



# ANNUAL REPORT 2022

**Boston Groundwater Trust (BGWT)**

**229 Berkeley Street Ste. 410**

**Boston, MA 02116**

**617.859.8439**

**[www.bostongroundwater.org](http://www.bostongroundwater.org)**

# ORGANIZATION

## BOARD OF TRUSTEES



Gary L. Saunders, Co-Chair  
Back Bay  
Association



Robert Whitney, Co-Chair  
Beacon Hill Civic Association



Tim Ian Mitchell  
Neighborhood Association  
of the Back Bay



Angie Liou  
Asian Community Development Corporation



Leah Camhi  
Fenway Community Development Corporation



Aaron Michlewitz  
North End/Waterfront Neighborhood Council

Janine Commerford, Secretary  
Greater Boston Real Estate Board

Ed Flynn  
Boston City Council

Peter Shilland  
Ellis South End Neighborhood Association



Christian Simonelli  
Executive Director

# Boston Groundwater Trust (BGwT)

229 Berkeley St, Fourth Floor, Boston, MA 02116

617.859.8439

[www.bostongroundwater.org](http://www.bostongroundwater.org)

## Board of Trustees

Gary L. Saunders  
Robert Whitney  
Co-Chairs

Tim Ian Mitchell  
Janine Commerford  
Peter Shilland  
Aaron Michlewitz  
Angie Liou  
Ed Flynn  
Leah Camhi

## Executive Director

Christian Simonelli

December 12<sup>th</sup>, 2022

## **ANNUAL REPORT - FISCAL YEAR 2022**

The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in sections of the City where the integrity of building foundations, especially those supported by wood pilings, is threatened by low groundwater levels and to make recommendations for solving the problem. In Fiscal Year 2022 (7/1/21 through 6/30/22), we continued to make headway on these efforts.

The Trust's primary responsibility is to maintain our approximately 800 observation well network, to measure groundwater elevations, and to distribute the data to the public and appropriate agencies.

The Trust hosted a City-Wide Groundwater forum for the first time since 2005 at the Boston Public Library central branch. The forum examined how climate change may threaten wood pile foundations, reviewed the present-day value of real estate on filled lands, how Amsterdam is dealing with climate change and lowered groundwater levels, and a panel of experts discussed the changing climate & the impact of long-term drought conditions on Boston's groundwater table. The forum was well attended with over 100 people attending in person and over 50 people attending virtually.

Since 2002 the Trust has posted groundwater elevations taken in all of the active wells on an interactive map. In addition, we have compiled foundation information for hundreds of buildings throughout the affected areas. In FY22 the Trust invested in a long overdue upgrade of our mapping platform. The purpose of the upgrade was to put all of the groundwater and foundation data into a single information center.



The Trust reviewed proposals for the upgrade and selected Environmental Systems Research Institute (ESRI) as its vendor. The Trust worked with ESRI to upgrade the mapping platform into a Geographic Information System (GIS) environment. In addition, ESRI also provided services to develop a mobile application for our field engineers. The mobile application replaced the paper maps and sheets used to record the groundwater elevations in the field. The upgrade streamlined the field data collection and overall led to a more efficient field data collection process.

Traffic on the Trust's website, [www.bostongroundwater.org](http://www.bostongroundwater.org), remained steady and had nice increase in FY22 with the debut of our new information center. The site includes our video series about the groundwater issues, our upgraded information center with current and historic groundwater level data for all of our observation wells and building foundation data , updated organization documents, executive director reports, project comment letters, news stories about groundwater issues, and Groundwater Conservation Overlay District GCOD information. We continue to read the well network 6-8 times per year.

The Trust is an active participant in the quarterly meetings of the City-State Groundwater Working Group which includes all the public bodies that have significant underground infrastructure in areas where many buildings are supported on wood pilings. All Working Group meetings open with a review and analysis of the latest observation well elevations throughout the areas of concern in the City. Participation continues to be excellent. All agencies respond to the Trusts requests for information, investigation, and, if necessary, repairs in areas where we have low groundwater elevations.

The Trust's work at addressing the groundwater problem can only be effective with the cooperation of many others. In addition to the Trust's partners on the Working Group, the Boston Planning and Development Agency (BPDA) has made the evaluation of groundwater impacts a requirement of the Article 80 development review process for all projects. During the year, the Trust formally commented on 10 project submittals.

Public outreach and awareness endeavors continued as the Trust presented the groundwater issue to several residents, city departments and agencies, neighborhood groups, law firms, and real estate brokerages throughout the past year.



Inspectional Services Department (ISD) and the Zoning Board of Appeals (ZBA) continue to be diligent in assuring that all qualifying projects comply with the requirements of the GCOD. BWSC has been helpful in determining that the required recharge systems are properly sized and designed. To date over 900 recharge systems have been approved and installed through the GCOD process, directing rainfall into the ground rather than the storm system.

The success of the Trust's efforts would not be possible without the support of the Mayor, the City Council, and the Department of Environment, Energy and Open Space. Once again in FY22, the Trust's request for operating funds was approved by the City and the Trust also received an annual grant from the BWSC. The Trust's operations for the year were once again conducted within its annual budget.

The Trust's success is also predicated on the efforts of our 13 Trustees, who serve without compensation. The Trustees meet bi-monthly and review all operations of the Trust, setting policy, and providing guidance for the executive director. Also critical to the Trust's success are the nine volunteer members of the Technical Advisory Committee, all local engineers and scientists who are identified on our website. The committee meets regularly to help the Trust interpret the results of its well readings and develop strategies for addressing problems.

While important strides have been made in addressing groundwater problems, it is important to remember that the wood piling supported structures will always be vulnerable to lowered groundwater levels. The Trust's mission is crucial to protect the economic viability of our downtown neighborhoods and help continue preserving the historic character of this magnificent city.

Cordially Yours,



Christian Simonelli  
Executive Director





**Raphael &  
Raphael** LLP

**CPAs + Consultants**

**Big firm expertise.  
Small firm relationships.**

### **Independent Accountant's Review Report**

To the Board of Trustees of  
The Boston Groundwater Trust  
Boston, Massachusetts

We have reviewed the accompanying financial statements of Boston Groundwater Trust (a nonprofit organization), which comprise the statements of financial position as of June 30, 2022 and 2021, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole. Accordingly, we do not express such an opinion.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

### **Accountant's Responsibility**

Our responsibility is to conduct the review engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the financial statements for them to be in accordance with accounting principles generally accepted in the United States of America. We believe that the results of our procedures provide a reasonable basis for our conclusion.

**Accountant's Conclusion**

Based on our review, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.

Respectfully submitted,

A handwritten signature in cursive script that reads "Raphael and Raphael LLP".

Raphael and Raphael LLP  
Certified Public Accountants

Boston, Massachusetts  
November 15, 2022



TABLE OF CONTENTS

	<u>Page</u>
FINANCIAL STATEMENTS:	
Statements of Financial Position .....	1
Statements of Activities .....	2
Statements of Cash Flows .....	3
Notes to Financial Statements .....	4 – 10

BOSTON GROUNDWATER TRUST

Statements of Financial Position

As of June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

	<u>2022</u>	<u>2021</u>
ASSETS		
CURRENT ASSETS:		
Cash and Cash Equivalents	\$ 123,487	\$ 341,588
Interest Receivable	5,824	4,628
Investments Maturing in Less Than a Year	144,557	40,709
TOTAL CURRENT ASSETS	<u>273,868</u>	<u>386,925</u>
LONG TERM ASSETS:		
Investments Maturing in More Than a Year	<u>592,466</u>	<u>571,618</u>
PROPERTY AND EQUIPMENT:		
Equipment	45,900	45,900
Less - Accumulated Depreciation	(44,963)	(41,608)
NET PROPERTY AND EQUIPEMENT	<u>937</u>	<u>4,292</u>
TOTAL ASSETS	<u>\$ 867,271</u>	<u>\$ 962,835</u>
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES:		
Accrued Expenses	\$ 6,939	\$ 54,747
NET ASSETS:		
Without Donor Restrictions	<u>860,332</u>	<u>908,088</u>
TOTAL LIABILITIES AND NET ASSETS	<u>\$ 867,271</u>	<u>\$ 962,835</u>

The accompanying notes are an integral part of the financial statements.

BOSTON GROUNDWATER TRUST

Statements of Activities

For the Years Ended June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

	<u>2022</u>	<u>2021</u>
REVENUE:		
Grants and Contracts	\$ 187,373	\$ 194,373
Interest Income	12,392	12,260
TOTAL REVENUE	<u>199,765</u>	<u>206,633</u>
EXPENSES:		
PROGRAM EXPENSES:		
Well Installation	-	38,146
Payroll	62,506	57,776
Payroll Taxes	4,486	4,524
Employee Benefits	4,564	6,574
Rent and Utilities	12,721	13,034
Groundwater Monitoring	5,611	7,938
Research	-	-
Website Expense	30,729	609
Depreciation	3,055	8,653
TOTAL PROGRAM EXPENSES	<u>123,672</u>	<u>137,254</u>
MANAGEMENT AND GENERAL EXPENSES:		
Payroll	51,036	43,943
Payroll Taxes	4,090	3,421
Employee Benefits	4,565	6,574
Insurance	1,741	1,708
Rent and Utilities	4,241	4,345
Professional Services	6,600	6,600
Office Expense	12,471	11,018
Depreciation	300	300
TOTAL MANAGEMENT AND GENERAL EXPENSES	<u>85,044</u>	<u>77,909</u>
TOTAL EXPENSES	<u>208,716</u>	<u>215,163</u>
INCREASE (DECREASE) IN NET ASSETS WITHOUT DONOR RESTRICTIONS BEFORE OTHER INCOME	(8,951)	(8,530)
OTHER INCOME (LOSS)		
Gain on Sale of Investments	1,177	127
Impairment Loss	-	-
TOTAL OTHER INCOME (LOSS)	<u>1,177</u>	<u>127</u>
INCREASE (DECREASE) IN NET ASSETS WITHOUT DONOR RESTRICTIONS BEFORE CHANGE IN UNREALIZED GAIN (LOSS) ON INVESTMENTS	(7,774)	(8,403)
CHANGE IN UNREALIZED GAIN (LOSS) ON INVESTMENTS	<u>(39,982)</u>	<u>(476)</u>
DECREASE IN NET ASSETS WITHOUT DONOR RESTRICTIONS	(47,756)	(8,879)
NET ASSETS, BEGINNING OF YEAR	<u>908,088</u>	<u>916,967</u>
NET ASSETS, END OF YEAR	<u>\$ 860,332</u>	<u>\$ 908,088</u>

The accompanying notes are an integral part of the financial statements.

BOSTON GROUNDWATER TRUST

Statements of Cash Flows

For the Years Ended June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

	<u>2022</u>	<u>2021</u>
CASH FLOWS FROM OPERATING ACTIVITIES:		
Decrease in Net Assets	<u>\$ (47,756)</u>	<u>\$ (8,879)</u>
Adjustments to Reconcile Increase in Net Assets		
To Net Cash Provided by (Used in) Operating Activities:		
Depreciation Expense	3,355	8,953
Unrealized (Gains) Losses	39,982	476
Gain on Sale of Investments	(1,177)	(127)
Impairment Loss	-	-
Bond Premium Amortization	5,758	2,756
(Increase) Decrease in:		
Interest Receivable	(1,196)	(2,174)
Increase (Decrease) in:		
Accrued Expenses	(47,808)	49,448
Total Adjustments	<u>(1,086)</u>	<u>59,332</u>
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	<u>(48,842)</u>	<u>50,453</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of Investments	(234,657)	(270,284)
Maturity of Certificates of Deposit and Bonds	<u>65,397</u>	<u>120,182</u>
NET CASH USED IN INVESTING ACTIVITIES	<u>(169,260)</u>	<u>(150,102)</u>
NET DECREASE IN CASH AND CASH EQUIVALENTS	(218,102)	(99,649)
Cash and Cash Equivalents at Beginning of Year	<u>341,588</u>	<u>441,237</u>
Cash and Cash Equivalents at End of Year	<u><u>\$ 123,487</u></u>	<u><u>\$ 341,588</u></u>

The accompanying notes are an integral part of the financial statements.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 1 - ORGANIZATION:

The Boston Groundwater Trust (the "Trust") was established as a trust in Massachusetts on July 18, 1986 under the custodianship of the City of Boston. The Trust's mission is to serve the public interest by re-establishing and maintaining a system for monitoring groundwater levels in parts of the City of Boston. It achieves this by engaging engineers, contractors and other professionals to reactivate existing wells and install new observation wells in addition to collecting, managing, publishing and analyzing data derived from old and new observation wells.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES:

Basis of Accounting

The financial statements of the Trust are prepared on the accrual basis of accounting, under which revenues are recognized when earned and expenses are recognized when incurred. This is different from the cash basis of accounting, under which revenues are recognized when cash is received and expenses are recognized when cash is disbursed.

Basis of Presentation

Contributions, net assets, and changes therein are classified and reported as without donor restrictions and with donor restrictions, based on the existence or absence of donor-imposed restrictions. Contributions that are restricted by the donor are reported as increases in unrestricted net assets if the restrictions expire in the fiscal year in which the contributions are recognized. All other donor-restricted contributions are reported as increases in net assets with donor restrictions. When a restriction expires, net assets with donor restrictions are reclassified to net assets without donor restrictions.

Cash and Cash Equivalents

Cash and cash equivalents are held in banks and money market mutual funds, and consist of highly liquid investments with a maturity when purchased of three months or less.

On March 26, 2009, the Trustees voted to create an unrestricted reserve fund for the following uses: groundwater research; network upgrading; and a contingency for technical assistance.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES - Continued:

Investments

Investments consist of bonds and certificates of deposit and are reflected at fair market value. Generally, management relies on its custodian for securities valuations. Bond premiums and discounts are amortized over the maturity life of the bond. Unrealized gains and losses are included in the change of net assets.

Accrued Expenses

Accrued expenses include current period labor and other expenses paid after the balance sheet date.

Revenue Recognition

The Trust's revenue consists of grants and contracts and investment income.

The Boston Groundwater Trust receives substantially all grants and contract revenue from the City of Boston and its independent agencies, the U.S. government, and the Commonwealth of Massachusetts. The Trust records grant/contract revenue as deferred revenue until it is expended for the purpose of the grant/contract, at which time it is recognized as revenue.

Investment income and gains and losses on investments are reported as increases or decreases in net assets without donor restrictions unless a donor or law restricts their use. Investment income and gains restricted by a donor are reported as increases in net assets without donor restrictions if the restrictions are met (either by passage of time or by use) in the reporting period in which the income and gains are recognized.

Contributed Services and Facilities

The thirteen Trustees of the Boston Groundwater Trust contribute their services to assist in maintaining the various programs of the Trust.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES - Continued:

Property and Equipment

Property and equipment is valued at cost and is being depreciated over 5 years on the straight line method. Maintenance and repairs are charged to expense when incurred. Upon retirement or disposition, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in operations.

Income Taxes

The Trust is a not-for-profit organization that is exempt from income taxes under section 501(c)3 of the Internal Revenue Code. The Trust's tax returns generally remain subject to examination for three years after filing.

Functional Expenses

The Trust reports its expenses by their functional expense classification. Expenses related to monitoring of groundwater levels in the City of Boston are classified as program expenses. All other expenses are classified as management and general expenses. Some expenses are allocated between program and management and general. Payroll, payroll taxes and employee benefits are allocated between program and management and general based on time spent on program work versus administrative work. Rent and utilities are allocated based on square footage of space used for program activities versus administrative work. Depreciation expense related to program equipment is classified as a program expense; depreciation expense related to office equipment is classified as a management and general expense.

Use of Estimates

Management uses estimates and assumptions in preparing financial statements. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities, and the reported revenues, gains, support, expenses and losses. Actual results could differ from those estimates.

Compensated Absences

Employees of the Trust are entitled to paid vacations, sick days, and other time off depending on job classification, length of service, and other factors. Unused paid time off does not carry over from year to year; therefore, no liability has been recorded in the accompanying financial statements. The Trust's policy is to recognize the cost of compensated absences when paid to employees.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES - Continued:

Subsequent Events

Subsequent events are events or transactions that occur after the balance sheet date but that could affect the amounts or disclosures in the financial statements. Management has evaluated subsequent events through the date that the financial statements are available to be issued, which is the date noted at the bottom of the auditor's report.

NOTE 3 - INVESTMENTS:

For the years ended June 30, 2022 and 2021, management has classified all of the securities held by the Trust as held-to-maturity. In 2022 and 2021 the Trust had unrealized gains or (losses) of \$(39,982) and \$(476), respectively.

The marketable securities portfolio is comprised of the following:

	June 30,			
	2022		2021	
	<u>Cost</u>	<u>Value</u>	<u>Cost</u>	<u>Value</u>
Bonds	\$ 759,752	\$ 737,023	\$ 575,073	\$ 592,116
CDs	-	-	20,000	20,211
	<u>\$ 759,752</u>	<u>\$ 737,023</u>	<u>\$ 595,073</u>	<u>\$ 612,327</u>

The maturities of the investments in bonds and CDs for each of the next five years and thereafter are as follows:

<u>Year Ending June 30,</u>	<u>Bonds</u>	<u>CDs</u>	<u>Total</u>
2023	\$ 144,557	\$ -	\$ 144,557
2024	20,095	-	20,095
2025	204,301	-	204,301
2026	151,136	-	151,136
2027	216,934	-	216,934
Thereafter	-	-	-
Total	<u>\$ 737,023</u>	<u>\$ -</u>	<u>\$ 737,023</u>



BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 4 - FAIR VALUE MEASUREMENTS:

The Trust uses a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the reliability of inputs to the valuation of the Trust's investments. The three levels are defined as follows:

Level 1 - Valuations based on quoted prices for identical securities in active markets

Level 2 - Prices determined using other significant observable inputs

Level 3 - Valuations based on inputs that are unobservable and significant

The following is a summary of the inputs used as of June 30, 2022 in valuing the Trust's investments:

<u>Asset Valuation Inputs</u>	<u>Trading Securities</u>
Level 1 - Quoted Prices	\$ 737,023
Level 2 - Other Significant Observable Inputs	-
Level 3 - Significant Unobservable Inputs	-

The following is a summary of the inputs used as of June 30, 2021 in valuing the Trust's investments:

<u>Asset Valuation Inputs</u>	<u>Trading Securities</u>
Level 1 - Quoted Prices	\$ 612,327
Level 2 - Other Significant Observable Inputs	-
Level 3 - Significant Unobservable Inputs	-

The Trust relies on its custodian for valuations of its trading securities.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 5 - SUMMARY OF GRANTS/CONTRACTS FUNDING:

The Boston Groundwater Trust was primarily funded through the following grants and contracts for the year ended June 30, 2022:

Funding Source	Grant Period	Contract	Total Grant/ Contract	Recognized Support
City of Boston:				
The Environmental Department	6/30/21-6/30/22		\$162,373	\$162,373
City of Boston Independent Agencies:				
Boston Water and Sewer Commission			25,000	25,000
			\$187,373	\$187,373
Total Grants and Contracts			\$187,373	\$187,373

The Boston Groundwater Trust was primarily funded through the following grants and contracts for the year ended June 30, 2021:

Funding Source	Grant Period	Contract	Total Grant/ Contract	Recognized Support
City of Boston:				
The Environmental Department	6/30/20-6/30/21		\$169,373	\$169,373
City of Boston Independent Agencies:				
Boston Water and Sewer Commission			25,000	25,000
			\$194,373	\$194,373
Total Grants and Contracts			\$194,373	\$194,373

NOTE 6 - CONCENTRATION OF CREDIT RISK:

The Boston Groundwater Trust receives substantially all grants and contract revenue from The City of Boston and its independent agencies, the U.S. government, and the Commonwealth of Massachusetts.

The Trust maintains its cash accounts in Massachusetts financial institutions. Accounts at these financial institutions are insured by the Federal Deposit Insurance Corporation ("FDIC") up to \$250,000. At times, the Trust's cash balances were in excess of federally insured limits. The Trust has not experienced any losses in these accounts.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2022 and 2021

SEE INDEPENDENT ACCOUNTANT'S REVIEW REPORT

NOTE 7 - RETIREMENT PLAN:

The Trust has a discretionary retirement plan under Section 408(k) of the Internal Revenue Code. Under the plan and at its discretion, the Trust has contributed 5% of gross earnings to eligible employees who are at least twenty-one years old and have completed at least 3 years of service in the preceding five years. Employees are 100% vested upon participation. The Trust's contributions to the plan were \$0 and \$4,302 for the years ended June 30, 2022 and 2021, respectively.

NOTE 8 - LEASES:

The Trust sub-leases its facilities from the Back Bay Association. The operating lease was effective June 1, 2010, and is automatically renewable if not canceled. The lease is cancelable at any time by either party on one month's notice with no penalty.

Rent expense paid by the Trust was \$16,614 and \$16,612 for the years ended June 30, 2022 and 2021, respectively.

Note 9 - LIQUIDITY:

The Trust regularly monitors liquidity required to meet its operating needs, while also striving to maximize the investment of its available funds.

The following reflects the Trust's financial assets as of the statement of financial position date:

Cash and Cash Equivalents	\$	123,487
Interest Receivable		5,824
Investments		<u>737,023</u>
Financial Assets Available to Meet General Expenditures within One Year	\$	<u>866,334</u>