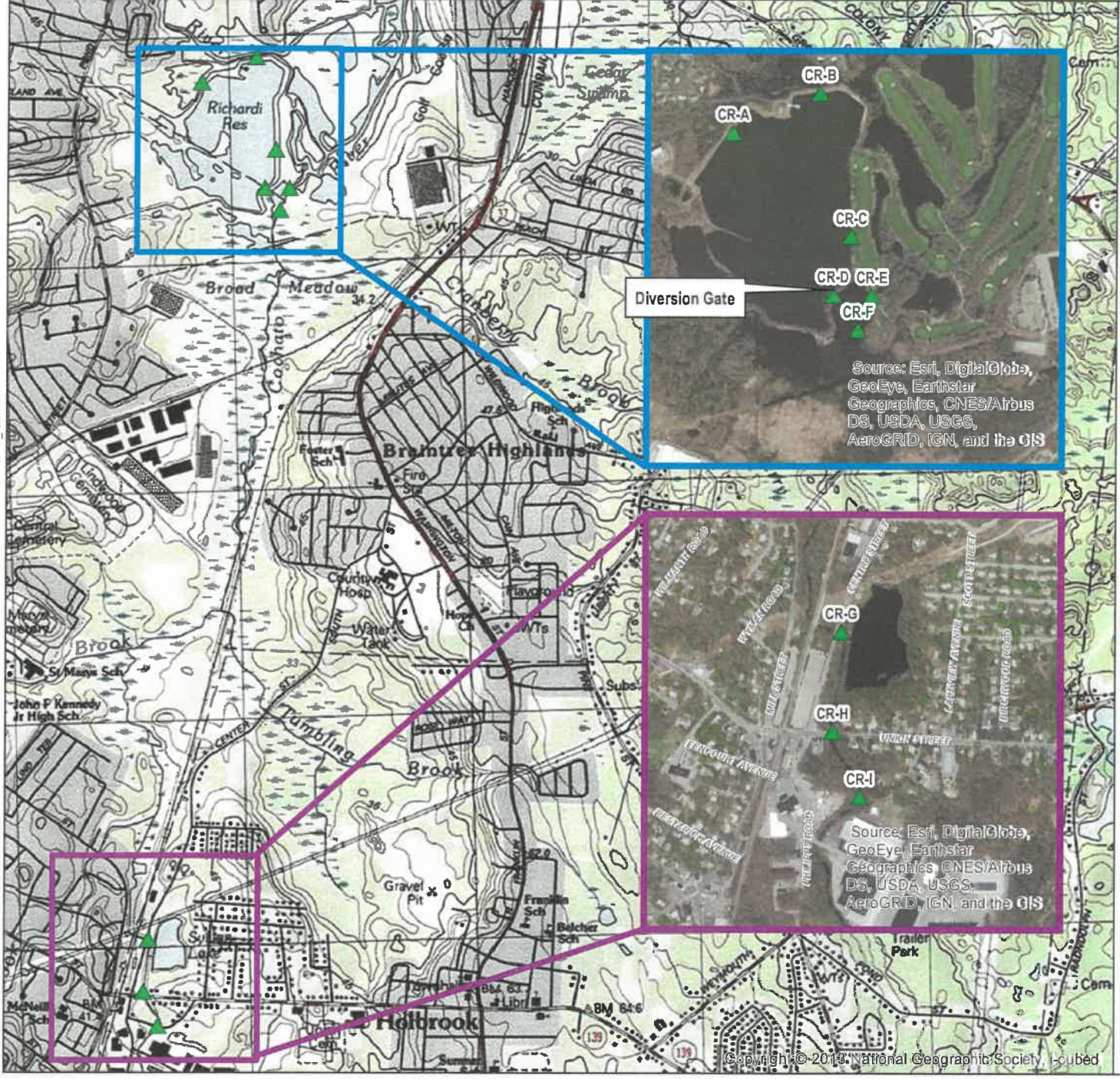


Figure 3. Site Plan

Cochato River Diversion
Bramtree, Randolph, Holbrook, MA



Source: Esri, DigitalGlobe,
GeoEye, Earthstar
Geographics, CNES/Airbus
DS, USDA, USGS,
AeroGRID, IGN, and the GIS

Source: Esri, DigitalGlobe,
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Legend
▲ Sample Location (approx.)



Project #: 230459
Map Created: March 2018

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources: ESRI

Figure 4. Hazardous Waste Site Map

Cochato River Diversion
 Braintree, Randolph, Holbrook, MA



- Legend**
- ▲ Sample Location (approx.)
 - MassDEP Hazardous Waste Site



Project #: 230459
 Map Created: March 2018

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:** ESRI, MassGIS

Figure Exported: 3/30/2018 8:47:18 AM Using: \\woodardcurran.net\GIS\MapProjects\230459_00 The Town Board - Cochato River Diversion\Map\3131\Project Files\Output4_Cites.mxd

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Table 2
Summary of Surface Water Analytical Results: 2017
 Cochoctoc River Water Quality Assessment
 Braintree, Holbrook, Randolph, MA

Sample ID	Massachusetts Drinking Water Standards, Guidelines and other Criteria	Units	CR-A	CR-B	CR-C	CR-D	CR-E	CR-F	CR-G	CR-H	CR-I
			11/8/2017	11/8/2017	11/8/2017	11/15/2017	11/8/2017	11/15/2017	11/8/2017	11/8/2017	11/8/2017
Volatile Organic Compounds											
1,4-Dioxane	0.3 (ORSG)	µg/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.11J	0.12J	0.14J
Acetone	6300 (ORSG)	µg/L	< 10	< 10	< 10	3.9J	< 10	< 10	< 10	< 10	3.4J
Methylene Chloride	5 (MCL)	µg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.52J
Semivolatile Organic Compounds											
Butyl benzyl phthalate	16 (RSL)	µg/L	0.19JB	0.19JB	< 15	< 30	0.18JB	< 30	< 30	< 60	< 30
Naphthalene	140 (ORSG)	µg/L	0.12JB	0.12JB	< 5.0	< 10	0.08JB	< 10	< 10	< 20	< 10
Total Metals											
Barium	2 (MCL)	mg/L	0.041	0.038	0.035	0.034	0.036	0.043	0.04	0.037	0.04
Chromium	0.1 (MCL)	mg/L	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	0.0019J	< 0.0040	0.0011J
Chromium (VI)	0.000035 (RSL)	mg/L	< 0.010	0.0061J	0.0052J	0.0052J	0.0052J	< 0.010	< 0.010	0.0052	< 0.010
Cobalt	0.0006 (RSL)	mg/L	0.00071J	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	0.00071J	0.00078J	0.00067J
Iron	0.3 (SMCL)	mg/L	1	1	0.91	1.1	2	1.1	1.3	1.6	1.3
Lead	0.015 (MCL)	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.0041J	0.0046J	0.0038J
Manganese	0.3 (ORSG)	mg/L	0.93	0.75	0.8	0.12	0.2	0.25	0.42	0.42	0.44
Selenium	0.05 (MCL)	mg/L	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.0093J
Sodium	20 (ORSG)	mg/L	87.4	87.8	78.4	50.8	51.6	67.2	38	35.3	36.6
Strontium	4 (LHA)	mg/L	0.088	0.084	0.078	0.079	0.08	0.075	0.086	0.075	0.085
Chlorates											
Chlorate	-	µg/L	3.2J	< 10	< 10	< 10	< 10	5.5J	< 10	< 10	< 10
Perchlorate	2 (MCL)	µg/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.055J	0.064J	0.093J
Bacteria/Parasites											
Cryptosporidium	Treatment Technique	ocysts/filter	0	0	0	-	0	-	0	0	0
Giardia	Treatment Technique	cysts/filter	0	0.195	0	-	0	-	0.0976	0	0.0976
Radioactivity											
Gross Alpha	15 (MCL)	pCi/L	< 3.00	< 3.00	< 3.00	2.93	< 3.00	2.92	< 3.00	1.75	< 3.00
Radium-226	5 (MCL - 5 pCi/L combined Ra-226/228)	pCi/L	0.208	< 1.00	0.245	< 1.00	0.132	0.135	0.149	0.151	0.137
Radium-228	5 (MCL - 5 pCi/L combined Ra-226/228)	pCi/L	0.45	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chemistry											
Chloride	250 (SMCL)	mg/L	153	157	153	98.8	97.6	117	75.9	77.6	73.3
Sulfate	250 (SMCL)	mg/L	11	10.4	11	6.2	6.6	9.7	14	13.9	14.4
Alkalinity, Total	-	mg/L	20.4	17.6	20	12.8	21.9	7.9	27.3	27.3	27.5
Turbidity	Treatment Technique (MCL)	NTU	4.6	4.21	4.46	5.54	4.24	4.38	5.82	6.51	6.53
pH	6.5-8.5 (SMCL)	SU	6.98	6.91	7.04	6.36	6.58	6.22	6.84	6.81	6.83
Temperature	-	degrees C	17.9	18.2	18	19	17.7	18.7	17.7	17.9	17.9

Notes:

Only constituents detected at least once are presented.

Detected constituent are presented in bold.

* < = Not detected above the presented laboratory reporting limit (LRL).

If a constituent was analyzed via more than one analytical method in a sample, the highest detected value or lowest LRL is presented.

“-” = Not analyzed

degrees C - degrees celsius

MCL = Massachusetts Maximum Contaminant Level (MassDEP 2017)

mg/L - milligrams per liter

ORSG = MassDEP Office of Research and Standards Guideline (MassDEP 2017)

NTU - nephelometric turbidity units

SMCL = MassDEP Secondary MCL (MassDEP 2017)

pCi/L - picocuries per liter

RSL = United States Environmental Protection Agency (USEPA) Regional Screening Level for Tapwater (USEPA 2017)

SU - standard unit

LHA = USEPA Lifetime Health Advisory (USEPA 2012)

µg/L - micrograms/liter

J = Result is less than the RL but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value

B = Compound was found in the blank and sample.

Shaded values exceed Massachusetts Drinking Water criterion.

References:

Massachusetts Department of Environmental Protection. 2017. Standards and Guidelines for Contaminants in Massachusetts Drinking Waters. Office of Research and Standards. <http://www.mass.gov/eea/docs/dep/water/dwstand.pdf>.

United States Environmental Protection Agency. 2012. 2012 Edition of the Drinking Water Standards and Health Advisories. Office of Water, EPA 822-S-12-001. April. <https://www.epa.gov/sites/production/files/2015-09/documents/dwstandards2012.pdf>

USEPA Regional Screening Levels for tapwater. November 2017. <https://www.epa.gov/risk/regional-screening-levels-rsl-generic-tables-november-2017>