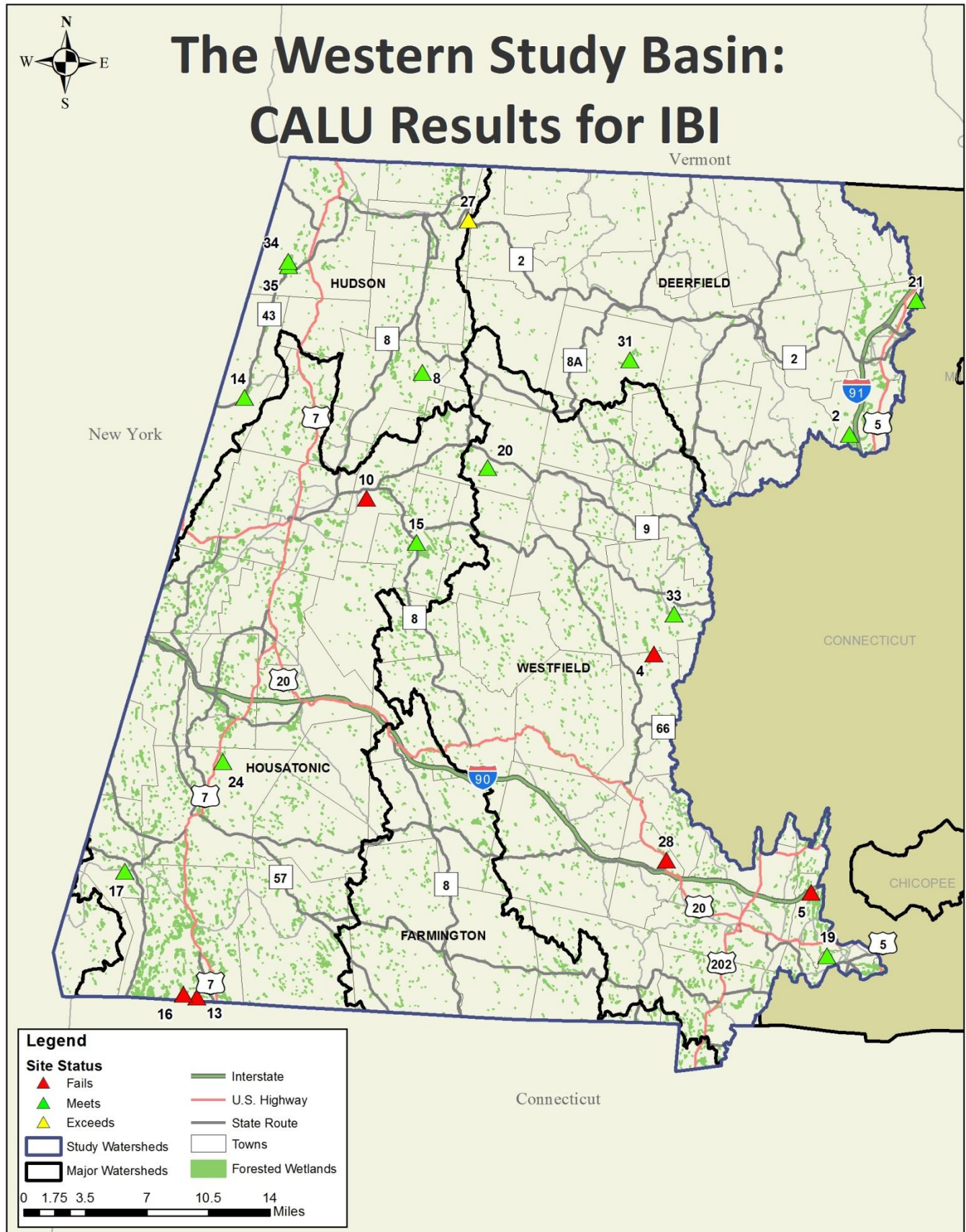# Appendix C:

IBI and CALU Assessment Results and Data
for IEI Metric and Three Stressor/Resiliency Metric
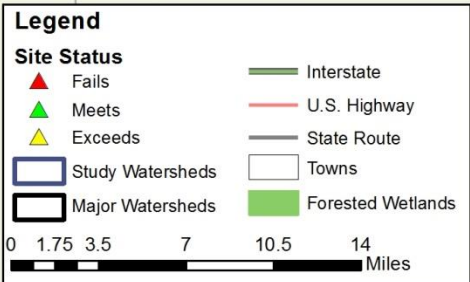
The Western Study Basin: CALU Results for IBI

Six of the twenty sites in the Western Basin *failed to meet expectations*, thirteen of the sites *met expectations*, and site 27 *exceeded expectations* and achieved an IBI of 1.0 which is the highest score possible.

SITE_ID	TOWN	IBI Score_IEI	Target Score_IEI	Compliance Level_IEI	Percentile IEI
2	Deerfield	0.6535	0.5	Meets expectations	78
4	Huntington	0.1387	0.64	Fails to meet expectations	5
5	W. Springfield	0.0199	0.44	Fails to meet expectations	8
8	Cheshire	0.4456	0.49	Meets expectations	42
10	Dalton	0.1189	0.66	Fails to meet expectations	4
13	Sheffield	0.01	0.4	Fails to meet expectations	9
14	Hancock	0.2476	0.47	Meets expectations	19
15	Hinsdale	0.6337	0.54	Meets expectations	71
16	Sheffield	0.0595	0.48	Fails to meet expectations	8
17	Egremont	0.2971	0.43	Meets expectations	28
19	Feeding Hills	0.4951	0.47	Meets expectations	54
20	Windsor	0.4951	0.62	Meets expectations	29
21	Greenfield	0.406	0.46	Meets expectations	40
24	Great Barrington	0.3565	0.66	Meets expectations	12
27	North Adams	1	0.56	Exceeds expectations	97
28	Russell	0.1585	0.54	Fails to meet expectations	9
31	Hawley	0.5446	0.51	Meets expectations	59
33	Chesterfield	0.6634	0.56	Meets expectations	72
34	Williamstown	0.2377	0.48	Meets expectations	17
35	Williamstown	0.3466	0.5	Meets expectations	27

The Western Study Basin: CALU Results for Habitat Loss

Legend

Site Status
- ▲ Fails
- ▲ Meets
- ▲ Exceeds

▢ Study Watersheds
▢ Major Watersheds

— Interstate
— U.S. Highway
— State Route
▢ Towns
▨ Forested Wetlands

0 1.75 3.5 7 10.5 14 Miles

Five of the twenty sites *failed to meet expectations* for the Habitat Loss metric.

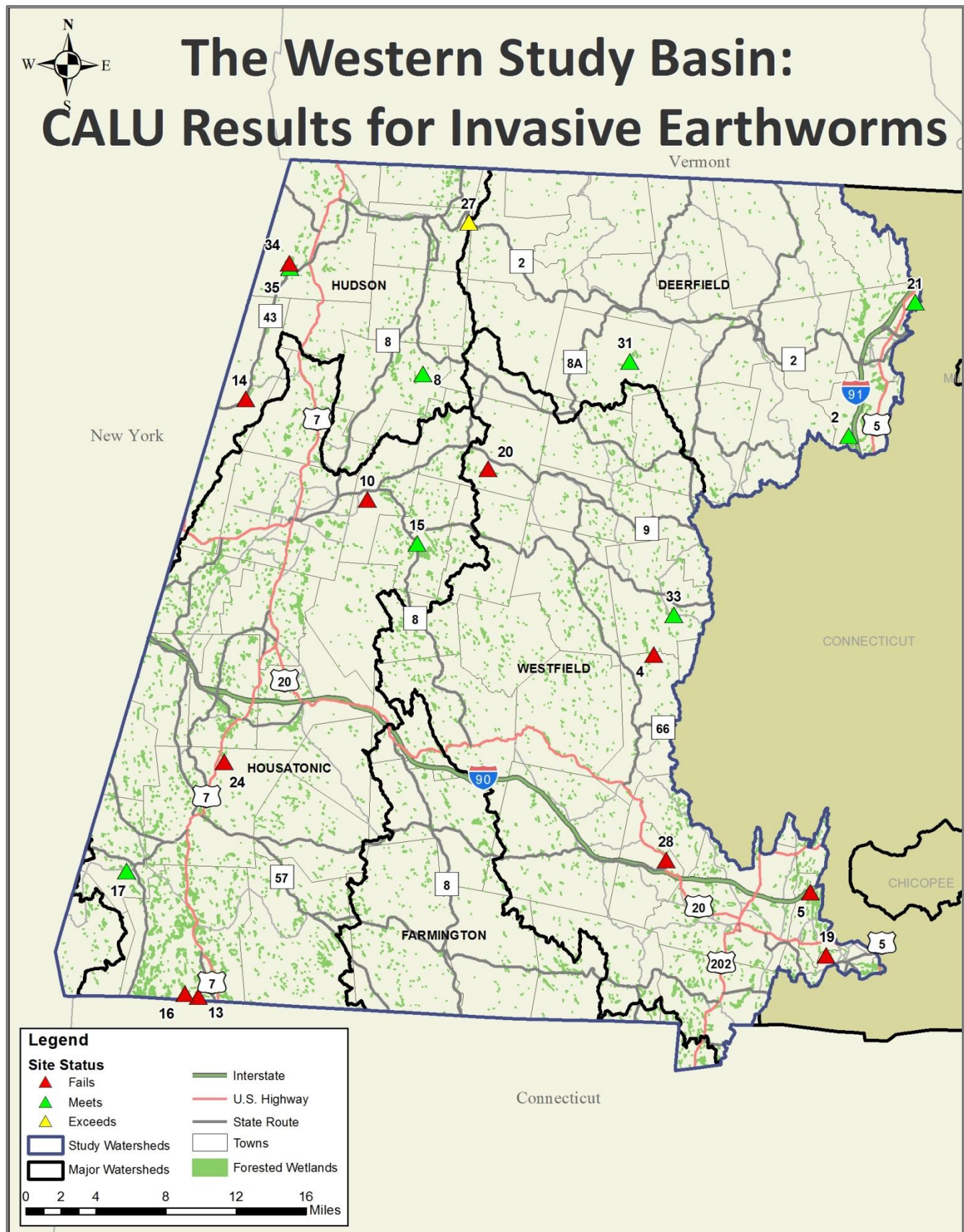| SITE _ID	TOWN	IBI Score SqrtHabitat Loss	Target Score SqrtHabitat Loss	Compliance Level SqrtHabitat Loss	Percentile SqrtHabitat Loss
2	Deerfield	0.4645	0.5053	Meets expectations	55
4	Huntington	0.7537	0.3079	Fails to meet expectations	1
5	W. Springfield	0.8764	0.449	Fails to meet expectations	1
8	Cheshire	0.5171	0.5473	Meets expectations	53
10	Dalton	0.6748	0.4627	Meets expectations	12
13	Sheffield	0.8238	0.5764	Fails to meet expectations	9
14	Hancock	0.6836	0.5719	Meets expectations	24
15	Hinsdale	0.4031	0.4233	Meets expectations	52
16	Sheffield	0.8063	0.5358	Fails to meet expectations	7
17	Egremont	0.6223	0.5128	Meets expectations	24
19	Feeding Hills	0.5171	0.4382	Meets expectations	33
20	Windsor	0.4996	0.4709	Meets expectations	42
21	Greenfield	0.5434	0.5585	Meets expectations	51
24	Great Barrington	0.631	0.502	Meets expectations	21
27	North Adams	0.1665	0.338	Meets expectations	81
28	Russell	0.7712	0.3866	Fails to meet expectations	2
31	Hawley	0.4996	0.5492	Meets expectations	56
33	Chesterfield	0.4119	0.5257	Meets expectations	71
34	Williamstown	0.6836	0.6052	Meets expectations	33
35	Williamstown	0.5697	0.6658	Meets expectations	69

The Western Study Basin: CALU Results for Connectivity
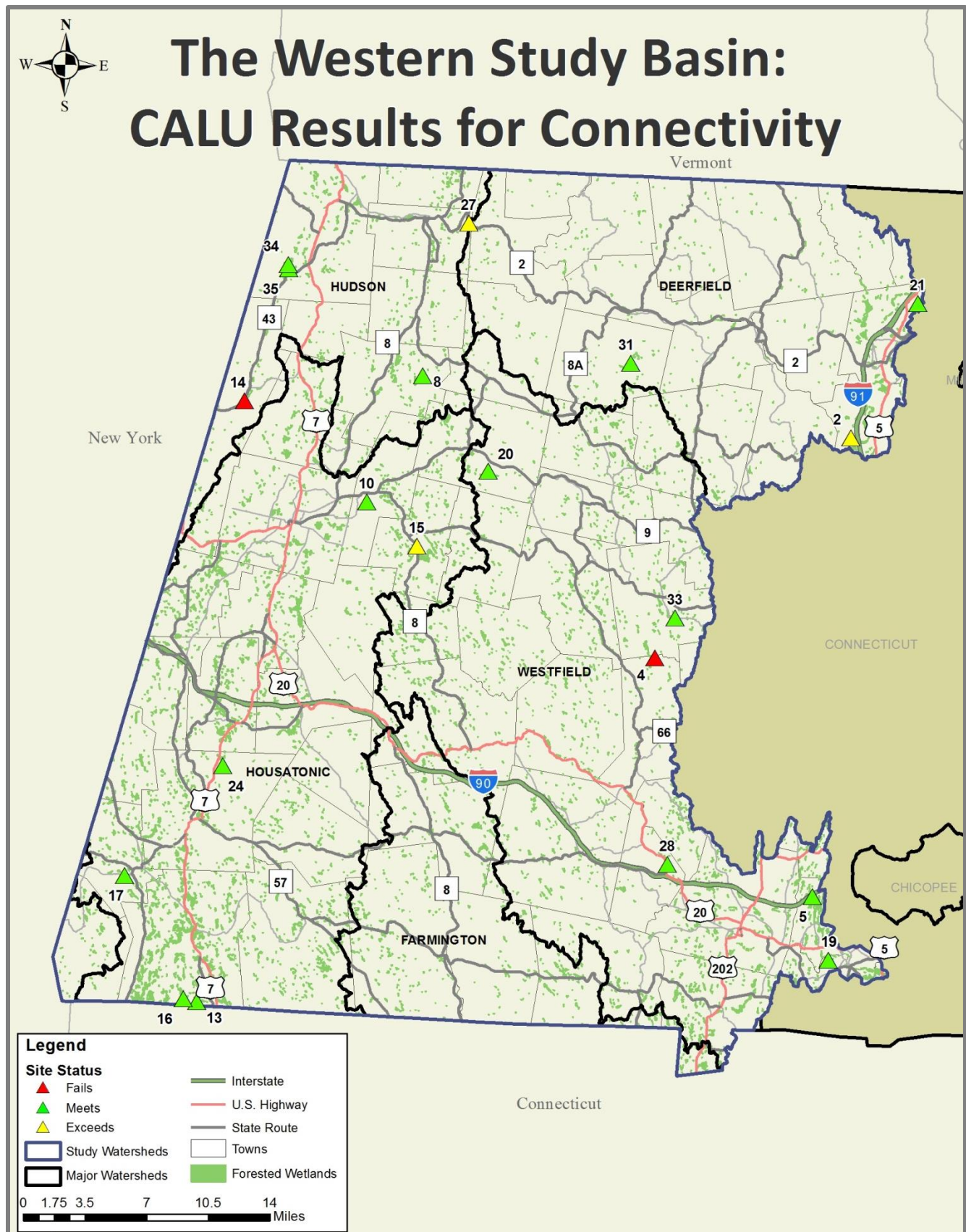
Two of the twenty sites *failed to meet expectations* and three of the sites *exceeded expectations* for the Connectivity metric.

SITE_ID	TOWN	IBI Score Connectedness	Target Score Connectedness	Compliance Level Connectedness	Percentile Connectedness
2	Deerfield	0.1693	0.0818	Exceeds expectations	91
4	Huntington	0.0565	0.239	Fails to meet expectations	3
5	W. Springfield	0.0176	0.0977	Meets expectations	15
8	Cheshire	0.2004	0.1366	Meets expectations	81
10	Dalton	0.0954	0.1384	Meets expectations	29
13	Sheffield	0.0176	0.0738	Meets expectations	24
14	Hancock	0.0331	0.158	Fails to meet expectations	6
15	Hinsdale	0.2588	0.0618	Exceeds expectations	99
16	Sheffield	0.0059	0.0956	Meets expectations	11
17	Egremont	0.0798	0.1078	Meets expectations	37
19	Feeding Hills	0.0954	0.0626	Meets expectations	67
20	Windsor	0.1148	0.1903	Meets expectations	16
21	Greenfield	0.1265	0.1131	Meets expectations	60
24	Great Barrington	0.0915	0.104	Meets expectations	45
27	North Adams	0.3054	0.2102	Exceeds expectations	93
28	Russell	0.0331	0.089	Meets expectations	24
31	Hawley	0.1965	0.2628	Meets expectations	20
33	Chesterfield	0.1965	0.1544	Meets expectations	72
34	Williamstown	0.0681	0.1214	Meets expectations	25
35	Williamstown	0.1109	0.126	Meets expectations	43

Eleven of the twenty sites *failed to meet expectations* and one of the sites *exceeded expectations* for the Invasive Earthworm metric.

SITE_ID	TOWN	IBI Score SqrtInvasive Earthworms	Target Score SqrtInvasive Earthworms	Compliance Level SqrtInvasive Earthworms	Percentile SqrtInvasive Earthworms
2	Deerfield	0.2656	0.272	Meets expectations	51
4	Huntington	0.5373	0.2073	Fails to meet expectations	3
5	W. Springfield	0.5917	0.2025	Fails to meet expectations	2
8	Cheshire	0.4588	0.3422	Meets expectations	26
10	Dalton	0.3683	0.1484	Fails to meet expectations	9
13	Sheffield	0.6037	0.2858	Fails to meet expectations	3
14	Hancock	0.6037	0.3284	Fails to meet expectations	5
15	Hinsdale	0.326	0.1853	Meets expectations	21
16	Sheffield	0.5856	0.2438	Fails to meet expectations	3
17	Egremont	0.3985	0.4105	Meets expectations	52
19	Feeding Hills	0.32	0.0756	Fails to meet expectations	7
20	Windsor	0.3381	0.1163	Fails to meet expectations	9
21	Greenfield	0.4166	0.2652	Meets expectations	19
24	Great Barrington	0.4226	0.1487	Fails to meet expectations	5
27	North Adams	0.0241	0.2729	Exceeds expectations	92
28	Russell	0.5434	0.2074	Fails to meet expectations	3
31	Hawley	0.3079	0.3385	Meets expectations	56
33	Chesterfield	0.2415	0.3131	Meets expectations	67
34	Williamstown	0.5132	0.2968	Fails to meet expectations	9
35	Williamstown	0.4166	0.2805	Meets expectations	22

The Western Study Basin: CALU Results for Edge Predators
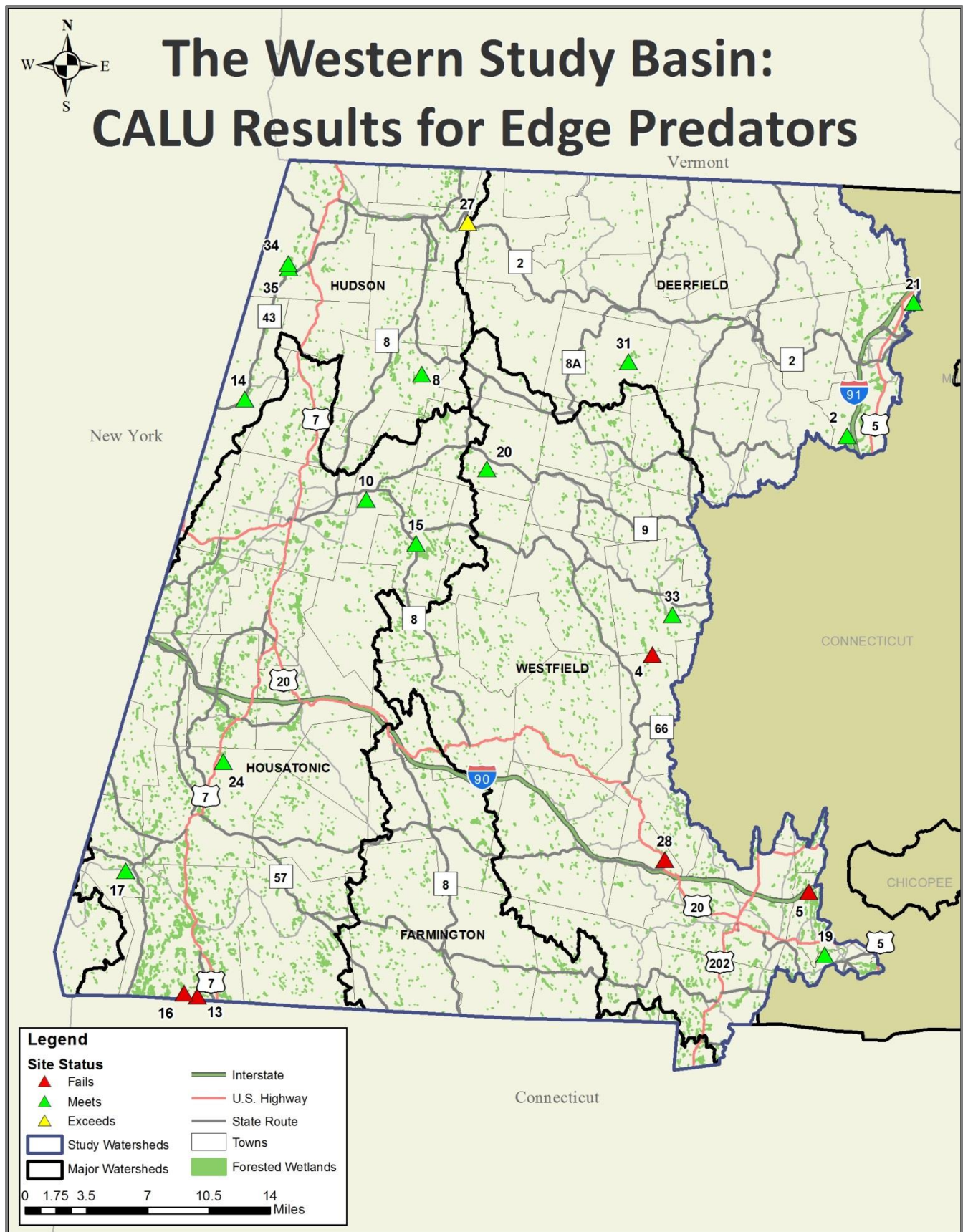
Legend

Site Status
- ▲ Fails
- ▲ Meets
- ▲ Exceeds
- Study Watersheds
- Major Watersheds

- Interstate
- U.S. Highway
- State Route
- Towns
- Forested Wetlands

0 1.75 3.5 7 10.5 14 Miles

Five of the twenty sites *failed to meet expectations* and one of the sites *exceeded expectations* for the Edge Predator metric.

| SITE_ID	TOWN	IBI Score SqrtEdge Predators	Target Score SqrtEdge Predators	Compliance Level SqrtEdge Predators	Percentile SqrtEdge Predators
2	Deerfield	0.2535	0.3132	Meets expectations	61
4	Huntington	0.6578	0.318	Fails to meet expectations	3
5	W. Springfield	0.6852	0.2895	Fails to meet expectations	3
8	Cheshire	0.5961	0.5861	Meets expectations	42
10	Dalton	0.4659	0.2621	Meets expectations	16
13	Sheffield	0.6852	0.3985	Fails to meet expectations	6
14	Hancock	0.6784	0.4517	Meets expectations	13
15	Hinsdale	0.4385	0.2419	Meets expectations	17
16	Sheffield	0.6647	0.4086	Fails to meet expectations	9
17	Egremont	0.4934	0.5129	Meets expectations	52
19	Feeding Hills	0.3426	0.1976	Meets expectations	24
20	Windsor	0.4385	0.2102	Meets expectations	13
21	Greenfield	0.4591	0.3241	Meets expectations	25
24	Great Barrington	0.4865	0.2364	Meets expectations	10
27	North Adams	0.0343	0.322	Exceeds expectations	92
28	Russell	0.5756	0.256	Fails to meet expectations	5
31	Hawley	0.4317	0.4566	Meets expectations	53
33	Chesterfield	0.3015	0.3968	Meets expectations	68
34	Williamstown	0.6304	0.4381	Meets expectations	17
35	Williamstown	0.5071	0.4012	Meets expectations	29

Five of the twenty sites *failed to meet expectations* and one of the sites *exceeded expectations* for the Invasive Plants metric.
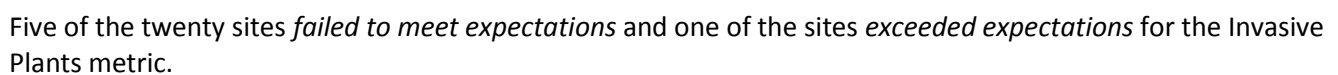
| SITE_ID	TOWN	IBI Score SqrtInvasive Plants	Target Score SqrtInvasive Plants	Compliance Level SqrtInvasive Plants	Percentile SqrtInvasive Plants
2	Deerfield	0.2342	0.2942	Meets expectations	65
4	Huntington	0.568	0.3599	Meets expectations	12
5	W. Springfield	0.5856	0.4067	Meets expectations	16
8	Cheshire	0.4568	0.2219	Fails to meet expectations	8
10	Dalton	0.4333	0.1781	Fails to meet expectations	6
13	Sheffield	0.5856	0.3772	Meets expectations	12
14	Hancock	0.5856	0.4486	Meets expectations	22
15	Hinsdale	0.3104	0.3398	Meets expectations	55
16	Sheffield	0.5856	0.3053	Fails to meet expectations	4
17	Egremont	0.4685	0.4567	Meets expectations	42
19	Feeding Hills	0.3104	0.1293	Meets expectations	16
20	Windsor	0.3924	0.2595	Meets expectations	22
21	Greenfield	0.4275	0.257	Meets expectations	17
24	Great Barrington	0.486	0.0691	Fails to meet expectations	1
27	North Adams	0.0117	0.3765	Exceeds expectations	97
28	Russell	0.5505	0.3042	Fails to meet expectations	7
31	Hawley	0.3748	0.3983	Meets expectations	53
33	Chesterfield	0.2752	0.3722	Meets expectations	71
34	Williamstown	0.5797	0.3629	Meets expectations	11
35	Williamstown	0.4626	0.3208	Meets expectations	22

The Western Study Basin: CALU Results for Mowing & Plowing
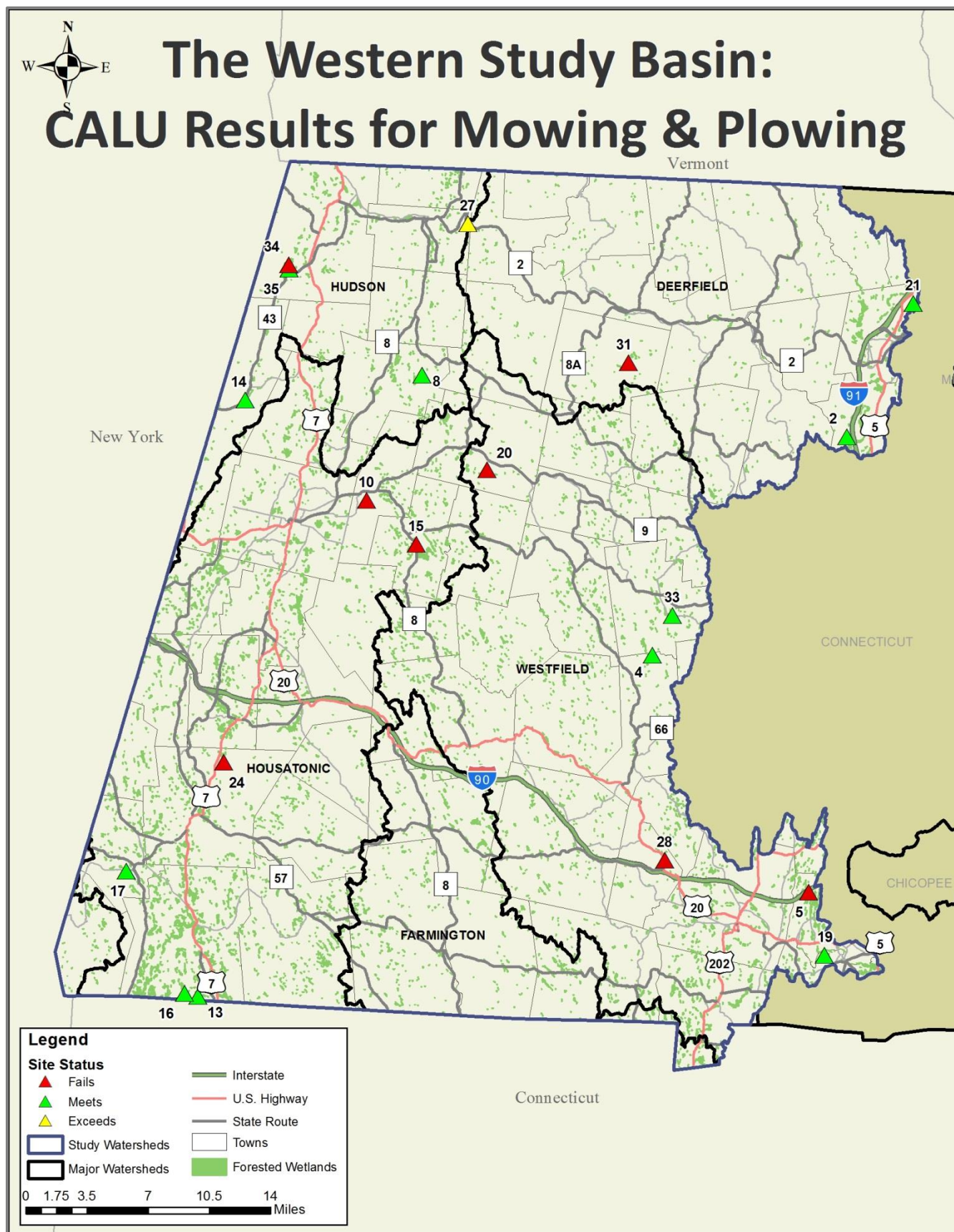
Eight of the twenty sites *failed to meet expectations* and one of the sites *exceeded expectations* for the Mowing & Plowing metric.

SITE_ID	TOWN	IBI Score SqrtMowPlow	Target Score SqrtMowPlow	Compliance Level SqrtMowPlow	Percentile SqrtMowPlow
2	Deerfield	0.2013	0.1545	Meets expectations	34
4	Huntington	0.46	0.2696	Meets expectations	13
5	W. Springfield	0.4773	0.2268	Fails to meet expectations	7
8	Cheshire	0.575	0.4628	Meets expectations	24
10	Dalton	0.483	0.1233	Fails to meet expectations	2
13	Sheffield	0.368	0.2418	Meets expectations	22
14	Hancock	0.575	0.4244	Meets expectations	17
15	Hinsdale	0.4773	0.1801	Fails to meet expectations	3
16	Sheffield	0.5348	0.4675	Meets expectations	31
17	Egremont	0.5405	0.3243	Meets expectations	10
19	Feeding Hills	0.2243	0.1349	Meets expectations	28
20	Windsor	0.4198	0.1827	Fails to meet expectations	8
21	Greenfield	0.4428	0.233	Meets expectations	10
24	Great Barrington	0.5118	0.1772	Fails to meet expectations	2
27	North Adams	0.0115	0.2319	Exceeds expectations	93
28	Russell	0.4543	0.1711	Fails to meet expectations	4
31	Hawley	0.575	0.296	Fails to meet expectations	5
33	Chesterfield	0.2358	0.2919	Meets expectations	68
34	Williamstown	0.5578	0.2897	Fails to meet expectations	5
35	Williamstown	0.4658	0.2711	Meets expectations	12

Western Study Basin: CALU Results for Watershed Habitat Loss
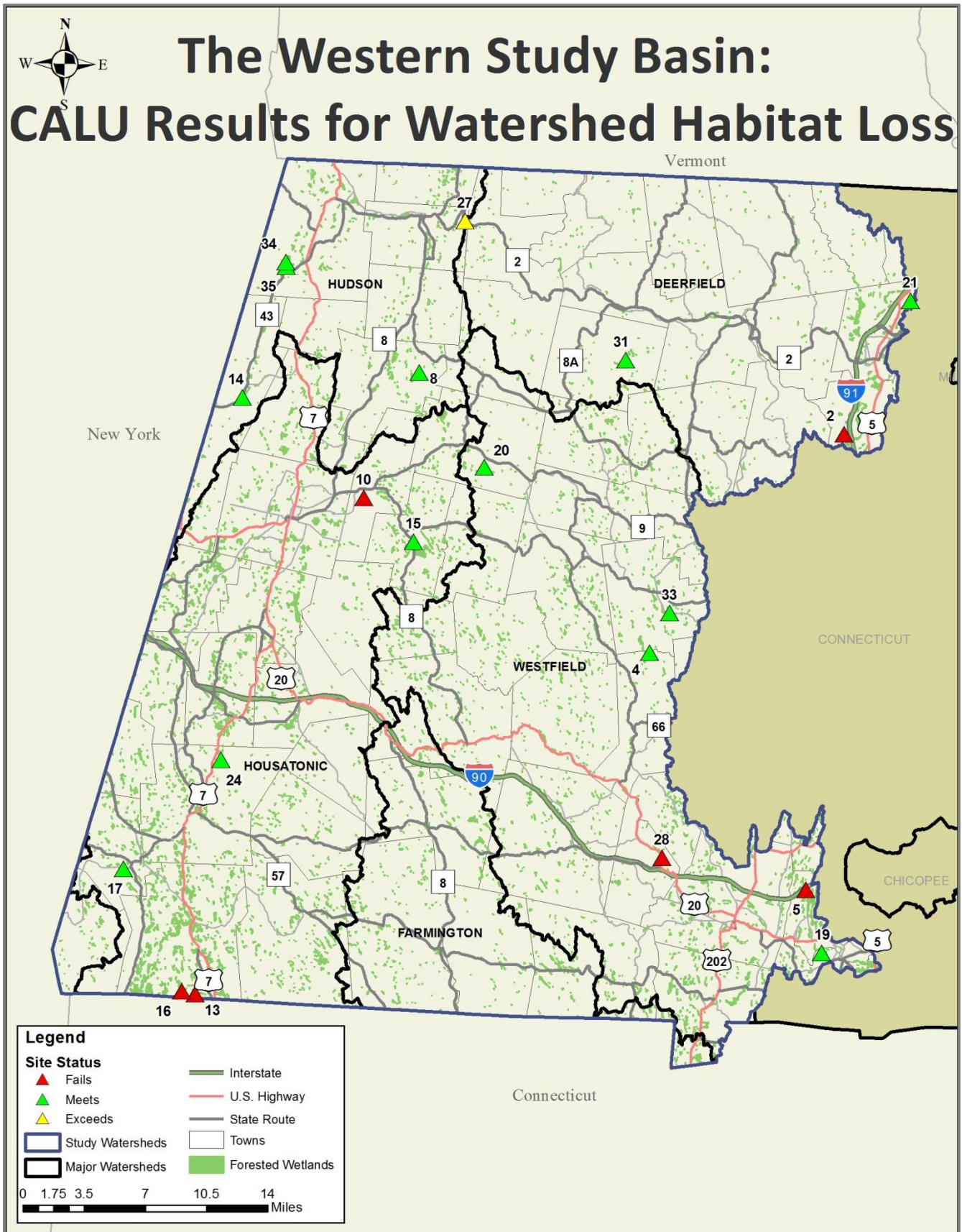
Six of the twenty sites *failed to meet expectations* and one of the sites *exceeded expectations* for the Watershed Habitat Loss metric.

SITE_ID	TOWN	IBI Score SqrtWhabloss	Target Score SqrtWhabloss	Compliance Level SqrtWhabloss	Percentile SqrtWhabloss
2	Deerfield	0.421	0	Fails to meet expectations	5
4	Huntington	0.7558	0.5236	Meets expectations	15
5	W. Springfield	0.9376	0.4175	Fails to meet expectations	2
8	Cheshire	0.5645	0.6301	Meets expectations	64
10	Dalton	0.6888	0.1099	Fails to meet expectations	2
13	Sheffield	0.861	0.4162	Fails to meet expectations	5
14	Hancock	0.6601	0.4144	Meets expectations	13
15	Hinsdale	0.3061	0.3665	Meets expectations	64
16	Sheffield	0.9376	0.5706	Fails to meet expectations	6
17	Egremont	0.5358	0.3878	Meets expectations	27
19	Feeding Hills	0.4114	0.5917	Meets expectations	81
20	Windsor	0.4592	0.6544	Meets expectations	84
21	Greenfield	0.5932	0.5068	Meets expectations	36
24	Great Barrington	0.574	0.352	Meets expectations	16
27	North Adams	0.0765	0.4897	Exceeds expectations	98
28	Russell	0.7175	0.3648	Fails to meet expectations	7
31	Hawley	0.4975	0.6439	Meets expectations	77
33	Chesterfield	0.4018	0.4013	Meets expectations	52
34	Williamstown	0.6793	0.4751	Meets expectations	18
35	Williamstown	0.6314	0.4132	Meets expectations	16