

CT DEEP **Riffle Bioassessment by Volunteers** Volunteer Water Monitoring Program



2019 Annual Summary Report (Report #21)

To Learn more about RBV visit: <u>https://portal.ct.gov/DEEP/</u> <u>Water/Inland-Water-Monitoring/</u> <u>Riffle-Bioassessment-by-</u> <u>Volunteers-RBV</u>





Table of Contents

An Introduction to RBV: The 'Treasure Hunt' for CT's Healthiest Streams!	2
Local RBV Program Leaders	3
Executive Summary	ļ
Participation Summary	5
Monitoring Results	5
Download Data Online	3
Interpreting Your RBV Results	5

Appendix A: Local RBV Program Contact Information Appendix B: RBV Monitoring Station Descriptions and Details Appendix C: New Healthy Waters Identified by Volunteers (Photos)



Above: Carriel Cataldi (left) sorts an RBV sample for the Eightmile River Wild & Scenic Watershed, while Kevin Johns and Gary Hoehne (right) sort a sample for The Last Green Valley.

Front Cover Photos:

Top Left: RBV Volunteers pose at Hedge Brook in East Haddam, CT. (*Photo courtesy of Three River Community College*) **Bottom Left**: A volunteer holds several macroinvertebrates on their hand. (*Photos courtesy of The Last Green Valley.*) **Bottom Right:** Volunteers from the Bolton Conservation Commission work together to process an RBV sample. (Photo courtesy of the Bolton Conservation Commission.)

Back Cover Photo:

RBV Volunteers support each other while wading at a monitoring location. *Photo courtesy of Three Rivers Community College.*

An Introduction to RBV: The Treasure Hunt for CT's Healthiest Streams!

The CT DEEP Riffle Bioassessment by Volunteers or "RBV" Program is an annual fall 'treasure hunt' for Connecticut's healthiest streams. CT DEEP uses the data collected by RBV volunteers to expand its inventory of small, high gradient Connecticut streams that have excellent water quality – our "Healthy Streams" list.

RBV volunteers examine the water quality of local stream segments by studying the aquatic benthic macroinvertebrate community present in rocky or 'riffle' areas of these streams.

To learn more contact:

Meghan Lally State RBV Program Coordinator DEEP.RBVProgram@ct.gov 860-424-3061

www.ct.gov/deep/rbv

If volunteers can find four or more pollution sensitive or 'most wanted' macroinvertebrates, CT DEEP can use this data to assess that stream as fully supporting water quality standards for aquatic life use – documenting it as one of CT's healthiest streams! (Because it is a screening approach and not a more in-depth assessment methodology, RBV cannot provide a detailed water quality assessment nor can it be used to identify low or impaired water quality.)



Above: A volunteer holds a rock covered with caddisfly cases. (Photo courtesy Bolton Conservation Commission.) Right: Mashamoquet Brook in Pomfret, Connecticut. A 'four or more' RBV monitoring location. (Photo courtesy of The Last Green Valley.)



2019 Local RBV Program Leaders

Local RBV Program Leaders ensure that the RBV program is a success each year. These individuals put countless hours into organizing their programs, coordinating with DEEP, recruiting and training volunteers, and more. Thank you to the following individuals for serving as local leaders in 2019 & 2020!

- Doreen Carroll-Andrews (Town of Greenwich Inland Wetlands & Watercourses Agency)
 Sarah Coccaro (Town of Greenwich Conservation Commission)
 Tom Fahsbender (Washington Montessori
- School; Steep Rock Association) Carol Haskins (Pomperaug River Watershed Coalition)
- **Penny Howell** (Town of East Lyme Conservation of Natural Resources Commission)
- Joe Hovious (Candlewood Valley Trout Unlimited)
- Diba Khan-Bureau (Three Rivers Community College)
- Tom Ouellette (Vernon Conservation Commission)

- Rod Parlee (Town of Bolton Conservation Commission)
 Alisa Phillips-Griggs (Farmington River Watershed Association)
 Jean Pillo (The Last Green Valley, Eastern Connecticut Conservation District)
 Judy Rondeau (Niantic River Watershed Committee)
 Paul Shafer (Candlewood Valley Trout Unlimited)
- Peter Van Dine (Bolton Conservation Commission)
- Pat Young (Salmon River Watershed Partnership; Eightmile River Wild & Scenic Watershed)

Thank You Volunteers!

The RBV Program would not be possible without the volunteers that actually head out into the streams each year to collect RBV samples – <u>thank you to each of you!</u>



A few of the many dedicated volunteers that participate in the RBV Program! Photos courtesy of (left to right) The Last Green Valley, Three Rivers Community College, and the Bolton Conservation Commission.)

2019 Executive Summary

	2015	2016	2017	2018	2019
Total # of RBV Samples	68	70	78	55	118
# of '4 or More' Samples	21	21	43	23	62
% Total '4 or More' Samples	31%	30%	55%	42%	53%
# Stations Monitored	68	61	74	45	102
# Waterbodies Monitored	54	55	61	43	89

The 2019 RBV field season was a resounding success! Volunteers submitted more than twice as many vouchers as during the previous sampling season. Continuing upon the successful 2017 and 2018 field seasons, volunteers had a high success rate, effectively using the RBV method to document a large number of high quality waters throughout the state.

- **13 Local RBV Programs coordinated programs in their area,** approximately **250 volunteers** from these groups and local partner organizations participated in the program.
- **102 stations** were monitored. Stations spanned **89 waterbodies** located in **36 towns.**
- 118 vouchers were submitted; 62 of these vouchers (52.5%) contained 4 or more RBV 'most wanted' taxa, indicating that these stream segments are among Connecticut's healthiest streams!
- **Volunteers monitored 27 new stations** not previously monitored by DEEP. These efforts are likely to result in **20 new healthy water assessments** (i.e., full support of aquatic life use).



Participation Summary

In 2019, thirteen (13) Local RBV Programs contributed data to the State. Local RBV Programs consisted of partnerships between a variety of groups and organizations, including, river and watershed associations, local conservation commissions and agencies, environmental conservation groups, and educational institutions.

River and Watershed-Based Organizations:

- Eightmile River Wild & Scenic Watershed
- Farmington River Watershed Association
- Niantic River Watershed Committee
- Pomperaug River Watershed Coalition
- Salmon River Watershed Partnership
- The Last Green Valley

Environmental Conservation Groups:

- Eastern CT Conservation District
- Naugatuck River Brigade
- Trout Unlimited Candlewood Valley Chapter

Community Groups:

East Haddam Girl Scouts

Municipal Groups:

- Bolton Conservation Commission
- East Lyme Commission for the Conservation of Natural Resources
- Town of Greenwich Inland Wetlands & Watercourses Agency
- Town of Greenwich Conservation Commission
- Vernon Conservation Commission

Education-Based Partners:

- Nathan Hale-Ray High School
- RHAM High School
- Three Rivers Community College
- UConn Natural Resource Conservation Academy
- Washington Montessori School
- Waterford High School

RBV monitoring locations spanned 36 Connecticut towns including:

• Andover Ashford

Bethel

Bolton

Bristol

Barkhamsted

Bethlehem

Burlington

 Canton Colchester

• East Lyme

Glastonbury

• Eastford

• Greenwich

• Granby

- Hebron
 - Lisbon
- East Hampton Lyme
 - Mansfield
 - Marlborough
 - New Milford

- Willington
 - Woodbury

Waterford

Woodstock

- Colebrook
- East Haddam

- Newtown
- Norwich • Pomfret
- Salem
- Simsbury
- Southbury
- Vernon
- Warren

Monitoring Results

2019 marked the 21st year volunteer monitoring groups collected and submitted vouchers to DEEP under the RBV program. Over 20 years – wow!

Together, volunteers collected 118 vouchers from 102 unique locations on 89 different waterbodies. The distribution of most wanted types in the samples ranged from 0 to 8, with total taxa types in the vouchers ranging from 4 to 28.

	2015	2016	2017	2018	2019
RBV Samples Submitted	68	70	78	55	118
# Monitoring Stations (Appendix B)	68	61	74	45	102
# Streams Monitored	54	55	61	43	89
# Samples w/ 4+ "Most Wanted" Types	21 (31%)	21 (30%)	43 (55%)	23 (42%)	62 (53%)

Table 1. 5-Year Annual RBV Program Monitoring Location Statistics 2014-2019

Sixty-two (62) of the 2019 monitoring sites had 4 or more taxa types in the 'Most Wanted' category, indicating that these stream segments are among Connecticut's healthiest streams. Detailed results for the RBV Program (i.e. voucher contents) are provided in Table 2.

Twenty (20) stream segments are candidates for <u>new</u> 'full support' assessments for aquatic life use support, including nineteen (19) waterbodies not previously assessed:

- Basset Brook Ashford
- Beaver Brook Lyme
- Bissel Brook Granby
- Blackman's Brook Andover
- Cedar Pond Brook Lyme
- Unnamed tributary to the East Branch Eightmile River ("Ransom Brook") – Salem
- Unnamed tributary to the East Branch Eightmile River – Salem
- Tributary to Fraser Brook Salem
- Hedge Brook East Haddam
- Kidder Brook Ashford
- Unnamed tributary to Lake Hayward East Haddam

- Malt House Brook East Haddam
- Freeman Hill Brook (Formerly Negro Hill Brook) – Bristol
- Unnamed tributary to Stratton Brook Simsbury
- Slocum Brook Colebrook
- Spruce Brook Southbury
- Strongs Brook East Haddam
- Unnamed tributary to Strongs Brook East Haddam
- Tisdale Brook Lyme
- Unnamed tributary to the West Branch Eightmile River – East Haddam

Results Map. This map depicts the number of 'Most Wanted' macroinvertebrate types present in RBV voucher samples. Sites are considered to be 'healthy' if 4 or more 'Most Wanted' macroinvertebrate taxa were present (yellow stars).



Table 2. Detailed RBV Station Results. Table 2 provides a list of RBV monitoring vouchers submitted to DEEP 2019. Samples are sorted alphabetically (A-Z) by Waterbody Name and then from smallest to largest Station ID. 'Most Wanted' and 'Moderately Wanted' taxa (family-level ID) that were confirmed to be present in the voucher are noted with an "X". (Column numbers corresponds to the RBV macroinvertebrate organism ID number). In select cases a genus-level ID is required to make a 'Most Wanted' identification; the family may therefore be represented in another category as well; in this case the second occurrence is represented by an "R" to avoid double-counting the family in the Grand Total taxa count. Note: Oligochaetes and select other organisms were not identified to the family level. See the full RBV results for detailed IDS. Bold italicized font indicates stations at which four or more 'Most Wanted' RBV taxa types were present in the voucher; these data will be used to consider listing the associated stream segment as 'fully supporting' Aquatic Life Use support goals during the next biennial assessment. (Sites highlighted in yellow indicate new proposed Healthy Waters.)

Date	Station	Waterbody Name	L Ephemerellidae (Drunella sp.)	b Isonychiidae	Heptageniidae (Epeorus sp.)	y Perlidae	Breronarcyidae	م Capniidae ۲ Chloroperlidae	Leuctridae	Nemouridae	Periodidae Taenioptervgidae	P Glossosomatidae	в Адраталііdae 2	Rhyacophilidae	Bendostomatidae	TOTAL MOST WANTED	^G Hydropsychidae	D Philopotamidae	F Heptageniidae	2 Psephenidae	E Corydalidae	Loraulegastriaae Corduliidae	- Gomphidae	Libellulidae	표 Calopterygidae	, Coenagrionidae	Lestidae	TOTAL MUDEKA LELY WAN LEU TOTAL LEACT MANTED	TOTAL CEASI WAINTED	GRAND TOTAL
3-Nov	18821	Baker Brook					Х									1	X	Х									2	3	1	7
26-Nov	20384	Basset Brook				X	X	,			Х		X	(4	Χ.	X Z	х х	í)	(X						6	3	7	20
4-May	15312	Beaver Brook	X	Χ		X						Χ				4	Χ.	X Z	X								3	2	2	11
27-Sep	15312	Beaver Brook	X	Χ		Х						Χ		X		5	х.	X X	х х	X	(Χ)	K		7	3	6	21
19-Oct	<mark>18686</mark>	<mark>Beaver Brook</mark>	X			Х						Χ	Χ	X	Χ	6	Χ.	X Z	х х	X	(Χ				6	1	5	18
1-May	20379	Beaver Brook	X)	<i>(X</i>	Χ			Χ	X		Χ	Х	(8	X		R	X	(2	2	4	16
12-Oct	17992	Big Brook				Χ						Χ	Х		Χ	4	х.	X X	х х	X	X		Χ)	K		8	1	7	20
3-Nov	<mark>20382</mark>	<mark>Bissel Brook</mark>	X)	(X	X						Х	(5	х.	X I	R								2	1	2	10
21-Oct	20374	Blackledge River	X	х)	(X						Χ	Х	X		7	х.	X I	R X	X	(Χ				5	0	4	16
13-Sep	<mark>20054</mark>	<mark>Blackmans Brook</mark>		х)	(Х		X				Χ				5	х.	X I	r X	X	X						5	1	5	16
22-Oct	20383	Blissville Brook		Х		Х								Х		3	X	x x	X	X	Х						5	0	0	8
3-Nov	16266	Bolton Pond Brook														0	x	2	x x								3	3	1	7
25-Oct	16288	Branch Brook	X	x y	X	X							X	X		7	X.	X I	R X	X	(X				5	1	3	16
11-Nov	15315	Burnham Brook	X		X	X				X			X	X	X	7	X.	X Z	x x	X	X	 	X)	ĸ		8	1	8	24

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			nemerellidae (Drunella sp nvrhiidae	ptageniidae (Epeorus sp.	lidae	:ronarcyidae oniidae	oroperlidae Ictridae	mouridae	Toalaae eniopterygidae	ssosomatidae	ataniidae vacophilidae	ichycentridae	oidostomatidae	. MOST WANTED	dropsychidae	lopotamidae	ptageniidae whenidae	ydalidae	shnidae	dulegastridae duliidae	mphidae	ellulidae	opterygidae enagrionidae	tidae	. MODERATELY WANTED	LEAST WANTED	D TOTAL
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Date	Station	Waterbody Name	12	34	5A 5	5B 5C ·			-	6A 6	B 7	8A	8B) 10 /	01	1 12 ,	13	14A ·			- 14 V	4B -	-	Ĕ		2 0
15-INOV	15315	Burnham Brook	v	v	X	X		v	X		Y	X		4 / 5 \	K V V	X V	,	X	X V			X X			5 L) <u>2</u> 1 2	11
<u>4-1010y</u> 13-Oct	20205	Cabin Brook	~	x	x			~		x	л Х			4 X	<u> </u>	<u>л</u> У Х	,	X	л Х			~		_	5 (2	14
22-Oct	20205	Cedar Pond Brook		<u>x</u>	x			x	x	<i>x</i>	7	x	x	6 2	x x	· x	' X	x	x			x			7 2	7	22
<u>15-Aua</u>	17273	Cherry Brook	x x	X	X		Х			X	X			7)	x x	R	X	X	X	x	Х				7 1	15	20
18-Oct	20375	Cranberry Meadow Brook											(0 >	< X	Х	Х	Х	2	х	Х	Х			B (6	14
2-Nov	20391	Cranberry Meadow Brook			Х					Х	[Х	3)	<	Х		Х	Х						4 2	2 6	15
7-Sep	16324	Dickinson Creek	Х	X	X							X	4	4 >	K X	,	X	X			Χ				5 () 2	11
4-May	19215	E. B. Eightmile River Tributary	Х		X			X			X		4	4 >	K	X	X	X			Χ			!	5 () 3	12
19-Oct	<mark>19215</mark>	E. B. Eightmile River Tributary	X	X	X						X	X	1	5	X	' X	X	X	Х		X	X			7 (3	15
27-Sep	19215	E.B. Eightmile River Tributary		Х	Х							Х		3 >	κх	Х	Х	Х	Х		Х	Х		8	B 1	16	18
2-Nov	<mark>20390</mark>	E.B. Eightmile River Tributary		X	X			X		X	X	X	X	7)	K X	' X	X	Χ	Χ			X			7 () 4	18
10-Oct	16122	Early Brook	X	X	X					X		X		5)	K X	' X	X	Χ	Χ			X			72	29	23
16-Oct	15278	East Aspetuck River	ХХ		Х								3	3 >	κх	Х									3 () 2	8
16-Oct	15278	East Aspetuck River	Х		Х									2 >	<	Х									20	0	4
7-Oct	17143	East Aspetuck River	Х		Х									2 >	Χ	Х		Х	Х		Х			(5 1	1	10
25-Nov	15180	East Branch Eightmile River	X		X				Х	X	X		X	6)	K X	' X	X	X	Χ					(5 2	2 3	17
11-Oct	18390	East Branch Eightmile River	XX		X					X	X	Χ	(6)	K X	' X	X	Χ			Χ		X		7 () 6	19
5-Oct	18962	East Branch Eightmile River	Х		Х							Х	1	3 >	< X	X	Х	Х	Х		Х				7 (3	13
1-Aug	18993	East Meadow Brook			Х		Х				Х			3	Х			Х							2 () 2	7
8-Nov	20045	East Meadow Brook				Х								1 >	< X	Х		Х							4 1	1 3	9
<u>12-Oct</u>	20386	East Swamp Brook	Х		Х						Х			3)	< X	Х	Х	Х						!	5 1	1	10
25-Oct	19713	Eightmile River	Х		Х							Х		3	Х	Х					Х				3 2	2 3	11
<u>13-Apr</u>	15314	Eightmile River Tributary		X X						X	X			4)	K X	'R		X	X						4 2	2 2	12
26-Sep	15314	Eightmile River Tributary			Х			Х					2	2)	K X	X		Х	Х		Х	Х			7 (2	11

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19-Oct	15310	Fightmile River Tributary	T	Ζ.	54	л Х	20 20				-	θA	עם אי	, ,	SA Ö	ם יי 1	<u>–</u> 9 х	X	х тт ,	12	X 13	14A	x			. т Т	.4D -	-	Ĕ 6	⊢ 2	⊢ (1 10	<u>פ</u> ר
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21-Oct	18409	Fawn Brook		X		X						X	,		x	4		X	X	X	X				x				5	1	4 14	1
12-Oct	15732	Fenton River		X	Х	Х										3	Х	Х		Х	Х								4	1	19	
7-Sep	16121	Flat Brook		Χ.	x x	X						Х				5	X	X		X	Χ	X							5	2	3 1	5
24-Oct	17322	Fourmile River				Х)	X	2	Х	Х	Х		Х	Х		2	Х				6	4	i 13	3
22-Sep	18961	Fraser Brook			Х	Х										2	Х	Х		Х	Х	Х		2	X				6	0	1 12	2
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28-Oct	<mark>20392</mark>	Fraser Brook Tributary	X		X	X							<i>x)</i>	x X	x x	(7	X	X	Χ	X	Χ	X							6	2	7 22	2
28-Sep	<mark>15154</mark>	<mark>Freeman Hill Brook</mark>	X		X X	X	X					X)	X		7	X	Х	R	Х	Χ	Χ				Х	(6	0	5 18	3
3-Nov	15592	French Brook														0	Х				Х		Х						3	0	2 5	
5-Oct	20125	Gages Brook Tributary			Х	Х)	X		3	Х	Х	Х										3	1	3 10)
8-Nov	16996	Good Hill Brook	X		X X	Χ		X			Х	(Χ		Х	8	X	X	R	Х	Χ	Χ							5	1	5 20	כ
25-Oct	15313	Harris Brook		Х		Х)	X	3	Х	Х	Х		Х	Х		2	X				6	0	2 11	1
30-Nov	15313	Harris Brook	X			X	X				X	<i>x x</i>	<i>X</i>)	X	X	8	X	Х			Χ	X		2	X	Х	(6	3	3 20)
4-May	19214	Harris Brook		Х		Х)	X		3	Х		Х		Х	Х							4	0	2 9	
22-Sep	19214	Harris Brook	X	X		X						X)	X		5	X	X	X	X	X	X		,	X	Х	(8	1	5 20)
25-Oct	19214	Harris Brook		Х		Х					Х	(3	Х		Х		Х	Х	Х			Х	(6	2	1 12	2
25-Oct	18818	Hedge Brook														0			_		X		Х						2	1	58	
22-Nov	<mark>18818</mark>	Hedge Brook			X	X	X			X	<u>(</u>	()	X	X	(7	X	X	R		X								3	3	8 21	L
<u>13-Apr</u>	20126	Hedge Brook	X		ХХ	X		X		X	()	X	X	8	X	X	R		V.			-					2	1	2 13	3
13-Sep	20310	Hop River		Х		Х						Х				3	X	X	Х	Х	Х	Х			X				7	3	4 17	<u>/</u>
12-Oct	19452	HUDDard Brook		V		v										0	X	X	v	v	V								2	1	2 5	_
21-Sep	20051	Jeremy River		X		X						v				2	X	X	X	X	X	V							5	2 .	5 14	<u> </u>
7-0Ct	12383	Jordan Brook				X						Х				2	Х	Х		Х		X							4	1	5 1(1

			(so.)		sp.)																										f	3		
			hemerellidae (Drunella	onvchildae	eptageniidae (Epeorus :	itoperiidae vilidae	eronarcyidae	pniidae	lloroperlidae	ucuridae 	emouridae rrlodidae	enioptervgidae	ossosomatidae	oataniidae	ıyacophilidae	achycentridae	pidostomatidae	L MOST WANTED	/dropsychidae	ilopotamidae	eptageniidae	ephenidae	rydalidae	shnidae	ordulegastridae	orduliidae	omphidae	bellulidae	lopterygidae	enagrionidae	stidae	L MUUEKALELT WAN	I OTHER	ID TOTAL
Date	Station	Waterbody Name	ц ц	<u>י ז</u> <u>י</u>	: Ĭ (<u>د</u> م	. E	ů c	<u>5</u>	2:2	žď	, io	: 0 60	Ā	È,	<u>م</u>	, E	OT 0	Í \ 1	<u>ک</u> ۱	Ť 1 1	ĕ′ ⊃ 1	Ŭ 2 1	۲ ۱۸	ŭ	3	Ğ		Ŭ 4B	Ŭ.	J F		OTA	RAN
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<u>29-3ep</u> 18-0ct	17840	Kidder Brook		~	x x	X							x			^	4	, / 1)	$\frac{1}{\sqrt{2}}$	(F	2 2	· /		>	(<u> </u>					0	Δ	13
12-Nov	20389	Lake Hayward Tributary			<u> </u>	<u>х</u>		x		X	X	x	~	x	2	хх	κ ε	3)	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	(X	·)	X		•						6	2	6	22
17-Oct	19249	Lake Haywardville Brook															C) >	< >	(Х	(Х	X	()	(X		7	3	4	14
21-Oct	17173	Lake Waramaug Brook Tributary			Х	Х											2	2 >	< >	$\langle \rangle$	(Х	Х								5	0	1	8
21-Oct	18413	Latimer Brook				Х											1	L	X	$\langle \rangle$	ίх	X	Х	X	(Х		Х	(8	3	3	15
21-Oct	18495	Latimer Brook	Х			X)	x X	х х	K 5	5)	_x	$\langle \rangle$	(X	')	X								6	5	5	21
12-Oct	20393	Little Brook			Х	Х											2	2 >	$\langle \rangle$	$\langle \rangle$	СХ	X	Х								6	0	3	11
3-Nov	18981	Lyman Brook			Х	X			X				X	X)	x		e	5)	K X	(Х	' X	X					Х	(6	4	3	19
22-Nov	<mark>20387</mark>	<mark>Malt House Brook</mark>			Х			x X	(X			x)	x	X	K 7	7)	K X	(X	(3	3	6	19
14-Sep	15599	Mashamoquet Brook		Х	X	X							Χ				4	;	K X	(F	x x	' X	(X					5	3	5	17
20-Nov	19495	Mianus River		Х			2	X				Х					3	;	$\langle \rangle$	()	(3	2	3	11
14-Sep	18871	Moodus River				Х							Х	>	x		3	3 >	$\langle \rangle$	$\langle \rangle$	(Х	(4	2	4	13
13-Apr	18694	Muddy Brook	Х		Х			>	<								3	;	<	>	(Х	Х								4	1	3	11
26-Sep	18694	Muddy Brook	X		X X	X)	(Χ				e	5)	K X	K F	<i>x</i> x	' X	X								5	0	3	14
19-Oct	18694	Muddy Brook			Х	Х											2	2 >	$\langle \rangle$	$\langle \rangle$	(X	X	Х								6	0	2	10
1-Nov	20376	Oil Mill Brook			X	X					X)	X	4	;)	ĸ)	(X	X					X	(5	0	1	10
21-Sep	16438	Pine Brook				Х)	Х	2	2 >	$\langle \rangle$	$\langle \rangle$	(X	X	Х								6	2	2	12
20-Oct	19457	Pine Brook	X		X	X)	X	4	i >	K X	$\langle \rangle$	(λ	X		X	X		X	(8	0	4	16
28-Sep	14406	Pootatuck River	X	X		X	Х						X				5	5)	K X	$\langle \rangle$	(X	' X	X								6	2	2	15
28-Sep	15280	Pootatuck River		Х		Х							Х				3	3	$\langle \rangle$	$\langle \rangle$	x										4	3	2	12
6-Nov	16094	Pootatuck River	X	X		X						X	X				5	5)	x x	(X									3	1	3	12
28-Sep	16420	Pootatuck River		Х		Х								>	X		3	3	$\langle \rangle$	$\langle \rangle$	x										4	2	0	9
5-Oct	20381	Punch Brook		X	X	X	X						X)	x		e	5)	<i>x x</i>	(X	' X	X					X	(6	2	4	18
5-Oct	16995	Railroad Brook				Х	Х										2	2	$\langle \rangle$	$\langle \rangle$	x		Х								5	0	1	8

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5-Oct	17703	Railroad Brook	X	X		X X							X			5	х х	(F	<i>x</i> x	X	X			X					6	1	1 16	5
3-Nov	18816	Railroad Brook														0	ХХ	$\langle \rangle$	Х	Х	Х			Х					7	2 :	1 10)
5-Oct	16999	Raymond Brook		X		Χ)	(X		4	х х	(X	X					X			5	2	1 15	5
5-Oct	20371	Rickenback Brook				Х										1	ХХ	$\langle \rangle$	(Х							4	<u>0</u>	2 7	
13-Apr	19458	Roaring Brook #2	X	X X	Χ	Χ				X			Χ			7		F	?	X	X					X			3	1 () 11	1
25-Oct	19458	Roaring Brook #2	X	X	X	X										4	λ	$\langle \rangle$	<i>(X</i>	X	X								5	<u> </u>	5 14	1
7-Sep	14440	Salmon River		<u>x</u> x		X		Х	()	(Χ		6	ХХ	(F	<i>X</i> 8	X				Х					5	1 (5 18	3
7-Sep	20373	Salmon River Tributary				Х		Х			>	<				3	ХХ	$\langle \rangle$	(Х	Х								5	1	3 12	2
23-Oct	20198	Shingle Mill Brook				Х					>	<		Х		3	ХХ	$\langle \rangle$	X	Х				Х		Х			7	2 !	<u>; 17</u>	/
21-Oct	19617	Slab Gut Brook														0	ХХ	$\langle \rangle$	(Х	Х							5	2	2 9	
21-Oct	<u>17052</u>	Slocum Brook		<u>X</u>	X	XX					X		X			6	X X	$\langle \rangle$	(X	<u> </u>								5	0	2 13	3
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26-Oct	16084					X					<u>x</u>	,				2	<u>x x</u>	() /		X	X		,						5	3	! 12	<u>'</u>
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26-Oct	20372	Wildcat Brook	~	<u>, , ,</u>		~ ~				~	<u>~</u> >	<	~			1	<u>x x</u>	. / (X					3	1	1 6	
20-Nov	17201	Willys Meadow Brook			x	х					,	•		x		3	<u>x</u> x	()	(X	x			~					5	2	7 11	2
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	64.4		Ephemerellidae (Drunella sp.)	Isonychiidae	Heptageniidae (Epeorus sp.)	Perlidae	Pteronarcyidae	· Capniidae Chloronerlidae	Leuctridae	Nemouridae	Perlodidae	Taeniopterygidae	Glossosomatidae	Rhvacophilidae	Brachycentridae	Lepidostomatidae	DTAL MOST WANTED	Hydropsychidae	Philopotamidae	Heptageniidae	Psephenidae	Corydalidae	: Aeshnidae	Cordulegastridae	Corduliidae	Gomphidae	Libellulidae	calopterygidae	Coenagrionidae	Lestidae	DTAL MODERATELY WANTED	DTAL LEAST WANTED	JIAL UI HEK	KAND IUIAL
Date	Station	Waterbody Name	1	2 3	4	5A 5	5B 5	C -	-	-		- (6A 6B	7	8A	8B	<u><u> </u></u>	9 1	10 1	11 1	2 1	.3 1	4A -	-	-	-	1	L4B -		•	¥		2 5	5
1-Nov	20377	Willys Meadow Brook Tributary	Х			Х									Х		3)	x)	X	Х		(X	(5 1	2	1:	1
7-Nov	20246	Witch Meadow Brook				Х					2	Х					2 >	x >	X		Х	< X	(4	4 1	1	8	
8-Nov	20378	Wood Creek	X	XX	(X	κ					X	X				7)	x y	XI	R X	$\langle \rangle$	(4	4 0) 3	14	4
13-Sep	14735	Yantic River	Х	XX	(X											4)	x y	x	X	$\langle \rangle$	<								4	4 0) 5	1.	3

Download Data Online

All RBV data are available for download from the <u>Water Quality Portal (WQP</u>), a cooperative service sponsored by the United States Geological Survey, the Environmental Protection Agency, and the National Water Quality Monitoring Council. Along with serving as a clearing house for Connecticut's RBV data, WQP serves data collected by over 400 other state, federal, tribal, and local agencies. The WQP contains sample locations, physical/chemical, biological, habitat and metric results. All data in the portal is free and open to the public for download and use.

Water Quality Portal Data Download Instructions:

Go to <u>https://www.waterqualitydata.us/portal/.</u> In the "Site Parameters" box enter "CTVOLMON" for the Organization ID. In the "Sampling Parameters" box enter "CT-VOLMON-RBV" as the Project ID. OPTIONAL: Within the "Sampling Parameters" box use the "Date range – from" and "to:" boxes to filter the database by a particular time period. (If you do not utilize this feature ALL available RBV results will be returned.)

1) To download a list of **RBV MONITORING STATIONS**:

- Select Data to Download \rightarrow Site data only
- File Format \rightarrow Comma-separated (suggested but not required)
- Check to sort data
- Click "Download" button
- A 'Download Status' box should be returned indicated the number of sites that will be included in the download file. Click "Continue"
- If the file does not appear go to your 'downloads' folder to locate it. The file will download as a .zip file; the "station.csv" file will need to be extracted to a location of your choosing on your computer.
- The following fields are core fields that should be retained:
 - MonitoringLocationIdentifier (*Unique ID for each station)
 - o MonitoringLocationName
 - MonitoringLocationTypeName
 - MonitoringLocationDescriptionText
 - HUCEightDigitCode
 - o LatitudeMeasure
 - o LongitudeMeasure
 - StateCode (CT=9)
 - o CountyCode
- NOTE: If you select all data in Excel you can use the Filter feature to search for a given town or stream name within the dataset

2) To download a TAXA LIST FOR ONE OR MORE SAMPLES:

- Select Data to Download \rightarrow Sample Results (biological metadata)
- File Format → Comma-separated (suggested but not required)
- Check to sort data
- Click "Download" button
- A 'Download Status' box should be returned indicated the number of sites that will be included in the download file. Click "Continue"
- If the file does not appear go to your 'downloads' folder to locate it. The file will download as a biologicalresult.zip file; the "biologicalresult.csv" file will need to be extracted to a location of your choosing on your computer.
- The following fields are core fields that should be retained:
 - ActivityIdentifier (*Unique ID for sample; use to link to biologicalresult.csv table)
 - ActivityStartDate (Collection Date)
 - MonitoringLocationIdentifier (Use this to link to the station.csv and biologicalresult.csv tables)
 - ActivityLocation/LatitudeMeasure
 - ActivityLocation/LongitudeMeasure
 - AssemblageSampledName should be 'benthic macrionvertebrates'
 - CharacteristicName should be 'count' but really stands for 'presence = true'

- o Result Measure should be '1' indicating it was present
- o ResultComment Text the RBV Category of the taxa present
- o SubjectTaxonomicName the Scientific Name (typically family) of the taxa
- UnidentifiedSpeciesIdentifer genus name (typically entered only if needed to confirm 'most wanted' taxa)
- NOTE: You can filter this data using the filtered list of stations generated in step 2 above. Keep in mind for a given sample there may be many rows all rows with the same ActivityIdentifier are part of the same sample.

Interpreting Your Results

RBV monitoring locations that supported four or more 'Most Wanted' macroinvertebrate taxa, are considered to be 'healthy waters'. DEEP will integrate these '4 or more' results into the biennial water quality assessment process, noting them as locations that support aquatic life use. Refer to Table 3 for additional monitoring result interpretation guidance. Local RBV Program Coordinators are encouraged to contact the State RBV Coordinator to discuss follow-up actions for specific monitoring locations as needed.



Now this is what we call a field office! An RBV volunteer sorts through a sample while monitoring Beaver Brook in Barkhamsted, CT. Photo courtesy of the Farmington River Watershed Association.

# 'Most Wanted' Taxa	What Does it Tell Us?
4+	Excellent!! Lots of very sensitive macroinvertebrate types were present – <u>you found a healthy stream segment</u> !
	This is a very clear signal of excellent water quality as the 'Most Wanted' types cannot survive in degraded streams or otherwise low water quality conditions.
	DEEP Assessment Decision : The stream containing the monitoring location will be considered for 'Fully Supporting' State aquatic life use standards. Fully supporting streams or stream segments will be listed in the next Integrated Water Quality Report (IWQR) and added to the DEEP's running list of miles of Healthy Waters assessed. (The IWQR is prepared by DEEP and submitted to the U.S. Environmental Protection Agency every two years.)
	Recommended Volunteer Follow-Up Action : Revisit every 2 to 5 years to continue documenting the excellent health of this stream.
2	A Very <u>Good Sign</u> – Keep this Site on Your Radar!
5	Three Most Wanted or very sensitive macroinvertebrate types in a sample is a strong signal of good to excellent water quality. Although three most wanted is not statistically enough data for DEEP to list the site as a healthy stream segment this time, this is a great find!
	DEEP Assessment Decision: No Assessment Made but consider trying again!
	Recommended Volunteer Follow-Up Action : If this was the first time the site was monitored with RBV, this site should be a high priority candidate for monitoring next season.
0.2	Double check whether this is a good spot to be using the RBV
0-2	method
	More information is needed to determine the water quality at this site. Reasons for few most wanted may include poor water quality; <i>however</i> , few most wanted types should not be interpreted as a proof of degraded conditions. Other factors such as unusual flow conditions (i.e. very high or very low), lack of adequate riffle habitat, etc. could result in few most wanted types despite overall good water quality.
	DEEP Assessment Decision: No Assessment Made
	Recommended Volunteer Follow-Up Action : If this is a first-time monitoring location, and the site otherwise is suitable for RBV monitoring (e.g. small watershed with year-round flow and riffle habitat), assign the site a low to medium priority for follow-up monitoring.

Table 3. Interpretation of RBV Results by Most Wanted Taxa Type Count.

Appendix A: Local RBV Program Contact Information

	Group Abbreviation	Local Coordinator(s) Name(s)	Email
Bolton Conservation Commission	BCC	Rod Parlee	captundra@aol.com
Candlewood Valley Trout Unlimited	CVTU	Paul Shaffer	Shafer.paul@att.net
Eightmile River Wild & Scenic Watershed	8MILE	Pat Young	pyoung@eightmileriver.org
Farmington River Watershed Association	FRWA	Alisa Phillips-Griggs	aphillipsgriggs@frwa.org
Niantic River Watershed Committee	NRWC	Judy Rondeau	judy.rondeau@comcast.net
Pomperaug River Watershed Coalition	PRWC	Carol Haskins	chaskins@pomperaug.org
Salmon River Watershed Partnership	SRWP	Pat Young	salmonriverct@att.net
The Last Green Valley	TLGV	Jean Pillo	jean.pillo@conservect.org
Three Rivers Community College	TRCC	Diba Khan-Bureau	dkhan-bureau@trcc.commnet.edu
Town of Greenwich IWWA	GIWWA	Doreen Carroll-Andrews	dcarroll@greenwichct.org
Town of Greenwich Conservation Commission	GCC	Sarah Coccaro	Sarah.Coccaro@greenwichct.org
Vernon Conservation Commission	VCC	Tom Ouellette	tom.r.ouellette@gmail.com
Washington Montessori School	WMS	Tom Fahsbender	tfahsbender@washingtonmontessori.org

Photos (L-R): RBV Volunteers monitoring Cranberry Meadow Brook in East Lyme, CT. (*Photo courtesy of the Niantic River Watershed Committee*); Volunteers sort RBV samples in Bolton, CT. (*Photo courtesy of the Town of Bolton Conservation Commission.*); RBV Volunteers monitor Freeman Hill Brook in Bristol, CT. (*Photo courtesy of the Farmington River Watershed Association.*); A special guest made an appearance at this year's Still River monitoring event in Eastford, CT. (Photo courtesy of The Last Green Valley.)

Appendix B: RBV Monitoring Station Description & Details

Locations are sorted by DEEP Station ID number. Note that the actual RBV monitoring location may be slightly upstream or downstream of the official DEEP station description noted below. Refer to Appendix A to interpret RBV group abbreviations.

Station	Waterbody Name	Location Description	Town	Latitude	Longitude	RBV Group
14406	Pootatuck River	Downstream Wasserman Way	NEWTOWN	41.40640	-73.27200	CVTU
14440	Salmon River	Downstream Route 16 Bridge	EAST HAMPTON	41.55260	-72.44960	SRWP
14735	Yantic River	Upstream West Town St.	NORWICH	41.55830	-72.11200	TLGV
15045	Judd Brook	Upstream old road crossing	HEBRON	41.60050	-72.37300	SRWP
15154	Freeman Hill Brook	Upstream Shrub Rd.	BRISTOL	41.71530	-72.93640	FRWA
15170	West Branch Salmon Brook	Adjacent Salmon Brook Park	GRANBY	41.94380	-72.79570	FRWA
15179	Eightmile River	At Deep Hole Picnic Area	EAST HADDAM	41.46710	-72.33720	8MILE
15180	East Branch Eightmile River	Off Walden Rd.	SALEM	41.47950	-72.28190	8MILE
15278	East Aspetuck River	Behind the Pratt Center	NEW MILFORD	41.62300	-73.40000	WMS
15280	Pootatuck River	At Tom's Brook Confluence	NEWTOWN	41.41490	-73.28270	CVTU
15312	Beaver Brook	Downstream private drive off Beaver Brook Rd.	LYME	41.40995	-72.32906	8MILE / TRCC
15313	Harris Brook	At mouth	SALEM	41.47330	-72.28510	8MILE / TRCC
15314	Eightmile River Tributary ("PV brook")	Within Pleasant Valley Preserve	LYME	41.41550	-72.33960	8MILE / TRCC
15315	Burnhams Brook	At mouth	EAST HADDAM	41.46030	-72.33430	8MILE / TRCC
15383	Jordan Brook	Downstream Cross Rd.	WATERFORD	41.38000	-72.15580	NRWC
15592	French Brook	At French Rd.	BOLTON	41.74420	-72.44850	BCC
15599	Mashamoquet Brook	Within State Park	POMFRET	41.85610	-71.97580	TLGV
15732	Fenton River	Downstream Daleville School Rd.	WILLINGTON	41.85090	-72.24150	TLGV
16084	Still River	Downstream Old Turnpike Rd.	WOODSTOCK	41.96600	-72.09000	TLGV
16094	Pootatuck River	At Sandy Hook Center	NEWTOWN	41.42220	-73.28200	CVTU
16121	Flat Brook	At Route 16	EAST HAMPTON	41.55440	-72.45230	SRWP
16122	Early Brook	At Haywardville Rd.	EAST HADDAM	41.49780	-72.34350	8MILE
16238	West Branch Salmon Brook	Within McLean Game Refuge	GRANBY	41.93930	-72.81690	FRWA
16266	Bolton Pond Brook	At Mark Anthony Lane	BOLTON	41.77840	-72.41670	BCC
16288	Branch Brook	Adjacent Kozy Corner Rd.	EASTFORD	41.91990	-72.12560	TLGV
16324	Dickinson Creek	At mouth	COLCHESTER	41.55750	-72.44200	SRWP
16420	Pootatuck River	At Walnut Tree Hill Rd.	NEWTOWN	41.43760	-73.27020	CVTU

Riffle Bioassessment by Volunteers (RBV) Program -2019 Summary Report

Appendix B

Station	Waterbody Name	Location Description	Town	Latitude	Longitude	RBV Group		
16438	Pine Brook	At mouth	COLCHESTER	41.58011	-72.39937	SRWP		
16696	Good Hill Brook	Upstream of Grassy Hill Rd.	WOODBURY	41.54080	-73.23420	PRWC		
16995	Railroad Brook	Downstream Bread and Milk Rd.	VERNON	41.82772	-72.44828	VCC		
16999	Raymond Brook	Downstream Grayville Rd.	HEBRON	41.61280	-72.36810	SRWP		
17052	Slocum River	Upstream of waterfall on MDC logging road	COLEBROOK	42.03220	-73.03530	FRWA		
17143	East Aspetuck River Tributary	At mouth	NEW MILFORD	41.62830	-73.39750	WMS		
17173	Waramaug Brook	Upstream Town Farm Rd.	WARREN	41.73970	-73.34140	WMS		
17201	Willys Meadow Brook	Upstream I-395	WATERFORD	41.38110	-72.18780	NRWC		
17273	Cherry Brook	At Shagbark Lane	CANTON	41.89380	-72.89460	FRWA		
17322	Fourmile River	At Spring Rock Rd.	EAST LYME	41.33900	-72.25920	NRWC		
17703	Railroad Brook	Upstream of pond in Valley Falls Park	VERNON	41.81913	-72.44547	VCC		
17840	Kidder Brook	Upstream Kidder Brook Rd.	ASHFORD	41.90972	-72.21295	TLGV		
17992	Big Brook	Upstream Route 85	SALEM	41.50446	-72.28783	8MILE		
18390	East Branch Eightmile River	At Ed Bills spillway	LYME	41.42682	-72.33191	8MILE		
18409	Fawn Brook	Downstream Old Hartford Rd.	MARLBOROUGH	41.60458	-72.41875	SRWP		
18413	Latimer Brook	Upstream Colony Rd.	EAST LYME	41.38397	-72.21429	NRWC		
18495	Latimer Brook	Upstream Route 1, behind Flanders Plaza	EAST LYME	41.36726	-72.20808	NRWC		
18686	Beaver Brook	Upstream Grass Hill Rd.	LYME	41.41123	-72.28826	8MILE		
18694	Muddy Brook	Upstream Hopyard Rd.	EAST HADDAM	41.47597	-72.34292	8MILE/TRCC		
18816	Railroad Brook	Downstream Bolton Notch Pond	BOLTON	41.79583	-72.45055	BCC		
18818	Hedge Brook	Below Hopyard Rd.	EAST HADDAM	41.45324	-72.33871	8MILE/TRCC		
18821	Baker Brook Tributary	Downstream School Rd.	BOLTON	41.74794	-72.42410	BCC		
18826	Tisdale Brook	Upstream Sterling City Rd.	LYME	41.38372	-72.33828	8MILE		
18871	Moodus River	Upstream Gristmill Rd.	EAST HADDAM	41.50859	-72.44826	SRWP		
18961	Fraser Brook	At Salem Community Park	SALEM	41.48108	-72.25275	8MILE/TRCC		
18962	East Branch Eightmile River	Downstream Darling Rd.	SALEM	41.44221	-72.30620	8MILE		
18981	Lyman Brook	Downstream of Glenwood Dr.	MARLBOROUGH	41.63271	-72.45228	SRWP		
18993	East Meadow Brook	At Scratchville Rd.	WOODBURY	41.55509	-73.19706	PRWC		
19157	Weekeepeemee River	Adjacent to Mill Pond Rd.	BETHLEHEM	41.63113	-73.22246	PRWC		
19214	Harris Brook	Upstream Music Vale Rd.	SALEM	41.48739	-72.27044	8MILE/TRCC		
19215	East Branch Eightmile River Tributary	Downstream Darling Rd.	SALEM	41.45494	-72.28356	8MILE/TRCC		
19249	Lake Hayward Brook	Downstream of Salem Rd.	SALEM	41.49748	-72.32527	8MILE		
19452	Hubbard Brook	Downstream of New London Tpk.	GLASTONBURY	41.70391	-72.59376	NRCA		
Riffle I	Riffle Bioassessment by Volunteers (RBV) Program -2019 Summary Report Appendix B							

Station	Waterbody Name	Location Description	Town	Latitude	Longitude	RBV Group	
19457	Pine Brook	Within Middlesex Land Trust Preserve	EAST HAMPTON	41.53845	-72.52452	SRWP	
19458	Roaring Brook #2	Upstream Rte. 82, behind Hadlyme Post Office	LYME	41.42348	-72.39911	TRCC	
19495	Mianus River	Parallel to River Rd.	GREENWICH	41.06417	-73.57929	GIWWA	
19617	Slab Gut Brook	upstream of Matson HIII Rd	GLASTONBURY	41.65128	-72.56963	NRCA	
19713	Eightmile River	Upstream of Dolbia Hill Rd.	EAST HADDAM	41.45272	-72.33677	TRCC	
19976	South Brook	Downstream of Middle Quarter Rd.	WOODBURY	41.52489	-73.20123	PRWC	
20045	East Meadow Brook	Downstream Church Hill Rd.	WOODBURY	41.59793	-73.20554	PRWC	
20046	Spruce Brook	Downstream of Spruce Brook Rd.	SOUTHBURY	41.48789	-73.26860	PRWC	
20051	Jeremy River	Upstream Route 149	COLCHESTER	41.58021	-72.40082	SRWP	
20054	Blackmans Brook	At mouth	ANDOVER	41.74333	-72.37779	DEEP	
20125	Tankerhoosen River Tributary	Upstream of Fish & Game Rd.	VERNON	41.84139	-72.43027	VCC	
20126	Hedge Brook	At West Dolbia Hill Rd.	EAST HADDAM	41.45207	-72.33766	TRCC	
20198	Shingle Mill Brook	Upstream Shingle Mill Rd.	SALEM	41.46877	-72.26479	8MILE	
20199	Cedar Pond Brook	Downstream of Gungy Rd.	LYME	41.42479	-72.28750	8MILE	
20205	Cabin Brook	Downstream of Lake Hayward Rd.	COLCHESTER	41.56026	-72.31922	SRWP	
20246	Witch Meadow Brook	Behind #643 Hartford Rd.	SALEM	41.51375	-72.29786	8MILE	
20310	Hop River	Upstream confluence with Blackman's Brook	ANDOVER	41.74195	-72.37770	DEEP	
20371	Rickenback Brook	Within Belding Wildlife Management Area	VERNON	41.83361	-72.44306	VCC	
20372	Wildcat Brook	Within JB Williams Park	GLASTONBURY	41.70418	-72.55282	NRCA	
20373	Salmon River Tributary	Upstream of Salmon River confluence	EAST HAMPTON	41.54838	-72.45101	SRWP	
20374	Blackledge River	Upstream of Fallen Brook confluence	MARLBOROUGH	41.59564	-72.41955	SRWP	
20375	Cranberry Meadow Brook	Within Nehantic State Forest	EAST LYME	41.41490	-72.24536	NRWC	
20376	Oil Mill Brook	East of Oil Mill Rd.	WATERFORD	41.38966	-72.17740	NRWC	
20377	Willys Meadow Brook Tributary	West of Oil Mill Rd.	WATERFORD	41.39386	-72.19021	NRWC	
20378	Wood Creek	Upstream Arch Bridge Rd.	BETHLEHEM	41.62964	-73.22928	PRWC	
20379	Beaver Brook	Upstream Park Rd.	BARKHAMSTED	41.93317	-72.97650	FRWA	
20380	Stratton Brook Tributary ("Lily Brook")	At 341 Shingle Mill Rd.	SIMSBURY	41.87130	-72.87040	FRWA	
20381	Punch Brook	Downhill from 19 Punch Brook Rd.	BURLINGTON	41.77583	-72.92861	FRWA	
20382	Bissel Brook	Upstream Canton Rd.	GRANBY	41.92891	-72.81130	FRWA	
20383	Blissville Brook	Adjacent Kenyon Rd.	LISBON	41.59389	-72.02601	TLGV	
20384	Basset Brook	Downstream Perry Hill Estates driveways	ASHFORD	41.87840	-72.16641	TLGV	
20385	Eldredge Brook	Upstream Daleville Rd.	MANSFIELD	41.84858	-72.29636	TLGV	
20386	East Swamp Brook	Behind Bethel Johnson School	BETHEL	41.38567	-72.39314	CVTU	
Riffle I	Riffle Bioassessment by Volunteers (RBV) Program -2019 Summary Report Append						

Station	Waterbody Name	Location Description	Town	Latitude	Longitude	RBV Group
20387	Malt House Brook	At Hedland Rd. Intersection	EAST HADDAM	41.43091	-72.35931	8MILE
20388	West Branch Eightmile River Tributary	0.5 miles down Casey Boy Scout trail	EAST HADDAM	41.46931	-72.35183	8MILE
20389	Lake Hayward Tributary	East Shore Dr. right-of-way	EAST HADDAM	41.52014	-72.32424	8MILE
20390	East Branch Eightmile River Tributary	Upstream Rte. 11N	SALEM	41.47705	-72.29481	8MILE
20391	Cranberry Meadow Brook	Upstream Fox Hopyard Rd.	EAST HADDAM	41.44020	-72.35384	8MILE
20392	Fraser Brook Tributary	Downstream Forsyth Rd. right-of-way	SALEM	41.47239	-72.25620	8MILE
20393	Little Brook	Upstream Rte. 85	SALEM	41.49931	-72.28268	8MILE
20394	Strongs Brook Tributary	Upstream Rte. 82	EAST HADDAM	41.44538	-72.32521	8MILE
20395	Strongs Brook	Within Burnham Brook Preserve	EAST HADDAM	41.45509	-72.32235	8MILE

Appendix C: New Healthy Waters Identified by Volunteers (Photos)

Stream Segments Proposed for New Listing as Fully Supporting Aquatic Life Use Support (ALUS) Goals

The following twenty (20) stream segments are candidates for <u>new</u> listings as Healthy Waters in Connecticut. These waterbodies are likely to be listed as 'full supporting' aquatic life use goals during the next statewide water quality reporting cycle.

Basset Brook – Ashford, CT

Beaver Brook – Lyme

Bissel Brook – Granby

Blackman's Brook – Andover

Cedar Pond Brook – Lyme

Tributary to the E. Branch Eightmile River ("Ransom Brook") – Salem

Unnamed tributary to the East Branch Eightmile River – Salem

Tributary to Fraser Brook – Salem

Hedge Brook – East Haddam

Kidder Brook – Ashford

Unnamed tributary to Lake Hayward – East Haddam

Malt House Brook – East Haddam

Freeman Hill Brook (Formerly Negro Hill Brook) – Bristol

Unnamed tributary to Stratton Brook – Simsbury

Slocum Brook – Colebrook

Spruce Brook – Southbury

Strongs Brook – East Haddam

Unnamed tributary to Strongs Brook – East Haddam

Tisdale Brook – Lyme

Unnamed tributary to the West Branch Eightmile River – East Haddam

CT Department of Energy & Environmental Protection **Riffle Bioassessment by Volunteers**

Volunteer Water Quality Monitoring Program

Annual Summary Report (Report #21)

https://portal.ct.gov/DEEP/Water/Inland-Water-Monitoring/ Riffle-Bioassessment-by-Volunteers-RBV