



Town of Brewster Board of Health

2198 Main St., Brewster, MA 02631

brhealth@brewster-ma.gov

(508) 896-3701

BOARD OF HEALTH MEETING AGENDA

2198 Main Street

January 3, 2024 at 6:30PM

Board of Health

Penny Holeman

Kimberley Crocker
Pearson

David Bennett

John Keith

Abigail Archer

Health Director

Amy von Hone

Assistant Health Director

Sherrie McCullough

Senior Department Assistant

Tammi Mason

This meeting will be conducted in person at the date, time and location identified above. This means that at least a quorum of the members of the public body will attend the meeting in person and members of the public are welcome to attend in person as well. As a courtesy only, access to the meeting is also being provided via remote means in accordance with applicable law. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast or affect remote attendance or participation, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda, which includes an applicant and its representatives, should make plans for in-person vs. virtual attendance accordingly.

Members of the public who wish to access the meeting may do so in the following manner:

Phone: Call (301)715-8592 or (312)626-6799. Webinar ID: 820 4394 4509 Passcode: 979174

To request to speak: Press *9 and wait to be recognized.

Zoom Webinar: <https://us02Web.zoom.us/j/82043944509?pwd=MytpM2kvUExKbU1RS0hmM01Zb3dQZz09>

Passcode: 979174

To request to speak: Tap Zoom "Raise Hand", then wait to be recognized.

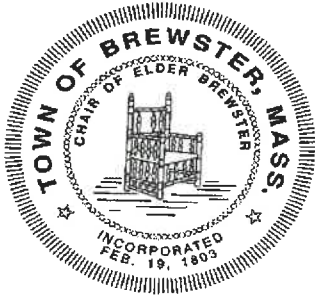
When required by law or allowed by the Chair, persons wishing to provide public comment or otherwise participate in the meeting, may do so by accessing the meeting remotely, as noted above. Additionally, the meeting will be broadcast live, in real time, via **Live broadcast** (Brewster Government TV Channel 18), **Livestream** (livestream.brewster-ma.gov) or **Video recording** (tv.brewster-ma.gov)

1. Call to Order
2. Declaration of a Quorum
3. Recording Statement
4. Chairman's announcements
5. Citizen's forum: Members of the public may address the Board of Health on matters not on the meeting agenda for a maximum 3-5 minutes at the Chair's discretion. Under Open Meeting Law, the Board of Health is unable to reply but may add items presented to a future agenda
6. Discussion and vote on Pressure Dose System Public Outreach second notice letter
7. I/A Enforcement of Non-compliant systems review, update, and possible vote on enforcement:
 - a. 83 Greenland Pond Road
 - b. 158 Jonathan's Way
 - c. 39 McGuerty Road
 - d. 56 McGuerty Road
 - e. 50 Sarah Maker Lane
 - f. 320 Satucket Road
 - g. 7 Thousand Oaks Drive
 - h. 54 Thousand Oaks Drive
 - i. 298 Robbins Hill Road
8. Liaison Reports
9. Matters not reasonably anticipated by the Chair
10. Items for next agenda
11. Next meeting: January 17, 2024
12. Informational items:
 - a. Monthly report(s) for Pleasant Bay Health & Living Center, Maplewood, Serenity, Ocean Edge
 - b. MA DEP Get the Lead Out of Drinking Water Outreach Letter December 18, 2023
 - c. Blood Drive January 4, 2024
 - d. Brewster Bass River DeMinimis Nitrogen Load Exemption Application
 - e. Brewster Herring River Watershed Permit Notice of Intent Filing
 - f. Brewster Draft Pond Management Plan Process
13. Adjournment

Date Posted:
12/28/23

Date Revised:

Received by Town Clerk:



Town of Brewster

2198 MAIN STREET
BREWSTER, MASSACHUSETTS 02631-1898

PHONE: 508.896.3701 EXT. 1120

FAX: 508.896.4538

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Health Department
Amy L. von Hone, R.S., C.H.O.
Director

Sherrie McCullough, R.S.
Assistant Director

Tammi Mason
Senior Department Assistant

Date:

Name
Address

RE: Pressure Dose Septic System Inspection Requirements
SECOND NOTICE

Dear Property Owner,

Earlier this year, you received a letter from the Brewster Board of Health regarding maintenance requirements for your pressure-dosed septic system pursuant to Massachusetts State Sanitary Code, 310 CMR 15.254 (2)(d). As of the date of this letter, we have received no response from you for the requested information on the inspection or maintenance of the system within the past twelve (12) months.

You are hereby Ordered to provide a copy of the most recent inspection report for maintenance of your pressure dosed septic system within 60 days of receipt of this letter or provide a date certain for such inspection and maintenance with receipt of such submitted within the next 120 days. A list of licensed Septic Inspectors and Wastewater Treatment Operators has been enclosed for your convenience or otherwise contact the design engineer for recommendations.

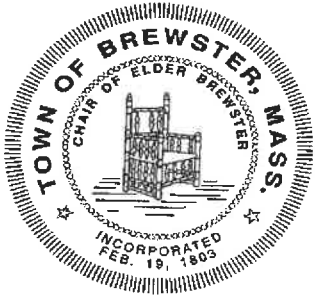
If you feel you have a hardship to be considered in the compliance with this Order, please communicate in writing to the Board of Health within 30 days of receipt this notice for Board of Health consideration. Failure to take any action will constitute a non-compliance and violation of MA State Environmental Code and our local code for which enforcement actions may be undertaken, including a hearing before the Board of Health and /or the issuance of monetary fines.

If you have questions, please to contact the Health Department at 508-896-3701, ext. 1120.

Sincerely,

David Bennett
Brewster Board of Health, Chairman

Encl. Title 5: 310 CMR 15.254 (2) (d) Pressure Dosing and Pressure Distribution excerpt
List of Septic Inspectors/Wastewater Treatment Operators
<https://neiwpc.org/wp-content/uploads/2023/04/SI-In-State-04-25-2023.pdf>
Public Information for Septic System Owners:
<https://www.mass.gov/guides/caring-for-your-septic-system>



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RE: Pressure Dose Septic System Inspection Requirements

Dear Property Owner,

Cape Cod has a sole source aquifer, meaning that one underground water source provides essentially all of the drinking water on Cape Cod. We drink the same water into which stormwater, grey water, industrial wastewater, and sewage is discharged. The earth has natural capacity to filter and treat wastewater to meet drinking water standards with proper separation to wells. However, data shows increased impairment in water quality as the population in our communities continues to grow.

The Board of Health is responsible to ensure effective monitoring of the operation and maintenance of septic systems to protect and sustain this most valuable resource. In accordance with Mass. State Environmental Code 310 CMR 15.254 (2)(d):

..... Pumps, alarms and other equipment requiring periodic or routine inspection and maintenance shall be operated, inspected and maintained in accordance with the manufacturer's and designer's specifications. In no instance shall inspection be performed less frequently than once every three months for a system serving a facility with a design flow of 2,000 gallons per day or greater and annually for any system serving a facility with a design flow of less than 2,000 gallons per day. The system owner shall submit the results of such inspections to the Approving Authority annually by January 31st of each year for the previous calendar year.

Health Department records indicate the property at this address is served by a septic system with a pressure dosed leach facility. We are writing to remind you of your obligation to ensure proper operation of your system by obtaining routine, periodic inspections as required under the State Environmental Code.

If you have recently had your system inspected, please forward a copy of the report for our records. If you have not had your system inspected within the past year, we urge you to do so at this time and request that you forward a copy of the report to the Health Department. A list of licensed Septic Inspectors and Wastewater Treatment Operators has been enclosed for your convenience.

Thank you for your assistance. Title 5 septic system inspections and maintenance are not only a critical part of our work together to protect our water resources but will also extend the life of your septic system. If you have questions, feel free to contact the Health Department at 508-896-3701, ext. 1120.

Sincerely,

David Bennett
Brewster Board of Health, Chairman

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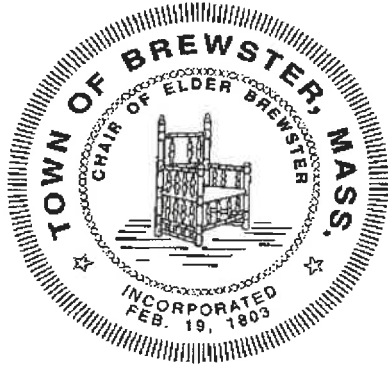
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		Street #	Street Name	Owner Name	Mailing Address	Town	Map	Parcel	Zone II	Watershed	GPD	Inspection #1	Inspection #2	Inspection #3	Inspection #4	Letter sent 7/14/23	Responses
2	1	4	Alden Drive	Jamie & Jennifer Dicandia	19 Adam Taylor Road	Sterling, MA 01564	56	89	No	CCB	288.7					X	
3	2		Bay Pines System 9 (Ocean Edge)	Ocean Edge	1 Villages Drive	Brewster, MA 02631			No	CCB	13040					X	
4	3	9 & 11	Breakwater Road	The Todd & Jessica French Nominee Trust, Wendy French, Trustee	258 Sheep Pond Drive	Brewster, MA 02631	57	10	No	CCB	356.97					X	
5	4	141	Brewster Road (Brewster Senior Housing)	Frederick Court Development Corp.	460 Main Street	Hyannis, MA 02601	56	75-16925	No	CCB	3600					X	
6	5	200	Brier Lane	Jack & Nancy Drake, Trustees Briar Lane Nom. Trust	PO Box 935	Brewster, MA 02631	48	45	No	CCB	440	10/18/2023	9/1/2022	9/10/2021	12/10/2020		Perc-Rite System
7	6	34	Captain Connolly Road	Peter & Ellen Marie Guidry	1907 Stirrup Lane	Alexandria, VA 22308	19	29	Yes	HR	330						Perc-Rite System - no O & M contract
8	7	19	Cedar Hill Road	Virginia B. Neumann, Trustee Virginia B. Neumann 2017 Trust	19 Charles Street	Lexington, MA 02421	38	20	No	CCB	341.88	12/6/2022	11/24/2021	12/10/2020	11/26/2019	X	Perc-Rite System
9	8	94	Cedar Hill Road	William & Maria Gaine	58 Kings Row	Ashland, MA 01721	38	30	No	CCB	444					X	
10	9	102	Cedar Hill Road	Jonathan Rosenfeld & Arlene Feldman	10 Ben Arthurs Way	Dover, MA 02030	38	29	No	CCB	336.7					X	
11	10	40	Cranview Road	Sanford & Madeline Zevon	40 Cranview Road	Brewster, MA 02631	10	66	Yes	HR	364					X	
12	11	46	Featherbed Lane	Boys Camp Inc., Camp Mitton Attn: Simon Hess	119 Myrtle Street	Duxbury, MA 02332	11	45	Yes	CCB	1500					X	
13	12	121	Fiddlers Lane	John & Christine Martell	46 Harjean Road	Billerica, MA 01821	48	33	No	CCB	356.98					X	
14	13	169	Fiddlers Lane	Joshua & Sarah Brunelle	169 Fiddlers Lane	Brewster, MA 02631	48	35	No	CCB	462.5					X	
15	14		Fletcher Village System 2-1 (Ocean Edge)	Ocean Edge	1 Villages Drive	Brewster, MA 02631			No	CCB	10780					X	
16	15	11	Frederick Court	Brewster Housing Authority	11 Frederick Court	Brewster, MA 02631	56	67	No	CCB	3649					X	11/13/23Email from Chad, Coastal Eng. requesting clarification on frequency of mandatory inspections
17	16	1000	Freeman's Way	Town of Brewster	1000 Freemans Way	Brewster, MA 02631	119	1-F	Yes	PB	6000					X	7/11/23Spoke with J. Packett Golf Dir., requested bid from operator, price for 4x inspections \$8600 +/- Consulting with Town Admin. office for combining town properties for inspections.
18	17		Granite State Court	Cape Associates Inc.	PO Box 1858	North Eastham, MA 02651	138	47	No	BR	2140	8/24/2023				X	9/14/23 Title 5 Report needs pressure distribution information. Spoke w/ inspector
19	18	199	Hamilton Cartway	Sandra Nayak, Trustee of The Nayak Brewster Realty Trust	12 Orchard Street	Belmont, MA 02478	93	3	No	BR	266.4					X	
20	19	283	Hamilton Cartway	Kelly Mobley, Trustee of Kolb Properties Realty Trust	1611 Whitman Drive	West Melbourne, FL 32904	81	1	Yes	HR	330						New 2023 to be installed - PercRite System
21	20	62	Harvest Lane	Carl Firlings Et AL	9 Jib Court	Middletown, RI 02842	68	66	No	CCB	475.95					X	
22	21		Huckleberry Lane System 1	Brewster Housing Authority	11 Frederick Court	Brewster, MA 02631	142	6	No	PB	3813						11/13/23Email from Chad, Coastal Eng. requesting clarification on frequency of mandatory inspections
23	22		Huckleberry Lane System 2	Brewster Housing Authority	11 Frederick Court	Brewster, MA 02631	142	6	No	PB	3740						11/13/23Email from Chad, Coastal Eng. requesting clarification on frequency of mandatory inspections
24	23	54	John Wings Lane	Stuart Koman C/O The Stuart Koman Trustee	54 John Wings Lane	Brewster, MA 02631	23	47	No	CCB	503					X	
25	24	72	Johnson Cartway	Bruce & Nancy Johnson	72 Johnson Cartway	Brewster, MA 02631	61	21	No	HR	330	12/1/2022	11/30/2021				Perc-Rite System
26	25	75	Johnson Cartway	Craig & Carolyn Colgate	PO Box 1841	Brewster, MA 02631	61	20	No	HR	440	12/1/2022	11/24/2021	12/10/2020	12/20/2019		Perc-Rite System
27	26	42	Konohassett Cartway	Joseph Carty & Diana Pohly	42 Konohassett Cartway	Brewster, MA 02631	72	25				10/18/2022				X	
28	27	200	Lower Road	Jake V. & Nancy A. Drake, Trustees Brier Lane Nominee Trust	P.O. Box 935	Brewster, MA 02631	48	45	No	CCB	474	3/20/2020	12/10/2020	10/3/2022			Perc-Rite System
29	28	0	Main Street	Eastward MBT, LLC Trustee	155 Crowell Road	Chatham, MA 02633	139	74	No	NC	452						New System to be installed
30	29	89	Main Street	Xiaobei Sullivan	89 Main Street	Brewster, MA 02631	6	13	No	QC	578					X	Response letter received 7/26/23, system pumped only
31	30	523	Main Street	Hilary & Steven Hickok, The Hilary Hickok Trust	523 Main Street	Brewster, MA 02631	16	21	No	QC	331.7					X	
32	31	1646	Main Street	Latham Centers Inc.	1646 Main Street	Brewster, MA 02631	56	69	No	CCB	1100					X	
33	32	1990	Main Street	Westerly Holdings LLC	PO Box 2000	Brewster, MA 02631	67	97	No	QC	210					X	
34	33	2639	Main Street	Brewster Main Street Realty Trust	PO Box 524	South Yarmouth, MA 02664	89	18	No	CCB	1709					X	
35	34	2553	Main Street	Michele Rowan	PO Box 1026	Brewster, MA 02631	78	76	No	CCB	793.3					X	New system installed 11/17/23
36	35	3057	Main Street (2005 CC Sea Camps)	Town of Brewster	2198 Main Street	Brewster, MA 02631	101	45	No	CCB	555					X	MA DEP Groundwater Discharge Permit/5 year inspection cycle.
37	36	3057	Main Street (2009 CC Sea Camps)	Town of Brewster	2198 Main Street	Brewster, MA 02631	101	45	No	CCB	555					X	MA DEP Groundwater Discharge Permit/5 year inspection schedule.
38	37	2639	Main Street (Cumberland Farms)	Brewster Main Street Realty Trust	PO Box 524	South Yarmouth, MA 02664	89	18	No	CCB	474					X	Recv'd letter from owner on 7.26.23. Repair work completed to replace failed pump.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
39	38	2298	Main Street (Eddy Elementary School)	Town of Brewster	2298 Main Street	Brewster, MA 02631	77	58	No	CCB	6660	7/14/2023	3/20/2023			X	7/14/23,8/29/23,9/8/23 emails from D. Caolo-Eddy School requested O & M Operator Coastal Eng. for proposal. Need to locate system and build up laterals to inspect. Waiting for cost estimate. 11/21/23D.Caolo sent request to management for permission to solicit quotes due to expense of repairs and inspections.	
40	39	1671	Main Street (Fire Station)	Town of Brewster	1671 Main Street	Brewster, MA 02631	56	6	No	CCB	2533						X	8/14/23,8/17/23 Emails from K.Varley requested proposal from system inspector, consulting with Town Admin. Re: one contractor for all town properties 11/21/23 FD soliciting other inspection quotes.
41	40	1993	Main Street (The Brewster Inn)	Andrew Murphy, Trustee, The Main Street Realty Trust	PO Box 773	East Dennis, MA 02641	67	2	No	CCB	2690						X	
42	41	3260	Main Street 1&2 (Cobies)	Robert Slavin, Trustee, Roberts Realty Trust	3238 Main Street	Brewster, MA 02631	101	47	No	CCB	2710	Inspection to be done at end of Aug '23				X	Inspection scheduled for end of Aug. 12/26/23 No inspection to date.	
43	42	80	Mill Pond Drive	Carmine & Krista Cutone	80 Mill Pond Drive	Brewster, MA 02631	34	48	No	CCB	338						X	
44	43	26	Nancy May Path	David A. Gillespie & Susan T Sabetti, Trustees, Gilsab Joint Trust	47 Tucker Ridge Court	Hilton Head, SC 29926	91	14-801	No	CCB	330	12/6/2022	11/24/2021	12/9/2020	12/2022019			Perc-Rite System
45	44	119	North Pond Drive	Calvin & Karen Mutti	119 North Pond Drive	Brewster, MA 02631	89	61	No	CCB	337						X	
46	45	85	Olde Owl Pond Road	Ralph & Katherine Tupper; Steven & Stephanie Tupper	105 Olde Owl Pond Road	Brewster, MA 02631	137	75	No	NC	440							Perc-Rite System
47	46	254	Robbins Hill Road	Evelyn Maguire Trustee, Evelyn B. Maguire Trust C/O Carolyn Shea	22 Cross Street	Harwichport, MA 02646	38	84	No	CCB	475	8/16/2023					X	
48	47	255	Robbins Hill Road	Howard Hayes, Trustee Corcoran Nominee Trust	PO Box 1048	Brewster, MA 02631	38	58	No	CCB	586	12/6/2022	12/21/2021	12/14/2020	10/16/2023		X	Perc-Rite System
49	48	371	Robbins Hill Road	371 Robbins Hill Road LLC C/O Robbins Hill Creek LLC	770 Boylston Street, Penthouse 27D	Boston, MA 02199	38	73	No	CCB	471						X	
50	49	242	Seaway Road	Sean & Nicole Cronican	211 Marsh Street	Belmont, MA 02478	79	110	No	CCB	444						X	
51	50	53	Sheep Pond Circle	Marjorie Smeltzer	820 Harwich Road Apt 171	Brewster, MA 02631	73	11	No	HR	451						X	
52	51	42	Six Penny Lane	David Howland & Erika Holzbaur-Howland	2408 Waverly Street	Philadelphia, PA 19146	37	29	No	CCB	334	4/29/2019	2/15/2008				X	
53	52	56	Six Penny Lane	Eunice Terrenzi	56 Six Penny Lane	Brewster, MA 02631	37	27	No	CCB	335						X	
54	53	0	South Orleans Road(White Rock Commons)	White Rock Homeowners Association	35 Beacon Hill Way	South Chatham, MA 02659	130	34	No	PB	4070	10/2/2022	6/20/2022	3/22/2022	12/16/2022	X(sent back 7.26.23 wrong address	Letter resent 7.26.23	
55	54	100-120	Southern Eagle Cartway	Christopher & Clinton Kanaga Trustees, HKN Trust	PO Box 236	Orleans, MA 02653	138	43	No	BR	675						X	
56	55	842	Stony Brook Road	Gino Verzone	842 Stony Brook Road	Brewster, MA 02631	35	46	No	CCB	553.52	3/18/2014	1/17/2008	6/8/2007			X	
57	56	468	Stony Brook Road (Our Lady of the Cape Church)	Roman Catholic Bishop, Our Lady of the Cape	PO Box 1799	Brewster, MA 02631	25	3	No	QC	3450						X	
58	57	102	Susan Lane	Sean Bennett	102 Susan Lane	Brewster, MA 02631	55	4	No	CCB	332						X	
59	58	57	The Channel Way	Martha Dunbar, Trustee	54 Haven Street	Milford, MA 01757	58	5	No	CCB	555						X	
60	59	90	The Channel Way	Estate of John Henry, Nancy Asfour, Personal Representative	90 The Channel Way	Brewster, MA 02631	58	74	No	CCB	566						X	
61	60	93	The Channel Way	William Glynn & Ann Lombroso, Trustees	64 Birchwood Lane	Lincoln, MA 01773	58	6	No	CCB	444						X	
62	61	42	Warrens Road	Pamela Lloyd-Baker	45 Warrens Road	Brewster, MA 02631	38	99	No	CCB	330	12/6/2022	11/24/2021	11/26/2019	10/11/2018			Perc-Rite System
63																		
64																		
65																		
66			Letter sent w/ response															
67			Compliant															
68																		
69																		



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I/A System Samples for Discussion Continued January 3, 2024 BOH Meeting

I/A Systems (Systems out of compliance): Systems currently under review by BOH

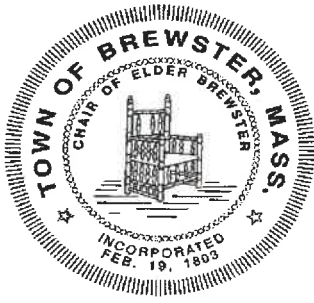
1. 83 Greenland Pond Road
 - Letter sent 9/27/23 undeliverable. Letter resent 10/24/23.
 - Contract expired per Wastewater Treatment Systems & County. Owner renewed contract with WTS upon receipt of BOH letter and waiting on 2023 test results.
2. 158 Jonathan's Way
 - Letter sent 8/22/23. No response.
 - Incomplete results. 10/25/23 data met standard.
3. 39 McGuerty Road
 - Letter sent. Contract renewed 3/14/23. Contacted by O&M Operator on 9/1/23 and will sample influent if TN if August sample still high.
 - No additional samples recorded. Email sent to Operator on 12/27/23.
4. 56 McGuerty Road
 - Letter sent 8/22/23. Email sent 9/8/23 & 9/21/23 to owner from O&M Operator with updated proposal to address noncompliance issue. Health Dept. agreed to extend resampling at end of October, 2023 after system is pumped. No samples recorded for 2023.
 - Email sent to operator for update.
5. 50 Sarah Maker Lane
 - Letter sent 9/27/23. Owner contacted Health Dept. and operator. Operator provided recommendations to reduce TN.

6. 320 Satucket Road
 - Letter sent 8/22/23.
 - Notification from current operator (Bennett) services ended. New operator Siegmund Env.
 - Samples noted by County as late. No new samples from new operator.

7. 7 Thousand Oaks Drive
 - Letter sent 8/22/23.
 - Owner contacted Health Dept. 9/7/23, 9/21/23, 10/4/23 & researching operators for contract. Unable to hire contractor on Cape.
 - Owner advised to contact off-Cape operators for interim.
 - No contract in place. No samples for 2023.

8. 54 Thousand Oaks Drive
 - Letter sent 9/27/23.
 - No response from owner.
 - Sample on 8/17/23 in compliance.

9. 298 Robbins Hill Road
 - Letter sent 10/25/23.
 - No response from owner.
 - New system installed/start-up 2021.



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Senior Department Assistant

Date:

Name
Address

RE: **Notice of Noncompliance – Innovative/Alternative Sewage System
(property address/assessors reference), Brewster, MA**

SECOND NOTICE

Dear Property Owner,

In September 2023, you received a letter from the Brewster Board of Health regarding deficiencies of your Innovative Alternative Sewage System in meeting sewage treatment requirements under the **State Sanitary Code, Title 5: General Conditions for Use of Alternative Systems pursuant to 310 CMR 15.284 through 15.287 and 15.288 and Brewster Board of Health Regulations**. We have not received a response from you for the correction of deficiencies or otherwise that such deficiencies remain unresolved or unexplained. You should contact your wastewater treatment operator to discuss your system performance in the removal of nitrogen and advise them of your receipt of this Notice of Noncompliance.

You are hereby Ordered to appear before the Board of Health at its meeting on (March 6, 2024) or otherwise provide a copy of your most recent I/A inspection with analytical results demonstrating compliance with the effluent nitrate, nitrite and total nitrogen treatment requirements.

If you feel you have extenuating circumstances for a hardship to be considered in attaining compliance with this Order, please communicate in writing to the Board of Health within 30 days of receipt this notice for Board of Health consideration. Failure to take any action will constitute a non-compliance and violation of MA State Environmental Code and our local code for which enforcement actions may be undertaken, including the issuance of monetary fines.

If you have questions, please to contact the Health Department at 508-896-3701, ext. 1120.

Sincerely,

David Bennett
Brewster Board of Health, Chairman

Cc. Wastewater Treatment Operator

Encl. MassDEP Approvals of I/A Technologies
<https://www.mass.gov/guides/approved-title-5-innovativealternative-technologies>

	Permit Number	Site Address	Sample Date	Operator	Component	Effluent Total Nitrogen	Effluent Nitrate	Effluent Nitrite	Efflu.Total Kjehldahl Nitrogen	Effluent BOD, 5-Day	Effluent Total Suspended Solids	Effluent Total Phosphorus	Effluent Total Dissolved Phosphorus
1	BREW-Wil120-ADV	120 William Maker Way	2023-06-14	J.M. O'Reilly	Advantex	1.19		0.19	1	2.7	2		
2	BREW-Bea127-Bio	127 Beach Plum Lane	2022-03-08	Coastal	Bioclere	19.2	18	1.2			97		
3	BREW-Bea127-Bio	127 Beach Plum Lane	2022-03-08	Coastal	Bioclere	19.2	18	1.2			97		
4	BREW-Bea127-Bio	127 Beach Plum Lane	2022-09-21	Coastal	Bioclere	2.21	0.89		1.32				
5	BREW-Bea127-Bio	127 Beach Plum Lane	2023-03-06	Coastal	Bioclere	14.88	11	0.65	3.23		7.2		
6	BREW-Sou157-Sep	157 South Orleans Road	2021-11-29	J.M. O'Reilly	Septitech	12.04	9.5	0.34	2.2	5	3.6		
7	BREW-Sou157-Sep	157 South Orleans Road	2022-02-23	J.M. O'Reilly	Septitech	16.58	14	0.28	2.3		3.6		
8	BREW-Sou157-Sep	157 South Orleans Road	2022-05-23	J.M. O'Reilly	Septitech	13.22	9.1	0.42	3.7	7.4	2.4		
9	BREW-Sou157-Sep	157 South Orleans Road	2022-09-01	J.M. O'Reilly	Septitech	9.33	6.9	0.43	2	3.1	3.2		
10	BREW-Sou157-Sep	157 South Orleans Road	2022-11-22	J.M. O'Reilly	Septitech	11.83	9.5	0.23	2.1	6.4			
11	BREW-Sou157-Sep	157 South Orleans Road	2023-03-22	J.M. O'Reilly	Septitech	75.9	6.6	1.3	68	6	39		
12	BREW-Sou157-Sep	157 South Orleans Road	2023-06-14	J.M. O'Reilly	Septitech	12.47	9.9	0.37	2.2	3.6			
13	BREW-Sou157-Sep	157 South Orleans Road	2023-08-25	J.M. O'Reilly	Septitech	11.1	10		1.1		2.8		
14	BREW-Jon158-Sin	158 Jonathans Way	2022-01-05	Siegmund	Singular	9.9	9.9						
15	BREW-Jon158-Sin	158 Jonathans Way	2022-03-23	Siegmund	Singular	17	17						
16	BREW-Jon158-Sin	158 Jonathans Way	2022-11-17	Siegmund	Singular	67.6	27	1.4	39.2				
17	BREW-Jon158-Sin	158 Jonathans Way	2023-03-16	Siegmund	Singular	62		0.15	61.7				
18	BREW-Jon158-Sin	158 Jonathans Way	2023-03-23	Siegmund	Singular	21	17		4.07				
19	BREW-Jon158-Sin	158 Jonathans Way	2023-06-15	Siegmund	Singular	47		0.055	47				
20	BREW-Jon158-Sin	158 Jonathans Way	2023-08-31	Siegmund	Singular	2.2	0.7	1.5					
21	BREW-Jon158-Sin	158 Jonathans Way	2023-10-25	Siegmund	Singular	15	2.8	3.5	9.11				
22	BREW-Lon159-Bio	1597 Long Pond Road	2022-01-10	Bennett	Bioclere	7.3	5.9		1.4		21		
23	BREW-Lon159-Bio	1597 Long Pond Road	2022-07-25	Bennett	Bioclere	79.77	46	0.079	33.7		220		
24	BREW-Lon159-Bio	1597 Long Pond Road	2023-01-17	Bennett	Bioclere	34	34				7.8		
25	BREW-Lon159-Bio	1597 Long Pond Road	2023-07-06	Bennett	Bioclere	8.724	7.7	0.091	0.933		10		
26	BREW-Rus017-Wat	17 Russells Path	2021-11-01	Bennett	Waterloo	9.43	6.9		2.53	4.1			
27	BREW-Rus017-Wat	17 Russells Path	2022-04-13	Bennett	Waterloo	16.42	4.3	0.42	11.7	7.1			
28	BREW-Rus017-Wat	17 Russells Path	2022-10-17	Bennett	Waterloo	9.988	7.7	0.068	2.22	5.5			
29	BREW-Rus017-Wat	17 Russells Path	2023-04-27	Bennett	Waterloo	8.47	6.7		1.77				
30	BREW-Rus017-Wat	17 Russells Path	2023-04-27	Bennett	Waterloo	8.47	6.7		1.77				
31	BREW-Rus017-Wat	17 Russells Path	2023-10-24	Bennett	Waterloo	5.79	3.3		2.49		9.3		
32	BREW-Bur019-Bio	19 Burning Bush Way	2022-03-09	Coastal	Bioclere	19.75	19	0.35	0.4	2.2	8.7		
33	BREW-Bur019-Bio	19 Burning Bush Way	2022-03-09	Coastal	Bioclere	19.75	19	0.35	0.4	2.2	8.7		
34	BREW-Bur019-Bio	19 Burning Bush Way	2023-03-09	Coastal	Bioclere	9.17	5.4	0.16	3.61	2.9			
35	BREW-Bri200-FAS	200 Brier Lane	2022-09-01	J.M. O'Reilly	FAST	12.31	9.6	0.31	2.4	31	14		
36	BREW-Rob298-Adv	298 Robbins Hill Road	2021-11-01	Bennett	Advantex	84.3	66		18.3		10		
37	BREW-Rob298-Adv	298 Robbins Hill Road	2022-05-27	Bennett	Advantex	5.612	5.2	0.098	0.314				
38	BREW-Rob298-Adv	298 Robbins Hill Road	2023-05-04	Bennett	Advantex	106	88		18				
39	BREW-Rob298-Adv	298 Robbins Hill Road	2023-10-25	Bennett	Advantex	90.93	82		8.93				
40	BREW-Bre030-BIO	30-40 Brewster Woods Driv	2023-04-28	Coastal	Bioclere								
41	BREW-Bre030-BIO	30-40 Brewster Woods Driv	2023-10-20	Coastal	Bioclere					26	46		
42	BREW-Sat320-Sin	320 Satucket Road	2021-11-01	Bennett	Singular	51.6			51.6	47	120		
43	BREW-Sat320-Sin	320 Satucket Road	2022-01-20	Bennett	Singular	44.3			44.3	86	140		
44	BREW-Sat320-Sin	320 Satucket Road	2022-04-13	Bennett	Singular	61.8			61.8	70	150		
45	BREW-Sat320-Sin	320 Satucket Road	2022-10-17	Bennett	Singular	72.47	0.33	0.24	71.9	140	140		
46	BREW-Sat320-Sin	320 Satucket Road	2023-01-17	Bennett	Singular	69.573	0.1	0.073	69.4	150	230		
47	BREW-Sat320-Sin	320 Satucket Road	2023-07-07	Bennett	Singular	56.312	0.12	0.092	56.1	49	240		
48	BREW-Sat320-Sin	320 Satucket Road	2023-08-31	Siegmund	Singular	58.616	0.13	0.086	58.4	59	160		
49	BREW-McG039-FAS	39 McGuerty Road	2021-11-30	J.M. O'Reilly	FAST	27.51	19	0.41	8.1		9		
50	BREW-McG039-FAS	39 McGuerty Road	2022-03-09	J.M. O'Reilly	FAST	51.54	6.3	0.24	45	0	11		
51	BREW-McG039-FAS	39 McGuerty Road	2022-05-23	J.M. O'Reilly	FAST	40.95	17	0.95	23	35	31		
52	BREW-McG039-FAS	39 McGuerty Road	2022-09-01	J.M. O'Reilly	FAST	20.39	12	0.79	7.6		13		
53	BREW-McG039-FAS	39 McGuerty Road	2022-11-22	J.M. O'Reilly	FAST	38.21	6.8	0.41	31	25	17		

	Permit Number	Site Address	Sample Date	Operator	Component	Effluent Total Nitrogen	Effluent Nitrate	Effluent Nitrite	Efflu.Total Kjehldahl Nitrogen	Effluent BOD, 5-Day	Effluent Total Suspended Solids	Effluent Total Phosphorus	Effluent Total Dissolved Phosphorus
54	BREW-McG039-FAS	39 McGuerty Road	2023-05-17	J.M. O'Reilly	FAST	22.39	14	0.69	7.7	15	15		
55	BREW-McG039-FAS	39 McGuerty Road	2023-08-28	J.M. O'Reilly	FAST	37	23		14	18	20		
56	BREW-Cra040-Wat	40 Cranview Road	2021-11-15	BCDHE	Waterloo EC-P							3.1	1.5
57	BREW-Cra040-Wat	40 Cranview Road	2021-11-15	BCDHE	Pump Chamber					58		8.6	8
58	BREW-Cra040-Wat	40 Cranview Road	2022-03-23	BCDHE	Pump Chamber					58		6.61	6.02
59	BREW-Cra040-Wat	40 Cranview Road	2022-03-23	BCDHE	Waterloo EC-P					19		18.7	3.38
60	BREW-Cra040-Wat	40 Cranview Road	2022-05-18	BCDHE	Waterloo EC-P					8		4.31	3.35
61	BREW-Cra040-Wat	40 Cranview Road	2022-05-18	BCDHE	Pump Chamber					56		7.45	7.03
62	BREW-Cra040-Wat	40 Cranview Road	2022-11-07	BCDHE	Waterloo EC-P					5		28.1	28.1
63	BREW-Cra040-Wat	40 Cranview Road	2023-06-15	BCDHE	Waterloo EC-P							7.8	
64	BREW-Com044-FAS	44 Commons Way	2023-05-17	WTS	FAST	22.78	18.9		3.88				
65	BREW-Com044-FAS	44 Commons Way	2023-08-17	WTS	FAST	9.96	7.51	0.72	1.73				
66	BREW-Com044-FAS	44 Commons Way	2023-10-26	WTS	FAST	8.2	3.09		5.11				
67	BREW-Sar050-FAS	50 Sarah Maker Lane	2021-12-07	WTS	FAST	14.33	13.4	0	0.93				
68	BREW-Sar050-FAS	50 Sarah Maker Lane	2022-03-29	WTS	FAST	30.25	9.85	0	20.4				
69	BREW-Sar050-FAS	50 Sarah Maker Lane	2022-10-18	WTS	FAST	47.66	8.36	0	39.3				
70	BREW-Sar050-FAS	50 Sarah Maker Lane	2023-02-17	WTS	FAST	28.9	11.9	0	17				
71	BREW-Sar050-FAS	50 Sarah Maker Lane	2023-08-17	WTS	FAST	32.36	3.96	0	28.4				
72	BREW-Sea050-Sep	50 Sea Meadow Lane	2021-12-07	WTS	Septitech	12.45	11		1.45				
73	BREW-Sea050-Sep	50 Sea Meadow Lane	2022-02-08	WTS	Septitech	9.03	7.3		1.73				
74	BREW-Sea050-Sep	50 Sea Meadow Lane	2022-06-14	WTS	Septitech	13.91	11.6		2.31	4.4			
75	BREW-Sea050-Sep	50 Sea Meadow Lane	2022-09-14	WTS	Septitech	15.4	15.4						
76	BREW-Sea050-Sep	50 Sea Meadow Lane	2022-10-18	WTS	Septitech	11.42	8.52		2.9				
77	BREW-Sea050-Sep	50 Sea Meadow Lane	2022-12-21	WTS	Septitech	9.07	7		2.07	5.7			
78	BREW-Sea050-Sep	50 Sea Meadow Lane	2023-02-17	WTS	Septitech	5.77	3.98		1.79	4.5	10.5		
79	BREW-Sea050-Sep	50 Sea Meadow Lane	2023-05-17	WTS	Septitech	13.8	13.8			6.9	10.5		
80	BREW-Sea050-Sep	50 Sea Meadow Lane	2023-10-26	WTS	Septitech	5.62	5.62			11.5	7		
81	BREW-Thou054-FAS	54 Thousand Oaks Drive	2022-03-29	WTS	FAST	35.81	13.2	17.7	4.91				
82	BREW-Thou054-FAS	54 Thousand Oaks Drive	2022-07-08	WTS	FAST	13.68	10.9		2.78				
83	BREW-Thou054-FAS	54 Thousand Oaks Drive	2023-03-14	WTS	FAST	29.94	29.1	0.84					
84	BREW-Thou054-FAS	54 Thousand Oaks Drive	2023-08-17	WTS	FAST	16.4	16.4						
85	BREW-McG056-Sin	56 McGuerty Road	2021-11-01	Bennett	Singulair	33.8	2.4	8.4	23	51	62		
86	BREW-McG056-Sin	56 McGuerty Road	2022-10-17	Bennett	Singulair	97.64	0.24	1.3	96.1	170	490		
87	BREW-Tho007-Adv	7 Thousand Oaks Drive	2021-11-30	J.M. O'Reilly	Advantex	31.98	22	0.28	9.7			46	
88	BREW-Tho007-Adv	7 Thousand Oaks Drive	2022-02-23	J.M. O'Reilly	Advantex	28.8	21	0.1	7.7			58	
89	BREW-Old078-Sin	78 Old Red Top Road	2022-04-26	Siegmund	Singulair	6.09	3.2	0.23	2.66	19	6.5		
90	BREW-Old078-Sin	78 Old Red Top Road	2022-11-17	Siegmund	Singulair	28.64	0.33	0.21	28.1	22	7.4		
91	BREW-Old078-Sin	78 Old Red Top Road	2023-05-22	Siegmund	Singulair	37	12	6.6	18.4	110	62		
92	BREW-Gre083-FAS	83 Greenland Pond Road	2021-12-09	WTS	FAST	35.26	13.7	1.76	19.8				
93	BREW-Gre083-FAS	83 Greenland Pond Road	2022-03-29	WTS	FAST	37.8	17.6		20.2				
94	BREW-Gre083-FAS	83 Greenland Pond Road	2022-06-14	WTS	FAST	33.78	25.5		8.28				
95	BREW-Gre083-FAS	83 Greenland Pond Road	2022-10-18	WTS	FAST	70	18		52				

Enforce. Letter Sent w/ response

Enforce. Letter Sent no response

BOH to review

	Number	Street	Map/Parcel	Brand	DEP Approval	Year	Nutrient Reduction	Nutr. Limit	ESA	O&M Contract	Compliance	Notification	Response
1	127	Beach Plum Lane	96/63	Bioclere	Provisional					Y			
2	306	Blueberry Pond Drive	101/100	Presby	General					2013 BOH and DEP d/c Inspection rqrmt			
3	30	Brewster Woods Road	56/75	Bioclere	General	2021			>2000gpd - Ch. 40B development exempt	Y	Y		
4	200	Brier Lane	48/45	Perc-Rite	Remedial								
5	19	Burning Bush Way	33/267	Bioclere	Provisional								
6	34	Captain Connolly Road	19/29	Perc-Rite	General					historically non-compliant	10/2021 BOH hearing		
7	5	Carson's Way	23/60	Micro Fast 0.9	General								
8	47	Carson's Way	23/63	H600A H-Series Hoot					Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
9	60	Carson's Way	23/64	Micro Fast 0.9	General				Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
10	56	Carson's Way	23/65	Micro Fast 0.9	General				Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
11	14	Carson's Way	23/67	Micro Fast 0.5	General				Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
12	26	Carson's Way	23/68	Micro Fast 0.5L	General				Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
13	35	Carson's Way	23/62	Micro Fast 0.5	General				Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
14	40	Carson's Way	23/66	Micro Fast 0.5	General				Water Quality Reg (Zoning) - 4 or more dwellings d/c > 2000 gpd	Y			
15	19	Cedar Hill Road	38/20	Perc-Rite									
16	44	Commons Way	97/93	MicroFAST 0.5	General	2022	Nitrogen	19 ppm	Zone II/DCPC/CC Bay Watershed	Y	Y		10/18/23 Monitor for 1 year per BOH 10/18/23
17	40	Cranview	38/74	Waterloo Biofilter	Pilot	2018	Phosphorous		300' Elbow Pond, Bog, GW@ 4.5'	County	No		
18	300	Foster Road	79/25	Micro Fast 0.5	General					N	No	Letter 6/30/23	
19	83	Greenland Pond Road	94/27	MicroFAST 0.5	General	2021	Nitrogen	19 ppm	Zone II/DCPC/Herring River Watershed	N	No	Letter 9/27/23	9/27/23 Cert. mail returned-unable to find correct mailing address. 10/24/23 Letter resent & no response.
20	75	Johnson Cartway	61/20	Perc-Rite	General								
21	158	Jonathan's Way	95/7	Singulair	General w/ N							Letter 8/22/23	
22	85	Hamilton Cartway	93/9	Advantex A20									
23	88	Hamilton Cartway	93/11	Micro Fast / Drip Dispersal									
24	283	Hamilton Cartway	81/1	PercRite Drip Dispersal	General	2023			Zone II/300' to Greenland & Long Ponds/ESA/Herring River Watershed				New Installation 2023
25	40	Konohassett Cartway	72/25	Micro Fast 0.5	General								
26	495	Long Pond Road	85/111	Septi-tech	General								
27	1597	Long Pond Road	94/93	Bioclere	Provisional	2003	Nitrogen	19 ppm	Zone II/DCPC/Herring River Watershed	Y	Y	Letter 8/22/23	NSU/Owner 9/11/23. Monitor for 1 year per BOH 9/20/23
28	15	Lower Road	37/1	Micro Fast 4.5	General	2006	Nitrogen	25 ppm	300' to saltmarsh/test every 3 years/CC Bay Wtshed	Y	No		
29	540	Main Street	26/7	Micro Fast w/ UV	General w/ N								
30	2907	Main Street (Ocean Edge)		Amphidrome	Pilot								
31	54	Mate's Way	18/32	Sludge Hammer									
32	39	McGuerty Road	94/75	Micro Fast 0.5	General	2018	Nitrogen	19 or 25 ppr	Zone II/DCPC not addressed	Y	No	Letter 8/22/23	JMO'Reilly Email 9/1/23 Influent test scheduled. 12/27/23 Email sent to operator for update on influent test.12/28/23 December effluent/influent samples completed & waiting for results.
33	56	McGuerty Road	94/88	Singulair	Pilot	2002	Nitrogen		Zone II/DEP reduct. approv. 1x/year	Y	No	Letter 8/22/23	9/11/21 NSU contract prop.9/21/23 NSU reminder to owner contract prop.9/25/23 NSU email to owner/BOH re: extension request to pump system then test-ok.12/27/23 Email sent to operator for update.
34	26	Nancy May Path	91/14-801	Perc Rite									
35	78	Old Red Top Road	12/72	Singulair	Remedial w/ N							Ck on 8/16/24	8/16/23 HOLD - review in 1 year

36	160	Old Red Top Road	12/44	Singular	Pilot/General	2014	2003	Nitrogen	25 ppm	Zone II/DCPC/CC Bay Watershed	Y	Y	Letter 6/28/23	10/2/23 Contract w/ Bennett, sample start 2/24
37	85	Old Owl Pond Road	137/75	Perc Rite										
38	65	Pell's Fishing Road	125/50	White Knight										
39	255	Robbin's Hill Road	38/58	Perc Rite										
40	298	Robbin's Hill Road	38/80	Advantex AX25RT	Remedial w/ N		2020	Nitrogen	19 ppm	300' to wetland/CC Bay Watershed	Y	No	Letter 10/25/23	No response from owner.
41	17	Russell's Path	85/73	Waterloo Biofilter	Provisional		2005	Nitrogen		Zone II	Yes	Yes		
42	0	Sachemus Trail	78/	Bioclere w/ Cultex LF	General									
43	50	Sarah Maker Lane	85/138	Micro Fast	General		2014	Nitrogen	19 ppm	Zone II/DCPC/Herr. River & CC Bay Wtshed/Priv.Well	N	No	Letter 9/27/23	10/3/23 Call from owner. Returned call - unable to leave message.10/16/23 Spoke w/ owner.Will contact Wastewater Services and advise.011/9/23 Owner advised by operator of recommendations to reduce TN.
44	18	Samoset Road	85/134	Micro Fast										
45	120	Satucket Road	13/103	Singular 960 NR										
46	320	Satucket Road	13/103	Singular 960 NR	Provisional		2007	Nitrogen	19 ppm	Zone II/DCPC/CC Bay Watershed	Y	No	Letter 8/22/23	9/1/23 New O&M Contract w/ Siegmund Env. Last test 8/31/23. New samples late, system noncompliant.
47	50	Sea Meadow Lane	37/71	Micro Fast										
48	6	Seaman's Lane	12/71	Micro Fast 0.5										
49	53	Sheep Pond Circle	73/11	Biotube ProPak Pump										
50	42	Six Penny Lane	37/29	Micro Fast	Remedial									
51	157	South Orleans Road	142/102	Septi-tech M3000N										
52	842	Stony Brook Road	35/46	Micro Fast	Remedial									
53	75	Swift Lane		Sludge Hammer										
54	7	Thousand Oaks Drive	107/21	Advantex	Provisional			Nitrogen		Zone II	No	No	Letter 8/22/23	9/7/23 Owner contacted office.9/21/23 Owner update - waiting for response from operator.10/4/23 Owner update-JM O'Reilly responded no but will reassess.11/23 Owner contacted Health Dept. unable to find operator on Cape. Advised may need to hire off-Cape operator until owner can contract with local operator.
55	54	Thousand Oaks Drive	108/23	Micro Fast	General		2016	Nitrogen	19 ppm	Zone II/DCPC/Pleasant Bay Watershed	Y	No	Letter 9/27/23	10/13/23 No response
56		Trevor Lane (Ocean Edge)		White Knight										
57	42	Warren's Road	38/75	Perc Rite										
58	120	Woodlands Lane (PBA Living)	143/12	Amphidrome										
		Pending Review in 1 year												



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **SFARRENKOPF**

Transaction ID: **1649110**

Document: **Groundwater Discharge Monitoring Report Forms**

Size of File: **1081.41K**

Status of Transaction: **In Process**

Date and Time Created: **12/12/2023:1:31:21 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



Groundwater Permit

DAILY LOG SHEET

746
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV DAILY
3. Sampling Month & Frequency

A. Facility Information

Important:When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



- Facility name, address:

PLEASANT BAY HEALTH CTR		
a. Name		
383 SOUTH ORLEANS ROAD		
b. Street Address		
BREWSTER	MA	02631
c. City	d. State	e. Zip Code
- Contact information:

JOSEPH SMITH		
a. Name of Facility Contact Person		
7742125005	jsmith@nsuwater.com	
b. Telephone Number	c. e-mail address	
- Sampling information:

11/1/2023	NOT APPLICABLE
a. Date Sampled (mm/dd/yyyy)	b. Laboratory Name
BEA/NSU WWTO PERSONNEL	
c. Analysis Performed By (Name)	

B. Form Selection

- Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2023 Nov Daily

 - All forms for submittal have been completed.
- This is the last selection.
- Delete the selected form.



Groundwater Permit
DAILY LOG SHEET

746

1. Permit Number

2. Tax identification Number

2023 NOV DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	11144					6.9		88.6
2	12391					6.7		95
3	12206					6.6		85.7
4	12206							
5	12206							
6	13002					6.5		
7	9449					6.5		
8	10562					6.5		33
9	10422					6.7		33.3
10	12265					6.7		28.6
11	12265							
12	12265							
13	12879					6.7		29
14	7385					6.8		72.9
15	11743					6.8		28.1
16	6681				6.9	6.9		72.9
17	9859					6.8		24.2
18	9859							
19	9859							
20	6930					7.1		18.8
21	13585					6.6		18.7
22	9734					6.8		17.2
23	9734							
24	9734							
25	9734							
26	9734							
27	14001					6.5		73.6
28	6752					6.8		73.6
29	8890					6.8		12.8
30	6619					7.0		12.4
31								



Groundwater Permit

DISCHARGE MONITORING REPORT

746
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

PLEASANT BAY HEALTH CTR

a. Name

383 SOUTH ORLEANS ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

JOSEPH SMITH

a. Name of Facility Contact Person

7742125005

b. Telephone Number

jsmith@nsuwater.com

c. e-mail address

3. Sampling information:

11/2/2023

a. Date Sampled (mm/dd/yyyy)

ALPHA ANALYTICAL

b. Laboratory Name

ALPHA ANALYTICAL PERSONNEL

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2023 Nov Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Groundwater Permit
 DISCHARGE MONITORING REPORT

746
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled

1. Parameter/Contaminant	2. Influent	3. Effluent	4. Effluent Method Detection limit
Units			
BOD	130	ND	2.0
MG/L			
TSS	83	ND	5.0
MG/L			
TOTAL SOLIDS	300	240	13
MG/L			
AMMONIA-N	16.2		
MG/L			
NITRATE-N		0.90	0.10
MG/L			
TOTAL NITROGEN(NO3+NO2+TKN)		1.62	0.450
MG/L			
OIL & GREASE		ND	3.6
MG/L			
FECAL COLIFORM		ND	2.0
/100 ML			
CHLORIDE		48	1.0
MG/L			



Groundwater Permit
MONITORING WELL DATA REPORT

746
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

PLEASANT BAY HEALTH CTR

a. Name

383 SOUTH ORLEANS ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

JOSEPH SMITH

a. Name of Facility Contact Person

7742125005

b. Telephone Number

jsmith@nsuwater.com

c. e-mail address

3. Sampling information:

11/29/2023

a. Date Sampled (mm/dd/yyyy)

NOT APPLICABLE

b. Laboratory Name

BEA/NSU WWTO PERSONNEL

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2023 Nov Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Groundwater Permit
 MONITORING WELL DATA REPORT

746
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

<

Parameter/Contaminant	DG-1	DG-2	DG-4	UG-1		
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4	Well #: 5	Well #: 6
PH	5.47	6.15	6.63	6.45		
S.U.						
STATIC WATER LEVEL	10.76	10.82	10.74	11.01		
FEET						
SPECIFIC CONDUCTANCE	281	342	355	169		
UMHOS/C						



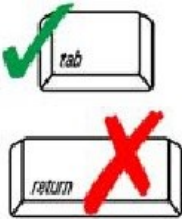
Groundwater Permit

746

1. Permit Number

2. Tax identification Number

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronic-ally and want to attach additional comments, select the check box.



Facility Information

PLEASANT BAY HEALTH CTR

a. Name

383 SOUTH ORLEANS ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

SAMANTHA FARRENKOPF

a. Signature

12/12/2023

b. Date (mm/dd/yyyy)

Reporting Package Comments

BENNETT ENVIRONMENTAL ASSOCIATES, LLC. (BEA) HAS COMPLETED THE NOVEMBER 2023 MONTHLY INFLUENT AND EFFLUENT SAMPLING OF THE AMPHIDROME WASTEWATER TREATMENT SYSTEM. MONTHLY WASTEWATER SAMPLING WAS COMPLETED ON 11/2/23. LABORATORY RESULTS REPORTED ALL PARAMETERS WITHIN DISCHARGE PERMIT LIMITATIONS. EFFLUENT PH WAS REPORTED WITHIN THE 6.5-8.5 RANGE THROUGHOUT THE MONTH. FLOW VOLUME MEASUREMENTS WERE ASSESSED DURING THE MONTH FROM THE SYSTEM'S EFFLUENT FLOW METER. DAILY FLOW REMAINED WITHIN THE 26,500-GPD LIMITATION THROUGHOUT THE MONTH. THE MINIMUM, MAXIMUM AND AVERAGE GPD FLOWS REPORTED OVER THE COURSE OF THE MONTH WERE 6,619 GPD, 14,001 GPD AND 10,470 GPD, RESPECTIVELY.

DURING THE COURSE OF THE MONTH, THE UV METER PERIODICALLY DIDN'T DISPLAY THE UV PERCENTAGE READING DUE TO A REOCCURRING NUISANCE ALARM. AS SUCH, UV INTENSITY IS REPORTED IN W/M2 UNITS FOR THE FOLLOWING DAYS: NOVEMBER 6TH – 13TH, NOVEMBER 16, NOVEMBER 20TH – 22ND, NOVEMBER 29TH, AND NOVEMBER 30TH, 2023. BEA IS WORKING WITH THE UV SYSTEM MANUFACTURER TO DIAGNOSE AND RESOLVE THE NUISANCE ALARM.



ANALYTICAL REPORT

Lab Number:	L2365178
Client:	Bennett Environmental Associates 1573 Main Street Brewster, MA 02631
ATTN:	Joseph Smith
Phone:	(508) 896-1706
Project Name:	PLEASANT BAY
Project Number:	K47810DA.S.WW.700
Report Date:	11/13/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2365178-01	INFLUENT	WATER	BREWSTER, MA	11/02/23 13:45	11/02/23
L2365178-02	EFFLUENT	WATER	BREWSTER, MA	11/02/23 13:45	11/02/23
L2365178-03	EFFLUENT	WATER	BREWSTER, MA	11/02/23 13:45	11/02/23

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Case Narrative (continued)

Coliform, Fecal (MF)

L2365178-03: The sample has an elevated detection limit due to the dilution required by the method.

OIL & GREASE, HEM-GRAV

The WG1851194-4 MS recovery, performed on L2365178-02, is outside the acceptance criteria for oil & grease, hem-grav (70%); however, the associated LCS recovery is within criteria. No further action was taken.

BOD, 5 day

The WG1848170-4 MS recovery, performed on L2365178-02, is outside the acceptance criteria for bod, 5 day (392%); however, the associated LCS recovery is within criteria. No further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 11/13/23

INORGANICS & MISCELLANEOUS

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

SAMPLE RESULTS

Lab ID: L2365178-01
Client ID: INFLUENT
Sample Location: BREWSTER, MA

Date Collected: 11/02/23 13:45
Date Received: 11/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	300		mg/l	13	NA	1.3	-	11/06/23 05:15	121,2540B	DEW
Solids, Total Suspended	83.		mg/l	20	NA	4	-	11/03/23 19:16	121,2540D	REM
Nitrogen, Ammonia	16.2		mg/l	0.375	--	5	11/06/23 22:26	11/10/23 11:54	121,4500NH3-BH	KEP
BOD, 5 day	130		mg/l	30	NA	15	11/03/23 10:00	11/08/23 12:40	121,5210B	OCF



Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

SAMPLE RESULTS

Lab ID: L2365178-02
Client ID: EFFLUENT
Sample Location: BREWSTER, MA

Date Collected: 11/02/23 13:45
Date Received: 11/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	240		mg/l	13	NA	1.3	-	11/06/23 05:15	121,2540B	DEW
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/03/23 19:16	121,2540D	REM
Chloride	48.		mg/l	1.0	--	1	-	11/10/23 14:36	121,4500CL-E	JER
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/03/23 03:58	44,353.2	KAF
Nitrogen, Nitrate	0.90		mg/l	0.10	--	1	-	11/03/23 03:58	44,353.2	KAF
Nitrogen, Total Kjeldahl	0.715		mg/l	0.300	--	1	11/04/23 15:28	11/10/23 20:26	121,4500NH3-H	AT
BOD, 5 day	ND		mg/l	2.0	NA	1	11/03/23 22:19	11/08/23 20:09	121,5210B	JRG
Oil & Grease, Hem-Grav	ND		mg/l	3.6	--	.9	11/11/23 14:30	11/11/23 17:22	140,1664B	QJM



Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

SAMPLE RESULTS

Lab ID: L2365178-03
Client ID: EFFLUENT
Sample Location: BREWSTER, MA

Date Collected: 11/02/23 13:45
Date Received: 11/02/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab										
Coliform, Fecal (MF)	ND		col/100ml	2.0	NA	2	-	11/02/23 19:07	121,9222D	JAI



Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis - Westborough Lab for sample(s): 03 Batch: WG1847700-1										
Coliform, Fecal (MF)	ND		col/100ml	1.0	NA	1	-	11/02/23 19:07	121,9222D	JAI
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1847764-1										
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/03/23 02:59	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1847770-1										
Nitrogen, Nitrate	ND		mg/l	0.10	--	1	-	11/03/23 03:06	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1847819-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	11/03/23 10:00	11/08/23 12:40	121,5210B	OCF
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1848168-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/03/23 19:16	121,2540D	REM
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1848170-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	11/03/23 22:19	11/08/23 20:09	121,5210B	JRG
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1848317-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	11/04/23 15:28	11/10/23 20:21	121,4500NH3-H	AT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1848591-1										
Solids, Total	ND		mg/l	10	NA	1	-	11/06/23 05:15	121,2540B	DEW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1848844-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	11/06/23 22:26	11/10/23 11:26	121,4500NH3-BH	KEP
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1850842-1										
Chloride	ND		mg/l	1.0	--	1	-	11/10/23 13:37	121,4500CL-E	JER
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1851194-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	--	1	11/11/23 14:30	11/11/23 16:33	140,1664B	QJM

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1847764-2								
Nitrogen, Nitrite	102		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1847770-2								
Nitrogen, Nitrate	104		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1847819-2								
BOD, 5 day	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1848168-2								
Solids, Total Suspended	97		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1848170-2								
BOD, 5 day	103		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1848317-2								
Nitrogen, Total Kjeldahl	93		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1848591-2								
Solids, Total	90		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1848844-2					
Nitrogen, Ammonia	101	-	80-120	-	20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1850842-2					
Chloride	103	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1851194-2					
Oil & Grease, Hem-Grav	100	-	78-114	-	18

Matrix Spike Analysis

Batch Quality Control

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1847764-4 QC Sample: L2364994-01 Client ID: MS Sample												
Nitrogen, Nitrite	0.15	4	4.9	119	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1847770-4 QC Sample: L2364994-01 Client ID: MS Sample												
Nitrogen, Nitrate	5.3	4	10	118	Q	-	-	-	83-113	-	-	6
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1847819-4 QC Sample: L2365178-01 Client ID: INFLUENT												
BOD, 5 day	130	200	310	87	-	-	-	-	50-145	-	-	35
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1848170-4 QC Sample: L2365178-02 Client ID: EFFLUENT												
BOD, 5 day	ND	100	390	392	Q	-	-	-	50-145	-	-	35
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1848317-4 QC Sample: L2349794-56 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	ND	8	6.78	85	-	-	-	-	77-111	-	-	24
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1848844-4 QC Sample: L2365134-01 Client ID: MS Sample												
Nitrogen, Ammonia	ND	4	4.07	102	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1850842-4 QC Sample: L2365024-01 Client ID: MS Sample												
Chloride	28	20	51	115	-	-	-	-	58-140	-	-	7
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1851194-4 QC Sample: L2365178-02 Client ID: EFFLUENT												
Oil & Grease, Hem-Grav	ND	37.7	26	70	Q	-	-	-	78-114	-	-	18

Lab Duplicate Analysis

Batch Quality Control

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1847764-3 QC Sample: L2364994-01 Client ID: DUP Sample						
Nitrogen, Nitrite	0.15	0.14	mg/l	7		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1847770-3 QC Sample: L2364994-01 Client ID: DUP Sample						
Nitrogen, Nitrate	5.3	5.4	mg/l	2		6
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1847819-3 QC Sample: L2365178-01 Client ID: INFLUENT						
BOD, 5 day	130	140	mg/l	2		35
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1848168-3 QC Sample: L2365096-01 Client ID: DUP Sample						
Solids, Total Suspended	56	57	mg/l	2		32
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1848168-4 QC Sample: L2365157-02 Client ID: DUP Sample						
Solids, Total Suspended	310	320	mg/l	3		32
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1848170-3 QC Sample: L2365178-02 Client ID: EFFLUENT						
BOD, 5 day	ND	ND	mg/l	NC		35
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1848317-3 QC Sample: L2349794-56 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	ND	ND	mg/l	NC		24
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1848591-3 QC Sample: L2364610-01 Client ID: DUP Sample						
Solids, Total	510	520	mg/l	2		16
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1848844-3 QC Sample: L2365134-01 Client ID: DUP Sample						
Nitrogen, Ammonia	ND	0.097	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1850842-3 QC Sample: L2365024-01 Client ID: DUP Sample					
Chloride	28	31	mg/l	10	Q 7
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1851194-3 QC Sample: L2365081-02 Client ID: DUP Sample					
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC	18

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178**Report Date:** 11/13/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2365178-01A	Plastic 500ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		NH3-4500(28)
L2365178-01B	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSC-2540(7),BOD-5210(2)
L2365178-01C	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSS-2540(7)
L2365178-02A	Plastic 250ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		TKN-4500(28)
L2365178-02B	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSC-2540(7),CL-4500(28),NO2-353(2),NO3-353(2),BOD-5210(2)
L2365178-02C	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		TSS-2540(7)
L2365178-02D	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		OG-1664(28)
L2365178-02E	Amber 1000ml HCl preserved	A	NA		3.4	Y	Absent		OG-1664(28)
L2365178-03A	Bacteria Cup Na2S2O3 preserved	A	NA		3.4	Y	Absent		F-COLI-MF(.33)
L2365178-03B	Bacteria Cup Na2S2O3 preserved	A	NA		3.4	Y	Absent		F-COLI-MF(.33)

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: PLEASANT BAY
Project Number: K47810DA.S.WW.700

Lab Number: L2365178
Report Date: 11/13/23

REFERENCES

- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 140 Method 1664, Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1



Westborough, MA
 TEL: 508-898-9220
 FAX: 508-898-9193

Mansfield, MA
 TEL: 508-822-9300
 FAX: 508-822-3288

Project Information

Project Name: Pleasant Bay

Project Location: Brewster, MA

Project #: K47810DA.S.WW.700

Project Manager: Joseph Smith

ALPHA Quote #:

Client Information

Client: Bennett Environmental Associates

Address: 1573 Main Street

Brewster, MA 02631

Phone: 508-896-1706

Fax: 508-896-5109

Email: sfarrenkopf@NSUWater.com

These samples have been Previously analyzed by Alpha

Turn-Around Time

Standard Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: 11/2/23

ALPHA Job #: L23108178

Report Information Data Deliverables

FAX EMAIL
 ADEx Add'l Deliverables

Billing Information

Same as Client info PO #: 47810DA.S

Regulatory Requirements/Report Limits

State/Fed Program Criteria

ANALYSIS

SAMPLE HANDLING
Filtration
 Done
 Not Needed
Preservation
 Lab to do
 Lab to do
 (Please specify below)

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	BOD, TS	NH3	TSS	BOD, TS, Nitrate, Nitrite, Chloride	Oil & Grease	TKN	Fecal Coliform											TOTAL # BOTTLES					
		Date	Time																									
5178 01	Influent	11/2/23	1345	WW	JCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	
02	Effluent	11/2/23	1345	WW	JCS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5
03	Effluent	11/2/23	1345	WW	JCS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

Container Type	P	P	P	P	A	P	B	-	-	-	-	-	-	-	-
Preservative	O	D	O	O	B	D	H	-	-	-	-	-	-	-	-

Relinquished By:	Date/Time	Received By:	Date/Time
<i>Jeff Heindel</i>	11/2/23 14:32	<i>Joseph Smith</i>	11/2 15:00
<i>Joseph Smith</i>	11/2 18:10	<i>Jeff Heindel</i>	11/2 18:10

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-018-NJ (rev. 29-APR-05)



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **SFARRENKOPF**

Transaction ID: **1650445**

Document: **Groundwater Discharge Monitoring Report Forms**

Size of File: **1083.91K**

Status of Transaction: **In Process**

Date and Time Created: **12/14/2023:2:39:11 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



Groundwater Permit

DAILY LOG SHEET

951
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV DAILY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

MAPLEWOOD AT BREWSTER

a. Name

820 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

JOSEPH SMITH

a. Name of Facility Contact Person

7742125005

b. Telephone Number

jsmith@nsuwater.com

c. e-mail address

3. Sampling information:

11/1/2023

a. Date Sampled (mm/dd/yyyy)

NOT APPLICABLE

b. Laboratory Name

BEA/NSU WWTO PERSONNEL

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2023 Nov Daily

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Groundwater Permit
DAILY LOG SHEET

951

1. Permit Number

2. Tax identification Number

2023 NOV DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	12398				6.9	7.2		
2	4381				7.0	7.2		
3	5269				6.9	6.8		
4	5269							
5	5269							
6	5202				6.8	6.8		
7	7157					6.8		
8	6591				6.9	7.0		
9	5279				6.7	7.0		
10	6294					7.6		
11	6294							
12	6294							
13	7456				6.9	7.4		
14	6185				6.8	7.1		
15	4921				6.9	6.9		
16	6471				6.9	7.0		
17	7195					6.8		
18	7195							
19	7195							
20	13918				6.8	6.9		
21	9720				6.8	6.8		
22	6239					6.9		
23	6239							
24	6239							
25	6239							
26	6239							
27	14189				6.9	7.1		
28	10816				6.8	6.8		
29	7995				6.9	7.0		
30	8945				6.8	7.3		
31								



Groundwater Permit

DISCHARGE MONITORING REPORT

951
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

MAPLEWOOD AT BREWSTER

a. Name

820 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

JOSEPH SMITH

a. Name of Facility Contact Person

7742125005

b. Telephone Number

jsmith@nsuwater.com

c. e-mail address

3. Sampling information:

11/16/2023

a. Date Sampled (mm/dd/yyyy)

ALPHA ANALYTICAL

b. Laboratory Name

ALPHA ANALYTICAL PERSONNEL

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2023 Nov Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



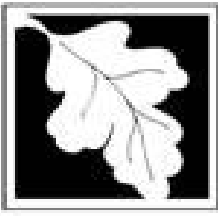
Groundwater Permit
 DISCHARGE MONITORING REPORT

951
 1. Permit Number
 [REDACTED]
 2. Tax identification Number
 2023 NOV MONTHLY
 3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled

1. Parameter/Contaminant	2. Influent	3. Effluent	4. Effluent Method Detection limit
Units			
BOD	77	ND	2.0
MG/L			
TSS	32	ND	5.0
MG/L			
TOTAL SOLIDS	380		
MG/L			
AMMONIA-N	14.6		
MG/L			
NITRATE-N		12	0.50
MG/L			
TOTAL NITROGEN(NO3+NO2+TKN)		14.42	1.15
MG/L			
OIL & GREASE		ND	3.6
MG/L			



Groundwater Permit
MONITORING WELL DATA REPORT

951
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

MAPLEWOOD AT BREWSTER

a. Name

820 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

JOSEPH SMITH

a. Name of Facility Contact Person

7742125005

b. Telephone Number

jsmith@nsuwater.com

c. e-mail address

3. Sampling information:

11/16/2023

a. Date Sampled (mm/dd/yyyy)

ALPHA ANALYTICAL

b. Laboratory Name

ALPHA ANALYTICAL PERSONNEL

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2023 Nov Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Groundwater Permit
 MONITORING WELL DATA REPORT

951
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

<

Parameter/Contaminant	MW-1	MW-2	MW-3	MW-4	Well #: 5	Well #: 6
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4		
PH	6.84	6.52	6.67	6.91		
S.U.						
STATIC WATER LEVEL	33.25	32.13	32.68	32.31		
FEET						
SPECIFIC CONDUCTANCE	168.1	193.4	202.6	165.0		
UMHOS/C						



Groundwater Permit

951

1. Permit Number

2. Tax identification Number

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronic-ally and want to attach additional comments, select the check box.



Facility Information

MAPLEWOOD AT BREWSTER

a. Name

820 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

SAMANTHA FARRENKOPF

a. Signature

12/14/2023

b. Date (mm/dd/yyyy)

Reporting Package Comments

BENNETT ENVIRONMENTAL ASSOCIATES, LLC. (BEA) HAS COMPLETED THE NOVEMBER 2023 MONTHLY INFLUENT AND EFFLUENT SAMPLING OF THE BIOCLERE WASTEWATER TREATMENT SYSTEM. MONTHLY WASTEWATER SAMPLING WAS COMPLETED ON 11/16/23. LABORATORY RESULTS REPORTED NITRATE AND TOTAL NITROGEN GREATER THAN DISCHARGE PERMIT LIMITS. EFFLUENT RESAMPLING COMPLETED ON 12/5/23 FOR ANALYSIS OF NITRATE AND TOTAL NITROGEN REPORTED CONCENTRATIONS OF 0.22 MG/L AND 2.37 MG/L, RESPECTIVELY. EFFLUENT PH WAS REPORTED WITHIN THE 6.5-8.5 RANGE THROUGHOUT THE MONTH. FLOW VOLUME MEASUREMENTS WERE ASSESSED DURING THE MONTH FROM THE SYSTEM'S EFFLUENT FLOW METER. DAILY FLOW REMAINED WITHIN THE 19,800-GPD LIMITATION THROUGHOUT THE MONTH. THE MINIMUM, MAXIMUM AND AVERAGE GPD FLOWS REPORTED OVER THE COURSE OF THE MONTH WERE 4,381 GPD, 14,189 GPD AND 7,303 GPD, RESPECTIVELY.



ANALYTICAL REPORT

Lab Number:	L2368339
Client:	Bennett Environmental Associates 1573 Main Street Brewster, MA 02631
ATTN:	Samantha Farrenkopf
Phone:	(508) 896-1706
Project Name:	MAPLEWOOD AT BREWSTER
Project Number:	K10842DA.S.WW.700
Report Date:	11/27/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2368339-01	INFLUENT	WATER	BREWSTER, MA	11/16/23 11:00	11/16/23
L2368339-02	EFFLUENT	WATER	BREWSTER, MA	11/16/23 11:30	11/16/23

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Case Narrative (continued)

Solids, Total Suspended

The WG1855029-2 LCS recovery for solids, total suspended (76%), associated with L2368339-02, is outside the acceptance criteria. Due to the lack of additional sample, no further action was taken.

WG1855029: A Laboratory Duplicate was prepared with the sample batch, however, the native sample required re-analysis; therefore, the result could not be reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Tiffani Morrissey

Title: Technical Director/Representative

Date: 11/27/23

INORGANICS & MISCELLANEOUS

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2368339-01
Client ID: INFLUENT
Sample Location: BREWSTER, MA

Date Collected: 11/16/23 11:00
Date Received: 11/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	380		mg/l	13	NA	1.3	-	11/21/23 05:06	121,2540B	DEW
Solids, Total Suspended	32.		mg/l	10	NA	2	-	11/22/23 20:56	121,2540D	REM
Nitrogen, Ammonia	14.6		mg/l	0.375	--	5	11/19/23 20:18	11/21/23 21:50	121,4500NH3-BH	AT
BOD, 5 day	77		mg/l	30	NA	15	11/17/23 15:15	11/22/23 12:00	121,5210B	MKT



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2368339-02
Client ID: EFFLUENT
Sample Location: BREWSTER, MA

Date Collected: 11/16/23 11:30
Date Received: 11/16/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/21/23 07:09	121,2540D	MRS
Nitrogen, Ammonia	1.02		mg/l	0.075	--	1	11/19/23 20:18	11/21/23 21:36	121,4500NH3-BH	AT
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/17/23 05:58	44,353.2	KAF
Nitrogen, Nitrate	12.		mg/l	0.50	--	5	-	11/17/23 06:08	44,353.2	KAF
Nitrogen, Total Kjeldahl	2.42		mg/l	0.600	--	2	11/19/23 23:52	11/21/23 18:53	121,4500NH3-H	AT
BOD, 5 day	ND		mg/l	2.0	NA	1	11/17/23 15:15	11/22/23 12:00	121,5210B	MKT
Oil & Grease, Hem-Grav	ND		mg/l	3.6	--	.9	11/22/23 13:01	11/22/23 15:59	140,1664B	JGM



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1853477-1										
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/17/23 03:25	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1853481-1										
Nitrogen, Nitrate	ND		mg/l	0.10	--	1	-	11/17/23 03:30	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1853807-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	11/17/23 15:15	11/22/23 12:00	121,5210B	MKT
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1854242-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	11/19/23 23:52	11/21/23 18:41	121,4500NH3-H	AT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1854310-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	11/19/23 20:18	11/21/23 21:18	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1854947-1										
Solids, Total	ND		mg/l	10	NA	1	-	11/21/23 05:06	121,2540B	DEW
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1855029-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/21/23 07:09	121,2540D	MRS
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1855735-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	--	1	11/22/23 13:01	11/22/23 14:38	140,1664B	JGM
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1855878-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/22/23 20:56	121,2540D	REM

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER

Lab Number: L2368339

Project Number: K10842DA.S.WW.700

Report Date: 11/27/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1853477-2								
Nitrogen, Nitrite	102		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1853481-2								
Nitrogen, Nitrate	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1853807-2								
BOD, 5 day	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1854242-2								
Nitrogen, Total Kjeldahl	115		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1854310-2								
Nitrogen, Ammonia	105		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1854947-2								
Solids, Total	101		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1855029-2								
Solids, Total Suspended	76	Q	-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER

Project Number: K10842DA.S.WW.700

Lab Number: L2368339

Report Date: 11/27/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1855735-2					
Oil & Grease, Hem-Grav	79	-	78-114	-	18
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1855878-2					
Solids, Total Suspended	101	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1853477-4 QC Sample: L2368339-02 Client ID: EFFLUENT												
Nitrogen, Nitrite	ND	4	4.2	105	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1853481-4 QC Sample: L2368339-02 Client ID: EFFLUENT												
Nitrogen, Nitrate	12	4	16	100	-	-	-	-	83-113	-	-	6
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1853807-4 QC Sample: L2368222-01 Client ID: MS Sample												
BOD, 5 day	ND	100	89	89	-	-	-	-	50-145	-	-	35
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1854242-4 QC Sample: L2368371-01 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	ND	8	5.96	74	Q	-	-	-	77-111	-	-	24
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1854310-4 QC Sample: L2368391-02 Client ID: MS Sample												
Nitrogen, Ammonia	620	40	655	88	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1855735-4 QC Sample: L2367637-02 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	37.7	32	85	-	-	-	-	78-114	-	-	18
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1855735-6 QC Sample: L2362960-99 Client ID: MS Sample												
Oil & Grease, Hem-Grav	ND	37.7	32	85	-	-	-	-	78-114	-	-	18

Lab Duplicate Analysis

Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER

Project Number: K10842DA.S.WW.700

Lab Number: L2368339

Report Date: 11/27/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1853477-3 QC Sample: L2368339-02 Client ID: EFFLUENT						
Nitrogen, Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1853481-3 QC Sample: L2368339-02 Client ID: EFFLUENT						
Nitrogen, Nitrate	12	12	mg/l	0		6
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1853807-3 QC Sample: L2368222-01 Client ID: DUP Sample						
BOD, 5 day	ND	ND	mg/l	NC		35
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1854242-3 QC Sample: L2368371-01 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	ND	ND	mg/l	NC		24
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1854310-3 QC Sample: L2368391-02 Client ID: DUP Sample						
Nitrogen, Ammonia	620	573	mg/l	8		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1854947-3 QC Sample: L2367614-01 Client ID: DUP Sample						
Solids, Total	320	350	mg/l	9		16
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1855735-3 QC Sample: L2367637-01 Client ID: DUP Sample						
Oil & Grease, Hem-Grav	ND	ND	mg/l	NC		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1855878-3 QC Sample: L2368386-01 Client ID: DUP Sample						
Solids, Total Suspended	730	730	mg/l	0		32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1855878-4 QC Sample: L2368663-01 Client ID: DUP Sample						
Solids, Total Suspended	41	41	mg/l	0		32

Project Name: MAPLEWOOD AT BREWSTER**Lab Number:** L2368339**Project Number:** K10842DA.S.WW.700**Report Date:** 11/27/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2368339-01A	Plastic 500ml H2SO4 preserved	A	<2	<2	5.3	Y	Absent		NH3-4500(28)
L2368339-01B	Plastic 950ml unpreserved	A	7	7	5.3	Y	Absent		TSC-2540(7),BOD-5210(2)
L2368339-01C	Plastic 950ml unpreserved	A	7	7	5.3	Y	Absent		TSS-2540(7)
L2368339-02A	Plastic 500ml H2SO4 preserved	C	<2	<2	2.2	Y	Absent		TKN-4500(28),NH3-4500(28)
L2368339-02B	Plastic 950ml unpreserved	C	7	7	2.2	Y	Absent		NO2-353(2),NO3-353(2),BOD-5210(2)
L2368339-02C	Plastic 950ml unpreserved	C	7	7	2.2	Y	Absent		TSS-2540(7)
L2368339-02D	Amber 1000ml HCl preserved	C	NA		2.2	Y	Absent		OG-1664(28)
L2368339-02E	Amber 1000ml HCl preserved	C	NA		2.2	Y	Absent		OG-1664(28)

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2368339
Report Date: 11/27/23

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: MAPLEWOOD AT BREWSTER**Lab Number:** L2368339**Project Number:** K10842DA.S.WW.700**Report Date:** 11/27/23

REFERENCES

- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 140 Method 1664, Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1



Westborough, MA Mansfield, MA
 TEL: 508-898-9220 TEL: 508-822-9300
 FAX: 508-896-9193 FAX: 508-822-3288

Project Information

Project Name: Maplewood at Brewster

Project Location: Brewster, MA

Project #: K10842DA.S.WW.700

Project Manager: Joseph Smith

ALPHA Quote #:

Turn-Around Time

Standard Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Client Information

Client: Bennett Environmental Associates

Address: 1573 Main St

Brewster, MA 02631

Phone: 508-896-1706

Fax: 508-896-5109

Email: sfarrenkopf@NSUWater.com

These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: 11/16/03

ALPHA Job #: 0308339

Report Information Data Deliverables Billing Information

FAX EMAIL
 ADEx Add'l Deliverables

Same as Client info PO #: K10842DA.S

Regulatory Requirements/Report Limits

State/Fed Program Criteria

ANALYSIS

SAMPLE HANDLING
 Filtration
 Done
 Not Needed
 Preservation
 Lab to do
 Lab to do
 (Please specify below)

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
05339 01	Influent	11-16-03	11:00	WW	RL
05339 02	Effluent	11-16-03	11:30	WW	RL

TSS	BOD, TS	BOD, Nitrate, Nitrite	NH3	Oil & Grease	TKN												
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Sample Specific Comments

3

6

9

Container Type	P	P	P	P	A	P	P	-	-	-	-	-	-
Preservative	O	O	O	D	B	D	D	-	-	-	-	-	-

Relinquished By:	Date/Time	Received By:	Date/Time
Roshan Ganes	11-16-03 12:00	FRIDGE	4/16 15:00
Hydramin S	11/16 18:23	ADL	11/16 15:23

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-010-142 (rev. 29-APR-03)



ANALYTICAL REPORT

Lab Number:	L2371568
Client:	Bennett Environmental Associates 1573 Main Street Brewster, MA 02631
ATTN:	Samantha Farrenkopf
Phone:	(508) 896-1706
Project Name:	MAPLEWOOD AT BREWSTER
Project Number:	K10842DA.S.WW.700
Report Date:	12/11/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2371568-01	EFFLUENT RESAMPLE	WATER	BREWSTER, MA	12/05/23 12:00	12/05/23

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Kelly O'Neill

Title: Technical Director/Representative

Date: 12/11/23

INORGANICS & MISCELLANEOUS

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

SAMPLE RESULTS

Lab ID: L2371568-01
Client ID: EFFLUENT RESAMPLE
Sample Location: BREWSTER, MA

Date Collected: 12/05/23 12:00
Date Received: 12/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	12/07/23 07:19	44,353.2	KAF
Nitrogen, Nitrate	0.22		mg/l	0.10	--	1	-	12/07/23 07:19	44,353.2	KAF
Nitrogen, Total Kjeldahl	2.37		mg/l	0.300	--	1	12/06/23 17:29	12/08/23 13:43	121,4500NH3-H	KEP



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1860488-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	12/06/23 17:29	12/08/23 13:00	121,4500NH3-H	KEP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1860745-1										
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	12/07/23 03:45	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1860753-1										
Nitrogen, Nitrate	ND		mg/l	0.10	--	1	-	12/07/23 04:02	44,353.2	KAF

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER

Lab Number: L2371568

Project Number: K10842DA.S.WW.700

Report Date: 12/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1860488-2								
Nitrogen, Total Kjeldahl	98		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1860745-2								
Nitrogen, Nitrite	100		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1860753-2								
Nitrogen, Nitrate	106		-		90-110	-		

Matrix Spike Analysis Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1860488-4 QC Sample: L2371537-02 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	2.68	8	9.71	88	-	-	-	-	77-111	-	-	24
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1860745-4 QC Sample: L2371527-01 Client ID: MS Sample												
Nitrogen, Nitrite	ND	4	4.5	112	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1860753-4 QC Sample: L2371527-01 Client ID: MS Sample												
Nitrogen, Nitrate	16	4	20	102	-	-	-	-	83-113	-	-	6

Lab Duplicate Analysis

Batch Quality Control

Project Name: MAPLEWOOD AT BREWSTER

Project Number: K10842DA.S.WW.700

Lab Number: L2371568

Report Date: 12/11/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1860488-3 QC Sample: L2371537-02 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	2.68	3.16	mg/l	16		24
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1860745-3 QC Sample: L2371527-01 Client ID: DUP Sample						
Nitrogen, Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1860753-3 QC Sample: L2371527-01 Client ID: DUP Sample						
Nitrogen, Nitrate	16	16	mg/l	0		6

Project Name: MAPLEWOOD AT BREWSTER

Project Number: K10842DA.S.WW.700

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler Custody Seal

B Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2371568-01A	Plastic 500ml H2SO4 preserved	B	<2	<2	4.2	Y	Absent		TKN-4500(28)
L2371568-01B	Plastic 950ml unpreserved	B	7	7	4.2	Y	Absent		NO2-353(2),NO3-353(2)

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

Data Qualifiers

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: MAPLEWOOD AT BREWSTER
Project Number: K10842DA.S.WW.700

Lab Number: L2371568
Report Date: 12/11/23

REFERENCES

- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 1

Westborough, MA Mansfield, MA
 TEL: 508-898-9220 TEL: 508-822-9300
 FAX: 508-898-9193 FAX: 508-822-3288

Client Information

Client: Bennett Environmental Associates
 Address: 1573 Main St
 Brewster, MA 02631
 Phone: 508-896-1706
 Fax: 508-896-5109
 Email: sfarrenkopf@NSUWater.com
 These samples have been Previously analyzed by Alpha

Project Information

Project Name: Maplewood at Brewster
 Project Location: Brewster, MA
 Project #: K10842DA.X.WW.700
 Project Manager: Joseph Smith
 ALPHA Quote #:

Turn-Around Time

Standard Rush (ONLY IF PRE-APPROVED)
 Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: 12/5/03 ALPHA Job #: 10371568

Report Information Data Deliverables Billing Information

FAX EMAIL Same as Client info PO #: K10842DA.X
 ADEX Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program Criteria

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

ALPHA Lab ID	Sample ID	Date	Time	Sample Matrix	Sampler's Initials	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
70368 01	Effluent Resample	12-5-23	12:40	WW	RG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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ANALYSIS

103	TK2																								
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TOTAL # BOTTLES

SAMPLE HANDLING
 Filtration
 Done
 Not Needed
 Lab to do
 Preservation
 Lab to do
 (Please specify below)

Sample Specific Comments

2

Container Type	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	O	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Relinquished By:	Date/Time	Received By:	Date/Time
Rashawn Gomes	12-5-23 2:00	Fridge	12/5 13:00
FRIDGE	12/5	FRIDGE	12/5 17:54
ADMIN	12/5 17:54	ADMIN	12/5 17:54

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **EBELAIR**

Transaction ID: **1641824**

Document: **Groundwater Discharge Monitoring Report Forms**

Size of File: **1079.95K**

Status of Transaction: **Submitted**

Date and Time Created: **12/26/2023:12:38:47 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



Groundwater Permit

DISCHARGE MONITORING REPORT

599
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SERENITY BREWSTER WWTF

a. Name

873 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

MAHEEN AKHTER

a. Name of Facility Contact Person

6178526110

b. Telephone Number

makhter@elevationfinancialgroup.com

c. e-mail address

3. Sampling information:

11/2/2023

a. Date Sampled (mm/dd/yyyy)

RI ANALYTICAL

b. Laboratory Name

KRISTIN PHELAN

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2023 Nov Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Groundwater Permit
 DISCHARGE MONITORING REPORT

599
 1. Permit Number
 [REDACTED]
 2. Tax identification Number
 2023 NOV MONTHLY
 3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled

1. Parameter/Contaminant	2. Influent	3. Effluent	4. Effluent Method Detection limit
Units			
BOD	17	ND	3.0
MG/L			
TSS	12	2.3	2.0
MG/L			
TOTAL SOLIDS	260		
MG/L			
AMMONIA-N	5.2		
MG/L			
NITRATE-N		1.1	0.050
MG/L			
TOTAL NITROGEN(NO3+NO2+TKN)		2.7	0.50
MG/L			
OIL & GREASE		0.80	0.50
MG/L			



Groundwater Permit

MONITORING WELL DATA REPORT

599
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SERENITY BREWSTER WWTF

a. Name

873 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

MAHEEN AKHTER

a. Name of Facility Contact Person

6178526110

b. Telephone Number

makhter@elevationfinancialgroup.com

c. e-mail address

3. Sampling information:

11/3/2023

a. Date Sampled (mm/dd/yyyy)

WHITEWATER

b. Laboratory Name

RICK BRULOTTE

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2023 Nov Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Groundwater Permit
MONITORING WELL DATA REPORT

599
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV MONTHLY
3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

<

Parameter/Contaminant	MW1	MW2	MW3	MW4	Well #: 5	Well #: 6
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4		
PH	6.4	6.9	6.9	7		
S.U.						
STATIC WATER LEVEL	59.4	58.1	59.5	29.25		
FEET						
SPECIFIC CONDUCTANCE	319	220	375	619		
UMHOS/C						



Groundwater Permit

DAILY LOG SHEET

599
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV DAILY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SERENITY BREWSTER WWTF

a. Name

873 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

MAHEEN AKHTER

a. Name of Facility Contact Person

6178526110

b. Telephone Number

makhter@elevationfinancialgroup.com

c. e-mail address

3. Sampling information:

11/30/2023

a. Date Sampled (mm/dd/yyyy)

WHITEWATER

b. Laboratory Name

RICK BRULOTTE

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2023 Nov Daily

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.

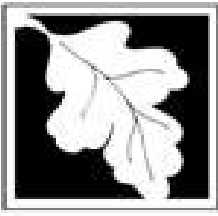


Groundwater Permit
DAILY LOG SHEET

599
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 NOV DAILY
3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	8182					7.1		
2	9135					7.1		
3	7233					7		0.8
4	6672							
5	7601							
6	7280					6.9		0.8
7	8101					7.1		0.8
8	8637					6.5		0.6
9	6748					6.8		0.6
10	7320					7.2		0.2
11	6960							
12	7705							
13	6977					7		0.7
14	9452					7		1
15	7608					7		0.4
16	7415					6.9		0.6
17	7277					6.9		0.6
18	7639							
19	6657							
20	6270					7		0.9
21	8370					7		0.9
22	8838					7.1		0.8
23	7567							
24	6971					7.2		0.6
25	7374							
26	6850							
27	8210					7.1		0.8
28	7601					7.2		0.8
29	8185					7.1		0.8
30	7512					7.1		0.8
31								



Groundwater Permit

599

1. Permit Number

2. Tax identification Number

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronic-ally and want to attach additional comments, select the check box.



Facility Information

SERENITY BREWSTER WWTF

a. Name

873 HARWICH ROAD

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

ELIZABETH BELAIR

a. Signature

12/26/2023

b. Date (mm/dd/yyyy)

Reporting Package Comments

FACILITY WAS IN FULL COMPLIANCE WITH ALL PERMIT REQUIREMENTS FOR THE MONTH

November 22, 2023

Bryan Webb (via email)
Ocean Edge Resort
2907 Main Street
Brewster, MA 02631

**RE: Ocean Edge Resort Wastewater Treatment Facility
Monthly Operations Report – October 2023**

Dear Mr. Webb:

Enclosed please find the Monthly Operations Reporting Package for the Ocean Edge Resort wastewater treatment facility (WWTF) located at 832 Village Drive in Brewster, MA.

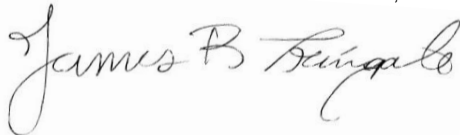
Weston & Sampson Services, Inc. would like to note the following:

- All regulated effluent parameters of samples collected on October 23 were reported to be within their respective permissible limits.
- Quarterly effluent samples were collected during this month.
- Quarterly monitoring well samples were collected during this month.
- Data was filed with MassDEP electronically, via eDEP. A copy of the transaction is included in this package.

If you have any questions or concerns regarding this report, or the wastewater treatment facility, please feel free to contact me at wsscompliance@wseinc.com.

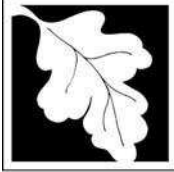
Regards,

WESTON & SAMPSON SERVICES, INC.



James R. Tringale
Compliance Coordinator

cc: Brewster Board of Health (via email)
FR Mahony Associates (via email)



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **WSSINC**

Transaction ID: **1639677**

Document: **Groundwater Discharge Monitoring Report Forms**

Size of File: **1683.25K**

Status of Transaction: **Submitted**

Date and Time Created: **12/5/2023:11:16:01 AM**

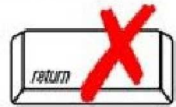
Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 OCT DAILY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

OCEAN EDGE CONFERENCE CTR

a. Name

ROUTE 6A

b. Street Address

BREWSTER MA 02631

c. City

d. State

e. Zip Code

2. Contact information:

JAMES TRINGALE

a. Name of Facility Contact Person

9785321900 wsscompliance@wseinc.com

b. Telephone Number

c. e-mail address

3. Sampling information:

10/1/2023 ON SITE MEASUREMENTS

a. Date Sampled (mm/dd/yyyy)

b. Laboratory Name

CHRIS VIGNEAU

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2023 Oct Daily

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Groundwater Discharge Program
Groundwater Permit
 DAILY LOG SHEET

633
 1. Permit Number
 [REDACTED]
 2. Tax identification Number
 2023 OCT DAILY
 3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	8378							
2	8378				6.97	7.19		
3	5928				7.01	7.17		
4	10151				7.03	7.26		
5	3785				6.98	7.31		
6	6093				7.02	7.24		
7	11919							
8	11919							
9	11919				7.08	7.21		
10	3895				7.01	7.27		
11	7312							
12	7312				7.00	7.31		
13	9633				7.04	7.26		
14	8428							
15	8428							
16	8428				7.07	7.33		
17	10458				7.09	7.29		
18	5292				7.01	7.36		
19	4568				6.97	7.28		
20	7226				7.00	7.23		
21	10523							
22	10523				7.09	7.25		
23	4442				7.06	7.31		
24	2978				7.11	7.30		
25	4188							
26	4188				7.08	7.37		
27	7151				7.12	7.32		
28	7628							
29	7628							
30	7628							
31	1465				7.10	7.35		



Groundwater Permit
MONITORING WELL DATA REPORT

633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 OCT MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important:When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

OCEAN EDGE CONFERENCE CTR

a. Name

ROUTE 6A

b. Street Address

BREWSTER

c. City

MA

d. State

02631

e. Zip Code

2. Contact information:

JAMES TRINGALE

a. Name of Facility Contact Person

9785321900

b. Telephone Number

wsscompliance@wseinc.com

c. e-mail address

3. Sampling information:

10/23/2023

a. Date Sampled (mm/dd/yyyy)

ON SITE MEASUREMENTS

b. Laboratory Name

CHRIS VIGNEAU

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2023 Oct Monthly

All forms for submittal have been completed.

2. This is the last selection.

3. Delete the selected form.



633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 OCT MONTHLY
3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

<

Parameter/Contaminant	DG2	DG3	DG4	DG5	UG1	
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4	Well #: 5	Well #: 6
PH	6.30	6.00	6.10	5.90	5.90	
S.U.						
STATIC WATER LEVEL	46.3	45	42.6	47.3	40.6	
FEET						
SPECIFIC CONDUCTANCE	435	460	330	270	300	
UMHOS/C						



633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 OCT MONTHLY
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

OCEAN EDGE CONFERENCE CTR				
a. Name				
ROUTE 6A				
b. Street Address				
BREWSTER	MA	02631		
c. City	d. State	e. Zip Code		

2. Contact information:

JAMES TRINGALE	
a. Name of Facility Contact Person	
9785321900	wsscompliance@wseinc.com
b. Telephone Number	c. e-mail address

3. Sampling information:

10/23/2023	R I ANALYTICAL
a. Date Sampled (mm/dd/yyyy)	b. Laboratory Name
VARIOUS ANALYSTS	
c. Analysis Performed By (Name)	

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2023 Oct Monthly ▼

- All forms for submittal have been completed.
- This is the last selection.
- Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program
Groundwater Permit
DISCHARGE MONITORING REPORT

633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 OCT MONTHLY
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled

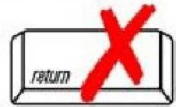
1. Parameter/Contaminant	2. Influent	3. Effluent	4. Effluent Method Detection limit
Units			
BOD	63	ND	10
MG/L			
TSS	120	12	2.0
MG/L			
TOTAL SOLIDS	530		
MG/L			
AMMONIA-N	7.6		
MG/L			
NITRATE-N		ND	0.050
MG/L			
TOTAL NITROGEN(NO3+NO2+TKN)		1.2	
MG/L			
OIL & GREASE		1.1	0.50
MG/L			



633
 1. Permit Number
 [REDACTED]
 2. Tax identification Number
 2023 QUARTERLY 4
 3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

OCEAN EDGE CONFERENCE CTR
 a. Name
 ROUTE 6A
 b. Street Address
 BREWSTER MA 02631
 c. City d. State e. Zip Code

2. Contact information:

JAMES TRINGALE
 a. Name of Facility Contact Person
 9785321900 wsscompliance@wseinc.com
 b. Telephone Number c. e-mail address

3. Sampling information:

10/23/2023 R I ANALYTICAL
 a. Date Sampled (mm/dd/yyyy) b. Laboratory Name
 VARIOUS ANALYSTS
 c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2023 Quarterly 4

- All forms for submittal have been completed.
- This is the last selection.
- Delete the selected form.



Groundwater Permit
DISCHARGE MONITORING REPORT

633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 QUARTERLY 4
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled

1. Parameter/Contaminant	2. Influent	3. Effluent	4. Effluent Method
Units			Detection limit
TOTAL PHOSPHORUS AS P		8.3	0.010
MG/L			
ORTHO PHOSPHATE		8.1	0.020
MG/L			



633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 QUARTERLY 4
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

OCEAN EDGE CONFERENCE CTR				
a. Name				
ROUTE 6A				
b. Street Address				
BREWSTER	MA	02631		
c. City	d. State	e. Zip Code		

2. Contact information:

JAMES TRINGALE	
a. Name of Facility Contact Person	
9785321900	wsscompliance@wseinc.com
b. Telephone Number	c. e-mail address

3. Sampling information:

10/23/2023	R I ANALYTICAL
a. Date Sampled (mm/dd/yyyy)	b. Laboratory Name
VARIOUS ANALYSTS	
c. Analysis Performed By (Name)	

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2023 Quarterly 4

- All forms for submittal have been completed.
- This is the last selection.
- Delete the selected form.



633
1. Permit Number
[REDACTED]
2. Tax identification Number
2023 QUARTERLY 4
3. Sampling Month & Frequency

C. Contaminant Analysis Information

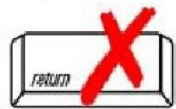
- For "0", below detection limit, less than (<) value, or not detected, enter "ND" <
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

Parameter/Contaminant	DG2	DG3	DG4	DG5	UG1	
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4	Well #: 5	Well #: 6
NITRATE-N	5.2	3.6	3.9	3.1	5.5	
MG/L						
TOTAL NITROGEN(NO3+NO2+TKI)	5.2	3.6	3.9	4.9	5.5	
MG/L						
TOTAL PHOSPHORUS AS P	1.6	0.42	0.23	0.23	0.23	
MG/L						
ORTHO PHOSPHATE	1.3	ND	ND	ND	ND	
MG/L						



633
1. Permit Number
2. Tax identification Number

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronic-ally and want to attach additional comments, select the check box.

Facility Information

OCEAN EDGE CONFERENCE CTR
a. Name
ROUTE 6A
b. Street Address
BREWSTER MA 02631
c. City d. State e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MARIANNA COOMBS 11/30/2023
a. Signature b. Date (mm/dd/yyyy)

Reporting Package Comments



LABORATORY REPORT

WSS Inc.dba Weston & Sampson
Attn: Christopher Vigneau
55 Walkers Brook Drive
Suite 100
Reading, MA 01867

Date Received: 10/24/2023
Date Reported: 11/2/2023
P.O. Number

Work Order #: 2310-18143

Project Name: PROJECT# 25364 OCEAN EDGE RESORT - QUARTERLY I+E

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest concentration of an analyte that can be reliably detected under routine laboratory conditions. The Reporting Limit is the minimum concentration that can be reliably quantified under routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:

A handwritten signature in black ink that reads "Katie Amaral".

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

WSS Inc.dba Weston & Sampson

Work Order #: 2310-18143

Project Name: PROJECT# 25364 OCEAN EDGE RESORT - QUARTERLY I+E

Sample Number: 001
Sample Description: INFLUENT
Sample Type : COMPOSITE
Sample Date / Time : 10/23/2023 @ 16:15

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
BOD 5	63	60	mg/L	SM5210B 21ed	10/24/2023 19:11	HNB
Total Suspended Solids	120	2.0	mg/L	SM2540D 2023	10/26/2023 13:44	KPG
Total Solids	530	10	mg/L	SM2540B 18-21ed	10/25/2023 19:57	BRC
Ammonia (as N)	7.6	0.40	mg/L	EPA 350.1	10/31/2023 11:10	VC

Sample Number: 002
Sample Description: EFFLUENT
Sample Type : COMPOSITE
Sample Date / Time : 10/23/2023 @ 16:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
BOD 5	<10	10	mg/L	SM5210B 21ed	10/24/2023 19:11	HNB
Total Suspended Solids	12	2.0	mg/L	SM2540D 2023	10/26/2023 13:44	KPG
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/24/2023 20:34	JW
Nitrate (as N)	<0.050	0.050	mg/L	EPA 300.0	10/24/2023 20:34	JW
TKN (as N)	1.2	0.50	mg/L	SM4500NOrg-D 18-21ed	10/30/2023 11:40	JCD

Sample Number: 003
Sample Description: EFFLUENT
Sample Type : GRAB
Sample Date / Time : 10/23/2023 @ 16:45

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	8.1	0.020	mg/L	SM4500 P E-2011	10/25/2023 0:28	JW
Total Phosphorus (as P)	8.3	0.010	mg/L	SM4500 P-B,E-2011	10/27/2023 10:00	VC
Oil & Grease Gravimetric	1.1	0.50	mg/L	EPA 1664A	11/1/2023 13:18	ZAC

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

CHAIN OF CUSTODY RECORD

41 Illinois Avenue
Warwick, RI 02888-3007
800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105
Hudson, MA 01749-1331
800-937-2580 • Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type ^C	Preservation Code ^P	Matrix Code ^M	BOD - Biochemical O ₂ Demand	TDS - Total Dissolved Solids	TSS - Suspended Solids	TS - Total Solids	NO ₂ - Nitrite Nitrogen as N	NO ₃ - Nitrate Nitrogen as N	TN - Total Nitrogen Calculation	TKN - Total Kjeldahl Nitrogen	NH ₃ - Ammonia Nitrogen as N	O-P - Ortho Phosphate	T-P - Total Phosphate	O&G - Oil & Grease (1664)	VOCs - method 624.1	Metals:	Fecal Coliform (MF)
10/23/23	16:15	IN-1/VENT	C	1P NP WS	WS		X		X	X											
	16:15	IN-1/VENT	C	1P NP WS	WS																
	16:30	EF-1/VENT	C	1P NP WS	WS			X		X				X							
	16:30	EF-1/VENT	C	1P NP WS	WS																
	16:45	EF-1/VENT	C	1P NP WS	WS																
	16:45	EF-1/VENT	C	1P NP WS	WS																
	16:45	EF-1/VENT	C	1P NP WS	WS																

PRK

Client Information

Company Name: **WSS Inc., dba Weston & Sampson Services**
Address: **55 Walkers Brook Drive, Suite 100**
City / State / Zip: **Reading, MA 01867**
Telephone: **978-532-1900** Fax: **978-977-0100**
Contact Person: **Christopher Vigneau**

Project Information

Project Name: **Ocean Edge Resort - Aventura**
P.O. Number: **253364**
Report To: **Chris Vigneau** Phone: **978-818-9946** Fax: **978-818-9946**
Sampled by: **Chris Vigneau** Email address: **vigneauc@wseinc.com**
Quote No: **wsecompliance@wseinc.com**

Relinquished By	Date	Time	Received By	Date	Time
<i>CV</i>	10/24/23	12:40	<i>CV</i>	10/24/23	12:40
<i>CV</i>	10/24/23	16:30	<i>CV</i>	10/24/23	16:20

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? **No**

Temp. Upon Receipt **4.0 °C**

Lab Use Only

Sample Pick Up Only	<input checked="" type="checkbox"/>
RIAL Sampled; attach fieldhous	<input checked="" type="checkbox"/>
Shipped on ice	<input checked="" type="checkbox"/>
Workorder No: 2310-18143	



LABORATORY REPORT

WSS Inc.dba Weston & Sampson
Attn: Christopher Vigneau
55 Walkers Brook Drive
Suite 100
Reading, MA 01867

Date Received: 10/24/2023
Date Reported: 11/2/2023
P.O. Number

Work Order #: 2310-18144

Project Name: PROJECT# 25364 OCEAN EDGE RESORT - QUARTERLY WELLS

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest concentration of an analyte that can be reliably detected under routine laboratory conditions. The Reporting Limit is the minimum concentration that can be reliably quantified under routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:

Katie Amaral, Ph.D., CMQ/OE
Laboratory Director

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508

Report Qualifiers & Abbreviations

These qualifiers/abbreviations may or may not be present in this report.

Qualifier	Descriptions
*	Recovery outside of acceptance limits
B	Analyte detected in method blank at a level about the detection limit
D	Surrogate diluted out to reach a parameter result within the instrument calibration curve
E	Parameter result exceeds calibration curve
J	Estimated result based on MDL

Abbreviation	Definition
BLK	Method Blank
CFU	Colony Forming Unit
DF	Dilution Factor
DL	Detection Limit
LCS(D)	Laboratory Control Standard (Duplicate)
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
MPN	Most Probable Number
MS(D)	Matrix Spike (Duplicate)
QC	Quality Control
RPD	Relative Percent Difference
TIC	Tentatively Identified Compound
TNTC	Too Numerous to Count
*CS	Field data provided by the client

R.I. Analytical Laboratories, Inc.

Laboratory Report

WSS Inc.dba Weston & Sampson

Work Order #: 2310-18144

Project Name: PROJECT# 25364 OCEAN EDGE RESORT - QUARTERLY WELLS

Sample Number: 001
Sample Description: MW UG-1
Sample Type : GRAB
Sample Date / Time : 10/23/2023 @ 17:00

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/25/2023 0:28	JW
Total Phosphorus (as P)	0.23	0.010	mg/L	SM4500 P-B,E-2011	10/30/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/24/2023 21:22	JW
Nitrate (as N)	5.5	0.050	mg/L	EPA 300.0	10/24/2023 21:22	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	10/30/2023 11:40	JCD

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 002
Sample Description: MW DG-2
Sample Type : GRAB
Sample Date / Time : 10/23/2023 @ 17:15

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	1.3	0.020	mg/L	SM4500 P E-2011	10/25/2023 0:28	JW
Total Phosphorus (as P)	1.6	0.010	mg/L	SM4500 P-B,E-2011	10/30/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/24/2023 23:13	JW
Nitrate (as N)	5.2	0.050	mg/L	EPA 300.0	10/24/2023 23:13	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	10/30/2023 11:40	JCD

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 003
Sample Description: MW DG-3
Sample Type : GRAB
Sample Date / Time : 10/23/2023 @ 17:30

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/25/2023 0:28	JW
Total Phosphorus (as P)	0.42	0.010	mg/L	SM4500 P-B,E-2011	10/30/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/24/2023 23:29	JW
Nitrate (as N)	3.6	0.050	mg/L	EPA 300.0	10/24/2023 23:29	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	10/30/2023 11:40	JCD

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

R.I. Analytical Laboratories, Inc.

Laboratory Report

WSS Inc.dba Weston & Sampson

Work Order #: 2310-18144

Project Name: PROJECT# 25364 OCEAN EDGE RESORT - QUARTERLY WELLS

Sample Number: 004
Sample Description: MW DG-4
Sample Type : GRAB
Sample Date / Time : 10/23/2023 @ 17:45

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/25/2023 0:28	JW
Total Phosphorus (as P)	0.23	0.010	mg/L	SM4500 P-B,E-2011	10/30/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/25/2023 0:16	JW
Nitrate (as N)	3.9	0.050	mg/L	EPA 300.0	10/25/2023 0:16	JW
TKN (as N)	<0.50	0.50	mg/L	SM4500NOrg-D 18-21ed	10/30/2023 11:40	JCD

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.

Sample Number: 005
Sample Description: MW DG-5
Sample Type : GRAB
Sample Date / Time : 10/23/2023 @ 18:00

PARAMETER	SAMPLE RESULTS	REP. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Orthophosphate	<0.020	0.020	mg/L	SM4500 P E-2011	10/25/2023 0:28	JW
Total Phosphorus (as P)	0.23	0.010	mg/L	SM4500 P-B,E-2011	10/30/2023 10:30	VC
Nitrite (as N)	<0.050	0.050	mg/L	EPA 300.0	10/25/2023 0:48	JW
Nitrate (as N)	3.1	0.050	mg/L	EPA 300.0	10/25/2023 0:48	JW
TKN (as N)	1.8	0.50	mg/L	SM4500NOrg-D 18-21ed	10/30/2023 11:40	JCD

Orthophosphate - Filtered upon receipt at the laboratory. The filtration should occur within fifteen minutes of sample collection.



CHAIN OF CUSTODY RECORD

41 Illinois Avenue
 Warwick, RI 02888-3007
 800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105
 Hudson, MA 01749-1331
 800-937-2580 • Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification		Grab or Composite	# of Containers & Type C	Preservation Code P	Matrix Code M	BOD - Biochemical O ₂ Demand	TDS - Total Dissolved Solids	TSS - Suspended Solids	TS - Total Solids	NO ₂ - Nitrite Nitrogen as N	NO ₃ - Nitrate Nitrogen as N	TN - Total Nitrogen Calculation	TKN - Total Kjeldahl Nitrogen	NH ₃ - Ammonia Nitrogen as N	O-P - Ortho Phosphate	T-P - Total Phosphate	O&G - Oil & Grease (1664)	VOCs - method 624.1	Metals:	Fecal Coliform (MF)	
		Sample ID	Location																				
10/23/23	17:00	MW	UG-1	G	1P NP	GW						X	X				X						
	17:00	MW	UG-1	G	1P S	GW						X					X						
	17:15	MW	DG-2	G	1P NP	GW						X	X				X						
	17:15	MW	DG-2	G	1P S	GW						X					X						
	17:20	MW	DG-3	G	1P NP	GW						X	X				X						
	17:30	MW	DG-3	G	1P S	GW						X					X						
	17:45	MW	DG-4	G	1P NP	GW						X	X				X						
	17:45	MW	DG-4	G	1P S	GW						X					X						
	18:00	MW	DG-5	G	1P NP	GW						X	X				X						
	18:00	MW	DG-5	G	1P S	GW						X					X						

Client Information		Project Information	
Company Name:	WSS Inc., dba Weston & Sampson Services	Project Name:	Ocean Edge Resort - <i>Very Early</i>
Address:	55 Walkers Brook Drive, Suite 100	P.O. Number:	25364
City / State / Zip:	Reading, MA 01867	Report To:	Chris Vigneau
Telephone:	978-532-1900	Sampled by:	<i>Chris Vigneau</i>
Contact Person:	Christopher Vigneau	Quote No.:	
		Phone:	978-818-9946
		Fax:	
		Email address list:	vigneau@wseinc.com wsscpliance@wseinc.com

Relinquished By	Date	Time	Received By	Date	Time
<i>Ch Vigneau</i>	10/24/23	12:40	<i>R. D.</i>	10/24/23	12:40
	10/24/23	16:20	<i>Brandon Dore</i>	10/24/23	16:20

Turn Around Time	
Normal	<input checked="" type="checkbox"/> EMAIL Report
Rush - 5-7 Business days.	<input checked="" type="checkbox"/>
Rush - Date Due:	/ /

Lab Use Only	
Sample Pick Up Only	<input checked="" type="checkbox"/>
RIAL Sampled; attach field hours	<input type="checkbox"/>
Shipped on ice	<input checked="" type="checkbox"/>
Workorder No:	<i>2310-18144</i>

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? **No**

Temp. Upon Receipt **4.0°C**

Amy von Hone

From: "MassDEP Drinking Water Program" <program.director-dwp@mass.gov>
Sent: Monday, December 18, 2023 3:02 PM
To: Amy von Hone
Subject: Re: We need your assistance with Get the Lead Out of Drinking Water Outreach
Attachments: Service Line Inventory and Lead Service Line Replacement Program Assistance Flyer.pdf



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

100 Cambridge Street Suite 900 Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

1

Date: 12/18/2023

Re: We need your assistance with Get the Lead Out of Drinking Water Outreach

Dear Amy von Hone,

The Massachusetts Department of Environmental Protection (MassDEP) needs your help sharing the information in this letter and the attached flyer with your members and constituents in order to assist local public water systems efforts to work with their customers to identify the materials of their water service lines and further enhance public health protection.

As required by the U.S. Environmental Protection Agency's (USEPA) Lead and Copper Rule Revisions (LCRR), all Community and Non-Transient Non-Community Public Water Systems (PWS) must develop and submit to MassDEP a Service Line Inventory (SLI), including identification of lead service lines, on or before October 16, 2024. This inventory is needed for the PWS to ensure the removal of all lead service lines as soon as they can.

Identifying and removing lead service lines is a public health priority because lead is a tasteless and odorless metal which can cause harm to infants, children, and pregnant women. Lead exposure may lead to damage to the brain and nervous system, hearing and speech problems, learning and behavioral problems, and slowed growth and development.

MassDEP is committed to continuing its efforts to address lead service lines and exposure to lead in drinking water and to work with PWS to meet the MassDEP public health protection goal of removing all lead service lines in five years.

For many PWS, completing a SLI will require a significant amount of effort. Failure to submit an SLI may lead to enforcement, and the submittal of an SLI that identifies the material of many service lines as "unknown" will create further work for the system, while potentially delaying the removal of lead service lines. **This makes it essential that PWS move quickly to take advantage of several free to low-cost programs offered by MassDEP. We need your help with spreading the word about these resources!**

These programs include:

- **Service Lines Inventory and Lead Service Line Replacement Plan Grant Program**
- **Assistance for Small Community Water Systems and Non-Transient Non-Community Systems - Lead Service Line Planning Program.**
- **0% Interest Loans for LSL Construction Projects**
- Free Pilot Program for School and Early Education and Care Facilities Testing Ahead of LCRR

These programs use funding from State Revolving Fund (SRF) and USEPA to provide grants and free technical assistance to qualifying PWS.

Thank you for assisting with this important public health protection and safe drinking water program. **We can also provide you with additional written information for any member or constituent communication (e.g., newsletter) you produce, and we are available to attend any of your outreach events or opportunities to promote our programs.**

If you have any questions or comments, please contact me or the Drinking Water Program at program.director-dwp@mass.gov.

Sincerely,
A M Yvette DePeiza
Program Director,
MassDEP Drinking Water Program

For more information, visit the MassDEP LCRR webpage here: <https://www.mass.gov/info-details/lead-and-copper-rule-revisions>.

For information on the DWSRF see <https://www.mass.gov/lists/state-revolving-fund-applications-forms#loan-and-grant-applications-for-lead-service-line-replacement>.



MassDEP Drinking Water Program Service Line Inventory and Lead Service Line Replacement Plan Technical Assistance Program

Assistance for NTNC and Small COM Public Water Systems
Serving < 10,000 people!

WHAT ASSISTANCE WILL BE PROVIDED?

1. Service Line Inventory Assistance

NTNC and small COM PWS will be provided with assistance in completing a Service Line Inventory (SLI) that will meet both federal and state LCRR requirements.

2. Lead Service Line Replacement Plan Assistance

NTNC and small COM PWS will be provided with assistance in establishing a proactive and comprehensive Lead Service Line Replacement Plan (LSLRP).



SCAN ME

How Do I Apply?

To receive technical assistance, submit the survey form here!

<https://tinyurl.com/NTNC-SmallCOM-Assistance>

Concerned about Funding For LSL Replacement and Planning? Take advantage of SRF Funding!

State Revolving Fund (SRF) Grant

The Clean Water Trust is offering grants while funding is available for activities assisting PWSs to complete planning projects for SLI and for the development of LSL replacement plans. MassDEP will accept grant applications on a rolling basis while funding is available.

0% Interest Loans for LSL Construction Projects

The Clean Water Trust and MassDEP are offering 0% interest construction loans for LSL replacement and planning grants to assist PWS with completing planning projects for SLIs and replacement programs. Further, the Trust offers loan forgiveness to disadvantaged communities completing LSL construction projects in addition to the 0% interest rate.

FOR MORE INFORMATION...

If you have further questions about the Assistance Program, please contact MassDEP's Drinking Water Program at program.director-dwp@mass.gov (Subject: Lead Service Line Assistance Program) or 617-292-5770. If you have further questions about the State Revolving Fund, contact Maria Pinaud at maria.pinaud@mass.gov.



CAPE COD
HEALTHCARE

Nicholas G. Xiarhos
Blood Donor Center

WHAT'S DONATED HERE, STAYS HERE.

BLOOD DRIVE

Thursday, January 4th

10:40 am – 5 pm

Brewster Police Department
631 Harwich Rd



**Don't have cold feet about donating –
complimentary socks for all donors!!**

Appointments are required.



To make an appointment please
visit our donor portal at
<https://srt.capecodhealth.org/donorportal>

For information about the Nicholas G. Xiarhos
Blood Donor Program, please visit
www.capecodhealth.org/give-blood

Like us on Facebook:
www.facebook.com/capecodbloodcenter

Every pint of blood donated to us stays on Cape Cod to serve
your community and save the lives of your family, friends and neighbors.

Horsley Witten Group

Sustainable Environmental Solutions

90 Route 6A, Unit 1 • Sandwich, MA • 02563

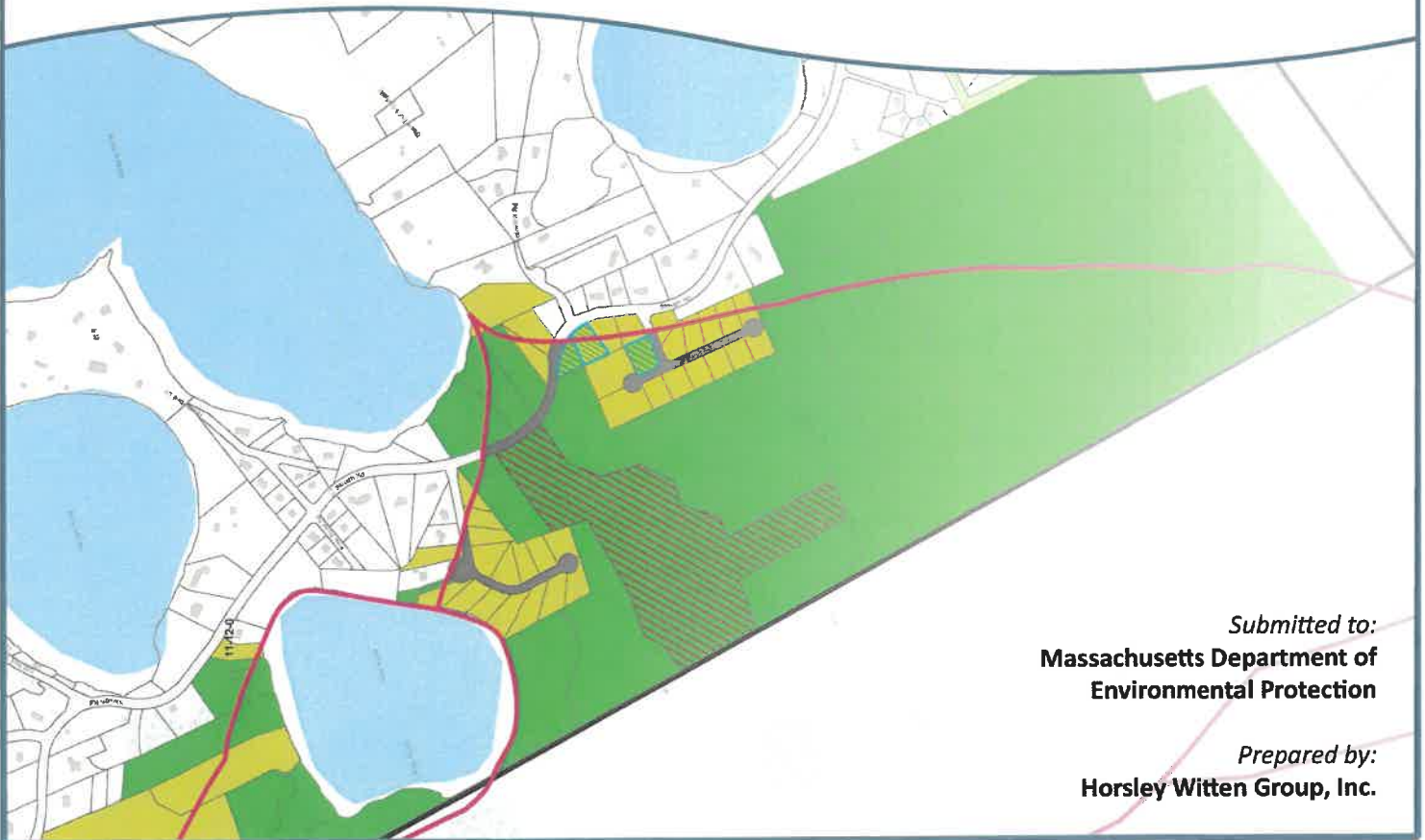
Phone - 508-833-6600 • Fax - 508-833-3150 • www.horsleywitten.com



De Minimis Nitrogen Load Exemption Application - Bass River Watershed

Brewster, MA

November 21, 2023



Submitted to:
**Massachusetts Department of
Environmental Protection**

Prepared by:
Horsley Witten Group, Inc.

**De Minimis Nitrogen Load Exemption Application
Bass River Watershed
Brewster, MA**

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**De Minimis Nitrogen Load Exemption Application
Bass River Watershed
Brewster, MA**

Introduction

On behalf of the Town of Brewster, the Horsley Witten Group, Inc. (HW) is submitting this application for a *De Minimis* Nitrogen Load Exemption for the Town's portion of the Bass River watershed (Figure 1). This application is being submitted according to the requirements provided in the Massachusetts Watershed Permit Regulations (314 CMR 21.12). The regulations allow this exemption if the Town can document that the baseline and updated nitrogen loads for the Town's portion of the watershed do not exceed 3% of the total controllable, attenuated nitrogen load for the entire Bass River watershed (314 CMR 12.12(2)).

This assessment is based on the Massachusetts Estuaries Program (MEP) Report for the Bass River watershed prepared by the University of Massachusetts Dartmouth School of Marine Science and Technology (SMAST, April 2011). This report documents the nitrogen loading factors used to calculate the nitrogen load from various sources in the watershed and provides the total baseline nitrogen load at the time of the report.

This application has been prepared as part of the Town's Integrated Water Resource Management Plan (IWRMP, HW, 2013) which is summarized below. Information on the specific Bass River subwatersheds located in Brewster and the associated attenuation rates is then discussed. This is followed by a summary of the extent of development and the associated nitrogen loads for three scenarios:

- Baseline nitrogen load at the time of the MEP report (2011)
- The updated nitrogen load as of September 2023; and
- The nitrogen load associated with buildout conditions in the Town's portion of the watershed.

The information provided below demonstrates that the baseline nitrogen load for Brewster's portion of the Bass River watershed is 0.31% of the total controllable load. The updated nitrogen load and the buildout nitrogen load are 0.25% and 0.26% of the total controllable load respectively. These are both lower than the baseline load and significantly below the 3% exemption threshold.

Brewster's Integrated Water Resource Plan

Brewster completed its IWRMP in 2013 and it described the water quality issues associated with drinking water, coastal estuaries, and freshwater ponds. This plan was submitted to the Massachusetts Department of Environmental Protection (DEP) for review; however, DEP did not complete the review as there were no proposed actions that required a state permit to

implement. Since then, the Town has worked to implement the recommendations in the report which include:

- Coordination with Chatham, Harwich, and Orleans on the Pleasant Bay watershed permit, including analysis of options to meet the Town's obligations for nitrogen removal in its portion of the watershed. This includes changes in fertilizer applications at the town-owned Captains Golf Course, which has achieved more than 50% of the nitrogen reduction goal the Town needs to meet for Pleasant Bay. It also involves development of a plan to meet the remaining nitrogen reduction goals including those associated with future, buildout development, potentially using a neighborhood wastewater system, innovative/alternative septic treatment systems or a nitrogen trade with another town.
- Ongoing projects to evaluate freshwater ponds and develop plans to protect and restore their water quality.
- Passage of a new stormwater management regulation to minimize water quality impacts to the Town's water resources.
- Upgrades to stormwater treatment facilities at town-owned landings on freshwater ponds and parking areas adjacent to town beaches.
- Updates to the Town's Water Quality Review bylaw which currently limits nutrient loading in Zone II wellhead protection areas and the Pleasant Bay watershed.

This information is provided to document the Town's water resource planning work for estuaries and for the Town's other important water resources as required in the Watershed Permit Regulations (314 CMR 21.2(a)).

Overview of Bass River Watershed

The Bass River is located along the border between Yarmouth and Dennis. It originates in a series of freshwater ponds, including Mill Pond and Follins Pond located north of Route 6 and flows south where it empties into Nantucket Sound (Figure 1). The watershed is predominantly in Yarmouth and Dennis. A small area along the northeast edge of the Bass River watershed is located within the Town of Brewster. The land area in Brewster encompasses 160 acres, or 1.5% of the total watershed area.

According to the SMAST Report, Brewster's land is located in two of the subwatersheds that comprise the overall Bass River watershed. They are the Pine Pond and the NW Dennis Wells subwatersheds. Information on each subwatershed is provided below, including how nitrogen loads in Brewster's portion of them is reduced by attenuation and by how these watersheds also contribute a portion of their load to other watersheds, such that not all of it flows to the Bass River.

Pine Pond

Pine Pond is located entirely in Brewster, along the border with the Town of Dennis (Figure 2). The watershed to the pond is located in Brewster and Dennis. The Brewster portion comprises 41.7 acres. Groundwater and associated nitrogen loads flow from the watershed into Pine Pond.

The flow through the pond reduces the overall load that can migrate to Bass River through a process known as attenuation. According to the SMAST report, 50% of the nitrogen that originates in the Pine Pond subwatershed is attenuated in the pond, meaning only half of the nitrogen load flows into areas downgradient of the pond. As required under the watershed permit regulations, the attenuated load is used to evaluate the percentage of the nitrogen contribution from the Town's portion of the watershed. In addition, according to the SMAST report, 59% of the attenuated nitrogen load from the Pine Pond subwatershed enters the NW Dennis Wells subwatershed. The remaining 41% flows to the east away from Bass River. This means that only 29.5% of the overall nitrogen load that originates in the Pine Pond subwatershed flows south and eventually enters the Bass River estuary.

NW Dennis Wells Subwatershed

This subwatershed encompasses the land area from which groundwater flows to a series of public supply wells located in Dennis. The groundwater and associated nitrogen load in this subwatershed then migrate to both the Bass River and Swan Pond watersheds. The SMAST report documents that 70% of the overall nitrogen load that originates in the NW Dennis Wells subwatershed (or upgradient subwatersheds) remains in the Bass River watershed. Thirty percent of the load migrates to the Swan Pond River watershed. Therefore, the nitrogen loading impact from Brewster's portion of this subwatershed is reduced by 30%.

In summary, only 70% of the nitrogen load that originates in or migrates through the NW Dennis Wells subwatershed remains in the Bass River Watershed. As discussed above, the nitrogen load from Pine Pond is reduced to 29.5% of the total load that originates in this subwatershed before it enters the NW Dennis Wells Subwatershed where the load is again reduced by 30%. These load reduction factors are factored into the nitrogen loading calculations used to document the controllable nitrogen load that originates in Brewster and flows to the Bass River.

De Minimis Nitrogen Load Calculations for Pine Pond and NW Dennis Wells Subwatersheds

The information documenting the fact that the overall, controllable nitrogen load from Brewster's portion of the Bass River watershed is less than 3% is provided below. A summary of the land use in Brewster is provided first, showing the level of development at the time of the Bass River SMAST report. This is followed by an updated land use summary for 2023, used to calculate the updated nitrogen load as required by the regulations. An overview of the potential buildout development for Brewster is also provided.

The nitrogen loading calculations are then described, providing a summary of the nitrogen load factors related to each Brewster land use and the overall load by land use in each subwatershed. These loads are then adjusted based on the appropriate attenuation rate for Pine Pond and the percentages by which the load from both subwatersheds is split such that part flows to the Bass River and part flows to another watershed. The final loads are used to calculate the percentage of the overall load to Bass River that originates in Brewster.

Land Use Assessment

Brewster's baseline land use in the Pine Pond and NW Dennis Wells subwatersheds at the time of the S Mast report is shown on Figure 2-. This figure also shows the changes in land use from the 2011 S Mast report to 2023 that were used to calculate the updated nitrogen load for these subwatersheds. Overall, the land use consists of residential properties, protected open space, a former cranberry bog, a religious facility, paved roadways, and undeveloped parcels that could potentially have a house built on them in the future. The land use data for the baseline conditions was taken from the S Mast spreadsheets used to calculate the overall Bass River watershed, which were provided to HW by S Mast. This data, and the updated information of the 2023 and buildout development scenarios are summarized in a separate excel file that documents the land use assessment and nitrogen loading calculations used for this assessment (Bass River Exemption Calcs.xlsx).

The updated land use data for 2023 was developed by comparing the 2011 S Mast land use information with the current, 2023 data available from the Town's Board of Assessors database. No new homes were built in the watershed during that timeframe. The only changes are related to the Town's acquisition and protection of three parcels for open space preservation. A conservation restriction was placed on lot 10-25-0 that prohibits any future use of fertilizers on the Sarabella Bog, eliminating a nitrogen load that was included in the baseline load (see Figure 2 for location). Two other parcels listed as developable in the S Mast baseline data (lots 9-15-0 and 8-4-0) are now owned by the Town of Brewster and have conservation restrictions prohibiting future development. These lots were both labeled as vacant land in the baseline load developed by S Mast so there is no change in the updated or buildout load on these properties.

HW also analyzed the potential for additional development under buildout conditions. The entire watershed area in Brewster is zoned residential, with either a 100,000 square foot or 60,000 square foot minimum lot size required for each parcel. For the Pine Pond Subwatershed, all the properties are either protected open space or have an existing residence. The only exception is an existing church on the property at the northwest corner of the watershed (lot 3-4-0). The four residential properties partially located in the northern portion of the subwatershed (Figure 2, lots 11-16-0, 12-1-0, 12-2-0, and 12-3-0) could potentially be subdivided based on the minimum lot size allowed under zoning. However, the current homes on these properties are located within the Pine Pond subwatershed and any additional homes would be built outside the watershed. For this reason, no additional development is expected in the Pine Pond Subwatershed.

For the NW Dennis Wells subwatershed, there are two residentially zoned parcels that are currently undeveloped as shown on Figure 2. These parcels are listed below with information on their development potential.

- Lot 10-18-0: This lot is owned by the Town of Brewster but there is no conservation restriction on the property. There could potentially be a house built on this property in the future.

- Lot 10-22-0: This lot could have a house built on it in the future as there are no development constraints on the property.

Overall, two of the undeveloped parcels in the NW Dennis Wells subwatershed could potentially have a new home built on them.

Finally, there is the potential for existing homes to be enlarged with one or more additional bedrooms but, based on the nitrogen loading calculations used in the S Mast report, no additional nitrogen load is assigned to this type of development. The S Mast report calculates the nitrogen load from a home based on the average water use per residence. It does not take into account the number of bedrooms on each parcel. The buildout calculations used by S Mast only involve the potential to subdivide a parcel if it can accommodate more than one home under the Town's zoning requirements.

If a house was enlarged, the nitrogen load is also limited under the Town's Water Quality Review Bylaw which requires a maximum nitrogen concentration of 5 mg/L in the mapped Zone II wellhead protection areas and the Pleasant Bay Watershed. The Pine Pond and NW Dennis Wells subwatersheds are located in mapped Zone II areas in Brewster, so development in these areas is subject to the Water Quality Review Bylaw. Therefore, if a new bedroom was added to a house, the property owner would have to prove the 5 mg/L standard would be met, and, if not, would have to install an I/A septic system or take other actions to reduce the overall load below the 5 mg/L threshold. Therefore, the potential new load from any increase in residential land use on a parcel would not likely result in an increase in the overall nitrogen load.

In summary, the land uses in Brewster's portion of the two subwatershed that are or will contribute to the controllable nitrogen load to the Bass River are summarized below.

	Baseline (2011)	Updated Load (2023)	Buildout
Developed Residential Lots	41	41	43
Religious Institutions	1	1	1
Cranberry Bogs	1	1	1

The major change between the baseline timeframe and the 2023 updated load timeframe is the cessation of fertilizer applications at the Sarabella bog on property owned by the Town. A conservation restriction on this parcel prohibits any future fertilizer applications. Therefore, the updated and buildout nitrogen loads are less than the baseline load documented in the S Mast report.

Nitrogen Loading Factors

HW used the nitrogen loading factors used in the S Mast report to calculate the controllable nitrogen load from the properties in Brewster and compare them to the total controllable nitrogen load throughout the Bass River watershed. The controllable nitrogen load is defined in the watershed regulations as "the total nitrogen load from all controllable loads within the

watershed that reaches the embayment or estuary (314 CMR 21.02). The controllable load therefore only includes nitrogen from wastewater discharges, fertilizer applications and runoff from impervious surfaces including roads, driveways, and roofs.

These nitrogen loading factors for these controllable loads are summarized in Table 1, and include the water use and nitrogen concentrations used to calculate wastewater loads, the fertilizer application and leaching rates for lawns, and the nitrogen concentrations and recharge rates for impervious surfaces. They also include the fertilizer application rates for the cranberry bog located within Brewster's portion of the NW Dennis Wells subwatershed. SMAST did not include any cranberry bog areas in Brewster's portion of the Pine Pond subwatershed. No changes in these nitrogen loading factors were made in the calculations to determine Brewster's portion of the Bass River controllable nitrogen load.

Table 1: Nitrogen Loading Factors To Calculate De Minimis Nitrogen Load			
Residential Properties			
Wastewater Load			
	Effluent Nitrogen Conc.	26.25	mg/L
	Water Use	180	gpd/house
	Consumptive Water Use Factor	90%	
Lawn Fertilizer Load			
	Lawn Area per Home	5,000	sq. ft
	Fertilizer Application Rate	1.08	lbs/1,000 sq. ft
	Leaching Rate	20%	
	Percentage of Properties that Use Lawn Fertilizers	50%	
Building Roof Load			
	Nitrogen Concentration	0.75	mg/L
	Roof Size	1,450	sq. ft
	Recharge Rate, Impervious Surfaces	40	in/year
Driveway Load			
	Nitrogen Concentration	1.5	mg/L
	Driveway Size	1,500	sq. ft
	Recharge Rate, Impervious Surfaces	40	in/year
Cranberry Bogs			
	Fertilizer Application Rate	0.716	lbs/1,000 sq. ft.
	Leaching Rate	66%	
Paved Roads			
	Nitrogen Concentration	1.5	mg/L
	Driveway Size	1,500	sq. ft
	Recharge Rate, Impervious Surfaces	40	in/year
<i>The Nitrogen Loading Factors are taken from the MEP report for the Bass River Watershed (SMAST April, 2011)</i>			

Brewster's percentage of the overall load to Bass River is based on the existing and future land uses in Brewster and the nitrogen loading factors shown on Table 2. It is also based on the total, controllable, attenuated load from the entire Bass River watershed, which is 77,617 kg/year. The total controllable load for the watershed was calculated by subtracting the loads associated with natural areas and surface water bodies from the 84,068 kg/year overall load calculated by SMAST for the entire Bass River watershed.

Table 2: Summary of De Minimis Nitrogen Loading Calculations for Brewster's Portion of the Bass River Watershed.							
	Pine Pond			NW Dennis Wells		Total	
	Unattenuated Load (kg/yr)	Attenuated Load (kg/yr)	59% to NW Dennis Wells	Unattenuated Load (kg/yr)	Attenuated Load	Attenuated Load (kg/yr)	70% to Bass River
Baseline Nitrogen Load							
Wastewater	35.32	17.66	10.42	217.51	217.51	227.93	159.55
Lawn Fertilizer	2.94	1.47	0.87	17.64	17.64	18.50	12.95
Driveways and Roads	1.27	0.64	0.38	25.20	25.20	25.58	17.90
Roofs	0.62	0.31	0.18	3.70	3.70	3.88	2.71
Cranberry Bogs	0.00	0.00	0.00	63.54	63.54	63.54	44.48
Total Load From Brews	40.15	20.07	11.84	327.58	327.58	339.42	237.60
Total Attenuated Controllable Nitrogen Load to Bass River							77,617
% of Total Bass River Nitrogen Load							0.31%
Updated Nitrogen Load							
Wastewater	35.32	17.66	10.42	217.51	217.51	227.93	159.55
Lawn Fertilizer	2.94	1.47	0.87	17.64	17.64	18.50	12.95
Driveways and Roads	1.27	0.64	0.38	26.48	26.48	26.85	18.80
Roofs	0.62	0.31	0.18	3.70	3.70	3.88	2.71
Cranberry Bogs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load From Brews	40.15	20.07	11.84	265.32	265.32	277.16	194.01
Total Attenuated Controllable Nitrogen Load to Bass River							77,617
% of Total Bass River Nitrogen Load							0.25%
Buildout Nitrogen Load							
Wastewater	35.32	17.66	10.42	229.28	229.28	239.70	167.79
Lawn Fertilizer	2.94	1.47	0.87	18.62	18.62	19.48	13.64
Driveways and Roads	1.27	0.64	0.38	29.02	29.02	29.40	20.58
Roofs	0.62	0.31	0.18	3.90	3.90	4.08	2.86
Cranberry Bogs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Load From Brews	40.15	20.07	11.84	280.82	280.82	292.66	204.87
Total Attenuated Controllable Nitrogen Load to Bass River							77,617
% of Total Bass River Nitrogen Load							0.26%

Brewster's Nitrogen Load Contribution to The Bass River Watershed

HW calculated Brewster's nitrogen load to the Bass River watershed using the summary nitrogen loading spreadsheet developed by SMAST. Specifically, the land use input worksheet from the file titled BassRiver_MEP_NLoadingSummary093010.xls was used. It was modified to include only the nitrogen loads from properties in Brewster for the baseline conditions, and then updated for any changes in land use for the updated nitrogen load and the buildout scenario. The results of the calculations are summarized in Table 2 and are based on the calculations provided in the separate Excel workbook submitted with this application (Bass River Exemption Calcs.xlsx)

The overall, attenuated nitrogen load originating from Brewster under the baseline, 2011 land use conditions is 238 kg/N per year. This is 0.31% of the total attenuated load to the watershed. The calculations include the 50% attenuation rate associated with Pine Pond and the 59% contribution from Pine Pond to the NW Dennis Wells subwatershed. It also includes the 70% contribution of nitrogen to Bass River from the NW Dennis Wells subwatershed (Table 3). The updated nitrogen load using 2023 land use data shows that Brewster's contribution is currently - 194 kg/yr. or 0.25% of the total load. The reduction in nitrogen load from the baseline to the updated nitrogen load scenarios is due to the placement of a conservation restriction on the town owned parcel that contains the Sarabella cranberry bog. The restrictions include a provision that no fertilizers can be used on the bog, lowering the load from this parcel by 63.5 kg/year.

Under buildout conditions, the potential construction of two additional homes on currently undeveloped parcels could increase the nitrogen load by approximately 10 kg/yr. Therefore, the controllable buildout load from Brewster is 205 kg/yr. or 0.26% of the nitrogen load to Bass River. This buildout load is still below the baseline load documented in the SMAST report because the new load is offset by the restrictions on fertilizer applications to the Sarabella cranberry bog.

Each of these scenarios documents that Brewster's contribution to the Bass River watershed is significantly below the 3% threshold that must be met to receive a *De Minimis* Nitrogen Load Exemption under the state's new watershed permit regulations. Therefore, The Town of Brewster requests that DEP approve this application such that a watershed permit will not need to be filed for this watershed, and that the upgrade requirements for septic systems in this watershed included in the new Title 5 regulations (314 CMR 15.215) will be suspended.

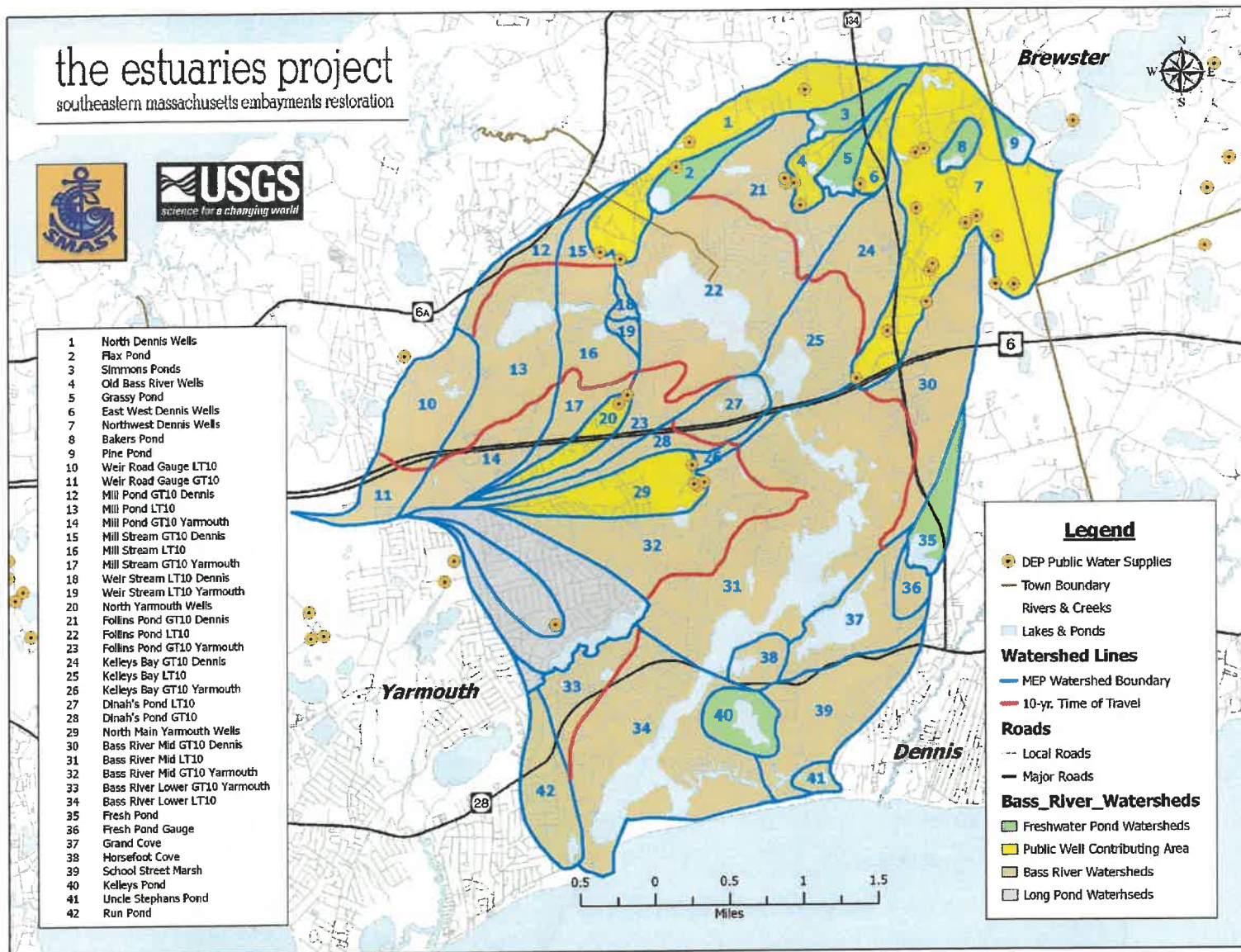
The Town will publish a notice of this exemption request in the Environmental Monitor within 28 days of when it is submitted to DEP and will meet the public notice requirements for Environmental Justice Populations as required under the regulations (314 CMR 21.12 (1)).

References

Horsley Witten Group, Inc. 2013 Integrated Water Resource Management Plan, Town of Brewster, Massachusetts.

University of Massachusetts School of Marine Science and Technology, April 2011. Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Bass River Embayment System. Towns of Yarmouth and Dennis, Massachusetts.

Path: H:\Projects\2011\11109 Brewster IntWtrResMgt Plan\GIS\Maps\Bass River Exemption\Figure 1 - MEP fig III-1.mxd



Date: 10/26/2023

Data Sources: Bureau of Geographic Information (MassGIS), ESRI

This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

Figure III-1 from "Howes B., S. Kelley, J. S. Ramsey, E. Eichner, R. Samimy, D. Schlezinger, P. Detjens (2011). Massachusetts Estuaries Project Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Bass River Embayment System, Towns of Yarmouth and Dennis, Massachusetts, Massachusetts Department of Environmental



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Date: 10/24/2023
 Data Sources: Bureau of Geographic Information (MassGIS), ESRI
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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Unchanged Parcels</p> <ul style="list-style-type: none"> Residential Church Road right-of-way Accessory building | <p>Updated Parcels</p> <ul style="list-style-type: none"> Undeveloped, buildout residential Undeveloped and buildable, now protected Undeveloped, now protected | <ul style="list-style-type: none"> Bass River Subwatersheds Brewster Tax Parcels Municipal Boundary |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Figure 1
Brewster Parcels Within The Bass River Watershed

Town Of Brewster, Massachusetts

Submittal of a *De Minimis* Watershed Permit Exemption Application for the Bass River Watershed Under the Massachusetts Watershed Permit Regulations (314 CMR 21.00)

Applicant: Town of Brewster, Massachusetts
2198 Main Street
Brewster, MA 02631

Project Location: The Portion of the Bass River Watershed Located in the Town of Brewster

On November 21, 2023, the Town of Brewster submitted a *De Minimis* Watershed Permit Exemption Application to the Massachusetts Department of Environmental Protection. This application documents that the controllable nitrogen load from properties in Brewster is less than 3% of the total controllable nitrogen load from the entire Bass River watershed.

Most of the Bass River watershed is located in Dennis and Yarmouth with a small portion in the southwest corner of Brewster. It is defined as a Natural Resource Area that is sensitive to the discharge of pollutants from on-site sewage disposal systems and therefore considered a Nitrogen Sensitive Area according to the State Environmental Code Title 5 (310 CMR 15.214(1)). According to these regulations, existing developed properties in these Natural Resource Areas are required to upgrade their septic systems to incorporate Best Available Nitrogen Reducing Technology within five years of July 7, 2023, the date these regulations were established. Properties with new construction that occurs after six months of the date of the regulations must also incorporate Best Available Nitrogen Reducing Technology.

However, according to Title 5, and the state's Watershed Permit Regulations (314 CMR 21), the approval of a *De Minimis* Watershed Permit Exemption application suspends the requirements for-site septic system upgrades for Brewster's portion of the Bass River Watershed. Therefore, properties in this portion of the Town of Brewster will not be subject to the Title 5 upgrade and new construction requirements under 310 CMR 15.215(2)(a) and (b).

The application can be found on the Town of Brewster website at <https://www.brewster-ma.gov/town-projects/pages/integrated-water-resource-management-planning-implementation> and is also available in the Town Manager and Board of Health offices at Brewster Town Hall. The application provides maps showing the portion of Brewster that is located within the overall Bass River watershed and provides documentation that proves the controllable nitrogen load from Brewster is 0.26% of the total controllable load that enters the Bass River. This is well below the 3% threshold that must be met to receive the *de minimis* watershed permit exemption. Questions regarding the Town's plans for the development of the permit can be directed to Peter Lombardi, Town Manager at plombardi@brewster-ma.gov.



Town of Brewster

2198 Main Street
Brewster, MA 02631-1898
Phone: (508) 896-3701
www.brewster-ma.gov

Office of the:
Select Board
Town Manager

November 21, 2023

Millie Garcia-Serrano, Regional Director
Massachusetts Department of Environmental Protection
20 Riverside Drive
Lakeville, MA 02347

RE: Notice of Intent to File a Watershed Permit Application for the Portion of the Herring River Watershed in the Town of Brewster

Dear Ms. Garcia-Serrano:

On behalf of the Town of Brewster Select Board, I am filing this Notice of Intent to inform the Massachusetts Department of Environmental Protection (DEP) that the Town plans to file a watershed permit application pursuant to 310 CMR 22 for the Town's portion of the Herring River watershed located in the southern portion of Brewster. Figure 1 shows the overall watershed boundary and Figure 2 shows land use information for the parcels in Brewster's portion of the watershed. It is the Town's understanding that the filing of this Notice of Intent will suspend the requirements for septic system upgrades using Best Available Nitrogen Reducing Technology both for existing septic systems (310 CMR 15.215(2)(a)) and for new construction (310 CMR 15.215(2)(b)).

The Town is requesting initial funding to begin this work at the November 2023 town meeting and plans to file the application no later than January 1, 2028. This is a conservative estimate, and the application may be filed before then if a plan to complete the necessary nitrogen load reductions can be finalized sooner. A more detailed schedule for the completion and approval of the watershed permit application is provided in Table 1.

Table 1: Schedule to Complete and File Brewsters' Watershed Permit Application for the Herring River Watershed

Initial funding request to develop the Watershed Management Plan	November 2023 Town Meeting
Development of the Watershed Management Plan	January 2024-January 2028
Nitrogen loading assessment for Brewster's portion of the watershed.	July 2024
Establishment of the necessary nitrogen load reduction for Brewster.	January 2025
Evaluation of strategies to reduce nitrogen loads.	January 2026
Estimate of costs to implement the proposed strategies	January 2026
Development of draft Watershed Management Plan	January 2027
Development of final Watershed Management Plan	November 2027
Select Board Approval of final Watershed Management Plan	December 2027
Submission of final Plan and application documents	January 2028
Cape Cod Commission 208 compliance review	April 2028
Issuance of Watershed Permit by MassDEP	No Later Than July 6, 2030

In Brewster, the nitrogen load from the existing development at the time the Massachusetts Estuaries Project (MEP) Herring River report was published (SMAST March 2013) did not exceed the threshold loads for the relevant subwatersheds. Therefore, the Town's nitrogen management responsibility is related to development that has taken place since the MEP report was issued. It also includes the load associated with future development within Brewster's subwatersheds. The Targeted Watershed Management Plan that the Town proposes to develop will document this load and the proposed management strategies to comply with the necessary nitrogen load reduction in the new regulations.

Brewster's application will include a Targeted Watershed Management Plan for Herring River that will be based, in part, on the Town's Integrated Water Resource Management Plan (HW 2013). As specified in MassDEP's watershed permit regulations (310 CMR 21.02(2)(b)), the plan will include the required information on the extent of nitrogen that must be removed and the proposed actions that will be implemented to meet the nitrogen reduction goals for Brewster's portion of the watershed. The plan will document both conventional and alternative options for nitrogen management. It will also provide a schedule to provide the necessary nitrogen reductions and describe the monitoring and reporting requirements required under the permit regulations.

Brewster's current plan is to file a permit application for the Town's portion of the watershed. If, during the planning process, the Town learns that it could be beneficial to file a joint permit with Harwich, then this option will be explored. If so, the Town will notify Mass DEP and may need to adjust the schedule for completing the permit application. Brewster understands that the permit must be issued within 7 years of the issuance of the watershed permit regulations, or by July 2030, to avoid the implementation of the septic system upgrades under the new Title 5 regulations. The Town will work with MassDEP to ensure this deadline is met.

As required under the new Title 5 regulations (310 CMR 15.215(2)(C)(3)), the Town will publish an announcement regarding the filing of the Notice of intent in the Environmental Monitor and in the appropriate local newspaper. An announcement will also be placed on the Town's Water Resources website and the Town will comply with the required notifications to Environmental Justice Populations in Brewster.

If you have any questions on the proposed schedule to complete the application, please let me know.

Sincerely,



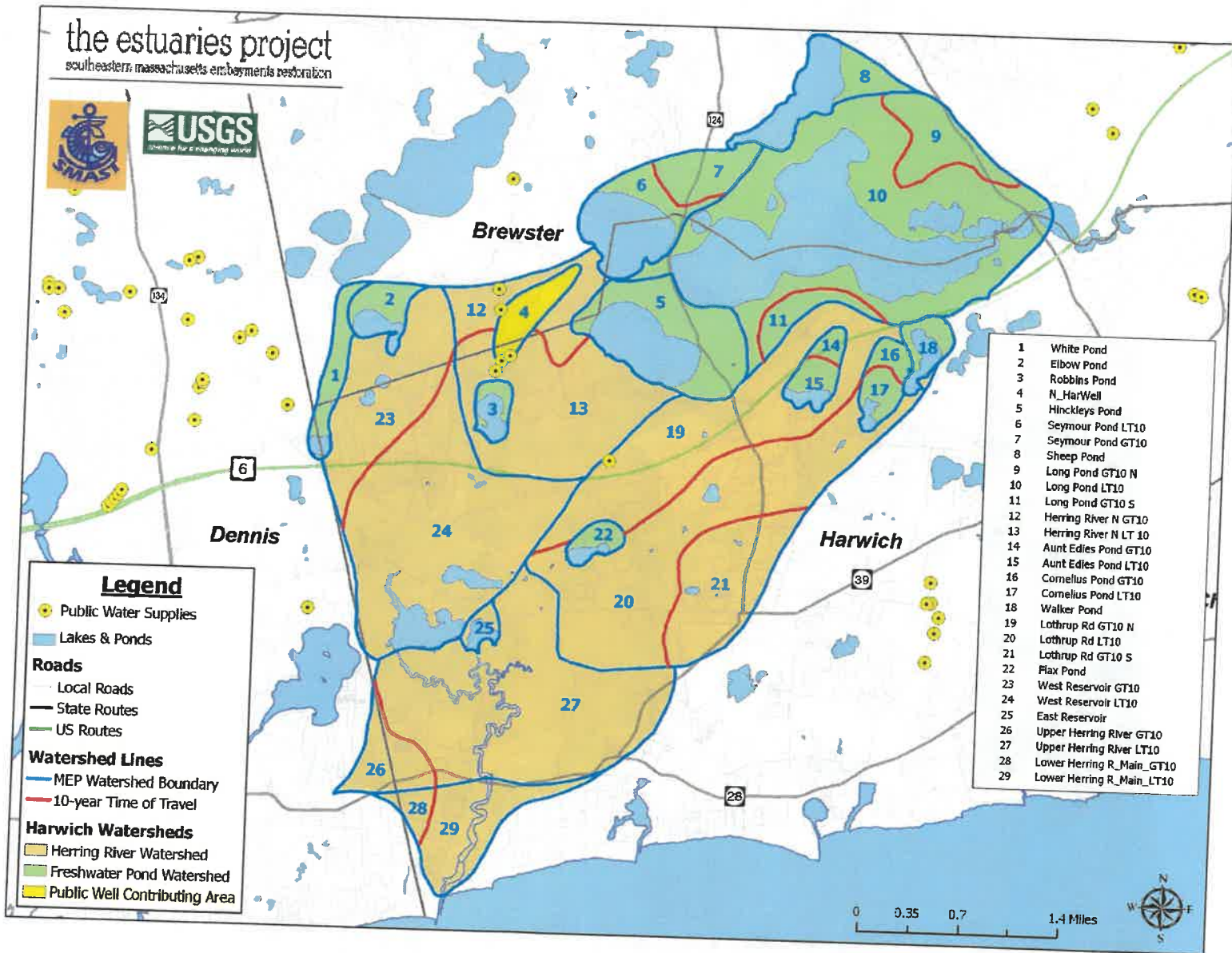
Peter Lombardi
Town Manager, Town of Brewster, Massachusetts

CC: Gerard Martin, DEP; Andrew Osei, DEP

References

Horsley Witten Group, Inc.(HW) 2013. Integrated Water Resource Management Plan, Town of Brewster, Massachusetts.

University of Massachusetts Dartmouth, School of Marine Science and Technology (SMAST). March 2013. Massachusetts Estuaries Project. Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Herring River Embayment System, Harwich, Massachusetts.



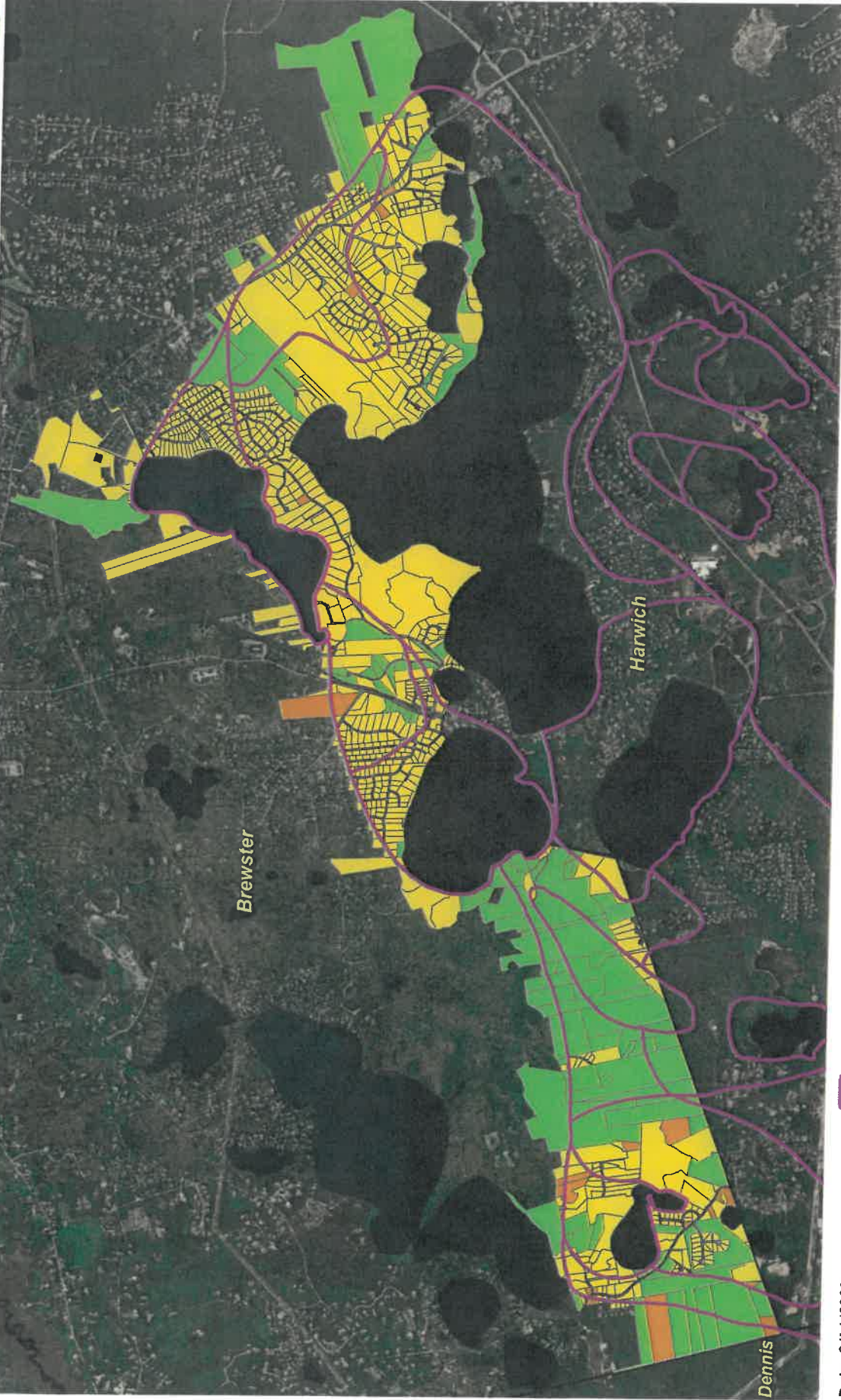
Service Layer Credits:

Date: 10/26/2023

Data Sources: Bureau of Geographic Information (MassGIS), ESRI

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Figure III-1 from "Howes B., H.E. Ruthven, J. S. Ramsey, R. Samimy, D. Schlezinger, E. Eichner (2012). *Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Herring River Embayment System, Harwich, Massachusetts*, Massachusetts Estuaries Project, Massachusetts Department of Environmental Protection, Boston, MA3"



Date: 8/16/2023

Data Sources: Bureau of Geographic Information (MassGIS), ESRI

This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

- Herring River Watersheds
- Municipal Boundary
- Brewster Parcels**
 - Developed/Residential
 - Protected
 - Vacant Land - Unprotected

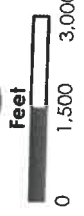


Figure 2
Brewster Parcels within Herring River Watersheds

Town Of Brewster, Massachusetts

**Notice of Intent to Submit a Watershed Permit for the Herring River
Watershed Under the Massachusetts Watershed Permit Regulations
(314 CMR 21.00)**

Applicant: Town of Brewster, Massachusetts
2198 Main Street
Brewster, MA 02631

Project Location: The Portion of the Herring River Watershed Located in the Town of Brewster

On November 21, 2023, the Town of Brewster submitted a Notice of Intent to the Massachusetts Department of Environmental Protection stating that the Town will submit a Watershed Permit application for its portion of the Herring River Watershed. The Herring River watershed is defined as a Natural Resource Area that is sensitive to the discharge of pollutants from on-site sewage disposal systems and is therefore considered a Nitrogen Sensitive Area according to the State Environmental Code Title 5 (310 CMR 15.214(1)). According to these regulations, existing developed properties in Natural Resource Areas are required to upgrade their septic systems to incorporate Best Available Nitrogen Reducing Technology within five years of July 7, 2023, the date these regulations were established. Properties with new construction that occurs after six months of the date of the regulations must also incorporate Best Available Nitrogen Reducing Technology.

According to Title 5, the submission of this Notice of Intent suspends the requirements for-site septic system upgrades for properties within Brewster's portion of the Herring River Watershed. The suspension is effective as of the submission of this Notice of Intent and continues through the development and implementation of the watershed permit. Therefore, properties in this portion of the Town of Brewster will not be subject to the Title 5 upgrade and new construction requirements under 310 CMR 15.215(2)(a) and (b).

The Notice of Intent can be found on the Town of Brewster website at <https://www.brewster-ma.gov/town-projects/pages/integrated-water-resource-management-planning-implementation> and is also available in the Town Manager's and Board of Health offices at Brewster Town Hall. It provides the overall schedule for the development, review, and subsequent approval of the Town's Herring River Watershed Permit. The Town plans to complete the permitting process no later than July 6, 2030. The Notice of Intent also provides maps showing the portion of Brewster that is located within the overall Herring River watershed. The permit will document how the Town will meet its requirements to reduce nitrogen loading to the Herring River and will be developed with ongoing public input. Questions regarding the Town's plans for the development of the permit can be directed to Peter Lombardi, Town Manager at plombardi@brewster-ma.gov.



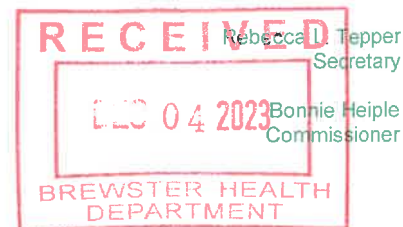
Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor



November 30, 2023

Amy von Hone, Board of Health
Town of Brewster
2198 Main St
Brewster, MA 02631

Re: Extension of date for Best Available Nitrogen Reducing Technology in septic systems serving New Construction in designated Natural Resource Nitrogen Sensitive Areas

Dear Ms. von Hone:

This letter is to notify you that in accordance with 310 CMR 15.000, the State Environmental Code, Title 5, MassDEP is extending the date for requiring the incorporation of Best Available Nitrogen Reducing Technology (BANRT) in septic systems serving New Construction on Cape Cod in designated Natural Resource Nitrogen Sensitive Areas (NRNSA).

Per 310 CMR 15.215(2)(e), MassDEP can extend deadlines for the new NRNSA requirements: "...the Department may extend any time limit contained in 310 CMR 15.215 for good cause including, but not limited to, an insufficient supply of necessary equipment or materials or unavailability of contractors."

Extending the date for this requirement will allow for:

- Continued and requested outreach and implementation guidance to the towns and local Boards of Health;
- A more comprehensive review of the data for nitrogen reducing technologies leading to a more robust list of BANRT technologies;
- Additional evaluation of whether there is a sufficient supply of necessary equipment and materials, and availability of contractors; and

- Additional time for Cape Cod towns to prepare and submit a Notice of Intent to pursue a Watershed Permit, a Watershed Permit application, or a DeMinimis Load application, which would stay the requirement to install BANRT for both new construction and existing systems, and facilitate an efficient implementation of the new requirements.

The requirement to install BANRT for new construction was scheduled to commence on January 8, 2024 for 30 watersheds on Cape Cod and, on March 30, 2024 for the Wellfleet Harbor watershed on Cape Cod.

MassDEP is extending this date to July 8, 2024 for all 31 watersheds designated as NRNSAs on Cape Cod.

This extension for New Construction does not change the timeline for the requirement to install BANRT on existing systems.

This extension for New Construction does not alter or stay any requirement(s) specified by a town bylaw or regulation.

Please contact Marybeth Chubb at Marybeth.Chubb@mass.gov or Ian Jarvis at Ian.Jarvis@mass.gov should you have any questions concerning this extension or a Watershed Permit submittal.

Sincerely,



Millie Garcia-Serrano
Regional Director

ec: BOH

DEP-Boston

Attn: Gary Moran, Deputy Commissioner, Operations and Environmental Compliance
Kathy Baskin, Assistant Commissioner, Bureau of Water Resources (BWR)
Lealdon Langley, BWR Director, Watershed Management
Marybeth Chubb, BWR, Chief, Title 5, Groundwater, and Reclaimed Water

DEP-SERO

Attn: Millie Garcia-Serrano, Regional Director
Drew Osei, BWR Wastewater Management
Ian Jarvis, BWR, Wastewater Management



Department of Environmental Protection

100 Cambridge Street Suite 900 Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

Extension of Date for Best Available Nitrogen Reducing Technology for Septic Systems Serving New Construction in Designated Natural Resource Nitrogen Sensitive Areas

In accordance with Title 5, 310 CMR 15.000, MassDEP is extending the date for requiring the incorporation of Best Available Nitrogen Reducing Technology (BANRT) in septic systems serving New Construction on Cape Cod in designated Natural Resource Nitrogen Sensitive Areas (NRNSA).

Per 310 CMR 15.215(2)(e), MassDEP may extend deadlines for the new NRNSA requirements: "...the Department may extend any time limit contained in 310 CMR 15.215 for good cause including, but not limited to, an insufficient supply of necessary equipment or materials or unavailability of contractors."

Extending the date for this requirement will allow for:

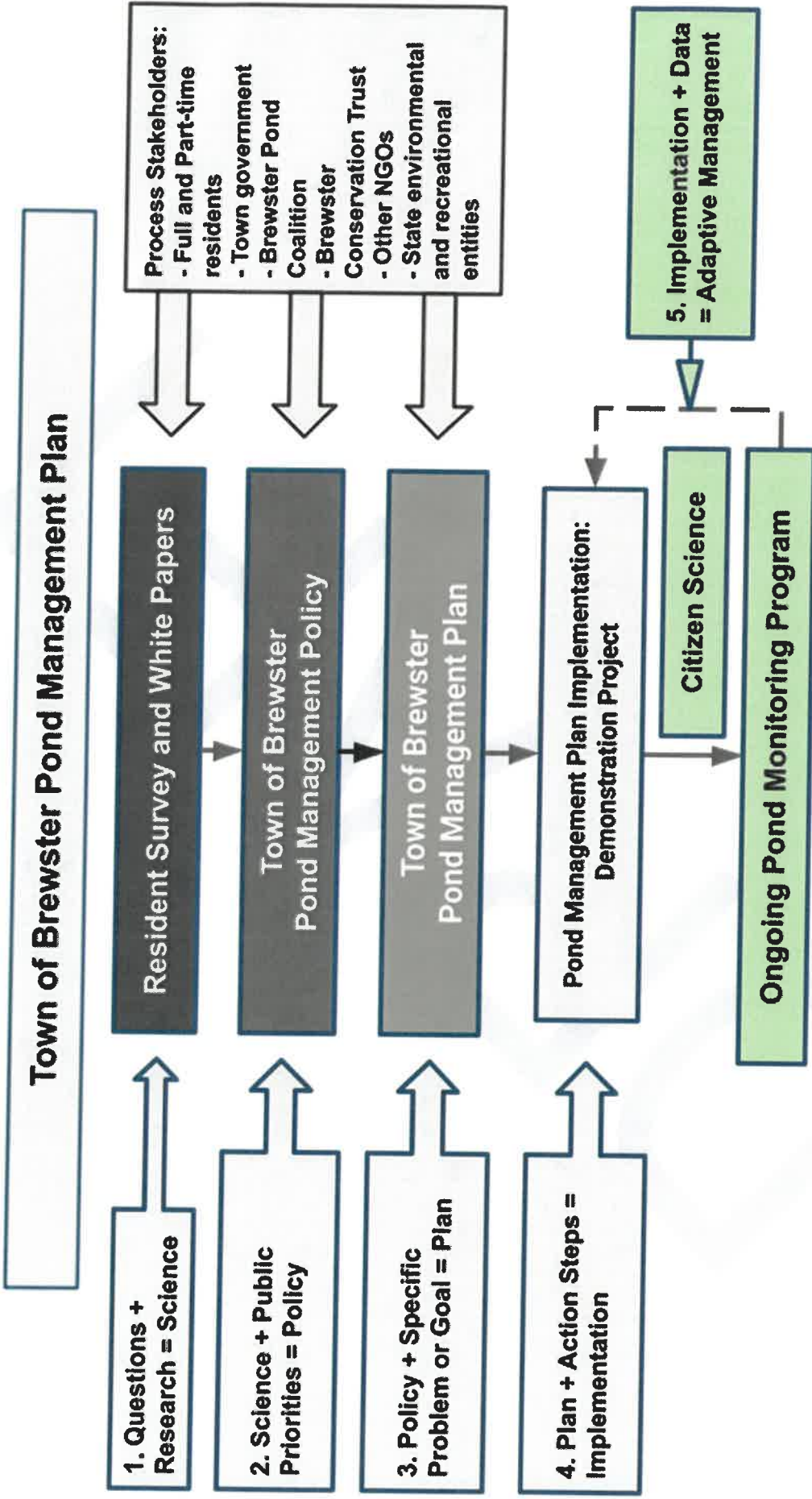
- Continued and requested outreach and implementation guidance to the towns and local Boards of Health;
- A more comprehensive review of the data for nitrogen reducing technologies, leading to a more robust list of BANRT technologies;
- Additional evaluation of whether there is a sufficient supply of necessary equipment and materials, and availability of contractors; and
- Additional time for Cape Cod towns to prepare and submit a Notice of Intent to pursue a Watershed Permit, a Watershed Permit application, or a DeMinimis Load application, which would stay the requirement to install BANRT for both New Construction and existing systems and facilitate an efficient implementation of the new requirements.

The requirement to install BANRT for new construction was scheduled to commence on January 8, 2024 for 30 watersheds on Cape Cod and, on March 30, 2024 for the Wellfleet Harbor watershed on Cape Cod. MassDEP is extending this date to July 8, 2024 for all 31 watersheds designated as NRNSAs on Cape Cod.

This extension for New Construction does not change the timeline for the requirement to install BANRT on existing systems.

This extension for New Construction does not alter or stay any requirement(s) specified by a town bylaw or regulation.

November 30, 2023



Town of Brewster Pond Management Plan Process

Phase	Goals	Personnel and Resources	Stakeholders	Deliverable(s)	Timeline
<p>1. Questions + Research = Science</p>	<ul style="list-style-type: none"> - Develop and execute a survey to elucidate resident designated use preferences for ponds and willingness to pay to achieve those uses - From survey results, generate research questions to be addressed in White Paper(s) on science-based strategies to meet resident designated use preferences 	<p>Natural Resources Advisory Commission (NRAC) with input from consultants having the following areas of expertise:</p> <ul style="list-style-type: none"> - Survey expertise - Scientific expertise - Communication and engagement expertise - Administrative expertise 	<ul style="list-style-type: none"> - Full and Part-time Brewster residents - Brewster town government - Brewster Pond Coalition - Brewster Conservation Trust - Other Brewster-based NGOs - State of MA environmental and recreational entities 	<ul style="list-style-type: none"> - Survey Report - White Paper(s) - Resident engagement plan 	<p>To begin upon charge to NRAC from Town Manager / Select Board</p>
<p>2. Science + Public Priorities = Policy</p>	<ul style="list-style-type: none"> - Draft a Pond Management Policy addressing the principles and goals of pond management in the Town of Brewster - Subject this draft to public comment by the scientific, administrative, regulatory, and public stakeholders and consultants 	<p>Natural Resources Advisory Commission with input from consultants having the following areas of expertise:</p> <ul style="list-style-type: none"> - Scientific expertise - Regulatory expertise - Communication and engagement expertise - Administrative expertise 	<ul style="list-style-type: none"> - Full and Part-time Brewster residents - Brewster town government - Brewster Pond Coalition - Brewster Conservation Trust - Other Brewster-based NGOs - State of MA environmental and recreational entities 	<ul style="list-style-type: none"> - Pond Management Policy 	<p>To begin upon charge to NRAC from Town Manager / Select Board</p>
<p>3. Policy + Specific Problem or Goal = Plan</p>	<ul style="list-style-type: none"> - Obtain and review existing chemical conditions report (Eichner) and all available biologic, hydrologic, geographic, or other data representing existing 	<p>Natural Resources Advisory Commission with input from consultants having the following areas of expertise:</p> <ul style="list-style-type: none"> - Scientific expertise 	<ul style="list-style-type: none"> - Full and Part-time Brewster residents - Brewster town government - Brewster Pond Coalition - Brewster Conservation Trust 	<ul style="list-style-type: none"> - Pond Management Plan 	<p>To follow Phase 2</p>

	<p>conditions of Brewster ponds</p> <ul style="list-style-type: none"> - Identify policy solutions to identified impairments in existing conditions that limit desired designated uses of ponds 	<ul style="list-style-type: none"> - Regulatory expertise - Communication and engagement expertise - Administrative expertise 	<ul style="list-style-type: none"> - Other Brewster-based NGOs - State of MA environmental and recreational entities 		
<p>4. Plan ÷ Action Steps = Implementation</p>	<ul style="list-style-type: none"> - Prioritize ponds for management - Select pond for demonstration project 	<p>Natural Resources Advisory Commission with input from consultants having the following areas of expertise:</p> <ul style="list-style-type: none"> - Scientific expertise - Communication and engagement expertise - Administrative expertise 	<ul style="list-style-type: none"> - Full and Part-time Brewster residents - Brewster town government - Brewster Pond Coalition - Brewster Conservation Trust - Other Brewster-based NGOs - State of MA environmental and recreational entities 	<ul style="list-style-type: none"> - Demonstration Pond Study Report 	<p>To follow Phase 3</p>
<p>5. Implementation + Data = Adaptive Management</p>	<ul style="list-style-type: none"> - Establish ongoing monitoring of Brewster ponds with triggers for detailed investigation and intervention 	<p>Natural Resources Advisory Commission with input from consultants having the following areas of expertise:</p> <ul style="list-style-type: none"> - Scientific expertise - Citizen science expertise - Communication and engagement expertise - Data management expertise 	<ul style="list-style-type: none"> - Full and Part-time Brewster residents - Brewster town government - Brewster Pond Coalition - Brewster Conservation Trust - Other Brewster-based NGOs - State of MA environmental and recreational entities 	<ul style="list-style-type: none"> - Pond Monitoring Database 	<p>To follow Phase 4</p>