

CT DEEP Riffle Bioassessment by Volunteers (RBV) Program

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2014 Annual Program Summary

(Report #16)



Connecticut Dept. of Energy and Environmental Protection

Bureau of Water Protection & Land Reuse Monitoring & Assessment Program



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#### **Cover Photos:**

Top: Keyuan Dai and Maggie Blumenthal, students from the Marvelwood School, work with Carol Franken from the Kent Conservation Commission to sort an RBV sample collected on Macedonia Brook in Kent, CT.

Center: Macroinvertebrate images courtesy of Simon Winter and Joshua Fusaro, students at The Marvelwood School in Kent, CT.

Bottom: Richard Jewell of the Bolton Conservation Commission works with Kervelle Baird, a student from the UConn Soil & Water Conservation Society, to collect an RBV sample on Railroad Brook in Bolton, CT.

Riffle Bioassessment by Volunteers (RBV) Program -2014 Summary Report Program materials are on the Internet at: <u>www.ct.gov/deep/rbv</u>

### Acknowledgements

Local leaders across the state deserve special recognition for ensuring that the RBV program is a success each year. These individuals put countless hours into organizing their programs, coordinating with DEEP staff, recruiting and training volunteers, and more. During the 2014 season, the following individuals served as **Local RBV Program Coordinators** - thank you!!

Ann Astarita (Candlewood Valley Trout Unlimited) Daniel Berheide\* (Town of Greenwich Inland Wetlands & Watercourses Agency) James Biardi\* (Fairfield University) Chris Brittain (WAMOGO High School) Doreen Carroll\* (Town of Greenwich Inland Wetlands & Watercourses Agency) Paula Coughlin (CT Audubon Society at Pomfret) Laurie Doss (The Marvelwood School) Tom Fahsbender (Washington Montessori School, Steep Rock Association) **Denise Fitch** (Friends of the Lake) Jeanette Glover\* (Eagle Hill School) Carol Haskins (Pomperaug River Watershed Coalition) MaryAnn Haverstock\* (South Kent School) Penny Howell (East Lyme Conservation Commission) Steve Johnson\* (Wepawaug River Watershed Alliance) Diba Khan-Bureau (Three Rivers Community College)

Michael Jastremski (Housatonic Valley Association) **Connie Manes** (Kent Conservation Commission) Becky Martorelli (Quinnipiac River Watershed Association) Gian Morresi\* (Conservation Discovery Corps at Connecticut's Beardsley Zoo) Tom Ouellette (Vernon Conservation Commission) Rod Parlee (Bolton Conservation Commission) Alisa Phillips-Griggs (Farmington River Watershed Association) Jean Pillo (The Last Green Valley, Eastern Connecticut Conservation District) Lori Romick\* (Wepawaug River Watershed Alliance) Judy Rondeau (Niantic River Watershed Committee) Gary Steinman (Roxbury Conservation Commission) Pat Young (Salmon River Watershed Partnership; Eightmile River Watershed Wild

& Scenic Partnership)

\*New Local RBV Program Coordinator – Welcome to the Program!

The Riffle Bioassessment by Volunteers Program (RBV) would also not be possible without the dedication of the **hundreds of volunteers** that participate annually – <u>thank you to each of you!</u> We hope to see you again this fall!

#### **Photograph Contributions**

Photographs in this report were provided by the group credited beneath the caption – thank you to everyone who contributed!

All macroinvertebrates images are courtesy of The Marvelwood School. A big thank you to Laurie Doss and her students for providing these wonderful images!

# **RBV: The Treasure Hunt for CT's Healthiest Streams!**

The CT DEEP "RBV" Program is an annual fall 'treasure hunt' for Connecticut's healthiest streams. Volunteers examine the water quality of local stream segments by studying the aquatic benthic macroinvertebrate community present in rocky or 'riffle' areas of small, wadeable streams.

RBV is a screening approach for excellent water quality. 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.)



Examples of Connecticut's aquatic macroinvertebrates – commonly called 'stream bugs' by RBV volunteers. Photographs courtesy of The Marvelwood School

### Get Involved with RBV Today!

As an RBV volunteer you collect valuable environmental data that will help ensure protection of the beautiful stream in your neighborhood or backyard. If this sounds interesting, DEEP and your local RBV group would love to have your participation! (New volunteers are required to attend a training session.) Find your nearest Local RBV Program using Appendix A and B.

Volunteer groups of 5 or more individuals may be eligible to start a new RBV program. New groups are trained by the State RBV Coordinator during a two-year mentorship period. During the mentorship period the Coordinator will help assist with site selection, volunteer training, and equipment loans. At the conclusion of the mentorship, local coordinators are certified by the State Coordinator as an official RBV Trainer and Local RBV Program Coordinator.



#### To learn more contact:

Meghan Lally State RBV Program Coordinator <u>Meghan.Lally@ct.gov</u> 860-424-3061 or visit <u>www.ct.gov/deep/rbv</u>

### **2014 Executive Summary**



	2010	2011	2012	2013	2014
Total # of RBV Samples	105	110	99	140	94
# of '4 or More' Samples	18	24	21	33	37
% Total '4 or More' Samples	15%	20%	16%	24%	39%
# Stations Monitored	106	117	127	137	92
# Waterbodies Monitored	76	68	96	92	78

The 2014 RBV Program results were the best yet in the 15 year history of the program! Despite the low flows in many of CT's streams this past fall, the hard work of CTDEEP's RBV volunteers and their dedication to finding and documenting Connecticut's healthiest streams, paid off!

- 94 vouchers were collected; 37 of these vouchers (39%) contained 4 or more RBV 'most wanted' taxa, indicating that these stream segments are among Connecticut's healthiest streams!
- **92 stations** were monitored, including **4 new stations** not previously monitored by DEEP. Stations spanned **78 waterbodies** located in **40 towns.** Average upstream watershed area was 7.14 mi2.
- **22 Local RBV Programs coordinated programs in their area,** approximately **450 volunteers** from these groups and local partner organizations participated in the program.

2014 RBV volunteers represented watershed and conservation organizations, local commissions, scout troops, schools, and local businesses - <u>thank you</u> to all of our 2014 CT DEEP RBV partners!



# **2014 Participation Summary**

6	*				
	2010	2011	2012	2013	2014
# Local RBV Programs*	17	16	17	21	22
# Groups/Organizations Total*	22	21	22	30	45
# First-Time Groups/Organizations	6 (27%)	5 (24%)	4 (18%)	4 (13%)	7 (15.5%)
# Volunteers (estimated)	400	400	400	565	450
# Towns Represented	41	44	56	51	39

#### **Table 1.** Annual RBV Program Participation Statistics 2010-2014

\*Local RBV Programs often consist of a partnership between several local groups in the town or watershed.

In 2014, over 450 volunteers participated in one of twenty-two (22) Local RBV Programs (Table 1, Figure 1). Local RBV Programs Organizations 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 Coordinating Committee
- Farmington River Watershed Association
- Friends of the Lake
- Housatonic Valley Association
- Niantic River Watershed Committee
- Pomperaug River Watershed Coalition
- Quinnipiac River Watershed Association
- Rivers Alliance of Connecticut
- Salmon River Watershed Partnership
- The Last Green Valley
- Wepawaug River Watershed Alliance

#### Environmental Conservation Groups:

- Candlewood Valley Trout Unlimited
- Connecticut Audubon Society Center at Pomfret
- Conservation Discovery Corps at Connecticut's Beardsley Zoo
- CT River Coastal Conservation District
- Eastern CT Conservation District
- Steep Rock Association

• Trout Unlimited, Salmonkill Restoration Project

#### Municipal Groups:

- Bolton Conservation Commission
- East Lyme Conservation Commission
- Kent Conservation Commission
- Lebanon Inland Wetland and Watercourses Commission
- Roxbury Conservation Commission
- Town of Greenwich Inland Wetlands & Watercourses Agency
- Vernon Conservation Commission
- Washington Environmental Council

#### Education-Based Partners:

- Colchester Girl Scouts
- Cub Scouts Pack 7 (East Lyme)
- Cub Scouts Pack 11 (Kent)
- East Lyme High School
- E.O. Smith Depot Campus
- Eagle Hill School
- Fairfield University
- Housatonic Valley Regional High School
- Montessori School of Greater Hartford

#### Education-Based Partners (Continued):

- RHAM High School
- RHAM Middle School
- South Kent School
- The Gunnery
- The Marvelwood School
- Three Rivers Community College

- UConn Chapter of the Soil & Water **Conservation Society**
- WAMOGO High School
- Washington Montessori School
- Woodstock Academy

### **RBV monitoring locations spanned a total of 39 Connecticut towns** in 2014 (Figure 1) including:

- Ashford
- Avon
- Bethlehem
- Bolton
- Canton
- Cheshire
- Colchester
- East Haddam
- East Hampton

Right: Volunteers from

to the RBV Program Fairfield University and Connecticut's

Beardsley Zoo!

East Lyme

- Greenwich
- Hebron
- Kent Lebanon
- Litchfield
- Lvme
- Mansfield
- Marlborough
- New Hartford

Many of these towns were active partners in the local RBV programs in their area.

Newtown

- Norwich Orange
- Pomfret
- Preston
- Putnam
- Roxbury
- Salem
- Salisbury
- Southbury
- Stamford

- Sterling
- Vernon
- Warren
- Washington
- Waterford
- Weston
- Winchester
- Woodbury
- Woodstock

Fairfield University and the Connecticut's Beardsley Zoo Conservation Discovery Corp Program collect an RBV sample from Hawleys Brook in Weston, CT during a new volunteer training. The site was not previously *monitored by RBV volunteers* and although unusually low stream flows made it *difficult, the volunteers were* able to successfully collect *four most wanted RBV types from the site – providing the* State with the data needed to document it as a healthy stream segment. Welcome



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**Figure 1. 2014 RBV Monitoring Locations by Local RBV Program and Town.** Monitoring locations are color-coded by the local RBV organization responsible for collecting and submitting the data. Towns with one or more monitoring location are shaded green. (Note: The municipalities themselves were not necessarily involved in the RBV program.)

# **2014 Monitoring Results**

2014 marked the 16<sup>th</sup> year volunteer monitoring groups collected and submitted vouchers to DEEP under the RBV program. An estimated 450 volunteers representing twenty-two (22) Local RBV Programs participated in the 2014 program. **Together, volunteers collected 94 vouchers from 92 locations on 78 different waterbodies (Table 2, Figure 2)**. The distribution of most wanted types in the samples ranged from none to eleven, a new program high!!

	2010	2011	2012	2013	2014
RBV Samples Submitted	119	120	132	140	94
# Monitoring Stations (Appendix C)	106	117	127	137	92
# Streams Monitored	76	68	96	92	78
# Samples w/ 4+ "Most Wanted" Types	18 (15%)	24 (20%)	21 (16%)	33 (24%)	37 (39%)

**Table 2.** Annual RBV Program Monitoring Results 2010-2014

The results of the 2014 RBV Program (i.e. voucher contents) are shown in Table 3. Thirty-seven (37) of the 2014 monitoring sites had 4 or more types in the 'Most Wanted' category, indicating that these stream segments are among Connecticut's healthiest streams. Suggested guidelines for understanding your results and deciding whether to revisit your monitoring locations in 2015 are provided in Table 6.



Above: Volunteers from the Pomperaug River Watershed Coalition found a record eleven (11) most wanted macroinvertebrate types at Goodhill Brook in Woodbury! This is the highest number of most wanted types found at <u>any</u> RBV monitoring station since the program started in 1999 – we think it's safe to say that Goodhill Brook is definitely one of Connecticut's healthiest streams! Way to go PRWC!



**Figure 2. 2014 RBV Results Map.** The number of 'Most Wanted' macroinvertebrate types present in 2014 RBV voucher samples. Sites are considered to be 'healthy' if 4 or more 'Most Wanted' macroinvertebrate types were present; these sites will be considered for listing as fully supporting aquatic life use in the 2016 Integrated Water Quality Report (IWQR) to Congress.

**Table 3. 2014 RBV Voucher Contents.** Table 3 provides a list of stations monitored with RBV in 2014 and the contents of the corresponding voucher submitted to DEEP for analysis. The samples are sorted in descending order by the greatest number of most wanted types present in the voucher, and then by stream name and Station number. Column numbers corresponds to the macroinvertebrate panel numbers on the RBV datasheet, identification cards, and sorting guide. Additional station details can be found in Appendix C.

Stream Name	Station	Date	l - Drunella	2 - Isonychia	3 - Epeorus	l - Peltoperlidae	ia - Perlidae	i - Pteronarycs	sC - Misc. Stonefly Genera	sA - Glossosoma	3B - Apatania	- Rhyacophila	8A - Brachycentrus	3B - Lepidostoma	OTAL Most Wanted	) - Hydropsychidae	0 - Chimarra/Dolophilodes	11 - Maccafertium/Stenonema	.2 - Psephenus	.3A - Corydalus	L3B - Nigronia	L4A - Dragonfly (All Genera)	.4B - Damselfly (All Genera)	OTAL Moderately Wanted	L5A - Amphipoda	L5B - Isopoda	L5C - Leech	.5D - Midge	.5E - Simuliidae	L5F - Snail	.5G - Worm	OTAL Least Wanted	OTAL Other Taxa	OTAL TAXA
GOODHILL BROOK	16696	11/21/14			X	X	X	X	XXX	X	X	X		X	11	X	X	X			X	X		5								0	10	26
Indian Meadow Brook	14842	10/18/14		Х	Х	Х	Х	Х	Х	Х	Х	Х			9	Х	Х	Х	Х		Х			5								0	5	19
Bee Brook	15519	10/21/14		Х	Х		Х	Х	Х	Х	Х	Х			8	Х	Х	Х			Х			4								0	1	13
Rugg Brook	16114	10/28/14		Х	Х	Х	Х		XX	Х		Х			8	Х	Х	Х	Х		Х	Х		6								0	5	19
Barrows Brook	15594	11/8/14			Х	Х			XX	Х			Х		6	Х	Х	Х			Х	Х		5								0	4	15
Macedonia Brook	15845	9/28/14		Х		Х	Х	Х	Х			Х			6	Х	Х		Х		Х	Х		5								0	3	14
Macedonia Brook	17384	9/28/14		Х		Х	Х	Х	Х			Х			6	Х		Х	Х		Х			4		Х		Х				2	4	16
Railroad Brook	17703	11/8/14			Х	Х	Х		Х			Х		Х	6	Х	Х	Х	Х		Х	Х		6				Х				1	5	18
Battleswamp Brook	18493	9/13/14		Х	Х		Х	Х		Х					5	Х	Х	Х	Х		Х	Х		6								0	2	13
Bull Mountain Brook	18510	10/1/14		Х		Х	Х			Х		Х			5	Х	Х	Х	Х		Х			5								0	3	13
Macedonia Brook	15525	9/17/14		Х		Х	Х	Х				Х			5	Х		Х	Х		Х	Х		5								0	2	12
Pootatuck River	15280	9/27/14		Х			Х	Х		Х		Х			5	х	Х	Х			Х			4							Х	1	2	12
RAYMOND BROOK	17978	10/15/14	•	Х			Х			Х		Х	Х		5	Х	Х	Х	Х		Х	Х		6				Х				1	4	16
Sawmill Brook	15007	10/26/14		Х		Х	Х	Х				Х			5	Х	Х	Х	Х		Х	Х		6			Х			Х	Х	3	2	16
Wachocastinook Creek	17436	11/21/14			Х	Х	Х	Х		Х					5	х	Х				Х			3								0	2	10
Wappoquia Brook	15838	9/20/14		Х	Х		Х			Х		Х			5	Х	Х	Х	Х		Х	Х		6								0	0	11
Bull Mountain Brook	18514	10/8/14				Х	х		ΧХ						4	х						Х		2								0	2	8
("Iron Mountain Stream")																																		
Cherry Brook	15571	10/22/14		Х			Х		Х	Х					4	Х	Х	Х	Х		Х	Х		6								0	2	12
Deep Brook, E. Branch	18512	10/12/14				Х	Х		XX						4	Х		Х	Х			Х		4								0	3	11

			- Drunella	- Isonychia	- Epeorus	- Peltoperlidae	v - Perlidae	- Pteronarycs	C - Misc. Stonefly Genera	<ul> <li>Glossosoma</li> </ul>	s - Apatania	- Rhyacophila	<ul> <li>Brachycentrus</li> </ul>	s - Lepidostoma	<b>JTAL Most Wanted</b>	- Hydropsychidae	) - Chimarra/Dolophilodes	Maccafertium/Stenonema	: - Psephenus	A - Corydalus	B - Nigronia	A - Dragonfly (All Genera)	B - Damselfly (All Genera)	JTAL Moderately Wanted	A - Amphipoda	iB - Isopoda	-C - Leech	D - Midge	E - Simuliidae	iF - Snail	ig - Worm	<b>DTAL Least Wanted</b>	<b>DTAL Other Taxa</b>	JTAL TAXA
Stream Name	Station	Date	÷.	Ň	, ḿ	4	2	5	С	6	66	~	8	8	Ĕ	6	10	1	12	13	13	14	14	Ĕ	11	۱ ۲	11	13	11	11	11	Ĕ	Ĕ	Ĕ
Dickinson Creek	16324	10/5/14		X			X		V	X			Х		4	X	X	X	Х		X	Х		6				V			X	1	4	15
East Branch Byram River	15239	11/20/14	•	X		V	X		X	X			V		4	X	X	X			X	V		4				X			X	2	2	12
Eightmile River	18518	10/18/14	•	v		X	X		Х	v			X		4	X	X	X	V		X	X		5	_			X			X	2	4	15
Fawn Brook, E. Branch	16440	10/7/14		X			X			X			X		4	X	X	X	X	V	v	X	v	5				X	V			1	2	12
	15313	10/18/14	•	X			X			X			X		4	X	X	X		X	X	X	X	-					X			1	5	1/
Hawleys Brook	18817	11/15/14		~			X		XXX						4	X	X	X	V		X	X		5								0	2	11
	15045	11/8/14		х			X		V	х			Х		4	X	X	X	Х		X	X		6								0	2	12
	1/639	10/12/14	•	V		Х	X	х	Х		v	V			4	X	Х	X	V		X	Х		5								0	4	13
LAKE WARAMAUG BROOK	16795	10/23/14	•	X			х				X	Х			4	х		X	х		x			4							X	1	0	9
( Sucker Brook	18/05	10/8/1/			v		v						v	v	Λ	v	v	v	v			v		5	v	v					v	2	2	14
Little Piver	15151	10/0/14		v	^		×			v		v	^	^	4	×	×	^	×	v	v	^		5	^	^		v			^ V	с С	2	12
Moodus Pivor	10071	$\frac{10}{3}\frac{14}{12}$		^	v		^ V			^ V		^ V			4	×	^	v	^ V	×	^ V	v		5	v			^ V			^ V	2	2	17
Quanduck Brook	1850/1	10/8/1/		x	^		×			^		×	x		4	×	x	^	^	~	×	×		1	^			^			^	0	3	11
Railroad Brook	16995	11/8/1/		^			×	x	xx			~	~		4	X	X		x		×	~		4	_						x	1	2	11
Railroad Brook	18816	11/9/14					X	~	X			x		x	4	X	X	x	X		x	x		6							X	1	2	15
Ratium Brook	18855	9/23/14				x	X	x	~			X		^	- Д	X	X	x	~		x	x		5	_						~	0	- 2	11
Womenshenuck Brook	18513	9/28/14		x		X	~	~	x			X			- Д	~	X	X			~	x		2	_							0	2	10
Yantic River	14735	9/12/14		X	x	~	x		~	x		~			4	x	X	x	Х	x		~		5				x	x	x	x	4	1	14
Bee Brook	15519	9/20/14		X	~		X			x					3	X	X	X	~	~	х			4				~	~	~	~	0	-	7
Cedar Swamp Brook	15715	10/17/14				_	X		Х			х			3	~	X	~	Х		X			3								0	2	8
Choggam Brook	18620	10/13/14				Х	X		X						3	Х	X	х				х		4							х	1	2	10
Fawn Brook	18433	10/7/14		Х			Х						х		3	Х	Х	Х	Х		Х	X		6				х		х		2	3	14
Fawn Brook, W. Branch	15888	10/7/14		Х			х						х		3			х	Х		Х	х		4				х				1	1	9
Halfway River	16421	9/27/14		Х			х					Х			3	Х	Х	Х			Х			4								0	3	10
Kirby Brook	15128	9/13/14					Х	Х				Х			3		Х							1							х	1	2	7
Knowlton Brook	16108	11/8/14		Х					Х	Х					3	Х	Х	Х	Х		Х			5							х	1	1	10

Stream Name	Station	Date	 2 - Isonychia	3 - Epeorus	4 - Peltoperlidae	5A - Perlidae	5B - Pteronarycs	5C - Misc. Stonefly Genera	6A - Glossosoma	6B - Apatania	7 - Rhyacophila	8A - Brachycentrus	8B - Lepidostoma	TOTAL Most Wanted	9 - Hydropsychidae	10 - Chimarra/Dolophilodes	11 - Maccafertium/Stenonema	12 - Psephenus	13A - Corydalus	13B - Nigronia	14A - Dragonfly (All Genera)	14B - Damselfly (All Genera)	TOTAL Moderately Wanted	15A - Amphipoda	15B - Isopoda	15C - Leech	15D - Midge	15E - Simuliidae	15F - Snail	15G - Worm	TOTAL Least Wanted	TOTAL Other Taxa	TOTAL TAXA
Latimer Brook	1/324	10/25/14	X			X				-	Х			3	X	X				X	X		4				X	_	X		2	1	10
Latimer Brook	18413	10/8/14	Х			X							Х	3	X	Х	Х			Х	Х	Х	6			_	X			Х	2	2	13
Meadow Brook	15965	9/6/14			Х	X						X		3	X	Х	Х		Х	Х	Х		6			_	X				1	5	15
Miller Brook	16852	10/8/14				х			Х			Х		3	X	Х		X		Х	Х	Х	6			_	×				1	3	13
North Kent Brook	16101	10/9/14			X		Х	X						3	Х			Х			Х		3				_			Х	1	1	8
Pease Brook	18423	10/25/14	Х					Х	Х					3	Х		Х	Х			Х		4				×	_			1	3	11
Pond Brook	15581	9/27/14	Х			Х					Х			3	Х		Х	Х		Х			4								0	1	8
Pond Brook	16425	9/27/14	Х			Х				Х				3	Х	Х	Х			Х			4	Х							1	0	8
SAFSTROM BROOK	17015	9/6/14				Х			Х			Х		3	Х		Х	Х		Х	Х		5								0	2	10
Tankerhoosen River Tributary ("Tucker Brook")	18823	11/8/14				Х		Х			Х			3	Х	Х	Х	Х			Х	Х	6							Х	1	2	12
THAYER BROOK	17113	10/9/14			Х	Х		Х						3	Х		Х			Х			3							Х	1	3	10
West Aspetuck River	18869	9/6/14			Х		Х		Х					3	Х	Х	Х	Х		Х			5				X				1	4	13
Baker Brook Tributary	18821	11/9/14						Х		Х				2	Х						Х		2					Х	Х	Х	3	3	10
Bee Brook	15519	9/13/14	Х			Х								2	Х	Х				Х			3								0	2	7
Bolton Pond Brook	16266	11/9/14						Х			Х			2									0							Х	1	6	9
Bullet Hill Brook	16333	9/21/14							Х		Х			2	Х	Х							2	Х						Х	2	4	10
Cedar Pond Brook	15501	10/18/14	Х		Х									2	Х	Х	Х			Х	Х		5								0	4	11
Cold Brook	17776	10/30/14				Х				Х				2	Х					Х	Х		3				Х			Х	2	4	11
Deep Brook	16039	9/27/14	Х								Х			2	Х	Х	Х	Х					4								0	0	6
Deep Brook	16253	9/27/14	Х			Х								2	Х	Х	Х	Х			Х		5							Х	1	2	10
Dickinson Creek	17765	9/28/14				Х						Х		2	Х	Х	Х	Х		Х	Х		6								0	1	9
Eagleville Brook	15783	10/24/14				Х					Х			2	Х			Х		Х	Х		4								0	2	8
Fawn Brook	18409	9/6/14	Х			Х								2		Х		Х	Х		Х		4								0	4	10
Fenn Brook	15996	9/13/14				Х					Х			2	Х	Х		Х			Х		4								0	1	7
Flat Brook	16121	11/2/14				Х		Х						2		Х	Х	Х		Х	Х		5				Х				1	4	12
Fourmile River	17322	10/18/14									Х	Х		2		Х	Х			Х	Х		4	Х		Х			Х		3	1	10

<b>Stream Name</b> Hatch Pond Tributary	Station 17306	<b>Date</b> 10/7/14	1 - Drunella	2 - Isonychia	3 - Epeorus	4 - Peltoperlidae	× 5A - Perlidae	5B - Pteronarycs	× 5C - Misc. Stonefly Genera	6A - Glossosoma	6B - Apatania	7 - Rhyacophila	8A - Brachycentrus	8B - Lepidostoma	▷ TOTAL Most Wanted	× 9 - Hydropsychidae	× 10 - Chimarra/Dolophilodes	× 11 - Maccafertium/Stenonema	12 - Psephenus	13A - Corydalus	13B - Nigronia	14A - Dragonfly (All Genera)	14B - Damselfly (All Genera)	∞ TOTAL Moderately Wanted	15A - Amphipoda	15B - Isopoda	15C - Leech	× 15D - Midge	× 15E - Simuliidae	15F - Snail	× 15G - Worm	⇔ TOTAL Least Wanted	∞ TOTAL Other Taxa	TOTAL TAXA
Jacks Brook	17742	9/13/14		Х			Х								2		Х	Х				Х		3								0	0	5
Mill Brook	16211	10/25/14		Х			Х								2	Х		Х	Х		Х	Х		5								0	2	9
Mount Hope River	16449	9/13/14		Х			Х								2			Х	Х		Х			3								0	3	8
Pootatuck River	14406	9/27/14		Х			Х								2	Х	Х	Х						3	Х			Х			Х	3	1	9
SALMON CREEK (Salmon Kill)	17018	11/21/14						Х		Х					2	Х	Х		Х					3	Х							1	0	6
Taylor Brook	16219	10/17/14		Х			Х								2	Х	Х	Х			Х	Х		5								0	3	10
Wood Creek	17333	9/20/14				Х	Х								2	Х	Х	Х	Х		Х	Х		6				Х			Х	2	6	16
Bantam River	15138	10/3/14					Х								1	Х	Х		Х	Х		Х		5								0	1	7
Eightmile River Tributary ("Pleasant Valley Brook")	15314	10/18/14					Х								1	Х	Х					Х	х	4								0	4	9
HORSENECK BROOK	16753	10/28/14								Х					1		Х	Х				Х		3	Х	Х			Х	Х	Х	5	2	11
Jeremy Brook	17985	9/20/14					Х								1	Х	Х	Х			Х	Х	Х	6								0	1	8
Nod Brook	15319	10/21/14					Х								1	Х	Х		Х			Х		4								0	1	6
Poorhouse Brook	18775	9/5/14								Х					1	Х	Х	Х			Х	Х	Х	6								0	4	11
Roberts Brook	18870	10/28/14					Х								1	Х	Х				Х			3								0	1	5
Stony Brook	17317	11/8/14					Х								1	Х	Х				Х			3			Х					1	1	6
Wepawaug River	18774	9/7/14					Х								1	Х	Х		Х		Х	Х	Х	6				Х		Х	Х	3	0	10
Deep Brook	14172	9/27/14													0	Х	Х	Х	Х					4	Х							1	0	5
French Brook	15592	11/9/14													0	Х	Х	Х	Х		Х	Х		6							Х	1	5	12
Honeypot Brook	15193	10/18/14													0	Х	Х	Х					Х	4	Х							1	0	5
Honeypot Brook Tributary ("Cheshire Park Brook")	18868	10/18/14													0	Х	Х	Х				Х		4	Х	Х					Х	3	0	7
Pattagansett River	18422	10/13/14													0	Х	Х	Х	Х				Х	5	Х	Х			Х		Х	4	3	12
West Aspetuck River	18617	9/6/14													0	Х		Х	Х		Х			4							Х	1	1	6

### **Interpreting Your Results**

**2014 RBV monitoring locations that met the program site requirements (i.e. watershed area less than 15.0 mi2) and supported four of more 'Most Wanted' macroinvertebrate types, are considered to be characterized by excellent water quality conditions.** DEEP will integrate these '4 or more' results into the biennial water quality assessment process, noting them as one of Connecticut's healthy waters. (DEEP will complete its next round of water quality assessments during spring 2016 based upon 2013 and 2014 data.)

Table 4 below shows the frequency with which RBV taxa types were identified in vouchers.

		<b>#Vouchers with Taxa</b>	%Vouchers with Taxa	Frequency Rank*
_	1 - Drunella	0	0%	27
ive	2 - Isonychia	43	46%	8
sit	3 - Epeorus	12	13%	18
Sen	4 - Peltoperlidae	24	26%	13
st	5A - Perlidae	73	78%	3
δ ş	5B - Pteronarycs	17	18%	15
) p	5C - Misc. Stonefly Genera	29	31%	12
Ite	6A - Glossosoma	30	32%	11
Vai	6B - Apatania	7	7%	22
st <	7 - Rhyacophila	32	34%	10
β	8A - Brachycentrus	16	17%	16
2	8B - Lepidostoma	5	5%	25
)e	9 - Hydropsychidae	83	88%	1
iti	10 - Chimarra/Dolophilodes	75	80%	2
ens	11 - Maccafertium/Stenonema	68	72%	4
V S	12 - Psephenus	52	55%	7
T a	13A - Corydalus	7	7%	21
era	13B - Nigronia	64	68%	5
po	14A - Dragonfly (All Genera)	60	64%	6
Σ	14B - Damselfly (All Genera)	10	11%	19
ха	15A - Amphipoda	12	13%	17
Ца	15B - Isopoda	5	5%	24
ive	15C - Leech	3	3%	26
Jsit	15D - Midge	23	24%	14
Ser	15E - Simuliidae	6	6%	23
ast	15F - Snail	8	9%	20
le	15G - Worm	33	35%	9

Table 4. Summary of 2014 RBV Voucher contents by RBV taxa

\*1 = most common in vouchers; 27 = least common in vouchers

The 'top five' RBV taxa found in 2014 vouchers included the common net-spinner caddisfly (Hydropsychidae), the fingernet caddisfly (*Chimarra sp.* and *Dolophilodes sp.*), common stonefly (Perlidae), three-tailed mayfly (*Maccaffertium sp.* and *Stenonema sp.*), and the fishfly (Nigronia). The five least common taxa in 2014 vouchers included leech, mid-size plant case

caddis (Lepidostoma), isopod (isopoda), black fly (Simuliidae), and the 'cornucopia case' caddisfly (Apatania sp.). No vouchers contained the 'body builder' mayfly (Drunella).

Table 5 summarizes the range of 2014 results by taxa category (i.e. "most", "moderately" or "least" wanted/sensitive.).

	Min	Max	Mean	Median
Most Sensitive (Most Wanted) Taxa	0	11	3.2	3
Moderately Sensitive Taxa	0	7	4.5	4.5
Least Sensitive Taxa	0	5	1.0	1
Other Taxa	0	10	2.5	2
Total Taxa Count	5	26	11.0	11

Table 5.	Summary of 2014 RBV	voucher	contents by	RBV	category
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Table 6 provides guidance for how to interpret your 2014 RBV results. Appendix C contains a list of 2014 monitoring locations, including their corresponding upstream watershed area and predicted water quality score (i.e. MMI score). Table 6 is intended to serve as general guidance; Local RBV Program Coordinators are encouraged to contact the State RBV Coordinator to discuss follow-up actions for specific monitoring locations as needed.

Table 6. A Volu	nteer's Guide to Interpretation of RBV Results.

# 'Most Wanted' Organisms	What Does it Tell Us?
0-1	<ul> <li>Drop this site from future monitoring efforts</li> <li>More information is needed to determine why Most Wanted types were rare or absent in the sample. Reasons may include poor water quality, but it could also be that this just isn't the right type of site for RBV. If there are no concerns regarding the volunteer sampling effort, follow-up RBV monitoring in 2015 is not suggested for this site.</li> <li>DEEP Assessment Decision: No Assessment Made</li> <li>Recommended Volunteer Follow-Up Action: Do not revisit this site with RBV.</li> </ul>
2	<b>Double check whether this is a good spot to be using the RBV method</b> More information is needed to determine why Most Wanted types were limited in the sample. Reasons may include less than excellent water quality or unusual flow conditions (i.e. very high or very low) during the monitoring season; however, it could also be that this site does not have adequate riffle habitat or that your volunteers may need additional, targeted training. <b>(Continued on next page)</b>

	DEEP Assessment Decision: No Assessment Made
	Recommended Volunteer Follow-Up Action:
	<ul> <li>Volunteers should cease using RBV to monitor this site if:</li> <li>the site does not meet the RBV site requirements (i.e. no riffle habitat or watershed area &gt;15 mi2);</li> <li>the MMI model score prediction is less than 48 (see Appendix C); or</li> <li>the site was previously monitored using RBV and less than 4 most wanted were found during the last monitoring event.</li> </ul>
	assign the site a low to medium priority for follow-up monitoring. Volunteers may also need additional targeted training to insure that they are collecting their sample from riffle habitat, checking for organisms attached to cobbles, and able to distinguish between organism types when sorting.
3	A <u>Very Good Sign</u> – Keep this Site on Your Radar!
	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 'fully supporting' State water quality standards without additional monitoring, particularly if this is the first piece of data we have at this site, this is a great find!
	DEEP Assessment Decision: No Assessment Made but consider trying again!
	<b>Recommended Volunteer Follow-Up Action</b> : If this was the first time the site was monitored with RBV, and the site's water quality is predicted to be high (e.g. high MMI score) this site should be a high priority candidate for remonitoring next RBV season. Pay careful attention to net placement within riffle habitat, avoiding the edges of the stream. Instruct volunteers to also give extra attention to rock scrubbing/substrate kicking during the 2015 monitoring effort. A second look at that cobble before you toss it might be all it takes to get that 4 <sup>th</sup> Most Wanted type in your sample!
	If however this site was previously monitored with RBV and 3 or fewer most wanted types were found, this site should be assigned a lower priority than those sites in your region that have not yet been monitored with RBV and that are predicted to have a water quality/MMI score greater than 48.
4+	Excellent!! Lots of very sensitive macroinvertebrate types were present – you found the treasure!
	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.
	<b>DEEP Assessment Decision</b> : Considered for 'Fully Supporting' State aquatic life use standards. Fully supporting sites will be listed in next Integrated Water Quality Report and submitted to EPA and Congress
	<b>Recommended Volunteer Follow-Up Action</b> : Revisit every 2 to 5 years to continue documenting the excellent health of this stream.

# *Lessons from the Field:* Why Less than Four Most Wanteds is NOT Proof of Degraded Water Quality

**Fewer than three or the absence of 'Most Wanted' types in a voucher should not be interpreted as evidence of low or degrading water quality.** These sites may actually be characterized by good or even excellent water quality, however these sites may not be suitable for RBV-based monitoring (e.g. due to habitat limitations) or volunteers may not have properly executed the RBV methodology (e.g. due to limited experience or unusual field monitoring conditions). No State water quality assessment will be made for 2014 RBV sites for which a voucher was submitted that contained 3 or fewer 'Most Wanted' macroinvertebrate types.

Volunteers are discouraged from interpreting less than 4 most wanted taxa in a voucher as a sign of poor or degrading water quality. The following examples from 2014 monoitoring efforts demonstrate why CT DEEP does not assess streams as having low or impaired water quality based on low numbers of 'most wanted' taxa in an RBV voucher.



The Bolton Conservation Commission RBV monitoring locations on Railroad Brook in 2013 (left, Station 17971) and 2014 (right, Station 18816.)

The first example (pictured above) involves Railroad Brook in Bolton, CT. The water quality of Railroad Brook in Bolton, CT is predicted to be relatively good based upon the CT DEEP water quality prediction model or the "Macroinvertebrate Multimetric Index or MMI" model. The model predicts a score of 0-100 based on a variety of land use and other factors. The higher the predicted score, the more likely the stream is to support good water quality. For assessment purposes a score greater than 48 is typically needed to assess a stream segment as fully supporting aquatic life use. Railroad Brook in Bolton is predicted to have an MMI score of 58, a prediction of relatively good water quality and therefore making it a strong candidate site

for the RBV program. However, RBV volunteers in Bolton were unable to find any most wanted types in their 2013 sample. Confused by their results volunteers contacted the State RBV Coordinator to request additional site selection guidance for 2014. After reviewing the segment with the State Coordinator in the field, in 2014 volunteers decided to replace their previous sampling location with a new one several hundred meters downstream in order to target more ideal monitoring habitat. The extra effort and flexibility of the volunteers paid off – despite lower flows in 2014, volunteers were finally able to find four most wanted RBV types in their sample, confirming the model predictions that the stream does in fact support good water quality, therefore documenting the segment as one of Connecticut's healthy waters. (Great job Bolton Conservation Commission!)

In another example, when three RBV groups in Washington, CT unknowingly sampled the same stretch of brook in 2014, they found that repeat sampling can yield surprisingly different results – even when there is no obvious reason to think that the water quality changed between sampling events.



Above: Bee Brook (Station 15519) in Washington on September 20, 2014 during extreme low flows (left) and again on October 21, 2014. Extreme low flows during September RBV monitoring likely resulted in a natural loss of the local macroinvertebrate community and severely limited habitat avaialble for RBV monitoring, resulting in low 'most wanted' counts in RBV samples.. October precipitation events returned flows in the brook to more normal fall levels, allowing volunteers to successfully locate 8 most wanted taxa in their sample.

Bee Brook (Station 15519) is predicted to have very good water quality (predicted MMI = 63.4) – and past monitoring along this reach has confirmed that the brook does indeed typically support an excellent macroinvertebrate community. However, on September 13<sup>th,</sup> volunteers from the Shepaug River Alliance sampled the brook, locating only two most wanted taxa in their sample. One week later, volunteers from the Steep Rock Association sampled the same stretch of brook, finding three most wanted taxa. Neither sample met the 'four or more' RBV rule, and based on these initial results, one might mistakenly conclude that Bee Brook does not have excellent water quality or that water quality conditions in the stream are degrading. However, during September 2014 the State was experiencing extremely low flows, and many small streams, including Bee Brook, came very close to drying up, likely causing a decline (unrelated to water quality) in the overall numbers of macroinvertebrates in the stream. A return of

precipitation in October increased stream flow expanding the available benthic habitat in the brook, allowing the macroinvertebrate communiy to recover. In late October a third group, the Washington Montessori School, once again sampled Bee Brook and found a total of eight most wanted macroinvertebrates - clearly demonstrating that Bee Brook is a very healthy stream. (Success at last!)

In the Railroad Brook example, the culprit for low numbers of most wanted taxa in the 2013 sample was likely due to volunteers accidentaly looking for RBV taxa in habitat that more closely resembled a pool or a glide. Just like one species of bird may prefer to live in the deep woods while another may prefer to live in a flowering meadow, macroinvertebrates have habitat prefernces. The RBV taxa are taxa that prefer to live in riffle habitat; if volunteers fail to identify suitable quality and quantity of riffle habitat during their monitoring event, regardless of water quality conditions, they will have difficulty finding four or more most wanted taxa. By moving downstream in 2014 to a stretch better characterized by riffles, the Bolton volunteers were able to successfully collect four most wanted taxa types, confirming the CTDEEP model prediction of good water quality in that segment.

In the Bee Brook example, the culprit for low numbers of most wanted taxa in the September samples was likely low flows. The return to normal flows in October not only increased the amount of habitat available to the macroinvertebrates remaining in the stream segment, but also likely made it much easier for volunteers to collect the macroinvertebrates in their sample. Because low flows create challenging monitoring conditions and can temporarily reduce local macroinvertebrate communities, volunteers are encouraged to avoid extreme high or extreme low flow clonditions and limit monitoring activities to normal flow conditions when possible.

Both of these stories are great real-world examples of why RBV volunteers should use extreme caution around drawing negative conclusions from their data. To be safe, CT DEEP will only use RBV data as 'proof positive' – if four or more most wanted types were present in the voucher we can say with confidence that that stream is healthy/has good water quality – but there are just too many reasons other than water quality that might explain why volunters were unable to find four most wanteds at their site on a given day.

Refer to Table 6 to determine whether your 2014 monitoring location should be remonitored in 2015! If after reviewing Table 6, you are still unsure as to whether or not to resample your station again in 2015, do not hesitate to contact the State RBV Coordinator for additional guidance.

# **Appendix A: 2014 Local RBV Program Contact Information**

Bolton Conservation Commission	Rod Parlee	captundra@aol.com
Candlewood Valley Trout Unlimited	Joe Hovious	jchovious@snet.net
CT Audubon Society - Pomfret Center Citizen Science Program	Paula Coughlin	paulacoughlin@charter.net
Eagle Hill School	Jeanette Glover	j.glover@eaglehill.org
East Lyme Conservation Commission	Penny Howell	Penny.howell@ct.gov
Eightmile River Wild & Scenic Coordinating Committee &	Pat Young	pyoung@eightmileriver.org
Three Rivers Community College	Diba Khan-Bureau	dkhan-bureau@trcc.commnet.edu
Fairfield University &	Jim Biardi	jbiardi@fairfield.edu
Connecticut's Beardsley Zoo CDC	Gian Morresi	gmorresi@gmail.com
Farmington River Watershed Association	Alisa Phillips-Griggs	aphillipsgriggs@frwa.org
Friends of the Lake	Denise Fitch	necies4@yahoo.com
Housatonic Valley Association	Mike Jastremski	Mj.hva@outlook.com
Kent Conservation Commission &	Connie Manes	connie@manes-consulting.com
The Marvelwood School	Laurie Doss	laurie.doss@marvelwood.org
Niantic River Watershed Committee	Judy Rondeau	judy.rondeau@comcast.net
Pomperaug River Watershed Coalition	Carol Haskins	chaskins@pomperaug.org
Quinnipiac River Watershed Association	Becky Martorelli	beckym06451@yahoo.com
Salmon River Watershed Partnership	Pat Young	salmonriverct@att.net
Shepaug River Alliance	Gary Steinman	garysteinman@charter.net
South Kent School	MaryAnn Haverstock	haverstockm@southkentschool.org
Steep Rock Association	Tom Fahsbender	tfahsbender@washingtonmontessori.org
The Last Green Valley & Eastern CT Conservation District	Jean Pillo	jean.pillo@conservect.org
The Nature Conservancy – Devil's Den Preserve	Cynthia Fowx	theden@tnc.org
Town of Greenwich IWWA	Doreen Carroll-Andrews	dcarroll@greenwichct.org
Vernon Conservation Commission	Tom Ouellette	tom.r.ouellette@gmail.com
	Jane Seymour	jane.seymour@ct.gov
WAMOGO High School	Chris Brittain	cbrittain@rsd6.org
Washington Montessori School	Tom Fahsbender	tfahsbender@washingtonmontessori.org
Wepawaug River Watershed Association	Lori Romick	Iromick@optonline.net

### **Appendix B: Guide to Local RBV Programs by CT County and Town**

The following is a list of Local RBV Programs active by town. If you would like to serve as a new RBV volunteer during the 2015 RBV season, please contact the coordinator of the Local RBV Program(s) nearest to you (refer to Appendix A for contact information).

If there are no Local RBV Programs in your town or nearby and you wish to discuss starting a new program in your area, please contact the State RBV Coordinator, Meghan Lally, at <u>Meghan.lally@ct.gov</u> or 860-424-3061.

#### **Fairfield County:**

Bethel	Housatonic Valley Association
Bridgeport	Connecticut's Beardsley Zoo CDC Program
Brookfield	Friends of the Lake; Housatonic Valley Association
Danbury	Housatonic Valley Association
Darien	No Local RBV Program
Easton	The Nature Conservancy at Devil's Den Preserve
Fairfield	Fairfield University
Greenwich	Town of Greenwich IWWA
Monroe	No Local RBV Program
New Canaan	No Local RBV Program
New Fairfield	No Local RBV Program
Newtown	Candlewood Valley Trout Unlimited; Friends of the Lake; Housatonic Valley Association
Norwalk	No Local RBV Program
Redding	The Nature Conservancy at Devil's Den Preserve
Ridgefield	No Local RBV Program
Shelton	No Local RBV Program
Sherman	No Local RBV Program
Stamford	No Local RBV Program
Stratford	No Local RBV Program
Trumbull	No Local RBV Program
Weston	The Nature Conservancy at Devil's Den Preserve
Westport	The Nature Conservancy at Devil's Den Preserve
Wilton	The Nature Conservancy at Devil's Den Preserve

#### **Hartford County**

Avon	Farmington River Watershed Association
Berlin	No Local RBV Program
Bloomfield	No Local RBV Program

Bristol	Farmington River Watershed Association
Burlington	Farmington River Watershed Association
Canton	Farmington River Watershed Association
East Granby	Farmington River Watershed Association
East Hartford	No Local RBV Program
East Windsor	No Local RBV Program
Enfield	No Local RBV Program
Farmington	Farmington River Watershed Association
Glastonbury	No Local RBV Program
Granby	Farmington River Watershed Association
Hartford	No Local RBV Program
Hartland	Farmington River Watershed Association
Manchester	No Local RBV Program
Marlborough	Salmon River Watershed Partnership
New Britain	No Local RBV Program
Newington	No Local RBV Program
Plainville	Quinnipiac River Watershed Coalition; Farmington River Watershed Coalition
Rocky Hill	No Local RBV Program
Simsbury	Farmington River Watershed Association
South Windsor	No Local RBV Program
Southington	Quinnipiac River Watershed Coalition
Suffield	No Local RBV Program
West Hartford	No Local RBV Program
Wethersfield	No Local RBV Program
Windsor	Farmington River Watershed Association
Windsor Locks	Farmington River Watershed Association

### Litchfield County

Barkhamsted	Farmington River Watershed Association
Bethlehem	Pomperaug River Watershed Coalition
Bridgewater	Friends of the Lake; Shepaug River Alliance; Housatonic Valley Association
Canaan	Housatonic Valley Association
Colebrook	Farmington River Watershed Association
Cornwall	Housatonic Valley Association
Goshen	Shepaug River Alliance; Housatonic Valley Association
Harwinton	Housatonic Valley Association
Kent	Kent Conservation Commission; Housatonic Valley Association
Litchfield	Shepaug River Alliance; Housatonic Valley Association
Morris	Shepaug River Alliance; Housatonic Valley Association
New Hartford	Farmington River Watershed Association
New Milford	Housatonic Valley Association
Norfolk	Housatonic Valley Association
North Canaan	Housatonic Valley Association

Plymouth	Housatonic Valley Association; Farmington River Watershed Association
Roxbury	Shepaug River Alliance
Salisbury	Housatonic Valley Association
Sharon	Housatonic Valley Association
Thomaston	Housatonic Valley Association
Torrington	Housatonic Valley Association; Farmington River Watershed Association
Warren	Housatonic Valley Association
Washington	Shepaug River Alliance; Steep Rock Association
Watertown	Pomperaug River Watershed Coalition; Housatonic Valley Association
Winchester	Farmington River Watershed Association
Woodbury	Pomperaug River Watershed Coalition

### **Middlesex County**

Chester	No Local RBV Program
Clinton	No Local RBV Program
Cromwell	No Local RBV Program
Deep River	No Local RBV Program
Durham	No Local RBV Program
East Haddam	Salmon River Watershed Partnership; Eightmile River Wild & Scenic CC
East Hampton	Salmon River Watershed Partnership
Essex	No Local RBV Program
Haddam	No Local RBV Program
Killingworth	No Local RBV Program
Middlefield	No Local RBV Program
Middletown	No Local RBV Program
Old Saybrook	No Local RBV Program
Portland	No Local RBV Program
Westbrook	No Local RBV Program

### **New Haven County**

No Local RBV Program
No Local RBV Program
No Local RBV Program
No Local RBV Program
Quinnipiac River Watershed Association
No Local RBV Program
No Local RBV Program
No Local RBV Program
Quinnipiac River Watershed Association
No Local RBV Program
Quinnipiac River Watershed Association
No Local RBV Program
Wepawaug River Watershed Coalition

Naugatuck	No Local RBV Program
New Haven	Quinnipiac River Watershed Association
North Branford	No Local RBV Program
North Haven	Quinnipiac River Watershed Association
Orange	Wepawaug River Watershed Coalition
Oxford	No Local RBV Program
Prospect	Quinnipiac River Watershed Association
Seymour	No Local RBV Program
Southbury	Pomperaug River Watershed Coalition
Wallingford	Quinnipiac River Watershed Association
Waterbury	No Local RBV Program
West Haven	No Local RBV Program
Wolcott	No Local RBV Program
Woodbridge	Wepawaug River Watershed Coalition

### **New London County**

Bozrah	The Last Green Valley
Colchester	Salmon River Watershed Partnership; The Last Green Valley
East Lyme	East Lyme Conservation Commission; Niantic River Watershed Committee
Franklin	The Last Green Valley
Griswold	The Last Green Valley
Groton	No Local RBV Program
Lebanon	The Last Green Valley
Ledyard	No Local RBV Program
Lisbon	The Last Green Valley
Lyme	Eightmile River Wild & Scenic Coordinating Committee
Montville	The Last Green Valley
New London	No Local RBV Program
North Stonington	No Local RBV Program
Norwich	The Last Green Valley
Old Lyme	No Local RBV Program
Preston	The Last Green Valley
Salem	Eightmile River Wild & Scenic Coordinating Committee
Sprague	The Last Green Valley
Stonington	No Local RBV Program
Voluntown	The Last Green Valley
Waterford	Niantic River Watershed Committee

### **Tolland County**

Andover	The Last Green Valley
Bolton	Bolton CC; Salmon River Watershed Partnership; The Last Green Valley
Columbia	The Last Green Valley
Coventry	The Last Green Valley

No Local RBV Program
Salmon River Watershed Partnership
The Last Green Valley
No Local RBV Program
The Last Green Valley
The Last Green Valley
The Last Green Valley
Vernon Conservation Commission
The Last Green Valley

### Windham County

Ashford	The Last Green Valley
Brooklyn	CT Audubon Society; The Last Green Valley
Canterbury	The Last Green Valley
Chaplin	The Last Green Valley
Eastford	The Last Green Valley
Hampton	The Last Green Valley
Killingly	The Last Green Valley
Plainfield	The Last Green Valley
Pomfret	CT Audubon Society; The Last Green Valley
Putnam	CT Audubon Society; The Last Green Valley
Scotland	The Last Green Valley
Sterling	The Last Green Valley
Thompson	The Last Green Valley
Windham	The Last Green Valley
Woodstock	CT Audubon Society; The Last Green Valley

# **Appendix C: 2014 RBV Monitoring Station Description & Details**

The following provides a description of the official CT DEEP monitoring station to which 2014 RBV samples were assigned. Note that the actual RBV monitoring location may have been slightly upstream or downstream of the official DEEP station.

Locations are sorted by DEEP Station ID number. The number of most wanted types found during 2014 monitoring, the associated upstream watershed area and the predicted water quality score (i.e. Macroinvertebrate Multimetric Index or MMI score) are shown at the far right.

#### Organization Abbreviation Key:

Code	Local RBV Program Name	Code	Local RBV Program Name	Code	Local RBV Program Name
BCC	Bolton Conservation Commission	HVA	Housatonic Valley Association	StRA	Steep Rock Association
CAS	C CT Audult an Casista Dansfast Cantan		Kent Conservation Commission &		The Last Green Valley &
CAS	CT Addubolt Society - Politiet Center	KCC/TIVIS	The Marvelwood School	TLGV/ECCD	Eastern CT Conservation District
CV/TU	Candlowood Valley Trout Unlimited		Niantic Pivor Watershed Committee	TNC	The Nature Conservancy – Devil's Den
CVIO	CVTO Candlewood valley frout Unlimited NRWC INfantic River Watershe		Mantic River Watershed Committee	INC	Preserve
FHS	Eagle Hill School	DRIVIC	Pomperaug River Watershed Coalition	SMILE/TRCC	Eightmile River Wild & Scenic CC &
EHS		PRVC	Politiperaug River Watershed Coalition	olviile/ TRCC	Three Rivers Community College
ELCC	East Lyme Conservation Commission	QRWA	Quinnipiac River Watershed Association	VCC	Vernon Conservation Commission
FOTL	Friends of the Lake	ShRA	Shepaug River Alliance	WHS	WAMOGO High School
FRWA	Farmington River Watershed Association	SKS	South Kent School	WMS	Washington Montessori School
	Fairfield University &		Calmon Diver Watershed Dartnership		Wanawaya Divar Watershed Association
FFLD0/200	Connecticut's Beardsley Zoo CDC	SRVVP	Salmon River watersned Partnership	VVKVVA	wepawaug River watersned Association
GIWWA	Town of Greenwich IWWA				

Station #	Stream Name	Location Description	Town	Lat.	Long.	Upstream Area (mi2)	Predicted Water Quality Score (0-100)	Local RBV Program	Date	# Most Wanted Types
14172	Deep Brook	US mouth near Pootatuck River	NEWTOWN	41.4131	-73.2823	5.4	50.72	CVTU	9/27/14	0
14406	Pootatuck River	DS Wasserman Way on Game Club Property (Mile Hill Rd)	NEWTOWN	41.4064	-73.2720	16.1	50.75	CVTU	9/27/14	2
14735	Yantic River	US West Town St Adj to Connecticut Avenue	NORWICH	41.5583	-72.1120	91.3	56.64	TLGV/ECCD	9/12/14	4
14842	Indian Meadow Brook	between Route 44 crossing and end of Loomis St	WINCHESTER	41.9305	-73.0790	4.4	63.61	FRWA	10/18/14	9
15007	Sawmill Brook	US Meadowbrook Lane/Conantville Rd.	MANSFIELD	41.7398	-72.2017	3.7	60.96	TLGV/ECCD	10/26/14	5
15045	Judd Brook	US old Rd. crossing	HEBRON	41.6005	-72.3730	5.6	64.83	SRWP	11/8/14	4
15090	Beaver Brook	300 meters US of route 156	LYME	41.4096	-72.3376	8.3	76.09	8MILE/TRCC	10/18/14	2
15128	Kirby Brook	At dirt Rd. crossing 300 m us of confluence with	WASHINGTON	41.6173	-73.3227	2.7	59.55	ShRA	9/13/14	3

Station	Christian Norma	Logation Deparimin	Tour	Let	Long	Upstream Area	Predicted Water Quality Score	Local RBV	Data	# Most Wanted
#	Stream Name		Iown	Lat.	Long.	(m12)	(0-100)	Program	Date	Types
15138	Bantam River	DS Route 63		41.7305	-/3.1868	21.6	57.90	WHS	10/3/14	1
15151		Denind #145 Pomifiet St US of Route 44 crossing		41.9120	-/1.9163	39.2	61.99	CAS	10/4/14	4
15193	Honeypot Brook		CHESHIKE	41.5396	-72.8789	3.4	34.50	QRWA	10/18/14	0
15239	E. Branch Byram River	US John St		41.0995	-/3.6832	1.8	03.50	GIWWA	0/27/14	4
15280				41.4149	-/3.282/	22.3	45.11		9/2//14	5
15313	Harris Brook	at Mouth		41.4733	-72.2851	6.2	67.44	8MILE/TRCC	10/18/14	4
15314	I ributary to Eightmile River			41.4155	-72.3396	1.0	100.00	SIVILE/TRCC	10/18/14	1
15319		DS Route 10		41.8158	-72.8294	6.2	45.67	FRWA	10/21/14	1
15519	Bee Brook	from mouth to footbridge	WASHINGTON	41.6571	-/3.3181	4.8	63.35	SHRA SHRA	9/13/14	2
15519	Bee Brook	from mouth to footbridge		41.6571	-73.3181	4.8	62.35	SIKA	9/20/14	3
15519	Bee Brook	in State Dark at some office		41.6571	-73.3181	4.8	70.19		0/17/14	<u>о</u> Г
15525				41.7670	-73.4950	4.7	79.18		9/1//14	<u>с</u>
15571	Cherry Brook	US Route 44		41.8365	-72.9295	13.8	54.04		0/27/14	4
15581	Franch Brook	at Bridge at State Boat Launch (mouth)		41.4597	-/3.32/5	13.0	50.50		9/2//14	3
15592	Prench Brook	at French Ru.		41.7442	-72.4485	0.8	39.80	NCC	11/9/14	0
15594	Barrows Brook	US confluence with Tankerhoosen		41.8402	-72.4365	0.6	47.06		11/8/14	4
15715				41.8110	-72.2841	2.5	59.00		10/1//14	3
15/83		US Route 32		41.7882	-/2.2//6	2.2	55.92		10/24/14	2
15838	Wappoquia Brook	et 1st main riegie and a satering park		41.8702	-71.9614	4.1	70.10		9/20/14	5
15845		at Lales who Dd. (Steen shows Dd.		41.7626	-73.4936	7.3	79.18		9/28/14	0
15888	Fawn Brook, w. Branch	at Holcombe Rd./Stonehouse Rd.		41.6392	-72.4155	4.2	/1.55	SKWP	10/7/14	3
15965		Immediately US confluence with Jeremy River		41.5871	-72.3868	10.9	53.71	SKVVP	9/6/14	3
16020	Fenn Brook	Dening Town of Roxbury DPW garage	RUXBURY	41.5610	-73.3134	1.9	61.95 50.72	SIIKA	9/13/14	2
16101	North Kont Brook			41.4023	-73.2947	4.0	50.72 90.72		9/2//14	2
10101		Detween Cucharen Del & Caucau Hellew confluence		41.7831	-73.4397	0.3	89.73 70.40		10/9/14	3
16114		Between Cushman Ru & Squaw Honow connuence		41.8492	-72.1783	0.9	70.40		10/29/14	3
16124		os misi ku. crossing from reservoir; #224 Old waterbury Tpk		41.9328	-/3.1214	2.1	69.52		11/2/14	<u> </u>
16211		at Now Sweden Pd		41.5544	-72.4523	2.4	71.77	SKVVP	10/25/14	2
16211		at Nubit Pock Pd	WOODSTOCK	41.9380	-71.9904	4.1	/1.//		10/25/14	2
16252		at Fulpit NUCK NU		41.9502	72.0045	1.2	/1.//		0/27/14	
16253	Deep Brook	os busny Hill ka. In Dickenson park		41.3976	-/3.3006	Z./	47.50		9/2//14	2
10200	BOILON PONG BROOK	at wark Anthony Lane	BULIUN	41./784	-72.4167	5.1	50.91	всс	11/9/14	۷

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Station			_			Upstream Area	Predicted Water Quality Score	Local RBV		# Most Wanted
#	Stream Name	Location Description	Town	Lat.	Long.	(m12)	(0-100)	Program	Date	Types
16324	Dickinson Creek	mouth	COLCHESTER	41.5575	-72.4420	15.1	64.19	SRWP	10/5/14	4
16333	Bullet Hill Brook	Adj to Heritage Rd DS Old Field Rd. ("Ewald Park")	SOUTHBURY	41.4826	-73.2205	3.6	43.58	PRWC	9/21/14	2
16421	Halfway River	at Jordan Hill Rd.	NEWTOWN	41.3811	-73.2010	8.8	61.34	CVTU	9/27/14	3
16425	Pond Brook	300 meters DS Intersection of Pond Brook Rd and Obtuse Rd	NEWTOWN	41.4432	-73.3545	10.2	47.76	CVTU	9/27/14	3
16440	Fawn Brook, E. Branch	DS Route 66	HEBRON	41.6483	-72.3993	6.2	73.39	SRWP	10/7/14	4
16449	Mount Hope River	Behind Ashford Town Hall, 250 ft DS Route 44	ASHFORD	41.8633	-72.1612	16.5	66.01	TLGV/ECCD	9/13/14	2
16696	Goodhill Brook	US of Grassy Hill Rd	WOODBURY	41.5408	-73.2342	1.9	62.78	PRWC	11/21/14	11
16753	HORSENECK BROOK	Below Driveway for Eaglehill School	GREENWICH	41.0319	-73.6417	3.6	39.96	EHS	10/28/14	1
16795	Lake Waramaug Brook	150 M US North Shore Rd	WARREN	41.7069	-73.3456	8.0	63.15	WMS	10/23/14	4
16852	Miller Brook	DS of Swantown Rd.	PRESTON	41.5292	-71.9328	4.4	74.58	TLGV/ECCD	10/8/14	3
16995	Railroad Brook	US Tankerhoosen River DS Bread and Milk Rd.	VERNON	41.8277	-72.4483	2.9	60.59	VCC	11/8/14	4
17015	SAFSTROM BROOK	US of Wood Bridge off Wopowag Rd.	EAST HAMPTON	41.5281	-72.4794	2.7	69.84	SRWP	9/6/14	3
17018	Salmon Creek (Salmon Kill)	50 M US mouth	SALISBURY	41.9336	-73.3667	38.0	56.88	HVA	11/21/14	2
17113	Thayer Brook	100 M US Schagticoke Rd	KENT	41.7095	-73.4931	1.5	100.00	KCC/TMS	10/9/14	3
17306	Tributary to Hatch Pond	US Bulls Bridge Rd.	KENT	41.6774	-73.4746	0.4	65.44	SKS	10/7/14	1
17317	Stony Brook	at Route 1	WATERFORD	41.3594	-72.1753	1.9	50.79	NRWC	11/8/14	1
17322	Fourmile River	at spring rock Rd.	East Lyme	41.3390	-72.2592	5.4	60.60	ELCC	10/18/14	2
17324	Latimer Brook	behind St Mathias Church	EAST LYME	41.4073	-72.2217	11.6	60.61	NRWC	10/25/14	3
17333	Wood Creek	at Route 132	BETHLEHEM	41.6275	-73.2257	3.4	67.98	PRWC	9/20/14	2
17384	Macedonia Brook	75 yds. below confluence with Hilltop Pond outflow	KENT	41.7844	-73.4885	3.8	79.18	KCC/TMS	9/28/14	6
17436	Wachocastinook Creek	At bridge and gate at lower-most Mt Riga Rd crossing	SALISBURY	41.9967	-73.4417	5.7	83.69	HVA	11/21/14	5
17639	Kent Falls Brook	DS Dugan Rd.	KENT	41.7726	-73.4132	5.8	77.05	KCC/TMS	10/12/14	4
17703	Railroad Brook	150 meters US of pond in valley falls state park	VERNON	41.8191	-72.4455	1.9	58.36	VCC	11/8/14	6
17742	Jacks Brook	Within RLT Tierney Preserve	ROXBURY	41.5328	-73.2858	5.0	67.32	ShRA	9/13/14	2
17765	Dickinson Creek	100 meters below airline trail viaduct	COLCHESTER	41.5631	-72.4495	14.8	63.58	SRWP	9/28/14	2
17776	Cold Brook	US White Plains Hill Rd.	NORWICH	41.5917	-72.0830	0.6	73.34	TLGV/ECCD	10/30/14	2
17978	RAYMOND BROOK	GRAYVILLE PARK	HEBRON	41.6142	-72.3678	9.0	67.90	SRWP	10/15/14	5
17985	Jeremy Brook	Rt 66 Above	HEBRON	41.6582	-72.3729	1.9	60.89	SRWP	9/20/14	1
18409	Fawn Brook	DS Old Hartford Rd./S. Main St (at mouth)	MARLBOROUGH	41.6046	-72.4188	12.8	73.22	SRWP	9/6/14	2
18413	Latimer Brook	50m US Colony Rd.	EAST LYME	41.3840	-72.2143	16.2	53.52	NRWC	10/8/14	3
18422	Pattagansett River	DS Brook Rd.	EAST LYME	41.3260	-72.2054	6.9	40.35	ELCC	10/13/14	0
18423	Pease Brook	DS Waterman Rd. Bridge (DS Hoxie Brook confluence)	LEBANON	41.6051	-72.2021	8.5	61.64	TLGV/ECCD	10/25/14	3

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Station	Stream Namo	Location Description	Tourn	Lat	Long	Upstream Area (mi2)	Predicted Water Quality Score	Local RBV	Data	# Most Wanted
# 19422	Su eann Naine	at and of Danormill Rd		Ldl.	T2 4001	12.9	(0-100)	CDM/D	10/7/14	rypes
19402	Pattloswamp Brook	LIS ludds Bridge Bd. (within BLT Broserve)		41.0224	72.4091	2.7	60.79	SHEA	0/12/14	3
10495	Latimor Brook	US Doute 1, behind Flandere Plaza		41.5825	-73.3310	17.2	C4.20		10/0/14	4
18495	Latimer Brook	OS Route 1, benind Flanders Plaza		41.3673	-72.2081	17.2	54.28		10/8/14	4
18504	Quanduck Brook	Adj River Rd. (DS Sumola Rd.)	STERLING	41.7230	-71.8236	17.9	65.71	TLGV/ECCD	10/8/14	4
18510	Bull Mountain Brook	Adj 103 Geer Mountain Rd.	KENT	41.6896	-73.4501	1./	69.92	KCC/TMS	10/1/14	5
18511	Deep Brook, W. Branch	Adj Laurel Preserve Trail within KLT Tobin Preserve	KENT	41.7775	-73.3970	0.2	81.15	KCC/TMS	10/12/14	0
18512	Deep Brook, E. Branch	Near kiosk within KLT Tobin Preserve	KENT	41.7780	-73.3943	0.4	81.15	KCC/TMS	10/12/14	4
18513	Womenshenuck Brook	Adj Route 341 within Emery Park	KENT	41.7128	-73.4659	0.5	62.91	KCC/TMS	9/28/14	4
18514	Bull Mountain Brook	Within Iron Mountain Preserve ~1/2 mi from trailhead	KENT	41.7032	-73.4303	0.3	83.91	KCC/TMS	10/8/14	4
18518	Eightmile River	Within Devil's Hopyard State Park	EAST HADDAM	41.4730	-72.3390	13.8	79.37	8MILE/TRCC	10/18/14	4
18617	W. Aspetuck River	50m US Kent Hollow Rd/Anderson Acres	KENT	41.7141	-73.3951	4.1	64.02	HVA	9/6/14	0
18620	Choggam Brook	at Skiff Mountain Rd	KENT	41.7448	-73.4694	0.6	87.48	KCC/TMS	10/13/14	3
18774	Wepawaug River	In Wepawaug Conservation Area	ORANGE	41.2954	-73.0335	8.3	48.99	WRWA	9/7/14	1
18775	Poorhouse Brook	Within Barlett Arboretum (US red trail pedestrian bridge)	STAMFORD	41.1347	-73.5514	1.6	51.22	FFLDU/ZOO	9/5/14	1
18816	Railroad Brook	600m DS Bolton Notch Pond, adj Hop River Rail Trail	BOLTON	41.7958	-72.4506	0.6	58.36	BCC	11/9/14	4
18817	Hawleys Brook	Within Trout Brook Valley Preserve, adj Violet Trail	WESTON	41.2511	-73.3425	0.5	100.00	FFLDU/ZOO	11/15/14	4
18821	Tributary to Baker Brook	DS School Rd.	BOLTON	41.7479	-72.4241	0.6	58.60	BCC	11/9/14	2
18823	"Tucker Brook"	200ft US confluence with Tankerhoosen River	VERNON	41.8236	-72.4872	1.5	46.35	VCC	11/8/14	3
18855	Ratlum Brook	lower End of grass parking lot Ski Sundown	NEW	41.8827	-72.9480	2.8	68.52	FRWA	9/23/14	4
18868	Tributary to Honeypot	DS Cheshire Park, Off Country Club Rd.	CHESHIRE	41.5236	-72.8914	0.2	34.50	QRWA	10/18/14	0
18869	W. Aspetuck River	US of Anderson Acres Farm	KENT	41.7161	-73.3947	3.6	64.02	HVA	9/6/14	3
18870	Roberts Brook	at Gurleyville Rd near Bundy Lane	MANSFIELD	41.8128	-72.2350	0.8	58.30	TLGV/ECCD	10/28/14	1
18871	Moodus River	25m US of Gristmill Rd Crossing	East Haddam	41.5086	-72.4483	12.1	67.54	SRWP	9/13/14	4

# **Appendix D: 2014 RBV Site Condition Photographs**

\*Yellow stars indicate sites for which a 2014 voucher containing four or more 'most wanted' taxa was submitted to DEEP



Station 14172 – Deep Brook (Newtown, CT) Monitored 09/28/2014 by CVTU Results: 0 Most Wanteds



Station 14406 – Pootatuck River (Newtown, CT) Monitored 09/28/2014 by CVTU Results: 2 Most Wanteds



Station 14735 – Yantic River (Norwich, CT) Monitored 09/12/14 by TLGV/ECCD (\*Training) **Results: 4 Most Wanteds** 



Station 14842 – Indian Meadow Brk (Winchester, CT) Monitored 10/18/14 by FRWA **Results: 9 Most Wanteds** 



Station 15007 – Sawmill Brook (Mansfield, CT) Monitored 10/26/14 by TLGV/ECCD Results: 5 Most Wanteds



Station 15045 – Judd Brook (Colchester, CT) Monitored 11/08/14 by SRWP **Results: 4 Most Wanteds** 



Station 15128 – Kirby Brook (Washington, CT) Monitored 09/13/14 by Roxbury CC & FOTL Results: 3 Most Wanteds

Station 15138 – Bantam River (Litchfield, CT) Monitored 10/03/2014 by WAMOGO High School Results: 1 Most Wanted \*Training Location



Station15151 – Little River Monitored 10/04/14 by CAS Pomfret Center **Results: 4 Most Wanteds** 



Station15193 – Honeypot Brook Monitored 10/18/14 by QRWC Results: 0 Most Wanteds



Station 15239 – E. Branch Byram River (Greenwich, CT) Monitored 11/20/14 by Greenwich IWWA **Results: 4 Most Wanteds** 



Station 15280 – Pootatuck River (Newtown, CT) Monitored 09/28/14 by CVTU **Results: 5 Most Wanteds** 

Station condition photograph not provided	Station condition photograph not provided
Station 15313 – Harris Brook (Salem, CT)	Station 15314 – "Pleasant Valley Brook" (Lyme, CT)
<i>Results: 4 Most Wanteds</i>	Monitorea 10/18/14 by IRCC Results: 1 Most Wanted



Station condition photograph not provided

Station 15139 – Nod Brook (Avon, CT) Monitored 10/21/14 by FRWA Results: 1 Most Wanted

Station 15501 – Cedar Pond Brook (Lyme, CT) Monitored 10/18/14 by TRCC Results: 2 Most Wanteds

Station 15519 – Bee Brook (Washington, CT) Monitored 09/13/14 by Roxbury CC & WEC Results: 2 Most Wanteds

Station 15519 – Bee Brook (Washington, CT) Monitored 09/20/14 by Steep Rock Association Results: 3 Most Wanteds



Station 15519 – Bee Brook (Washington, CT) Monitored 10/21/14 by WMS **Results: 8 Most Wanteds** 



Station 15525 – Macedonia Brook (Kent, CT) Monitored 09/17/14 by KCC & The Marvelwood School **Results: 5 Most Wanteds** 



Station 15571 – Cherry Brook (Canton, CT) Monitored 10/22/14 by FRWA **Results: 4 Most Wanteds** 



Station 15581 – Pond Brook (Newtown, CT) Monitored 09/28/14 by CVTU Results: 3 Most Wanteds



Station 15592 – French Brook (Bolton, CT) Monitored 11/09/14 by Bolton CC Results: 0 Most Wanteds



Station 15594 – Barrows Brook (Vernon, CT) Monitored 11/08/14 by Vernon CC **Results: 4 Most Wanteds** 



Station 15715 – Cedar Swamp Brook (Mansfield, CT) Monitored 10/17/14 by TLGV w/ EO Smith HS Results: 3 Most Wanteds



Station 15783 – Eagleville Brook (Mansfield, CT) Monitored 10/24/14 by TLGV w/ UConn SWCS Results: 2 Most Wanteds



Station 15838 – Wappoquia Brook (Pomfret, CT) Monitored 09/20/14 by CAS Pomfret Center **Results: 5 Most Wanteds** 



Station 15845 – Macedonia Brook (Kent, CT) Monitored 09/28/14 by KCC w/ Marvelwood School **Results: 6 Most Wanteds** 



Station 15888 – W. Branch Fawn Brk (Marlborough, CT) Monitored 10/07/14 by SRWP w/ RHAM HS Results: 3 Most Wanteds

Station 15965 – Meadow Brook (Colchester, CT) Monitored 09/06/14 by SRWP Results: 3 Most Wanteds



Station 16039 – Deep Brook (Newtown, CT) Monitored 09/28/14 by CVTU Results: 2 Most Wanteds

Station 15996 – Fenn Brook (Roxbury, CT) Monitored 09/13/14 by Roxbury CC Results: 2 Most Wanteds



Station 16101 – North Kent Brook (Kent, CT) Monitored 10/09/14 by KCC w/ Marvelwood School Results: 3 Most Wanteds



Station 16108 – Knowlton Brook (Ashford, CT) Monitored 11/09/14 by TLGV/ECCD Results: 3 Most Wanteds



Station 16114 – Rugg Brook (Winchester, CT) Monitored 10/28/14 by FRWA **Results: 8 Most Wanteds** 



Station 16121 – Flat Brook (East Hampton, CT) Monitored 11/02/14 by SRWP Results: 2 Most Wanteds



Station 16211 – Mill Brook (Woodstock, CT) Monitored 10/25/2014 by CAS Pomfret Center Results: 2 Most Wanteds



Station 16219 – Taylor Brook (Woodstock, CT) Monitored 10/17/14 by TLGV w/ Woodstock Academy Results: 1 Most Wanted



Station 16253 – Deep Brook (Newtown, CT) Monitored 09/28/14 by CVTU Results: 2 Most Wanteds



Station 16266 – Bolton Pond Brook (Bolton, CT) Monitored 11/09/14 by Bolton CC Results: 2 Most Wanteds



Station 16324 – Dickinson Creek (Colchester, CT) Monitored 10/05/14 by SRWP **Results: 4 Most Wanteds** 



Station 16333 – Bullet Hill Brook (Southbury, CT) Monitored 09/21/14 by PRWC Results: 2 Most Wanteds



Station 16421 – Halfway River (Newtown, CT) Monitored 09/27/14 by CVTU Results: 3 Most Wanteds



Station 16425 – Pond Brook (Newtown, CT) Monitored 09/27/14 by CVTU Results: 3 Most Wanteds



Station 16440 – E. Branch Fawn Brook (Hebron, CT) Monitored 10/07/14 by SRWP w/ RHAM HS **Results: 4 Most Wanteds** 



Station 16449 – Mount Hope River (Ashford, CT) Monitored 09/13/14 by TLGV Results: 2 Most Wanteds



Station 16696 – Good Hill Brook (Woodbury, CT) Monitored 09/20/14 by PRWC **Results: 11 Most Wanteds** 



Station 16753 – Horseneck Bk (Greenwich, CT) Monitored 10/28/14 by Eagle Hill School Results: 1 Most Wanted



Station 16795 – Lake Waramaug Brook (Warren, CT) Station 16852 – Miller Brook (Preston, CT) Monitored 10/23/14 by Washington Montessori **Results: 4 Most Wanteds** 

Monitored 10/08/14 by TLGV/ECCD Results:3 Most Wanteds



Station 16995 – Railroad Brook (Vernon, CT) Monitored 11/08/14 by Vernon CC **Results: 4 Most Wanteds** 



Station 17015 – Safstrom Brook (East Hampton, CT) Monitored 09/06/14 by SRWP Results: 3 Most Wanteds



Station 17018 – Salmon Creek (Salisbury, CT) Monitored 11/21/14 by HVA w/ TU & HVRHS Results: 2 Most Wanteds



Station 17113 – Thayer Brook (Kent, CT) Monitored 10/09/14 by KCC Results: 3 Most Wanteds



Station 17306 – NNT Hatch Pond (Kent, CT) Monitored 10/07/14 by South Kent School Results: 1 Most Wanted



Station 17317 – Stony Brook (Waterford, CT) Monitored 11/08/14 by NRWC Results: 1 Most Wanted



Station 17322 – Fourmile River (East Lyme, CT) Monitored 10/18/14 by ELCC w/ ELHS Results: 2 Most Wanteds



Station 17324 – Latimer Brook (East Lyme, CT) Monitored 10/25/14 by NRWC w/ Cub Scout Pack 7 Results: 3 Most Wanteds



Station 17333 – Wood Creek (Bethlehem, CT) Monitored 09/20/14 by PRWC Results: 2 Most Wanteds

Station 17384 – Macedonia Brook (Kent, CT) Monitored 09/28/14 by KCC & Marvelwood School Results: 6 Most Wanteds



Station 17436 – Wachocastinook Creek (Salisbury, CT) Monitored 11/21/14 by HVA **Results: 5 Most Wanteds** 



Station 17639 – Kent Falls Brook (Kent, CT) Monitored 10/12/14 by KCC & Marvelwood School **Results: 4 Most Wanteds** 



Station 17703 – Railroad Brook (Vernon, CT) Monitored 11/08/14 by Vernon CC **Results: 6 Most Wanteds** 

Station17742 – Jack's Brook (Roxbury, CT) Monitored 09/13/14 by Roxbury CC Results: 2 Most Wanteds



Station 17765 – Dickinson Creek (Colchester, CT) Monitored 09/28/14 by SRWP Results: 2 Most Wanteds



17776 – Cold Brook (Norwich, CT) Monitored 10/30/14 by TLGV Results: 2 Most Wanteds



Station 17978 – Raymond Brook (Hebron, CT) Monitored 10/15/14 by SRWP w/ RHAM MS **Results: 5 Most Wanteds** 

17985 – Jeremy Brook (Hebron, CT) Monitored 09/20/14 by SRWP Results: 1 Most Wanted



Station 18409 – Fawn Brook (Marlborough, CT) Monitored 09/06/14 by SRWP Results: 2 Most Wanteds



Station 18413 – Latimer Brook (East Lyme, CT) Monitored 10/08/14 by NRWC Results: 3 Most Wanteds



Station 18422 – Pattagansett River (East Lyme, CT) Monitored 10/13/14 by ELCC Results: 0 Most Wanteds

Station 18426 – Pease Brook (Lebanon, CT) Monitored 10/25/14 by TLGV w/ LIWWC Results: 3 Most Wanteds



Station 18433 – Fawn Brook (Marlborough, CT) Monitored 10/07/14 by SRWP w/ RHAM HS Results: 3 Most Wanteds



Station 18493 – Battleswamp Brook (Roxbury, CT) Monitored 09/13/14 by HVA w/ RCC **Results: 4 Most Wanteds** 



Station 18495 – Latimer Brook (East Lyme, CT) Monitored 10/08/14 by NRWC **Results: 4 Most Wanteds** 

Station 18504 – Quanduck Brook (Sterling, CT) Monitored 10/08/14 by TLGV/ECCD **Results: 4 Most Wanteds** 



Station 18510 – Bull Mountain Brook (Kent, CT) Monitored 10/01/14 by KCC w/ Marvelwood School **Results: 5 Most Wanteds** 

Station 18512 –E. Branch Deep Brook (Kent, CT) Monitored 10/12/14 by KCC w/ Cub Scouts Pack 11 **Results: 4 Most Wanteds** 



Station 18513 – Womenshenuk Brook (Kent, CT) Monitored 09/28/14 by KCC **Results: 4 Most Wanteds** 

Station 18514 – Bull Mountain Brook (Kent, CT) Monitored 10/08/14 by KCC **Results: 4 Most Wanteds** 



Station 18518 – Eightmile River (East Haddam, CT) Monitored 10/18/14 by TRCC **Results: 4 Most Wanteds** 



Station 18617 – West Aspetuck River (Kent, CT) Monitored 09/06/14 by HVA w/ The Gunnery Results: 0 Most Wanteds



Station 18620 – Choggam Brook (Kent, CT) Monitored 10/13/14 by KCC Results: 3 Most Wanteds



Station 18774 – Wepawaug River (Orange, CT) Monitored 09/07/14 by WRWA Results: 1 Most Wanted \*DEEP RBV Training Location



Station 18775 – Poorhouse Brook (Stamford, CT) Monitored 09/05/14 by Fairfield Univ/Beardsley Zoo Results: 1 Most Wanted \*DEEP RBV Training Location



Station 18816 – Railroad Brook (Bolton, CT) Monitored 11/09/14 by BCC **Results: 4 Most Wanteds** 



Station 18817 – Hawleys Brook (Weston, CT) Monitored 11/15/14 by Fairfield Univ/Beardsley Zoo Monitored 11/09/14 by BCC **Results: 4 Most Wanteds** 

Station 18821 – Tributary to Baker Brook (Bolton, CT) Results: 2 Most Wanteds



Station 18823 – Tucker Brook (Vernon, CT) Monitored 11/08/14 by VCC Results: 3 Most Wanteds



Station 18855 – Ratlum Brook (New Hartford, CT) Monitored 09/23/14 by FRWA w/ MSGH **Results: 4 Most Wanteds** 



Station 18868 – NNT\* Honeypot Brook (Cheshire, CT) Station 18869 – West Aspetuck River (Kent, CT) Monitored 10/18/14 by QRWC Results: 0 Most Wanteds \*NNT = Unnamed (No-Name) Tributary to



*Monitored 09/06/14 by HVA w/ The Gunnery* Results: 3 Most Wanteds



Station 18870 – Roberts Brook (Mansfield, CT) Monitored 10/28/14 by TLGV w/ UConn SWCS Results: 1 Most Wanted

Station 18871 – Moodus River (East Haddam, CT) Monitored 09/13/14 by SRWP Results: 4 Most Wanteds