

# Boston Groundwater Trust

229 Berkeley St, Fourth Floor, Boston, MA 02116  
617.859.8439 voice – 617.266.8750 fax  
[www.bostongroundwater.org](http://www.bostongroundwater.org)

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## Executive Director

Elliott Laffer

August 1, 2012

## **ANNUAL REPORT INTRODUCTION**

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 is threatened by low groundwater levels and to make recommendations for solving the problem. In FY 2012 (7/1/11 through 6/30/12), we continued to make progress on these efforts.

In order to monitor groundwater levels, the Trust maintains a network of 809 observation wells located throughout Boston's filled-land neighborhoods. Wells are read every four to six weeks; water levels are posted to our impartial, publicly accessible website, [www.bostongroundwater.org](http://www.bostongroundwater.org), generally on the same day they are taken. In addition, a complete history of previous readings from the same well is displayed; many of these wells have been read for 10 years or more.

The Trust is an active participant in the quarterly meetings of the City-State Groundwater Working Group, which brings together all of the public entities that maintain infrastructure that can influence groundwater levels in the area of concern. All Working Group meetings open with a review and analysis of the latest readings from our network.

The data generated from our well network has led to the identification of causes of low water readings and to their repair by our partners in the Working Group. Based on low groundwater level readings, MassDOT utilized the opportunity afforded by a paving project to clean and inspect the drain line from the Prudential Tunnel on the Turnpike for the first time since it opened more than fifty years ago. Ten leaks in the line were discovered and

repaired. Groundwater levels in wells north of the Turnpike in Bay Village went up significantly and are, in many cases, at the highest we have ever measured. The system installed several years ago by DCR to bring water from the Storrow Drive Tunnel drain lines to a BWSC installed recharge system under Back Street has continued to raise groundwater levels in that section of Back Bay. Unfortunately, efforts by BWSC to repair infrastructure in the North End have yet to lead to an increase in groundwater levels near the corner of Commercial and Richmond Streets; a similar planned repair effort along Dartmouth Street in Back Bay has slipped into FY13. Also planned for FY13 are repairs to a sewer line under Blagdon Street near the Boston Public Library. The MBTA continues to work on the design for a long term solution to the low water levels in the South End near Back Bay Station.

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 Redevelopment Authority has made the evaluation of groundwater impacts an important part of the Article 80 development review process for all projects. During the year, the Trust formally commented on 19 project submittals; these, and all of our comment letters, are posted on our website, [www.bostongroundwater.org](http://www.bostongroundwater.org).

The Inspectional Services Department and the Zoning Board of Appeals have been diligent in making sure that all qualifying projects comply with the requirements of the Groundwater Conservation Overlay District. The BWSC has been helpful in determining that the required recharge systems are properly sized and designed. To date nearly 300 recharge systems have been approved through the GCOD process, and more than 150 have been installed and are directing rainfall into the ground rather than the sewer system.

During the fiscal year, the Trust first read 30 new or replacement groundwater observation wells to enhance our ability to understand what is happening to groundwater levels and what might be the cause of any particular reduction. Of these, 11 were funded and installed by the Trust, and 19 were turned over to the Trust after they were installed by other projects or were included in our network with access agreements with private landowners.

Public communication about groundwater is an important part of the Trust's role. The Trust's primary means of communication is our website, [www.bostongroundwater.org](http://www.bostongroundwater.org), which is used as a resource by many people (we average almost 200 discrete visitors a day) concerned about the issue. The site includes, in addition to an interactive map with current and historic data on all of our observation wells, minutes of trustees' meetings,



all reports from the executive director and technical and recharge coordinator, all of our comment letters, news stories about groundwater issues, information about piling cutoffs, recharge information, and other data that can be helpful to anyone interested in or concerned about the topic, whether professional, member of the public, or government official. New information posted to the website, other than new well readings that are posted as soon as they are available, is identified under a "Newest" tab so that visitors can easily find this latest material.

The success of the Trust's efforts would not be possible without the support of the Mayor and the City Council. Once again in FY2012, the Trust's funding request was approved by the City. In addition, the Trust received a \$25,000 grant from the BWSC and a \$25,000 community benefits grant from the Prudential Center reconstruction project through the BRA. The Trust's operations for the year were once again conducted within its operating budget.

The Trust's success is also predicated on the efforts of our 13 Trustees, who serve without compensation. The Trustees meet bimonthly and review all operations of the Trust, setting policy and providing guidance for the staff. Also critical to the Trust's success are the eight volunteer members of the Technical Advisory Committee. 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 that represent so much of Boston's history will always be vulnerable to lowered groundwater levels. All of us who are concerned about Boston must continue to monitor levels, repair leaking infrastructure, assure that new projects cannot cause drawdowns, and recharge rainwater into the ground so that these buildings, located in almost all of Boston's in-town neighborhoods, can continue to protect the economic viability of a significant tax base asset and also help to maintain the historic character of this special city.

Elliott Laffer  
Executive Director

**Independent Accountants' Review Report**

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

We have reviewed the accompanying statement of financial position of The Boston Groundwater Trust as of June 30, 2012 and 2011, and the related statements of activities and cash flows for the years then ended. A review includes primarily applying analytical procedures to management's financial data and making inquiries of Trust 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 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 designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the review in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. Those standards require us to perform procedures to obtain limited assurance that there are no material modifications that should be made to the financial statements. We believe the results of our procedures provide a reasonable basis for our report.

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 conformity with accounting principles generally accepted in the United States of America.

Respectfully submitted,

  
Raphael and Raphael LLP  
Certified Public Accountants

Boston, Massachusetts  
July 30, 2012

BOSTON GROUNDWATER TRUST

Statements of Financial Position

As of June 30, 2012 and 2011

SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

	<u>2012</u>	<u>2011</u>
ASSETS		
CURRENT ASSETS:		
Cash and Cash Equivalents	\$ 345,888	\$ 128,665
CDs - Maturing in less than 1 year	385,519	376,076
Interest Receivable	2,371	13,277
TOTAL CURRENT ASSETS	<u>733,778</u>	<u>518,018</u>
LONG TERM ASSETS:		
CDs - Maturing in more than 1 year	-	250,000
TOTAL LONG TERM ASSETS	<u>-</u>	<u>250,000</u>
TOTAL ASSETS	<u>\$ 733,778</u>	<u>\$ 768,018</u>
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES:		
Accrued Expenses	3,180	2,423
TOTAL CURRENT LIABILITIES	<u>3,180</u>	<u>2,423</u>
NET ASSETS:		
Unrestricted	730,598	765,595
TOTAL NET ASSETS	<u>730,598</u>	<u>765,595</u>
TOTAL LIABILITIES AND NET ASSETS	<u>\$ 733,778</u>	<u>\$ 768,018</u>

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



BOSTON GROUNDWATER TRUST

Statements of Activities

For the Years ended June 30, 2012 and 2011

SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

	<u>2012</u>	<u>2011</u>
REVENUE:		
Grants and Contracts	\$ 219,373	\$ 194,373
Interest Income	8,246	13,195
Misc. Revenue	3,578	3,530
TOTAL REVENUE	<u>231,197</u>	<u>211,098</u>
EXPENSES:		
PROGRAM EXPENSES:		
Salary	66,712	70,858
Well Installation	26,777	-
Payroll taxes	5,452	6,399
Insurance	7,366	5,816
Employee Benefits	1,828	1,835
Groundwater Monitoring	19,306	458
Website Expense	10,774	566
TOTAL PROGRAM EXPENSES	<u>138,215</u>	<u>85,932</u>
MANAGEMENT AND GENERAL EXPENSES:		
Salary	90,202	87,426
Rent and Utilities	11,237	11,250
Payroll Taxes	7,428	6,545
Professional Services	6,000	6,000
Employee Benefits and Reimbursed Expenses	2,651	5,263
Miscellaneous Expense	10,461	5,290
TOTAL MANAGEMENT AND GENERAL EXPENSES	<u>127,979</u>	<u>121,774</u>
TOTAL EXPENSES	<u>266,194</u>	<u>207,706</u>
INCREASE (DECREASE) IN NET ASSETS	(34,997)	3,392
NET ASSETS, BEGINNING OF YEAR	<u>765,595</u>	<u>762,203</u>
NET ASSETS, END OF YEAR	<u>\$ 730,598</u>	<u>\$ 765,595</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, 2012 and 2011

SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

	<u>2012</u>	<u>2011</u>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Change in Unrestricted Net Assets	\$ (34,997)	\$ 3,392
Increase (Decrease) in Net Assets	(34,997)	3,392
Adjustments to Reconcile Change in Net Assets to Net Cash Used by Operating Activities:		
(Increase) Decrease in:		
Grants and Contracts Receivable	-	3,500
Interest Receivable	10,906	(5,597)
Increase (Decrease) in:		
Accounts Payable	-	(35,118)
Accrued Expenses	757	(20,455)
Total Adjustments	<u>11,663</u>	<u>(57,670)</u>
NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES	<u>(23,334)</u>	<u>(54,278)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Maturity of Certificates of Deposit	626,076	368,721
Purchase of Certificates of Deposit	<u>(385,519)</u>	<u>(376,076)</u>
NET CASH PROVIDED (USED) BY INVESTING ACTIVITIES	<u>240,557</u>	<u>(7,355)</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>217,223</b>	<b>(61,633)</b>
Cash and Cash Equivalents at Beginning of Year	<u>128,665</u>	<u>190,298</u>
Cash and Cash Equivalents at End of Year	<u>\$ 345,888</u>	<u>\$ 128,665</u>

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

## BOSTON GROUNDWATER TRUST

### Notes to Financial Statements

June 30, 2012 and 2011

### SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

#### NOTE 1 - ORGANIZATION:

The Boston Groundwater 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

Financial statement presentation follows the recommendations of the Financial Accounting Standards Board Accounting Standards Codification ( FASB ASC) Topic 958, *Not-For-Profit Entities*. Under FASB ASC Topic 958, the Trust is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.

##### 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; contingency for technical assistance. The funds are currently held in FDIC insured Certificates of Deposit or Money Market account.

##### Accrued Expenses

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



## BOSTON GROUNDWATER TRUST

### Notes to Financial Statements

June 30, 2012 and 2011

### SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

#### NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES - Continued:

##### Grants, Contracts and Deferred Revenue

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.

##### Contributions

Contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support, depending on the existence and/or nature of any donor restrictions. The Boston Groundwater Trust has not received any contributions with donor-imposed restrictions that would result in temporarily or permanently restricted net assets.

##### 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. The Trust received rent free office space and use of business equipment for one of its employees through September 2011. The value of these contributions has not been recorded on the accompanying financial statements since the services do not meet the criteria for recognition.

##### Other Revenues

Interest income is recognized when earned.

##### 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.

##### 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.

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2012 and 2011

SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES - Continued:

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. It is impracticable to estimate the amount of compensation for future absences and, accordingly, 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.

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 - SUMMARY OF GRANTS/CONTRACTS FUNDING:

The Boston Groundwater Trust was primarily funded through the following grants and contracts for the year ended June 30, 2012:

<u>Funding Source</u>	<u>Grant Period</u>	<u>Contract</u>	<u>Total Grant / Contract</u>	<u>Recognized Support</u>
City of Boston:				
The Environment Department	07/01/11-06/30/12		\$169,373	\$ 169,373
City of Boston Independent Agencies:				
Boston Water and Sewer Commission			25,000	25,000
Prudential Project Advisory Committee			25,000	25,000
Total Grants and Contracts				<u>\$ 219,373</u>

BOSTON GROUNDWATER TRUST

Notes to Financial Statements

June 30, 2012 and 2011

SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT

NOTE 3 - SUMMARY OF GRANTS/CONTRACTS FUNDING - Continued:

The Boston Groundwater Trust was primarily funded through the following grants and contracts for the year ended June 30, 2011:

<u>Funding Source</u>	<u>Grant Period</u>	<u>Contract</u>	<u>Total Grant / Contract</u>	<u>Recognized Support</u>
City of Boston:				
The Environment Department	07/01/10-06/30/11		\$ 169,373	\$ 169,373
City of Boston Independent Agencies:				
Boston Water and Sewer Commission			25,000	25,000
Total Grants and Contracts				<u>\$ 194,373</u>

NOTE 4 - CONCENTRATION OF CREDIT RISK:

The Corporation maintains cash balances which at times exceed federally insured amounts.

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.

NOTE 5 - 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 3% 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 \$4,479 and \$4,510 for the years ended June 30, 2012 and 2011, respectively.

NOTE 6 - 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 \$11,088 and \$10,742 for the years ended June 30, 2012 and 2011, respectively.