensitivity information are based on an actuarial valuation performed as of July 1, 2022 and 2021. The total pension liability was rolled forward from the valuation date to the measurement dates of June 30, 2023 and 2022 using generally accepted actuarial principles. A schedule of Net Pension Liability, in addition to the information above, includes multi-year trend information (beginning with FY2015) and is presented in the Required Supplementary Information section.

**Net Position Liability (in thousands)**

Measurement Date	06/30/2023		June 30, 2022	
	Houston Municipal Employees' Pension	Fund proportionate share of NPL	Houston Municipal Employees' Pension	Fund proportionate share of NPL
Total Pension Liability	\$5,698,777	\$993,297	\$5,562,146	\$984,378
Less: Fiduciary Net Position	(4,072,345)	(709,890)	(3,952,351)	(699,479)
Net Position Liability	\$1,626,432	\$283,407	\$1,609,795	\$284,899

Combined Utility System’s proportionate share of NPL is 17.43% and 17.70% for Fiscal Years 2023 and 2022.

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## Note 8. DEFINED BENEFIT PENSION PLAN (continued)

### C. Schedule of Changes in Net Pension Liability (in thousands)

City (HMEPS)	June 30, 2023			June 30, 2022		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Service Cost	\$ 85,184	\$ —	\$ 85,184	\$ 82,080	\$ —	\$ 82,080
Interest on the Total Pension Liability	381,016	—	381,016	371,952	—	371,952
Difference between Expected and Actual Experience	6,279	—	6,279	26,473	—	26,473
Employer Contributions	—	204,895	(204,895)	—	197,341	(197,341)
Employees Contributions	—	34,600	(34,600)	—	32,655	(32,655)
Pension Plan Net Investment Income	—	221,364	(221,364)	—	189,390	(189,390)
Assumptions Changes	—	—	—	(29,515)	—	(29,515)
Benefits Payments	(334,859)	(334,859)	—	(327,772)	(327,772)	—
Refunds	(989)	(989)	—	(1,133)	(1,133)	—
Administrative Expense	—	(5,636)	5,636	—	(5,681)	5,681
Other	—	619	(619)	—	466	(466)
Net Change	136,631	119,994	16,637	122,085	85,266	36,819
Net Pension Liability Beginning	5,562,146	3,952,351	1,609,795	5,440,061	3,867,085	1,572,976
Net Pension Liability Ending	\$ 5,698,777	\$ 4,072,345	\$ 1,626,432	\$ 5,562,146	\$ 3,952,351	\$ 1,609,795

### D. Pension Expense

For the years ended June 30, 2023 and 2022, the City recognized pension expense for HMEPS as follows (in thousands):

City (HMEPS)	June 30, 2023	June 30, 2022
Service Cost	\$ 85,184	\$ 82,080
Interest	381,016	371,952
Difference between Expected and Actual Experience	(1,966)	(9,242)
Changes of Assumptions	(7,828)	(7,828)
Differences between Projected and Actual Earnings	(84,487)	(103,681)
Member Contributions	(34,600)	(32,655)
Projected Earnings on Plan Investments	(273,117)	(267,052)
Administrative Expense	5,636	5,681
Other	(619)	(466)
Total Pension Expense	\$ 69,219	\$ 38,789

The Fund's proportionate shares of pension expense are \$9.6 million and \$6.9 million for June 30, 2023 and 2022, respectively.

## Note 8. DEFINED BENEFIT PENSION PLAN (continued)

### E. Schedule of Deferred Outflows and Inflows of Resources

Deferred outflows of resources and deferred inflows of resources by source reported by the Fund at June 30, 2023 and 2022 (in thousands)

Fund proportionate share	June 30, 2023		June 30, 2022	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 2,957	\$ (553)	\$ 3,443	\$ (2,460)
Changes of Assumptions	—	(2,415)	—	(3,838)
Net Difference between Projected and Actual Earnings on	—	(34,978)	—	(59,637)
Change in Proportion	—	(5,585)	—	(2,684)
Total	\$ 2,957	\$ (43,531)	\$ 3,443	\$ (68,619)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to Pensions at June 30, 2023 for the Fund will be recognized in pension expense as follows (in thousands):

Year Ended June 30	Fund
2024	\$ (17,763)
2025	(28,407)
2026	3,792
2027	1,804
2028	—
Thereafter	—
Total	\$ (40,574)

A single discount rate of 7.00% was used to measure the TPL for the Municipal Employees' Pension plan. This single discount rate was based on the expected rate of return on the pension plan's investments of 7.00% and the current municipal bond rate was not applicable. The projection of cash flows used to determine this single discount rate assumed that respective plan member contributions will be made at the current contribution rate and that City contributions will be made at the rate determined actuarially in the annual Risk Sharing Valuation Study which would become effective in the fiscal year beginning one year after the study date. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, a single discount rate of 7.00% was applied to all periods of projected benefit payments to determine the total pension liability. For the June 30, 2023 and 2022 measurement dates, the single discount rate used was 7.00%.

### F. Sensitivity of the Net Position Liability to Changes in the Discount Rate

The following presents the Net Position Liability for Municipal Employees' Pension plan, calculated using the current discount rate of 7%, as well as what the Combined Utility System's Net Pension Liability would have been if they were calculated using a discount rate that is 1% point lower and 1% point higher than the current rate (in thousands):

## Note 8. DEFINED BENEFIT PENSION PLAN (continued)

	June 30, 2023		
	1% Decrease	Current Discount Rate	1% Increase
	- 6% -	- 7% -	- 8% -
Municipal Employees' Pension System	\$ 2,202,979	\$ 1,626,432	\$ 1,141,455
Fund proportionate share of NPL	\$ 383,871	\$ 283,407	\$ 198,899

	June 30, 2022		
	1% Decrease	Current Discount Rate	1% Increase
	- 6% -	- 7% -	- 8% -
Municipal Employees' Pension System	\$ 2,180,572	\$ 1,609,795	\$ 1,129,984
Fund proportionate share of NPL	\$ 385,914	\$ 284,899	\$ 199,983

### G. Schedule of Assumptions

Inflation	2.25%
Salary Changes	3.25% to 5.50%
Investment Rate of Return	7.00%
Valuation Date	July 1, 2022
Actuarial Cost Method	Entry Age Normal Cost
Amortization Method	Level Percent of Payroll
Amortization Period	25 Years
Asset Valuation Method	5 Year smoothed market, direct offset of deferred gains and losses
Ad hoc OPEB and Ad hoc COLA	3.00% to 6.00%
Mortality Assumption	PUB-2010 table, amount weighted, below-median income, with a 2-year set forward. The rates are then projected on a fully generational basis by the long-term rates of improvement of scale MP-2020.
Experience Study	6/30/2020

The long-term expected rate of return on the investments was supported using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in HMEPS' target asset allocation and actual allocation as of June 30, 2023 and 2022 are summarized as follows.

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## Note 8. DEFINED BENEFIT PENSION PLAN (continued)

Asset Class	June 30, 2023		June 30, 2022	
	Target Allocation	Long Term Expected Rate of Return	Target Allocation	Long Term Expected Rate of Return
Domestic equity	28.00 %	6.75 %	32.50 %	7.30 %
Private equity	17.00 %	9.60 %	17.00 %	10.25 %
Fixed income	10.00 %	5.10 %	10.00 %	5.88 %
Real Estate	12.50 %	7.95 %	12.50 %	6.35 %
Absolute return	— %	— %	8.00 %	7.00 %
Inflation Linked	20.00 %	7.73 %	15.00 %	7.70 %
Private Debt	12.50 %	8.20 %	5.00 %	7.80 %
Cash & Short-term	— %	3.65 %	— %	3.65 %
	<u>100.00 %</u>		<u>100.00 %</u>	

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**Note 9. OTHER EMPLOYEE BENEFITS**

**A. Retiree Health Insurance Benefits**

The City of Houston Other Post-Employment Benefit (“OPEB”) Health plan is a single-employer plan, and calculations are based on the OPEB benefits provided under the terms of the plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

The City provides certain health care benefits for retired employees as approved during annual budget process. Substantially all employees become eligible for these benefits if they reach normal retirement age while working for the City. The City is not required by law or contractual agreement to provide funding for OPEB other than pay-as-you-go amounts necessary to provide current benefits to retirees, eligible dependent, and beneficiaries.

Contributions are recognized in the year paid. The plan is not accounted for as a trust, and an irrevocable trust that meets the criteria of GASB codification P22.101 or P52.101 to pay related benefits has not been established for this OPEB plan. The cost of retiree health care premiums incurred by the City (employer and subscriber) amounted to approximately \$56.5 million and \$61.5 million for the years ended June 30, 2023 and June 30, 2022, respectively. The cost of retiree health care premiums incurred by the Fund amounted to approximately \$4.2 million and \$4.8 million for the years ended June 30, 2023 and June 30, 2022, respectively.

As a department of the City, the CUS participates in the OPEB plan of the City’s municipal employees. A separate accounting is not done for the Fund’s portion. CUS’s proportionate share of the net OPEB liability is 7.50% and 7.8% for fiscal years 2023 and 2022.

**1. Membership**

Membership data is updated every two years by the Actuary. As of the most recent actuarial valuation of the total OPEB Liability, membership data is as follows:

City	
Retirees and Beneficiaries Currently Receiving Benefits	10,175
Active Members	20,954
Total Participants	<u>31,129</u>

**2. Total and Net OPEB Liability**

The total OPEB liability was measured as of June 30, 2022 and June 30, 2021. The total OPEB Liability was determined from an actuarial valuation as of June 30, 2022 and June 30, 2021. The net OPEB Liability is the total OPEB Liability less the Plan Fiduciary Net Position. The total OPEB liability is the present value of all future benefit payments for current retirees and active employees, considering assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.

## Note 9. OTHER EMPLOYEE BENEFITS (continued)

Measurement Date: June 30, 2022 and 2021

Reporting Date: June 30, 2023 and 2022

City	June 30, 2023	June 30, 2022
Total OPEB Liability	\$1,759,895	\$2,336,426
Less: Fiduciary Net Position	—	—
Net OPEB Liability	\$1,759,895	\$2,336,426
The Fund's Portion of Net OPEB Liability	\$131,934	\$182,172

A schedule of Total OPEB Liability, in addition to the information above, includes multi-year trend information (beginning with year 2018) and is presented in the Required Supplementary Information section.

### 3. Schedule of Changes in Total OPEB Liability

Changes of assumption reflects a change in discount rate from 2.16% in 2021 to 3.54% in 2022. In addition, per capita health costs and future trend on such costs, as well as actuarial spread factors used to estimate individual retiree and spouse costs by age and by gender, have been updated. Changes in total OPEB liability for the years ended June 30, 2023 and June 30, 2022, are as follows:

Changes in total OPEB Liability (in thousands)	June 30, 2023	June 30, 2022
	City	City
Service cost	\$ 124,690	\$ 140,185
Interest	52,553	60,194
Change of benefit terms	—	(461,192)
Difference between expected and actual experience	23,213	(2,523)
Changes of assumptions	(720,476)	47,150
Benefit payments	(56,511)	(61,487)
Net change	(576,531)	(277,673)
Beginning total OPEB Liability	2,336,426	2,614,099
Ending total OPEB Liability	\$ 1,759,895	\$ 2,336,426

### 4. OPEB Expense (Benefit)

The City recognized OPEB expense (benefit) of \$2.6 million and \$(335.8) million for the reporting years ended June 30, 2023 and June 30, 2022, respectively. The Fund recognized OPEB expense (benefit) of \$0.2 million and \$(26.2) million for the reporting years ended June 30, 2023 and June 30, 2022, respectively. Components of OPEB expense (benefit) recognized is as follows (in thousands):

## Note 9. OTHER EMPLOYEE BENEFITS (continued)

Components of OPEB Expense (Benefit)	June 30, 2023	June 30, 2022
	City	City
Service cost	\$ 124,690	\$ 140,185
Interest	52,553	60,194
Current-period benefit changes	—	(461,192)
Difference between expected and actual experience	3,316	(360)
Amortization of beginning of year deferred amounts	(75,008)	(81,383)
Changes of assumptions	(102,925)	6,736
OPEB expense (benefit)	<u>\$ 2,626</u>	<u>\$ (335,820)</u>

## 5. Schedule of Deferred Outflows and Inflows of Resources

Deferred outflows and inflows of resources are differences between actual and expected experience that are not reflected in the current year's expenses. Deferred outflows of resources and deferred inflows of resources by source reported by the City and the Fund at June 30, 2023 and 2022 (in thousands):

	June 30, 2023		June 30, 2022	
	City		City	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	\$ 220,498	\$ (796,552)	\$ 273,939	\$ (278,908)
Difference between expected and actual earning in the total OPEB liability	19,896	(76,945)	—	(105,488)
City contributions subsequent to the measurement date	63,556	—	56,511	—
Total	<u>\$ 303,950</u>	<u>\$ (873,497)</u>	<u>\$ 330,450</u>	<u>\$ (384,395)</u>

	June 30, 2023		June 30, 2022	
	Fund		Fund	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	\$ 16,530	\$ (59,716)	\$ 21,359	\$ (21,746)
Difference between expected and actual earning in the total OPEB liability	1,492	(5,768)	—	(8,225)
Fund contributions subsequent to the measurement date	4,725	—	4,236	—
Total	<u>\$ 22,747</u>	<u>\$ (65,485)</u>	<u>\$ 25,595</u>	<u>\$ (29,971)</u>

## Note 9. OTHER EMPLOYEE BENEFITS (continued)

\$63.6 million reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized by the City as a reduction of the total OPEB liability in the year ended June 30, 2024. \$4.7 million reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized by the Fund as a reduction of the total OPEB liability in the year ended June 30, 2024.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to total OPEB Liability at June 30, 2023 for the City and the Fund will be recognized in OPEB expense (benefit) as follows (in thousands):

Year Ended June 30	City of Houston	Fund
2024	\$ (174,617)	\$ (13,091)
2025	(128,023)	(9,598)
2026	(81,835)	(6,135)
2027	(55,785)	(4,182)
2028	(93,234)	(6,989)
Thereafter	(99,609)	(7,467)
Total	<u>\$ (633,103)</u>	<u>\$ (47,462)</u>

## 6. Sensitivity of the Total OPEB Liability to Changes in the Discount Rate and Healthcare Cost Trend Rate

The following presents the total OPEB liability, calculated using the current discount rate and the healthcare cost trend rate, as well as what the City's and the Fund's total OPEB Liability would have been if they were calculated using a discount rate or healthcare cost trend rate that is 1-percent-point lower and 1-percent-point higher than the current rate (in thousands):

June 30, 2023	1% Decrease	Current Discount Rate	1% Increase
	<u>2.54%</u>	<u>3.54%</u>	<u>4.54%</u>
City - Net OPEB Liability	\$ 2,057,272	\$ 1,759,895	\$ 1,524,711
Fund proportionate share of NOL	\$ 154,228	\$ 131,934	\$ 114,303

June 30, 2022	1% Decrease	Current Discount Rate	1% Increase
	<u>1.16%</u>	<u>2.16%</u>	<u>3.16%</u>
City - Net OPEB Liability	\$ 2,765,530	\$ 2,336,426	\$ 2,003,281
Fund proportionate share of NOL	\$ 215,629	\$ 182,172	\$ 156,196

## Note 9. OTHER EMPLOYEE BENEFITS (continued)

June 30, 2023	1% Decrease in Health Care Cost Trend Rates	Current Health Care Cost Trend Rate	1% Increase in Health Care Cost Trend Rates
City - Net OPEB Liability	\$ 1,490,595	\$ 1,759,895	\$ 2,111,265
Fund proportionate share of NOL	\$ 111,746	\$ 131,934	\$ 158,275

June 30, 2022	1% Decrease in Health Care Cost Trend Rates	Current Health Care Cost Trend Rate	1% Increase in Health Care Cost Trend Rates
City - Net OPEB Liability	\$ 1,933,455	\$ 2,336,426	\$ 2,875,373
Fund proportionate share of NOL	\$ 150,752	\$ 182,172	\$ 224,193

## 7. Schedule of Assumptions

The total OPEB Liability was rolled forward from an actuarial valuation as of June 30, 2022 using the following assumptions, applied to all periods included in the measurement, unless otherwise specified.

Experience study	July 1, 2018
Inflation	2.25%
Salary increases	2.75% to 22.75%, varies by job classification, service and age
Discount rate	3.54% and 2.16% for June 30, 2022 and 2021 reporting, respectively
Measurement date	June 30, 2022
<b>Healthcare Costs Trends Rates</b>	
Medical	7.00% grading down to 4.5% by 0.25% per annum
Prescription drug	8.00% grading down to 4.5% by 0.25% per annum
Medicare Advantage	1.80% in the first year, then 4.50% thereafter
Administrative costs	2.00%
Healthy mortality rates	Rates that vary by job classification and employee status. The rates are consistent with the pension plans valuation assumptions for the same employees.

## Note 9. OTHER EMPLOYEE BENEFITS (continued)

### B. Long-Term Disability Plan (LTD)

The long-term disability (“LTD”) plan, with related contributions and benefit payments accounted for as an internal service fund of the City, is a part of the City’s Compensable Sick Leave Plan (“CSL”) and is provided at no cost to City employees who are members of CSL. Coverage is effective the later of September 1, 1985 or upon completion of one year of continuous service. When an employee cannot work because of injury or illness, the plan provides income equal to 50% of base pay plus longevity, or 70% of base plus longevity when combined with income benefits available from other sources. Plan benefits may be payable after all CSL scheduled sick leave benefits, including frozen sick leave days, have been used, however, not before six months of absence from work. The plan is administered by Reed Group, which is reimbursed by the internal service fund for claims as they are paid along with a fee for administrative services. For the years ended June 30, 2023 and June 30, 2022, claims paid totaled approximately \$0.9 million. The Fund participates in the OPEB-LTD plan for the City’s municipal employees. No assets are accumulated in a trust that meets the criteria of GASB codification P22.101 or P52.101 to pay related benefits for this OPEB plan.

A separate accounting is not done for the Fund’s portion. It is allocated its share of experience on annual basis.

#### 1. Changes in Total OPEB LTD Liability

##### Total OPEB - LTD Liability (in thousands)

City	June 30, 2023	June 30, 2022
Beginning Balance	\$ 14,170	\$ 15,546
Changes for the Year		
Service Cost	1,571	1,705
Interest	541	363
Experience	(965)	(1,800)
Benefit Payments	(919)	(901)
Assumption Changes	(326)	(743)
Net Changes	(98)	(1,376)
Ending Balance	\$ 14,072	\$ 14,170

Total OPEB liability at June 30, 2023 and 2022 was measured as of June 30, 2023 and 2022, respectively. At June 30, 2023, total OPEB liability of \$14.08 million includes \$8.16 million and \$5.92 million for active and disabled employees. At June 30, 2022, total OPEB liability of \$14.17 million includes \$8.33 million and \$5.84 million for active and disabled employees, respectively, respectively.

The Fund’s proportionate share of the total OPEB liability for the LTD at June 30, 2023 and 2022 was 13.78% and 14.08%, respectively.

#### 2. OPEB LTD Expense

For the reporting year ended June 30, 2023 and June 30, 2022, the OPEB expense of the City is \$2.0 million and \$2.1 million. Components of OPEB Expense (in thousands) for the years ended for June 30, 2023 and June 30, 2022 are as follows:

**Note 9. OTHER EMPLOYEE BENEFITS (continued)**

	June 30, 2023		June 30, 2022	
	City of Houston	Fund	City of Houston	Fund
Service Cost	\$ 1,571	\$ 216	\$ 1,705	\$ 240
Interest on TOL	541	75	363	51
Difference between Expected and Actual Experience	(340)	(47)	(243)	(34)
Changes in Assumptions	247	34	280	39
<b>Total OPEB Expense</b>	<b>\$ 2,019</b>	<b>\$ 278</b>	<b>\$ 2,105</b>	<b>\$ 296</b>

**3. Schedule of Deferred Outflows and Inflows of Resources**

Deferred outflows of resources and deferred inflows of resources by sources related to the LTD reported by the City and Fund at June 30, 2023 and 2022 (in thousands):

	June 30, 2023		June 30, 2022	
	City		City	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 692	\$ (3,610)	\$ 827	\$ (3,120)
Changes of Assumptions	2,264	(954)	2,634	(751)
<b>Total</b>	<b>\$ 2,956</b>	<b>\$ (4,564)</b>	<b>\$ 3,461</b>	<b>\$ (3,871)</b>

	June 30, 2023		June 30, 2022	
	Fund		Fund	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ 95	\$ (497)	\$ 116	\$ (439)
Changes of Assumptions	312	(131)	371	(106)
<b>Total</b>	<b>\$ 407</b>	<b>\$ (628)</b>	<b>\$ 487</b>	<b>\$ (545)</b>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB at June 30, 2023 for the City and the Fund will be recognized in OPEB expense as follows (in thousands):

Year Ended June 30	City of Houston	Fund
2024	(92)	(13)
2025	(92)	(13)
2026	(92)	(13)
2027	(92)	(13)
2028	(81)	(11)
Thereafter	(1,159)	(160)
<b>Total</b>	<b>\$ (1,608)</b>	<b>\$ (223)</b>

## Note 9. OTHER EMPLOYEE BENEFITS (continued)

### 4. Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the Total OPEB liability - LTD, calculated using the current discount rate of 4.13% and 3.54%, June 30, 2023 and 2022, respectively, as well as what the total OPEB Liability would be if they were calculated using a discount rate that is 1-percentage point lower and 1 percentage point higher than the current rate (in thousands):

June 30, 2023	1% Decrease 3.13%	Current Discount Rate 4.13%	1% Increase 5.13%
City - Total OPEB / LTD Liability	\$ 14,622	\$ 14,072	\$ 13,517
Fund proportionate share of NOL	\$ 2,014	\$ 1,939	\$ 1,862
June 30, 2022	1% Decrease 2.54%	Current Discount Rate 3.54%	1% Increase 4.54%
City - Total OPEB / LTD Liability	\$ 14,714	\$ 14,170	\$ 13,614
Fund proportionate share of NOL	\$ 2,072	\$ 1,996	\$ 1,917

The last experience study for the LTD plan was performed as of July 1, 2018.

### E. Deferred Compensation Plan

The City offers its employees a deferred compensation plan (the "DCP"), created in accordance with Internal Revenue Code Section 457 as a separately administered trust. The DCP, available to all City employees, permits employees to defer a portion of their salary until future years. The City does not make any matching or discretionary contributions to the DCP. The DCP is considered as an other employee benefit plan in accordance with paragraph 6 of GASBS No. 97. The DCP is not considered as a fiduciary activity of the City under the provisions of GASBS No. 84. The deferred compensation funds are not available until termination, retirement, death or unforeseeable emergency. However, the DCP now offers loans to participant employees. The maximum loan amount is the lesser of \$50,000 or 50% of the total account balance, less any outstanding loans. The minimum loan amount is \$1,000. The DCP's assets are not subject to the City's general creditors and are not included in these the accompanying financial statements.

**Note 9. OTHER EMPLOYEE BENEFITS (continued)**

**F. Workers' Compensation Self-Insurance Plan**

The City has established a Workers' Compensation Self-Insurance Plan (“the “WCSP”), accounted for within the various operating funds. The WCSP is administered by TriStar Insurance Group, Inc. Funds are wire transferred to TriStar as needed to pay claims.

As of June 30, 2023 and 2022, the City has an accumulated liability in the amount of \$146.2 million and \$148.7 million, respectively, covering estimates for approved but unpaid claims and incurred but not reported claims (calculated on an actuarial basis) recorded in the City’s Statement of Net Position. The amount of liability is based on an actuarial study each year. The Fund’s share of the liability totaled approximately \$6.0 million and \$6.8 million at June 30, 2023 and 2022, respectively.

**Schedule of Changes in City Liability (in thousands)**

City	June 30, 2023	June 30, 2022
Beginning actuarial estimate of claims liability, July 1	\$ 148,698	\$ 135,520
Incurred claims for fiscal year	24,704	45,743
Payment of claims	(19,200)	(32,400)
Actuarial adjustment	(8,000)	(165)
Ending actuarial estimate of claims liability, June 30	\$ 146,202	\$ 148,698

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## Note 10. COMMITMENTS AND CONTINGENCIES

### Litigation and Claims

The City and the Fund are defendants in various lawsuits and is aware of pending claims arising in the ordinary course of its municipal and enterprise activities, certain of which seek substantial damages. The matters affecting the Combined Utility System are primarily class actions and contracts. The status of such litigation ranges from an early discovery stage to various levels of appeal, against which the City and the Fund will continue to vigorously defend itself. The amount of damages is limited in certain cases under the Texas Tort Claims Act and is subject to appeal. The City intends to defend itself vigorously against the suits. In the opinion of management, the outcome of any litigation will not have a material effect on the financial position or the Combined Utility System's ability to conduct business.

**Clean Water Act.** In 2013, the City commenced formal negotiations with the U.S. Environmental Protection Agency ("EPA") and the U.S. Department of Justice ("DOJ") (collectively, the "United States") on a draft Clean Water Act consent decree relating to the City's Wastewater Treatment and Collection System (the "Collection System") that would contain specific remedial measures to address sanitary sewer overflows ("SSOs") and wastewater treatment plant permit exceedances and mitigate against future occurrences. The State of Texas (the "State") later joined in the negotiations and resolution of this matter. Before the EPA, DOJ, State and the City could complete the consent decree negotiations, a citizen group called Bayou City Waterkeeper ("BCW") notified the City in July 2018 of BCW's Notice of Intent to Sue ("NOI") the City on the same matters being addressed in the consent decree negotiations with the United States and the State. In response to the threatened citizen suit, the United States and the State filed a suit against the City first in the United States District Court for the Southern District of Texas (Civil Action No. 4:18-cv-03368) – on September 20, 2018 – which the City believed precluded BCW under federal law from filing a separate suit on the same matters. The United States also requested that the Court stay the United States' and State's proceeding to allow the parties to complete the settlement negotiations, and the Court granted the motion to stay. BCW also ultimately intervened in the United States' September 20, 2018 lawsuit as allowed by the Clean Water Act. In addition, and notwithstanding the United States' suit, BCW filed a separate action (also in the United States District Court for the Southern District of Texas; Civil Action No. 4:18-cv-03369) on the next day – September 21, 2018 – which was ultimately dismissed with prejudice.

Following filing of the lawsuit on September 20, 2018, the United States, State and City continued settlement negotiations, which resulted in an agreement between those parties on a proposed consent decree (the "Consent Decree"). On July 24, 2019, City Council, by ordinance, approved the Consent Decree and payment of \$4.4 million in penalties to the State and United States, and \$200,000 in attorney fees to the State to resolve all civil claims of the federal government and the State against the City for alleged wastewater violations since 2005. The City signed the Consent Decree on July 26, 2019, and after execution by federal and state officials, the Consent Decree was lodged with the federal District Court on August 27, 2019. Notice of the lodging of the Consent Decree was published in the Federal Register on September 3, 2019 which opened a 30-day period (until October 14, 2019) for the submission of public comments to the United States on the Consent Decree; on October 9, 2019, however, the United States extended the public comment period on the Consent Decree until November 8, 2019. Notice of the Consent Decree was published in the Texas Register on September 13, 2019, which opened a 30-day period (until October 14, 2019) for the submission of public comments to the State of Texas on the Consent Decree. The public comment periods for the State and United States closed on October 14, 2019 and November 8, 2019, respectively. On August 7, 2020, the United States and the State filed a motion to enter the Consent Decree with the Court, including the response to comments that were submitted concerning the Consent Decree. After reviewing the motion, comments, and any other pleadings in support of or opposing entry of the Consent Decree, the Court signed an Order on March 31, 2021 approving the Consent Decree as lodged on August 27, 2019 and entered the Consent Decree as a final judgment on April 1, 2021. The City has posted a copy of the Consent Decree and related documents on its website at <https://www.houstonpublicworks.org/wastewater-cd>.

## **Note 10. COMMITMENTS AND CONTINGENCIES (continued)**

While the total amount of the investment to be made in the wastewater system will not be known until the City completes the assessment work to identify the condition and remedial measures needed, it is estimated that the City may be required to invest an additional \$2 billion over 15 years to upgrade the wastewater system pursuant to the Consent Decree.

In fiscal year 2019, the City engaged a utility rate consultant to review the water and wastewater cost of service and rate design, and water and wastewater impact fee update, which among other things, took into account the additional investment requirements in the then-proposed Consent Decree. The City sought court validation of the water and wastewater rates excluding contract rates and on October 4, 2021, a final judgment was entered by a Travis County District Court validating the water and wastewater rates for which the City sought validation. Other than the costs identified above that have been paid for resolution of all civil claims of the federal government and the State against the City for alleged wastewater violations since 2005, the City cannot predict the total financial impact on current and future long-term operations, annual maintenance and/or capital improvements costs that may be required, which could be substantial.

The Consent Decree terms cause stipulated penalties to accrue in certain situations; the City has paid to the United States and Texas \$1.4 million in stipulated penalties for SSOs and wastewater treatment plant permit exceedances that occurred during the seven quarters since the operation under the Consent Decree, which was expected as it takes time to correct the defects in the City's wastewater system. It is unclear at this time the total amount of stipulated penalty monies that may be demanded from the City over the life of the Consent Decree. The City continues to manage the its wastewater system, including Consent Decree commitments, through capital investments, maintenance, and assessment activities. These activities include enhanced sewer cleaning; renewal, rehabilitation, and consolidation of lift stations; restaurant inspections; lift station and wastewater treatment plant inspections and investigations; SSO response; and public outreach and education.

### **Environmental Liabilities**

The assessment and remediation of asbestos, mold and groundwater contamination are ongoing and included in the cost of the capital project at the time it becomes an obligation event under GASB 49. Management had determined the costs of this additional remediation for which the Combined Utility System is ultimately liable would not be material in these financial statements.

### **Commitments for Capital Facilities**

At June 30, 2023 and 2022, the Fund had appropriated, but not yet spent, \$1,395.5 million and \$1,614.0 million, respectively, for capital projects.

### **Risk Management**

The City purchases fidelity coverage to comply with City ordinance, boiler and machinery insurance with a per occurrence loss limit of \$125.0 million and commercial property insurance with a per occurrence loss limit of \$200.0 million. The commercial property insurance sublimit for flood is \$200.0 million. The commercial property insurance provides deductibles as follows: \$2.0 million per occurrence for all perils, except (1) 3% of the damaged insured value for windstorm or hail from a named storm, subject to a \$2.5 million minimum and a \$20.0 million maximum deductible and (2) 3% of the damaged insured value for flood, subject to a \$2.5 million minimum and a \$20.0 million maximum deductible. Should a named storm event occur that involves both perils of windstorm and flood, the maximum deductible is \$20.0 million. The City's property insurance retention is 10% of the \$50.0 million primary limits, not to exceed the \$5.0 million retention limit.

## **Note 10. COMMITMENTS AND CONTINGENCIES (continued)**

### **Electricity Futures Contracts**

On July 1, 2020 the City of Houston entered into an electricity supply agreement with Reliant Energy Retail Services, Inc. for a 5-year term with two 1-year options. The total committed price is approximately \$634.0 million for expected usage of the potentially 7-year contract. As of June 30, 2023, the remaining commitment is \$322.9 million.

On November 13, 2015, the City entered into a solar energy supply agreement with ENGIE to supply solar power to the City from a facility located in Alpine, Texas, for a 20-year term starting in April 2017. The contract value is approximately \$124.7 million. As of June 30, 2023, the remaining commitment is \$86.4 million.

### **Risk and Uncertainties**

In year 2020, the outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has been characterized as a pandemic (the “Pandemic”) by the World Health Organization. Even though the Pandemic has negatively affected travel, commerce, and financial markets globally, there has been minimal to no immediate financial impact for the Fund’s 2023 and 2022 financial statement. The City and the Fund continue to monitor the Pandemic and work with local, state and national agencies to address its potential impact on the City and the Fund.

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## **Note 11. RELATED ORGANIZATION TRANSACTIONS**

### **Trinity River Authority (TRA)**

The City and TRA have a long-term contract under which the City is obligated to pay debt service for certain bonds as well as certain maintenance and operating expenses for a TRA dam and reservoir. During the fiscal year ended June 30, 2008, all outstanding long-term debt had been paid off. During the fiscal years ended June 30, 2023 and June 30, 2022, the City paid \$4.5 million and \$4.0 million for maintenance and operating expenses under the terms of the contract.

In December 2016, the City and the TRA entered into a Raw Water Supply Contract. This contract referred to prior agreements with TRA regarding the construction of Lake Livingston and the Wallisville salinity control barrier of which the City paid for all the construction costs. The 2016 agreement established a receivable due from TRA for their 30% share of the project costs. The receivable will be offset by the charges due from the City to TRA as established by the Raw Water Supply contract. It is estimated the receivable will be dismissed by 2040. The balance as of June 30, 2023 and June 30, 2022 was \$60.1 million and \$63.5 million, respectively. For FY2023, the current portion of this receivable was \$3.5 million, with the remaining \$56.6 million reflected as non-current. For FY2022, the current portion of this receivable was \$3.5 million, with the remaining \$60.0 million reflected as non-current.

### **Coastal Water Authority (CWA)**

The City has a long-term contract with Coastal Water Authority (CWA) for water conveyance. During the fiscal year ended June 30, 2023, the City paid CWA \$6.4 million for debt services and \$32.0 million for maintenance and operating expenses. During the fiscal year ended June 30, 2022, the City paid CWA \$6.4 million for debt services and \$26.9 million for maintenance and operating expenses.

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## **Note 12. SUBSEQUENT EVENTS**

Management has evaluated subsequent events through November 17, 2023, the date that financial statements were available to be issued, and determined that there were no events that require disclosure. No events occurring after this date have been evaluated for inclusion in these financial statements.

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REQUIRED SUPPLEMENTARY INFORMATION





**Schedule of Changes in the Fund's Net Pension Liability and Related Ratios**

For Fiscal Years Ended June 30 (in thousands)

Last 9 Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015 <sup>(1)</sup>
Total Pension Liability	\$993,016	\$984,500	\$972,139	\$895,898	\$865,387	\$843,068	\$737,088	\$745,768	\$902,524
Plan Fiduciary Net Position	(709,609)	(699,601)	(691,048)	(484,128)	(512,509)	(492,791)	(386,811)	(355,527)	(465,299)
Net Pension Liability	<u>\$283,407</u>	<u>\$284,899</u>	<u>\$281,091</u>	<u>\$411,770</u>	<u>\$352,878</u>	<u>\$350,277</u>	<u>\$350,277</u>	<u>\$390,241</u>	<u>\$437,225</u>
CUS Proportionate Percentage	17.43%	17.70%	17.87%	16.80%	16.53%	16.49%	14.86%	14.81%	18.94%
Covered Payroll	123,799	120,068	114,889	105,007	101,552	100,820	89,900	94,885	118,232
The Fund's proportionate share of NPL as a percentage of covered payroll	228.93%	237.28%	244.66%	392.14%	347.49%	347.43%	389.63%	411.28%	369.80%
Plan fiduciary net position as a percentage of TPL	71.46%	71.06%	71.09%	54.04%	59.22%	58.45%	52.48%	47.67%	51.56%

**Note to Schedule:**

1. The schedules are intended to show information for 10 years. 2015 is the first year for this presentation. The additional years will be included as it becomes available.





**Schedule of the Fund’s Contributions for Municipal Pension Plans**

For Fiscal Years Ended June 30

(in thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015 <sup>(1)</sup>
Actuarially Determined Contribution	\$35,201	\$34,567	\$33,648	\$30,735	\$29,461	\$69,905	\$27,455	\$24,032	\$29,416
Contributions in Relation to the Actuarially Determined Contribution	35,703	34,929	33,017	29,639	29,131	69,505	27,132	23,695	27,466
Contribution Deficiency (Excess)	<u>\$(502)</u>	<u>\$(362)</u>	<u>\$631</u>	<u>\$1,095</u>	<u>\$330</u>	<u>\$400</u>	<u>\$323</u>	<u>\$336</u>	<u>\$1,949</u>
Covered Payroll	123,799	120,068	114,889	105,007	101,552	100,820	89,900	94,885	118,232
Contributions as a Percentage of Covered Payroll	<u>28.84%</u>	<u>28.74%</u>	<u>28.23%</u>	<u>28.69%</u>	<u>68.94%</u>	<u>30.18%</u>	<u>24.97%</u>	<u>23.23%</u>	<u>23.00%</u>

**Schedule of the Fund’s Investment Returns**

For Fiscal Years Ended June 30

(in thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015 <sup>(1)</sup>
Annual Return	6.1%	5.0%	38.6%	(3.7)%	6.2%	8.7%	12.2%	0.9%	N/A

**Note to Schedule:**

1. The schedules are intended to show information for 10 years. 2015 is the first year for this presentation. The additional years will be included as it becomes available.





**Notes to Required Pension Supplementary Information**

**Valuation Date:** July 1, 2022 and 2021

**Notes:** Actuarially determined contribution rates are calculated as of July 1, which is 12 months prior to the beginning of the fiscal year in which they are contributed. The assumptions shown below apply to the Actuarially Determined Employer Contribution for fiscal year 2023 and 2022 which was determined by the July 1, 2022 and 2021 actuarial valuation. These assumptions are the same as those used to determine the Net Pension Liability as of June 30, 2023 and 2022.

**Methods and Assumptions Used to Determine Contribution Rates:**

**Actuarial cost method:** Entry Age Normal

**Amortization method:** Level Percentage of Payroll, Open

**Remaining amortization period:** 25 years

**Assets valuation method:** 5 year smoothed market, direct offset of deferred gains and losses

**Inflation:** 2.25%

**Salary increases:** 3.25% to 5.50% including inflation

**Investment rate of return:** 7.00%

**Retirement age:** Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2021 valuation pursuant to an experience study of the period 2015– 2020.

**Mortality:** PUB-2010 Mortality Table, amount weighted, Below-Median Income, with a 2-year set forward. The rates are then projected on a fully generational basis by the long-term rates of improvement of MP-2020.

**Other information:** 1. The actuarially determined contribution includes the Legacy Liability payment as specified by the January 1, 2016 Risk Sharing Valuation Study and a calculated employer rate equal to the normal cost and the amortization of any new unfunded liabilities over a closed 30 year period from the valuation date the liability base was created.

2. Investment rate of return was lowered from 8.50% to 8.00% as of July 1, 2015 and subsequently lowered to 7.00% as of July 1, 2017.

3. Salary increases were changed as of July 1, 2016 from 3.25% - 6.00%, including inflation, to 3.25% - 5.50%, including inflation.





**Schedule of the Fund’s Proportionate Share of OPEB Liability and Related Ratios**

(in thousands)

	<b>Health Benefits</b>					
	2023	2022	2021	2020	2019	2018
Total OPEB liability	\$131,934	\$182,172	\$211,742	\$144,480	\$149,754	\$183,319
Plan Fiduciary Net Position	—	—	—	—	—	—
Net OPEB Liability	\$131,934	\$182,172	\$211,742	\$144,480	\$149,754	\$183,319
Fund’s proportionate percentage	7.50%	7.80%	8.10%	6.51%	6.64%	7.52%
Fund’s covered-employee payroll	\$102,160	\$104,826	\$105,985	\$86,713	\$85,324	\$92,872
Total OPEB liability as a percentage of the Fund’s covered-employee payroll	129.14%	173.78%	199.78%	166.62%	175.51%	197.39%



**Schedule of the Fund's Proportionate Share of OPEB Liability and Related Ratios**

(in thousands)

	Long-Term Disability					
	2023	2022	2021	2020	2019	2018
Total OPEB Liability	\$1,939	\$1,996	\$2,217	\$1,460	\$1,097	\$852
Plan Fiduciary Net Position	—	—	—	—	—	—
Net OPEB Liability	\$1,939	\$1,996	\$2,217	\$1,460	\$1,097	\$852
CUS Proportionate Percentage	13.78%	14.08%	14.26%	9.38%	8.51%	7.73%
Fund's Covered-employee Payroll	\$131,445	\$126,157	\$113,310	\$72,920	\$70,931	\$60,951
Total OPEB liability as a percentage of the Fund's covered-employee payroll	1.47%	1.58%	1.96%	2.00%	1.55%	1.40%



Notes to Required Pension Supplementary Information

Retiree Health Insurance Benefits

Note: There are no assets in a trust compliant with GASB codification P22.101 or P52.101 to pay related benefits.

Measurement Date: June 30, 2022 for reporting date as of June 30, 2023.

Benefit Changes: Reflected June 30, 2022

- Effective July 1, 2022, the OOP maximum for all non-Medicare Advantage plans increased from \$8,150 to \$8,700. for the purposes of this valuation, the impact of this change was considered negligible.

Reflected June 30, 2021

- Texas Plus, Cigna Health Spring, and UHC Plan F plans have all been terminated as of 12/31/2020 and a new plan, Aetna PO1 PPO Basic, was added as of 1/1/2021.

Reflected June 30, 2020

No changes.

Reflected June 30, 2019

Effective May 1, 2019:

For Cigna Limited Network Plan:

- Deductible increased from \$150 / \$450 (individual / family) to \$200 / \$600.
- OOP maximum increased from \$4,500 / \$9,000 to \$7,900 / \$15,800.
- Prescription Drug deductible increased from \$100 /\$300 to \$150 /\$450.

For Cigna Open Access Plan:

- Deductible increased from \$750 / \$1,500 (individual / family) to \$850 / \$1,700
- OOP maximum increased from \$6,840 / \$13,700 to \$7,900 / \$15,800.

For Consumer Driven Plan:

- OOP maximum increased from \$6,840 / \$13,700 to \$7,900 / \$15,800.

Retirees of Texas plan has been discontinued.

Effective May 1, 2020:

For Cigna Limited Network Plan:

- OOP Maximum increased from \$7,900 to \$15,800 to \$8,150/\$16,300.

For Cigna Open Access Plan:

- OOP Maximum increased from \$7,900 to \$15,800 to \$8,150/\$16,300.

For Consumer Driven Health Plan:

- OOP Maximum increased from \$7,900 to \$15,800 to \$8,150/\$16,300 in network and \$12,000/\$24,000 to \$16,000/\$32,000 out of network.
- Prescription coinsurance increased from 40% to 60%.

For Kelsey Care Advantage:

- Specialist copay increased from \$15 to \$20.

For Cigna Health Spring

- Emergency Room Copay increased from \$100 to \$120.
- Non-preferred generic pharmacy copay increased from \$10 to \$45.
- Mail order prescription drugs moved to two times retail for all tiers.

Aetna PPO:

- Inpatient copay increased from \$80 to \$250 for in network and from \$80 to 20% per stay for out of network.
- Non-preferred generic pharmacy copay increased from \$20 to \$40 for out of network.
- Preferred brand name pharmacy copay increased from \$40 to \$80 for out of network.

Reflected June 30, 2018

- KelseyCare Advantage HMO – Specialty Drug copay increased to \$75
- Texas Plus – Inpatient copay increased to \$325, emergency room copay rates to \$100, prescription drug copays increased to \$10/\$15/\$40/\$55/\$75.
- Cigna HealthSpring – Emergency room copay increased to \$100, mail order prescription drugs move to two times retail for all tiers.





Changes of Assumptions:

Effective June 30, 2022

- The basis for the discount rate remained the same (20-year, general obligation, municipal bond index), resulting in a change in discount rate to 3.54% compared to 2.16% in prior year.
- Medicare and prescription drug claims costs and trend rates were updated to reflect recent experience.
- The actuarial factors used to estimate individual retiree and spouse costs by age and by gender were updated. The new factors are based on a review of historical claims experience by age, gender, and status (active vs retired) from Segal's claims data warehouse.

Effective June 30, 2021

- The basis for the discount rate remained the same (20-year, general obligation, municipal bond index), resulting in a change in discount rate to 2.16% compared to 2.21% in prior year.
- The demographic assumptions (mortality, turnover, disability and retirement) for the Fire department were updated to be consistent with the Houston Firefighter's Relief and Retirement Fund Actuarial Certification as of July 1, 2020, dated September 16, 2021, completed by Buck Consulting.

Effective June 30, 2020

- Medical and prescription drug claims costs and trend rates were updated to reflect recent experience.
- The basis for the discount rate remained the same (20-year, general obligation, municipal bond index), resulting in a change in discount rate to 2.21 compared to 3.50% in prior year.
- Active participation rates upon retirement were updated to reflect recent experience.
- Life insurance to be fully retiree paid and is no longer being valued.

Effective June 30, 2019

- The excise tax regulation was repealed by Congress in December 2019.
- The basis for the discount rate remained the same (20-year, general obligation, municipal bond index), resulting in a change in the discount rate to 3.50% compared to 3.87% in the prior year.
- Post-Medicare starting costs were adjusted for the actual premiums charged. Similar adjustments were made for contribution rates.
- Prescription drug trend rates were changed to reflect future expectations by extending the number of years until the ultimate trend is reached.

Reflected June 30, 2018

- Medical, prescription drug, Medicare Plan, and administrative expected claims and payments were changed, based on experience through June 30, 2018.
- Medical, prescription drug, Medicare Plan, and administrative trend rates were changed to reflect future expectations.
- Demographic changes included mortality changes for all participants, changes to the salary scale for
- Municipal and Police participants, and changes to the retirement rates for Police and Fire participants.
- The basis for the discount rate remained the same (20-year, general obligation, municipal bond index), resulting in a change in the discount rate to 3.87% compared to 3.58% in the prior year.

**Long Term Disability**

---

Note:

There are no assets in a trust compliant with GASB codification P22.101 or P52.101 to pay related benefits.

Measurement Date:

June 30, 2023 for reporting date as of June 30, 2023.

Changes of Assumptions:

Discount rate - FY2023: 4.13%; FY2022: 3.54%; FY2021: 2.16%; FY2020: 3.50%; FY2019: 3.50%; FY2018: 3.87%.

Employees Covered:

Houston Fire Department is covered by this LTD Plan in addition to all municipal employees. Houston Police Department is not covered by this LTD Plan.





# STATISTICAL SECTION (UNAUDITED)

Annual Comprehensive Financial Report

# ADOPT·A·DRAIN HOUSTON



# Statistical Section

(Unaudited)

The statistical section of the Combined Utility System's annual comprehensive financial report represent detailed information to provide context to the information in the financial statements, note disclosures, and required supplementary information.

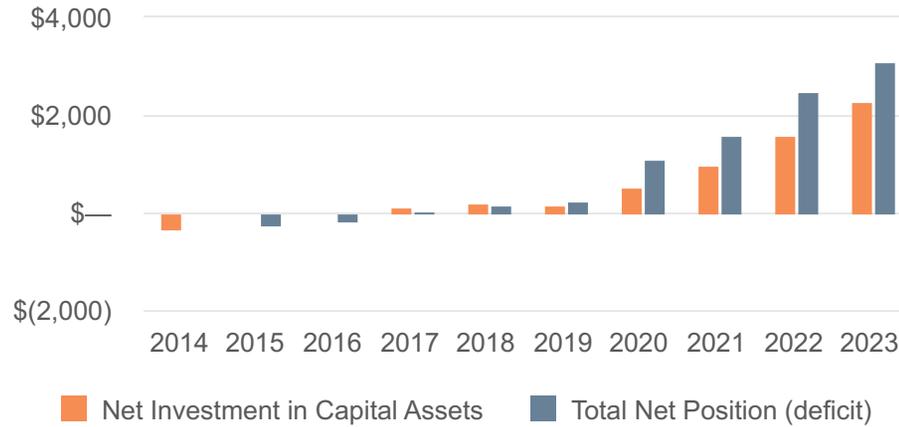
Section	Page	Description
<b>FINANCIAL TRENDS</b>	85	These schedules contain trend information to help the reader understand how the Combined Utility System's financial performance and well-being have changed over time.
<b>REVENUE CAPACITY</b>	88	These schedules contain information to help the reader assess the Combined Utility System's revenue resources and rate structures.
<b>DEBT CAPACITY</b>	100	These schedules present information to help the reader assess the affordability of the Combined Utility System's current levels of outstanding debt and the ability to issue additional debt in the future.
<b>DEMOGRAPHIC AND ECONOMIC INFORMATION</b>	108	These schedules offer demographic and economic indicators to help the reader understand environment within which the Combined Utility System's financial activities take place.
<b>OPERATING INFORMATION</b>	112	These schedules contain service and infrastructure data to help the reader understand how the information in the Combined Utility System's financial report relates to the services provided and the activities performed.

**FINANCIAL TRENDS SCHEDULES**



**City of Houston, TX**  
**Combined Utility System**  
**Net Position**  
*Last Ten Fiscal Years*  
*(amounts expressed in millions)*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
						(restated)	(restated)			
<b>Net Position</b>										
Net Investment in Capital Assets	\$ (346)	\$ —	\$ 20	\$ 136	\$ 222	\$ 178	\$ 539	\$ 995	\$ 1,602	\$ 2,272
Restricted Net Position										
Restricted for Debt Service	—	—	—	—	85	64	70	72	91	102
Restricted for Maintenance and Operations	72	75	83	77	78	82	85	91	72	75
Restricted for Capital Improvement	1	1	1	74	16	14	15	15	16	17
Unrestricted (deficit)	279	(322)	(261)	(249)	(255)	(82)	394	411	697	648
<b>Total Net Position (deficit)</b>	<b>\$ 7</b>	<b>\$ (245)</b>	<b>\$ (156)</b>	<b>\$ 38</b>	<b>\$ 146</b>	<b>\$ 257</b>	<b>\$ 1,104</b>	<b>\$ 1,584</b>	<b>\$ 2,478</b>	<b>\$ 3,113</b>



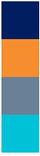
**City of Houston, TX**  
**Combined Utility System**  
**Change in Net Position**

*Last Ten Fiscal Years*  
*(amounts expressed in thousands)*  
*(unaudited)*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Operating Revenues</b>										
Water sales	\$ 499,912	\$ 486,517	\$ 529,879	\$ 547,054	\$ 559,010	\$ 554,294	\$ 591,611	\$ 584,594	\$ 698,263	802,915
Wastewater system user charges	441,300	434,305	462,786	475,392	479,978	485,183	509,315	510,832	607,343	713,004
Penalties, other services and charges	12,195	6,602	9,917	3,349	13,561	2,965	(834)	(2,686)	1,907	(11,937)
<b>Total Operating Revenues</b>	<b>953,407</b>	<b>927,424</b>	<b>1,002,582</b>	<b>1,025,795</b>	<b>1,052,549</b>	<b>1,042,442</b>	<b>1,100,092</b>	<b>1,092,740</b>	<b>1,307,513</b>	<b>1,503,982</b>
<b>Non-Operating Revenues</b>										
Investment income (loss)	10,688	7,685	12,652	3,954	8,074	55,170	54,988	3,310	(50,712)	39,748
Other non-operating revenue	80,062	49,632	55,306	58,414	74,595	83,688	70,546	84,451	152,820	85,144
<b>Total Non-Operating Revenues</b>	<b>90,750</b>	<b>57,317</b>	<b>67,958</b>	<b>62,368</b>	<b>82,669</b>	<b>138,858</b>	<b>125,534</b>	<b>87,761</b>	<b>102,108</b>	<b>124,892</b>
<b>Total Revenues</b>	<b>\$ 1,044,157</b>	<b>\$ 984,741</b>	<b>\$ 1,070,540</b>	<b>\$ 1,088,163</b>	<b>\$ 1,135,218</b>	<b>\$ 1,181,300</b>	<b>\$ 1,225,626</b>	<b>\$ 1,180,501</b>	<b>\$ 1,409,621</b>	<b>1,628,874</b>
<b>Operating Expenses</b>										
Maintenance and operating	\$ 399,647	\$ 428,732	\$ 451,342	\$ 354,396	\$ 492,391	\$ 516,503	\$ 518,591	\$ 529,971	\$ 463,364	\$ 578,050
Depreciation and Amortization	223,381	231,048	236,841	246,218	252,093	257,430	265,306	273,747	282,839	289,362
<b>Total Operating Expenses</b>	<b>623,028</b>	<b>659,780</b>	<b>688,183</b>	<b>600,614</b>	<b>744,484</b>	<b>773,933</b>	<b>783,897</b>	<b>803,718</b>	<b>746,203</b>	<b>867,412</b>
<b>Non-Operating Expenses</b>										
Interest on long-term debt	291,122	265,013	252,116	248,920	248,284	268,708	247,440	242,569	257,907	270,085
Other expenses	5,397	—	1,877	—	—	—	—	—	—	2,955
<b>Total Non-Operating Expenses</b>	<b>296,519</b>	<b>265,013</b>	<b>253,993</b>	<b>248,920</b>	<b>248,284</b>	<b>268,708</b>	<b>247,440</b>	<b>242,569</b>	<b>257,907</b>	<b>273,040</b>
<b>Total Expenses</b>	<b>\$ 919,547</b>	<b>\$ 924,793</b>	<b>\$ 942,176</b>	<b>\$ 849,534</b>	<b>\$ 992,768</b>	<b>\$ 1,042,641</b>	<b>\$ 1,031,337</b>	<b>\$ 1,046,287</b>	<b>\$ 1,004,110</b>	<b>1,140,452</b>
<b>Contributions</b>	<b>5,768</b>	<b>9,983</b>	<b>10,364</b>	<b>17,260</b>	<b>9,624</b>	<b>12,330</b>	<b>319,627</b>	<b>408,344</b>	<b>546,307</b>	<b>201,164</b>
<b>Transfers (In/Out)</b>	<b>(40,588)</b>	<b>(47,725)</b>	<b>(49,759)</b>	<b>(61,395)</b>	<b>(63,058)</b>	<b>(57,831)</b>	<b>(50,921)</b>	<b>(61,984)</b>	<b>(57,875)</b>	<b>(54,396)</b>
<b>Total Change in Net Position</b>	<b>\$ 89,790</b>	<b>\$ 22,206</b>	<b>\$ 88,969</b>	<b>\$ 194,494</b>	<b>\$ 89,016</b>	<b>\$ 93,158</b>	<b>\$ 462,995</b>	<b>\$ 480,574</b>	<b>\$ 893,943</b>	<b>\$ 635,190</b>

**REVENUE CAPACITY SCHEDULES**





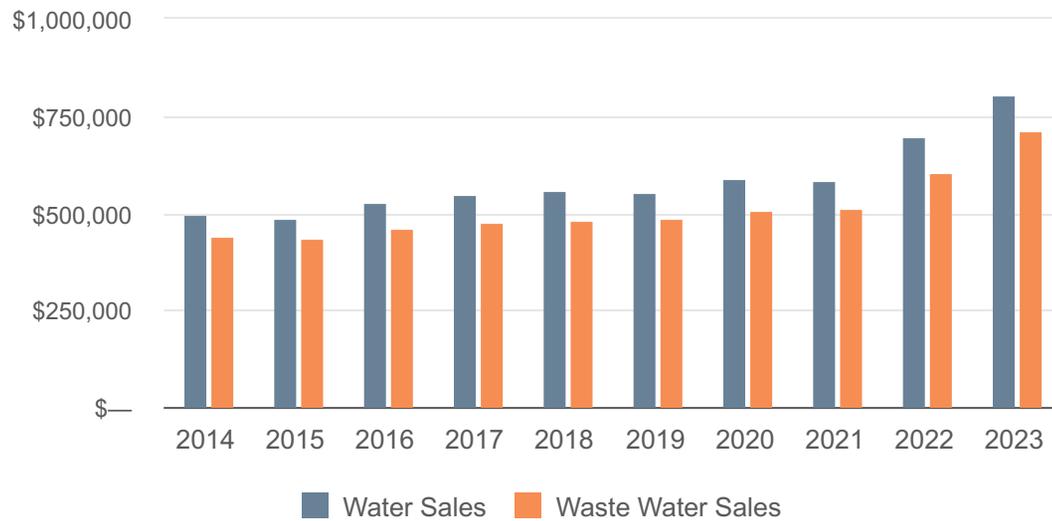
**Operating Revenues by Source**

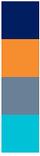
*Last Ten Fiscal Years*

*(amounts expressed in thousands)*

*(unaudited)*

Fiscal Year	Water Sales	Waste Water Sales	Service Charges and Fees	Total
2014	\$ 499,912	\$ 441,300	\$ 12,195	\$ 953,407
2015	486,517	434,305	6,602	927,424
2016	529,879	462,786	9,917	1,002,582
2017	547,054	475,392	3,349	1,025,795
2018	559,010	479,978	13,561	1,052,549
2019	554,294	485,183	2,965	1,042,442
2020	591,611	509,315	(834)	1,100,092
2021	584,594	510,832	(2,686)	1,092,740
2022	698,263	607,343	1,907	1,307,513
2023	\$ 802,915	\$ 713,004	\$ (11,937)	\$ 1,503,982





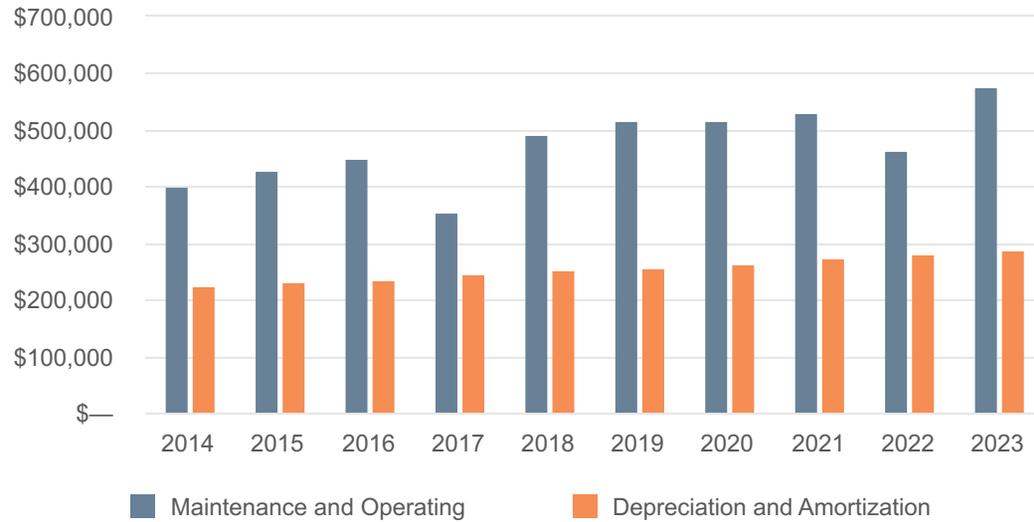
**Operating Expenses**

*Last Ten Fiscal Years*

*(amounts expressed in thousands)*

*(unaudited)*

Fiscal Year	Maintenance & Operating	Depreciation & Amortization	Total Operating Expenses
2014	\$ 399,647	\$ 223,381	\$ 623,028
2015	428,732	231,048	659,780
2016	451,342	236,841	688,183
2017	354,396	246,218	600,614
2018	492,391	252,093	744,484
2019	516,503	257,430	773,934
2020	518,591	265,306	783,897
2021	529,971	273,747	803,718
2022	463,364	282,839	746,203
2023	\$ 578,050	\$ 289,362	\$ 867,412



**Revenues and Expenses**

Last Ten Fiscal Years

(amounts expressed in thousands)

(unaudited)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Operating Revenues</b>										
Water sales	\$ 499,912	\$ 486,517	\$ 529,879	\$ 547,054	\$ 559,010	\$ 554,294	\$ 591,611	\$ 584,594	\$ 698,263	\$ 802,915
Waste water system user charges	441,300	434,305	462,786	475,392	479,978	485,183	509,315	510,832	607,343	713,004
Penalties, other services and charges	12,195	6,602	9,917	3,349	13,561	2,965	(834)	(2,686)	1,907	(11,937)
<b>Total Operating Revenues</b>	<b>953,407</b>	<b>927,424</b>	<b>1,002,582</b>	<b>1,025,795</b>	<b>1,052,549</b>	<b>1,042,442</b>	<b>1,100,092</b>	<b>1,092,740</b>	<b>1,307,513</b>	<b>1,503,982</b>
<b>Non-Operating Revenues</b>										
Investment income (loss)	10,688	7,685	12,652	3,954	8,074	55,170	54,988	3,310	(50,712)	39,748
Other income	80,062	49,632	55,306	58,414	74,595	83,688	70,546	84,451	152,820	85,144
<b>Total Non-Operating Revenues</b>	<b>90,750</b>	<b>57,317</b>	<b>67,958</b>	<b>62,368</b>	<b>82,669</b>	<b>138,858</b>	<b>125,534</b>	<b>87,761</b>	<b>102,108</b>	<b>124,892</b>
<b>Total Revenues</b>	<b>\$ 1,044,157</b>	<b>\$ 984,741</b>	<b>\$ 1,070,540</b>	<b>\$ 1,088,163</b>	<b>\$ 1,135,218</b>	<b>\$ 1,181,300</b>	<b>\$ 1,225,626</b>	<b>\$ 1,180,501</b>	<b>\$ 1,409,621</b>	<b>\$ 1,628,874</b>
<b>Operating Expenses</b>										
Maintenance and operating	\$ 399,647	\$ 428,732	\$ 451,342	\$ 354,396	\$ 492,391	\$ 516,503	\$ 518,591	\$ 529,971	\$ 463,364	\$ 578,050
Depreciation and amortization	223,381	231,048	236,841	246,218	252,093	257,430	265,306	273,747	282,839	289,362
<b>Total Operating Expenses</b>	<b>623,028</b>	<b>659,780</b>	<b>688,183</b>	<b>600,614</b>	<b>744,484</b>	<b>773,933</b>	<b>783,897</b>	<b>803,718</b>	<b>746,203</b>	<b>867,412</b>
<b>Non-Operating Expenses</b>										
Interest on long-term debt	291,122	265,013	252,116	248,920	248,284	268,708	247,440	242,569	257,907	270,085
Other expenses	5,397	—	1,877	—	—	—	—	—	—	2,955
<b>Total Non-Operating Expenses</b>	<b>296,519</b>	<b>265,013</b>	<b>253,993</b>	<b>248,920</b>	<b>248,284</b>	<b>268,708</b>	<b>247,440</b>	<b>242,569</b>	<b>257,907</b>	<b>273,040</b>
<b>Total Expenses</b>	<b>\$ 919,547</b>	<b>\$ 924,793</b>	<b>\$ 942,176</b>	<b>\$ 849,534</b>	<b>\$ 992,768</b>	<b>\$ 1,042,641</b>	<b>\$ 1,031,337</b>	<b>\$ 1,046,287</b>	<b>\$ 1,004,110</b>	<b>\$ 1,140,452</b>

(1) In 2014, GASB No. 65 "Items Previously Reported as Assets and liabilities" was implemented causing a restatement to beginning net position of (\$60,080). Certain bond issuance cost were expensed.

(2) In 2015, GASB No. 68 "Accounting and Financial Reporting for Pensions" was implemented causing a restatement to beginning net position of (\$273,806) from the recognition of additional pension expense.

(3) In 2018, GASB No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (OPEB)" was implemented causing a restatement to beginning net position of (\$61,602).

(4) In 2019, a prior period adjustment was recorded causing a restatement to beginning net position of \$79,429.

(5) In 2020, a prior period adjustment was recorded causing a restatement to beginning net position of \$383,966.

**Coastal Water Authority (CWA) Revenues and Expenses**

*Last Ten Fiscal Years (amounts expressed in thousands)*

*(unaudited)*

The following schedule sets forth the revenues and expenses (exclusive of certain non-cash transactions, primarily depreciation and amortization) of the “Water and Sewer System”, as defined in the Coastal Water Authority Official Statements.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Operating Revenues</b>										
Water sales	\$ 499,912	\$ 486,517	\$ 529,879	\$ 547,054	\$ 559,010	\$ 554,294	\$ 591,611	\$ 584,594	\$ 698,263	\$ 802,915
Waste water system user charges	441,300	434,305	462,786	475,392	479,978	485,183	509,315	510,832	607,343	713,004
Penalties, other services and charges	12,195	6,602	9,917	3,349	13,561	2,965	(834)	(2,680)	1,907	(11,937)
<b>Total Operating Revenues</b>	<b>953,407</b>	<b>927,424</b>	<b>1,002,582</b>	<b>1,025,795</b>	<b>1,052,549</b>	<b>1,042,442</b>	<b>1,100,092</b>	<b>1,092,746</b>	<b>1,307,513</b>	<b>1,503,982</b>
<b>Non-Operating Revenues</b>	<b>76,155</b>	<b>45,865</b>	<b>51,066</b>	<b>49,993</b>	<b>74,020</b>	<b>81,164</b>	<b>84,261</b>	<b>61,914</b>	<b>99,202</b>	<b>163,340</b>
<b>Total Gross Revenues (A)</b>	<b>\$1,029,562</b>	<b>\$ 973,289</b>	<b>\$1,053,648</b>	<b>\$1,075,788</b>	<b>\$1,126,569</b>	<b>\$1,123,606</b>	<b>\$1,184,353</b>	<b>\$1,154,660</b>	<b>1,406,715</b>	<b>1,667,322</b>
<b>Operating Expenses</b>										
Maintenance and operating	387,398	406,619	419,161	431,126	432,152	461,859	459,410	499,533	503,696	578,839
Contractual maintenance and CWA Debt Service	18,875	18,064	17,684	7,204	6,399	6,385	6,381	6,398	6,376	6,356
<b>Total Contractual</b>	<b>18,875</b>	<b>18,064</b>	<b>17,684</b>	<b>7,204</b>	<b>6,399</b>	<b>6,385</b>	<b>6,381</b>	<b>6,398</b>	<b>6,376</b>	<b>6,356</b>
<b>Total Operating Expenses (B)</b>	<b>406,273</b>	<b>424,683</b>	<b>436,845</b>	<b>438,330</b>	<b>438,551</b>	<b>468,244</b>	<b>465,791</b>	<b>505,931</b>	<b>510,072</b>	<b>585,195</b>
<b>Net Revenues</b>	<b>\$ 623,289</b>	<b>\$ 548,606</b>	<b>\$ 616,803</b>	<b>\$ 637,458</b>	<b>\$ 688,018</b>	<b>\$ 655,362</b>	<b>\$ 718,562</b>	<b>\$ 648,729</b>	<b>\$ 896,643</b>	<b>\$1,082,127</b>
Gross Revenue (A) / Total Operating Expenses (B)	2.53	2.29	2.41	2.45	2.57	2.40	2.54	2.28	2.76	2.85

**Largest Treated Water Customers**

For Years Ending June 30, 2023 and June 30, 2014  
 (unaudited)

The following schedule presents information concerning the ten largest treated water customers of the Combined Utility System for the twelve month period ended June 30, 2023. The total charges to such customers during such period represent approximately 3.80% of the Fund's Gross Revenues and 7.81% of total water sales revenues for such period.

	2023		2014
Customers	Gross Charges	Customers	Gross Charges
1. North Harris Co. Regional Water Authority	\$ 13,718,755	1. North Harris Co. Regional Water Authority	\$ 14,664,078
2. North Channel Water Authority	10,563,562	2. North Fort Bend County Water Authority	8,631,052
3. West Harris Co. Regional Water Authority	6,667,163	3. West Harris Co. Regional Water Authority	7,746,876
4. City of Pasadena	6,582,812	4. North Channel Water Authority	6,315,829
5. North Fort Bend County Water Authority	5,978,393	5. City of Pasadena	4,612,713
6. Gulf Coast Water Authority (Galveston)	5,354,654	6. Anheuser-Busch, Inc	3,353,549
7. Anheuser-Busch, Inc	3,873,550	7. Gulf Coast Water Authority (Galveston)*	3,119,213
8. Clear Lake City	3,396,367	8. Clear Lake City	2,362,127
9. City of Bellaire	3,368,729	9. City of Pearland	2,061,151
10. Memorial Villages Water Authority	3,191,210	10. Memorial Villages Water Authority	1,722,227
	\$ 62,695,195		\$ 54,588,815

**Largest Untreated Water Customers**

For Years Ending June 30, 2023 and June 30, 2014  
*(unaudited)*

The following schedule presents information concerning the ten largest untreated water customers of the Combined Utility System for a twelve month period ended June 30, 2023. The total of the contract payments by these ten customers during such period represents approximately 3.04% of the Fund's Gross Revenue and 6.24% of total water sales revenues for such period.

	2023		2014
Customers	Gross Charges	Customers	Gross Charges
1. Equistar Chemicals LP	\$ 9,828,146	1. Equistar Chemicals	\$ 7,075,794
2. Deer Park Refining Partnership LP	6,135,281	2. Shell Oil	4,722,631
3. Air Liquide America Corp.	5,366,551	3. Air Liquide America Corp.	3,782,934
4. Chevron Phillips Chemical Co.	5,057,509	4. Battleground Water Company	3,600,881
5. Battleground Water Company	4,983,430	5. Baytown Area	3,092,767
6. Houston Refining, LP	4,755,563	6. Houston Refining, LP (Lyondell-Citgo)	2,960,033
7. Hoescht Celanese	2,959,630	7. Chevron Phillips Chemical Company	2,748,417
8. Occidental Chemical	2,856,201	8. Hoechst Celanese	2,026,709
9. TPC Group	2,699,411	9. Occidental Chemical Corporation	1,709,612
10. Deer Park Energy Center	2,621,358	10. E. I. DuPont De Nemours & Company	1,308,716
	\$ 47,263,080		\$ 33,028,494

**Largest Wastewater Customers**

For Years Ending June 30, 2023 and June 30, 2014  
(unaudited)

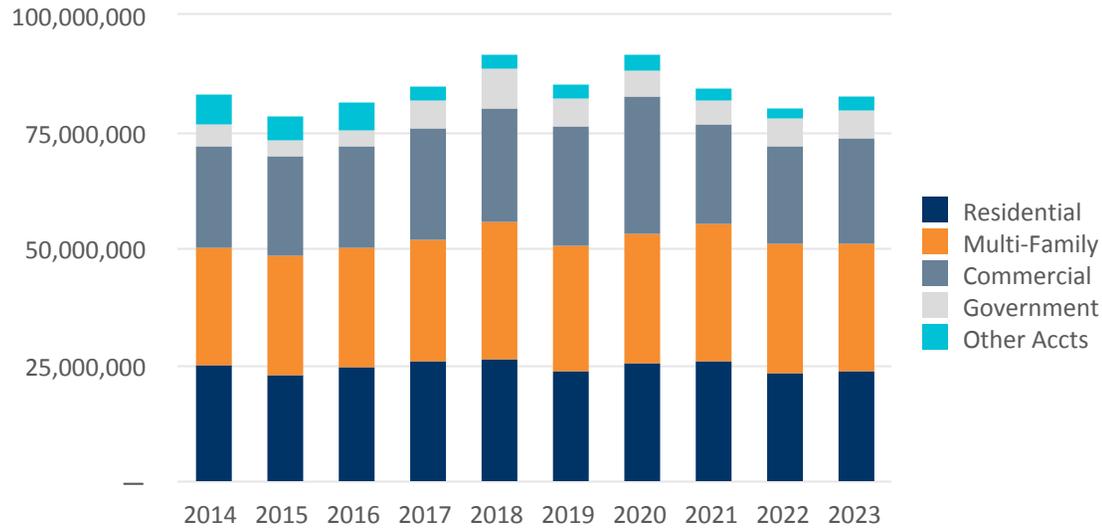
The following schedule presents information concerning the ten largest customers of the Sewer Facilities for the twelve month period ended June 30, 2023. The total charges to such customers represent approximately 2.01% of the Fund's Gross Revenues and 4.67% of Sewer Facilities gross charges during such period.

	2023		2014
Customers	Gross Charges	Customers	Gross Charges
1. Anheuser-Busch, Inc	\$ 7,316,994	1. Anheuser-Busch, Inc	\$ 4,164,213
2. City of Houston	6,224,753	2. Harris County	4,032,244
3. Houston Independent School District	5,801,005	3. City of Houston	3,695,925
4. Harris County	4,145,608	4. Houston Independent School District	2,936,357
5. University of Houston	3,521,650	5. University of Houston	2,790,050
6. Memorial Hermann	2,588,863	6. Oak Farms Dairies	2,154,286
7. Rice University	1,839,059	7. Maximums Coffee Group	1,947,153
8. MD Anderson	1,119,935	8. Methodist Hospital	1,661,057
9. Houston Baptist Church	406,049	9. Hermann Hospital	1,644,795
10. Methodist Hospital	366,373	10. Dr. Pepper Bottling	1,072,051
	\$ 33,330,289		\$ 26,098,131



**Treated Water Consumption**  
*Last Ten Fiscal Years ( in thousand gallons)*  
 (NOT INCLUDING WHOLESALE NOR RAW WATER)  
 (unaudited)

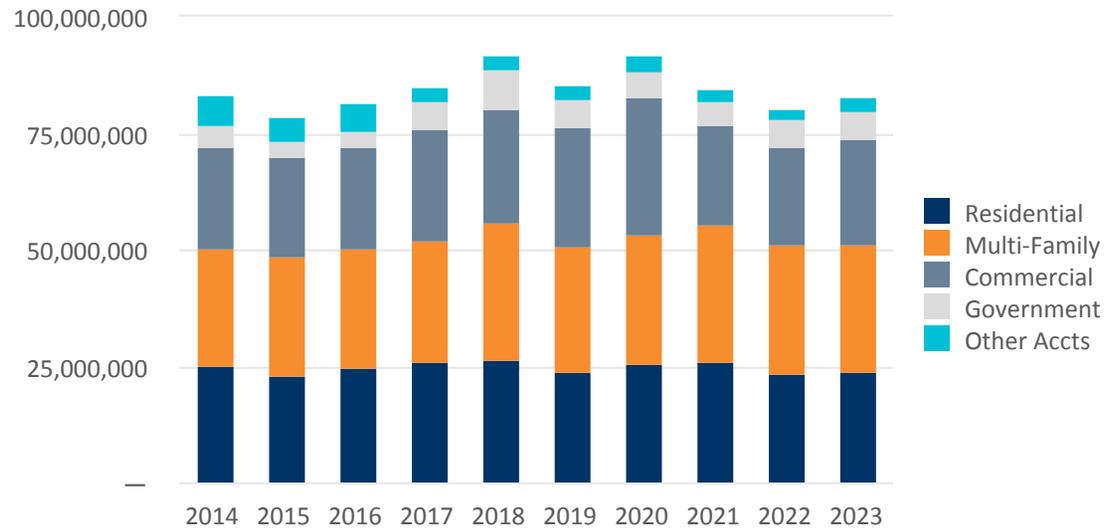
Fiscal Years	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	25,263,997	23,265,022	24,744,815	25,911,974	26,498,295	24,144,424	25,495,741	26,166,947	23,640,857	24,058,354
Multi-Family	25,131,767	25,370,691	25,676,282	26,323,185	29,640,195	26,521,613	27,766,727	29,532,580	27,836,619	27,363,147
Commercial	21,728,794	21,591,973	21,825,149	23,764,306	24,188,333	25,778,408	29,590,893	21,200,453	20,818,858	22,411,325
Government	4,688,639	3,149,624	3,558,515	6,174,766	8,670,358	5,982,549	5,566,938	5,347,518	5,715,351	6,054,926
Other Accts	6,339,166	5,099,403	5,903,309	3,072,484	2,777,547	3,092,248	3,270,522	2,528,725	2,195,120	2,887,063
<b>Total</b>	<b>83,152,363</b>	<b>78,476,713</b>	<b>81,708,070</b>	<b>85,246,715</b>	<b>91,774,728</b>	<b>85,519,242</b>	<b>91,690,821</b>	<b>84,776,223</b>	<b>80,206,805</b>	<b>82,774,815</b>





**Waste Water Consumption**  
*Last Ten Fiscal Years ( in thousand gallons)*  
 (unaudited)

<b>Fiscal Years</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Residential	25,171,385	23,176,519	24,545,897	24,729,939	25,368,705	23,107,362	24,305,681	25,058,608	22,652,739	22,912,312
Multi-Family	25,072,775	25,290,180	25,520,422	25,669,642	29,017,348	25,860,847	27,100,348	28,918,302	27,264,817	26,640,463
Commercial	22,234,061	22,165,594	22,375,995	19,777,267	20,008,565	22,373,928	20,236,691	17,472,601	17,901,146	18,597,125
Government	521,190	428,287	400,109	3,799,206	6,865,830	4,030,345	3,402,662	3,251,174	3,541,662	3,503,413
<b>Total</b>	<b>72,999,411</b>	<b>71,060,580</b>	<b>72,842,423</b>	<b>73,976,054</b>	<b>81,260,448</b>	<b>75,372,482</b>	<b>75,045,382</b>	<b>74,700,685</b>	<b>71,360,364</b>	<b>71,653,313</b>





### Water and Wastewater Average Rate Adjustments - All Customer Classes

Date	Average Percent Rate (Increase/Decrease)		
	Water	Sewer	
April 2014	1.2%	1.2%	Current water rates are based on customer class. Customer classes include single-family, commercial, industrial, contract and agricultural. The amount of the bill is the sum of the fixed charge based on meter size and an additional charge based on the volume of water consumed. For example, for single-family customers, water rates can vary from \$9.48 for the first thousand gallons to \$94.69 for ten thousand gallons.
April 2015	4.4%	4.4%	
April 2016	1.4%	1.4%	
April 2017	3.4%	3.4%	
April 2018	2.8%	2.8%	Wastewater rates also include a fixed charge based on meter size and an additional charge based on the volume of the water usage. For example, for single-family customers, wastewater rates can vary from \$19.87 for the first thousand gallons to \$123.66 for ten thousand gallons. Additionally, industrial customers may be subject to a sewer surcharge based on the quality of their wastewater discharge.
April 2019	2.8%	2.8%	
April 2020	3.5%	3.5%	
April 2021	1.5%	1.5%	
September 2021*	9.0%	20.0%	The bill for a typical single family residential customer using 7,000 gallons per month would be \$147.19 for both water and wastewater services. Refer to table below for further information. However, total water and sewer charges may range from \$29.35 for 1,000 gallons to \$102.74 for 5,000 gallons per month for single-family residential customers.
April 2022*	7.5%	11.0%	
April 2022	5.6%	5.6%	*Determined from Water and Wastewater Cost of Service Study Rate formally approved by City Council in 2021. Refer to City of Houston, TX Ordinance No. 2021-15 for further information.
April 2023	9.2%	9.2%	
April 2023*	6.0%	6.0%	

### Water & Wastewater Rates - Single-Family Residential Customers

Date	Water*	Sewer*	Total	
April 2014	35.34	45.09	80.43	*Rates are calculated in this example based on a monthly consumption of 7,000 gallons with 5/8" or 3/4" meter. Rates will change with the level of consumption.
April 2015	36.90	47.08	83.98	
April 2016	37.42	47.75	85.17	Please refer to our website <a href="http://Houstonwater.org">Houstonwater.org</a> for a complete list of customer classes and rates.
April 2017	38.69	49.38	88.07	
April 2018	39.78	50.77	90.55	
April 2019	40.90	52.18	93.08	
April 2020	42.33	54.01	96.34	
April 2021	42.96	54.83	97.79	
September 2021	47.25	64.00	111.25	
April 2022	54.72	73.91	128.63	
April 2023	63.28	83.91	147.19	

**Discretionary Debt Service paid by the Combined Utility System**

The total amount of Discretionary Debt Service paid from Net Revenues of the Combined Utility System for the past nine fiscal years and the amount budgeted for fiscal year 2024 is set forth below:

<u>Fiscal Year</u>	<u>Discretionary Debt Service (in millions)</u>
2024 (budgeted)	\$ 2.8
2023	4.9
2022	4.9
2021	5.0
2020	5.6
2019	7.8
2018	9.1
2017	9.2
2016	9.9
2015	12.0

**Indirect Charges Paid by the Combined Utility**

<u>Fiscal Year</u>	<u>Indirect Charges (in thousands)</u>
2024 (budgeted)	\$ 8,418
2023	7,333
2022	8,824
2021	9,503
2020	11,069
2019	10,404
2018	10,877
2017	9,988
2016	9,810
2015	9,776

**General Purpose Fund Transfers for Drainage**

The Combined Utility System transfers from its General Purpose Fund to the Storm Water Fund for the past nine fiscal years and the amount budgeted for fiscal year 2024 are reflected below (unaudited):

<u>Fiscal Year</u>	<u>General Purpose Fund Transfer (in millions)</u>
2024 (budgeted)	\$ 49.7
2023	51.4
2022	57.1
2021	66.5
2020	58.8
2019	55.4
2018	54.0
2017	52.8
2016	42.2
2015	35.2

**DEBT CAPACITY SCHEDULES**





**City of Houston, TX**  
**Combined Utility System Bonds <sup>(1)</sup>**  
**Pledged - Revenue Coverage**  
*Last Ten Fiscal Years*  
*(amounts expressed in thousands)*  
*(unaudited)*

Fiscal Year	Operating & Non-Operating Revenues <sup>(2)</sup>	Less: Total Expenses	Net Pledged Revenue	Debt Service		Coverage
				Principal	Interest	
2014	1,029,562	406,273 \$	623,289	134,030	273,484	1.53
2015	973,289	424,683 \$	548,606	140,685	266,636	1.35
2016	1,053,648	436,845 \$	616,803	160,450	261,489	1.46
2017	1,075,788	438,330 \$	637,458	184,570	259,941	1.43
2018	1,126,569	438,551 \$	688,018	200,505	261,978	1.49
2019	1,123,606	468,244 \$	655,362	213,810	257,760	1.39
2020	1,184,353	465,791 \$	718,562	207,110	268,749	1.51
2021	1,154,660	505,931 \$	648,729	228,641	262,231	1.32
2022	1,407,715	510,072 \$	896,643	254,501	250,694	1.77
2023	1,667,322	585,195 \$	1,082,127	271,299	257,069	2.05

(1) Including water and sewer system bonds, Combined Utility System bonds, and commercial paper interest.  
(2) Income and revenues derived from the operation of the Combined Utility System with limited exclusions.



## Revenue Bond Coverage

Last Ten Fiscal Years (amounts expressed in thousands)  
(unaudited)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Operating Revenues</b>										
Water sales	\$ 499,913	\$ 486,517	\$ 529,879	\$ 547,054	\$ 559,010	\$ 554,294	\$ 591,611	\$ 584,594	\$ 698,263	\$ 802,915
Wastewater system user charges	441,300	434,305	462,786	475,392	479,978	485,183	509,315	510,832	607,343	713,004
Penalties, other services and charges	12,195	6,602	9,917	3,349	13,561	2,965	(834)	(2,680)	1,907	(11,937)
<b>Total Operating Revenues</b>	<b>953,408</b>	<b>927,424</b>	<b>1,002,582</b>	<b>1,025,795</b>	<b>1,052,549</b>	<b>1,042,442</b>	<b>1,100,092</b>	<b>1,092,746</b>	<b>1,307,513</b>	<b>1,503,982</b>
<b>Non-Operating Revenues</b>										
Investment earnings under Previous Ordinance	5,385	5,733	6,718	8,880	14,695	21,890	23,679	14,479	8,935	28,285
Investment earnings under Master Ordinance	1,401	2,221	2,390	3,061	4,054	11,246	13,184	5,967	3,757	6,541
Contributions from Water Authorities	—	—	—	—	—	—	—	—	—	54,339
Other non-operating revenues	33,682	7,671	22,264	17,853	30,905	19,407	18,438	9,070	37,568	23,478
<b>Total Non-Operating Revenues</b>	<b>40,468</b>	<b>15,625</b>	<b>31,372</b>	<b>29,794</b>	<b>49,654</b>	<b>52,543</b>	<b>55,301</b>	<b>29,516</b>	<b>50,260</b>	<b>112,643</b>
<b>Total Gross Revenues</b>	<b>993,876</b>	<b>943,049</b>	<b>1,033,954</b>	<b>1,055,589</b>	<b>1,102,203</b>	<b>1,094,985</b>	<b>1,155,393</b>	<b>1,122,262</b>	<b>1,357,773</b>	<b>1,616,625</b>
<b>Expenses</b>										
Contract Revenue Bonds Payments <sup>(1)</sup>										
Coastal Water Authority debt service	18,875	18,064	17,684	7,204	6,399	6,385	6,381	6,398	6,376	6,356
<b>Total Contract Revenue Bond Payments</b>	<b>18,875</b>	<b>18,064</b>	<b>17,684</b>	<b>7,204</b>	<b>6,399</b>	<b>6,385</b>	<b>6,381</b>	<b>6,398</b>	<b>6,376</b>	<b>6,356</b>
Maintenance and operating expenses	387,398	406,619	419,161	431,126	432,152	461,859	459,410	499,533	503,696	578,839
<b>Total Expenses</b>	<b>406,273</b>	<b>424,683</b>	<b>436,845</b>	<b>438,330</b>	<b>438,551</b>	<b>468,244</b>	<b>465,791</b>	<b>505,931</b>	<b>510,072</b>	<b>585,195</b>
<b>Restricted Receipts under Master Ordinance</b>	<b>35,687</b>	<b>30,240</b>	<b>19,694</b>	<b>20,199</b>	<b>24,366</b>	<b>28,621</b>	<b>28,960</b>	<b>32,398</b>	<b>48,942</b>	<b>50,697</b>
<b>Net Revenues under Master Ordinance</b>	<b>\$ 623,290</b>	<b>\$ 548,606</b>	<b>\$ 616,803</b>	<b>\$ 637,458</b>	<b>\$ 688,018</b>	<b>\$ 655,362</b>	<b>\$ 718,562</b>	<b>\$ 648,729</b>	<b>\$ 896,642</b>	<b>\$ 1,082,127</b>
<b>Bond Debt Service:</b>										
Previously Issued Bonds	15,293	11,215	—	—	—	—	23,520	22,405	15,480	17,345
First Lien Bonds	387,750	396,101	419,260	443,274	461,505	471,570	452,339	468,467	489,715	511,023
<b>Total Debt Service</b>	<b>\$ 403,043</b>	<b>\$ 407,316</b>	<b>\$ 419,260</b>	<b>\$ 443,274</b>	<b>\$ 461,505</b>	<b>\$ 471,570</b>	<b>\$ 475,859</b>	<b>\$ 490,872</b>	<b>\$ 505,195</b>	<b>\$ 528,368</b>
<b>Bond Debt Service Coverage:</b>										
Junior Lien Bond Coverage under Previous Ordinance <sup>(2)</sup>	38.33	46.02	—	—	—	—	28.76	27.24	54.52	59.09
First Lien Bond Coverage under Master Ordinance <sup>(3)</sup>	1.57	1.36	1.47	1.44	1.49	1.39	1.54	1.34	1.80	2.08
<b>Total Coverage<sup>(4)</sup></b>	<b>1.55</b>	<b>1.35</b>	<b>1.47</b>	<b>1.44</b>	<b>1.49</b>	<b>1.39</b>	<b>1.51</b>	<b>1.32</b>	<b>1.77</b>	<b>2.05</b>

(1) These are "Required Payments under Previous Ordinance."

(2) Coverage of debt service on Previous Ordinance Bonds by Net Revenues as calculated under Previous Ordinance, which does not include as revenues, Investment Earnings under Master Ordinance and Restricted Revenues.

(3) Coverage of debt service on First Lien Bonds by Net Revenues less debt service on Junior Lien Bonds under Previous Ordinance.

(4) Coverage of total debt service on Junior Lien Bonds under Previous Ordinance and First Lien Bonds under Master Ordinance by Net Revenues.

(5) Total coverages are as published in City's ACFR.

**Outstanding Debt by Type**

Last Ten Fiscal Years (amounts expressed in thousands)

(unaudited)

Outstanding Debt by Type	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
First Lien Revenue Bonds	\$ 5,864,213	\$ 6,221,781	\$ 6,433,228	\$ 6,544,163	\$ 6,377,562	\$ 6,430,091	\$ 6,439,889	\$ 6,984,887	\$ 6,835,066	\$ 6,537,881
Junior Lien Revenue Bonds	279,766	144,487	152,527	161,014	169,932	179,393	165,141	151,227	143,686	133,803
Commercial Paper	180,000	120,000	60,000	20,000	220,000	185,000	275,000	—	—	—
Subordinate Lien Bonds	—	—	25,915	88,295	276,060	441,895	430,805	457,590	445,116	432,491
Pension Obligation Bonds	60,247	59,272	58,232	57,117	98,381	96,976	95,429	92,302	88,933	85,308
Coastal Water Authority	102,374	92,642	78,094	73,516	69,582	65,514	61,281	56,843	52,239	47,461
Other Long Term Contracts	28,612	105,575	105,291	307,442	404,551	402,966	398,032	393,003	373,156	368,591
<b>Total Outstanding Debt Payable</b>	<b>\$ 6,515,212</b>	<b>\$ 6,743,757</b>	<b>\$ 6,913,287</b>	<b>\$ 7,251,547</b>	<b>\$ 7,616,068</b>	<b>\$ 7,801,835</b>	<b>\$ 7,865,577</b>	<b>\$ 8,135,852</b>	<b>\$ 7,938,196</b>	<b>\$ 7,605,535</b>
Total Active Accounts*	458	461	464	475	485	487	492	494	495	497
<b>Outstanding debt per active account</b>	<b>\$ 14.24</b>	<b>\$ 14.64</b>	<b>\$ 14.90</b>	<b>\$ 15.25</b>	<b>\$ 15.70</b>	<b>\$ 16.01</b>	<b>\$ 15.98</b>	<b>\$ 16.47</b>	<b>\$ 16.04</b>	<b>\$ 15.30</b>

\*Information Public Sector (IPS) billing system managed by HPW Customer Account Services

The following calculation shows coverage by Net Revenues of Maximum Annual Debt Service on the Previous Ordinance and First Lien Bonds (unaudited):

	FY 2023		FY 2022
Maximum Annual Debt Service Requirements on Previous Ordinance Bonds (2029) (1)	\$ 44,095,000	Maximum Annual Debt Service Requirements on Previous Ordinance Bonds (2029) (1)	\$ 44,095,000
Maximum Annual Debt Service Requirements on First Lien Bonds (2030) (1)(2)	\$ 550,744,741	Maximum Annual Debt Service Requirements on First Lien Bonds (2030) (1)(2)	\$ 525,489,512
Combined Maximum Annual Principal and Interest Requirements on Previous Ordinance Bonds and First Lien Bonds (2024)	\$ 553,982,122	Combined Maximum Annual Principal and Interest Requirements on Previous Ordinance Bonds and First Lien Bonds (2023)	\$ 525,489,512
Net Revenues under Previous Ordinance for Fiscal Year ended June 30, 2023 (3)	\$ 1,031,430,320	Net Revenues under Previous Ordinance for Fiscal Year ended June 30, 2022 (3)	\$ 847,701,671
Net Revenues under Master Ordinance for Fiscal Year ended June 30, 2023 (4)	\$ 1,082,127,044	Net Revenues under Master Ordinance for Fiscal Year ended June 30, 2022 (4)	\$ 896,643,191
Total Funds available for Debt Service Coverage at July 1, 2021 (5)	\$ 1,105,615,300	Total Funds available for Debt Service Coverage, July 1, 2022 (5)	\$ 1,026,007,834
Coverage of Maximum Annual Debt Service Requirements on Previous Ordinance Bonds	23.39	Coverage of Maximum Annual Debt Service Requirements on Previous Ordinance Bonds	19.22
Coverage of Maximum Annual Debt Service Requirements on First Lien Bonds	3.97	Coverage of Maximum Annual Debt Service Requirements on First Lien Bonds	3.66
Coverage of Maximum Annual Debt Service Requirements on Previous Ordinance Bonds and First Lien Bonds	3.95	Coverage of Maximum Annual Debt Service Requirements on Previous Ordinance and First Lien Bonds	3.66

- (1) Does not include debt service on CWA Bonds, which are payable from gross revenues as a maintenance and operating expense.
- (2) First Lien debt service largest payment requirement.
- (3) Excludes restricted receipts under Master Ordinance.
- (4) Net revenues as calculated under the Master Ordinance, which includes as revenues restricted receipts and earnings under the Master Ordinance.
- (5) Available cash from operating and General Purpose Fund net of encumbrances.

### Water & Sewer Facilities General

The City of Houston Drinking Water Operations (DWO) System covers over 580 square miles, providing drinking water to four counties: Harris, Fort Bend, Montgomery, and Galveston. There are 496,945 active water service accounts. 85% of source water is pulled from the San Jacinto and Trinity rivers while the remaining 15% originates from groundwater wells. In total, DWO has 861 million gallons per day (MGD) combined design production capacity of groundwater and surface water. More specifically, the water production and storage system include 3 surface water plants, 55 groundwater plants, 146 groundwater wells, 7 surface water re-pressurization plants, and 157 water storage tanks and towers. Average water purification and production is 476 MGD, which is enough to fill the Astrodome almost twice per day. The water distribution network consists of 7,660 linear miles of piping, 62,509 fire hydrants, and over 171,188 valves that are managed and maintained to the highest standards.

The City of Houston Wastewater Operations System receives and processes wastewater generated by residential, commercial, and industrial customers throughout the service area. The service area covers approximately 650 square miles within the City of Houston and serves a population of about 2.3 million people. The Wastewater System consists of over 6,192 miles of both gravity and force main lines, 600 miles of service lines within public right of way, 39 wastewater treatment plants, and over 377 lift/pumping stations and a centralized laboratory. The general condition of the collection lines varies depending on age, location and type of construction. The average daily wastewater flow through the Wastewater Treatment Facilities for Fiscal Year 2023 was 242 million gallons per day (mgd). The permitted treatment capacity of the wastewater treatment facilities, as reflected by State permits, is 587 mgd.

### Annexation Program - In - City Districts

The City has created reinvestment zones and public improvement districts in which infrastructure improvements, including water and wastewater facilities, will be financed by the respective district or zone through bonds supported by assessments within the districts and by a tax increment fund into which will be deposited the amount of ad valorem taxes collected in the reinvestment zones in excess of the amount calculated on the basis of the property tax appraisals in effect at the time of creation of the particular reinvestment zone. Under State law, the City can create a public improvement district both within the corporate limits of the City and within its extraterritorial jurisdiction.

### Funding of Proposed System Improvements

It is anticipated that the system improvements contemplated in the Combined Utility System's Five Year CIP will be financed approximately as follows:

*Last Ten Fiscal Years (amounts expressed in thousands)*  
*(unaudited)*

| Fiscal Year |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 2015 - 2019 | 2016 - 2020 | 2017 - 2021 | 2018 - 2022 | 2019 - 2023 | 2020 - 2024 | 2021 - 2025 | 2021 - 2025 | 2023-2027   | 2024-2028   |

#### Proposed Source of Funding

##### System Revenue Bonds

(Net Proceeds and Interest Earnings)	\$ 2,083,700	\$ 1,670,200	\$ 2,309,400	\$ 1,865,600	\$ 1,599,067	\$ 1,792,283	\$ 1,840,147	\$ 2,200,943	\$ 2,624,950	\$ 3,499,689 <sup>(1)</sup>
System Revenue	—	385,000	445,000	445,000	535,000	470,000	440,000	500,000	1,500,000	1,250,000
Swift Loan (Subordinate Lien)	—	285,800	270,900	250,200	353,445	428,264	107,434	—	—	—
Contributed Capital	—	1,290,900	1,223,300	1,242,200	2,030,511	1,459,401	571,340	391,518	97,801	97,801
<b>Total Proposed Source of Funding</b>	<b>\$ 2,083,700</b>	<b>\$ 3,631,900</b>	<b>\$ 4,248,600</b>	<b>\$ 3,803,000</b>	<b>\$ 4,518,023</b>	<b>\$ 4,149,948</b>	<b>\$ 2,958,921</b>	<b>\$ 3,092,461</b>	<b>\$ 4,222,751</b>	<b>\$ 4,847,490</b>

(1) The department's five year 2024-2028 CIP anticipates the periodic issuance of additional First Lien Bonds and Subordinate Lien Commercial Paper. City Council must approve each issuance of bonds, but not each issuance of Commercial paper Notes.

### Obligations Payable from System Revenues

The following sets forth the total outstanding principal amount of the system obligations payable from revenues of the Combined Utility System.

Last Ten Fiscal Years (amounts expressed in thousands)

(unaudited)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Contract Revenue Bonds Payable from the Combined Utility System Gross Revenues</b>										
CWA Bonds <sup>(1)</sup>	\$ 98,900	\$ 85,925	\$ 71,855	\$ 71,855	\$ 64,300	\$ 60,710	\$ 56,955	\$ 52,995	\$ 48,870	\$ 44,570
Total - Contract Revenue Bonds	\$ 98,900	\$ 85,925	\$ 71,855	\$ 71,855	\$ 64,300	\$ 60,710	\$ 56,955	\$ 52,995	\$ 48,870	\$ 44,570
<b>System Revenue Bonds Payable from the Combined Utility System Net Revenues</b>										
Previous Ordinance Bonds	200,234	57,339	57,339	57,339	57,339	57,339	49,949	43,292	38,946	34,342
First Lien Bonds	5,600,910	5,917,480	5,964,895	5,964,895	5,927,760	5,970,330	6,009,025	6,514,400	6,324,050	6,057,355
Third Lien Obligations	—	—	—	—	220,000	185,000	275,000	—	—	—
Total - System Revenue Bonds	\$ 5,801,144	\$ 5,974,819	\$ 6,022,234	\$ 6,022,234	\$ 6,205,099	\$ 6,212,669	\$ 6,333,974	\$ 6,557,692	\$ 6,362,996	\$ 6,091,697
Total - All Bonds Payable from System Revenues	\$ 5,900,044	\$ 6,060,744	\$ 6,094,089	\$ 6,094,089	\$ 6,269,399	\$ 6,273,379	\$ 6,390,929	\$ 6,610,687	\$ 6,411,866	\$ 6,136,267

(1) Under a 1968 agreement, as amended and superseded in part, and a 1995 agreement, CWA agreed to construct the CWA conveyance system and certain other projects and the City agreed to pay, as a maintenance and operation expense of the System, amounts calculated to be sufficient to cover maintenance and operation expenses of the CWA Conveyance System plus debt service of the CWA Bonds.

**Debt Service Schedule**

(unaudited)

The following schedule sets forth the principal and interest requirements on all outstanding bonds payable from revenues of the Combined Utility System for each of the City's fiscal years ending June 30 as shown below, based on footnoted assumptions. The following schedule also does not include Discretionary Debt Service Payments or interest on Commercial Paper notes issued as Third Lien Obligations under the Master Ordinance.

Fiscal Year Ending June 30	Payable from System Net Revenues				Total Debt Service <sup>(1) (2)</sup>
	Total Payable from System Gross Revenues <sup>(1)</sup>	Previous Ordinance Bonds	First Lien Bonds <sup>(2)</sup>	Total Payable from System Gross Revenues <sup>(1)</sup>	
2024	\$ 6,350,206	\$ 19,005,000	\$ 534,977,122	\$ 553,982,122	\$ 560,332,328
2025	6,338,956	17,990,000	535,336,302	553,326,302	559,665,258
2026	10,782,206	18,155,000	529,981,995	548,136,995	558,919,201
2027	3,378,081	30,815,000	522,023,951	552,838,951	556,217,032
2028	3,378,456	30,810,000	522,036,759	552,846,759	556,225,215
2029	3,404,306	44,095,000	508,203,850	552,298,850	555,703,156
2030	3,400,828	—	550,744,741	550,744,741	554,145,569
2031	3,396,313	—	544,420,911	544,420,911	547,817,224
2032	3,386,100	—	538,600,309	538,600,309	541,986,409
2033	3,381,000	—	523,879,004	523,879,004	527,260,004
2034	3,376,200	—	518,863,488	518,863,488	522,239,688
2035	3,381,300	—	350,427,387	350,427,387	353,808,687
2036	—	—	347,810,560	347,810,560	347,810,560
2037	—	—	326,747,030	326,747,030	326,747,030
2038	—	—	249,857,759	249,857,759	249,857,759
2039	—	—	245,105,629	245,105,629	245,105,629
2040	—	—	184,589,098	184,589,098	184,589,098
2041	—	—	184,210,158	184,210,158	184,210,158
2042	—	—	148,729,577	148,729,577	148,729,577
2043	—	—	141,548,971	141,548,971	141,548,971
2044	—	—	133,731,614	133,731,614	133,731,614
2045	—	—	121,795,379	121,795,379	121,795,379
2046	—	—	104,692,783	104,692,783	104,692,783
2047	—	—	87,342,893	87,342,893	87,342,893
2048	—	—	84,573,459	84,573,459	84,573,459
2049	—	—	66,592,080	66,592,080	66,592,080
2050	—	—	48,927,417	48,927,417	48,927,417
2051	—	—	14,722,719	14,722,719	14,722,719
2052	—	—	14,718,700	14,718,700	14,718,700
<b>Total</b>	<b>\$ 53,953,952</b>	<b>\$ 160,870,000</b>	<b>\$ 8,685,191,645</b>	<b>\$ 8,846,061,645</b>	<b>\$ 8,900,015,597</b>

(1) Includes CWA maintenance and operating lien

(2) \$249,075,000 of the Series 2012C variable rate bond debt service is calculated at the rate of 5.061% through March 2013 and thereafter at the fixed rate payor swap rate of 3.761%. This was refunded in 2016 & again in 2018 to Series 2016C and Series 2018C respectively. Series 2004B debt service is adjusted to take into account expected payments under the Series 2004B Qualified Hedge Agreements.

**DEMOGRAPHIC AND ECONOMIC SCHEDULES**





**City of Houston, Texas**

**Demographic and Economic Statistics**

*Last Ten Fiscal Years (unaudited)*



**STATISTICAL SECTION**  
**Combined Utility System**  
**Demographic and Economic Schedules**

<b>Fiscal Year</b>	<b>Population <sup>(1) (2)</sup></b>	<b>Personal Income (amount in thousands) <sup>(3)</sup></b>	<b>Per Capita Personal Income <sup>(3)</sup></b>	<b>Median Age <sup>(4)</sup></b>	<b>Education Level in Years of Formal Schooling <sup>(4)</sup></b>	<b>School Enrollment <sup>(4)</sup></b>	<b>Average Unemployment Rate (percentage) <sup>(5)</sup></b>
2014	2,196,367	\$360,298	\$55,436	32.3	13.0	1,790,150	5.4
2015	2,238,653	\$366,978	\$55,013	32.4	13.0	1,829,867	4.8
2016	2,283,616	\$351,012	\$51,572	32.6	13.0	1,849,065	5.6
2017	2,306,360	\$377,978	\$54,788	32.6	13.1	1,874,344	5.2
2018	2,313,079	\$403,674	\$57,875	32.7	13.2	1,893,312	4.7
2019	2,314,478	\$415,920	\$58,884	32.9	13.2	1,932,292	4.0
2020	2,315,720	\$428,501	\$59,893	32.9	13.4	1,915,864	11.6
2021	2,300,027	\$467,267	\$64,837	33.4	13.4	1,920,741	7.4
2022	2,288,250	Not available	Not available	35.3	13.4	1,911,456	4.8
2023	2,302,878	Not available	Not available	35.4	Not available	1,943,808	4.5

(1) Source: U.S. Census Bureau - City and Town Populations, Subcounty Resident Population Estimates: April 1, 2012 to July 1, 2019.

(2) Source: U.S. Census Bureau - Annual Estimates of the Resident Population for Incorporated Places of 50,000 or More: estimate as of July 1, 2021 and July 1, 2022 for fiscal years 2022 and 2023, respectively.

(3) Source: U.S. Department of Commerce, Bureau of Economic Analysis. Amounts as of year ended December 31 for the nine-county Metropolitan Statistical Area (MSA). Information for the years ended December 31, 2022 and 2021 are not yet available.

(4) Source: U.S. Census Bureau - ACS Demographic and Housing Estimates for or the nine-county Metropolitan Statistical Area.

(5) Source: U.S. Bureau of Labor Statistics. Information as of June each year for the nine-county Metropolitan Statistical Area.



**City of Houston, Texas**  
**Principle Employers <sup>(1)</sup>**  
**Last Ten Fiscal Years**  
**Employer (Listed Alphabetically)**  
*(Unaudited)*

2023	2022	2021	2020	2019
Amazon	CHI St. Luke's Health	ExxonMobil	ExxonMobil	HEB
CHI St. Luke's Health	ExxonMobil	HEB	HEB	Houston Methodist
ExxonMobil	HCA Houston Healthcare	HCA Houston Healthcare	HCA Houston Healthcare	Kroger
HCA Houston Healthcare	HEB	Houston Methodist	Houston Methodist	McDonald's Corp
HEB	Houston Methodist	Kroger	Kroger	Memorial Hermann Health System
Houston Methodist	Kroger	Memorial Hermann Health System	Memorial Hermann Health System	Schlumberger
Kroger	Memorial Hermann Health System	Schlumberger	Shell Oil Company	Shell Oil Company
Memorial Herman Health System	Schlumberger	UT MD Anderson Cancer Center	UT MD Anderson Cancer Center	UT MD Anderson Cancer Center
Schlumberger	UT MD Anderson Cancer Center	United Airlines	United Airlines	United Airlines
Walmart	Walmart	Walmart	Walmart	Walmart
2018	2017	2016	2015	2014
Exxon Mobil	HEB	ExxonMobil	Cameron International	B.P. America, Inc.
HEB	Houston Methodist	Houston Methodist Hospital System	ExxonMobil	ExxonMobil
Houston Methodist	Kroger Company	Kroger Company	HEB	Houston Methodist
Kroger Company	McDonald's Corp	Memorial Hermann Health System	Houston Methodist	Kroger
McDonald's Corp	Memorial Hermann Health System	National Oilwell Varco	Kroger	Memorial Hermann Health System
Memorial Hermann Health System	UT MD Anderson Cancer Center	Schlumberger Limited	Memorial Hermann Health System	National Oilwell Varco
Texas Children Hospital	United Airlines	Shell Oil Company	National Oilwell Varco	Schlumberger Limited
UT MD Anderson Cancer Center	Schlumberger Limited	UTMB Health	Shell Oil Company	Shell Oil Company
United Airlines	Shell Oil Company	UT MD Anderson Cancer Center	UT MD Anderson Cancer Center	UT MD Anderson Cancer Center
Walmart	Walmart	United Airlines	United Airlines	United Airlines

Source: Greater Houston Partnership Research

(1) Starting fiscal year 2022, information such as the number of employees or the employees' percentage of total employment is not available for disclosure. Prior year information has been modified to the format consistent with fiscal year 2022 for presentation purposes.

**City of Houston, Texas**  
**Full-time Equivalent Employees as of June 30, 2023**  
*(unaudited)*

<b>Fiscal Year</b>	<b>Combined Utility System</b>	<b>City</b>
2014	2,220.8	22,273.9
2015	2,166.2	22,380.0
2016	2,179.6	22,326.2
2017	2,254.8	22,514.5
2018	2,266.6	22,586.0
2019	2,245.0	21,932.1
2020	2,239.5	21,962.8
2021	2,289.0	21,835.6
2022	2,245.2	21,966.6
2023	2,257.0	21,897.7

**OPERATING INFORMATION SCHEDULES**





The following schedule sets forth information concerning Water Facilities capacity, production, and sales as follow.

Capacity, Production, and Sales							Treated and Untreated Total Sales			
Last Ten Fiscal Years (million gallons per day) (unaudited)							Last Ten Fiscal Years (million gallons per day) (unaudited)			
Fiscal Year	Available Capacity		Production Planned		Actual Production		Fiscal Year	Treated	Untreated	Total
	Ground	Surface	Ground	Surface	Ground	Surface				
2014	93	1172	230	1193	58	397	2014	378	213	591
2015	72	1172	268	1171	49	595	2015	359	216	575
2016	117	1172	268	990	74	371	2016	359	216	575
2017	237	562	98	352	71	387	2017	395	217	612
2018	242	540	83	382	72	389	2018	405	218	623
2019	230	565	73	381	N/A	N/A	2019	403	215	618
2020	225	565	82	422	60	395	2020	389	209	598
2021	204	560	82	422	59	387	2021	410	232	642
2022	178	535	82	422	59	399	2022	400	245	645
2023	153	540	71	401	71	405	2023	416	227	643

As of June 30, 2023, the Water Facilities and the Sewer Facilities served approximately 496,945 and 470,877 active service connections, respectively. During Fiscal Year 2023 approximately 48.66% of System Gross Revenues were derived from the sale of water, (90.50% from treated water and 9.50% from untreated water), approximately 43.22% from providing wastewater treatment services 1.39% from interest income and the remaining 6.73% from various other sources. Of the treated water sales, 93.27% of revenues were from retail customers and 6.73% from bulk sales to other governmental entities.

**General Water and Wastewater Indicators**

*Last Ten Fiscal Years*  
*(unaudited)*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Water</b>										
New connections <sup>(1)</sup>	6,796	6,349	4,559	4,530	4,612	4,524	3,083	3,805	4,009	3,956
Water main breaks <sup>(2)</sup>	11,935	10,572	11,122	9,638	8,355	11,067	8,178	9,427	8,539	11,119
Average daily pumpage (millions of gallons)	455	428	445	458	461	454	455	447	458	476
<b>Wastewater</b>										
Wastewater line repairs	2,210	2,186	2,252	2,322	2,452	2,222	1,893	2,152	2,067	1,987
Average daily sewage treatment (millions of gallons)	225	257	256	253	252	270	245	264	251	242

**Water and Wastewater Capital Asset Statistics**

*Last Ten Fiscal Years*  
*(unaudited)*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Water</b>										
Water main (miles)	7,198	7,128	7,128	7,128	7,144	7,210	7,174	7,640	7,639	7,660
Number of hydrants	58,984	N/A	N/A	60,420	60,543	61,524	61,876	61,991	62,103	62,509
Maximum daily capacity (millions of gallons)	885	803	808	799	782	795	790	764	713	693
<b>Wastewater</b>										
Sanitary sewers (miles) <sup>(3)</sup>	6,950	6,950	6,950	6,950	6,192	6,200	6,300	6,396	6,186	6,192
Storm sewers (miles)	3,838	3,838	3,894	3,946	3,987	3,987	3,987	3,987	3,987	3,987
Maximum daily treatment permitted (millions of gallons)	565	563	563	563	564	564	564	564	564	587

(1) New connections represents all water connection types as meters (physical connections) to the water supply, not the regulatory definition of a connection.

(2) A dry year caused a higher than usual number of breaks.

(3) The sanitary sewers (miles) for FY2013 to FY2018 were adjusted to reflect updated information received from Wastewater Operations Branch.



**Water Right Permits**

*Last Ten Fiscal Years (Rights in MGD)  
(unaudited)*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Surface Water</b>										
Trinity River Basin	N/A	914	914	914	914	914	914	914	914	914
Water Reuse	N/A	259	259	259	259	259	259	259	259	259
San Jacinto River Basin	N/A	258	258	258	258	258	258	258	258	258
Bayous	N/A	116	116	116	116	116	116	116	116	116
Brazos River Basin	N/A	62	62	62	62	91	91	91	91	91
<b>Total Surface Water Rights</b>	—	1,609	1,609	1,609	1,609	1,638	1,638	1,638	1,638	1,638
<b>Ground Water Production Capacity <sup>(1)</sup></b>	N/A	235	235	187	142	142	142	142	146	146
<b>Total Water Available</b>	N/A	N/A	1,844	1,796	1,751	1,780	1,780	1,780	1,784	1,784

(1) Pursuant to rules of the Harris - Galveston Coastal Subsidence District.



 **HOUSTON**  
**PUBLIC WORKS**

