

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

**Lists of References and Parameter Codes
Boston Harbor Data Management File**

Edited by

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code). Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government

CONTENTS

	<u>Page</u>
Introduction -----	i
Acknowledgements -----	i

TABLES

Table I	Boston Harbor Data Management File (BHD MF) Reference List (by reference nos.) -----	1
Table II	Reference list (by author(s)) -----	24
Table III	List of codes used with the Boston Harbor Data Management File -----	48
Table IV	Alphabetical index of codes -----	58
Table V	Comparison of structure of the Boston Harbor Data Management File in the original format compiled by Metcalf and Eddy, Inc. with the revision by the U.S. Geological Survey -----	68

FIGURES

Figure. 1	Locations of all sampling sites in the Boston Harbor Data Management File (BHD MF) -----	ii
Figure. 2	Locations of 411 sediment sampling sites in the Boston Harbor Data Management File (BHD MF) -----	iii

INTRODUCTION

Compilation of the Boston Harbor Data Management File (BHDMF) was begun by Metcalf and Eddy, Inc. under contract to the U.S. Environmental Protection Agency in order to assemble pre-existing published and unpublished chemical, physical and biologic data on the sediments and water masses in Boston Harbor and nearby areas. This compilation was in response to the need to gather data related to the environmental condition of Boston Harbor, one of the most polluted in the nation. Because funding for the contract ceased in 1983 owing to EPA budget constraints, the data compiled included only those reported to that date, and the file was not completed or fully documented; for example, the reference list was left incomplete. However, Metcalf and Eddy, Inc. did place more than 61,000 records of assembled data representing more than 1400 locations on 9-track digital magnetic tape. Each record represented an individual analysis of a single component. No unique identifier for multiple component analyses of each sample or replicate was given, thus correlation of components of a given sample required complete reexamination and changing of the structure of the file with the addition of a suitable unique sample identifier. The lack of such organization in the original compilation had severely limited the usefulness of the file as a data base. However, rather than let the considerable amount of data that already had been coded under the project be lost to later users, and to permit interpretation of the status of pollution in the Boston Harbor region in previous years, the Geological Survey has undertaken to reorganize the file as the basis for a Boston Harbor data base, especially one that can aid in answering questions about the condition and fate of contaminants in the sediments of the area. The work was planned in cooperation with the U.S. Environmental Protection Agency (EPA), Region I, which has undertaken the task of assembling data produced after 1983 for merging with the database. I have attempted to decode the data on the original magnetic tape, to reorganize the file so as to provide unique identifiers for analyses that were made on the same samples, to correct errors as they became evident, and to arrange the data base so that the information can be easily combined with the post-1983 data compiled by the U.S. EPA.

The data from a copy of the original magnetic tape were entered by U. S. Geological Survey personnel into both a centralized Structured Query Language (SQL) oriented database and into a desktop computer DOS-environment database. I reorganized and corrected the data, where possible, using widely available PC-compatible spreadsheet and database software so that it might be available in commonly used formats. The SQL oriented data base is used for centralized, permanent storage on a larger computer system. The USGS plans to release on a compact disk (CD-ROM) an expanded compilation of this and more recent data, including the post-1983 data assembled by the U.S.EPA and previously unpublished USGS data.

I have prepared the following reference and code lists for the purpose of aiding users of the data in interpreting the BHDMF and for providing information to investigators interested in learning what types of information are contained in the file. I have enclosed my corrections, additions, or comments in square brackets []. In Table I, the list of references is organized by reference number (Ref. #). These are the numbers used in the original file to identify the source documents of the data. References identified as "[unknown]" in the author column were missing from the documentation for the original file. In table II the reference list is organized alphabetically by author. Fig. 1 shows the locations of the 1400 samples reported in the BHDMF, and Fig. 2, the locations of the more than 400 sediment samples.

Further information about the file can be obtained from:

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ACKNOWLEDGEMENTS

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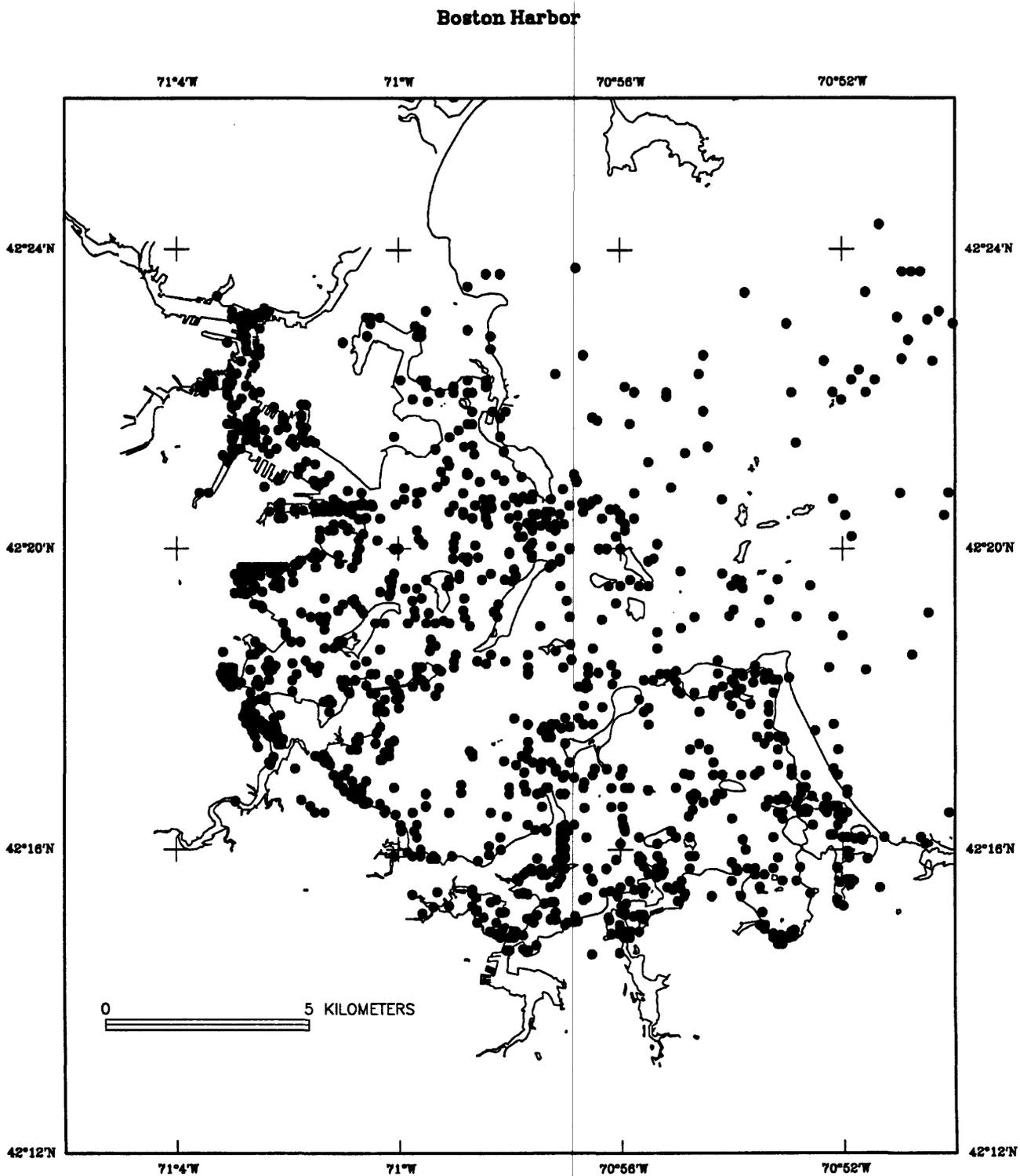


Fig. 1 Locations of all water and sediment sampling sites (about 1380) in the Boston Harbor Data Management File (BHDMF)
The positions of the samples are shown by the solid dots

Table I Boston Harbor Data Management File References
(ordered by reference no.)

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
1	CHESMORE, A.P., S.A. Testaverde, and F.P Richards	1971	A study of the marine resources of Dorchester Bay	Monograph Series No. 10, Dept. of Natural Resources, Division of Marine Fisheries, Commonwealth of Massachusetts	temp; salinity; pH; DO; CO ₂ ; DDT; dieldrin- DDE; tot coli; abundance; species comp	321
2	MASS. DEQE - DWPC, WATER QUALITY SECTION	1976	The Weymouth River Basin 1975, Part A. Water quality data: Part B, Wastewater discharge data	Westborough, MA.	DO; temp; BOD ₅ ; TS; TSS; NO ₃ -N; NH ₃ -N; pH; tot-P; tot alk; Cl-; fecal coli; tot coli; Chlor A; algae	24
3	GILBERT, T.R., A.M. Clay, and C.A. Karp	1976	Distribution of polluted materials in Massachusetts Bay	unpublished report, Research Department, New England Aquarium Boston, MA	Cd; Cr; Cu; Pb; Hg; Ni; Zn; PCB; hydrocarbons; Pb210; TVS; grain size; similarity index; affinity index; diversity; species comp	102
4	GILBERT, T.R., A. Clay, and A. Barker	1973	Report on the water quality of the Charles River Dam dredging site	unpublished report, Research Department, New England Aquarium Boston, MA	temp; salinity; pH; DO; turb; NO ₂ ; NO ₃ ; ortho-P; tot-P; coli; NH ₃ -N; Zn; Cd; Cu; Pb; Ni; V; Hg	
5	GILBERT, T.R. McLeod, Maehl, Ladd, Clay, and Barker	1972	Trace metal analysis of Boston Harbor water and sediments	unpublished report, Research Department, New England Aquarium Boston, MA	Zn; Pb; Cu; Cd; Ni; Cr; Hg; Co; V; Mo	1107
6	HITES, R.A. and K. Biemann	1972	Water pollution: Organic compounds in the Charles River, Boston	Science 178: 158- 170	hydrocarbons	
7	HAEDRICH, R.I. and S.O. Haedrich	1974	A seasonal survey of the fishes in the Mystic River, a polluted river in downtown Boston	Estuarine and Coastal Marine Science 2: 59-73	species comp; diversity; similarity	
8	HOWE, A.B., MacIsaac, Estrella, and Germano	1980	Fishery resource assessment coastal Massachusetts 1979-1980	Massachusetts Division of Marine Fisheries	abundance	
9	HOWE, A.B., MacIsaac, Estrella, and Germano	1979	Fishery resource assessment, coastal Massachusetts 1978-1979	Massachusetts Division of Marine Fisheries, Boston, MA	abundance	

Boston Harbor

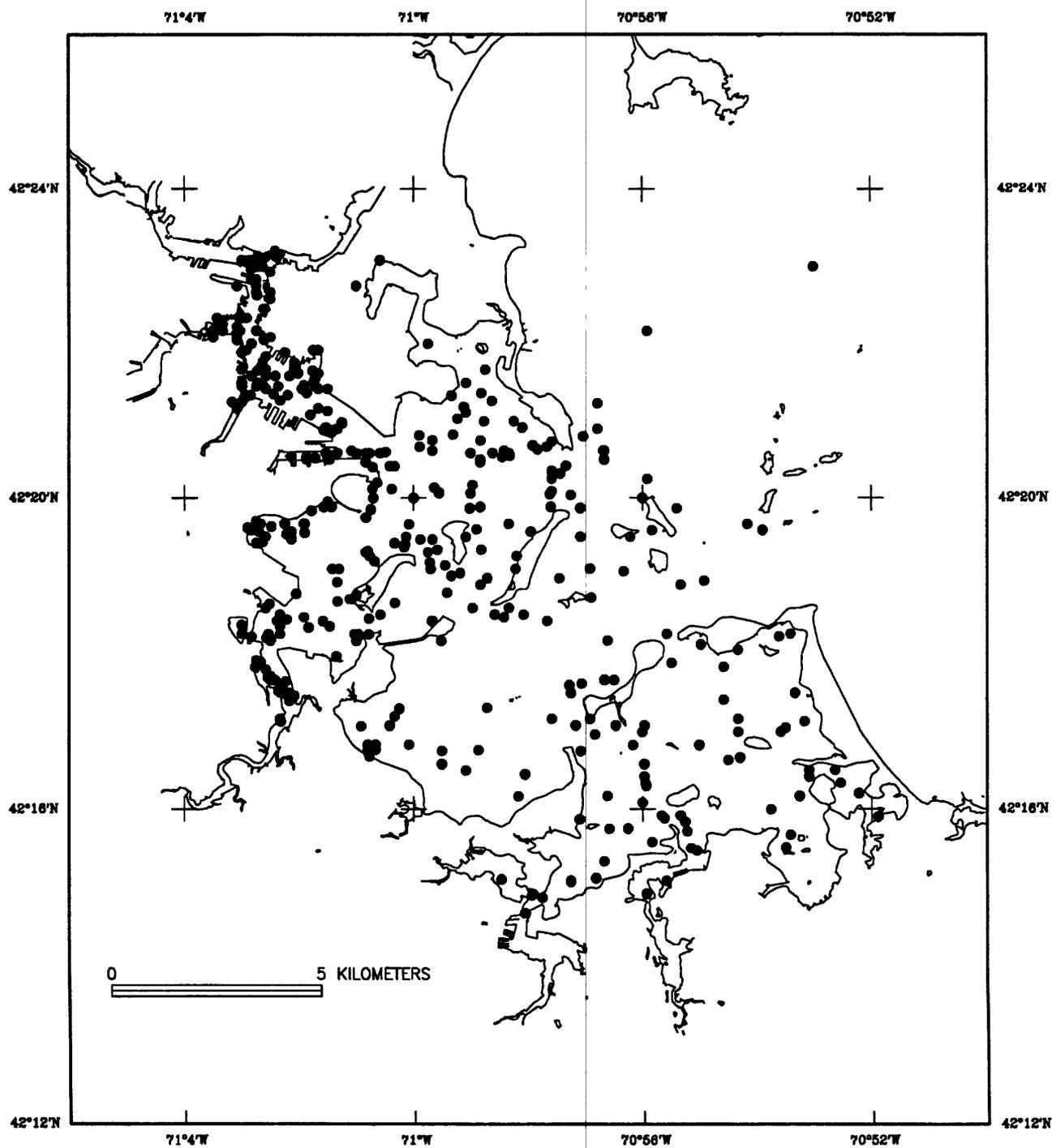


Fig. 2 Locations of 411 sediment sampling sites in the Boston Harbor Data Management File (BHDMF)
The positions of the samples are shown by the solid dots

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
17	BARKER, A.J., C.A. Karp, and K.A. Smith	1980	Biological and chemical analysis for the proposed seaport development at Boston Marine Industrial Park, south Boston	unpublished report, Research Department, New England Aquarium Boston, MA	PCB; DDT; grain size; % vol sol; O&G; As; Cd; Cr; Cu; Hg; Ni; Pb; Va; Zn; temp; DO; sal; pH; species comp; diversity	6
18	JOBIN, W.R. and A.F. Ferullo	1971	Report on the Charles River	Publication No. 2M- 12- 70-048478 Massachusetts Water Resources Commission,, Division of Water Pollution Control	none	
19	MASS. DEQE - DWPC, and Federal Water Poll. Control Admin.	1969	Joint report on pollution of the navigable waters of Boston Harbor		temp; DO; pH; spec cond; TSS; S03; TKN; tot-P; tot coli; fecal coli; Al; As; Cd; Cr; Cu; Pb; Hg; Ni; Au; Sn; Zn; O&G; phytoplankton	
20	LORD, S.M., B.C. McAnspie, and P.A. Dore	1973	Boston Harbor pollution survey, 1972, Part A - Data records of water quality and wastewater discharges	Publication No.6703 9145-68-4-73-CR, Massachusetts Water Resources Commission, Division of Water Pollution Control	POD; pH; temp; alkalinity; DO; chlorides; TS; TSS; total-P; total coli; fecal coli; color; turb; TKN; NH 3 -N; NO3-K; NO2-N; Hg; Cd; Pb; Zn; Ni; Cu; Cr; As; % vol sol	5236
21	LORD, S.M. McAnspie, Costello, and Jobin	1970	Boston Harbor pollution survey, Part A - Wastewater discharges: Part B - Sample analysis Publication No. 5323	Publication No. 5323, Massachusetts Water Resources Commission, Division of Water Pollution Control	BOD5; pH; alk; TSS; O&G; COD; ortho-P; tot coli	102
22	MASSACHUSETTS DEPT. OF PUBLIC HEALTH	1970	Report of the Massachusetts Department of Public Health to the Inter-Agency Task Force on the survey of the Dorchester Bay beaches.	unpublished data, Boston, MA	tot coli; fecal coli	1690
23	MCGRATH, R.A., J.A. Blake, and N. Maciolek-Blake	1982	Benthic communities in Boston Harbor in relation to the Nut Island and Deer Island sewage treatment plant	Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc., Duxbury, MA	benthos	195

Ref.#	Author(s)	Year	Title	Source	Parameters	records
10	MASS. DEQE - DWPC, TECHNICAL SERVICES BRANCH	1982	Boston Harbor 1982 water quality survey data, wastewater discharge data	Publication No. 13044- 37 - 100-12-82-CR, Westborough, MA	temp; DO; pH; spec cond; TSS; S03; TKN; tot-P; tot coli; fecal coli; Al; As; Cd; Cr; Cu; Pb; Hg; Ni; Au; Sn; Zn; O&G; phytoplankton	1182
11	ITEK DATA ANALYSIS CENTER	1969	Photographic analysis of water quality: Boston Harbor Technical Report ITEK 1759-1	ITEK Data Analysis Center, Alexandria, VA	none	
12	FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1969	Proceedings: Conference in the matter of pollution of the navigable waters of Boston Harbor and its tributaries April 30, 1969, Boston, Massachusetts, 2nd session U. S. Department of the Interior, Northeast Region		none	4377
13	FLAHERTY, J. F.	1968	Status and proposed control of pollution in Boston Harbor and its tributaries	J. Boston Soc. Civil Engineers 55(4): 221- 230	none	
14	GILBERT, T.R., A. Clay, and A. Barker	1973	Post dredging studies at the Charles River dam site	unpublished report, Research Department, New England Aquarium Boston, MA	temp; pH; salinity; turbidity; DO; NO2; NO3; tot-P; ortho-P; coli; chlor-A; NH3-N; Zn; Cu; Pb; Cd; Ni; V; Hg	
15	ISAAC. R. A. and J.D. Delaney	1972	Toxic element survey	Publication no. 6108, Massachusetts Water Resources Commission, Division of Water Pollution Control	Hg; Cd; Pb; Zn; Ni; Cu; Cr; As; %vol sol	227
16	IWANOWIOZ, H.B., R.D. Anderson, and B.A. Ketschke	1973	A study of the marine resources of Hingham Bay	Monograph Series No. 14, Commonwealth of Massachusetts, Department of Natural Resources, Division of Marine Fisheries	temp; salinity; pH; DO; tot coli; lindane; heptochlor; aldrin; malathion; parathion; DDE; epoxide; dieldrin; DDD; DDT	1337

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
33	SZCZURKO, S., JR.	1976	The Neponset River, Part 3 - Water quality analysis	Publication No. 8660-66-50-2-76-CR, Massachusetts Department of Environmental Quality Engineering	BOD; DC; NH3-N; NO3-N; tot coli	
34	U.S. ENVIRONMENTAL PROTECTION AGENCY	1971	Conference in the matter of pollution of the navigable waters of Boston Harbor and its tributaries, Massachusetts, Third session, 27 October 1971	Boston, MA	none	
35	MASS. DEQE - DWPC, WATER QUALITY SECTION	1976	Boston Harbor 1975 wastewater discharge data, Part B Publication No. 8845-19-50-4-76-CR	Westborough, MA.	COD; BOD; pH; Tot alk; TSS; TKN; NH3-N; NO2-N; sett sol; NO3-N; tot-P; ortho-P; Cl-; Cu; Cr; tot coli; fecal coli; temp; O&G; %vol	
36	TCE, INC.	1973	Structural evaluations and ecological observations in Boston Harbor	presented to Commonwealth of Massachusetts Metropolitan District Commission Engineering Division	qualitative	
37	WHITE, R.J., JR.	1972	The distribution and concentrations of selected metals in Boston Harbor sediments	Civil Engineering Department, Northeastern University, M.S. Thesis, Boston, MA	% vol; Cd; Cr; Cu; Hg; Ni; Pb; Zn	1009
38	ENERGY RESOURCES CO.,INC.	1981	Ecological evaluation of proposed oceanic discharge of dredged material from President Roads, Boston Harbor U. S. Army Corps of Engineers, New England Division	Waltham, MA	bioassay; Cd; Hg; PCB; DDT; DDE; PCB; pet hydro	
39	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1981	Environmental assessment, maintenance dredging in Boston Harbor, Massachusetts	Waltham, MA	grain sizes; liq. limit; plastic limit; plastic index; % H2O; pH; % vol; COD; TKN; O&G; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; PCB; DDT; NO2-N; NO3-N; NH3-N; S04; tot-	222

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
24	MASS. DEQE - DWPC and U.S. EPA	1971	Joint status report for the third session of conference on pollution of the navigable waters of Boston Harbor and its tributaries	Boston, MA	temp; DO; BOD 5; pH; TSS; TKN; NH3-N; NO3- N; tot-F; chloride; tot coli; fecal coli	
25	MASS. DEQE - DWPC. WATER QUALITY SECTION	1973	The Neponset River 1973 water quality survey, Part A Water quality survey data	Publication No. 6997 - 73- 136- 11 -73-CR, Westborough MA	DO; temp; BOD5; NH3-N; NC3-N; tot-P; tot alk; pH; TSS; tot coli; chlor A.; algae	77
26	MCLEOD, G. C.	1976	An evaluation of water quality at low tide near the mouth of the Charles River	unpublished report, Research Department, New England Aquarium, Boston, MA	temp; salinity; DO; tot coli; fecal coli	
27	NEW ENGLAND AQUARIUM Research Department	1973	Water quality measurements of Boston Harbor	unpublished report, Research Department, New England Aquarium, Boston, MA	temp; pH; DO; salinity; TSS; turb; tot coli; chlor A; NO3- N; NH3-N; NO2-N; ortho- P; tot-P; As; Be; Cd; Co; Cr; Cu; Fe; Hg; Mo; Ni; Pb; V; Zn	
28	NEW ENGLAND RIVER BASINS COMMISSION, COORDINATING GROUP	1970	Plan of study for a water quality management program for Boston Harbor	unpublished report	none	
29	NOLAN, P.M., M.D. Bilger, and J. Paar III	1981	Draft only, chemical and biological evaluation of Boston harbor sediments	New England Regional Laboratory, U.S. Environmental Protection Agency, Lexington, MA	Cd; Hg; Pb; PCB; DDT; O&G; bioassay; bioaccumulation	18
30	RICE, H.V. and W.R. Patterson	1973	Experimental analysis of Boston Harbor water quality data with the model Bio-Dyn III	unpublished report, Research Department, New England Aquarium, Boston, MA	none	
31	REINAS, C.F. and L.E. Resi	1968	Chemical and physical aspects of water quality, Charles River and Boston Harbor, Massachusetts	U.S. Dept. of the Interior, Federal Water Pollution Control Administration, Technical and Investigations Branch	temp; DO; salinity; pH; turb; color; NO3- N; org-N; NH3- N; tot-P; sol -P; tot coli; fecal coli	
32	STEWART, R.K.	1968	Biological aspects of water quality, Charles River and Boston Harbor, Massachusetts	Federal Water Pollution Control Administration, Technical Advisory and Investigations Branch Cincinnati, OH	benthos; org-C; org - N; phytoplankton; NH3- N; sol -P	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
47	U.S. ENVIRONMENTAL PROTECTION AGENCY	1971	Interim report on combined sewer overflows in Boston Harbor New England River Basins Commission	Boston, MA	BOD; tot coli; flow	
48	MENCHER, E., R.A. Copeland, and H. Payson	1968	Surficial sediments of Boston Harbor, Massachusetts	J. Sedimentary Petrology 38 (1): 76-86	grain size; tot organics	
49	LASSITER, J.P., J.E. Soden, and R.J. powers	1974	An assay of the marine resources of Massachusetts Bay Report No. MITSG 74-26	Massachusetts Institute of Technology Sea Grant Program	none	55
50	DUESIK, D. and T. Najarian	1971	Water quality improvement in Boston Harbor	Chapter 5 In: Duesik and Soifert (eds) Power,pollution and Public policy MIT Press, Cambridge, MA, p 242-281	none	
51	METCALF & EDDY, INC.	1979	Application for modification of secondary treatment requirements for its Deer Island and Nut Island treatment plants 5 vol., submitted to the U.S. EPA - Region 1	Commonwealth of Massachusetts Metropolitan District Commission, Boston, MA	POD; TSS; turb; temp; DO; pH; secci; density; sigma T; PCB; DDT; Hg; Ag; Cd; Cu; Pb	14377
52	FRANKEL, S.L. and B.R. Pearce	1973		No. MITSG 74-8, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	DO; sal; temp; PC4; TSS; % org; NO2; turb	2740
53	NEW ENGLAND AQUARIUM Research Department	1979	Chemical and physical characterization of Boston Harbor sediments	report to Metcalf & Eddy, Inc., Boston, MA	grain size; tot organics; Cr; Cu; Zn; Pb; Ag; Cd; Hg; PCP; DDT	190
54	MACIOLEK, N.J.	1980	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities, Final report on Task IV - Benthic communities	Report No. 14926-B 40 pp, Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc., Duxbury, MA	density; species richness; dominance; diversity; evenness	127

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
40	MANOHAR-MAHARAJ, V. and R..C. Beardsley	1973	Spring run -off and nutrient-seawater density correlations in the Massachusetts Bay, Part 1 - Spring runoff into Massachusetts Bay 1973		temp.; salinity	
41	KARPEN J.	1973	Spring run-off and nutrient-seawater density correlations in the Massachusetts Bay	Part II Dissolved nutrient -seawater density correlations and the circulations in Boston Harbor and vicinity Report No. MITSG 74-9, Massachusetts Institute of Technology Sea Grant Program	temp; ortho-P; NO3-N; DO; salinity; tot coli; fecal coli; phytoplankton; benthos	
42	JASON M. CORTELL & ASSOCIATES, INC.	1982	Draft environmental impact statement/report - Third harbor tunnel project, Interstate 90, Boston MA, Appendix 7 - Water resources dredged material disposal, vegetation, wildlife, and wetlands	FHWA-MA-EIS-82-02-D Federal Highway Administration and Massachusetts Department of Public Works,, Massachusetts Turnpike Authority, 91 pp	As; Cd; Cr; Cu; PB; Hg; Ni; V; Zn; PCB; pesticides; tot-P; NH3-N; TKN; TS; TVS; O&G; Ba; Se; Ag; endrin; lindane; grain size methoxychlor; toxaphene; 2,4-D; 2,4,5-TP;	724
43	EDGERTON, H.E.	1963	Sub-bottom penetrations in Boston Harbor	J. Geophysical Research 68 (9): 2753-2760	sonar	
44	EDGERTON, H.E.	1965	Sub-bottom penetration in Boston Harbor, 2.	J. Geophysical Research 70: 2931-2933	sonar	
45	RESOURCE ANALYSIS, INC.	1976	Scientific and technical evaluation of the Environmental Protection Agency's wastewater facilities planning.	Boston case study - Phase 1, Water Quality considerations prepared for The Council on Environmental Quality, Washington, DC, Cambridge, MA,	Hg; Cd; Pb; Zn; Ni; Cu; Cr; As	
46	GREELEY & HANSEN and Environmental Assessment Council, Inc.	1978	Draft environmental impact statement on the upgrading of the metropolitan Boston area sewerage system Vol. 2, Appendices	submitted to the U.S. EPA., Region 1 543 pp	SO2	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
62	CHRISTODULOU, G. C., W.F. Leimkukler, and A.T. Ippen	1974	Mathematical models of Massachusetts Bay; Part I - Finite element modeling of two dimensional hydrodynamic circulation	No. MITSG 74-4, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	none	
63	BRIGGS D. A. and C.S. Madden	1974	Mathematical models of the Massachusetts Bay. Part II Analytical models for one and two layer systems in rectangular basins	Report No. MITSG 74-4, Massachusetts Institute of Technology Sea Grant Program, Cambridge, MA	none	
64	FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1968	Report on the pollution of the navigable waters of Boston Harbor	U.S. Department of the Interior, Northeast Region Boston. MA	none	
65	HAVENS & EMERSON,LTD	1973	A plan for sludge management, 201+ pp	Commonwealth of Massachusetts, Metropolitan District Commission	none	
66	HYDROSCIENCE, INC.	1971	Final report, development of water quality model of Boston Harbor	Commonwealth of Massachusetts, Water Resources Division	none	
67	KILDOW, J.T.	1981	Boston Harbor management study	Report No. MITSG 81- 15, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	none	
68	KIM, K.	1972	Data summary from Boston Harbor entrance tide study	Massachusetts Institute of Technology Sea Grant Program, unpublished report	temperature; salinity	
69	FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1968	Proceedings: Conference on the pollution of the navigable waters of Boston Harbor and its tributaries	U.S. Department of the Interior, Northeast Region		
70	KELLY, P.A.	1978	Determination of particulate trace metal concentrations in Boston Harbor water by plasma emission spectrometry Chemistry Department, Simmons College	unpublished research	Al; Cr; Cu; Pb; Zn	262

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
55	WILLIAMS, J.A.	1980	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities,, Final report on Task V - Plankton	Report No. 14926-C 24 pp., Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc. Duxbury, MA		10
56	MACIOLEK, N.J.	1978	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities, Interim report on Task IV - Benthic communities	Report No. 14851-B 44+ pp, Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc., Duxbury, MA	species richness; density; dominance; diversity; evenness; similarity	531
57	WILLIAMS, J.A.	1980	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities,, Final report on Task II - Demersal fish	Report No. 14926-A 25 pp., Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc. Duxbury, MA	demersal fish	104
58	GCA CORPORATION, TECHNOLOGY DIVISION	1982	Analysis of sediment samples for priority pollutants and general parameters	Report no. 5- 177-054, prepared for Metcalf & Eddy, Inc., 105 pp	sediment analyses; TVS; org-C; Cn; phenol; asbestos; Sb; As; Be; Cd; Cr; Cu; Pb; Se; Ag; Ti; Zn; Hg; priority pollutants	570
59	CAMP, DRESSER, and MCKEE	1980	Metropolitan District Commission combined sewer overflow project	Volume ii - Environmental assessment report Dorchester Bay area consultant, Boston, MA	% solids; TVS; Hg; Cd; Zn; Ni; Pb; Cu; Cr	103
60	ECOLSCIENCES, INC.	1979	Final environmental impact statement MDC proposed sludge management plan Metropolitan District Commission submitted to the U.S. EPA., Region 1	Boston, M,A	none	
61	HAVENS & EMERSON,LTD	1980	Combined sewer overflow facilities plan for the Neponset River estuary # Vol 2. Environmental assessment	Commonwealth of Massachusetts, Metropolitan District Commission	none	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
82	METCALF & EDDY, INC., Normandeau Assoc., and U. S. Army COE	1975	Commonwealth of Massachusetts Metropolitan District	Commission, Wastewater engineering and management plan for Boston Harbor - Eastern Massachusetts Metropolitan Area (EMMA) Study, Tech. vol. 13A - Biological Impact analysis, 133 pp.	none	
83	PARKER, B.B. and B.R. Pearce	1975	The response of Massachusetts Bay to wind stress	Report No. MITSG 75-2, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	none	
84	SALMOND, D.A.	1971	An analysis of pesticides in Boston Harbor	M.S. Thesis, Civil Engineering Department, Northeastern University, Boston, MA 68 pp.	DDT; % vol; % H2O; grain size	27
85	MASS. DEPT. OF FISHERIES, WILDLIFE, AND RECR. VEHICLES	1983	Daily records of fecal coliform content of softshell clams taken from Boston Harbor and delivered to the shellfish depuration plant, Newburyport MA, 1968 - 1983	unpublished data, Division of Marine Fisheries	fec coli	
86	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1976	Permit to U.S. Coast Guard to dredge near Point Pemberton, Hull	unpublished data, Waltham, MA	% vol; COD; TKN; O&G; Hg; Pb; Zn	
87	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1981	Permit to Metropolitan District Commission to extend Pemberton Pier	unpublished data, Waltham, MA	Ag; Cd; Cr; Cu; Pb; Hg; Ni; V; Zn; NH3-N; TKN; tot-P; O&G; BOD; COD; PCB	
88	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1977	Permit to dredge Allerton Harbor	unpublished data, Waltham, MA	% H2O; O&G; Ag; Cu; Cd; Ni; Cr; Pb; % vol; TKN; Zn; Hg; pH; NO2-N; NO3-N; S04; ortho-P; V	
89	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1979	Permit to Bethlehem Steel to dredge Boston Shipyard	unpublished data, Waltham, MA	% H2O; % vol; TKN; O&G; tot-P; sett sol; Cd; Cr; Cu; Fe; Pb; Ni; Zn; As; Hg; COD; org-C	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
71	BOSTON HARBOR COORDINATING GROUP	1974	Debris and refuse in Boston Harbor: the problem and solution prepared for New England River Basins Commission		none	
72	MARINE ENVIRONMENTAL SERVICES	1970	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering corporation		
73	MARINE ENVIRONMENTAL SERVICES	1972	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
74	MARINE ENVIRONMENTAL SERVICES	1972	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
75	MARINE ENVIRONMENTAL SERVICES	1972	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
76	MARINE ENVIRONMENTAL SERVICES	1973	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
77	MARINE ENVIRONMENTAL SERVICES	1976	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
78	MARINE ENVIRONMENTAL SERVICES	1976	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
79	MARINE ENVIRONMENTAL SERVICES	1979	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
80	MARINE ENVIRONMENTAL SERVICES	1977	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation		
81	MASS. DEQE - DWPC, TECHNICAL SERVICES BRANCH	1982	Weymouth River Basin 1982 water quality survey	Publication No. 13, 069-27 -50-1 -83-CR Westborough, MA.		239

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
98	FITZGERALD, M.G.	1980	Anthropogenic influence of the sedimentary regime of an urban estuary - Boston Harbor, Massachusetts Technical Report No. WHOI -80-38 297 pp.	Woods Hole Oceanographic Institute - MIT Sea Grant Program Ph. D. Dissertation, Woods Hole, MA	grain size; org-C; Al ₂ O ₃ ; Fe ₂ O ₃ ; Pb; Mn; Mo; Cr; V; tot-N; Ni; Cd; Zn; Cu; Hg; Sb; As; temp; sal; NO ₃ -N; NO ₂ -N; NH ₃ -N; TSS; % vol sol; Pb210	
99	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1979	Bulk sediment analysis: Lab series EPA. - 1 - 1 - 5	unpublished data, Waltham MA.	PCB; DDT	
100	FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1968	Radioactivity levels in the Charles River and Boston Harbor, Massachusetts	Physical and Engineering Sciences Section of the Technical Advisory and Investigations Branch, U.S. Department of the Interior	TSS; U; Ra 226; Pb210; Sr 90	
101	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1978	Bulk sediment analysis: Lab series 100 - 276 - 1 - 18	unpublished data, Waltham, MA	liquid limit; plastic limit; plastic index; COD; TKN; O&G; Hg; % vol; Pb; Zn; As; Cd; Cr; Cu; Ni; V; tot-C; tot- H; tot-N; grain size	249
102	SMITH, G.A., JR.	1975	The distribution and concentrations of selected metals in the Charles, Mystic, Weymouth and Neponset Rivers 131 pp.	Civil Engineering Department, Northeastern University M.S. Thesis, Boston. MA	% vol; Cd; Cr; Cu; Ni; Pb; Zn	266
103	BLUNDO, J.	1981	Heavy metal concentrations in the softshell clam <i>Mya arenaria</i>	Civil Engineering Department, Northeastern University M.S. Thesis, Boston. MA	Cd; Cr; Cu; Pb; Ni; Sn; Zn	251
104	PECK ENVIRONMENTAL LABORATORY	1982	Proposed dredged sediment evaluation, Bird Island Flats and North Jetty sites	Massachusetts Port Authority	grain size; % H ₂ O	
105	WONG, EDWARD	1983	Heavy metal concentrations in sediments and clams from Boston Harbor, 1974 - 1976	unpublished data, Lexington, MA		38

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
90	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1972	Permit to White Fuel to dredge Reserve channel, South Boston	unpublished data, Waltham, MA	% vol; COD; TKN; O&G; Hg; Pb; Zn	
91	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1974	Permit to Massport to dredge by Castle Island Terminal	unpublished data, Waltham, MA	TKN; % vol; O&G; COD; Hg; Pb; Zn; Fe; Cd; Cu; Cr; As; Ni; V; tot -C; org -C; inorg-C	
92	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1975	Permit to dredge Quincy Bay near the Wollaston and Squantum Yacht Clubs	unpublished data, Waltham, MA.	temp; PO4-P; S04; O&G; NO2-N; NO3-N; As; Hg; Ni; Zn; Pb; Cu; Cr; Cd; V; COD; tot-C; tot-H; % H2O	
93	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1981	Elutriate testing	unpublished data, Waltham, MA	NO2-N; NO3-N; NH3-N; SO4; O&G; ortho-P; tot-P; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; PCB; DDT	
94	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1980	Bulk sediment analysis: Lab series 100 - 323	unpublished data, Waltham, MA	liq lim; plastic limit; plastic index; grain size% H2O; % vol; COD; TKN; O&G; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; tot-C; tot-H; tot-N	
95	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1980	Bulk sediment analysis: Lab series 100 - 3 16 - 1,2,4,5	unpublished data, Waltham MA	liq limit; plastic limit; plastic index; %vol; COD; O&G; Hg; Pb; Zn; As; Cd; Cu; Fe; Ni; Co; V; tot-C; tot-H; tot-N; grain size	
96	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1972	Bulk sediment analysis: Lab series 100 - 88 - 1 - 20	unpublished data, Waltham, MA	liquid limit; plastic limit; plastic index; COD; TKN; O&G; % vol; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; V; PCB; DDT; grain size	335
97	U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1975	Bulk sediment analysis: Lab series 100 - 218 - 2 - 27	unpublished data, Waltham, MA	liquid limit; plastic limit; plastic index; TKN; O&G; Hg; Pb; % vol; Zn; As; Cd; Cr; Cu; Ni; V; tot-C; tot-H; tot-N; PCB; DDT	473

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
115	MASS. DEQE - LAWRENCE EXPERIMENT STATION	1975	Water quality data from Quincy Bay	Unpublished data, Lawrence, MA	BOD; Ph; tot alk; TSS; TS; O&G; Cl2; Ca; NH3- N; NO3-N; tot-P; tot coli; fecal coli; Mg; SO2; turb; spec cond; DO	44
116	MASS. DEQE	1982	Application for certification for dredging by the MDC	Unpublished data, Metropolitan District Commision, Jason M. Cortell and Associates, Inc.	grain size; As; Cd; Cr; Cu; Pb; Hg; Ni; V; Zn; NH3; TKN; tot-P; C&G; COD; TVS; % tot sol; % vol sol; % CO3; PCB	68
117	U.S. ENVIRONMENTAL PROTECTION AGENCY	1975	Boston Harbor-Quincy Bay study	Unpublished data	tot coli; fecal coli; temp; salinity	46
118	MASS. DEQE	1978	Water Quality Certification to Bethlehem Steel Corporation to dredge Boston Harbor	Unpublished data, Herbert V. Shuster, Inc.	TS; % tot sol; % vol sol; TKN; O&G; tot-P; sett sol; Cd; Cr; Cu; Fe; Pb; Zn; As; Hg; COD; TVS; IDOD	180
119	U.S. ENVIRONMENTAL PROTECTION AGENCY	1981	Personal communication re: Maintenance Dredging of Mystic and Chelsea Rivers and President Roads Anchorage, Boston Harbor,MA.	Unpublished data, U.S. Army Corps of Engineers	NO2; NO3; NH3; SO4; O&G; Ortho-P; Tot-P; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; PCB; DDT; Cd+	
120	MASS. DEQE	1977	Water Quality Certification to Old Colony Yacht Club to dredge Boston Harbor	Unpublished data	grain size	4
121	MARINE RESEARCH INSTITUTE	1974	Chemical analysis of proposed dredge spoil material at Castle Island terminal, South Boston, MA.	Unpublished data, Fay, Spofford & Thomdike, Inc. prepared for the Massachusetts Port Authority	TVS; TKN; O&G; COD; Hg; Pb; Zn; Fe; Cd; Cu; Cr; As; Ni; V; tot- C; tot inorg-C	138
122	ENERGY RESOURCES CO., INC.	1981	Ecological evaluation of proposed oceanic discharge of dredged material from Allerton Harbor, Hull, MA.	Unpublished data, prepared for Mass. Department of Environmental quality Engineering, Cambridge, MA.	bioassay; bioaccum; Cd; Hg; PCB; DDT; DDE; pet hydro	
123	MASS. DEQE	1973	Water Quality Certification to General Dynamics to Dredge an area in the Fore River., Quincy, MA	Unpublished data, Herbert V. Shuster,Inc.	TVS; COD; BOD; TKN; O&G; Hg; Pb; Zn	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
106	RYAN, D.K., D.A. Wayne, and J.P. Kakareka	1982	Physical and chemical characterization of bottom sediments at the North Jetty, Massport Marine Terminal, Boston Marine Industrial Park	Harold E. Edgerton Laboratory, New England Aquarium unpublished report, Boston, MA	% H2O; % silt&clay; O&G; PCB; As; Cd; Cr; Cu; Hg; Ni; % vol sol; Pb; V; Zn; PCB	68
107	PENNEY, B. and J. Kakareka	1981	Chemical evaluation of sediment from a proposed dredge site near Bird Island Flats	Harold E. Edgerton Laboratory, New England Aquarium unpublished report, Boston, MA	%, H2O; % silt&clay; % vol sol; O&G; PCB; Cd; Cr; Cu; Hg; grain size; Ni; Pb; V; Zn; As	78
108	MASS. DEQE - DWPC, WATER QUALITY SECTION	1976	The Neponset River 1973 - 1975, Part B, wastewater discharge data	Pub. No. 8963-59-100-6-76-CR Westborough, M A.	none	
109	GENERAL SCIENCES CORPORATION	1981	South Boston Naval Annex water quality monitoring, 1980-1981	unpublished data, Needham, MA	TSS; DO; PCB; As; Cd; Cr; Cu; Pb; Hg; Ni; Zn	321
110	DAVID GORDON ASSOCIATES. INC.	1983	South Boston Naval Annex water quality monitoring. 1981-1983	unpublished data, Newton Upper Falls, MA.	TSS; DC; temp; salinity; PCB; As; Cd; Cr; Cu; Pb; Hg; Hi; Zn; pH	5245
111	FARRINGTON, J.W., Riseborough, Parker, et al.	1982	Hydrocarbons, polychlorinated biphenyls, and DDT in mussels and oysters from the U.S. coast, 1976 - 1978	The mussel watch, WHOI-82-42. Woods Hole Oceanographic Institution, Woods Hole, MA, prepared for the U.S. Environmental Protection Agency	naph; C1-naph; C2-naph; phenan; C1-phenan; C2-phenan; flouran; pyrene; chrysene; benzopy; dibenzoth; C1-dlbenzoth; PCB	10
112	MASS. DEQE	1974	Water quality certification for Mass. Department of Public Works to dredge Hingham Harbor, MA	Unpublished data	tot-PO4; O&G; Hg; Zn; Pb; Cd; COD; NO3-N	64
113	U.S. COAST GUARD	1976	Certificate of an analysis for water and sediment samples taken from Point Allerton, Hull.	Unpublished data, Werby Laboratories, Inc., Boston, MA	TVS; % COD; TKN; O&G; Hg; Pb; Zn; % Hg; % Pb; % Zn	40
114	METROPOLITAN AREA PLANNING COUNCIL	1972	Boston Harbor islands comprehensive plan	Prepared for Massachusetts Department of Natural Resources, Boston, MA	none	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
132	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-1, Winthrop, 1979-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	
133	MASS. DEQE SHELLFISH SANITATION OFFICE	1981	Heavy metals analysis of shellfish from management area BH-21, Quincy, 1981	Woburn, MA	Pb; Cd; Zn; Cr; Ni; Cu; Hg	35
134	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-7.1, Quincy, 1969-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	
135	LAPUCK LABS INC.	1982	Total and fecal coliform analyses of Winthrop seawater	Unpublished data	tot coli; fecal coli	46
136	HINGHAM BOARD OF HEALTH	1983	Bacteriological analyses of bathing beach waters, 1970-1983.	Unpublished data	tot coli; fecal coli	645
137	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform analyses of Winthrop- Logan Airport area seawater and shellfish, 1979 - 1983	Unpublished data, Woburn, MA	tot coli; fecal coli	
138	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH- 4, Boston, 1977-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	276
139	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-5, Quincy, 1980	Unpublished data, Woburn, MA	tot coli; fecal coil	
140	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management. area BH- 9A.1, Hingham, 1979-1982.	Unpublished data, Woburn, MA	tot coli; fecal coli	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
124	MASS. DEQE	1975	Water Quality Certification to Mass. Division of Waterways to Dredge in the vicinity of Squantum and Wollaston Yacht Club	Unpublished data, Tibbets Engineering Corporation	tot-P; SO4; O&G; NO2; NO3; As; Hg; Ni; Zn; Pb; Cu; Cr; Cd; V; TS; % COD; % C ; % H	80
125	JEROME, W.C., A.P. Chesmore, and C.O. Anderson	1966	A study of the marine resources of Quincy Bay	Monograph Series No. 2. Commonwealth of Massachusetts, Department of Natural Resources, Division of Marine Fisheries	temp; sal; pH; DO; CO2; detergent; secci; heptachlor; heptachloepoxide; dieldrin-DDE; DDT; species comp; abundance	
126	HYROSCIENCE	1973	Development of hydrodynamic and time variable water quality models of Boston Harbor	146 pp.+ prepared for Massachusetts Water Resources Commission Westwood, N.J.	none	
127	CAMP, DRESSER, AND McKEE, INC.	1982	Control combined sewer overflows, Environmental impact report for Neponset River, Dorchester Bay, Charles River Basin, Boston Inner Harbor	prepared for Commonwealth of Massachusetts, Metropolitan District Commission, Boston, MA 280 pp +	% H2O; % vol sol; O&G; Hg; Cd; Cr; Cu; Pb; Ni; As; grain size; phenol; PCB	
128	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-5, Quincy 1972-1981	Unpublished data, Woburn, MA	tot coli; fecal coli	
129	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management: area BH-5C.1, Quincy 1974-1981	Unpublished data, Woburn, MA	tot coli; fecal coli	725
130	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-6 Quincy, 1977-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	630
131	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-7, Quincy 1979-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
156	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area, BH-14, Hull, 1980-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	78
157	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	PCB Analysis of shellfish from management area BH- 14, Hull, 1983	Unpublished data, Woburn, MA	PCB	2
158	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-14.1, Hull, 1979-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	
159	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-14.2, Hull, 1982	Unpublished data, Woburn, MA	tot coli; fecal coli	45
160	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analysis of shellfish from management area BH-14.2, Hull 1979	Unpublished data, Woburn, MA	Cd; Cr; Cu; Ni; Pb; Zn; Hg	7
161	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-15, Hingham, 1977-1982.	Unpublished data, Woburn, MA	tot coli; fecal coli; pH; tresf; tresv; NH3; NO3	231
162	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-15.1, Hingham, 1979-1981	Unpublished data, Woburn, MA	tot coli; fecal coli	
163	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-16, Weymouth, 1979-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	
164	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analyses of shellfish from management area BH-16, Weymouth,1980	Unpublished data, Woburn, MA	Pb; Cr; As	6

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
141	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-9C, Weymouth, 1982-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	
142	[unknown]					51
143	[unknown]					
144	[unknown]					14
145	[unknown]					117
146	[unknown]					
147	[unknown]					538
148	[unknown]					14
149	[unknown]					
150	[unknown]					
151	[unknown]					
152	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-8A, Quincy, 1980-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	172
153	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-8B, Quincy, 1979-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	
154	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analyses of shellfish from management area BH-8B, Quincy, 1981	Unpublished data, Woburn, MA	Pb; Cd; Zn; Cr; Ni; Cu; Hg	192
155	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-9, Weymouth, 1980-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	74

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
176	CAMP, DRESSER AND McKEE, INC.	1979	Combined sewer overflow project, progress-to- date report, September, 1979.	Prepared for the Commonwealth of Massachusetts, Metropolitan District Commission, Boston, MA	none	
177	CAMP, DRESSER AND McKEE, INC.	1977	Charles Basin inventory and evaluation of public wastewater and stormwater facilities.	Prepared for the Metropolitan Area Planning Council, Boston, MA	none	
178	CAMP, DRESSER AND McKEE, INC.	1977	Boston Harbor, Mystic and Neponset Basins inventory and evaluation of public wastewater and stormwater facilities.	Prepared for the Metropolitan Area Planning Council, Boston, MA	none	
179	U.S. DEPARTMENT OF THE INTERIOR	1967	Summary of water quality evaluations, Boston Harbor and tributaries.		DO; tot coli	
180	MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1/1/82- 3/31/82.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin pH	
181	MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 6/1/81- 11/31/81.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; pH	
182	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH- 13, Hull, 1980-1983.	Unpublished data, Woburn, MA	tot coli; fecal coli	67
183	ENERGY RESOURCES CO.,INC	1981	Compliance of sewage sludge disposal with the ocean discharge criteria. A preliminary evaluation	Prepared for Havens and Emerson, Inc., Cambridge, MA	sludge	
184	MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1/1/81- 6/30/81.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; PH; DO	
185	MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1980.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; pH; DO	
186	MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1979.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; pH; DO	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
165	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-20, Hingham, 1969-1982.	Unpublished data, Woburn, MA	tot coli; fecal coli	
166	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-21, Hull, 1969-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	183
167	MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analysis of shellfish from management area BH-21, Hull, 1981	Unpublished data, Woburn, MA	Pb; Cd; Zn; Cr; Ni; Cu; Hg	
168	NEW ENGLAND AQUARIUM, Edgerton Research Lab	1973	Algal light requirements, Final technical report.	Submitted to the Office of Naval Research, Boston, MA	relative spectral irradiance	
169	CAMP, DRESSER AND McKEE, INC.	1972	Alternative regional sewerage systems for the Boston metropolitan area.	Metropolitan Area Planning Council (MAPC)	none	
170	PROCESS RESEARCH, INC.	1975	The impact of the Federal Water Pollution Control Act on the Charles River and Boston Harbor.	National Commission on Water Quality	none	
171	MASS. METROPOLITAN DISTRICT COMMISSION, SEWERAGE DIVISION	1982	Sewerage Division Annual reports, 1973 - 1982.		effluent quality	
172	HULL BOARD OF HEALTH	1983	Bacterial content of sea water from Hull town beaches, 1969 - 1983	Unpublished data, Hull, MA	tot coli ; fecal coli	546
173	OCEAN SYSTEMS, INC.	1976	Hydrothermal studies, Mystic station - Unit no. 7	Prepared for the U.S. Environmental Protection Agency	none	
174	MASS. DEQE DWPC	1977	Boston Harbor wastewater discharge survey, 1976 - 1977.	Pub. No. 10324-54-50-3- 78-CR, Westborough, MA	temp; DO; pH; SO ₃ ; TKN; tot-P; tot coli; fecal coli	
175	PROCESS RESEARCH, INC.	1975	Second interim report on evaluation of Federal program for control of pollution in the Charles River and Boston Harbor.	Prepared for the National Commission on Water Quality	none	

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
206	[unknown]					
207	[unknown]					21
208	[unknown]					30
209	[unknown]					106

Ref.#	Author(s)	Year	Title	Source	Parameters	Total records
187	WINTHROP DEPARTMENT OF PUBLIC HEALTH	1983	Records of bacterial content at Winthrop town beaches.	Unpublished data, Winthrop, MA	tot coli; fecal coli	764
188	O'BRIEN AND GERE, INC.	1980	Combined sewer overflow project, Inner Harbor facilities plan, Volume II, Environmental assessment report and Appendixes.	Prepared for the Commonwealth of Massachusetts, Metropolitan District Commission	rainfall(summary); tot coli; BOD; TKN; NO2; NO3; fecal coli; salin; chlor A; Cd; Cr; Hg; Pb; Cu; Zn; TSS; COD; TOC; p; chlor organics; coli; PCB; temp; DO; benthic O2 demand; Segn(Ag; As); MOSTLY SUMMARIES	252
189	CAMP, DRESSER AND McKEE. INC.	1982	Combined sewer overflow project, environmental Impact report.	Prepared for the Commonwealth of Massachusetts, Metropolitan District Commission, Boston, MA	none	
190	[unknown]					8623
191	[unknown]					5
192	[unknown]					4
193	[unknown]					
194	[unknown]					
195	[unknown]					
196	[unknown]					56
197	[unknown]					80
198	[unknown]					1135
199	[unknown]					56
200	[unknown]					
201	[unknown]					
202	[unknown]					
203	[unknown]					96
204	[unknown]					57
205	[unknown]					153

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
CAMP, DRESSER AND McKEE, INC.	1979	Combined sewer overflow project, progress-to- date report, September, 1979.	Prepared for the Commonwealth of Massachusetts, Metropolitan District Commission, Boston, MA	none		176
CAMP, DRESSER AND McKEE, INC.	1977	Charles Basin inventory and evaluation of public wastewater and stormwater facilities.	Prepared for the Metropolitan Area Planning Council, Boston, MA	none		177
CAMP, DRESSER, AND McKEE, INC.	1982	Control combined sewer overflows, Environmental impact report for Neponset River, Dorchester Bay, Charles River Basin, Boston Inner Harbor	280 pp + prepared for Commonwealth of Massachusetts, Metropolitan District Commission, Boston, MA	% H2O; % vol sol; O&G; Hg; Cd; Cr; Cu; Pb; Ni; As; grain size; phenol; PCB		127
CAMP, DRESSER, and MCKEE	1980	Metropolitan District Commission combined sewer overflow project	Volume ii - Environmental assessment report Dorchester Bay area consultant, Boston, MA	% solids; TVS; Hg; Cd; Zn; Ni; Pb; Cu; Cr	103	59
CHESMORE, A.P., S.A. Testaverde, and F.P Richards	1971	A study of the marine resources of Dorchester Bay	Monograph Series No. 10, Dept. of Natural Resources, Division of Marine Fisheries, Commonwealth of Massachusetts	temp; salinity; pH; DO; CO2; DDT; dieldrin-DDE; tot coli; abundance; species comp	321	1
CHRISTODULOU, G. C., W.F. Leimkukler, and A.T. Ippen	1974	Mathematical models of Massachusetts Bay; Part I - Finite element modeling of two dimensional hydrodynamic circulation	No. MITSG 74-4, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	none		62
DAVID GORDON ASSOCIATES. INC.	1983	South Boston Naval Annex water quality monitoring. 1981-1983	unpublished data, Newton Upper Falls, MA.	TSS; DC; temp; salinity; PCB; As; Cd; Cr; Cu; Pb; Hg; Hi; Zn; pH	5245	110
DUESIK, D. and T. Najarian	1971	Water quality improvement in Boston Harbor	Chapter 5 In: Duesik and Soifert (eds) Power, pollution and Public policy MIT Press p,p 242-28L, Cambridge, MA	none		50

Table II Boston Harbor Data Management File
References (ordered alphabetically by author(s))

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
BARKER, A.J., C.A. Karp, and K.A. Smith	1980	Biological and chemical analysis for the proposed seaport development at Boston Marine Industrial Park, South Boston	unpublished report, Research Department, New England Aquarium, Boston, MA	CB; DDT; grain size; % vol sol; O&G; As; Cd; Cr; Cu; Hg; Ni; Pb; Va; Zn; temp; DO; sal; pH; species comp; diversity	6	17
BLUNDO, J.	1981	Heavy metal concentrations in the softshell clam <i>Mya arenaria</i>	Civil Engineering Department, Northeastern University M.S. Thesis, Boston. MA	Cd; Cr; Cu; Pb; Ni; Sn; Zn	251	103
BOSTON HARBOR COORDINATING GROUP	1974	Debris and refuse in Boston Harbor: the problem and solution prepared for New England River Basins Commission		none		71
BRIGGS D. A. and C.S. Madden	1974	Mathematical models of the Massachusetts Bay. Part II Analytical models for one and two layer systems in rectangular basins	Report No. MITSG 74-4, Massachusetts Institute of Technology Sea Grant Program, Cambridge, MA	none		63
CAMP, DRESSER AND McKEE, INC.	1972	Alternative regional sewerage systems for the Boston metropolitan area.	Metropolitan Area Planning Council (MAPC)	none		169
CAMP, DRESSER AND McKEE, INC.	1977	Boston Harbor, Mystic and Neponset Basins inventory and evaluation of public wastewater and stormwater facilities.	Prepared for the Metropolitan Area Planning Council, Boston, MA	none		178
CAMP, DRESSER AND McKEE, INC.	1982	Combined sewer overflow project, environmental Impact report.	Prepared for the Commonwealth of Massachusetts, Metropolitan District Commission, Boston, MA	none		189

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1969	Proceedings: Conference in the matter of pollution of the navigable waters of Boston Harbor and its tributaries April 30, 1969, Boston, Massachusetts, 2nd session U. S. Department of the Interior, Northeast Region		none	4377	12
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1968	Report on the pollution of the navigable waters of Boston Harbor	U.S. Department of the Interior, Northeast Region Boston. MA	none		64
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1968	Proceedings: Conference on the pollution of the navigable waters of Boston Harbor and its tributaries	U.S. Department of the Interior, Northeast Region			69
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION	1968	Radioactivity levels in the Charles River and Boston Harbor, Massachusetts	Physical and Engineering Sciences Section of the Technical Advisory and Investigations Branch, U.S. Department of the Interior	TSS; U; Ra 226; Pb210; Sr 90		100
FITZGERALD, M.G.	1980	Anthropogenic influence of the sedimentary regime of an urban estuary - Boston Harbor, Massachusetts Technical Report No. WHOI -80-38 297 pp.	Woods Hole Oceanographic Institute - MIT Sea Grant Program Ph. D. Dissertation, Woods Hole, MA	grain size; org-C; Al2O3; Fe2O3; Pb; Mn; Mo; Cr; V; tot-N; Ni; Cd; Zn; Cu; Hg; Sb; As; temp; sal; NO3-N; NO2-N; NH3-N; TSS; % vol sol; Pb210		98
FLAHERTY, J. F.	1968	Status and proposed control of pollution in Boston Harbor and its tributaries	J. Boston Soc. Civil Engineers 55(4): 221-230	none		13
FRANKEL, S.L. and B.R. Pearce	1973		No. MITSG 74-8, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	DO; sal; temp; PC4; TSS; % org; NO2; turb	2740	52

ECOLSCIENCES, INC.	1979	Final environmental impact statement MDC proposed sludge management plan Metropolitan District Commission submitted to the U.S. EPA., Region 1	Boston, M,A	none	60
EDGERTON, H.E.	1963	Sub-bottom penetrations in Boston Harbor	J. Geophysical Research 68 (9): 2753-2760	sonar	43
EDGERTON, H.E.	1965	Sub-bottom penetration in Boston Harbor, 2.	J. Geophysical Research 70: 2931-2933	sonar	44
ENERGY RESOURCES CO., INC.	1981	Ecological evaluation of proposed oceanic discharge of dredged material from Allerton Harbor, Hull, MA.	Unpublished data, prepared for Mass. Department of Environmental quality Engineering, Cambridge, MA.	bioassay; bioaccum; Cd; Hg; PCB; DDT; DDE; pet hydro	122
ENERGY RESOURCES CO.,INC	1981	Compliance of sewage sludge disposal with the ocean discharge criteria. A preliminary evaluation	Prepared for Havens and Emerson, Inc., Cambridge, MA	sludge	183
ENERGY RESOURCES CO.,INC.	1981	Ecological evaluation of proposed oceanic discharge of dredged material from President Roads, Boston Harbor U. S. Army Corps of Engineers, New England Division	Waltham, MA	bioassay; Cd; Hg; PCB; DDT; DDE; PCB; pet hydro	38
FARRINGTON, J.W.,Riseborough, Parker, et al.	1982	Hydrocarbons, polychlorinated biphenyls, and DDT in mussels and oysters from the U.S. coast, 1976 - 1978	The mussel watch, WHOI-82-42. Woods Hole Oceanographic Institution, Woods Hole, MA, prepared for the U.S. Environmental Protection Agency	naph; C1-naph; C2-naph; phenan; C1-phenan; C2-phenan; flouran; pyrene; chrysene; benzopy; dibenzoth; C1-dibenzoth; PCB	10 111

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
HAVENS & EMERSON,LTD	1980	Combined sewer overflow facilities plan for the Neponset River estuary # Vol 2. Environmental assessment	Commonwealth of Massachusetts, Metropolitan District Commission	none		61
HAVENS & EMERSON,LTD	1973	A plan for sludge management, 201+ pp	Commonwealth of Massachusetts, Metropolitan District Commission	none		65
HINGHAM BOARD OF HEALTH	1983	Bacteriological analyses of bathing beach waters,1970-1983.	Unpublished data	tot coli; fecal coli	645	136
HITES, R.A. and K. Biemann	1972	Water pollution: Organic compounds in the Charles River, Boston	Science 178: 158- 170	hydrocarbons		6
HOWE, A.B., MacIsaac, Estrella, and Germano	1980	Fishery resource assessment coastal Massachusetts 1979-1980	Massachusetts Division of Marine Fisheries	abundance		8
HOWE, A.B., MacIsaac, Estrella, and Germano	1979	Fishery resource assessment, coastal Massachusetts 1978-1979	Massachusetts Division of Marine Fisheries, Boston, MA	abundance		9
HULL BOARD OF HEALTH	1983	Bacterial content of sea water from Hull town beaches, 1969 - 1983	Unpublished data, Hull, MA	tot coli ; fecal coli	546	172
HYDROSCIENCE, INC.	1971	Final report, development of water quality model of Boston Harbor	Commonwealth of Massachusetts, Water Resources Division	none		66
HYROSCIENCE	1973	Development of hydrodynamic and time variable water quality models of Boston Harbor	146 pp.+ prepared for Massachusetts Water Resources Commission Westwood, N.J.	none		126
ISAAC. R. A. and J.D. Delaney	1972	Toxic element survey	Publication no. 6108, Massachusetts Water Resources Commission, Division of Water Pollution Control	Hg; Cd; Pb; Zn; Ni; Cu; Cr; As; %vol sol	227	15
ITEK DATA ANALYSIS CENTER	1969	Photographic analysis of water quality: Boston Harbor Technical Report ITEK 1759-1	ITEK Data Analysis Center, Alexandria, VA	none		11

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
GCA CORPORATION, TECHNOLOGY DIVISION	1982	Analysis of sediment samples for priority pollutants and general parameters	Report no. 5-177-054 105 pp, prepared for Metcalf & Eddy, Inc.	sediment analyses; TVS; org-C; Cn; phenol; asbestos; Sb; As; Be; Cd; Cr; Cu; Pb; Se; Ag; Tl; Zn; Hg; priority pollutants	570	58
GENERAL SCIENCES CORPORATION	1981	South Boston Naval Annex water quality monitoring, 1980-1981	unpublished data, Needham, MA	TSS; DO; PCB; As; Cd; Cr; Cu; Pb; Hg; Ni; Zn	321	109
GILBERT, T.R. McLeod, Maehl, Ladd, Clay, and Barker	1972	Trace metal analysis of Boston Harbor water and sediments	unpublished report, Research Department, New England Aquarium, Boston, MA	Zn; Pb; Cu; Cd; Ni; Cr; Hg; Co; V; Mo	1107	5
GILBERT, T.R., A. Clay, and A. Barker	1973	Report on the water quality of the Charles River Dam dredging site	unpublished report, Research Department, New England Aquarium, Boston, MA	temp; salinity; pH; DO; turb; NO ₂ ; NO ₃ ; ortho-P; tot-P; coli; NH ₃ -N; Zn; Cd; Cu; Pb; Ni; V; Hg		4
GILBERT, T.R., A. Clay, and A. Barker	1973	Post dredging studies at the Charles River dam site	unpublished report, Research Department, New England Aquarium, Boston, MA	temp; pH; salinity; turbidity; DO; NO ₂ ; NO ₃ ; tot-P; ortho-P; coli; chlor-A; NH ₃ -N; Zn; Cu; Pb; Cd; Ni; V; Hg		14
GILBERT, T.R., A.M. Clay, and C.A. Karp	1976	Distribution of polluted materials in Massachusetts Bay	unpublished report, Research Department, New England Aquarium, Boston, MA	Cd; Cr; Cu; Pb; Hg; Ni; Zn; PCB; hydrocarbons; Pb210; TVS; grain size; similarity index; affinity index; diversity; species comp	102	3
GREELEY & HANSEN and Environmental Assessment Council, Inc.	1978	Draft environmental impact statement on the upgrading of the metropolitan Boston area sewerage system Vol. 2, Appendices	543 pp, submitted to the U.S. EPA., Region 1	SO ₂		46
HAEDRICH, R.I. and S.O. Haedrich	1974	A seasonal survey of the fishes in the Mystic River, a polluted river in downtown Boston	Estuarine and Coastal Marine Science 2: 59-73	species comp; diversity; similarity		7

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
KELLY, P.A.	1978	Determination of particulate trace metal concentrations in Boston Harbor water by plasma emission spectrometry Chemistry Department, Simmons College	unpublished research	Al; Cr; Cu; Pb; Zn	262	70
KILDOW, J.T.	1981	Boston Harbor management study	Report No. MITSG 81-15, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	none		67
KIM, K.	1972	Data summary from Boston Harbor entrance tide study	Massachusetts Institute of Technology Sea Grant Program, unpublished report	temperature; salinity		68
LAPUCK LABS INC.	1982	Total and fecal coliform analyses of Winthrop seawater	Unpublished data	tot coli; fecal coli	46	135
LASSITER, J.P., J.E. Soden, and R.J. powers	1974	An assay of the marine resources of Massachusetts Bay Report No. MITSG 74-26	Massachusetts Institute of Technology Sea Grant Program	none	55	49
LORD, S.M. McAnespie, Costello, and Jobin	1970	Boston Harbor pollution survey, Part A - Wastewater discharges: Part B - Sample analysis Publication No. 5323	Publication No. 5323, Massachusetts Water Resources Commission, Division of Water Pollution Control	BOD5; pH; alk; TSS; O&G; COD; ortho-P; tot coli	102	21
LORD, S.M., B.C. McAnspie, and P.A. Dore	1973	Boston Harbor pollution survey, 1972, Part A - Data records of water quality and wastewater discharges	Publication No. 6703 9145-68-4-73-CR, Massachusetts Water Resources Commission, Division of Water Pollution Control	POD; pH; temp; alkalinity; DO; chlorides; TS; TSS; total-P; total coli; fecal coli; color; turb; TKN; NH 3 -N; NO3-K; NO2-N; Hg; Cd; Pb; Zn; Ni; Cu; Cr; As; % vol sol	5236	20

IWANOWIOZ, H.B., R.D. Anderson, and B.A. Ketschke	1973 A study of the marine resources of Hingham Bay	Monograph Series No. 14, Commonwealth of Massachusetts, Department of Natural Resources, Division of Marine Fisheries	temp; salinity; pH; DO; tot coli; lindane; heptochlor; aldrin; malathion; parathion; DDE; epoxide; dieldrin; DDD; DDT	1337	16
JASON M. CORTELL & ASSOCIATES, INC.	1982 Draft environmental impact statement/report - Third harbor tunnel project, Interstate 90, Boston MA, Appendix 7 - Water resources dredged material disposal, vegetation, wildlife, and wetlands	FHWA-MA-EIS-82-02-D 91 pp, Federal Highway Administration and Massachusetts Department of Public Works,, Massachusetts Turnpike Authority.	As; Cd; Cr; Cu; PB; Hg; Ni; V; Zn; PCB; pesticides; tot-P; NH3-N; TKN; TS; TVS; O&G; Ba; Se; Ag; endrin; lindane; grain size methoxychlor; toxaphene; 2,4-D; 2,4,5-TP;	724	42
JEROME, W.C., A.P. Chesmore, and C.O. Anderson	1966 A study of the marine resources of Quincy Bay	Monograph Series No. 2. Commonwealth of Massachusetts, Department of Natural Resources, Division of Marine Fisheries	temp; sal; pH; DO; CO2; detergent; secci; heptachlor; heptachloepoxide; dieldrin-DDE; DDT; species comp; abundance		125
JOBIN, W.R. and A.F. Ferullo	1971 Report on the Charles River	Publication No. 2M- 12-70-048478 Massachusetts Water Resources Commission,, Division of Water Pollution Control	none		18
KARPEN J.	1973 Spring run-off and nutrient-seawater density correlations in the Massachusetts Bay	Part II Dissolved nutrient -seawater density correlations and the circulations in Boston Harbor and vicinity Report No. MITSG 74-9, Massachusetts Institute of Technology Sea Grant Program	temp; ortho-P; NO3- N; DO; salinity; tot coli; fecal coli; phytoplankton; benth os		41

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
MARINE ENVIRONMENTAL SERVICES	1976	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			78
MARINE ENVIRONMENTAL SERVICES	1979	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			79
MARINE ENVIRONMENTAL SERVICES	1977	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			80
MARINE RESEARCH INSTITUTE	1974	Chemical analysis of proposed dredge spoil material at Castle Island terminal, South Boston, MA.	Unpublished data, Fay, Spofford & Thorndike, Inc. prepared for the Massachusetts Port Authority	TVS; TKN; O&G; COD; Hg; Pb; Zn; Fe; Cd; Cu; Cr; As; Ni; V; tot-C; tot inorg-C	138	121
MASS. DEPT. OF FISHERIES, WILDLIFE, AND RECR. VEHICLES	1983	Daily records of fecal coliform content of softshell clams taken from Boston Harbor and delivered to the shellfish depuration plant, Newburyport MA, 1968 - 1983	unpublished data, Division of Marine Fisheries	fec coli		85
MASS. DEQE	1974	Water quality certification for Mass. Department of Public Works to dredge Hingham Harbor, MA	Unpublished data	tot-PO4; O&G; Hg; Zn; Pb; Cd; COD; NO3-N	64	112
MASS. DEQE	1982	Application for certification for dredging by the MDC	Unpublished data, Metropolitan District Commission, Jason M. Cortell and Associates, Inc.	grain size; As; Cd; Cr; Cu; Pb; Hg; Ni; V; Zn; NH3; TKN; tot-P; C&G; COD; TVS; % tot sol; % vol sol; % CO3; PCB	68	116
MASS. DEQE	1978	Water Quality Certification to Bethlehem Steel Corporation to dredge Boston Harbor	Unpublished data, Herbert V. Shuster, Inc.	TS; % tot sol; % vol sol; TKN; O&G; tot-P; sett sol; Cd; Cr; Cu; Fe; Pb; Zn; As; Hg; COD; TVS; IDOD	180	118
MASS. DEQE	1977	Water Quality	Unpublished data	grain size	4	120

MACIOLEK, N.J.	1980	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities, Final report on Task IV - Benthic communities	Report No. 14926-B 40 pp, Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc., Duxbury, MA	density; species richness; dominance; diversity ; evenness	127	54
MACIOLEK, N.J.	1978	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities, Interim report on Task IV - Benthic communities	Report No. 14851-B 44+ pp, Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc., Duxbury, MA	species richness; density; dominance; diversity; evenness; similarity	531	56
MANOHAR-MAHARAJ, V. and R..C. Beardsley	1973	Spring run -off and nutrient-seawater density correlations in the Massachusetts Bay, Part 1 - Spring runoff into Massachusetts Bay 1973		temp.; salinity		40
MARINE ENVIRONMENTAL SERVICES	1970	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering corporation			72
MARINE ENVIRONMENTAL SERVICES	1972	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			73
MARINE ENVIRONMENTAL SERVICES	1972	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			74
MARINE ENVIRONMENTAL SERVICES	1972	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			75
MARINE ENVIRONMENTAL SERVICES	1973	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			76
MARINE ENVIRONMENTAL SERVICES	1976	Ecological field survey in the Mystic River	prepared for Stone & Webster Engineering Corporation			77

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
MASS. DEQE - DWPC, WATER QUALITY SECTION	1976	The Neponset River 1973 - 1975, Part B, wastewater discharge data	Pub. No. 8963-59-100- 6-76-CR Westborough, M A.	none		108
MASS. DEQE - DWPC, and Federal Water Poll. Control Admin.	1969	Joint report on pollution of the navigable waters of Boston Harbor		temp; DO; pH; spec cond; TSS; SO3; TKN; tot-P; tot coli; fecal coli; Al; As; Cd; Cr; Cu; Pb; Hg; Ni; Au; Sn; Zn; O&G; phytoplankton		19
MASS. DEQE - DWPC. WATER QUALITY SECTION	1973	The Neponset River 1973 water quality survey, Part A Water quality survey data	Publication No. 6997 - 73- 136- 11 -73-CR, Westborough MA	DO; temp; BOD5; NH3- N; NC3-N; tot-P; tot alk; pH; TSS; tot coli; chlor A.; algae	77	25
MASS. DEQE - LAWRENCE EXPERIMENT STATION	1975	Water quality data from Quincy Bay	Unpublished data, Lawrence, MA	BOD; Ph; tot alk; TSS; TS; O&G; Cl2; Ca; NH3-N; NO3-N; tot-P; tot coli; fecal coli; Mg; SO2; turb; spec cond; DO	44	115
MASS. DEQE DWPC	1977	Boston Harbor wastewater discharge survey, 1976 - 1977.	Pub. No. 10324-54-50- 3-78-CR, Westborough, MA	temp; DO; pH; SO3; TKN; tot-P; tot coli; fecal coli		174
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH- 5, Quincy 1972-1981	Unpublished data, Woburn, MA	tot coli; fecal coli		128
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management: area BH-5C.1, Quincy 1974- 1981	Unpublished data, Woburn, MA	tot coli; fecal coli	725	129
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH- 6 Quincy, 1977-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	630	130

Certification to Old
Colony Yacht Club to
dredge Boston Harbor

MASS. DEQE	1973	Water Quality Certification to General Dynamics to Dredge an area in the Fore River., Quincy, MA	Unpublished data, Herbert V. Shuster, Inc.	TVS; COD; BOD; TKN; O&G; Hg; Pb; Zn	123
MASS. DEQE	1975	Water Quality Certification to Mass. Division of Waterways to Dredge in the vicinity of Squantum and Wollaston Yacht Club	Unpublished data, Tibbets Engineering Corporation	tot-P; SO4; O&G; NO2; NO3; As; Hg; Ni; Zn; Pb; Cu; Cr; Cd; V; TS; % COD; % C ; % H	80 124
MASS. DEQE - DWPC and U.S. EPA	1971	Joint status report for the third session of conference on pollution of the navigable waters of Boston Harbor and its tributaries	Boston. MA	temp; DO; BOD 5; pH; TSS; TKN; NH3- N; NO3-N; tot-P; chloride; tot coli; fecal coli	24
MASS. DEQE - DWPC, TECHNICAL SERVICES BRANCH	1982	Boston Harbor 1982 water quality survey data, wastewater discharge data	Publication No. 13044- 37 - 100-12-82-CR, Westborough, MA	temp; DO; pH; spec cond; TSS; S03; TKN; tot-P; tot coli; fecal coli; Al; As; Cd; Cr; Cu; Pb; Hg; Ni; Au; Sn; Zn; O&G; phytoplankton	1182 10
MASS. DEQE - DWPC, TECHNICAL SERVICES BRANCH	1982	Weymouth River Basin 1982 water quality survey	Publication No. 13, 069-27 -50-1 -83-CR Westborough, MA.		239 81
MASS. DEQE - DWPC, WATER QUALITY SECTION	1976	The Weymouth River Basin 1975, Part A. Water quality data: Part B, Wastewater discharge data	Westborough, MA.	DO; temp; BOD5; TS; TSS; NO3-N; NH3-N; pH; tot-P; tot alk; Cl-; fecal coli; tot coli; Chlor A; algae	24 2
MASS. DEQE - DWPC, WATER QUALITY SECTION	1976	Boston Harbor 1975 wastewater discharge data, Part B Publication No. 8845-19- 50-4-76-CR	Westborough, MA.	COD; BOD; pH; Tot alk; TSS; TKN; NH3- N; NO2-N; sett sol; NO3-N; tot-P; ortho- P; Cl-; Cu; Cr; tot coli; fecal coli; temp; O&G; %vol	35

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-8A, Quincy, 1980-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	172	152
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-8B, Quincy, 1979-1983	Unpublished data, Woburn, MA	tot coli; fecal coli		153
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analyses of shellfish from management area BH-8B, Quincy, 1981	Unpublished data, Woburn, MA	Pb; Cd; Zn; Cr; Ni; Cu; Hg	192	154
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-9, Weymouth, 1980-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	74	155
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area, BH-14, Hull, 1980-1983	Unpublished data, Woburn, MA	tot coli; fecal coli	78	156
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	PCB Analysis of shellfish from management area BH-14, Hull, 1983	Unpublished data, Woburn, MA	PCB	2	157
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-14.1, Hull, 1979-1982	Unpublished data, Woburn, MA	tot coli; fecal coli		158
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-14.2, Hull, 1982	Unpublished data, Woburn, MA	tot coli; fecal coli	45	159
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analysis of shellfish from management area BH-14.2, Hull 1979	Unpublished data, Woburn, MA	Cd; Cr; Cu; Ni; Pb; Zn; Hg	7	160

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-7, Quincy 1979-1983	Unpublished data, Woburn, MA	tot coli; fecal coli		131
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-1, Winthrop, 1979-1983	Unpublished data, Woburn, MA	tot coli; fecal coli		132
MASS. DEQE SHELLFISH SANITATION OFFICE	1981	Heavy metals analysis of shellfish from management area BH-21, Quincy, 1981	Woburn, MA	Pb; Cd; Zn; Cr; Ni; Cu; Hg	35	133
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-7.1, Quincy, 1969-1983	Unpublished data, Woburn, MA	tot coli; fecal coli		134
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform analyses of Winthrop-Logan Airport area seawater and shellfish, 1979 - 1983	Unpublished data, Woburn, MA	tot coli; fecal coli		137
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-4, Boston, 1977-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	276	138
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-5, Quincy, 1980	Unpublished data, Woburn, MA	tot coli; fecal coil		139
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management. area BH-9A.1, Hingham, 1979-1982.	Unpublished data, Woburn, MA	tot coli; fecal coli		140
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-9C, Weymouth, 1982-1983	Unpublished data, Woburn, MA	tot coli; fecal coli		141

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1/1/81-6/30/81.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; PH; DO		184
MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1980.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; pH; DO		185
MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1979.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; pH; DO		186
MASS. METROPOLITAN DISTRICT	1982	Sewerage Division Annual reports, 1973 -		effluent quality		171
COMMISSION, SEWERAGE DIVISION	1982.					
MASSACHUSETTS DEPT. OF PUBLIC HEALTH	1970	Report of the Massachusetts Department of Public Health to the Inter-Agency Task Force on the survey of the Dorchester Bay beaches.	unpublished data, Boston, MA	tot coli; fecal coli	1690	22
MCGRATH, R.A., J.A. Blake, and N. Maciolek-Blake	1982	Benthic communities in Boston Harbor in relation to the Nut Island and Deer Island sewage treatment plant	Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc., Duxbury, MA	benthos	195	23
MCLEOD, G. C.	1976	An evaluation of water quality at low tide near the mouth of the Charles River	unpublished report, Research Department, New England Aquarium, Boston, MA	temp; salinity; DO; tot coli; fecal coli		26
MENCHER, E., R.A. Copeland, and H. Payson	1968	Surficial sediments of Boston Harbor, Massachusetts	J. Sedimentary Petrology 38 (1): 76-86	grain size; tot organics		48
METCALF & EDDY, INC.	1979	Application for modification of secondary treatment requirements for its Deer Island and Nut Island treatment plants 5 vol., submitted to the U.S. EPA - Region 1	Commonwealth of Massachusetts Metropolitan District Commission, Boston, MA	POD; TSS; turb; temp; DO; pH; secci; density; sigma T; PCB; DDT; Hg; Ag; Cd; Cu; Pb	14377	51

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-15, Hingham, 1977-1982.	Unpublished data, Woburn, MA	tot coli; fecal coli; pH; tresf; tresv; NH3; NO3	231	161
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-15.1, Hingham, 1979-1981	Unpublished data, Woburn, MA	tot coli; fecal coli		162
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-16, Weymouth, 1979-1982	Unpublished data, Woburn, MA	tot coli; fecal coli		163
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analyses of shellfish from management area BH-16, Weymouth, 1980	Unpublished data, Woburn, MA	Pb; Cr; As	6	164
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-20, Hingham, 1969-1982.	Unpublished data, Woburn, MA	tot coli; fecal coli		165
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH-21, Hull, 1969-1982	Unpublished data, Woburn, MA	tot coli; fecal coli	183	166
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Heavy metals analysis of shellfish from management area BH-21, Hull, 1981	Unpublished data, Woburn, MA	Pb; Cd; Zn; Cr; Ni; Cu; Hg		167
MASS. DEQE SHELLFISH SANITATION OFFICE	1983	Total and fecal coliform content of seawater and shellfish from management area BH- 13, Hull, 1980-1983.	Unpublished data, Woburn, MA	tot coli; fecal coli	67	182
MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 1/1/82-3/31/82.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin pH		180
MASS. DIVISION OF MARINE FISHERIES	1983	Shellfish depuration plant records, 6/1/81-11/31/81.	Unpublished data, Newburyport, MA	tot coli; fecal coli; temp; turb; salin; pH		181

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
O'BRIEN AND GERE, INC.	1980	Combined sewer overflow project, Inner Harbor facilities plan, Volume II, Environmental assessment report and Appendixes.	Prepared for the Commonwealth of Massachusetts, Metropolitan District Commission	rainfall(summary); tot coli; BOD; TKN; NO2; NO3; fecal coli; salin; chlor A; Cd; Cr; Hg; Pb; Cu; Zn; TSS; COD; TOC; p; chlor organics; coli; PCB; temp; DO; benthic O2 demand; Segn(Ag; As); MOSTLY SUMMARIES	252	188
OCEAN SYSTEMS, INC.	1976	Hydrothermal studies, Mystic station - Unit no. 7	Prepared for the U.S. Environmental Protection Agency	none		173
PARKER, B.B. and B.R. Pearce	1975	The response of Massachusetts Bay to wind stress	Report No. MITSG 75-2, Massachusetts Institute of Technology Sea Grant Program Cambridge, MA	none		83
PECK ENVIRONMENTAL LABORATORY	1982	Proposed dredged sediment evaluation, Bird Island Flats and North Jetty sites	Massachusetts Port Authority	grain size; % H2O		104
PENNEY, B. and J. Kakareka	1981	Chemical evaluation of sediment from a proposed dredge site near Bird Island Flats	Harold E. Edgerton Laboratory, New England Aquarium unpublished report, Boston, MA	%, H2O; % silt&clay; % vol sol; O&G; PCB; Cd; Cr; Cu; Hg; grain size; Ni; Pb; V; Zn; As	78	107
PROCESS RESEARCH, INC.	1975	The impact of the Federal Water Pollution Control Act on the Charles River and Boston Harbor.	National Commission on Water Quality	none		170
PROCESS RESEARCH, INC.	1975	Second interim report on evaluation of Federal program for control of pollution in the Charles River and Boston Harbor.	Prepared for the National Commission on Water Quality	none		175

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
METCALF & EDDY, INC., Normandeu Assoc., and U. S. Army COE	1975	Commonwealth of Massachusetts Metropolitan District	Commission, Wastewater engineering and management plan for Boston Harbor - Eastern Massachusetts Metropolitan Area (EMMA) Study, Tech. vol. 13A - Biological Impact analysis, 133 pp.	none		82
METROPOLITAN AREA PLANNING COUNCIL	1972	Boston Harbor islands comprehensive plan	Prepared for Massachusetts Department of Natural Resources, Boston, MA	none		114
NEW ENGLAND AQUARIUM Research Department	1973	Water quality measurements of Boston Harbor	unpublished data, Boston, MA	temp; pH; DO; salinity; TSS; turb; tot coli; chlor A; NO3-N; NH3-N; NO2-N; ortho-P; tot-P; As; Be; Cd; Co; Cr; Cu; Fe; Hg; Mo; Ni; Pb; V; Zn		27
NEW ENGLAND AQUARIUM Research Department	1979	Chemical and physical characterization of Boston Harbor sediments	report to Metcalf & Eddy, Inc., Boston, MA	grain size; tot organics; Cr; Cu; Zn; Pb; Ag; Cd; Hg; PCP; DDT	190	53
NEW ENGLAND AQUARIUM, Edgerton Research Lab	1973	Algal light requirements, Final technical report.	Submitted to the Office of Naval Research, Boston, MA	relative spectral irradiance		168
NEW ENGLAND RIVER BASINS COMMISSION, COORDINATING GROUP	1970	Plan of study for a water quality management program for Boston Harbor	unpublished report	none		28
NOLAN, P.M., M.D. Bilger, and J. Paar III	1981	Draft only, chemical and biological evaluation of Boston harbor sediments	New England Regional Laboratory, U.S. Environmental Protection Agency, Lexington, MA	Cd; Hg; Pb; PCB; DDT; O&G; bioassay; bioaccumulation	18	29

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
SZCZURKO, S., JR.	1976	The Neponset River, Part 3 - Water quality analysis	Publication No. 8660-66-50-2-76-CR, Massachusetts Department of Environmental Quality Engineering	BOD; DC; NH3-N; NO3-N; tot coli		33
TCE, INC.	1973	Structural evaluations and ecological observations in Boston Harbor	presented to Commonwealth of Massachusetts Metropolitan District Commission Engineering Division	qualitative		36
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1981	Environmental assessment, maintenance dredging in Boston Harbor, Massachusetts	Waltham, MA	grain sizes; liq. limit; plastic limit; plastic index; % H2O; pH; % vol; COD; TKN; O&G; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; PCB; DDT; NO2-N; NO3-N; NH3-N; S04; tot-	222	39
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1976	Permit to U.S. Coast Guard to dredge near Point Pemberton, Hull	unpublished data, Waltham, MA	% vol; COD; TKN; O&G; Hg; Pb; Zn		86
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1981	Permit to Metropolitan District Commission to extend Pemberton Pier	unpublished data, Waltham, MA	Ag; Cd; Cr; Cu; Pb; Hg; Ni; V; Zn; NH3-N; TKN; tot-P; O&G; BOD; COD; PCB		87
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1977	Permit to dredge Allerton Harbor	unpublished data, Waltham, MA	% H2O; O&G; Ag; Cu; Cd; Ni; Cr; Pb; % vol; TKN; Zn; Hg; pH; NO2-N; NO3-N; S04; ortho-P; V		88
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1979	Permit to Bethlehem Steel to dredge Boston Shipyard	unpublished data, Waltham, MA	% H2O; % vol; TKN; O&G; tot-P; sett sol; Cd; Cr; Cu; Fe; Pb; Ni; Zn; As; Hg; COD; org-C		89
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1972	Permit to White Fuel to dredge Reserve channel, South Boston	unpublished data, Waltham, MA	% vol; COD; TKN; O&G; Hg; Pb; Zn		90

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
REINAS, C.F. and L.E. Resi	1968	Chemical and physical aspects of water quality, Charles River and Boston Harbor, Massachusetts	U.S. Dept. of the Interior, Federal Water Pollution Control Administration, Technical and Investigations Branch	temp; DO; salinity; pH; turb; color; NO3-N; org-N; NH3- N; tot-P; sol -P; tot coli; fecal coli		31
RESOURCE ANALYSIS, INC.	1976	Scientific and technical evaluation of the Environmental Protection Agency's wastewater facilities planning.	Boston case study - Phase 1, Water Quality considerations prepared for The Council on Environmental Quality, Washington, DC, Cambridge, MA,	Hg; Cd; Pb; Zn; Ni; Cu; Cr, As		45
RICE, H.V. and W.R. Patterson	1973	Experimental analysis of Boston Harbor water quality data with the model Bio-Dyn III	unpublished report, Research Department, New England Aquarium, Boston, MA	none		30
RYAN, D.K., D.A. Wayne, and J.P. Kakareka	1982	Physical and chemical characterization of bottom sediments at the North Jetty, Massport Marine Terminal, Boston Marine Industrial Park	Harold E. Edgerton Laboratory, New England Aquarium unpublished report, Boston, MA	% H2O; % silt&clay; O&G; PCB; As; Cd; Cr; Cu; Hg; Ni; % vol sol; Pb; V; Zn; PCB	68	106
SALMOND, D.A.	1971	An analysis of pesticides in Boston Harbor	M.S. Thesis, Civil Engineering Department, Northeastern University, Boston, MA 68 pp.	DDT; % vol; % H2O; grain size	27	84
SMITH, G.A., JR.	1975	The distribution and concentrations of selected metals in the Charles, Mystic, Weymouth and Neponset Rivers 131 pp.	Civil Engineering Department, Northeastern University M.S. Thesis, Boston. MA	% vol; Cd; Cr; Cu; Ni; Pb; Zn	266	102
STEWART, R.K.	1968	Biological aspects of water quality, Charles River and Boston Harbor, Massachusetts	Federal Water Pollution Control Administration, Technical Advisory and Investigations Branch Cincinnati, OH	benthos; org-C; org -N; phytoplankton; NH3-N; sol -P		32

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1979	Bulk sediment analysis: Lab series EPA. - 1 - 1 - 5	unpublished data, Waltham MA.	PCB; DDT		99
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1978	Bulk sediment analysis: Lab series 100 - 276 - 1 - 18	unpublished data, Waltham, MA	liquid limit; plastic limit; plastic index; COD; TKN; O&G; Hg; % vol; Pb; Zn; As; Cd; Cr; Cu; Ni; V; tot-C; tot- H; tot-N; grain size	249	101
U.S. COAST GUARD	1976	Certificate of an analysis for water and sediment samples taken from Point Allerton,Hull.	Unpublished data, Werby Laboratories, Inc., Boston, MA	TVS; % COD; TKN; O&G; Hg; Pb; Zn; % Hg; % Pb; % Zn	40	113
U.S. DEPARTMENT OF THE INTERIOR	1967	Summary of water quality evaluations, Boston Harbor and tributaries.		DO; tot coli		179
U.S. ENVIRONMENTAL PROTECTION AGENCY	1971	Conference in the matter of pollution of the navigable waters of Boston Harbor and its tributaries, Massachusetts, Third session, 27 October 1971	Boston, MA	none		34
U.S. ENVIRONMENTAL PROTECTION AGENCY	1971	Interim report on combined sewer overflows in Boston Harbor New England River Basins Commission	Boston, MA	BOD; tot coli; flow		47
U.S. ENVIRONMENTAL PROTECTION AGENCY	1975	Boston Harbor-Quincy Bay study	Unpublished data	tot coli; fecal coli; temp; salinity	46	117
U.S. ENVIRONMENTAL PROTECTION AGENCY	1981	Personal communication re: Maintenance Dredging of Mystic and Chelsea Rivers and President Roads Anchorage, Boston Harbor,MA.	Unpublished data, U.S. Army Corps of Engineers	NO2; NO3; NH3; SO4; O&G; Ortho-P; Tot-P; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; PCB; DDT; Cd+		119

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1974	Permit to Massport to dredge by Castle Island Terminal	unpublished data, Waltham, MA	TKN; % vol; O&G; COD; Hg; Pb; Zn; Fe; Cd; Cu; Cr; As; Ni; V; tot -C; org -C; inorg-C		91
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1975	Permit to dredge Quincy Bay near the Wollaston and Squantum Yacht Clubs	unpublished data, Waltham, MA.	temp; PO4-P; SO4; O&G; NO2-N; NO3-N; As; Hg; Ni; Zn; Pb; Cu; Cr; Cd; V; COD; tot-C; tot-H; % H2O		92
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1981	Elutriate testing	unpublished data, Waltham, MA	NO2-N; NO3-N; NH3-N; SO4; O&G; ortho-P; tot-P; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; PCB; DDT		93
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1980	Bulk sediment analysis: Lab series 100 - 323	unpublished data, Waltham, MA	liq lim; plastic limit; plastic index; grain size% H2O; % vol; COD; TKN; O&G; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; Ag; V; tot-C; tot-H; tot-N		94
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1980	Bulk sediment analysis: Lab series 100 - 3 16 - 1,2,4,5	unpublished data, Waltham MA	liq limit; plastic limit; plastic index; %vol; COD; O&G; Hg; Pb; Zn; As; Cd; Cu; Fe; Ni; Co; V; tot-C; tot-H; tot-N; grain size		95
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1972	Bulk sediment analysis: Lab series 100 - 88 - 1 - 20	unpublished data, Waltham, MA	liquid limit; plastic limit; plastic index; COD; TKN; O&G; % vol; Hg; Pb; Zn; As; Cd; Cr; Cu; Ni; V; PCB; DDT; grain size	335	96
U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION	1975	Bulk sediment analysis: Lab series 100 - 218 - 2 - 27	unpublished data, Waltham, MA	liquid limit; plastic limit; plastic index; TKN; O&G; Hg; Pb; % vol; Zn; As; Cd; Cr; Cu; Ni; V; tot-C; tot-H; tot-N; PCB; DDT	473	97

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
[unknown]					5	191
[unknown]					4	192
[unknown]						193
[unknown]						194
[unknown]						195
[unknown]					56	196
[unknown]					80	197
[unknown]					1135	198
[unknown]					56	199
[unknown]						200
[unknown]						201
[unknown]						202
[unknown]					96	203
[unknown]					57	204
[unknown]					153	205
[unknown]						206
[unknown]					21	207
[unknown]					30	208
[unknown]					106	209

Author(s)	Year	Title	Source	Parameters	Total records	Ref. #
WHITE, R.J., JR.	1972	The distribution and concentrations of selected metals in Boston Harbor sediments	Civil Engineering Department, Northeastern University, M.S. Thesis, Boston, MA	% vol; Cd; Cr; Cu; Hg; Ni; Pb; Zn	1009	37
WILLIAMS, J.A.	1980	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities,, Final report on Task V - Plankton	Report No. 14926-C 24 pp., Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc. Duxbury, MA		10	55
WILLIAMS, J.A.	1980	Marine environmental study of the Nut Island and Deer Island sewerage treatment facilities,, Final report on Task II - Demersal fish	Report No. 14926-A 25 pp., Battelle Columbus Laboratories, William F. Clapp Laboratory prepared for Metcalf & Eddy, Inc. Duxbury, MA	demersal fish	104	57
WINTHROP DEPARTMENT OF PUBLIC HEALTH	1983	Records of bacterial content at Winthrop town beaches.	Unpublished data, Winthrop, MA	tot coli; fecal coli	764	187
WONG, EDWARD	1983	Heavy metal concentrations in sediments and clams from Boston Harbor, 1974 - 1976	unpublished data, Lexington, MA		38	105
[unknown]					51	142
[unknown]						143
[unknown]					14	144
[unknown]					117	145
[unknown]						146
[unknown]					538	147
[unknown]					14	148
[unknown]						149
[unknown]						150
[unknown]						151
[unknown]					8623	190

AGENCY2 (4 letter code) (continued)

- * M&E Metcalf & Eddy
- * NEA New England Aquarium
- * NU Northeastern University
- * PERI Perini Corporation
- * WHOI Woods Hole Oceanographic Institution

LAB (4 letter code)

- * AGRN Arnold Greene Testing Laboratories, Inc.
- * BATT Battelle, New England
- BOST City of Boston
- * BRIG [?]
- CAA Cambridge Analytical Associates
- * CABT Cabot Corp.
- * CATC Cat Cove Marine Lab (DMF)
- CDM Camp, Dresser & McKee
- * DITP Deer Island Treatment Plant
- GDC Guild Drilling Co.
- LEX U.S. EPA -- Region I, Lexington lab
- ERCO Energy Resources Company
- FDAB FDA -- Boston District Office
- * FWPC Federal Water Pollution Control Administration
- * GCA GCA Corporation
- * JMCA Jason M. Cortell and Associates
- * LAP Lapuck laboratory
- * LES Lawrence Experiment Station (DEQE)
- * LYCO Lycott Environmental Research, Inc.
- * MDC Metropolitan District Commission
- * MDPH Massachusetts Department of Public Health
- M&E Metcalf & Eddy
- * MRI Marine Research Institute
- * NEA New England Aquarium
- * O&G O'Brien and Gere, Inc.
- * OLIV [?]
- * REIL Reilly Laboratories
- * SHUS Herbert V. Shuster, Inc.
- * TIBB Tibbets Engineering
- USCG U.S. Coast Guard
- VERS Versar
- * WERB Werby Laboratories
- WHOI Woods Hole Oceanographic Institution
- * WQL [?]

TYPE (6 letter code) [In the USGS revision, this is divided into two 3 letter columns]

Sample type

(for aquatic biota the code is AQB plus first letter of genus and first two letters of species)

- * AQB Aquatic biota (unidentified type)
- AQBAIR Argopencen irradians (Bay scallop)
- AQBARO Anguilla rostrata (American eel)
- AQBCAM Cerianthus americanus (polychaete)
- AQBCCA Callinectes sapidus (Blue Crab)
- AQBCST Centropristis striata (Black seabass)
- AQBCCI Crassostrea virginica (American oyster)
- AQBGED Geukensia demissa (Ribbed mussel)

Table III List of Codes used with the Boston Harbor Data Management File (BHDMF) in the original format compiled by Metcalf and Eddy, Inc.

FIELD NAME
 CODE Explanation * = Code present in file [if blank, no records contain the code]

NUMBER (5 digit number, plus 1 letter, if necessary)
 M&E sample number plus subscript for replicate samples

REF (4 number code)
 Reference number (same as in DOMAIN REFS)

AGENCY1 (4 letter code)

The agency responsible for the administration of the study

- * ACE Army Corps of Engineers
- * BETH Bethlehem Steel Corporation
- * BED Boston Edison
- CDM Camp, Dresser & McKee
- CZM Massachusetts Office of Coastal Zone Management
- * DEQE Department of Environmental Quality Engineering (Massachusetts)
- * DMF Division of Marine Fisheries
- * DWPC Mass. DEQE - Division of Water Pollution Control
- * EPA U.S. Environmental Protection Agency -- Region I
- FDA U.S. Food and Drug Administration
- * FWPC Federal Water Pollution Control Administration
- * HING Town of Hingham, Massachusetts
- * HULL Town of Hull, Massachusetts
- * MASP Massachusetts Port and Drug Administration
- * MASS Commonwealth of Massachusetts
- * MDEQ Massachusetts Department of Environmental Quality Engineering [?]
- * MDC Metropolitan District Commission
- * MDPH Massachusetts Department of Public Health
- * MDPW Massachusetts Department of Public Works
- * MIT M.I.T. Sea Grant
- NERB New England River Basins Commission
- * NU Northeastern University
- PITT Pittston Petroleum, Inc.
- * QUIN City of Quincy, Massachusetts
- * SIC Simmons College
- * USCG U.S. Coast Guard
- * USDT U.S. Department of Transportation
- WHOI Woods Hole Oceanographic Institution
- * WINT Town of Winthrop, Massachusetts
- * WTF White Fuel Corporation

AGENCY2 (4 letter code)

The contracted agency (left blank if not applicable)

- * CDM Camp, Dresser & McKee
- * CHI Childs Engineering
- * DGA David Gordon Associates, Inc.
- * ERCO Energy Resources Co.
- * FST Fay, Spofford and Thorndike
- * GSC General Sciences Corporation
- * HALL Hall Brothers Corporation
- * JMCA Jason M. Cortell and Associates

Waste (WST)		
	ASH	Ash
	GRT	Grit
*	IWW	Industrial wastewater - in process
*	IWE	Industrial wastewater effluent
	WWR	Wastewater - in process
*	WWE	Wastewater effluent
*	SLG	Sludge
	SWS	Solid waste
*	CSO	Combined sewer overflow - effluent
*	POI	Miscellaneous point source

Water (WTR)		
	RDW	Raw drinking water
	COO	Cooling water
	GWR	Groundwater
*	COL	Water column
*	PAR	Water column - particulate phase
*	SOL	Water column - soluble phase
*	ITS	Interstitial water

Aquatic biota (AQB)		
*	FLE	Flesh
*	VIS	Viscera
*	WHO	Whole organism (without shell)
	MIS	Miscellaneous

AREA (3 letter code)

Descriptive location in the Boston Harbor area		
*	AAS	[?]
*	WER	Weir River
*	WBR	Weymouth Back River
*	WFB	[?]
*	WFR	Weymouth Fore River
*	HIB	Hingham Bay
*	QUB	Quincy Bay
*	NER	Neponset River
*	DOB	Dorchester Bay
*	BIH	Boston Inner Harbor
*	LDF	Logan Airport, Deer Island Flats
*	NAR	Nantasket Road
*	MAB	Massachusetts Bay
*	OOP	Out of project area
*	MBE	[?]
*	SER	[?]
*	SFR	[?]

LAT (6 digit number, ddmss) latitude (degrees minutes seconds, North)
[In the USGS revision, these are converted to decimal degrees]

LONG (6 digit number, ddmss) longitude (degrees minutes seconds, West)
[In the USGS revision, these are converted to decimal degrees, minus(-) values for west longitude]

TYPE (6 letter code) (continued)

*	AQBGMO	Gadus morhua (Atlantic cod)
*	AQBHAM	Homarus americanus (american lobster)
*	AQBLFE	Limanda ferruginea (Yellowtail flounder)
	AQBLPE	Loligo peali (Long-finned squid)
*	AQBMAR	Mya arenaria (Softshell clam)
	AQBMBI	Merluccius bilinearis (Silver hake)
	AQBMCA	Mustelus canis (Smooth dogfish)
*	AQBMED	Mytilus edulis (Blue mussel)
	AQBMIS	Aquatic biota (unidentified type)
	AQBMME	Mercenaria mercenaria (quahog)
	AQBMSA	Morone saxatilis (Striped bass)
	AQBNVI	Nereis virens (Clam worm)
*	AQBNEP	Nephtids
	AQBNIN	Nephtys incisa (Shimmy Worm)
	AQBNTA	Neopanope texana (Mud crab)
	AQBOMO	Osmerus mordax (American smelt)
*	AQBPAM	Pseudopleuronectes americanus (Winter flounder)
	AQBPCA	Princnotus carolinus (SEA robin)
	AQBPDE	Paralichthys dentatus (Summer flounder or Fluke)
	AQBPOB	Paralichthys oblongus (Pourspot flounder)
	AQBPPU	Palaemonetes pugio (Glass shrimp)
	AQBPSA	Pomatomus saltatrix (Bluefish)
	AQBPTR	Peprilus triacanthus (Butterfish)
*	AQBPVI	Pollachius virens (Pollock)
	AQBRER	Raja erinacae (little skate)
	AQBSAQ	Scophthalmus aquosus (Windowpane)
	AQBSCH	Stenotomus chrysops (Scup)
	AQBTAD	Tautoglabrus adspersus (cunner)
	AQBTON	Tautoga onitus (Tautog)
	AQBUCH	Urophycis chuss (Red hake)
*	AIR	Air
*	BEN	Benthic community
*	PHY	Phytoplankton community
*	ZOO	Zooplankton community
*	FSH	Fish community
*	SED	Sediment
*	SEDELU	Sediment elutriates
	SEDEPT	Sediment - EP Toxicity
	SOI	Soil
*	WST	Waste including waste water
	WSTEPT	Waste - EP Toxicity
*	WTR	Water
	MIS	Miscellaneous

SOURCE (3 letter code)

AIR	Air
AMB	Ambient air
EMI	Air emissions (at source)
UPW	Upwind of source
DNW	Downwind of source

Physical (PHYS) (continued)

* TEMP	Temperature
TRASK	Trask sorting coefficient
* TURB	Turbidity
VOLUM	Volume

Metals (METL)

* AL	Aluminum
* SB	Antimony
* AS	Arsenic
BA	Barium
* BE	Beryllium
BI	Bismuth
* CD	Cadmium
* CR	Chromium
* CO	Cobalt
* CU	Copper
* FE	Iron
* PB	Lead
* MG	Magnesium
* HG	Mercury
* NI	Nickel
* SE	Selenium
* AG	Silver
* TL	Thallium
* SN	Tin
* U	Uranium
* V	Vanadium
* ZN	Zinc

Chemical (CHEM)

* ALK	Alkalinity
* CA	Calcium
* CHLO	Chloride
* CO2	Carbon dioxide
* CO3	Carbonate
* H	Hydrogen
* PH	pH
REDOX	Redox potential
* SO2	Sulfide
SO3	Sulfite
* SO4	Sulfate
* TIC	Total inorganic carbon
* TOC	Total organic carbon
* TOTC	Total carbon
VOLAC	Volatile acids

Oxygen-demand (OXYG)

* BOD	Biochemical oxygen demand (unspecified)
* BOD5	5-days Biochemical oxygen demand
BODU	Ultimate biochemical oxygen demand
* COD	Chemical oxygen demand
* DO	Dissolved oxygen
* IDOD	Immediate dissolved oxygen demand

DEPTH (5 digit number,XXX.XX)

Depth of sample, in meters
depth of water, if water column sample
999.99 if unknown, 0 if surface sample [In the USGS revision, converted to "Surface"]
depth of core, if sediment sample
999.99 if grab sample [In the USGS revision, converted to "Grab Sample"]
2 depths if range, as for core sample
(depth of water above a sediment sample goes in comments)

SAMP.DATE (6 digit number, mmddyy)

Use year (eg.____78) of analysis if date of collection is unknown
[In the USGS revision, The date is divided into separate columns of Month, Day, and Year]

TIME (4 digit number, hhmm)

In military Eastern Standard Time (hour:minute)

TIDE (5 mixed characters)

Time of tide in the hours from slack tide

- * SEB slack, ebb begins (high tide)
- * SEB+n slack, ebb begins plus "n" hours ("n" hours after high tide -- ebbing tide)
- * SEB+ ebbing tide, but number of hours past high tide is unknown)
- * SFB slack, flood begins (low tide)
- * SFB+n slack, flood begins plus "n" hours ("n" hours after low tide -- flooding tide)
- * SFB+ flooding tide, but number of hours past low tide is unknown

PARAM-TYPE (4 letter code)

Parameter type

- * PHYS Physical
- * CHEM Chemical
- * METL Metals
- * OXYG Oxygen demand
- * NUTR Nutrients
- * RADl Radioactivity
- * SOIL Solids
- * ECOL Ecological community analysis
- * BACT Bacteriological
- * PEST Pesticides, hydrocarbons, PCBs, etc.
- * MISC Miscellaneous

PARAMETER (PARAM-TYPE) (5 mixed-character code)

Parameter

Physical (PHYS)

- * COLOR Color
- * FINES Fines
- * GRNSZ Mean grain size
- LIQL liquid limit
- MOIS Moisture
- PLASI Plastic index
- PLASL Plastic limit
- * SALIN Salinity
- * SCO Specific conductance
- * SECCH Secchi disc
- * SIGT Sigma T
- * S&C Silt and clay

Solids (SOLI) (continued)

	TFNR	Total fixed nonfilterable residue
*	ORGC	Organic carbon
	TRES	Total residue
*	TS	Total solids
*	TRESF	Total residue - fixed
*	TRFSV	Total residue - volatile
*	TNR	Total nonfilterable residue
	TVNR	Total volatile nonfilterable residue
*	TVS	Total volatile solids

Nutrients (NUTR)

*	N	Total nitrogen
*	NO2	Nitrite nitrogen
*	NO3	Nitrate nitrogen
*	NH3	Ammonia nitrogen
*	ORGN	Organic nitrogen
*	ORTHF	Ortho-phosphate
*	PO4	Phosphate
*	SI	Silicon
*	SIO3	Silicate
	SOLUP	Soluble phosphorus
*	TKN	Total Kjeldahl nitrogen
*	TOTP	Total phosphorus

Radioactivity (RADI)

	PB210	Lead 210
	RA226	Radium 226
*	RAD	Radioactivity (total)
	SR90	Strontium 90

Misc.

*	CHLRA	Chlorophyll a
*	LIP	Lipids
*	ORG	Organic
*	O&G	Oil & grease
*	TRANS	[?]

CONC (13 digit number, XXXXXXXX.XXXXXX)

UNITS (8 mixed characters)

*	<blank>	No units (or non-detectable)
*	%	Percent
*	% DW	Percent dry weight
	0.054 M2	Number (of organisms) per 0.054 square meters
*	0.085 M2	Number (of organisms) per 0.085 square meters
*	0.147 M2	Number (of organisms) per 0.147 square meters
	1.0 M3	Number (of organisms) per 1.0 cubic meters
*	BU/AC	Bushels per acre
*	C	Degrees Celcius
*	CM	Centimeters
*	COL	Coliforms per 100 milliliters
	CPM	Counts per minute
*	FTU	Formazin polymer turbidity units
*	G/CM3	Grams per cubic centimeter

Pesticides, etc. (PEST)

*	ALDE	Aldrin
*	AROXY	Aromatic hydrocarbons
*	ABHC	Alpha-BHC
*	BBHC	Beta-BHC
*	CBHC	Gamma-BHC
*	DBHC	Delta-BHC
*	CHLOR	Chlordane
*	DDD	DDD
*	DDE	DDE
*	DDT	DDT
*	DIEL	Dieldrin
*	ENDI	Endosulfan I
*	ENDII	Endosulfan II
*	ENDS	Endosulfan sulfate
*	ENDR	Endrin
*	ENDRA	Endrin aldehyde
*	MALA	Malathion
	METHC	Methoxychlor
*	LIND	Lindane
*	HEPTA	Heptachlor
*	HEPTE	Heptachlor-epoxide
*	PARA	Parathion
*	TOXA	Toxaphene
*	TPEST	Total pesticides
*	PCB__	Polychlorinated biphenyls (with number to designate, e.g. PCB54 = Aroclor)
	PETHY	Petroleum hydrocarbons
*	CLHY	Unspecified chlorinated hydrocarbons
*	HYDRC	Unspecified hydrocarbons

Ecological (ECOL)

*	DENS	Density
*	DIVER	Diversity [?]
*	DOMIN	Dominance
*	EVEN	Evenness
	PHYTO	Phytoplankton
	PLANK	Plankton
	PROT	Protistids (protozoa)
*	RICH	Species richness
*	SWDIV	Shannon-Wiener diversity

Bacteriological (BACT)

*	FSTRP	Fecal streptococcus
*	FCOLI	Fecal coliform
*	TCOLI	Total coliform
*	COLIC	Coliform colony
*	SPC	Standard plate count
*	TBACT	Total bacteria (Standard plate count)

Solids (SOLI)

*	VSOL	Volatile solids, EPA (or unknown method)
*	VSOLN	Volatile solids, NED
*	TSS	Total suspended solids
*	SETT	Settleable solids

SOLIDS (2 digit number,XX)
as percent

COMMENTS (35 mixed characters)
for important, nonredundant information only, e.g. depth of water above a sediment sample,
e.g. composite information
[In USGS revision, corrections and questions shown in square brackets □]

ORNO (10 mixed characters)
original sample number

ORLA (10 mixed characters)
original lab number

ORSTA (10 mixed characters)
original station number

EXTRA (10 blanks)
for internal storage only (blank)

UNITS (8 mixed characters) (continued)

*	G/L	Grams per liter
*	JCU	Jackson candle units
	JTU	Jackson turbidity units
	KG/L	Kilograms per liter
*	M	Meters
*	MF	Millipore filter counts per 100 milliliters
	MF/ML	Millipore filter counts per milliliters
*	MG/G	Milligrams per gram
*	MG/G DW	Milligrams per gram dry weight
*	MG/KG	Milligrams per kilogram
*	MG/KG DW	Milligrams per kilogram dry weight
*	MG/KG WW	Milligrams per kilogram wet weight
*	MG/L	Milligrams per liter
	MG/M3	Milligrams per cubic meter
	ML/100 ML	Milliliters per 100 Milliliters
*	ML/L	Milliliters per liter
*	MM	millimeters
*	MPN	Most probable number per 100 milliliters
	MPN/ML	Most probable number per milliliters
*	MR/HR	Millirads per hour
	NG/G	Nanograms per gram
*	NG/G DW	Nanograms per gram dry weight
	NG/M3	Nanograms per cubic meter
*	NTU	Nephelometer turbidity units
*	PPB	Parts per billion
*	PPB DW	Parts per billion dry weight
	PPB WW	Parts per billion wet weight
*	PPM	Parts per million
*	PPM DW	Parts per million dry weight
*	PPM SIO2	Parts per million silicon dioxide (SiO2) (turbidity)
*	PPM WW	Parts per million wet weight
*	PPT	Parts per thousand
*	PPT DW	Parts per thousand dry weight
	PT-CO	Platinum-Cobalt units (color)
*	SPC/G	Standard plate count per gram
*	SPC/ML	Standard plate count per milliliter
*	UG/G	Micrograms per gram
*	UG/G DW	Micrograms per gram dry weight
*	UG/KG	Micrograms per kilogram
*	UG/L	Micrograms per liter
*	UMHO/CM	Micromohs per centimeters
*	UM/L	Micromoles per liter
*	[?]/100 ML	[?]

QUAL (1 character)

*	>	Greater than
*	<	Less than (detection limit)
*	N	Not detectable (detection limit unknown)
*	T	Trace
*	K	Questionable (Storet data only)
*	-	Below zero (temperature only)

DETECTION-LIMIT (8 digit number)

detection limit (with qual = "<")

Code	Column	Explanation	* = Used in BHD MF
AQBPOB	TYPE	Paralichthys oblongus (Pourspot flounder)	
AQBPPU	TYPE	Palaemonetes pugio (Glass shrimp)	
AQBPSA	TYPE	Pomatomus saltatrix (Bluefish)	
AQBPTR	TYPE	Peprilus triacanthus (Butterfish)	
AQBPMI	TYPE	Pollachius virens (Pollock)	*
AQBRER	TYPE	Raja erinacae (little skate)	
AQBSAQ	TYPE	Scophthalmus aquosus (Windowpane)	
AQBSCH	TYPE	Stenotomus chrysops (Scup)	
AQBTAD	TYPE	Tautoglabrus adspersus (cunner)	
AQBTON	TYPE	Tautoga onitus (Tautog)	
AQBUCB	TYPE	Urophycis chuss (Red hake)	
ARO	Species	Anguilla rostrata (American eel)	
AROHY	PEST	Aromatic hydrocarbons	*
AS	METL	Arsenic	*
ASH	WST	Ash	
BA	METL	Barium	
BACT	TYPE	Bacteriological	*
BATT	LAB	Battelle, New England	*
BBHC	PEST	Beta-BHC	*
BE	METL	Beryllium	*
BED	AGENCY1	Boston Edison	*
BEN	TYPE	Benthic community	*
BETH	AGENCY1	Bethlehem Steel Corporation	*
BI	METL	Bismuth	
BIH	AREA	Boston Inner Harbor	*
BOD	OXYG	Biochemical oxygen demand (unspecified)	*
BOD5	OXYG	5-days Biochemical oxygen demand	*
BODU	OXYG	Ultimate biochemical oxygen demand	
BOST	LAB	City of Boston	
BRIG	LAB	[?]	*
BU/AC	UNITS	Bushels per acre	*
C	UNITS	Degrees Celcius	*
CA	CHEM	Calcium	*
CAA	LAB	Cambridge Analytical Associates	
CABT	LAB	Cabot Corp.	*
CAM	Species	Cerianthus americanus (polychaete)	
CATC	LAB	Cat Cove Marine Lab (DMF)	*
CBHC	PEST	Gamma-BHC	*
CD	METL	Cadmium	*
CDM	AGENCY1	Camp, Dresser & McKee	
CDM	AGENCY2	Camp, Dresser & McKee	*
CDM	LAB	Camp, Dresser & McKee	
CHEM	TYPE	Chemical	*

Table IV Alphabetical Index of Codes

Code	Column	Explanation	* = Used in BHD MF
<blank>	UNITS	No units (or non-detectable)	*
AAS	AREA	[?]	*
ABHC	PEST	Alpha-BHC	*
ACE	AGENCY1	Army Corps of Engineers	*
AG	METL	Silver	*
AGRN	LAB	Arnold Greene Testing Laboratories, Inc.	*
AIR	SOURCE	Air	
AIR	Species	Argopencten irradians (Bay scallop)	
AIR	TYPE	Air	*
AL	METL	Aluminum	*
ALDE	PEST	Aldrin	*
ALK	CHEM	Alkalinity	*
AMB	SOURCE	Ambient air	
AQB	TYPE	Aquatic biota (unidentified type)	*
AQBAIR	TYPE	Argopencten irradians (Bay scallop)	
AQBARO	TYPE	Anguilla rostrata (American eel)	
AQBCAM	TYPE	Cerianthus americanus (polychaete)	
AQBCSA	TYPE	Callinectes sapidus (Blue Crab)	
AQBCST	TYPE	Centropristis striata (Black seabass)	
AQBCVI	TYPE	Crassostrea virginica (American oyster)	
AQBGED	TYPE	Geukensia demissa (Ribbed mussel)	
AQBGMO	TYPE	Gadus morhua (Atlantic cod)	*
AQBHAM	TYPE	Homarus americanus (american lobster)	*
AQBLFE	TYPE	Limanda ferruginea (Yellowtail flounder)	*
AQBLPE	TYPE	Loligo peali (Long-finned squid)	
AQBMAR	TYPE	Mya arenaria (Softshell clam)	*
AQBMBI	TYPE	Merluccius bilinearis (Silver hake)	
AQBMCA	TYPE	Mustelus canis (Smooth dogfish)	
AQBMED	TYPE	Mytilus edulis (Blue mussel)	*
AQBMIS	TYPE	Aquatic biota (unidentified type)	
AQBMME	TYPE	Mercenaria mercenaria (quahog)	
AQBMSA	TYPE	Morone saxatilis (Striped bass)	
AQBNEP	TYPE	Nephtids	*
AQBNIN	TYPE	Nephtys incisa (Shimmy Worm)	
AQBNTS	TYPE	Neopanope texana (Mud crab)	
AQBNVI	TYPE	Nereis virens (Clam worm)	
AQBOMO	TYPE	Osmerus mordax (American smelt)	
AQB PAM	TYPE	Pseudopleuronectes americanus (Winter flounder)	*
AQBPCA	TYPE	Princnotus carolinus (SEA robin)	
AQB PDE	TYPE	Paralichthys dentatus (Summer flounder or Fluke)	

Code	Column	Explanation	* = Used in BHD MF
ENDRA	PEST	Endrin aldehyde	*
ENDS	PEST	Endosulfan sulfate	*
EPA	AGENCY1	U.S. Environmental Protection Agency -- Region I	*
ERCO	AGENCY2	Energy Resources Co.	*
ERCO	LAB	Energy Resources Company	
EVEN	ECOL	Evenness	*
FCOLI	BACT	Fecal coliform	*
FDA	AGENCY1	U.S. Food and Drug Administration	
FDAB	LAB	FDA -- Boston District Office	
FE	METL	Iron	*
FINES	PHYS	Fines	*
FLE	AQB	Flesh	
FSH	TYPE	Fish community	*
FST	AGENCY2	Fay, Spofford and Thorndike	*
FSTRP	BACT	Fecal streptococcus	*
FTU	UNITS	Formazin polymer turbidity units	*
FWPC	AGENCY1	Federal Water Pollution Control Administration	*
FWPC	LAB	Federal Water Pollution Control Administration	*
G/CM3	UNITS	Grams per cubic centimeter	*
G/L	UNITS	Grams per liter	*
GCA	LAB	GCA Corporation	*
GDC	LAB	Guild Drilling Co.	
GED	Species	Geukensia demissa (Ribbed mussel)	
GMO	Species	Gadus morhua (Atlantic cod)	*
GRNSZ	PHYS	Mean grain size	*
GRT	WST	Grit	
GSC	AGENCY2	General Sciences Corporation	*
GWR	WTR	Groundwater	
H	CHEM	Hydrogen	*
HALL	AGENCY2	Hall Brothers Corporation	*
HAM	Species	Homarus americanus (american lobster)	*
HEPTA	PEST	Heptachlor	*
HEPTE	PEST	Heptachlor-epoxide	*
HG	METL	Mercury	*
HIB	AREA	Hingham Bay	*
HING	AGENCY1	Town of Hingham, Massachusetts	*
HULL	AGENCY1	Town of Hull, Massachusetts	*
HYDRC	PEST	Unspecified hydrocarbons	*
IDOD	OXYG	Immediate dissolved oxygen demand	*
ITS	WTR	Interstitial water	
IWE	WST	Industrial wastewater effluent	
IWW	WST	Industrial wastewater - in process	
JCU	UNITS	Jackson candle units	*
JMCA	AGENCY2	Jason M. Cortell and Associates	*

Code	Column	Explanation	* = Used in BHDMP
CHI	AGENCY2	Childs Engineering	*
CHLO	CHEM	Chloride	*
CHLOR	PEST	Chlordane	*
CHLRA	MISC	Chlorophylla	*
CLHY	PEST	Unspecified chlorinated hydrocarbons	*
CM	UNITS	Centimeters	*
CO	METL	Cobalt	*
CO2	CHEM	Carbon dioxide	*
CO3	CHEM	Carbonate	*
COD	OXYG	Chemical oxygen demand	*
COL	UNITS	Coliforms per 100 milliliters	*
COL	WTR	Water column	
COLIC	BACT	Coliform colony	*
COLOR	PHYS	Color	*
COO	WTR	Cooling water	
CPM	UNITS	Counts per minute	
CR	METL	Chromium	*
CSA	Species	Callinectes sapidus (Blue Crab)	
CSO	WST	Combined sewer overflow - effluent	
CST	Species	Centropristis striata (Black seabass)	
CU	METL	Copper	*
CVI	Species	Crassostrea virginica (American oyster)	
CZM	AGENCY1	Massachusetts Office of Coastal Zone Management	
DBHC	PEST	Delta-BHC	*
DDD	PEST	DDD	*
DDE	PEST	DDE	*
DDT	PEST	DDT	*
DENS	ECOL	Density	*
DEQE	AGENCY1	Department of Environmental Quality Engineering (Massachusetts)	*
DGA	AGENCY2	David Gordon Associates, Inc.	*
DIEL	PEST	Dieldrin	*
DITP	LAB	Deer Island Treatemt Plant	*
DIVER	ECOL	Diversity [?]	*
DMP	AGENCY1	Division of Marine Fisheries	*
DNW	SOURCE	Downwind of source	
DO	OXYG	Dissolved oxygen	*
DOB	AREA	Dorchester Bay	*
DOMIN	ECOL	Dominance	*
DWPC	AGENCY1	Mass. DEQE - Division of Water Pollution Control	*
ECOL	TYPE	Ecological community analysis	*
EMI	SOURCE	Air emissions (at source)	
ENDI	PEST	Endosulfan I	*
ENDII	PEST	Endosulfan II	*
ENDR	PEST	Endrin	*

Code	Column	Explanation	* = Used in BHDMP
MIS	AQB	Miscellaneous	
MIS	Species	Aquatic biota (unidentified type)	
MIS	TYPE	Miscellaneous	
MISC	TYPE	Miscellaneous	*
MIT	AGENCY1	M.I.T. Sea Grant	*
ML/100 ML	UNITS	Milliliters per 100 Milliliters	
ML/L	UNITS	Milliliters per liter	*
MM	UNITS	millimeters	*
MMB	Species	Mercenaria mercenaria (quahog)	
MOIS	PHYS	Moisture	
MPN	UNITS	Most probable number per 100 milliliters	*
MPN/ML	UNITS	Most probable number per milliliters	
MR/HR	UNITS	Millirads per hour	*
MRI	LAB	Marine Research Institute	*
MSA	Species	Morone saxatilis (Striped bass)	
N	NUTR	Total nitrogen	*
N	QUAL	Not detectable (detection limit unknown)	*
NAR	AREA	Nantasket Road	*
NEA	AGENCY2	New England Aquarium	*
NEA	LAB	New England Aquarium	*
NEP	Species	Nephtids	*
NER	AREA	Neponset River	*
NERB	AGENCY1	New England River Basins Commission	
NG/G	UNITS	Nanograms per gram	
NG/G DW	UNITS	Nanograms per gram dry weight	*
NG/M3	UNITS	Nanograms per cubic meter	
NH3	NUTR	Ammonia nitrogen	*
NI	MBTL	Nickel	*
NIN	Species	Nephtys incisa (Shimmy Worm)	
NO2	NUTR	Nitrite nitrogen	*
NO3	NUTR	Nitrate nitrogen	*
NTE	Species	Neopanope texana (Mud crab)	
NTU	UNITS	Nephelometer turbidity units	*
NU	AGENCY1	Northeastern University	*
NU	AGENCY2	Northeastern University	*
NUTR	TYPE	Nutrients	*
NVI	Species	Nereis virens (Clam worm)	
O&G	LAB	O'Brien and Gere, Inc.	*
O&G	MISC	Oil & grease	*
OLIV	LAB	[?]	*
OMO	Species	Osmerus mordax (American smelt)	
OOP	AREA	Out of project area	*
ORG	MISC	Organic	*
ORGC	SOLI	Organic carbon	*

Code	Column	Explanation	* = Used in BHD MF
JMCA	LAB	Jason M. Cortell and Associates	*
JTU	UNITS	Jackson turbidity units	
K	QUAL	Questionable (Steret data only)	*
KG/L	UNITS	Kilograms per liter	
LAP	LAB	Lapuck laboratory	*
LDF	AREA	Logan Airport, Deer Island Flats	*
LES	LAB	Lawrence Experiment Station (DEQE)	*
LEX	LAB	U.S. EPA -- Region I, Lexington lab	
LFE	Species	Limanda ferruginea (Yellowtail flounder)	*
LIND	PEST	Lindane	*
LIP	MISC	Lipids	*
LIQL	PHYS	liquid limit	
LPE	Species	Loligo peali (Long-finned squid)	
LYCO	LAB	Lycott Environmental Research, Inc.	*
M	UNITS	Meters	*
M&E	AGENCY2	Metcalf & Eddy	*
M&E	LAB	Metcalf & Eddy	
MAB	AREA	Massachusetts Bay	*
MALA	PEST	Malathion	*
MAR	Species	Mya arenaria (Softshell clam)	*
MASP	AGENCY1	Massachusetts Port and Drug Administration	*
MASS	AGENCY1	Commonwealth of Massachusetts	*
MBE	AREA	[?]	*
MBI	Species	Merluccius bilinearis (Silver hake)	
MCA	Species	Mustelus canis (Smooth dogfish)	
MDC	AGENCY1	Metropolitan District Commission	*
MDC	LAB	Metropolitan District Commission	*
MDEQ	AGENCY1	Massachusetts Department of Environmental Quality Engineering [?]	*
MDPH	AGENCY1	Massachusetts Department of Public Health	*
MDPH	LAB	Massachusetts Department of Public Health	*
MDPW	AGENCY1	Massachusetts Department of Public Works	*
MED	Species	Mytilus edulis (Blue mussel)	*
METHC	PEST	Methoxychlor	
METL	TYPE	Metals	*
MF	UNITS	Millipore filter counts per 100 milliliters	*
MF/ML	UNITS	Millipore filter counts per milliliters	
MG	METL	Magnesium	*
MG/G	UNITS	Milligrams per gram	*
MG/G DW	UNITS	Milligrams per gram dry weight	*
MG/KG	UNITS	Milligrams per kilogram	*
MG/KG DW	UNITS	Milligrams per kilogram dry weight	*
MG/KG WW	UNITS	Milligrams per kilogram wet weight	*
MG/L	UNITS	Milligrams per liter	*
MG/M3	UNITS	Milligrams per cubic meter	

Code	Column	Explanation	* = Used in BHD MF
RADI	TYPE	Radioactivity	*
RDW	WTR	Raw drinking water	
REDOX	CHEM	Redox potential	
REIL	LAB	Reilly Laboratories	*
RER	Species	Raja erinacae (little skate)	
RICH	ECOL	Species richness	*
S&C	PHYS	Silt and clay	*
SALIN	PHYS	Salinity	*
SAQ	Species	Scophthalmus aquosus (Windowpane)	
SB	METL	Antimony	*
SCH	Species	Stenotomus chrysops (Scup)	
SCO	PHYS	Specific conductance	*
SE	METL	Selenium	*
SEB	TIDE	Slack, ebb begins (high tide)	*
SEB+n	TIDE	Slack, ebb begins plus "n" hours ("n" hours after high tide -- ebbing tide)	*
SEB+	TIDE	Ebbing tide, but number of hours past high tide is unknown	*
SFB	TIDE	Slack, flood begins (low tide)	*
SFB+n	TIDE	Slack, flood begins plus "n" hours ("n" hours after low tide -- flooding tide)	*
SFB+	TIDE	Flooding tide, but number of hours past low tide is unknown	*
SECCH	PHYS	Secchi disc	*
SED	TYPE	Sediment	*
SEDELU	TYPE	Sediment elutriates	*
SEDEPT	TYPE	Sediment - EP Toxicity	
SER	AREA	[?]	*
SETT	SOLI	Settleable solids	*
SFR	AREA	[?]	*
SHUS	LAB	Herbert V. Shuster, Inc.	*
SI	NUTR	Silicon	*
SIC	AGENCY1	Simmons College	*
SIGT	PHYS	Sigma T	*
SIO3	NUTR	Silicate	*
SLG	WST	Sludge	
SN	METL	Tin	*
SO2	CHEM	Sulfide	*
SO3	CHEM	Sulfite	
SO4	CHEM	Sulfate	*
SOI	TYPE	Soil	
SOIL	TYPE	Solids	*
SOL	WTR	Water column - soluble phase	
SOLUP	NUTR	Soluble phosphorus	
SPC	BACT	Standard plate count	*
SPC/G	UNITS	Standard plate count per gram	*
SPC/ML	UNITS	Standard plate count per milliliter	*
SR90	RADI	Strontium 90	

Code	Column	Explanation	* = Used in BHD MF
ORGN	NUTR	Organic nitrogen	*
ORTHP	NUTR	Ortho-phosphate	*
OXYG	TYPE	Oxygen demand	*
PAM	Species	<i>Pseudopleuronectes americanus</i> (Winter flounder)	*
PAR	WTR	Water column - particulate phase	
PARA	PEST	Parathion	*
PB	METL	Lead	*
PB210	RADI	Lead 210	
PCA	Species	<i>Princnotus carolinus</i> (Sea robin)	
PCB_	PEST	Polychlorinated biphenyls (with number to designate, e.g. PCB54 = Aroclor)	*
PDE	Species	<i>Paralichthys dentatus</i> (Summer flounder or Fluke)	
PERI	AGENCY2	Perini Corporation	*
PEST	TYPE	Pesticides, hydrocarbons, PCBs, etc.	*
PETHY	PEST	Petroleum hydrocarbons	
PH	CHEM	pH	*
PHY	TYPE	Phytoplankton community	*
PHYS	TYPE	Physical	*
PHYTO	ECOL	Phytoplankton	
PITT	AGENCY1	Pittston Petroleum, Inc.	
PLANK	ECOL	Plankton	
PLASI	PHYS	Plastic index	
PLASL	PHYS	Plastic limit	
PO4	NUTR	Phosphate	*
POB	Species	<i>Paralichthys oblongus</i> (Pourspot flounder)	
POI	WST	Miscellaneous point source	
PPB	UNITS	Parts per billion	*
PPB DW	UNITS	Parts per billion dry weight	*
PPB WW	UNITS	Parts per billion wet weight	
PPM	UNITS	Parts per million	*
PPM DW	UNITS	Parts per million dry weight	*
PPM SIO2	UNITS	Parts per million silicon dioxide (SiO2) (turbidity)	*
PPM WW	UNITS	Parts per million wet weight	*
PPT	UNITS	Parts per thousand	*
PPT DW	UNITS	Parts per thousand dry weight	*
PPU	Species	<i>Palaemonetes pugio</i> (Glass shrimp)	
PROT	ECOL	Protistids (protozoa)	
PSA	Species	<i>Pomatomus saltatrix</i> (Bluefish)	
PT-CO	UNITS	Platinum-Cobalt units (color)	
PTR	Species	<i>Peprilus triacanthus</i> (Butterfish)	
PVI	Species	<i>Pollachius virens</i> (Pollock)	*
QUB	AREA	Quincy Bay	*
QUIN	AGENCY1	City of Quincy, Massachusetts	*
RA226	RADI	Radium 226	
RAD	RADI	Radioactivity (total)	*

Code	Column	Explanation	* = Used in BHD MF
VOLAC	CHEM	Volatile acids	
VOLUM	PHYS	Volume	
VSOL	SOLI	Volatile solids, EPA (or unknown method)	*
VSOLN	SOLI	Volatile solids, NED	*
WBR	AREA	Weymouth Back River	*
WER	AREA	Weir River	*
WERB	LAB	Werby Laboratories	*
WFB	AREA	[?]	*
WFR	AREA	Weymouth Fore River	*
WHO	AQB	Whole organism (without shell)	
WHOI	AGENCY1	Woods Hole Oceanographic Institution	
WHOI	AGENCY2	Woods Hole Oceanographic Institution	*
WHOI	LAB	Woods Hole Oceanographic Institution	
WINT	AGENCY1	Town of Winthrop, Massachusetts	*
WQL	LAB	[?]	*
WST	TYPE	Waste including waste water	*
WSTEPT	TYPE	Waste - EP Toxicity	
WTF	AGENCY1	White Fuel Corporation	*
WTR	TYPE	Water	*
WWE	WST	Wastewater effluent	
WWR	WST	Wastewater - in process	
ZN	METL	Zinc	*
ZOO	TYPE	Zooplankton community	*
%	UNITS	Percent	*
% DW	UNITS	Percent dry weight	*
-	QUAL	Below zero (temperature only)	*
0.054 M2	UNITS	Number (of organisms) per 0.054 square meters	*
0.085 M2	UNITS	Number (of organisms) per 0.085 square meters	*
0.147 M2	UNITS	Number (of organisms) per 0.147 square meters	*
1.0 M3	UNITS	Number (of organisms) per 1.0 cubic meters	*
<	QUAL	Less than (detection limit)	*
>	QUAL	Greater than	*
[?]/100 M	UNITS	[?]	*

Code	Column	Explanation	* = Used in BHDMP
SWDIV	BCOL	Shannon-Wiener diversity	*
SWS	WST	Solid waste	
T	QUAL	Trace	*
TAD	Species	Tautoglabrus adspersus (cunner)	
TBACT	BACT	Total bacteria (Standard plate count)	*
TCOLI	BACT	Total coliform	*
TEMP	PHYS	Temperature	*
TFNR	SOLI	Total fixed nonfilterable residue	
TIBB	LAB	Tibbetts Engineering	*
TIC	CHEM	Total inorganic carbon	*
TKN	NUTR	Total Kjeldahl nitrogen	*
TL	METL	Thallium	*
TNR	SOLI	Total nonfilterable residue	*
TOC	CHEM	Total organic carbon	*
TON	Species	Tautoga onitus (Tautog)	
TOTC	CHEM	Total carbon	*
TOTP	NUTR	Total phosphorus	*
TOXA	PEST	Toxaphene	*
TPEST	PEST	Total pesticides	*
TRANS	MISC	[?]	*
TRASK	PHYS	Trask sorting coefficient	
TRES	SOLI	Total residue	
TRESF	SOLI	Total residue - fixed	*
TRFSV	SOLI	Total residue - volatile	*
TS	SOLI	Total solids	*
TSS	SOLI	Total suspended solids	*
TURB	PHYS	Turbidity	*
TVNR	SOLI	Total volatile nonfilterable residue	
TVS	SOLI	Total volatile solids	*
U	METL	Uranium	*
UCH	Species	Urophycis chuss (Red hake)	
UG/G	UNITS	Micrograms per gram	*
UG/G DW	UNITS	Micrograms per gram dry weight	*
UG/KG	UNITS	Micrograms per kilogram	*
UG/L	UNITS	Micrograms per liter	*
UM/L	UNITS	Micromoles per liter	*
UMHC/CM	UNITS	Micromohs per centimeters	*
UPW	SOURCE	Upwind of source	
USCG	AGENCY1	U.S. Coast Guard	*
USCG	LAB	U.S. Coast Guard	
USDT	AGENCY1	U.S. Department of Transportation	*
V	METL	Vanadium	*
VERS	LAB	Versar	
VIS	AQB	Viscera	

ORIGINAL FIELD NAME (Metcalf and Eddy file)	FIELD NAME (USGS Revision)	EXPLANATION (USGS Revision)	FIELD TYPE (<i>Paradox</i>) ¹
SAMP.DATE	Date	Date sample taken (date format)	D
	Mo	Month sample taken ³	A2
	Da	Day sample taken ³	A2
	Yr	Year sample taken ³	A2
TIME	Hr	Hour sample taken	A2
	Min	Minute sample taken	A2
	Tide	Time of tide	A7
PARAM-TYPE	Param.type	Type of parameter analyzed	A5
PARAMETER	Parameter	Parameter analyzed	A6
	Value ug/g	Amount in µg/g (sediments only) recalculated from Concentr. and Solids (below) relative to dry weight	N
CONC	Concentr.	Concentration as reported in original file	N
UNITS	Units	Units for concentration (above)	A10
QUAL	Qualifier	Qualifier for concentration	A2
DETECTION-LIMIT	Detect.limit	Detection limit for parameter	N
	Unidentified #	Unidentified number or characters (perhaps misplaced in original file from Solids, below)	N
SOLIDS	Solids	Percent solids in sample where wet weight is indicated in Units (above)	N
COMMENTS	Comments	Comments; those added by USGS are in square brackets []	A37
ORNO	Orig. sample #	Original sample No.	A15
ORLA	Orig. lab. #	Original laboratory No.	A12
ORSTA	Orig. sta. #	Original station No.	A12
EXTRA	Extra	Additional characters in original Metcalf and Eddy file. Meaning is uncertain	A12

Table V Comparison of structure of the Boston Harbor Data Management File (BHDMF) in the original format compiled by Metcalf and Eddy, Inc. with the revision by the U.S. Geological Survey

ORIGINAL FIELD NAME (Metcalf and Eddy file)	FIELD NAME (USGS Revision)	EXPLANATION (USGS Revision)	FIELD TYPE (Paradox) ¹
NUMBER	Number	Metcalf & Eddy No.	A6
	USGS#	Unique identifier for samples with multiple analyses	A8
	Rep_no	Replicate analysis No.	N
	Of_reps	Total replicates for this parameter	N
REF	Reference	Reference to data source document	A4
AGENCY1	Agency1	Administrating agency	A5
AGENCY2	Agency2	Contracted agency	A5
LAB	Lab	Laboratory performing analysis	A5
TYPE	Type	Sample type	A4
	Species	Sub-type or biological species	A4
SOURCE	Source	Type of source of material	A4
AREA	Area	Geographic area	A4
	Latitude	Latitude in decimal degrees	N
	Longitude	Longitude in decimal degrees, West (-)	N
	LAT	Lat(degrees)	Latitude in degrees North
Lat(minutes)		Latitude in minutes North	N
Lat(seconds)		Latitude in seconds North	N
LONG	Lon(degrees)	Longitude in degrees West	N
	Lon(minutes)	Longitude in minutes West	N
	Lon(seconds)	Longitude in seconds West	N
	Orig. precsn.	Original precision of position report ²	A13
	Device, depth comment	Sampling device, comment on Depth1 (next field)	A30
DEPTH	Depth1	Depth of sample (m) (see Table III) top of sample if core	N
	-	Separator indicating range of depth Second depth indicates	A1
	Depth2	depth of bottom of sample	N

Notes

¹ In *Paradox* database structure, "A" indicates alpha-numeric character format with the numeral following indicating the maximum number of characters in, or width of, the field; "N" denotes numeric values, either integer or floating point; "D" denotes date (mm/dd/yy) format. Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey.

² The "Orig. precsn" (original precision) field indicates the manner in which the position of a sample was reported in the original document, e.g. DMS = degrees, minutes, and seconds; DMS.xx = Degrees, minutes, and seconds to hundredths of a second; DM.xxx = Degrees, and minutes to 3 decimal places; etc.

³ The date of sampling is also separated into components because for some records only the month or year is given; lack of all components of a date is incompatible with the standard date format of a database.