FUSS & O'NEILL

A G E N D A

Save the Sound and West River Watershed Coalition
Stream Assessment Training Workshop

Common Ground School

June 22, 2015
8:30 a.m. to 12:30 p.m.

8:30 a.m. - 8:40 a.m.	Welcome Kendall Barbery, Save the Sound Introductions and Schedule for the day David Askew, Fuss & O'Neill
8:40 a.m. - 10:00 a.m.	Indoor Training Session Seth Lerman and Todd Bobowick, Conn. NRCS
10:00 a.m. - 10:15 a.m.	Travel to Outdoor Training Site
10:15 a.m. - 12:00 noon	Outdoor Training Session: Wintergreen Brook
12:00 - 12:30 p.m.	Return to Common Ground School Lunch and Reach Assignments

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West River Watershed
Stream Assessments
Work Plan

Streams/Subwatersheds to Assess

Streams/subwatersheds with identified water quality issues (i.e., impairments) were selected for the stream assessments. Stream assessments are proposed in the more heavily-developed, lower half of the West River watershed (see attached maps). One reach was also selected in the upper part of the watershed, along the Sargent River, where water quality is very good. This reach will serve as a baseline or reference reach.

1. Lower West River: 6.67 miles
2. Wilmot Brook: 5.2 miles
    a. Farm Brook: 3.8 miles
3. Belden Brook: 3.3 miles
4. Wintergreen Brook: 5.2 miles
5. Beaver Brook: 0.61 miles
6. Sargent River: 1.10 miles

Assessment Reaches

Refer to attached maps and summary table for proposed stream reaches. Reaches were defined based on the following general criteria:

- At least one convenient access point from a road
- Located between major road crossings or a transition between significant land use change (generally include culverts with the associated downstream reach)
- Relatively homogeneous land use
- Separate reaches defined at confluence of two streams
- Reasonably accessible (check for private property)

NRCS Stream Visual Assessment

Stream Assessment Elements

- Channel condition
- Hydrological alteration
- Bank conditions
- Riparian quantity
- Riparian quality
- Canopy cover
- Water appearance
- Presence of waste
- Pools
- Barriers to aquatic species migration

A "Reach Level Assessment" form will be completed for each reach. In addition, separate "Area of Concern" forms will be completed for problems observed in each reach, including:

- Degraded buffers
- Erosion
- Fish barriers
- Manipulated channel
- Stormwater outfalls
- Trash-debris
- Water conditions

Recommended Materials, Equipment, and Staffing

Item	Needed
Mapping	GIS subwatershed maps Street maps
Equipment	Waders Tape measure Digital camera, extra batteries GPS unit (Commercial grade) Pencils, notebook, clipboard Cell phone Spray paint Clippers
Data Forms	Impact Forms Reach Assessment Form Photo Inventory Notification Letter
Staffing	1 or more teams of 2 people

Survey Logistics

1. Where practical, start at downstream end of the reach and walk up the stream corridor.
2. Convention is to face downstream when determining problems for the left and right stream bank
3. As individual impact sites are encountered, they are mapped (sketched and GPS coordinates obtained) and photographed, and an appropriate "Area of Concern" form completed.
4. Draw the location and ID number for each impact site on the reach diagram located on the Reach Level Assessment form.
5. After team walks the entire survey reach, record the general impression of reach conditions on the Reach Level Assessment form.
6. When conditions vary considerably within a reach, the reach should be split up into more uniform segments

General Safety and Responsibility

1. Plan each reach access location and vehicle drop off and pick up sites beforehand.
2. It is recommended to leave a volunteer letter on the dashboard of any cars left unattended while doing the stream survey.
3. Respect private property rights. If a landowner asks what you are doing, cordially inform them of your activities. If you are requested to leave the property, please do so. Information sheets with contact information are included in each packet for the landowner's information as needed.
4. The stream survey is intended to be informative and fun. If for any reason you are uncomfortable with landowner relations or stream conditions, move to another segment of the reach.

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West River Watershed Stream Assessment Reaches

Watercourse	Reach Name	Start - End	Miles	Total Reach Length / Notes
Lower West River				
	LW1	Confluence LIS to Spring Street	0.68	
	LW2	Spring Street to Route 1	0.95	
	LW3 (Reflecting Pool)	Just north of Route 1, east of river	0.88	Separate waterbody
	LW4	Just north of Route 1 to Derby	0.95	
	LW5	Derby Ave. / Route 34 to Blake Street	1.27	
	LW6	Blake Street to Lily Pond	1.40	
	LW7	North confluence of Lily Pond to Konoids Pond	0.54	Total: 6.67
Un-named Tributary				
	ALW1	Confluence with Lower West River	0.28	
	ALW2	Confluence with ALW1: splits south	0.52	
	ALW3	Confluence with ALW1: splits north	0.86	Total: 1.65
Beaver Brook				
	BB1	North of Blake Street to Impoundment	0.61	Total: 0.61
Wilmot Brook				
	WLB1	East of Catherine's Way to Woodin St.	0.52	Extensive wetland with stream embedded. May not be walkable.
	WLB2	Woodin Street to North of Rt. 15	0.95	
	WIB3	Lane Street to Benham Street	0.57	
	WLB4	Benham Street to Howard Road	1.43	
	WLB5	Howard Road to end	.90	
	WLB5A	Hill Street to Impounment	.81	Total 5.20
Farm Brook				
	FB1	Morgan Lane to Benham Street	0.59	
	FB2	Benham Street to Autumn Ridge Rd.	1.31	
	FB3	Autumn Ridge Rd. to Farm Brook Reservoir	1.37	
	FB4	Farm Brook Reservoir to end.	0.48	Total: 3.7

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West River Watershed Stream Assessment Reaches (continued)

Watercourse	Reach Name	Start - End	Miles	Total Reach Length / Notes
Belden Brook				
	BLB1	East of Winslow Field at Confluence of Wintergreen Brook to Woodin St.	0.39	
	BLB2	Woodin St. to Wintergreen Ave.	0.57	
	BLB3	Wintergreen Ave. to Benham St.	0.89	
	BLB4	Benham St. to Main Street	1.03	
	BLB5	Main Street to end	0.44	Total 3.34
Wintergreen Brook				
	WB1	Westville Village Apts. to Wintergreen Ave.	1.17	Confluence with West River may be inaccessible behind apartments. Start at Blake Street if necessary
	WB2	Wintergreen Ave. to Crossing at West Rock Nature Center	1.14	
	WB3	West Rock Nature Ctr. to Lake Wintergreen	0.53	
	WB4	North of Lake Wintergreen to Mountain Road	1.46	
	WB5	Mountain Road to end	0.93	Total 5.23
Sargent River	Reference		1.10	

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s):
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☐ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	Glide Depth:
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank):
Run Depth:	Bank Height (Left Bank):

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☐ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets

Indicate # and type of sheets completed for this reach assessment

Erosion_____
Fish Barrier_____
Storm Water Outfall_____
Modified Channel_____
Impacted Buffer_____
Trash / Debris_____
Water Conditions_____

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

Developed By: CT-NRCS
January 2008

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions / Excessive Plant or Algae Growth

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Describe Water Conditions: Mark all that apply.			
☐ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	☐ Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☐ In Spots	☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

☐ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☐ Residential	☐ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☐ Tires ☐ Metal ☐ Construction	☐ Appliances ☐ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☐ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☐ **Left Bank**		Estimate length of degraded buffer:	ft.
☐ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☐	☐	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map.** 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where erosion is occurring:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site				
Length:	Left Bank:	ft.	Right Bank:	ft.
Bank Height:	Left Bank:	ft.	Right Bank:	ft.
Bank Angle:	Left Bank:	deg.	Right Bank:	deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)**?**

☐ < 15 ft.	☐ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☐ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

☐ Public	☐ Private	☐ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

Type of Barrier: Mark the type of fish barrier.

☐ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials:	☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:……_____ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

Mark where channel modification occurs:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft.

Estimate height of bank modification: ft.

Type of Manipulation:	☐ Channelization	☐ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☐ Right Bank	☐ Left Bank	☐ Channel Bottom	

Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☐ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched……_____ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

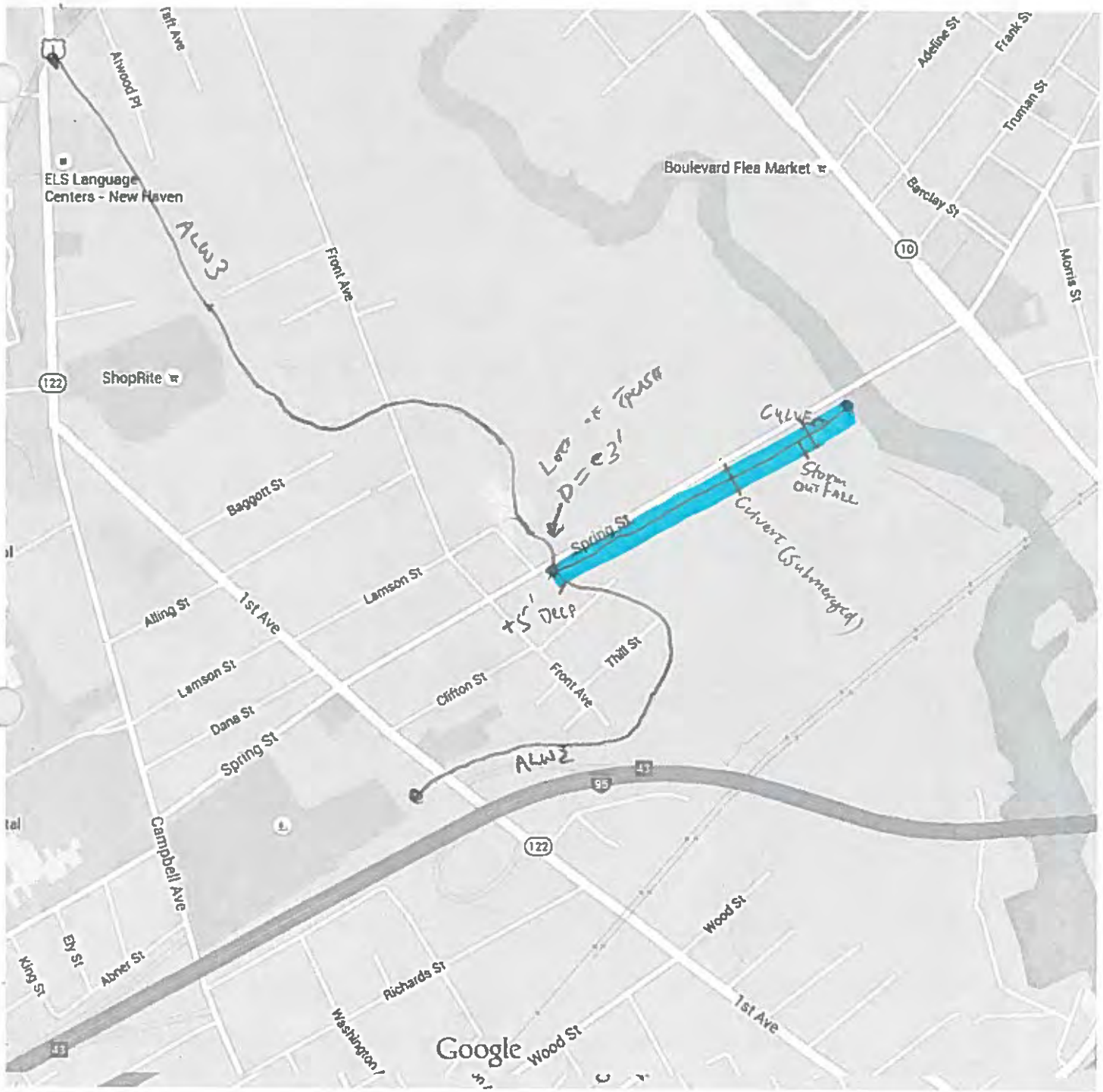
Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

Completed Stream Assessment Forms
Un-named Tributary ALW

ALW1 0.28 Mi 8 SPRING ST To



8 SPRING ST. To 46 SPRING ST.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/28 8 30 - 9 00
Name of Stream: UNNAMED TRIB	Assessed By: BH RE
Reach Code: ALW1	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 15 Ft			Glide Depth: 5 + Ft	
Riffle Depth:			Step Height:	
Pool Depth:			Bank Height (Right Bank): 0	
Run Depth:			Bank Height (Left Bank): 0	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☐ Clear	☒ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☒ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

- Erosion
- Fish Barrier
- Storm Water Outfall
- Modified Channel
- Impacted Buffer
- Trash / Debris
- Water Conditions

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☒ < 25% covered

None

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☒ Urban Residential	☐ Recreational
☒ Industrial	☐ Other	☒ Industrial	☐ Other	☒ Industrial	☐ Other
☒ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7/28
Name of Stream: ALW-1	Assessed By: BH RE
Reach Code: UNNAMED	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

ENTIRE STRETCH LIKELY MODIFIED

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
Estimate length of channel modification:	ft. 0.28 m		
Estimate height of bank modification:	ft.		

Type of Manipulation:	☒ Channelization	☐ Bank Armoring	☐ Concrete Channel		☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☒ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☒ Commercial	☒ Forested
☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☒ > 100 ft RIV LEFT

IN R

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

NO ARMORING VISIBLE, DENSE BANK VEGETATION

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7-28
Name of Stream:	Assessed By: BH RE
Reach Code: ALW-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

THROUGHOUT REACH

☑ Within Stream	☒ Riparian Area: ☐ Left Bank ☒ Right Bank

Type:	☒ Residential	☐ Commercial	☐ Industrial	
Material:	☒ Plastic ☒ Paper ☐ Yard Waste	☒ Tires ☒ Metal ☐ Construction	☑ Appliances ☒ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☒ Flooding	☒ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☒ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7-28
Name of Stream: ALW - 1	Assessed By: BH RE
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

Type of Barrier: Mark the type of fish barrier.

☐ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials:	☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☒ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

UNKNOWN - CULVERTS SUBMERGED -

2 IN REACH

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7-28
Name of Stream: ALW-1	Assessed By: BH RE
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☐ **Left Bank**		Estimate length of degraded buffer: ft.	
☒ **Right Bank**		Estimate length of degraded buffer: 0.28 ft. miles	

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☐ Minimal Width	☒ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☒	☐	☐	☐
Right Bank	☒	☐	☐	☒	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
	☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☒ > 100 ft
Right Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

PHRAGMITES ON BOTH SIDES

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-28
Name of Stream:	Assessed By: RE BH
Reach Code: ALW-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

SUBMERGED, CATCH BASIN NEAR ROAD -

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: ? ft.			
# of Pipes:	☒ 1	☐ 2	☐ 3 +	

Leak-Off Data: Provide all relevant data.

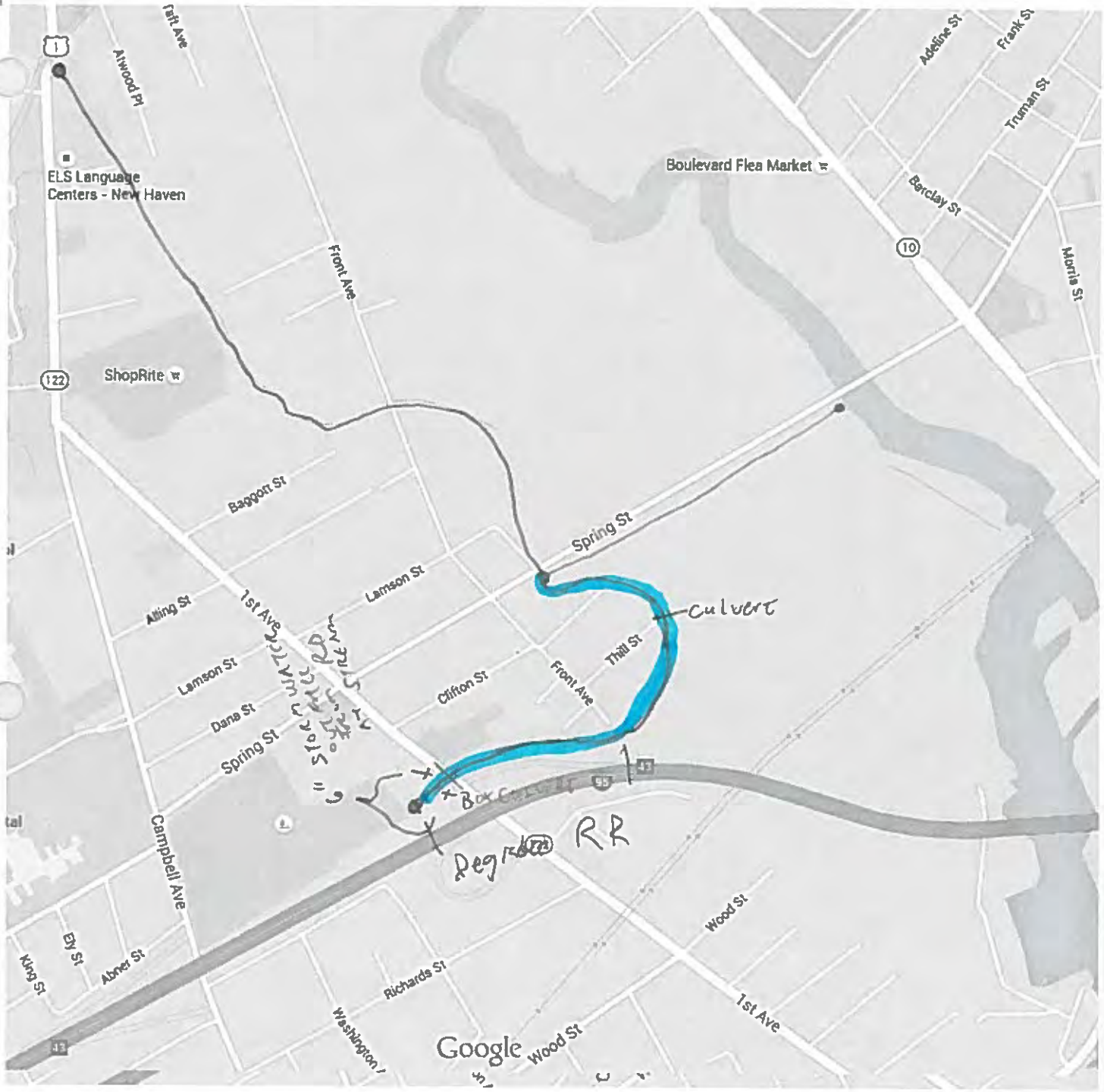
Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

ALW.C 0.52 mi



46 SPRING ST. TO 150 SPRING ST

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/28 9:30 – 10
Name of Stream:	Assessed By: BH RE
Reach Code: ALW2	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

OBSERVED FROM 6 LOCATIONS, START, 4 MIDDLE, END

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 10ft			Glide Depth: 2ft	
Riffle Depth:			Step Height:	
Pool Depth:			Bank Height (Right Bank): 6"	
Run Depth:			Bank Height (Left Bank): 6"	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
~~Cobble (2-10 inches)~~	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
~~Boulder (>10 inches)~~	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
~~Bedrock~~	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☐ Clear	☒ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☒ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	X
Modified Channel	
Impacted Buffer	X
Trash / Debris	X
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☑ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☑ Forested
☑ Urban Residential	☐ Recreational	☒ Urban Residential	☐ Recreational	☑ Urban Residential	☐ Recreational
☑ Industrial	☐ Other	☒ Industrial	☐ Other	☑ Industrial	☐ Other
☒ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 2 .	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☑ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☑ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7-28
Name of Stream: ALW 2	Assessed By: BH RC
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

THROUGHOUT, ESP. AT CULVERT

☒ Within Stream | ☒ Riparian Area: ☒ Left Bank ☒ Right Bank

Type:	☒ Residential	☐ Commercial	☐ Industrial	
Material:	☒ Plastic ☒ Paper ☒ Yard Waste	☒ Tires ☒ Metal ☒ Construction	☒ Appliances ☒ Automotive ☒ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☒ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☒ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7-28
Name of Stream: ALW-2	Assessed By: BH RC
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☒ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer: 0,52 ~~ft.~~ m	
☒ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other
Right Bank:	☒ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☒	☒	☐	☐
Right Bank	☐	☐	☐	☒	☒	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☒ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☒ Commercial	☒ Forested
	☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☐ < 15 ft.	☒ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☒ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-28
Name of Stream: KLW 2	Assessed By: RE BH
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☑ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 0.5 ft.			
# of Pipes:	☐ 1	☒ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

ALW 3 0.06 mi

46 SPRING ST TO 270 BOSTON POST RD. WEST HA

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/28 10:15 – 11:15
Name of Stream: Unnamed Trib	Assessed By: BH RE
Reach Code: ALW3	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☐ Yes ☒ No, Which section(s) were not surveyed? Why?

ONLY VISIBLE AT START + AT FRONT AVE - MUCH IS UNDERGROUND

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☒ Run	☐ Glide	*☒ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 6'	Glide Depth:
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank): 6'
Run Depth:	Bank Height (Left Bank): 6'

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☐ Clear	☒ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☒ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	1
Modified Channel	1
Impacted Buffer	1
Trash / Debris	1
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Deciduous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational	☒ Urban Residential	☐ Recreational
☒ Industrial	☐ Other	☒ Industrial	☐ Other	☐ Industrial	☐ Other
☒ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 1 .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7-28
Name of Stream: NLW-3	Assessed By: BH RC
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

one section along parking lot - conc. block 4'x2'x2'

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: 100 ft.

Estimate height of bank modification: 4 ft.

Type of Manipulation:	☐ Channelization	☒ Bank Armoring	☐ Concrete Channel	☐ Other	
Extent of Manipulation:	☐ Right Bank	☒ Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☒ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7-28
Name of Stream: ALW-3	Assessed By: RE BH
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Degraded buffer in modified section + at stream crossings AND MUCH PHRAGMITES THROUGHOUT

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer: 100	ft.
☐ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☑ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☒ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☒	☑	☑	☐
Right Bank	☐	☐	☐	☑	☑	☑	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
	☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☑ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☒ 35 – 50 ft.	☑ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7-28
Name of Stream: ALW-3	Assessed By: RE + BH
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

THROUGHOUT REACH

☑ Within Stream ☑ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☑ Residential	☑ Commercial	☐ Industrial	
Material:	☑ Plastic ☑ Paper ☑ Yard Waste	☑ Tires ☑ Metal ☑ Construction	☑ Appliances ☑ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☑ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☒ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-28
Name of Stream: ALW-3	Assessed By: BH RG
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

LEAK OFF, ASPHALT PAVED, FROM ROAD

Outfall Type:	☐ Pipe	☒ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

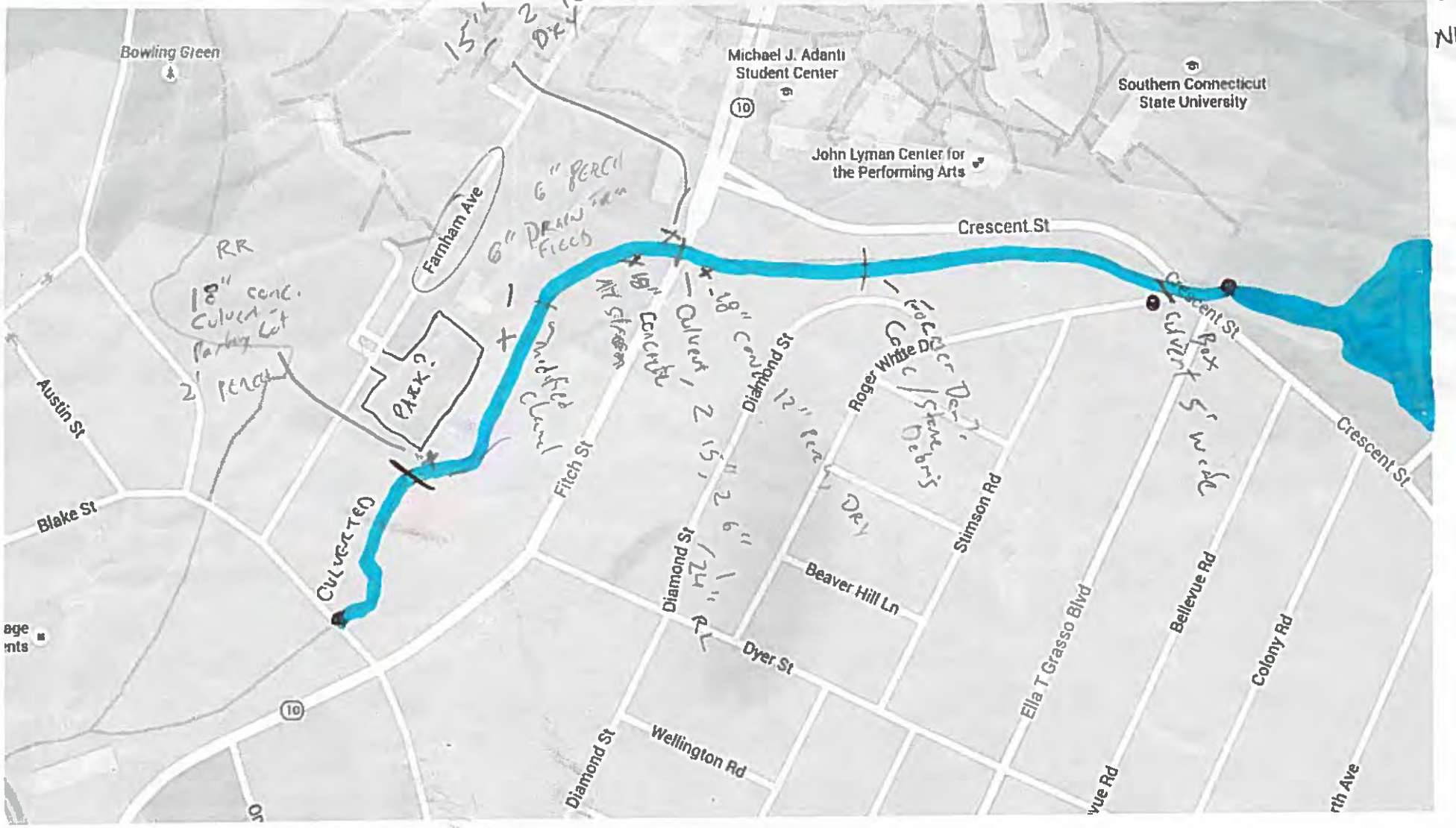
Leak-Off Swale:	☐ Concrete	☒ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☒ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: 6 **ft.**				
Width of Swale: 2 **ft.**				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Completed Stream Assessment Forms
Beaver Brook



400 CRESCENT ST NH.

0.61 m

BBL

NAN + BILL
830 meet at Corner of Roger White Drive + Crescent.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8-4-15
Name of Stream: BEAVER BROOK	Assessed By: BH + FOBEP
Reach Code: BB-1	830-1130
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 12-15' AVG 12			Glide Depth: —	
Riffle Depth: 6"			Step Height:	
Pool Depth: 1½' to 2'			Bank Height (Right Bank): 6'	
Run Depth: —			Bank Height (Left Bank): 6'	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock X	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream: FEW			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion ____
Fish Barrier ____
Storm Water Outfall ____
Modified Channel ____
Impacted Buffer ____
Trash / Debris ____
Water Conditions ____

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☒ Low	☒ Moderate	☐ Moderate	☐ High	☐ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
~~Coniferous Trees~~	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☒ Urban Residential	☒ Recreational	☒ Urban Residential	☐ Recreational	☒ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☒ Industrial	☒ Other
☐ Commercial		☐ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)? NOT SIGNIFICANT	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 8-4-15
Name of Stream: BB-1	Assessed By: SH +
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

DAM/CULVERT AT START + FINISH

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 4 ft.	**Length of Spillway:** 10 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials: ☐ Stone	☒ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8-4-15
Name of Stream:	Assessed By: BH +
Reach Code: BB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

9 TOTAL, SEE MAP

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☒ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☒ Parking Lot	☒ Other	☒ Unknown
Pipe Outlet:	☒ Perched 6'-2 ft.	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: 2'-2 ft.			
# of Pipes:	☐ 1	☐ 2	☒ 3 + 9	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8-4-15
Name of Stream:	Assessed By: BH + 4
Reach Code: BB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

ARMOR + RIP RAP

Mark where channel modification occurs:

☒ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft. ☒ ½ OF REACH

Estimate height of bank modification: 6 ft.

Type of Manipulation:	☐ Channelization	☒ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☒ Rip Rap	☒ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☒ Urban Residential	☐ Commercial	☒ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☒ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 8-4-15
Name of Stream:	Assessed By: BH + Y
Reach Code: BB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer: 100 ft.	
☐ **Right Bank**		Estimate length of degraded buffer: ft.	

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other
Right Bank:	☒ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☐	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☒ Urban Residential	☐ Commercial	☒ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational
Right Bank:	☐ Rural Residential	☒ Urban Residential	☐ Commercial	☒ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

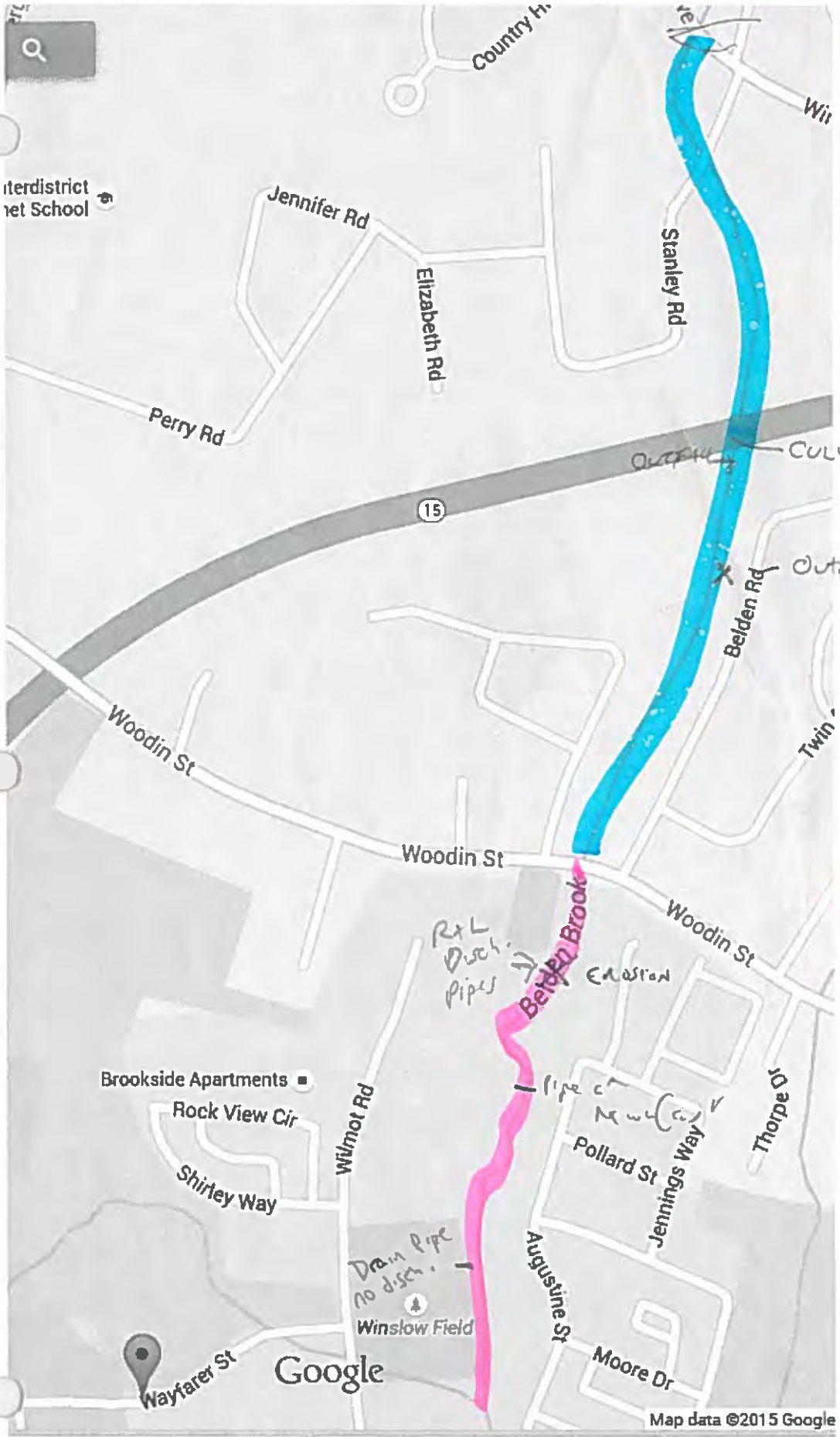
JAPANESE KNOTWEED / MEXICAN BAMBOO

WYSTERIA

LITTLE NATIVE VEG

(NATIVE GRAPE / FOXGRAPE, BUTTONBUSH)

Completed Stream Assessment Forms
Belden Brook



11665427 1015....jpg 11265405 1015....jpg 1166561

FRAG NEAR START
6' W, 1' D 1' BANK

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7·9·15
Name of Stream: BELDEN BROOK	Assessed By: BH AB RE
Reach Code: BLB-1	1000 - 1100
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 12'	~~Glide Depth~~:
Riffle Depth: @ 3"	~~Step Height~~:
Pool Depth: 1½	Bank Height (Right Bank): 2'
~~Run Depth~~:	Bank Height (Left Bank): 2'

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☒ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☒ Rusty-Red VERY MINIMAL	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	1
Fish Barrier	
Storm Water Outfall	3
Modified Channel	
Impacted Buffer	
Trash / Debris	1
Water Conditions	

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

50 %

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass X	☒ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☒ High	☐ High
Coniferous Trees X	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed. Check w/ Google Maps

Immediately adjacent to stream		< ¼ Mile from stream		> ¼ Mile from stream	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☒ Industrial	☐ Other
☒ Commercial		☐ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☒ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

Dam was Natural - Downed Tree, Brush, Trash, Leaves -
see Trash/Debris Sheet

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7-9-15
Name of Stream: Belden Brook	Assessed By: BH AB RE
Reach Code: BLB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

FLOOD DEBRIS – LUMBER, LOGS, BRANCHES, LEAVES

PIN PLACED, PHOTO

☒ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☒ Residential	☐ Commercial	☐ Industrial	
Material:	☒ Plastic ☐ Paper ☐ Yard Waste	☐ Tires ☐ Metal ☒ Construction	☐ Appliances ☐ Automotive ☐ Medical	☒ Other LOGS
Source:	☐ Unknown	☒ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☒ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

LOG JAM FROM FLOODING

BROOK WIDER - 12'

1 ½-2' BANK

New Construction River Left -

New Outfall
@100' from Brook

Natural Flood Debris causing Fish Barrier
Trash, Downed trees, Logs, Leaves

River Forks - BOTH SIDES Blocked

Riv L, 2' Corr. metal
Disch. Pipe, Conc. Rubble.

Riv R 1' Corr. Metal Disch. Pipe

Woodin

Fish Barrier

Bridge/Culvert Under Woodin ⊓ -
3 Disch. Pipes
2' Conc
1' Conc.
1' metal in Bridge Abutment

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date: 7-9-15
Name of Stream: Belden Brook	Assessed By: SH AB RE
Reach Code: BLB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Behind Large Industrial Bldg

Mark where erosion is occurring:

☐ Meander Bend	☐ Straight Section	☒ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site

Length:	Left Bank:	75	ft.	Right Bank:	X ft.
Bank Height:	Left Bank:	30'	ft.	Right Bank:	2' ft.
Bank Angle:	Left Bank:	60	deg.	Right Bank:	13° deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)?

☐ < 15 ft.	☒ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☐ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

☐ Public	☐ Private	☒ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☐ < 15 ft.	☒ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Steep slope, Bldg/Fence near top of slope,
erosion due to slope more than brook
No shrubs/grasses on slope, exposed root structure

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-7-15
Name of Stream: BELDEN BROOK	Assessed By: DH AB RE
Reach Code: BLD-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 5 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☒ Earthen
Contributing Source (s):	☒ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.	NONE -	NEW CONSTRUCTION		
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

WAS @ 75' FROM STREAM - BRAND NEW CONSTRUCTION

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-9-15
Name of Stream: Belden Brook	Assessed By: BH AB RE
Reach Code: BLB -1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☒ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched……_____ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

RIV, R = Small Corr. Metal from Cemetary @ 1' D. 2' above wat.
RN L = Metal, @ 2' D. // 10' V off stream from Steep Bank, Broken stobs beneath.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-9-15
Name of Stream: BELDEN BROOK	Assessed By: BH AB RE
Reach Code: BLB1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

AT WOODIN ST. BRIDGE

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched. 2.5 1 ft.	☐ Ramped	☒ At Stream Level 1	
Pipe Size:	Diameter: 2, 2, 1 ft.			
# of Pipes:	☐ 1	☐ 2	☒ 3 + 3	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

2' CONC
1' CONC.
1' metal? IN Abutment -

ALL DITCH. DIRECT TO BROOK

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-9-15
Name of Stream: BECDEN BROOK	Assessed By: BH RE AB
Reach Code: BLB-2	START 1200
Designated Stream Type:	END 1330

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 12'	Glide Depth:
Riffle Depth: 3"	Step Height:
Pool Depth: 1½ to 2	Bank Height (Right Bank): 1'
Run Depth:	Bank Height (Left Bank): 1'

Substrate Composition: Mark approximate percentages for each substrate type observed.

~~Silt or Clay~~	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
~~Bedrock~~	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	2
Storm Water Outfall	3
Modified Channel	1
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☒ Moderate	☐ Moderate	☒ High	☒ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
~~Coniferous Trees~~	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ ~~Rural Residential~~	☐ Agricultural	☐ Rural Residential	☒ Agricultural	☐ ~~Rural Residential~~	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested
☐ ~~Urban Residential~~	☐ Recreational	☐ ~~Urban Residential~~	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☒ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

SCATTERED TRASH THROUGHOUT
FIRST 3/4 ALL MODIFIED CHANNEL - RIP RAP

130 - 21
11 - 01

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7-9-15
Name of Stream: BELDEN	Assessed By: BH AB RE
Reach Code: BLB-2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

AT STANLEY RP

Type of Barrier: Mark the type of fish barrier.

☐ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight ☐ Crescent		
Materials: ☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No ☐ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☒ Perched:..... 3 ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: 4 ft.	Height: ft.	Width: ft.	
# of Culverts: 2	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section ☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.		

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7-9-15
Name of Stream: BELDEN BR.	Assessed By: BH AB RE
Reach Code: BLB-2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

UNDER MERRITT PKWY

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 4 ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials: ☐ Stone	☐ Concrete	☒ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☒ Residence (Former)	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☒ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☒ Perched:……_____ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: 6 ft.	Width: 6 ft.	
# of Culverts: 2	**Culvert Length:** 225 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

VERY SIMILAR TO I-95 · NORTON CULVERT

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-9-15
Name of Stream:	Assessed By: BH AB RE
Reach Code: BLB2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☒ Corrugated Metal	☐ Plastic	☐ Other m
Contributing Source(s):	☒ Road ?	☐ Parking Lot	☐ Other	☒ Unknown
Pipe Outlet:	☐ Perched……_____ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 1.5 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Metal Pipe in Conc Block.
From Residential area, Likely street runoff.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-9-15
Name of Stream: BELDEN BROOK	Assessed By: BH AB RE
Reach Code: BRB2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☒ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 8 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☒ Concrete	☐ Asphalt	☒ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: 35 **ft.**	RIP RAP SWALE TO BROOK			
Width of Swale: 6 **ft.**				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: **ft.**					
Channel Width: **ft.**					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-9-15
Name of Stream: BELDEN BR	Assessed By: BH AB RE
Reach Code: BLB 2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

AT SOUTH SIDE OF MERRITT RIVER R

Outfall Type:	☑ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☒ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 5 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 1.5 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☒ Concrete	☐ Asphalt	☒ Stone	☐ Earthen
Contributing Source (s):	☒ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: 12 **ft.**				
Width of Swale: 5 **ft.**				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: **ft.**					
Channel Width: **ft.**					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

STONEWORK SWALE, RAMPED.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7-9-15
Name of Stream: DELDEN	Assessed By: BH AB RE
Reach Code: BLB-2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

DOWNSTREAM 3/4

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft. 0.4 MILES

Estimate height of bank modification: 6 ft.

Type of Manipulation:	☐ Channelization	☒ Bank Armoring		☐ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank		☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☒ Rip Rap	☒ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel? N/A	☐ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7-9-15
Name of Stream: BELDEN	Assessed By: BH AB RE
Reach Code: BLB 2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

DOWNSTREAM 3/4 OF REACH

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer:	ft.
☒ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☐	☐	☐
Right Bank	☐	☐	☒	☐	☐	☐	☐

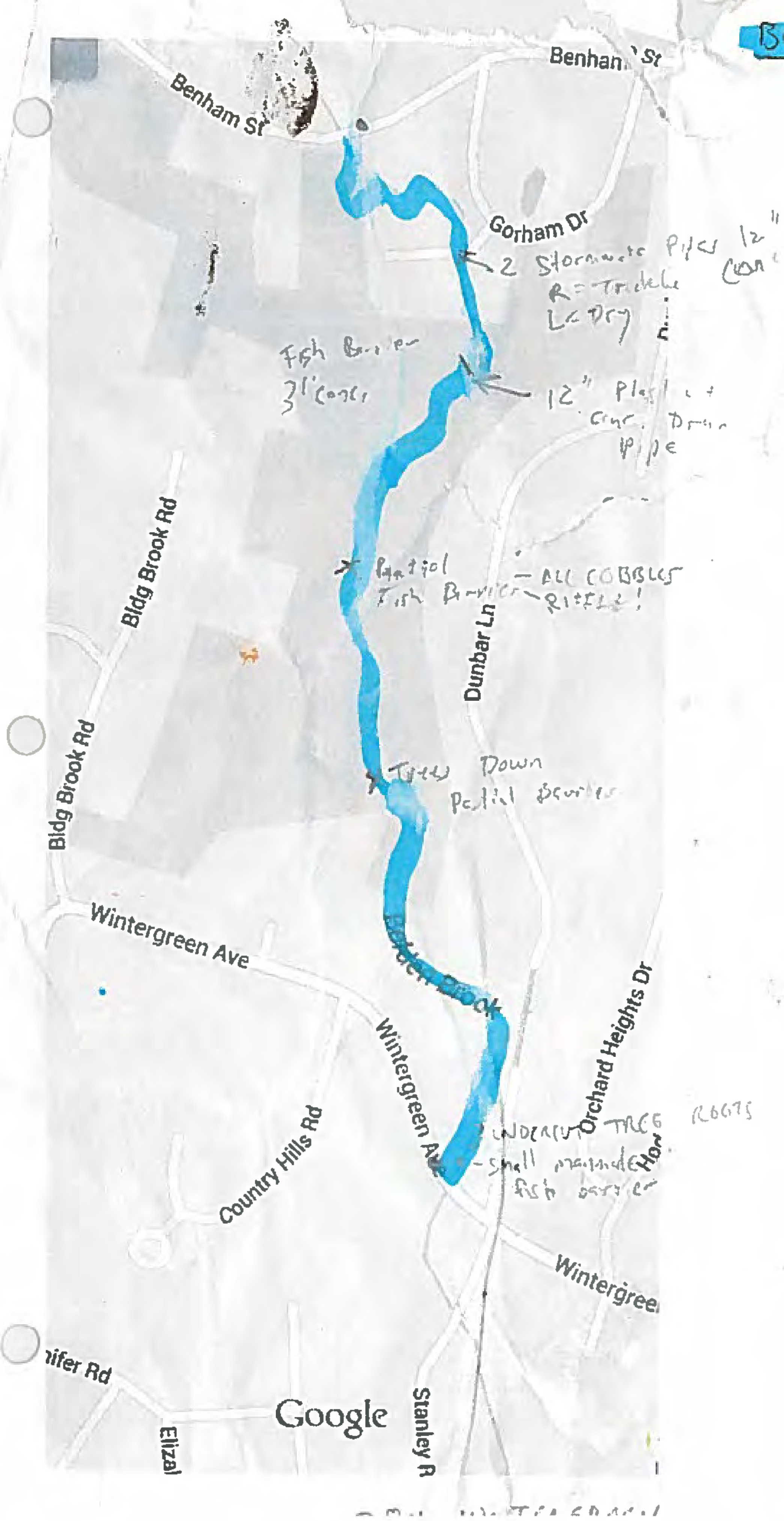
Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

MODIFIED CHANNEL -
LAWN, FENCE, STEEP BANK/RIP RP, BROOK

BLB3 0.89 m



Benham St
Gorham Dr
2 Stormwater Pipes 12" Conc
R = Trickle
L = Dry
Fish Barrier
3' Conc
12" Plastic + Conc. Drain Pipe
Bldg Brook Rd
Partial Fish Barrier
ALL COBBLES RIFFLE!
Dunbar Ln
Tree Down
Partial Barrier
Wintergreen Ave
Orchard Heights Dr
Country Hills Rd
Wintergreen
Google
Stanley R

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7-14-15
Name of Stream: BELDEN	Assessed By: BH, KTS
Reach Code: BLB-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

AT C ½ WAY THROUGH REACH

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 8 ft.	**Length of Spillway:** 8 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials: ☒ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

MAN MADE, LOOSE STONE ONLY

BELDEN
BLB - 3

7-14-15
BH + ASHA

2 OUTFALLS

1 AT MAIN ST. BRIDGE — RIV R — ROAD RUNOFF 12" CONC.

1 1/10 m South — RIV R — 8" PVC LAWN DRAINAGE

B.H PERCHED @ 6"

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-14-15
Name of Stream: DELDEN OR	Assessed By: BRIAN + ASHA
Reach Code: BLB-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

1 OUTFALL AT DAM - 12" CONC IN PLASTIC - L, DRY

2 AT BRIDGE NEAR BORHAM DR. R = TRICKLE
L = DRY

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☒ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 1 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 1 ft.			
# of Pipes:	☐ 1	☐ 2		☒ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

SEE MAP

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-14
Name of Stream: BELDEN BROOK	Assessed By: ASHA + BRIAN
Reach Code: BLB-3	1130 - 130 (INCL. PAPCAT AT END)
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: ~~Mark~~ the predominate condition(s), and indicate the average measurements.				
☒ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 10'	~~Glide Depth~~:
Riffle Depth: 1"	Step Height: 6"
Pool Depth: 12"	Bank Height (Right Bank): 12"
~~Run Depth~~:	Bank Height (Left Bank): 12"

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	1
Modified Channel	
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass X	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☒ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 3 .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

NATURAL EROSION BUT NOT NEAR INFRASTRUCTURE, ALL NATURALLY OCCURRING

MINIMAL TRASH, ONE CAR

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date:
Name of Stream: BLB-3	Assessed By:
Reach Code: BELDEN BR	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 4 ft.	**Length of Spillway:** 8 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials:	☐ Stone	☒ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

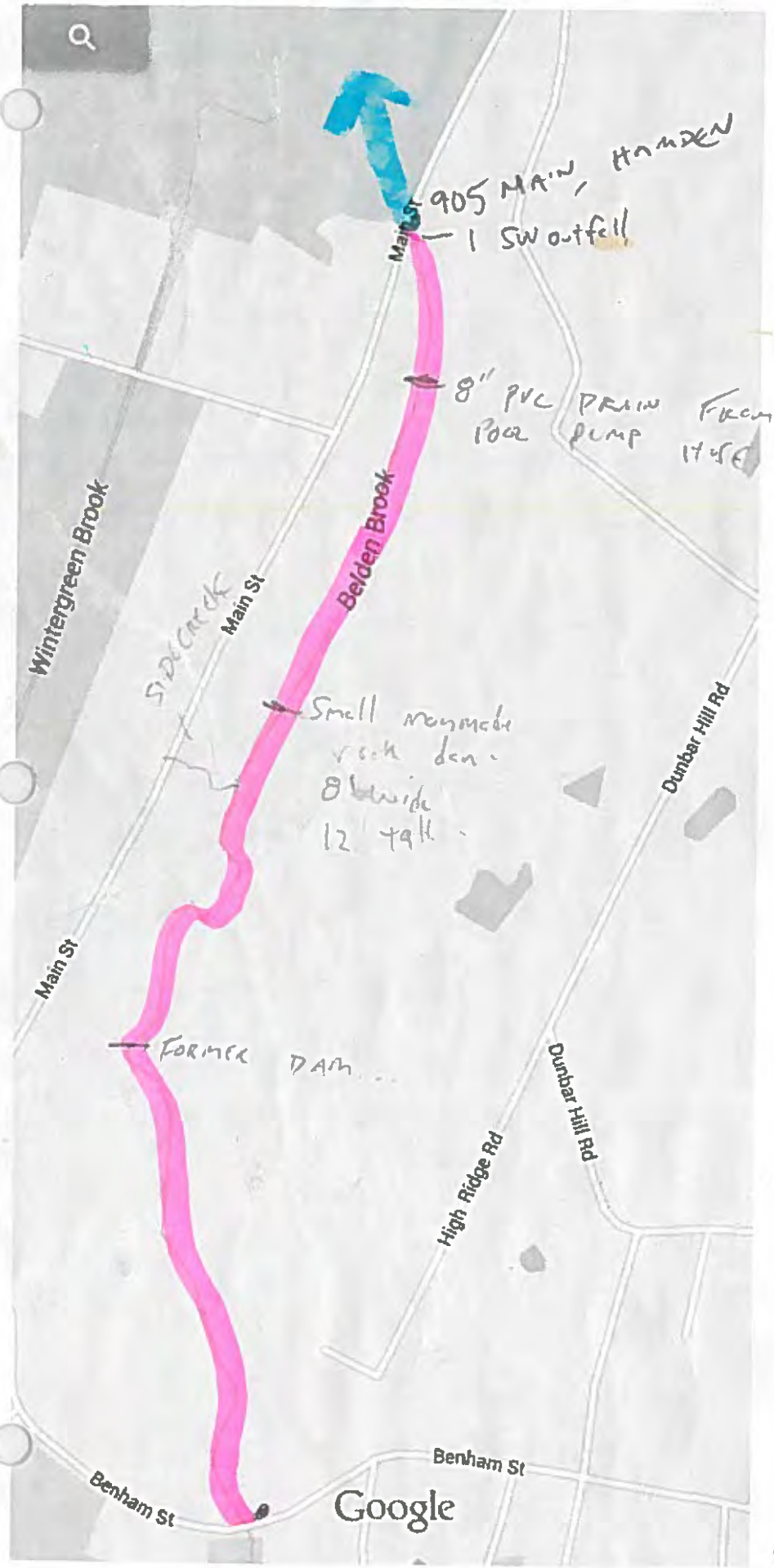
Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Two steps – 6", 3.5'

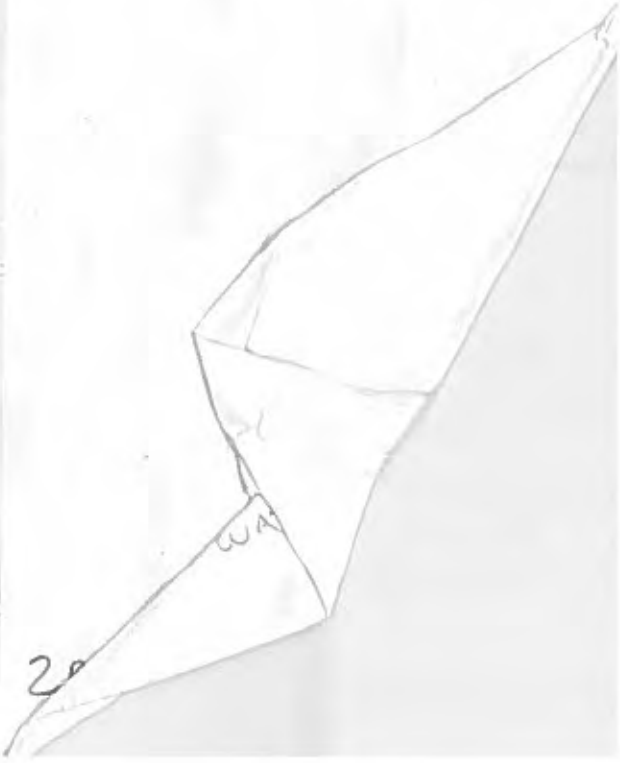
poured Conc. Structure

BLB5 0.44m?



915 BENHAM

BLB4 1.03m



CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s):
Name of Stream: BELDEN	Assessed By: ASHA, BRIAN
Reach Code: BLB - 4	2PM - 3:00
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☒ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 5' (1-8')			Glide Depth:	
Riffle Depth: 1'			Step Height: 4"	
Pool Depth: 1'			Bank Height (Right Bank): 1.5'	
Run Depth:			Bank Height (Left Bank): 1.5'	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay X	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	1
Storm Water Outfall	1
Modified Channel	
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass None L	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass X	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees X	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☒ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 2 .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-14-15
Name of Stream: BELDEN	Assessed By: B, A
Reach Code: BLB-5	3-330 PM
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☐ Yes ☐ No, Which section(s) were not surveyed? Why?

STREAM WIDTH < 12", DEPTH @ 2-3", HARD TO TRACK, VERY MARSHY, THICK UNDERSTORY - NO NEED TO RESURVEY

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements. MARSHY TRICKLE				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 12'			Glide Depth:	
Riffle Depth: 2"-3"			Step Height:	
Pool Depth: 2"-3"			Bank Height (Right Bank): < 3"	
Run Depth:			Bank Height (Left Bank): < 3"	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☒ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

LOT OF ORGANIC MUCK.

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion____
Fish Barrier____
Storm Water Outfall____
Modified Channel____
Impacted Buffer____
Trash / Debris____
Water Conditions____

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

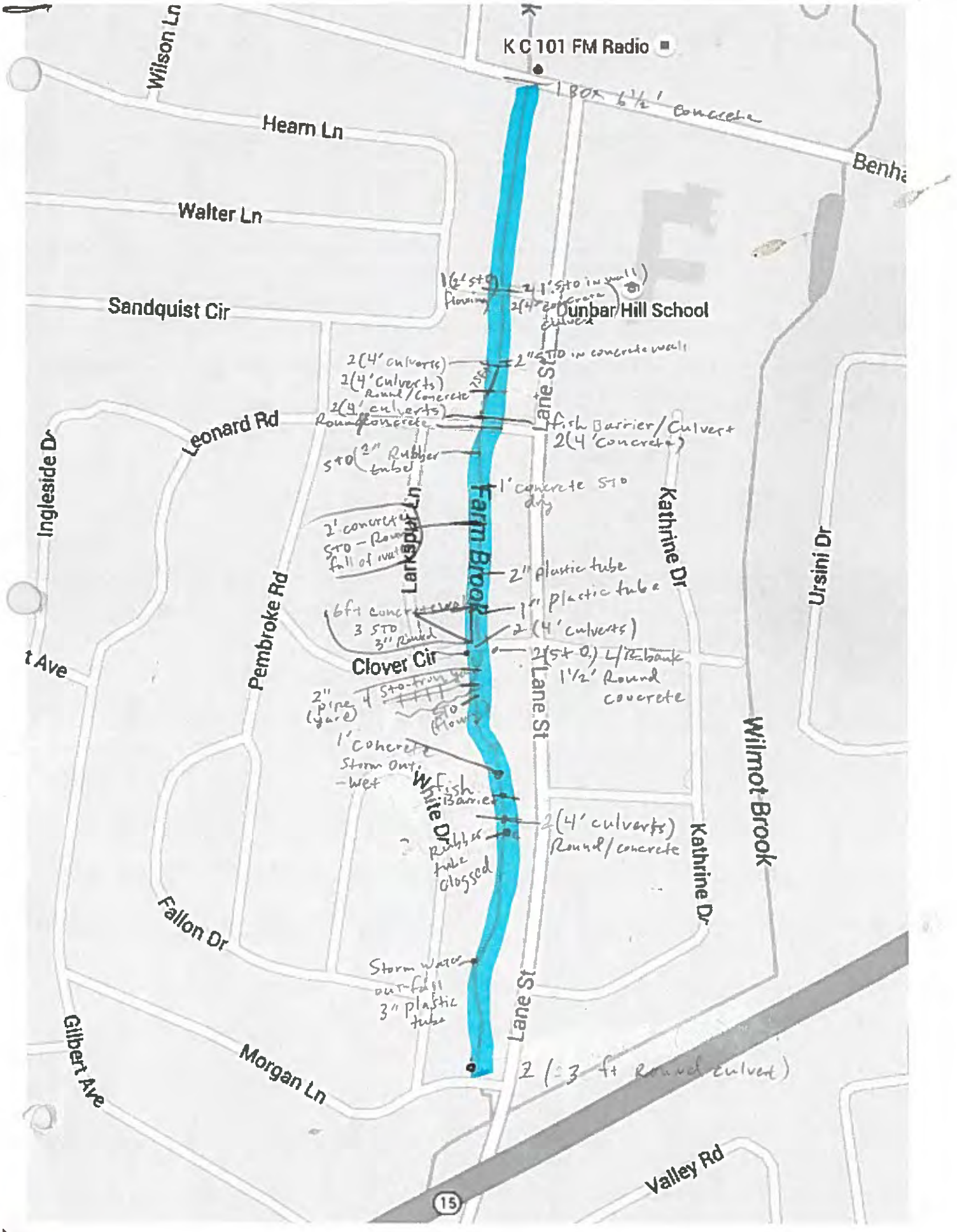
Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☐ Yes	☒ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

Completed Stream Assessment Forms
Farm Brook

B1 0.59m

499 BENHAM ST. HAMDEN



MORGAN LN, HAMDEN

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/13/15 10-11:30
Name of Stream: Farm Brook	Assessed By: RE / ZB / LCD
Reach Code: FB1	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☐ Run	☒ Glide	*☒ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 6'	Glide Depth: 6"
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank):
Run Depth:	Bank Height (Left Bank):

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	X
Storm Water Outfall	X
Modified Channel	X
Impacted Buffer	X
Trash / Debris	
Water Conditions	

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☒ Industrial	☐ Other
☒ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☒ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the map and provide a brief description of the location relative to roads or other landmarks.

☐ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☐ Residential	☐ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☐ Tires ☐ Metal ☐ Construction	☐ Appliances ☐ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☐ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where erosion is occurring:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site				
Length:	Left Bank:	ft.	Right Bank:	ft.
Bank Height:	Left Bank:	ft.	Right Bank:	ft.
Bank Angle:	Left Bank:	deg.	Right Bank:	deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)?

☐ < 15 ft.	☐ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☐ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

☐ Public	☐ Private	☐ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Developed By CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions /
Excessive Plant or Algae Growth

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Describe Water Conditions: Mark all that apply.			
☐ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	☐ Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☐ In Spots	☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/13/15 10-11-30
Name of Stream: Farm Brook	Assessed By: PE / ZB / LCD
Reach Code: FB1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☑ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Our falls are marked on map as STD - there are at least 23 throughout the reach. Mostly street or lawn drainage

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☑ Trickle	☒ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☒ Plastic	☒ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other	☒ Unknown
Pipe Outlet:	☒ Perched..... ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 1"- 3 ft.			
# of Pipes:	☐ 1	☐ 2		☒ 3 + (23)

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 8/13/15 10:00 - 1:30
Name of Stream: Farm Brook	Assessed By: RS / ZB / LCD
Reach Code: FB1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Entire Reach

Mark where the degraded buffer occurs.

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer:	ft. .59 mi
☒ **Right Bank**		Estimate length of degraded buffer:	ft. .59 mi

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☒	☒	☐
Right Bank	☐	☐	☒	☐	☒	☒	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 8/13/15 10-11:30
Name of Stream: Farm Brook	Assessed By: RE / ZB / LCD
Reach Code: FB1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

2 Fish Barriers: 1 Dam, 1 Culvert

Type of Barrier: Mark the type of fish barrier.

☑ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 2 ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials: ☐ Stone	☐ Concrete	☐ Stone & Concrete	☒ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☒ Ramped	☐ Submerged	
Culvert Size:	Diameter: 4 ft.	Height: ft.	Width: ft.	
# of Culverts: 2	**Culvert Length:** 60 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/13/15 10-11:30
Name of Stream: Farm Brook	Assessed By: RE / ZB / LCD
Reach Code: FB1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

Entire Reach

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: .59 ~~ft.~~ miles

Estimate height of bank modification: 2 ft.

Type of Manipulation:	☒ Channelization	☒ Bank Armoring	☒ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☑ Natural	☒ Rip Rap	☒ Concrete	☐ Gabions ☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

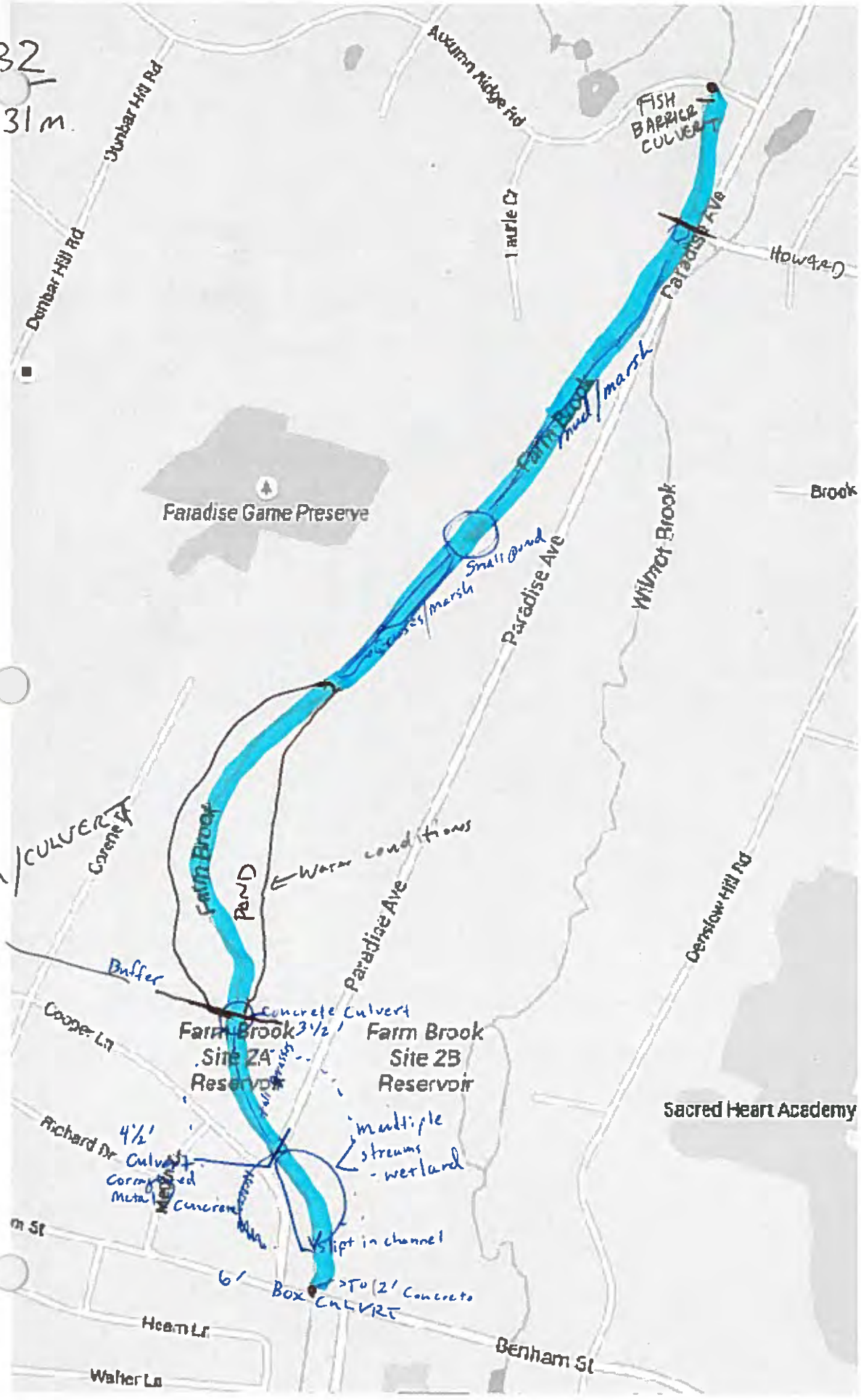
Notes: Use the space provided to record important observations otherwise not captures on this sheet.

One Section 6 ft wall (R Bank) mostly rip rap

Developed By CT-NRCS
January 2008

.6 AUTUMN RIDGE RD, HAMDEN

B2
-
1.31m



499 BENHAM ST HAMDEN

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/13/15 1:15-2:30
Name of Stream: Farm Brook	Assessed By: RE/ZB/LCD
Reach Code: FB2	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Large patches of marsh, impassible - appears to be mostly wetland

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 3'	Glide Depth: 4-6"
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank):
Run Depth:	Bank Height (Left Bank):

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☒ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	X
Storm Water Outfall	X
Modified Channel	
Impacted Buffer	
Trash / Debris	
Water Conditions	X

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☒ Agricultural	☐ Rural Residential	☒ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where erosion is occurring:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site				
Length:	Left Bank:	ft.	Right Bank:	ft.
Bank Height:	Left Bank:	ft.	Right Bank:	ft.
Bank Angle:	Left Bank:	deg.	Right Bank:	deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)?

☐ < 15 ft.	☐ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☐ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

☐ Public	☐ Private	☐ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions /
Excessive Plant or Algae Growth

Survey Basin Code:	Date: 8/13/15 1:15 - 2:30
Name of Stream: Farm Brook	Assessed By: RE / ZB / LCD
Reach Code: FB 2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Farm Brook Resivoir

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Describe Water Conditions: Mark all that apply.			
☐ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	☒ Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☒ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	☒ Everywhere
Attached: (e.g. water lily)	☐ Absent	☐ In Spots	☒ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☒ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☒ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☒ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Rusty Red bacteria near culvert

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

Mark where channel modification occurs:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft.

Estimate height of bank modification: ft.

Type of Manipulation:	☐ Channelization	☐ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☐ Right Bank	☐ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 6/17/15 1:15 - 2:30
Name of Stream: Farm Brook	Assessed By: RE / ZB / LCD
Reach Code: F32	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 25 ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials:	☐ Stone	☒ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☒ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☒ Ramped	☐ Submerged	
Culvert Size:	Diameter: 3 ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** 50 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☒ Other
Length of Barrier: 250 ft.	**Approx. Vertical Rise:** 30 ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Large Reservoir

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/13/15 1:15-2:30
Name of Stream: Farm Brook	Assessed By: RE / ZB / LCD
Reach Code: FB2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

☐ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☐ Residential	☐ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☐ Tires ☐ Metal ☐ Construction	☐ Appliances ☐ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☐ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☐ **Left Bank**		Estimate length of degraded buffer:	ft.
☐ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☐	☐	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

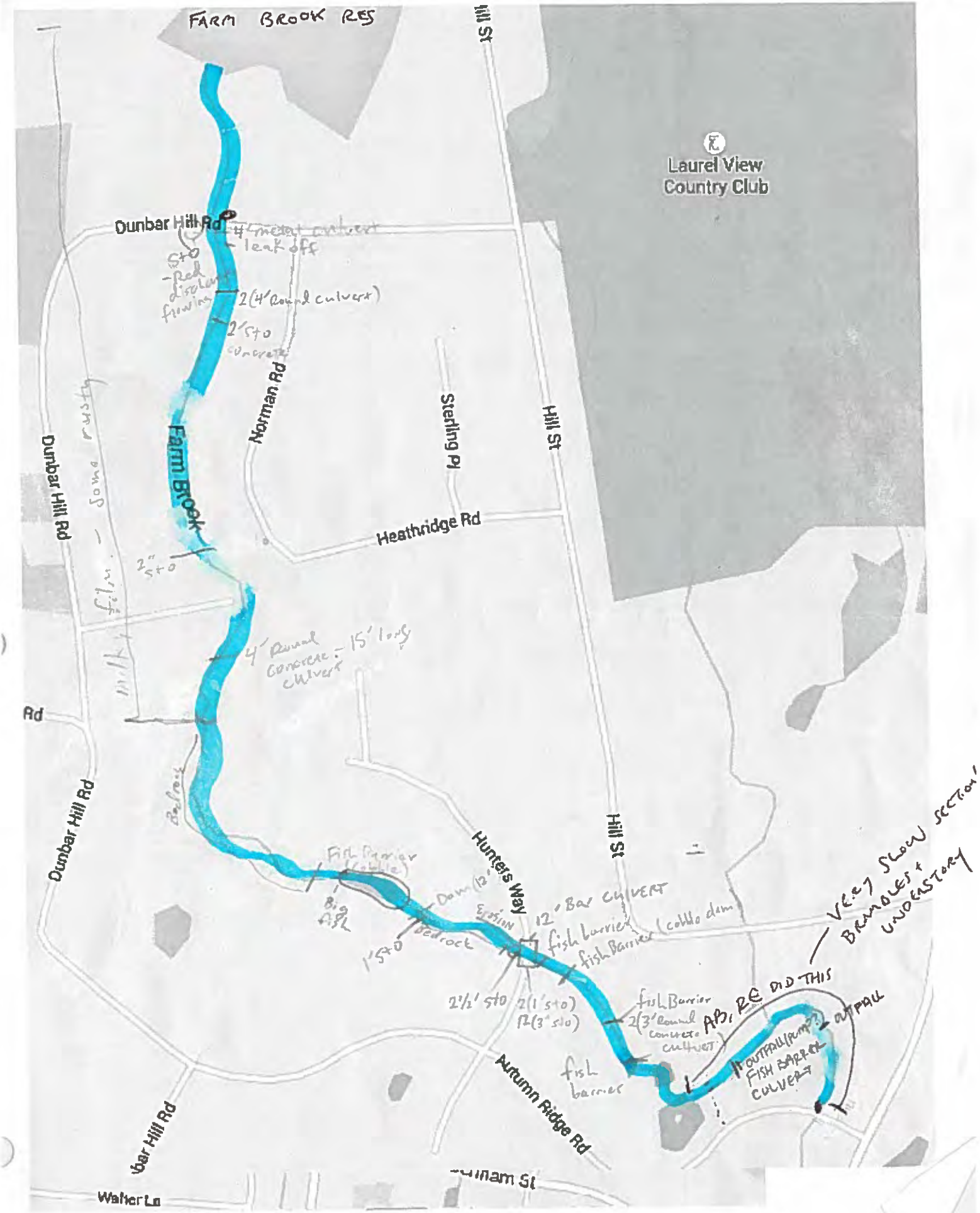
Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By CT-NRCS
January 2008

33 .1.37m

1430 DUNBAR HILL RD



16 AUTUMN RIDGE RD. HAMDEN

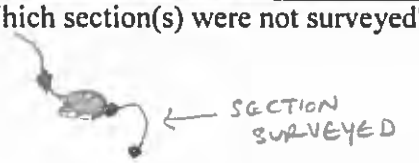
CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/21/15 9-10.15 AM 8/18/15
Name of Stream: FARM BROOK	Assessed By: AB RE 9:30-11:20
Reach Code: FB3	RE /LCD
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?



Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 6'	Glide Depth:
Riffle Depth: 2'	Step Height:
Pool Depth: 1 1/2'	Bank Height (Right Bank): 1 1/2'
Run Depth:	Bank Height (Left Bank): 1 1/2'

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☒ Rusty-Red	*☒ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	X
Storm Water Outfall	X
Modified Channel	
Impacted Buffer	X
Trash / Debris	
Water Conditions	X

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:		Date: 7/21/15	8/18/15
Name of Stream: FARMBROOK		Assessed By: AB BE	RE LCD
Reach Code: FB3			
Designated Stream Type:			
Site ID:			

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

① IN INITIAL BEND OF REACH, LEADING INTO GARDEN

② AT CULVERT BEFORE POND (outfalls are labled STO on map)

Outfall Type:	☒ Pipe	☒ Leak Off	☐ Channel	
Flow:	☐ None	☒ Trickle (Red discharge)	☐ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☒ Corrugated Metal	☒ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other GARDEN	☐ Unknown
Pipe Outlet:	☒ Perched..... ft.	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: 2'-2" ft.			
# of Pipes:	☐ 1	☐ 2	☒ 3 + 19	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☒ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☒ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.	10'			
Width of Swale: ft.	2'			

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

PLASTIC HOSES USED TO WATTER GARDEN

- Large BOX culvert under Hunter's Way had many small STO's draining into culvert - 12 in total

- Last STO before the Reservoire had rusty Red discharge

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7/21/15 9-10.15
Name of Stream: FARMBROOK	Assessed By: AB RE
Reach Code: FB3	
Designated Stream Type:	8/18/15 - RE LCD
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

BRIDGE AT AUTUMN RIDGE AVE. LEFT CULVERT TOO SHALLOW
RIGHT CULVERT BLOCKED WITH ROCKS

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 20 ft.	**Length of Spillway:** 10 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials:	☒ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☒ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☒ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☒ Box (3)	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☒ Submerged	
Culvert Size:	Diameter: ft.	Height: 6½ - 12 ft.	Width: 25 ft.	
# of Culverts: 2	**Culvert Length:** 45 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Several cobble dams
Bedrock slopes

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7/22/15
Name of Stream: FARMBROOK	Assessed By: AB RE
Reach Code: FLB3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.
LAWN OF HOUSE ON LEFT BANK

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer: 100 ft.	
☐ **Right Bank**		Estimate length of degraded buffer: ft.	

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

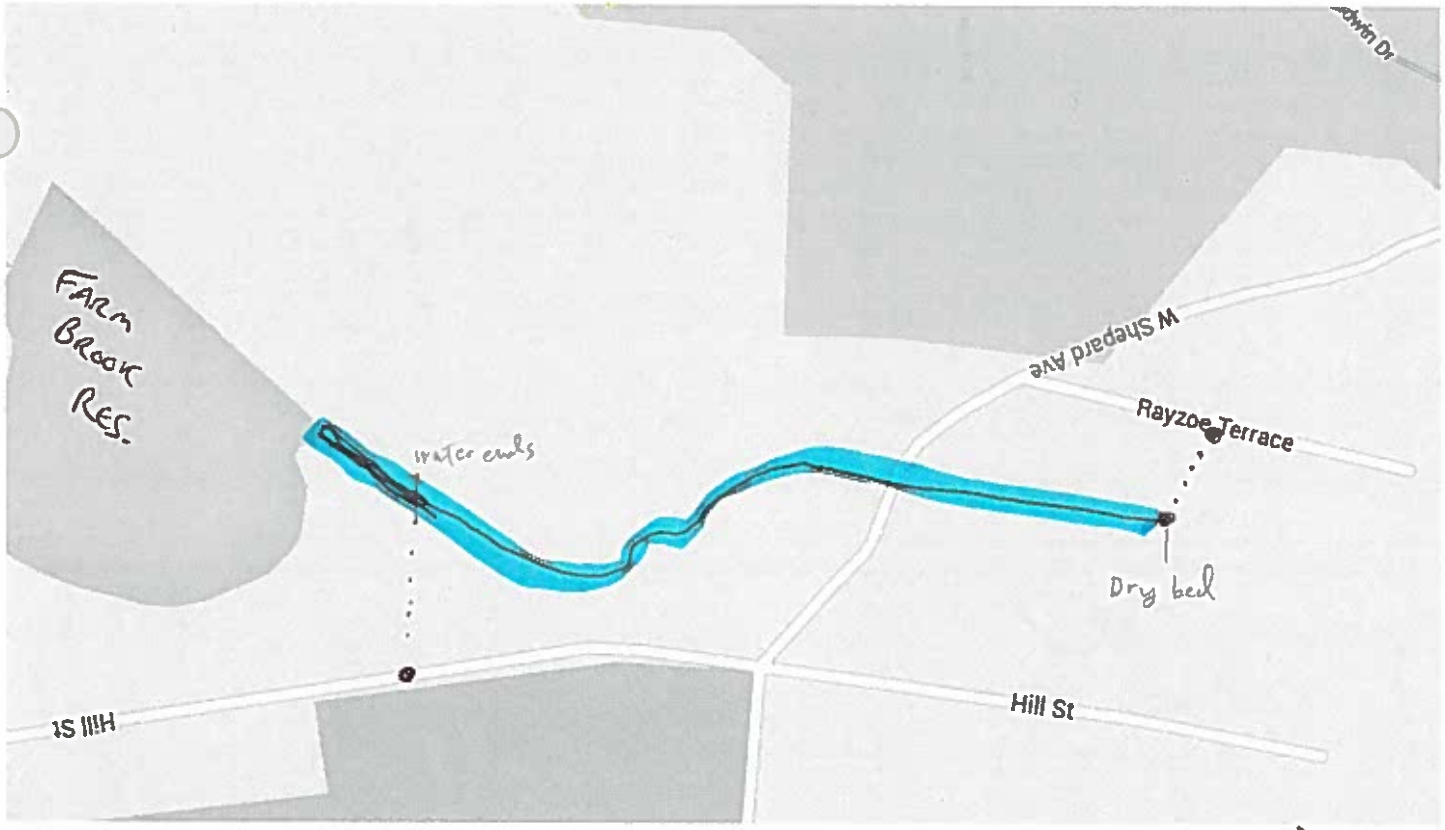
Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☐	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

FB 4 0.48 mi



29 RAYZOE TERRACE, HAMDEN

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8-18-15 11:45-12:00
Name of Stream: FARM Brook	Assessed By: RE LCD
Reach Code: FB 4	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☐ Yes ☒ No, Which section(s) were not surveyed? Why?

The stream bed was dry.

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width:			Glide Depth:	
Riffle Depth:			Step Height:	
Pool Depth:			Bank Height (Right Bank):	
Run Depth:			Bank Height (Left Bank):	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☐ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion
Fish Barrier
Storm Water Outfall
Modified Channel
Impacted Buffer
Trash / Debris
Water Conditions

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☑ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions / Excessive Plant or Algae Growth

Survey Basin Code:	Date: 8/18/15
Name of Stream: Farm Brook	Assessed By: RE LCD
Reach Code: FB3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Describe Water Conditions: Mark all that apply.

☐ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	☒ Rusty-Red	☒ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☑ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☐ Absent	☒ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☐ In Spots	☒ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☒ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☐ Yes	☒ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Change is downstream of Farm Brook Reservoir

Completed Stream Assessment Forms
Lower West River

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/19/15
Name of Stream: West River	Assessed By: Gary Zrelak
Reach Code:	Frank DeLeo
Designated Stream Type:	Frank Cochran
Site ID: #1	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Latitude 41.293° Longitude -72.9495°

#1 on Map Drainage thru Rip Rap

Outfall Type:	☐ Pipe	☐ Leak Off	☐ Channel	Flow thru Rip Rap
Flow:	☐ None	☐ Trickle	☒ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☒ Road	☒ Parking Lot	☐ Recreational Field	☒ Other Construction Area
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Bank has rip rap, flow from above area has construction material storage.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/19/15
Name of Stream: West River	Assessed By: Gary Zrelak
Reach Code:	Frank DeLeo
Designated Stream Type:	Frank Condrau
Site ID: #2	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Latitude – 41.29351° Longitude -72.95009°

#2 on Map – Appears to be a line behind the rip rap.

Outfall Type:	☐ Pipe	☐ Leak Off	☐ Channel	Flow thru rip rap
Flow:	☐ None	☐ Trickle	☒ Moderate	☐ Substantial
Odor:	☐ None	☒ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Cloudy discharge and odorous, discharge is in line with Printers Lane, storm sewer from 2 catch basins is shown on GIS map.

avity Main
rce main
essure Sewer

Drain Manhole
Drain Lateral
Drain Line

Private Mains

Force main
Gravity main

Active

Cross Connections

Abandoned

GNHWPCA_GIS.DBO.sewermanholeForm

0 0.02
0 0.0

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/19/15
Name of Stream: West River	Assessed By: Gary Zvelak
Reach Code:	Frank Delco
Designated Stream Type:	Frank Cochran
Site ID: # 3	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Latitude - 41.29524° Longitude -72.95091°

#3 on Map - Appears to drainage from Flea Market Parking Lot

Outfall Type:	☐ Pipe	☐ Leak Off	☐ Channel	Thru Rip Rap
Flow:	☐ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☒ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/19/15
Name of Stream: West River	Assessed By: Gary Zrelak
Reach Code:	Frank Deleo
Designated Stream Type:	Frank Cochran
Site ID: # 4	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Latitude – 41.29703° Longitude – 72.9506°

#4 on Map Tide Gate on West side has loose gasket.

Outfall Type:	☐ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/19/15
Name of Stream:	Assessed By: Gary Zrelak
Reach Code:	Frank DeLeo
Designated Stream Type:	Frank Cochran
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Latitude 41.29262° Longitude -72.94602°

#5 on Map Parking Lot drainage from H Academy

Outfall Type:	☐ Pipe	☐ Leak Off	☒ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

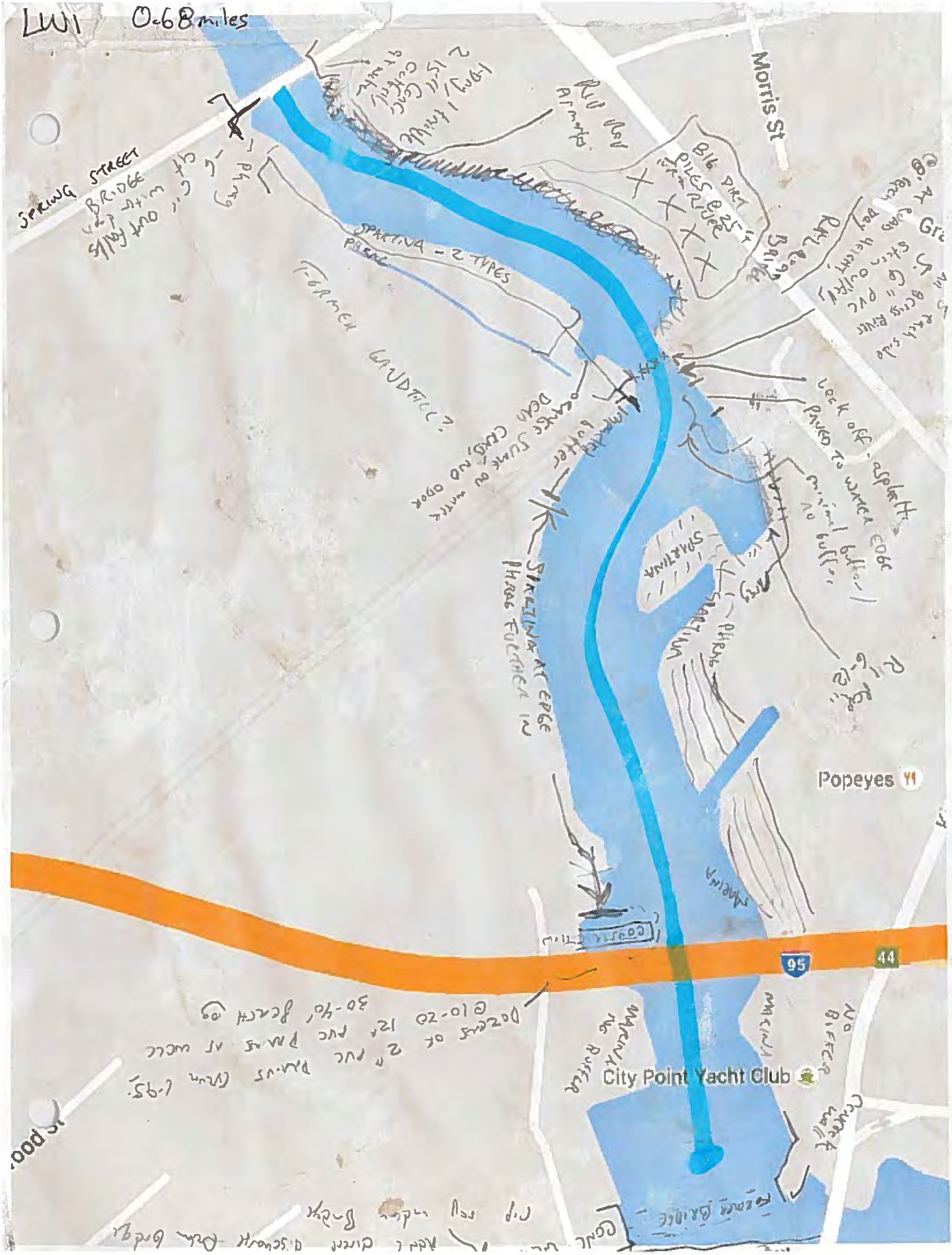
Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☒ Earthen
Contributing Source (s):	☐ Road	☒ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☒ Earthen	
Contributing Source (s):	☐ Road	☒ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.



LWI 0.68 miles
SPRING STREET BRIDGE
SPARTINA - 2 TYPES
FORMER LANDFILL?
Morris St
BIG DIRT PILES
SPARTINA
STRETTINA AT EDGE
PHRAG FURTHER IN
lock off asphalt
Paved to water edge
minimal buffer / no buffer
MARINA
CONSTRUCTION
95
44
Popeyes
City Point Yacht Club
MARINA no buffer
NO BUFFER
Concrete wall
ood St

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/13/15
Name of Stream: WEST RIVER	Assessed By: GP TEAM - JC GM BH AP KB
Reach Code: LW-1	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☒ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 200'	Glide Depth:
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank): 6"
Run Depth: >5'	Bank Height (Left Bank): 6"

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	X
Fish Barrier	X
Storm Water Outfall	1
Modified Channel	X
Impacted Buffer	1
Trash / Debris	X
Water Conditions	X

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☒ < 25% covered

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☐ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☒ Other	☐ Industrial	☒ Other	☐ Industrial	☒ Other
☒ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: DOZENS - 2 NOT AT BRIDGES	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 8/13/15
Name of Stream: WEST RIVER	Assessed By: GP TEAM
Reach Code: LW-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

BANKS HAVE SPARTINA IMMEDIATELY AT BANK, WITH PHRAGMITES FURTHER INLAND. SOME RIPRAP + MINIMAL WIDTH

Mark where the degraded buffer occurs.

☒ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer:	ft.
☒ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☒ Minimal Width	☒ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☒	☒	☐	☐
Right Bank	☐	☐	☐	☒	☒	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☒ Commercial	☒ Forested
	☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☐ < 15 ft.	☒ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☒ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/13/15
Name of Stream: WEST RIVER	Assessed By: GP TEAM
Reach Code: LW-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Multiple PVC outfalls at Spring St + I-95 - ALL DRY
2 15' CONC outfalls at Spring St. - 1 TRICKLE, 1 DRY
ONE LEAK OFF- RIV L. NEAR RR BRIDGE

Outfall Type:	☒ Pipe	☒ Leak Off	☐ Channel	
Flow:	☒ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☒ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched UP TO 40' ft	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: .5 to 1.25' ft.			
# of Pipes:	☐ 1	☐ 2	☒ 3 + MANY	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☒ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☒ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: 15 **ft.**				
Width of Swale: 6 **ft.**				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: **ft.**					
Channel Width: **ft.**					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/13/15
Name of Stream: WEST RIVER	Assessed By: GP TEAM
Reach Code: LW-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

RIP RAP ARMORING ALONG R/U L BANK – RAILROAD TO SPRING ST.

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: 2000 ft.

Estimate height of bank modification: 3 ft.

Type of Manipulation:	☐ Channelization	☒ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☐ Right Bank	☒ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☒ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

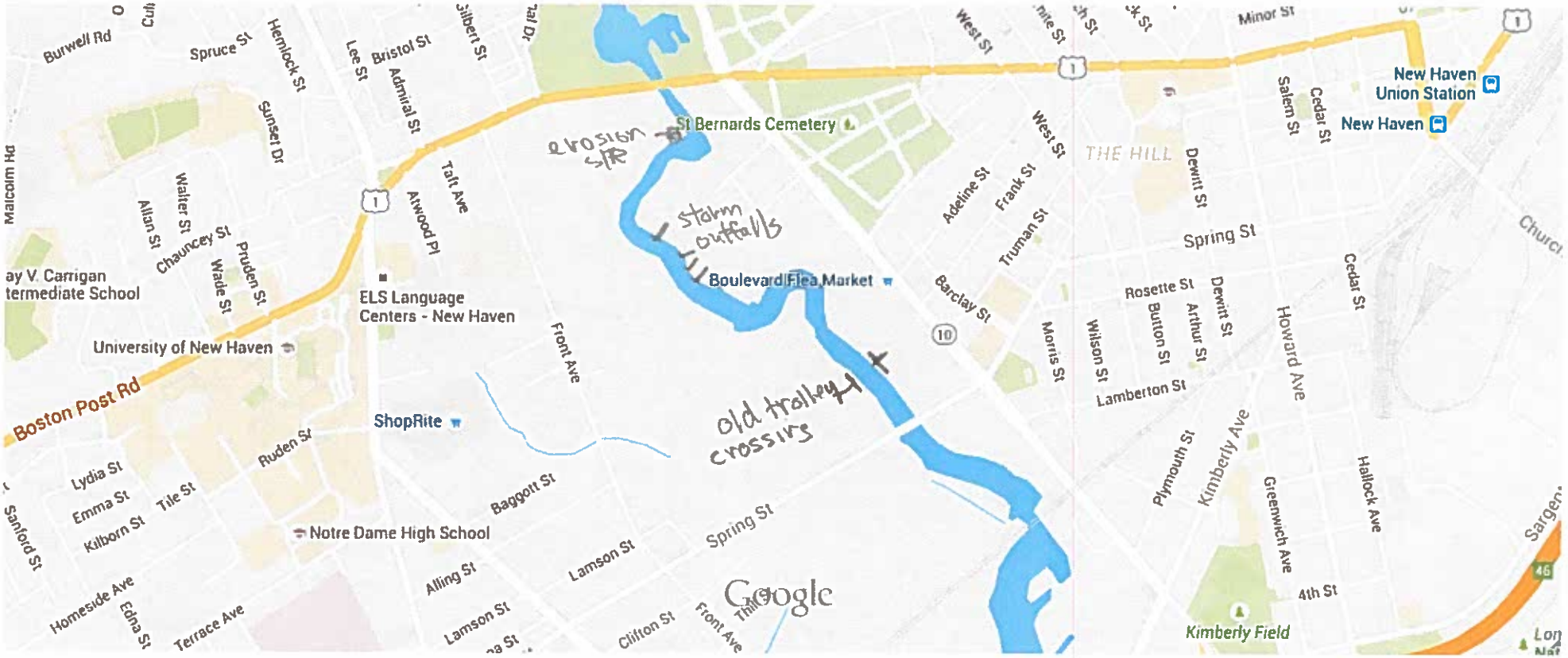
Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☐ < 15 ft.	☒ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Google Maps


Burwell Rd
Spruce St
Hemlock St
Lee St
Bristol St
Admiral St
Sunset Dr
Tait Ave
Atwood Pl
Allan St
Walter St
Chauncey St
Wade St
Pruden St
ay V. Carrigan
termediate School
ELS Language
Centers - New Haven
University of New Haven
Boston Post Rd
ShopRite
Front Ave
Ruden St
Lydia St
Emma St
Kilborn St
Tile St
Baggott St
Notre Dame High School
Alling St
Lamson St
Spring St
Homeside Ave
Edna St
Terrace Ave
Clifton St
Front Ave
St Bernards Cemetery
Boulevard Flea Market
Barclay St
Morris St
West St
Adeline St
Frank St
Truman St
THE HILL
Dewitt St
Spring St
Rosette St
Button St
Arthur St
Dewitt St
Wilson St
Lamberton St
Howard Ave
Cedar St
Plymouth St
Kimberly Ave
Greenwich Ave
Hallock Ave
4th St
Kimberly Field
Minor St
Salem St
Cedar St
New Haven
Union Station
New Haven
Google
Map data ©2015 Google
1000 ft

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code: LW2	Date(s): 8/19/2015
Name of Stream: West River	Assessed By: Frank Cochran, Frank Dilre
Reach Code: LW 2	Gary Zrelak
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 80' - 120'			Glide Depth: 3'	
Riffle Depth:			Step Height:	
Pool Depth:			Bank Height (Right Bank): 3' - 5'	
Run Depth:			Bank Height (Left Bank): 6' +	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☐ Clear	☐ Stained ("iced tea")	*☒ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☒ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	✓
Fish Barrier	✓
Storm Water Outfall	✓
Modified Channel	
Impacted Buffer	
Trash / Debris	✓
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☒ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☒ Industrial	☐ Other	☒ Industrial	☒ Other
☐ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: ____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

1. Much of the buffer and ~~surrounding~~ abutting land on the right hand (westerly side) is tidal wetland
2. As to stream bank erosion, there was evidence in many places of previous efforts to address and a few where more may be needed
3. Fish barrier = tide gates
4. Much of the "riparian buffer" consists of old rip rap with vegetated infill

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: .	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

General Notes

1. Behind Riverside Academy, our launch site, there is a vegetative buffer, believed to be spartina, and half of it mowed, but seemingly healthy. We launched over the mud flat adjoining it, at low tide, disturbing some of the vast quantity of fiddler crabs seen throughout our survey. A formal boat launch should be constructed at that site for kayaks + canoes.

2. The water turbidity was general: one could not see the substrate more than a foot. While most of this was probably silt, some may have been fecal material which "bounces" on tide changes.

3. Whatever the water quality issues, the birds are doing well. We saw waders of all sizes, jumping fish and literally thousands of crabs as well as mussels, oysters (some growing on chunks of asphalt.)

4. Probably most noticeable is the salt marsh to the west (right) of this reach. It is extensive and appears to serve as buffer for the several uses beyond. Also notable is a deteriorated trolley bridge; pilings remain there and for two docking or viewing facilities in this reach.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☐ Left Bank Mark and label the location of the outfall on the <u>map</u> and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☐ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date: 8/19/2015
Name of Stream: West River	Assessed By: Frank Cochran, Frank Dilen
Reach Code: LW 2	Gary Drelak
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Right hand side perhaps 150 yds below tide gates

Mark where erosion is occurring:

☒ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site				
Length:	Left Bank:	ft.	Right Bank: 20'	ft.
Bank Height:	Left Bank:	ft.	Right Bank: 6'	ft.
Bank Angle:	Left Bank:	deg.	Right Bank:	deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)?

☐ < 15 ft.	☐ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☒ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

☐ Public	☒ Private	☐ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Someone had cut a trail through vegetation - erosion created mud/sand bar much favored by small shore birds

N.B. There were numerous points, particularly along the left side with evidence of old erosion remedied by (formal and informal) "rip rap" composed of stone, old blacktop tires and in one instance, an engine block. We do not advise disturbing this pattern.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☐ **Left Bank**		Estimate length of degraded buffer:	ft.
☐ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☐	☐	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/19/2015
Name of Stream: West River	Assessed By: Frank Cochran, Frank DiLeo, Gary Zrelak
Reach Code: LW2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

Most of left hand side bank of this reach - banks had been raised by fill etc (old) and modified by a variety of forms of rip rap

Mark where channel modification occurs:

☒ Meander Bend	☒ Straight Section	☒ Steep Slope/~~Valley Wall~~	☐ Other

Estimate length of channel modification: 4000 ft.

Estimate height of bank modification: 6 ft. – 12ft (variable)

Type of Manipulation:	☐ Channelization	☒ Bank Armoring	☐ Concrete Channel		☐ Other
Extent of Manipulation:	☐ Right Bank	☒ Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☐ Natural	☒ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
☐ Suburban Residential	☒ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☒ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

1. Although there is little space for riparian vegetation above the rip rap slopes due to use of land for parking etc, there was, in most though not all places, "invasive" and other riparian vegetation growing in/on rip rap

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 8/19/2015
Name of Stream: West River	Assessed By: Frank Cochran, Frank DiLeo, Gary Zrelak
Reach Code: 2W2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

Just down from Route 1. Tide gates

Type of Barrier: Mark the type of fish barrier.			
☐ Dam	☐ Culvert	☐ Velocity Barrier	☒ Other

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent		
Materials:	☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other	

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

A number of the older tide gates are deteriorating fairly fast. If they were replaced, more fish would pass.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 8/19/2015
Name of Stream: West River	Assessed By:
Reach Code: LW 2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

☐ Within Stream	☐ Riparian Area: ☒ Left Bank ☒ Right Bank

Type:	☐ Residential	☐ Commercial	☒ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☒ Tires ☐ Metal ☐ Construction	☐ Appliances ☒ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☒ Private	☒ Public	☑ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

We have elected to use one form, and not the map because while there were a great number of tires in in many portions of the left side of the reach, and some on the right, they were for the most part helping to stabilize mud banks. The same was true of several other automotive "wastes" and much of the blacktop chunk rip rap (A photo shows mussels growing on old blacktop.

There were also at least three shoping carts, some floating material on the incoming tide, but few if any plastic bags, beer cans etc.


8/19/2015


8/19/2015


8/19/2015

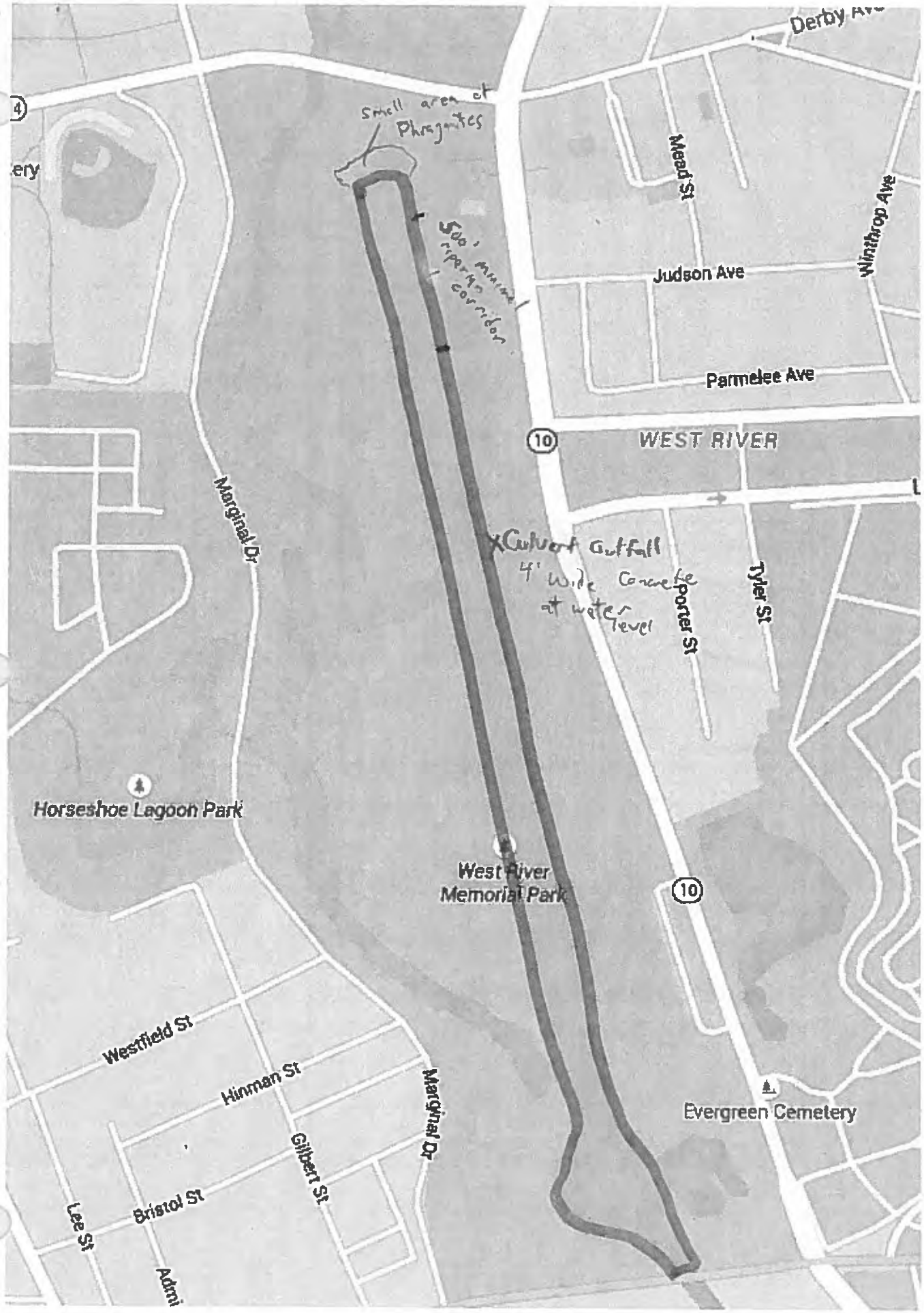

8/19/2015


8/19/2015


8/19/2015


8/19/2015

LW3 0.88 m


Derby Ave
Small area of Phragmites
Mead St
Winthrop Ave
500' marsh riparian corridor
Judson Ave
Parmelee Ave
10
WEST RIVER
Marginal Dr
X Culvert Outfall
4' Wide Concrete
at water level
Porter St
Tyler St
Horseshoe Lagoon Park
West River Memorial Park
10
Westfield St
Hinman St
Marginal Dr
Gilbert St
Bristol St
Lee St
Admi
Evergreen Cemetery

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/13/15
Name of Stream: West River	Assessed By: BH TA KB
Reach Code: LW-3	130-245
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☒ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 175'	Glide Depth:
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank): 12"
Run Depth: > 5'	Bank Height (Left Bank): 12"

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☒ 25-50%	☒ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☒ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☒ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	
Modified Channel	
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		< ¼ Mile from stream		> ¼ Mile from stream	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational	☒ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/13/15
Name of Stream: WEST RIVER	Assessed By: BH KB TA
Reach Code: LW3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

IN LINE W/ LEGION AVE

Outfall Type:	☐ Pipe	☐ Leak Off	☒ Channel	CULVERT
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☒ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☒ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ? ft.					
Channel Width: 4 ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CULVERT RECTANGULAR BOX @ 4' WIDE, 18" TALL

AT RIVER LEVEL

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 8/13/15
Name of Stream: WEST RIVER	Assessed By: BH TA KB
Reach Code: LW-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

NARROW BUFFER ALONG PARK AT NORTH END @ 500' LONG

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer: 506 ft.	
☐ **Right Bank**		Estimate length of degraded buffer: ft.	

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☒	☒	☐	☐
Right Bank	☐	☐	☐	☒	☒	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☒ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/13/15
Name of Stream: WEST RIVER	Assessed By: BH KB TA
Reach Code: LW-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

ENTIRE CHANNEL IS MAN MADE + DREDGED

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ~~X~~ 0.8 MILES

Estimate height of bank modification: ft.

Type of Manipulation:	☒ Channelization	☐ Bank Armoring	☐ Concrete Channel		☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☒ Channel Bottom		
Channel / Bank Materials:	☒ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational

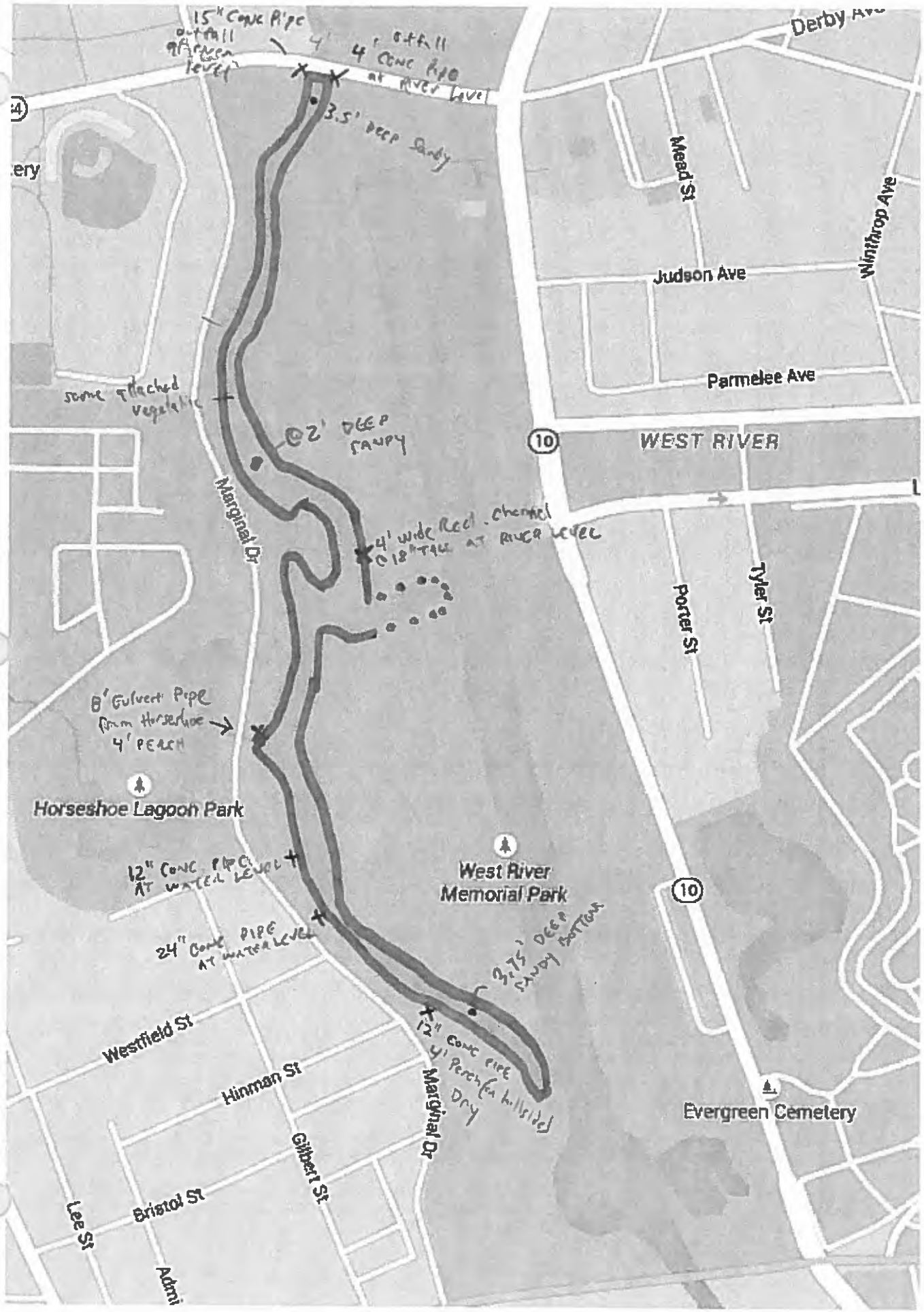
Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☐ < 15 ft.	☒ 15 – 35 ft. RL	☐ 35 – 50 ft.	☐ 50 – 100 ft	☒ > 100 ft RR

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☒ Yes	☐ No
Is the channel connected to a floodplain?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

LW.4 0.95 m



PARK AT @ 40 Boston Post Rd.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/13/15
Name of Stream: WEST RIVER	Assessed By: BH KB TA
Reach Code: LW-4	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☒ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 60'	Glide Depth:
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank): 12"
Run Depth: 3'	Bank Height (Left Bank): 12"

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☐ 75-50% covered	☒ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	1
Modified Channel	
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☒ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☒ Urban Residential	☐ Recreational	☒ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☒ Other
☐ Commercial		☐ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 7 .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8-13-15
Name of Stream: WEST RIVER	Assessed By: RH TA KB
Reach Code: LW-4	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☒ Channel	
Flow:	☐ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 4 ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 0.5–8 ft.			
# of Pipes:	☐ 1	☐ 2		☒ 3 + 6

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☒ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☒ Unknown
Channel Length: ft.					
Channel Width: 4 ft.		18" TALL	CONNECTS TO REFLECTING POOL?		

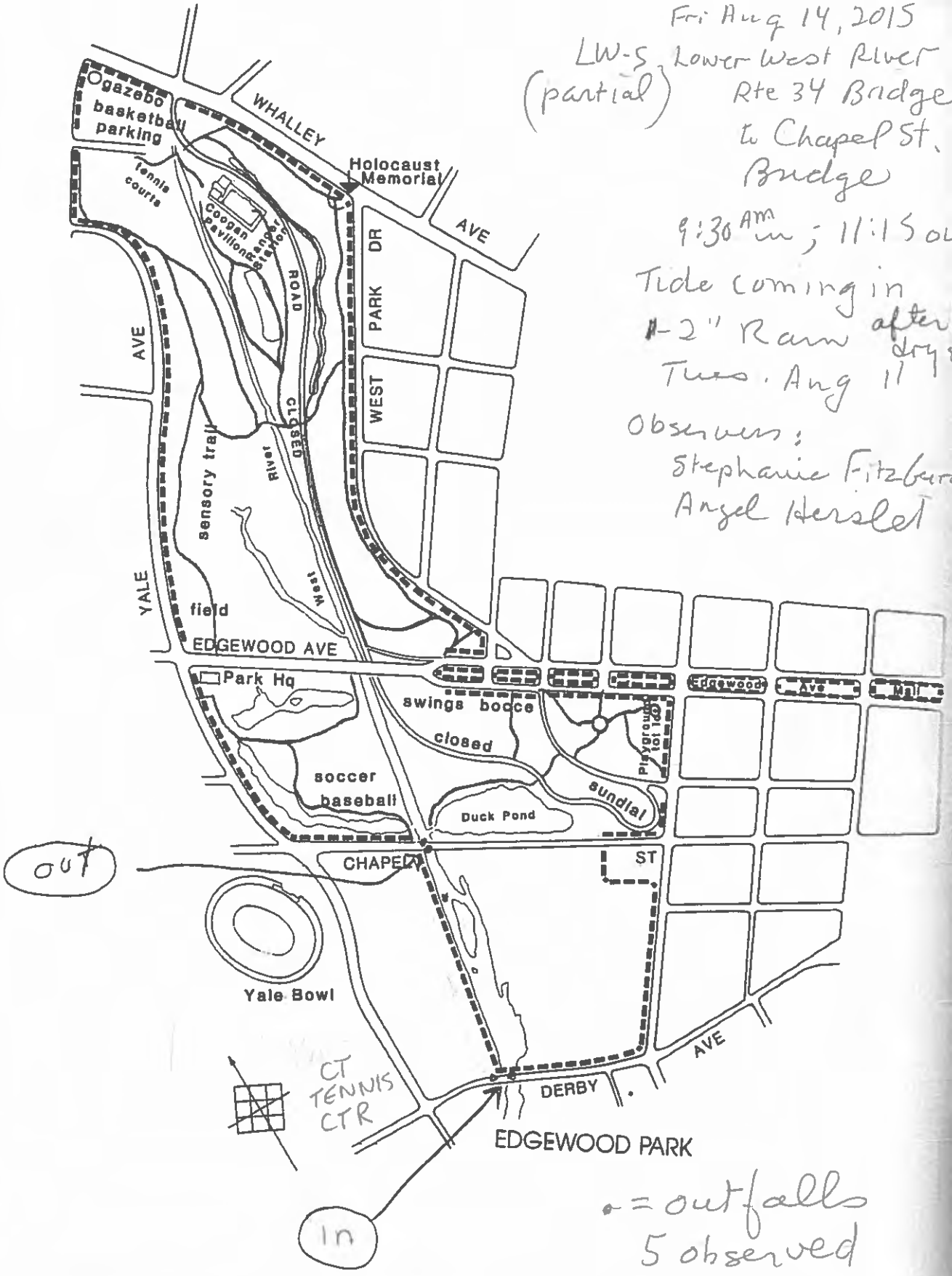
Notes: Use the space provided to record important observations otherwise not captures on this sheet.

15" CONC
4' CONC } AT RIVER LEVEL

8' CULVERT PIPE, 4' PERCH

12" CONC
24" CONC } AT WATER LEVEL

LW5



Fri Aug 14, 2015
LW-5 Lower West River
(partial) Rte 34 Bridge
to Chapel St.
Bridge
9:30 Am in; 11:15 out
Tide coming in
~2" Rain after low
Tues. Aug 11 dry spell

Observers:
Stephanie Fitzgerald
Angel Hersled

•=outfalls
5 observed

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): Aug 14 2015
Name of Stream: West River	Assessed By: Stephanie Fitzgerald
Reach Code: LW5	Angel Herstet
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☐ Yes ☒ No, Which section(s) were not surveyed? Why?
Rte. 34 Bridge to Chapel St Bridge.
Ran out of time.
May survey remainder from bank

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☐ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	35'	Glide Depth:	
Riffle Depth:		Step Height:	
Pool Depth:	5'	Bank Height (Right Bank):	5'
Run Depth:		Bank Height (Left Bank):	4' wetlands

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☐ Clear	☒ Stained ("iced tea")	*☒ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky when we walked through it
*☒ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

very few

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☒ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	0
Fish Barrier	0
Storm Water Outfall	6
Modified Channel	0
Impacted Buffer	0
Trash / Debris	1
Water Conditions	1

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

wetland & phragmites: Japanese knotweed

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☒ High *	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☒ Suburban Residential – R	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☒ Urban Residential	☐ Recreational
☐ Industrial	☒ Other park + wetland + tennis center R	☐ Industrial	☒ Other wetland + tennis ctr + lake bowl = R	☐ Industrial	☒ Other wetland + b
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

most notable concern – lots of solid brown particles floating in water everywhere we walked

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Could see flow of water going north (tidal action)
Average width of channel 35'
Average depth of water 2.5 - 3.5'
with shallower sandbars
no wind with deeper spots — middle up to 5' ft
smooth surface sometimes in middle
gentle tidal flow sometimes near one bank
always near outfalls

Along left side is large park wetland.
most plants: phragmites + some knotweed.

Along right bank — clay bank, Jap knotweed, some large trees — oaks + elms
some smaller understory trees dead - from return of tidal brackish water 4 yrs ago

Some birds observed — osprey, hawk, sea gulls, Canada geese, ducks, kingfisher (?) + other small birds.

Tree canopy cover varies from almost none to 75% → average 50% - 25%

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/14/13
Name of Stream: West River	Assessed By:
Reach Code: LW5	Stephanie FitzGerald
Designated Stream Type:	Angel Hernandez
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Under Rte 34 Bridge

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☒ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2.5 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Nothing coming out of pipe.
River Water smelled of sewage.
Water deeper near pipe.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/14/15
Name of Stream: West River	Assessed By: Stephanie Fitzgerald
Reach Code: LWS	Angel Heaslet
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

under Rt. 34 Bridge

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☒ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2.5 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Nothing coming out of pipe.
river water smelled of sewage.
Stream depth greater near pipe outfa

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/14/13
Name of Stream: West River	Assessed By: Stephanie FitzGerald
Reach Code: LWR	Angel Wesselet
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

2/3 of way up to Chapel St. Bridge from Rte. 34: at Tennis Center Parking Lot

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow: ?	☐ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☒ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☒ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped	☒ At Stream Level	half subm
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☒ 1	☐ 2	☐ 3 +	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

didn't notice water movement nearby ∴ no outflow?

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/14/15
Name of Stream: W River	Assessed By:
Reach Code: LW 5	Stephanie FitzGerald
Designated Stream Type:	
Site ID:	Angel Hensley

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Under Chapel St. Bridge

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 1/2 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/14/13
Name of Stream: W River	Assessed By: Stephanie FitzGerald
Reach Code: LW 5	Angel Heeslet
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

under Chapel St. Bridge (South) of 3

clear always running from a spring

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☒ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2½ ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/14/15
Name of Stream: West River	Assessed By: Stephanie FitzGerald
Reach Code: LWS	Angel Marslet
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

under Chapel St. Bridge (north) 8/2

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☐ Green	☐ Orange

appeared clear

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2½ ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3+

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 8/14/15
Name of Stream: W River	Assessed By: Stephanie Fitzgerald
Reach Code: LW 5	Angel Hensley
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

Overall, very little trash/debris in river; saw 1 med.-sized TV, some plastic water bottles + some potato chip ba

☒ Within Stream | ☐ Riparian Area: ☒ Left Bank ☒ Right Bank

Type:	☐ Residential	☐ Commercial	☐ Industrial	☒ Parkland
Material:	☒ Plastic ☐ Paper ☐ Yard Waste	☐ Tires ☐ Metal ☐ Construction	☐ Appliances ☐ Automotive ☐ Medical	☒ Other TV
Source:	☒ Unknown	☐ Flooding	☒ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☒ Public	☐ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Along shore – more litter especially under Chapel St Bridge on the left bank,

(4)

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions / Excessive Plant or Algae Growth

Survey Basin Code:	Date: 8/14/15
Name of Stream: West River	Assessed By:
Reach Code: LWS	Stephanie Fitz Gerald
Designated Stream Type:	Angel Heralet
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the map. 2) Briefly describe the location of the site relative to roads or other landmarks.

Water the same from Rte 34 - Chapel St.
Floating brown substance everywhere
Some floating tiny bubble clusters about 1½" diameter, a little oil? 3-5" patches occasional

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the ~~modified~~ section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Park lan

Describe Water Conditions: Mark all that apply. when stirred up

☐ Clear	☒ Stained ("iced tea")	☒ Turbid (muddy / silty)	☐ Odors
☐ Green	☐ Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☐ 75-50% covered	☒ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☐ Yes	☐ No

NI

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Saw lots of minnows, barnacles attached to submerged branches
Some submerged tree trunks & branches

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/22/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B
Reach Code: LW5	+ WILL,
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 39'	Glide Depth: 12"
Riffle Depth: 4"	Step Height:
Pool Depth: 18"	Bank Height (Right Bank): 2.5'
Run Depth: N/A	Bank Height (Left Bank): 2.5'

not predominately... (margin note)

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☒ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

many of the boulders + cobble appeared to be placed as a part of bridge abutment protection + channel armoring.

Describe Water Conditions: Mark all that apply.

☐ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
☒ Odors	*☐ Other (foam, dyes, chemicals)	

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	X
Modified Channel	
Impacted Buffer	
Trash / Debris	X
Water Conditions	X

...uatic Plants in Stream:

...ting: (e.g. duck weed)	☐ Absent	☐ In Spots	*☐ Everywhere
...hed: (e.g. water lily)	☐ Absent	☐ In Spots	*☒ Everywhere

...in Stream:

...: (e.g. planktonic)	☐ Absent	☐ In Spots	*☐ Everywhere
... (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

→ on stream bed — particularly closer to Whalley Ave outfalls

...ver: Mark approximate percentage of stream covered by tree canopy.

...vered	☐ 75-50% covered	☒ 50%-25% covered	☐ < 25% covered

...ns marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

...l canopy cover around stream through ...7 Edgewood Park — Chapel St to Footbridge — minimal — predominated ..., more canopy in immediate riparian ... — but did not extend far beyond banks. — from footbridge ...

...TTER ... DISCHARGE ...

RCS 2008

Developed By CT-NRCS January 2008

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☒ Low	☐ Low	☐ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		< ¼ Mile from stream		> ¼ Mile from stream	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☒ Recreational	☒ Urban Residential	☒ Recreational	☒ Urban Residential	☐ Recreational
☐ Industrial	☒ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial	Park	☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 16 - not counting Derby Ave outfalls !!	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)? Channel b/w Derby Ave + Whalley was straightened long ago.	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)? LOTS OF TIRES THROUGHOUT	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets. WHITE SUCKERS OBSERVED IN STREAM.

WATER WAS FOUL SMELLING THROUGH MUCH OF THE REACH - BUT ESPECIALLY CLOSER TO WHALLEY AVE - ADJACENT TO STORMWATER OUTFALLS (RT BANK) AND DOWNSTREAM OF THE CSO OUTFALL BELOW THE BRIDGE ABUTMENT.

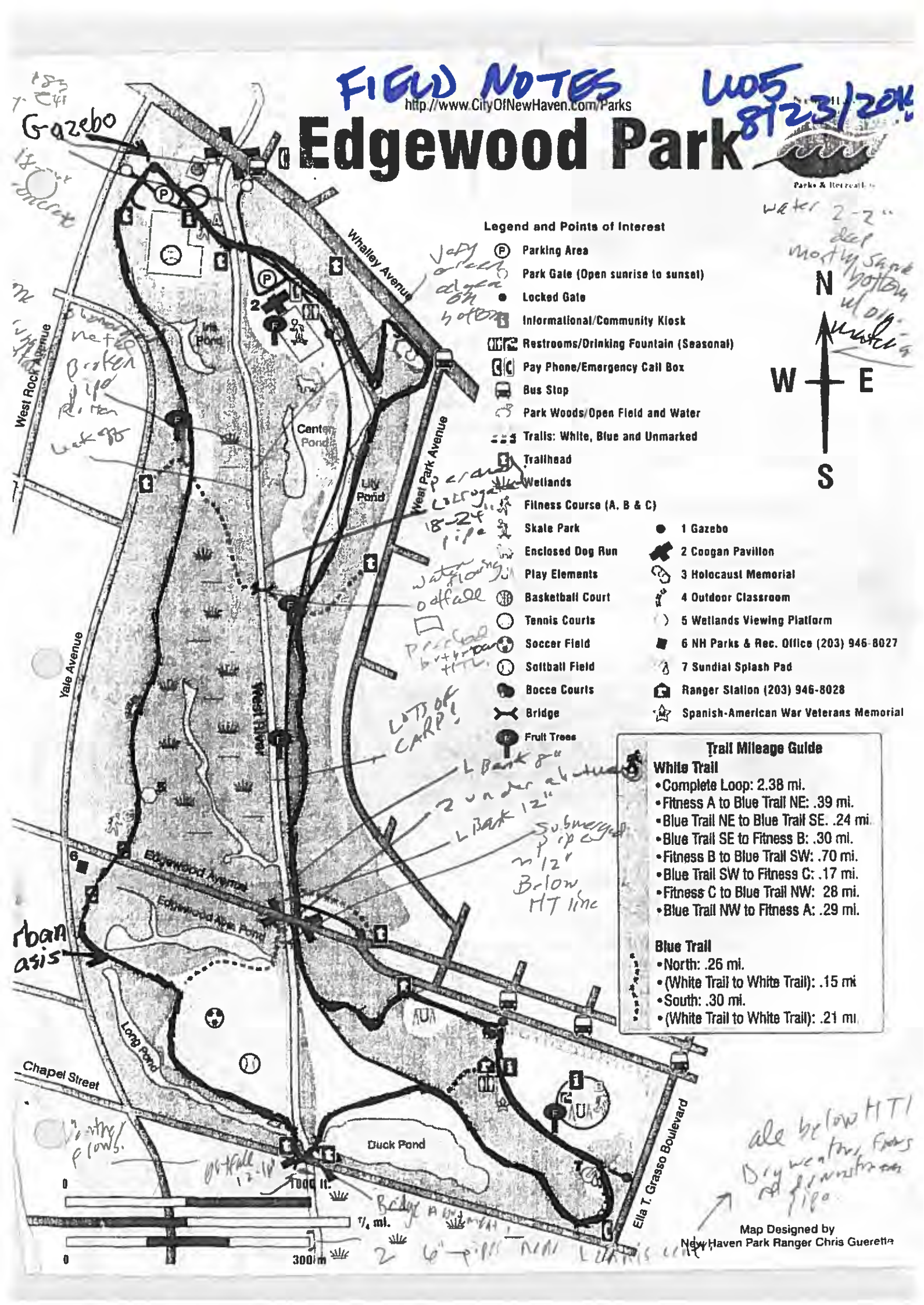
MANY OF THE OUTFALLS THAT WE IDENTIFIED ARE LIKELY SUBMERGED DURING HIGH TIDE - SEVERAL OF THEM WERE DISCHARGING WATER - BUT IT WAS UNCLEAR AS TO WHETHER OR NOT THIS WAS TIDE H-2O - GROUNDH-2O OR OTHER DISCHA

FIELD NOTES 1105 8/23/2014

http://www.CityOfNewHaven.com/Parks

Edgewood Park

Parks & Recreation



Legend and Points of Interest

- Parking Area
- Park Gate (Open sunrise to sunset)
- Locked Gate
- Informational/Community Kiosk
- Restrooms/Drinking Fountain (Seasonal)
- Pay Phone/Emergency Call Box
- Bus Stop
- Park Woods/Open Field and Water
- Trails: White, Blue and Unmarked
- Trailhead
- Wetlands
- Fitness Course (A, B & C)
- Skate Park
- Enclosed Dog Run
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- Basketball Court
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- Soccer Field
- Softball Field
- Bocce Courts
- Bridge
- Fruit Trees

- 1 Gazebo
- 2 Coogan Pavilion
- 3 Holocaust Memorial
- 4 Outdoor Classroom
- 5 Wetlands Viewing Platform
- 6 NH Parks & Rec. Office (203) 946-8027
- 7 Sundial Splash Pad
- Ranger Station (203) 946-8028
- Spanish-American War Veterans Memorial

Trail Mileage Guide

White Trail
- Complete Loop: 2.38 mi.
- Fitness A to Blue Trail NE: .39 mi.
- Blue Trail NE to Blue Trail SE. .24 mi.
- Blue Trail SE to Fitness B: .30 mi.
- Fitness B to Blue Trail SW: .70 mi.
- Blue Trail SW to Fitness C: .17 mi.
- Fitness C to Blue Trail NW: 28 mi.
- Blue Trail NW to Fitness A: .29 mi.

Blue Trail
- North: .26 mi.
- (White Trail to White Trail): .15 mi
- South: .30 mi.
- (White Trail to White Trail): .21 mi.

Map Designed by
New Haven Park Ranger Chris Guerette

EDGEWOOD PARK

Edgewood Park, one of New Haven's treasures was designed more than 100 years ago by the famous Olmsted team that designed NYC's Central Park. Today the park offers countless ways for people of all ages to enjoy nature and the outdoors - walking, jogging, bird watching, cross country skiing, tennis, basketball, soccer, relaxing by the Duck Pond and the West River, skateboarding, bocce, picnicking, dog walking, cooling off under the sundial sprinkler, playing in the playground, shopping at the Sunday Farmer's Market, working out on the fitness structures, biking, and now participating in events at the newly reopened Coogan Pavilion.

THE FRIENDS OF EDGEWOOD PARK

The Friends of Edgewood Park have been advocating for Edgewood Park for almost 50 years. Our mission is to assist the New Haven Department of Parks and Recreation in preserving and enhancing Edgewood Park for the enjoyment of all.

- **WHAT WE DO**
  - **Sponsor events and programs**

  Maple tree tapping, sap collecting, maple social, steel band concert, fall hike, and Nature Pals – a weekly program for youngsters ages 2 – 4 with their caregivers.
  - **On-going collaborations**

  Bike riding team and support for Rock to Rock
  Planning and supervision for summer Youth at Work team
  Planting and stewarding trees and gardens with Urban Resources Initiative

- **HOW YOU CAN PARTICIPATE**

  Visit the park often
  Read our email newsletter
  Visit us on Facebook
  Support park activities and events
  Join a walking, running or bicycling group
  Volunteer with the plant and trail maintenance team
  Help with school and community service group projects
  Join our board or a committee
  Donate money

- **CONTACT US**

  friendsofedgewoodpark@gmail.com
  or call 203 500-7777

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B T WILL
Reach Code: LW5 - from Derby Neck to Whitney	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

TIRES THROUGHOUT CHANNEL – NOT PILED, BUT FOUND ABOUT ONE TIRE EVERY 20 YARDS OR SO.

☒ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☐ Residential	☒ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☒ Tires ☐ Metal ☐ Construction	☐ Appliances ☐ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☐ Flooding	☒ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☒ Public	☐ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

TIRES LIKELY THE RESULT OF ILLEGAL DUMPING – BUT LOCATION OF DUMPING NOT SPECIFICALLY IDENTIFIED W/IN THIS REACH. TIRES WERE DISTRIBUTED THROUGHOUT – MANY OF THEM WERE COVERED IN ALGEA AND HAD CLEARLY BEEN IN THE REACH FOR SOME TIME.

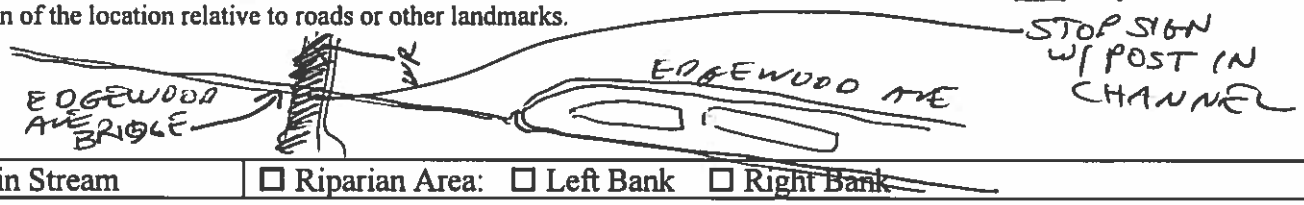
CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5 – FROM DERBY AVE TO WHALLEY	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.



☒ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☐ Residential	☒ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☐ Tires ☐ Metal ☒ Construction	☐ Appliances ☐ Automotive ☐ Medical	☐ Other
Source:	☒ Unknown	☐ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☒ Public	☐ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

THERE IS A STOPSIGN ON A METAL POST IN THE MIDDLE OF THE WEST RIVER BENEATH THE EDGEWOOD AVE BRIDGE.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions / Excessive Plant or Algae Growth

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

THROUGHOUT THE CHANNEL FROM DUCK POND TO WHALLEY AVE — ATTACHED VEG. ALGAE ON BOTTOM FROM FOOT BRIDGE TO WHALLEY — INTERMITTENT

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☒ Urban Residential	☐ Commercial	☒ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational

Describe Water Conditions: Mark all that apply.			
☒ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☒ Odors
☐ Green	☐ Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☒ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	☒ Everywhere

— IN SPOTS — A LOT OF THEM — BUT ENTIRE STREAM BED WAS NOT COVERED.

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	☐ Everywhere

— ESPECIALLY BETWEEN WHALLEY AVE + FOOTBRIDGE

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☒ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☐ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

LOTS OF ATTACHED VEGETATION ON STREAM BED WHERE WATER DEPTHS RANGED FROM 5"-18" @ LOW TIDE CONDITIONS — IN UPPER, POSSIBLY NON-TIDAL OR LOW-INFLUENCE TIDAL ZONES.

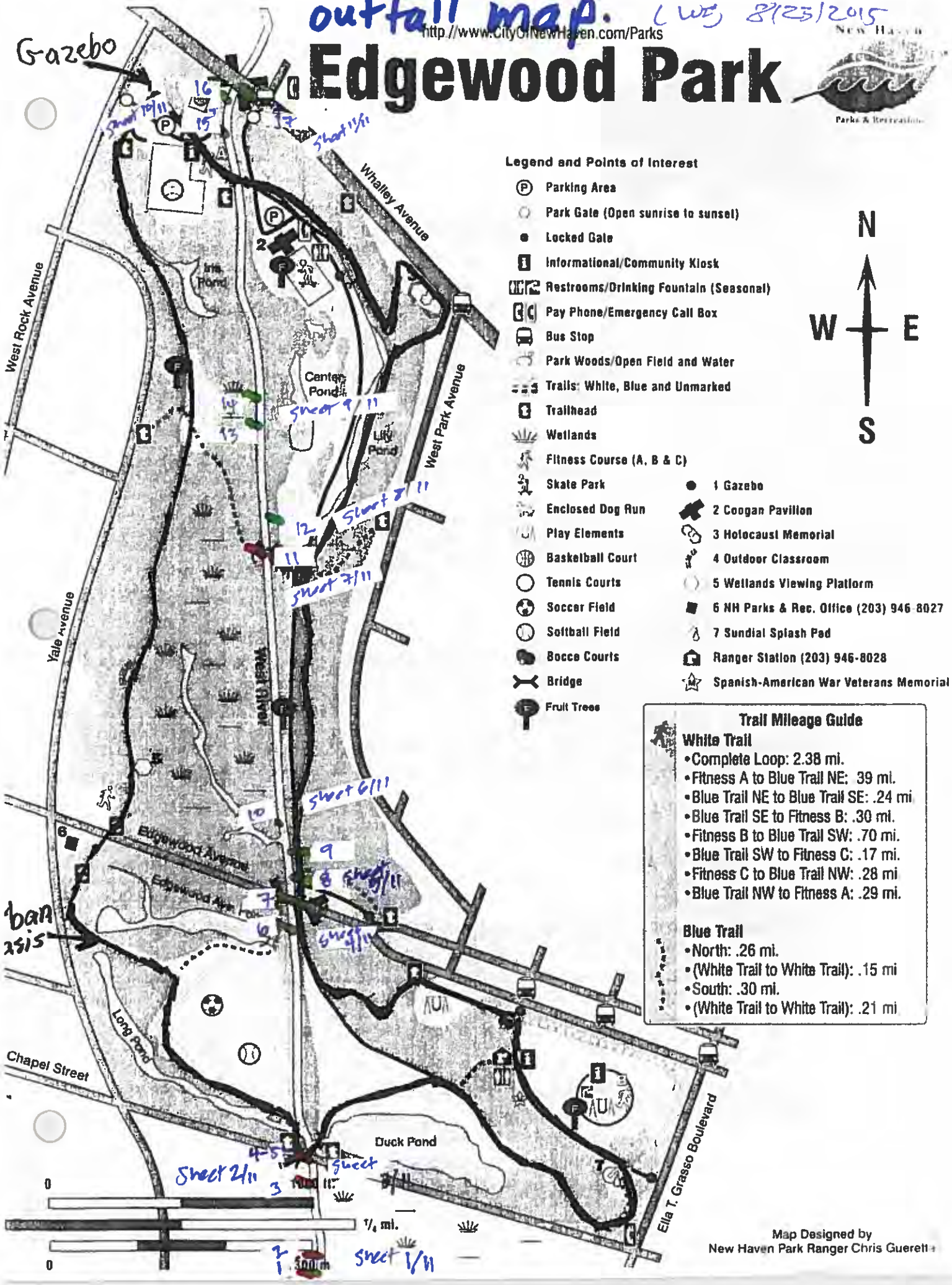
STRONG SEWAGE-LIKE ODOR PRESENT IN VICINITY OF WHALLEY AVE BRIDGE — THOUGH NO ACTIVE CSO DISCHARGE WAS OCCURING — IT HAD RAINED 2 DAYS PRIOR — SO POSSIBLY CSO + STORMWATER DISCHARGES RESULTING FROM

Developed By CT-NRCS
January 2008

outfall map. (WE) 8/23/2015

http://www.CityOfNewHaven.com/Parks

Edgewood Park



Legend and Points of Interest

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- Locked Gate
- Informational/Community Kiosk
- Restrooms/Drinking Fountain (Seasonal)
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- Park Woods/Open Field and Water
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- 7 Sundial Splash Pad
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- Spanish-American War Veterans Memorial

N W E S

Trail Mileage Guide

White Trail
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- Blue Trail NE to Blue Trail SE: .24 mi
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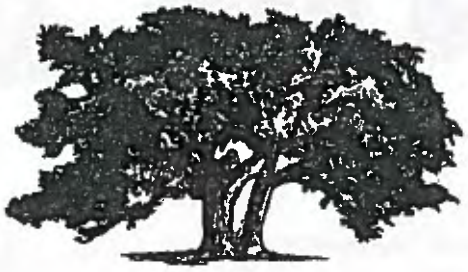
- Blue Trail SW to Fitness C: .17 mi.
- Fitness C to Blue Trail NW: .28 mi
- Blue Trail NW to Fitness A: .29 mi.

Blue Trail
- North: .26 mi.
- (White Trail to White Trail): .15 mi
- South: .30 mi.
- (White Trail to White Trail): .21 mi

Map Designed by
New Haven Park Ranger Chris Guerett



EDGEWOOD PARK

Edgewood Park, one of New Haven's treasures was designed more than 100 years ago by the famous Olmsted team that designed NYC's Central Park. Today the park offers countless ways for people of all ages to enjoy nature and the outdoors - walking, jogging, bird watching, cross country skiing, tennis, basketball, soccer, relaxing by the Duck Pond and the West River, skateboarding, bocce, picnicking, dog walking, cooling off under the sundial sprinkler, playing in the playground, shopping at the Sunday Farmer's Market, working out on the fitness structures, biking, and now participating in events at the newly reopened Coogan Pavilion.

THE FRIENDS OF EDGEWOOD PARK

The Friends of Edgewood Park have been advocating for Edgewood Park for almost 50 years. Our mission is to assist the New Haven Department of Parks and Recreation in preserving and enhancing Edgewood Park for the enjoyment of all.

- **WHAT WE DO**
  - **Sponsor events and programs**

  Maple tree tapping, sap collecting, maple social, steel band concert, fall hike, and Nature Pals – a weekly program for youngsters ages 2 – 4 with their caregivers.
  - **On-going collaborations**

  Bike riding team and support for Rock to Rock
  Planning and supervision for summer Youth at Work team
  Planting and stewarding trees and gardens with Urban Resources Initiative

- **HOW YOU CAN PARTICIPATE**

  Visit the park often
  Read our email newsletter
  Visit us on Facebook
  Support park activities and events
  Join a walking, running or bicycling group
  Volunteer with the plant and trail maintenance team
  Help with school and community service group projects
  Join our board or a committee
  Donate money

- **CONTACT US**

  friendsofedgewoodpark@gmail.com
  or call 203 500-7777

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL + WILL
Reach Code: LW5	Sheet 1/11
Designated Stream Type:	FIRST 2 PIPES FROM DOWNSTREAM
Site ID:	NORTH

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

SEE ATTACHED MAP. OUTFALLS LOCATED RT BANK B/W DERBY AVE + CHAPEL ST @ THE BASE OF THE YALE TENNIS CENTER. BELOW MHT (SEE BACK)

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☐ Sediment Delta	☐ Oily Stain	☐ Black ☒ Rust Co
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☒ Other Metal/Ir
Contributing Source(s):	☐ Road	☐ Parking Lot	☒ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... ½ ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 6"			
# of Pipes:	☐ 1	☒ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

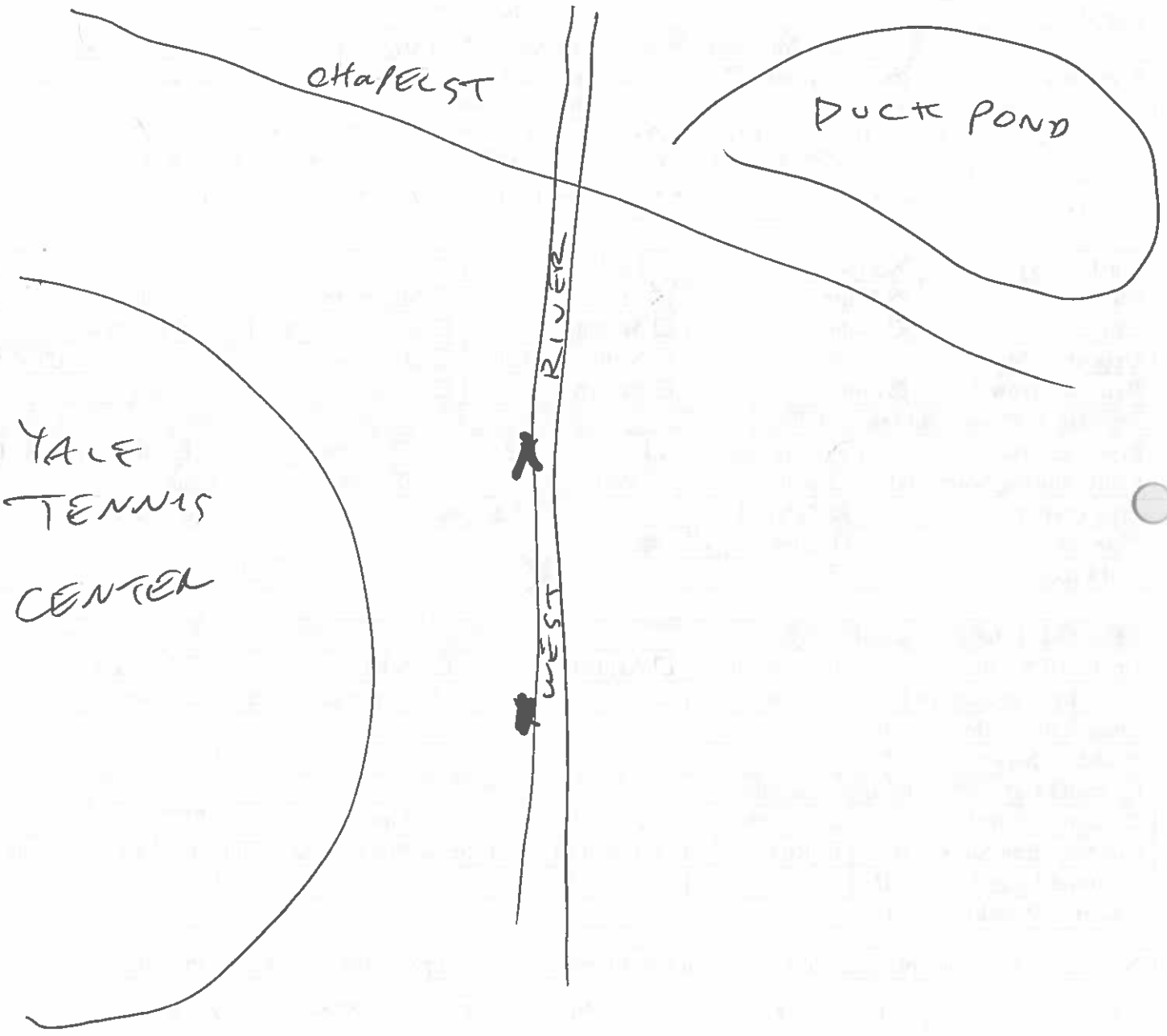
Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

PIPES PERCHED @ LOW TIDE - BUT ARE BELOW MEAN HIGH TIDE LINE + PROTRUDE FROM BANK. BOTH PIPES ARE TRICKLING — BUT UNCLEAR IF RESULT OF SUBMERGED CONDITION DURING LOW TIDE. — ONE OF THE TWO PIPES HAS RUST COLORED DISCHARGE AROUND THE BASE OF THE PIPE — POSSIBLY DUE TO PIPE MATERIAL.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall



Developed By: CT-NRCS
January 2008

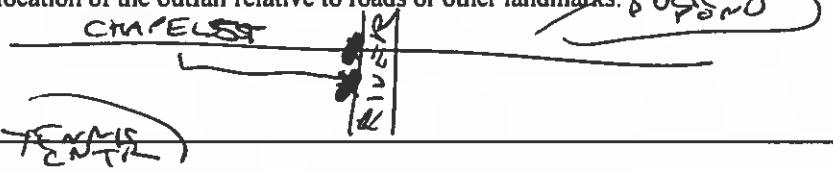
CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: EDWARDS + WILL
Reach Code: LW5	
Designated Stream Type:	Sheet 2 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.



Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☒ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☒ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☒ Unknown
Pipe Outlet:	☒ Perched..... 1 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 1.5 ft.	+ 5'		
# of Pipes:	☐ 1	☒ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

ONE PIPE DOWNSTREAM OF CHAPEL ST BRIDGE @ ~1.5' ABOVE LOW TIDE LEVEL — LIKELY PARTIALLY SUBMERGED DURING ~~MEAN~~ MEAN HIGH TIDE.
2ND PIPE BENEATH BRIDGE ABUTMENT — THERE ~~IS~~ IS ALWAYS DRY WEATHER DISCHARGE FROM THIS PIPE — LOCATED ABOUT 4-5' ABOVE LOW TIDE.

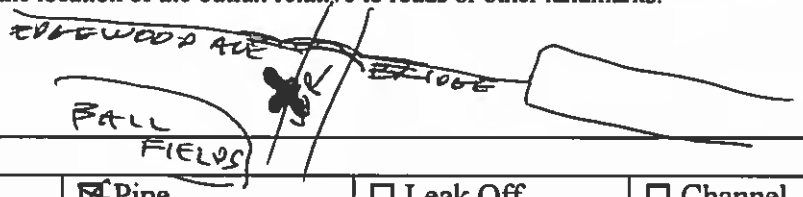
CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2005
Name of Stream: ~~CW5~~ WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: CW5	
Designated Stream Type:	Sheet 3 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.



DOWNSTREAM OF EDGEWOOD AVE BRIDGE.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☒ Other	☒ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped	☒ At Stream Level / SUBMERGED	
Pipe Size:	Diameter: (ft.			
# of Pipes:	☒ 1	☐ 2	☐ 3 +	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

PIPE BROKEN + PIECES IN CHANNEL — PIPE (-2 FEET, BELOW ACTIVE CHANNEL/ BANK HEIGHT/ MHT LEVEL. PIPE ½ SUBMERGED @ LOW TIDE.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5	
Designated Stream Type:	Sheet 4 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

2 SMALL OUTFALLS JUST ABOVE STREAM LEVEL BENEATH ABUTMENT FOR EDGEWOOD AVE BRIDGE

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☐ Perched…… ft.	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: 1/2 ft.			
# of Pipes:	☐ 1	☒ 2	☐ 3 +	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

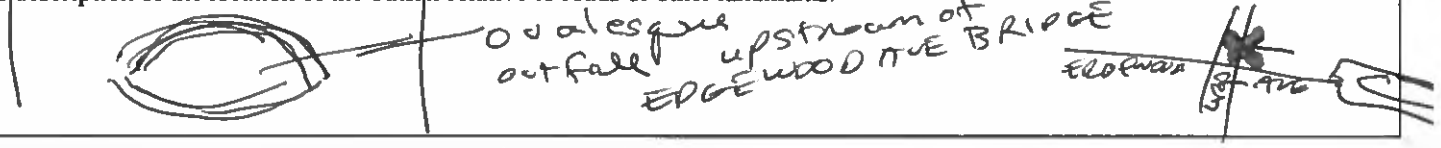
CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/13/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B TWILL
Reach Code: LW5	
Designated Stream Type:	Sheet 5 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.



Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☒ Unknown
Pipe Outlet:	☒ Perched..... 3 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: \ ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

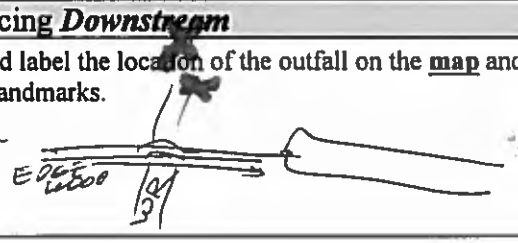
Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5	
Designated Stream Type:	Sheet 6 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

North of Edgewood Ave Bridge. - one on each Bank



Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☒ Other POSSIBLY METAL
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☒ Unknown
Pipe Outlet:	☒ Perched..... 2 ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 1/2 ft.			
# of Pipes:	☒ 1	☒ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

L. Bank BELOW MEAN HIGH TIDE LEVEL — TOE OF BANK MEIGHT PROTRUDING FROM BANK. 1-2' ABOVE LOW TIDE LEVEL. NO FLOWS OBSERVED.

R. Bank - Partially Submerged @ stream level during high tide. Partially filled w/ sediments.

CT – NRCS
Stream Assessment Worksheet

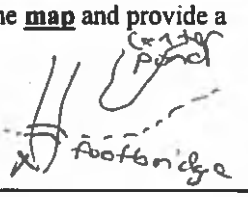
Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5	
Designated Stream Type:	Sheet 7 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Downstream of Footbridge - Bridge Abutment



Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☒ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 1 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 1 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5	
Designated Stream Type:	Sheet 8 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

north/upstream of footbride midway through Edgewood Park.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☒ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☒ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☒ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: 18"-24"			
# of Pipes:	☒ 1	☐ 2	☐ 3 +	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Partially submerged + filled w/ sediment @ Low water.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KEVIN B + WILL
Reach Code: LW5	
Designated Stream Type:	Sheet 9 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

A Leakoff + a broken pipe on Left Bank approximately across from "Center Pond" — Camera out of Batteries — NO Pictures

Outfall Type:	☒ Pipe	☒ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☒ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	☐ 1	☒ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☒ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: +50 **ft.**	estimated			
Width of Swale: 5-8 **ft.**	estimated			

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: **ft.**					
Channel Width: **ft.**					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

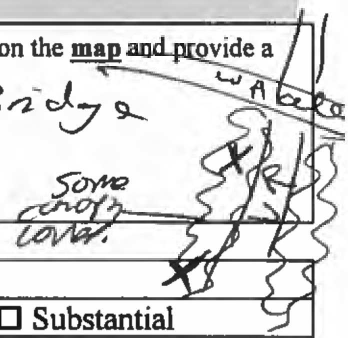
Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL
Reach Code: LW5	
Designated Stream Type:	sheet 10 of 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the map and provide a brief description of the location of the outfall relative to roads or other landmarks.

Just Downstream of Whaley Ave Bridge Abutment 20ft + 30-50 yds.



Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☒ Sewage	☒ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☒ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☒ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☒ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other	☐ Unknown
Pipe Outlet:	☒ Perched…… 1/2 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☐ 1	☒ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

2 Large stormwater outfall pipes. Northern most is Both concrete + corrugated metal — which is deteriorating. Heavy stormwater flows visible during Rain events, no flows observed @ time of survey.

Large Sediment Delta as well as RipRap leading to Bridge abutment. Base of Bridge also concrete — slightly perched w/ minimal flow.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

water flowing over the Rip Rap + from Wheeler Ave to the footbridge near Coogan Pavilion VERY Foul smelling. Sewage like. Green Algae + lots of sediment build up on Channel Bottom/Bed.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/2015
Name of Stream: WEST RIVER	Assessed By: KENDALL B + WILL R
Reach Code: LW5	
Designated Stream Type:	Sheet 01 / 11
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

CSO OUTFALL BENEATH BRIDGE/ W/in ABUTMENT

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☐ None	☒ Sewage	☒ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☐ None	☒ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☐ None	☐ Brown	☒ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... 5 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 x 3 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone		☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CSO outfall. No flows observed.
For Smell — see sheet 10 of 11

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

MARKED AS (MC1) ON MAP. LARGE ROCK RETAINING WALL BEHIND WALGREENS BELOW POND LILY DAM

Mark where channel modification occurs:			
☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
Estimate length of channel modification: 200 ft.			
Estimate height of bank modification: 6 ft.			

Type of Manipulation:	☐ Channelization	☒ Bank Armoring		☐ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank		☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☒ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.				
☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

COBBLE INSIDE CHAINS TO CREATE BLOCKS USED TO PROTECT WALL FROM EROSION.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/23/19
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

UPSTREAM FROM 1ST BRIDGE BELOW DAM. 7-11 IS CLOSEST BUILDING OFF OF STREAM ON THAT SIDE. MARKED AS (MC2) BRIDGE IS RAMSDELL AVE.

Mark where channel modification occurs:

☒ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: 100 ft.

Estimate height of bank modification: 6 ft.

Type of Manipulation:	☐ Channelization	☐ Bank Armoring	☒ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☐ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☒ Concrete	☐ Gabions ☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☒ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CONCRETE STONE WALL BUILD AS EROSION BARRIER.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW16	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

POND LILY DAM MARKED AS (B1) ON MAP.

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 7 ft.	**Length of Spillway:** 60 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials: ☐ Stone	☐ Concrete	☒ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

A FEW HUNDRED FEET UPSTREAM OF VALLEY ST. BRIDGE. MARKED AS (B2)

Type of Barrier: Mark the type of fish barrier.			
☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 1 ft.	**Length of Spillway:** 25 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent		
Materials:	☐ Stone	☒ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other	

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

LOW, OLD CONCRETE DAM. BROKEN APART IN MANY PLACES, NOT CAUSING FULL BLOCK OFF STREAM.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☑ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

100 FEET UPSTREAM OF E. RAMSDELL BRIDGE. MARKED ON MAP AS (O1)

Outfall Type:	☑ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☑ Trickle	☐ Moderate	☐ Substantial
Odor:	☑ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☑ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☑ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☑ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☑ Road	☑ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☑ Perched..... 2 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 3 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

MARKED ON MAP AS (O2) TWO OUTFALLS NEXT TO EACH OTHER. THIS ONE WAS MADE EXTERNALLY OF BRICK.

Outfall Type:	☑ Pipe	☐ Leak Off	☐ Channel	
Flow:	☑ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☑ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☑ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☑ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☑ Other (BRICK)
Contributing Source(s):	☐ Road	☐ Parking Lot	☐ Other	☑ Unknown
Pipe Outlet:	☐ Perched..... ft.	☐ Ramped		☑ At Stream Level
Pipe Size:	Diameter: 6 ft.			
# of Pipes:	☑ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

JUST UPSTREAM OF VALLEY ST. BRIDGE. 2 PIPES RIGHT NEAR EACH OTHER. ALSO LOCATION OF (B2) FISH BARRIER.

Outfall Type:	☑ Pipe	☐ Leak Off	☐ Channel	
Flow:	☑ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☑ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☑ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☑ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☑ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☑ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☑ Perched…… 1 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☑ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN EVANS
Reach Code: LW6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☐ Right Bank ☑ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

100 FEET DOWNSTREAM OF VALLEY ST. BRIDGE. MARKED AS O_4 ON MAP

Outfall Type:	☑ Pipe	☐ Leak Off	☐ Channel	
Flow:	☑ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☑ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☑ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☑ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☑ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☑ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☑ Perched..... 4 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☑ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Developed By: CT-NRCS
January 2008

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/23/15
Name of Stream: WEST RIVER	Assessed By: MORGAN R. EVANS
Reach Code: LW6	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☒ Pool-Riffle	☒ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 15' FEET	Glide Depth:
Riffle Depth: 2' FEET	Step Height:
Pool Depth: 3' FEET	Bank Height (Right Bank): 3' FEET
Run Depth: 2' FEET	Bank Height (Left Bank): 3' FEET

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☒ >75%
Boulder (>10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☒ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion
Fish Barrier 2
Storm Water Outfall 4
Modified Channel 2
Impacted Buffer
Trash / Debris
Water Conditions

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☒ Urban Residential	☒ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☒ Commercial		☒ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

Completed Stream Assessment Forms
Sargent Brook (Reference Reach)

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 5/7/2015 start 1pm / 1:15pm 3:25pm
Name of Stream: Sargent Brook	Assessed By: KB, Rian, Asha, Brian
Reach Code: Reference Reach	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☒ Step-Pool	☒ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 10' (b/w 8-12' avg)	Glide Depth: 8"
Riffle Depth: 3-4"	Step Height: 4-6"
Pool Depth: 1½-2'	Bank Height (Right Bank): 1½'
Run Depth: n/a	Bank Height (Left Bank): 1½'

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☒ 25-50% →	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☒ ~~25-50%~~	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

riffle vs pool
8-12" bank height
gravel + sand
pool riffle couple
[illegible]
– cobble

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

- Erosion ____
- Fish Barrier X
- Storm Water Outfall ____
- Modified Channel ____
- Impacted Buffer ____
- Trash / Debris X
- Water Conditions ____

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☒ 75-(50%) covered	☐ 50%-25% covered	☐ < 25% covered

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

Bank height 1-2'
water clear.
pool depth ≈ 2' riffle 4"

Canopy > 35' from channel
skunk cabbage, barberry, rose, etc. in buffer
active channel 8'

large board in stream w/ chain lock? Dam?

Developed By: CT-NRCS
January 2008

CT-NRCS
Stream Assessment Sheet

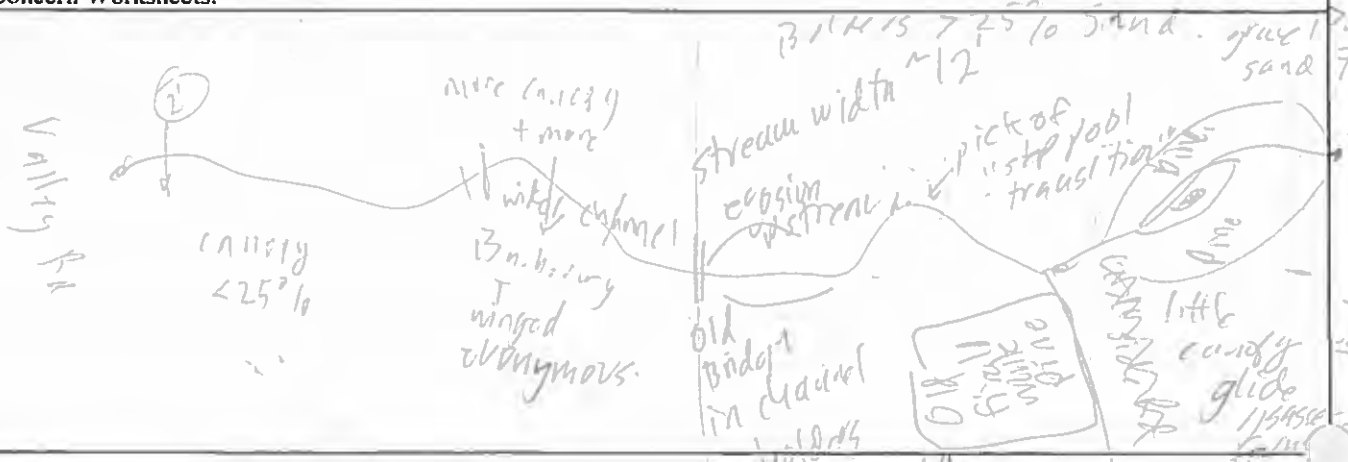
Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☒ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial	Abandoned Agricultural	☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☐ Yes	☒ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.



Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7/7/2015
Name of Stream: Sargent River	Assessed By: KB, A, R, B
Reach Code: Reference	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

marked photo & map screen shot — near Dam – Pond in Ranch Mat

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☒ Culvert @ end of Reach	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 4 ft.	**Length of Spillway:** 4 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent	
Materials:	☒ Stone	☐ Concrete	☒ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☒ No ☐ Yes (If yes mark the type below) concrete + metal				
☐ Factory	☐ Hydro Facility	☐ Mill	☒ Residence former	☒ Other unsure

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☒ Perched:..... 6" ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: 24" ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

5 x 6' = 30'

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

pictures.
area above dam – sand-silt organic material.
4-10' channel 50' upstream

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7/7/2015
Name of Stream: Sargent Brook	Assessed By: KB, Asha, Rian, Brian
Reach Code: REF, Mouth	
Designated Stream Type:	
Site ID: #1	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

Marked w/ photo + google map screen shot

☑ Within Stream	☐ Riparian Area: ☐ Left Bank ☐ Right Bank

Type:	☐ Residential	☐ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☒ Tires ☐ Metal ☐ Construction	☐ Appliances ☐ Automotive ☐ Medical	☒ Other old Bridge? Foot Bridge
Source:	☐ Unknown	☐ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☒ Unknown	

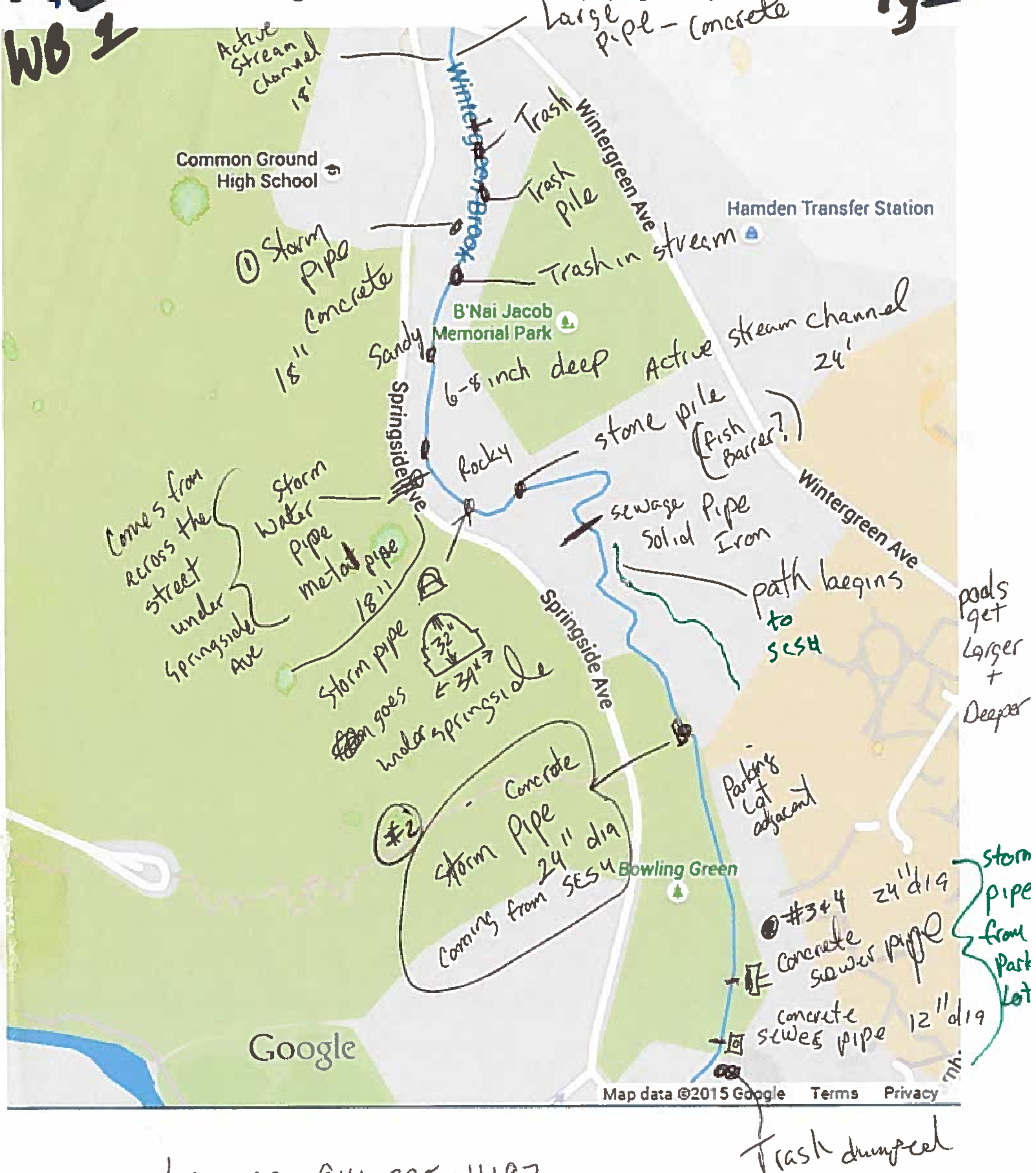
Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Remnant of old Bridge found laying across channel – another section downstream

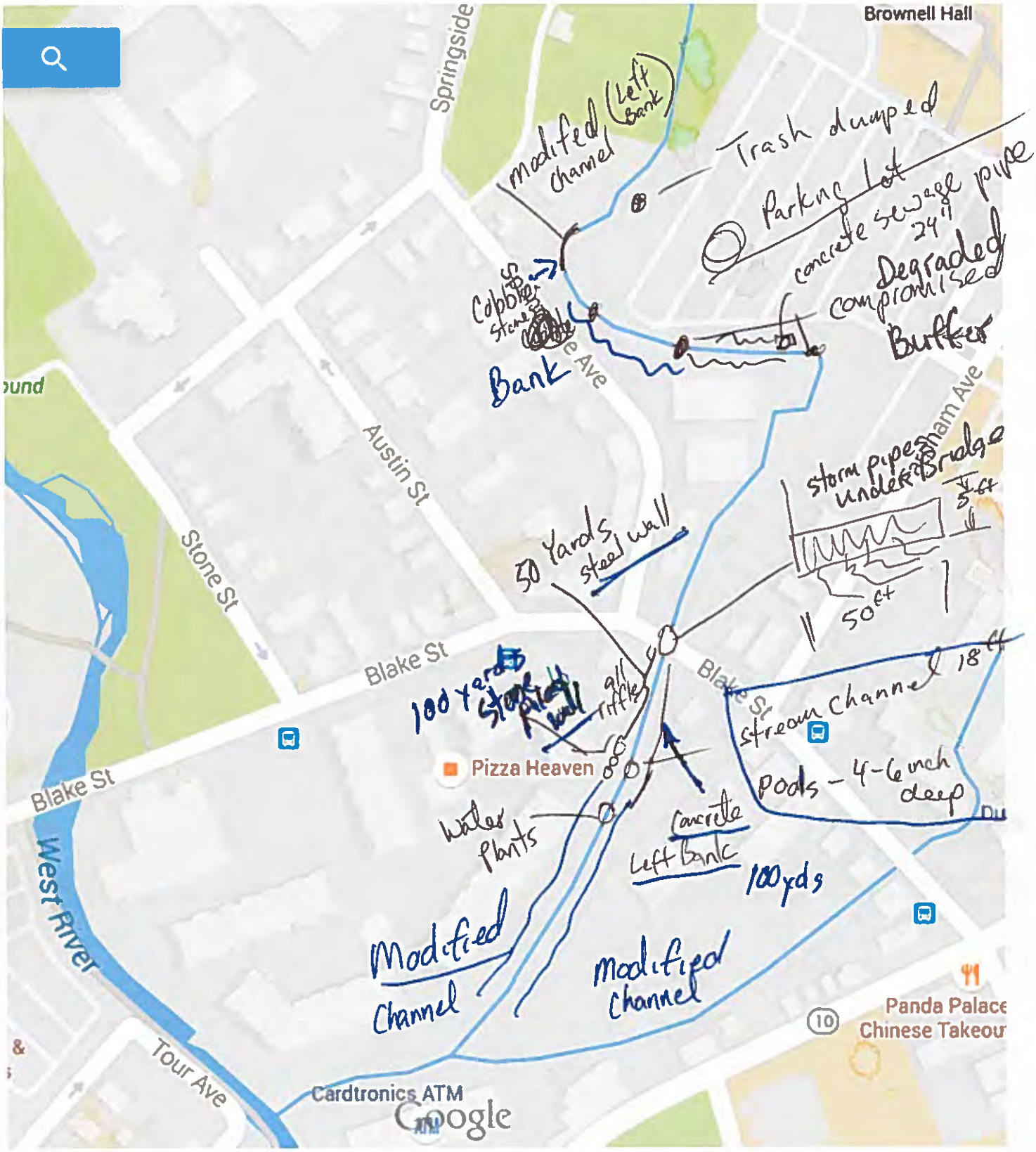
Completed Stream Assessment Forms
Wintergreen Brook

[redacted] August 3, 2015 [redacted] Pg 1

WB 1



Leanne 914 295-4197
iluminar2@yahoo.com
lbloom@savethesound.org


Brownell Hall
Springside
modified (Left bank) channel
Trash dumped
Parking Lot
concrete sewage pipe 24"
Degraded compromised Buffer
Cobble Stone
Bank
Austin St
Stone St
Blake St
Storm pipes under Bridge
50 Yards steel wall
100 yards
9" riffle
Stream Channel 18 ft
Pools - 4-6 inch deep
Pizza Heaven
water Plants
Concrete Left Bank
100 yds
Modified Channel
Modified Channel
West River
Tour Ave
Cardtronics ATM
Panda Palace Chinese Takeou
Google

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 8/3/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB #1	CG West River Stewards
Designated Stream Type: Fresh Water	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☑ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	20 ft	Glide Depth:	
Riffle Depth:	6 inches	Step Height:	
Pool Depth:	18 inches	Bank Height (Right Bank):	24 inches
Run Depth:		Bank Height (Left Bank):	24 inches

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☑ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☑ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☑ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☑ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☑ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	✓
Modified Channel	✓
Impacted Buffer	✓
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Pg 2

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☑ High	☑ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☐ Forested
☑ Urban Residential	☐ Recreational	☑ Urban Residential	☐ Recreational	☑ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☑ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☑ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 6 .	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☑ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☑ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☑ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☑ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 8/3/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB # 1	CG West River Stewards
Designated Stream Type: Fresh	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

1. Bank behind 61 Springside Ave (right Bank)
2. Both Banks – section from Blake St Bridge to West River (Entire section)

Mark where channel modification occurs:			
☑ Meander Bend	☑ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
Estimate length of channel modification: ft.	900 – 1000 ft		
Estimate height of bank modification: ft.			

Type of Manipulation:	☑ Channelization	☑ Bank Armoring	☑ Concrete Channel	☐ Other
Extent of Manipulation:	☑ Right Bank	☑ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☑ Urban Residential	☑ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.				
☑ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☑ No
Is there evidence of sediment deposition in the channel?	☑ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☑ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

- Left bank has steel wall and transitions into stoned piled bank
- Right bank is Concrete

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 8/3/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB #1	CG River Stewards
Designated Stream Type: freshwater	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☑ Right Bank ☑ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☑ Pipe	☐ Leak Off	☐ Channel	
Flow:	☑ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☑ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☑ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☑ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☑ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☐ Road	☑ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☑ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 18 Inches ft	24 inches		12 inches
# of Pipes:	☐ 1	☐ 2		☑ 3+

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☑ Parking Lot	☐ Recreational Field	☑ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

- Old large Concrete Storm pipe – section Broken and in Brook (right Bank)
- Storm drain from Right Bank, drains under road - run off from West Rock
- Several storm Drains from SCSU Parking lot #9

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 8/3/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB 5 2	CG West River Stewards
Designated Stream Type: Fresh	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where the degraded buffer occurs.

☐ Meander Bend	☐ Straight Section	☑ Steep Slope/Valley Wall	☐ Other
☑ **Left Bank**		Estimate length of degraded buffer: 200 ft.	
☐ **Right Bank**		Estimate length of degraded buffer: ft.	

Type of Degradation:				
Left Bank:	☐ Minimal Vegetation	☑ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☑	☐	☐	☑	☑	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☑ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☑ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

- Bank is steep
- Buffer is small
  - adjacent to large Parking Lot (SCSU)

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 8/3/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB 01	CG River Stewards
Designated Stream Type: Fresh water	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

① – Behind B'Nai Cemetary – several spots ③ Trash in water
② – Behind SCSU Parking lot (Lot #9)

☑ Within Stream	☑ Riparian Area: ☑ Left Bank ☐ Right Bank

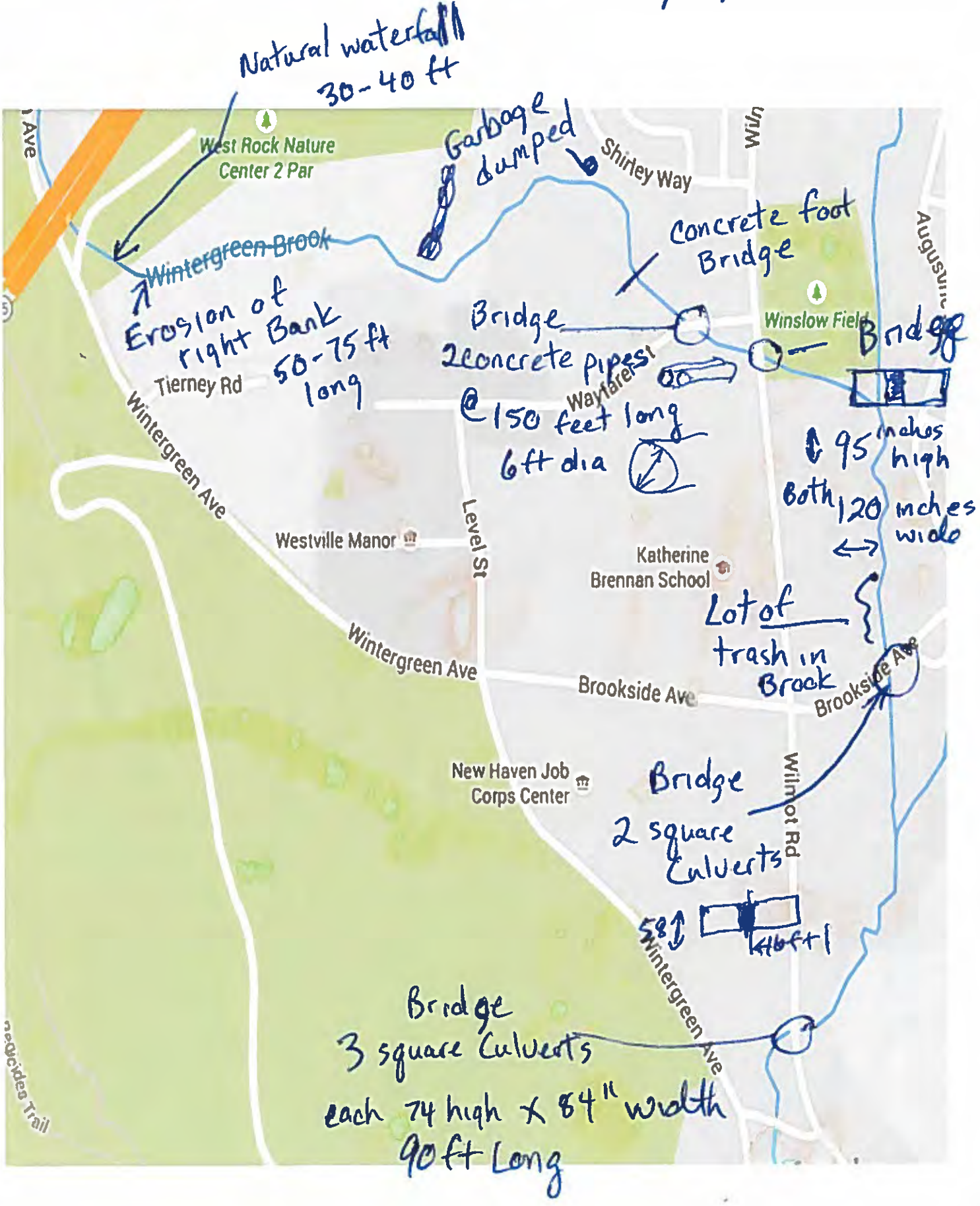
Type:	☑ Residential	☐ Commercial	☐ Industrial	
Material:	☑ Plastic ☑ Paper ☑ Yard Waste	☑ Tires ☑ Metal ☐ Construction	☑ Appliances ☐ Automotive ☐ Medical	☐ Other
Source:	☑ Unknown	☑ Flooding	☐ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☑ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

- Lots of trash in water for entire reach
-

WB 2 Map / Notes

7/27/15



CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/27/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB2	CG West River Stewards
Designated Stream Type: Freshwater	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☑ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width: 15 - 20 ft			Glide Depth:	
Riffle Depth: 3 inches			Step Height:	
Pool Depth: 8 - 10 inches			Bank Height (Right Bank): 10 inches	
Run Depth:			Bank Height (Left Bank): 10 inches	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☑ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☑ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☑ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☑ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☑ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☑ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	✓
Fish Barrier	
Storm Water Outfall	
Modified Channel	
Impacted Buffer	
Trash / Debris	✓
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☐ Forested
☑ Urban Residential	☐ Recreational	☑ Urban Residential	☐ Recreational	☑ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☑ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☑ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

- Erosion is taking place at the beginning of reach (near West Rock Nature Center). The right bank which is 30 feet high is being eroded.
- Trash was found in a large pile near neighborhood bordering West Rock Nature Center.
- Large amounts of trash were in Brook in section between Winslow Field and Brookside Ave

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date: 7/27/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB 2	CG West River Stewards
Designated Stream Type: Freshwater	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

See WB 2 google Map and Notes

Mark where erosion is occurring:

☑ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site

Length:	Left Bank:	ft.	Right Bank: 50-75	ft.
Bank Height:	Left Bank:	ft.	Right Bank: 30-40	ft.
Bank Angle:	Left Bank:	deg.	Right Bank: 70-80	deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)?

☐ < 15 ft.	☐ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☑ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☑ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

☐ Public	☐ Private	☑ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☑ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

The entire Wall of Brook is being eroded (30-40ft) high.

CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7/27/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB 2	GG West River Stewards
Designated Stream Type: Freshwater	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

See WB2 google Map and Notes

☑ Within Stream	☐ Riparian Area: ☐ Left Bank ☑ Right Bank

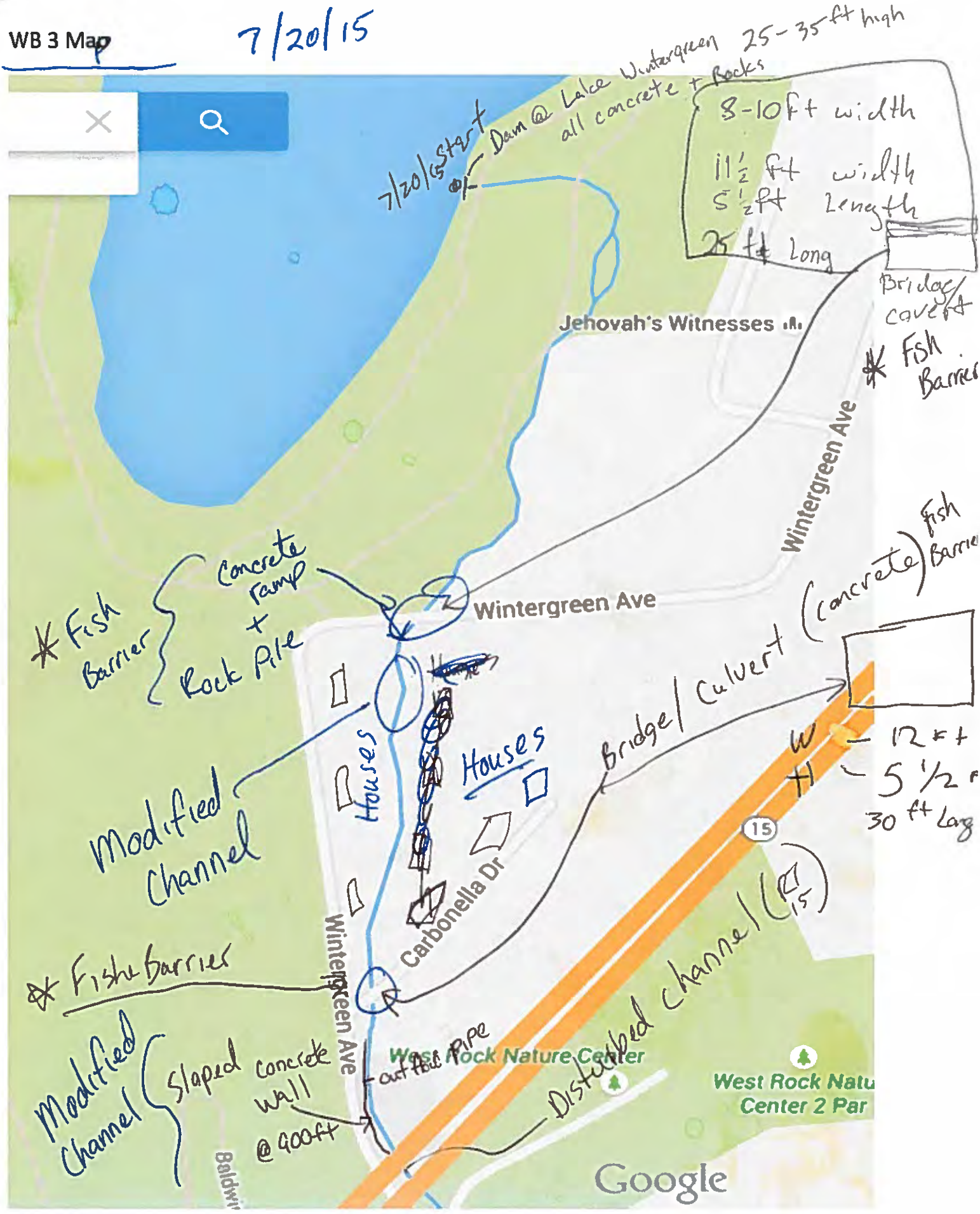
Type:	☑ Residential	☐ Commercial	☐ Industrial	
Material:	☑ Plastic ☐ Paper ☐ Yard Waste	☑ Tires ☑ Metal ☐ Construction	☑ Appliances ☑ Automotive ☐ Medical	☐ Other
Source:	☑ Unknown	☐ Flooding	☑ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☑ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

- Trash Pile was on Right Bank above Winslow Field several hundred Yards
- Trash in Brook was highest in section below Winslow Field

WB 3 Map

7/20/15



CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-20-15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB-3	CG West River Stewards
Designated Stream Type: Fresh Water	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☑ Pool-Riffle	☐ Run	☐ Glide	*☑ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	8-10 ft	Glide Depth:	
Riffle Depth:	1-2 inch	Step Height:	
Pool Depth:	5 inches	Bank Height (Right Bank):	3 Inches
Run Depth:		Bank Height (Left Bank):	3 inches

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☑ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☑ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☑ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☑ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☑ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	2
Storm Water Outfall	
Modified Channel	2
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

WB 3

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☑ High	☑ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ½ Mile from stream**		**> ½ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☑ Rural Residential	☐ Agricultural	☑ Rural Residential	☐ Agricultural
☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☑ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☑ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☑ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☑ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7/20/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB 3	CG River Stewards
Designated Stream Type: Freshwater	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

1. Dam @ Lake Wintergreen (start of Reach)
2. Culvert and Rock Pile at Wintergreen Ave
3. Culvert @ Carbonella Dr - Shallow Concrete Bottom

Type of Barrier: Mark the type of fish barrier.

☑ Dam	☑ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 40 ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials:	☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☑ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☑ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☑ Ramped		☐ Submerged
Culvert Size:	Diameter: ft.	Height: 5 ft.		Width: 12 ft.
# of Culverts: 2	**Culvert Length:** 30 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☑ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7/20/15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB 3	
Designated Stream Type: Fresh Water	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

1. Down stream of Wintergreen Ave Bridge

2. Above, Under, and Down stream of Rt 15 Bridge

Mark where channel modification occurs:

☐ Meander Bend	☑ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: 900 ft.

Estimate height of bank modification: 3-6 ft.

Type of Manipulation:	☑ Channelization	☑ Bank Armoring	☑ Concrete Channel	☐ Other
Extent of Manipulation:	☑ Right Bank	☑ Left Bank	☐ Channel Bottom	

Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☑ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☑ Suburban Residential	☑ Industrial	☐ Agricultural	☐ Recreational

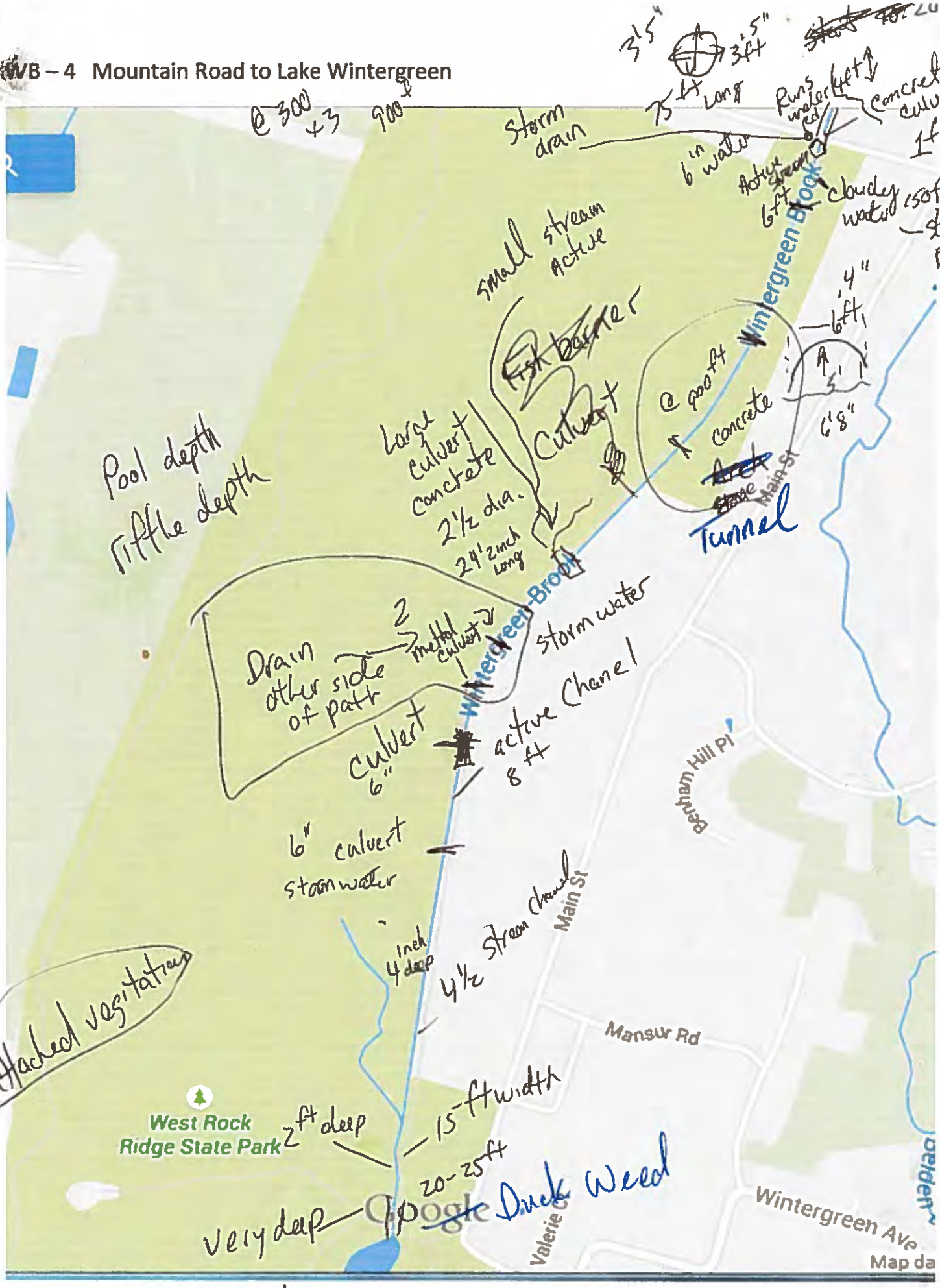
Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☑ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☑ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☑ No
Is the channel connected to a floodplain?	☐ Yes	☑ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

WB – 4 Mountain Road to Lake Wintergreen



Duckweed everywhere

Wintergreen Brook WB 4 Survey

Untitled layer

- Stream Culvert
- Sediment build-up and Duckweed
- Rust Colored Water and Algae
- Duckweed and Attached Vegetation

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/13/2015
Name of Stream: Wintergreen Brook	Assessed By: CDR Stewards
Reach Code: WB4	
Designated Stream Type: Fresh Waters	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☑ Pool-Riffle	☐ Run	☑ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	8ft	Glide Depth:	6 inches
Riffle Depth:	2-3 inches	Step Height:	
Pool Depth:	8 inches	Bank Height (Right Bank):	8 inches
Run Depth:		Bank Height (Left Bank):	8 inches

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☑ >75%
Sand	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☑ Clear	☑ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☑ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☑ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☑ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	1
Storm Water Outfall	1
Modified Channel	1
Impacted Buffer	
Trash / Debris	
Water Conditions	3

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

WB 4

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☑ High	☑ High
Coniferous Trees	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☑ Agricultural
☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☑ Forested
☐ Urban Residential	☑ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☑ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☑ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

- There are several pipes that run under the pathway that drains water from wet lands to the Wintergreen Brook. most are on Right Bank, some on Left bank.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7/13/2015 (assessed) 8/31/2015 (transcribed)
Name of Stream: Wintergreen Brook	Assessed By: Common Ground West River Stewards
Reach Code: WB 4	Kendall Barbery on hand for a portion of the survey
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

1/3 of the way between Lake Wintergreen and Mountain Road (from south to north)—stream passes through a culvert

Type of Barrier: Mark the type of fish barrier.

☐ Dam	x Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent		
Materials:	☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other	

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	x Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	x Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:……_____ft.	☐ Ramped	x Submerged	
Culvert Size:	Diameter: 6”	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** 8 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

Stream passes through culvert as adjacent road shifts from left bank to right bank.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7/13/2015 (assessed) 8/31/2015 (transcribed)
Name of Stream: Wintergreen Brook	Assessed By: Common Ground West River Stewards
Reach Code: WB 4	Kendall Barbery on hand for a portion of the survey
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

The entire reach is channelized, from the pond in LW5 to Lake Wintergreen. There is an old road, now foot path adjacent to the stream. Several culverts connect a surrounding wetland area to the main stem of the brook.

This worksheet highlights an extensive culvert that the brook passes through near the northern end of the reach 750 feet according to aerial scan on Google Maps. 900 feet paced out by D. Edgeworth in the field. See attached Google Map and screen shot of 1934 aerial survey.

Mark where channel modification occurs:			
☐ Meander Bend	x Straight Section	☐ Steep Slope/Valley Wall	☐ Other
Estimate length of channel modification:	750-800 ft.		
Estimate height of bank modification:	**5' high 6'8" wide**		

Type of Manipulation:	☐ Channelization	☐ Bank Armoring	☐ Concrete Channel		x Other
Extent of Manipulation:	x Right Bank	x Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	x Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	x Forested
☐ Suburban Residential	☐ Industrial	x Agricultural	x Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.				
☐ < 15 ft.	☐ 15 – 35 ft.	x 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	x Yes / Estimate Width: 2 ft	☐ No
Is there evidence of sediment deposition in the channel?	x Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	x No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

The culvert is made of stone and concrete. The top of it is covered with soil and vegetation. There is a section right at the beginning that lacks canopy. The remainder is vegetated and has emergent canopy—mixed coniferous and deciduous.


e search box below to locate an address in Connecticut.
intergreen, hamden, ct
Address
WB4 - MODIFIED CHANNEL
1934 + 2017 AERIAL
Toggle map layers
CT Towns
1934
Satellite
Carved section
50 m
Terms of Use
Google
Map Data
50 m
Terms of Use

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7/13/2015 (assessed) 8/31/2015 (transcribed)
Name of Stream: Wintergreen Brook	Assessed By: Common Ground West River Stewards
Reach Code: WB 4	Kendall Barbery on hand for a portion of the survey
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: x Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.
Several culverts were observed along the right bank, which appear to connect surrounding wetland areas to the main stem of Wintergreen Brook—which are otherwise blocked by a road/path that extends the length of the channel between Mountain Road and Lake Wintergreen.
One 6" culvert was perched several feet above the stream level. The main stem of the channel passed through an 8' long 6" diameter culvert about 1/3rd of the way between Lake Wintergreen and Mountain Road. Two larger outfalls, each about 2'6" in diameter and 24'2" long were partially submerged in the channel. The area around these two outfalls was particularly eroded, possibly for back eddies that occur during high flow conditions—which has led to some channel widening immediately around the outfall as well as sediment deposition immediately downstream of the outfall.

Outfall Type:	x Pipe	☐ Leak Off	☐ Channel	
Flow:	x None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	x None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	x None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	x None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	x Concrete	☐ Corrugated Metal	☐ Plastic	x Other
Contributing Source(s):	☐ Road	☐ Parking Lot	x Other	☐ Unknown
Pipe Outlet:	☐ Perched……4 ft.	☐ Ramped		x At Stream Level
Pipe Size:	Diameter: ft.			
# of Pipes:	x 2 @ 6" diameter (one in main stem of channel—that brook passes through, one connecting wetland area to channel)	x 2 @ 2'6" diameter, 24' long		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions /
Excessive Plant or Algae Growth

Survey Basin Code:	Date: 7/13/2015 (assessed) 8/31/2015 (transcribed)
Name of Stream: Wintergreen Brook	Assessed By: Common Ground West River Stewards
Reach Code: WB 4	Kendall Barbery on hand for a portion of the survey
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

The channel, just north of the inlet to Lake Wintergreen, is covered in duckweed

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
X Rural Residential	☐ Urban Residential	☐ Commercial	x Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	X Recreational

Describe Water Conditions: Mark all that apply.			
X Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	☐ Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	x 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	x Everywhere
Attached: (e.g. water lily)	x Absent	☐ In Spots	☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	X Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	x Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	x No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	x Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	x Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

The duckweed occurs immediately upstream of Lake Wintergreen, where water in the channel slows down and lots of sediment has accumulated. Channel bottom comprised of a deep layer of soft, organic debris and fine sediments. Water surface covered by duckweed.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions /
Excessive Plant or Algae Growth

Survey Basin Code:	Date: 7/13/2015 (assessed) 8/31/2015 (transcribed)
Name of Stream: Wintergreen Brook	Assessed By: Common Ground West River Stewards
Reach Code: WB 4	Kendall Barbery on hand for a portion of the survey
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Between the inlet of the extensive culvert described in the AOC Manipulated Channel Worksheet and the power line buffer (south of Mountain Road) the stream passes through a coniferous canopy—of Old Field White Pine—and the water changes in appearance from clear/lightly stained to rusty in color with an oily sheen on the surface.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	x Forested
☐ Suburban Residential	☐ Industrial	x Agricultural	X Recreational

Describe Water Conditions: Mark all that apply.			
☐ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	x Rusty-Red	☐ Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	x 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	x Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	X In Spots	☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	x Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	x Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	x No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	x Yes /	x No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☐ Yes	x No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

Change in water conditions occur upstream of extensive culvert and beneath a canopy of Old Field White Pine. The banks of the stream are visibly channelized and straightened with a bank made of stacked stone.

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions / Excessive Plant or Algae Growth

Survey Basin Code:	Date: 7/13/2015 (assessed) 8/31/2015 (transcribed)
Name of Stream: Wintergreen Brook	Assessed By: Common Ground West River Stewards
Reach Code: WB 4	Kendall Barbery on hand for a portion of the survey
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Between the power line buffer and mountain road, the stream is visibly straightened and channelized with banks made of stacked stone. Just north of the power line buffer, there is lots of attached vegetation and duckweed and the water is cloudy in appearance.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	x Forested
☐ Suburban Residential	☐ Industrial	x Agricultural	X Recreational

Describe Water Conditions: Mark all that apply.			
☐ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☐ Odors
☐ Green	☐ Rusty-Red	x Milky	☐ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	x 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	x In Spots	☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	X In Spots	☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	X In Spots	☐ Everywhere
Attached: (e.g. filamentous)	x Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	x No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	x Yes /	x No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	x Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

This section of the stream emerges from a culvert on Mountain Road and is channelized/straightened. The water is slow moving, as discharge from an impoundment upstream of Mountain Road (in WB 5) is minimal—the area of concern is not immediately abutting an impoundment, but it's likely that the low discharge from the impoundment upstream has an influence on sediment deposit and vegetation in this portion of the channel. In WB 5, just upstream, attached vegetation dominates in the stream channel and water levels are low.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/6/2015
Name of Stream: WINTERGREEN BROOK	Assessed By: DAVE EDGEWORTH, TY REEK, BALW
Reach Code: WB5 WB5a + b	LAVELLE K. BARBERY
Designated Stream Type: fresh	CG West River Stewards

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

with the exception of the confluence of the stream w/ the pond.

WB5a WB5b

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: (A) 2-3 ft (B) 3-4 ft	Glide Depth: (B) 5-6"
Riffle Depth: (A) 1-2"	Step Height:
Pool Depth: (A) 4"	Bank Height (Right Bank): (A) 7-8" (B) 12"
Run Depth:	Bank Height (Left Bank): (A) 7-9" (B) 12"

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☒ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

WB5a	WB5b
A >75% S+C; 5-25% Sand; <5% cobble; Dam	>75% silt+clay; 5-25% Sand.

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

(*) earthy odor (B)

Aquatic Plants in Stream: A B

Floating: (e.g. duck weed)	☒ Absent (A)	☒ In Spots (B)	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent (A)	☐ In Spots	*☒ Everywhere (B)

Pond — floating + attached in spots → lower stem

Algae in Stream: A B

Floating: (e.g. planktonic)	☒ Absent (A)	☒ In Spots (B)	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent (A)	☐ In Spots	*☒ Everywhere (B)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☒ >75% covered (A)	☐ 75-50% covered	☒ 50%-25% covered (B)	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

- Erosion ______
- Fish Barrier ______
- Storm Water Outfall ______
- Modified Channel ______
- Impacted Buffer ______
- Trash / Debris ______
- Water Conditions ______

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

In lower portion of channel — filled in w/ vegetation
~20 ft buffer along lower channel at 50% canopy

Developed By: CT-NRCS
January 2008

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

(A)

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☒ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

(B) – Grasses/Shrubs – Rt Bank – Shrubs Conifers – Left Bank (High Conifers)

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

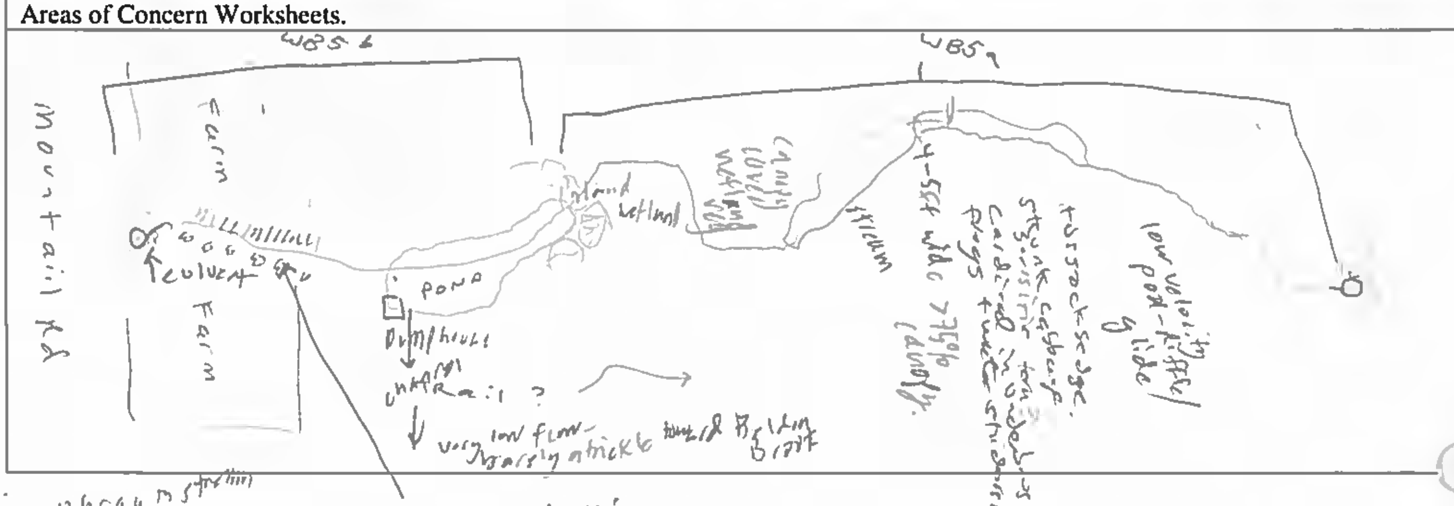
Immediately adjacent to stream		< ¼ Mile from stream		> ¼ Mile from stream	
☐ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural	☒ Rural Residential	☐ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

(B) — AGRICULTURAL < ¼ mile (B) AG (B) AG > ¼

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet. B A

Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:________.	☐ Yes	☒ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.



phragmites

Bob Shelt? Farm Mngr.

noted that this portion of the stream has been diverted from pond to Belden Brook
4' wide channel some standing water

Developed By: CT-NRCS
January 2008

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code: W65-6	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

Dam

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 15 ft.	**Length of Spillway:** 10 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent		
Materials:	☐ Stone	☒ Concrete	☒ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☒ Other	

Pump House — Pump House

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☒ Submerged	
Culvert Size:	Diameter: 24" ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** 40 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

Mark where channel modification occurs:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft.

Estimate height of bank modification: ft.

Type of Manipulation:	☐ Channelization	☐ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☐ Right Bank	☐ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/6/15
Name of Stream: Wintergreen Brook	Assessed By: CG WR Stewards
Reach Code: WB5-B	
Designated Stream Type: Fresh	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☐ Pool-Riffle	☐ Run	☑ Glide	*☑ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 3-4 Feet	Glide Depth: 5-6 Inches
Riffle Depth:	Step Height:
Pool Depth:	Bank Height (Right Bank): ~~FEET~~ Inches - 12
Run Depth:	Bank Height (Left Bank): ~~FEET~~ Inches -12

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☑ >75%
Sand	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☑ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☑ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☑ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☑ In Spots	*☑ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☐ 75-50% covered	☑ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion
Fish Barrier
Storm Water Outfall
Modified Channel
Impacted Buffer
Trash / Debris
Water Conditions

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☑ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☑ High
Shrubs	☑ Low	☐ Low	☐ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

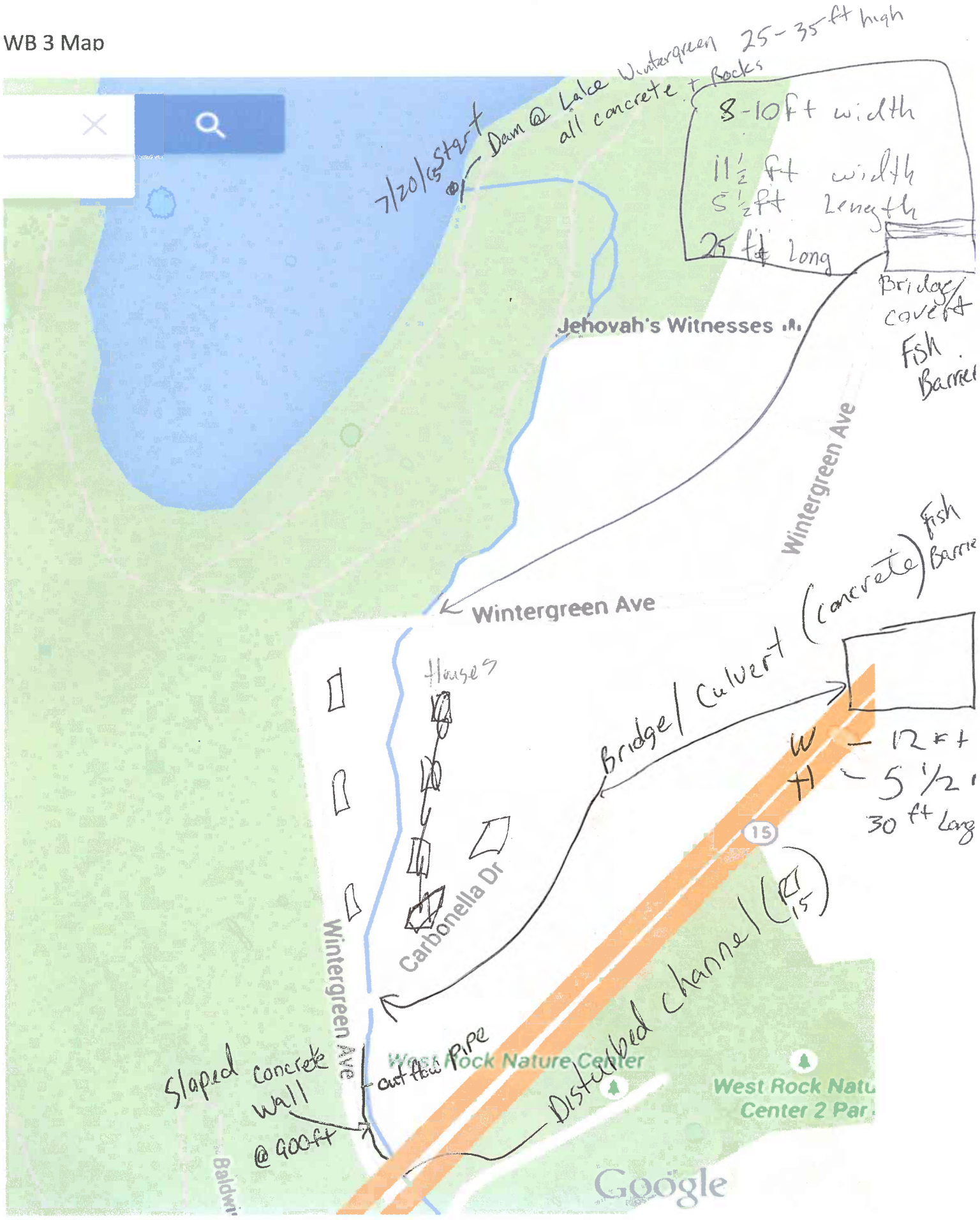
Immediately adjacent to stream		< ¼ Mile from stream		≥ ¼ Mile from stream	
☐ Rural Residential	☑ Agricultural	☐ Rural Residential	☑ Agricultural	☐ Rural Residential	☑ Agricultural
☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☑ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☑ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:	☐ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☑ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☑ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☑ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☑ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

WB 3 Map


7/20/15 start
Dam @ Lake Wintergreen 25-35 ft high
all concrete + Rocks
8-10 ft width
11 1/2 ft width
5 1/2 ft length
25 ft long
Bridge/ culvert
Fish Barrier
Jehovah's Witnesses
Wintergreen Ave
Wintergreen Ave
Houses
Bridge/ Culvert (concrete)
Fish Barrier
W - 12 ft
H - 5 1/2 ft
30 ft Long
15
Carbonella Dr
Wintergreen Ave
Disturbed channel
Sloped concrete wall @ 900 ft
out flow Pipe
West Rock Nature Center
West Rock Nature Center 2 Par
Google

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-20-15
Name of Stream: Wintergreen Brook	Assessed By:
Reach Code: WB-3	CG West River Stewards
Designated Stream Type: Fresh Water	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☑ Pool-Riffle	☐ Run	☐ Glide	*☑ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	8-10 ft	Glide Depth:	
Riffle Depth:	1-2 inch	Step Height:	
Pool Depth:	5 inches	Bank Height (Right Bank):	3 inches
Run Depth:		Bank Height (Left Bank):	3 inches

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☑ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☑ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☑ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☑ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☑ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	2
Storm Water Outfall	
Modified Channel	2
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

WB 3

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☑ High	☑ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ½ Mile from stream**		**> ½ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☑ Rural Residential	☐ Agricultural	☑ Rural Residential	☐ Agricultural
☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☐ Forested	☐ Suburban Residential	☑ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☑ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☑ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed:_____.	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☑ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

WB – 4 Mountain Road to Lake Wintergreen

Duckweed everywhere

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/13/2015
Name of Stream: Wintergreen Brook	Assessed By: CDR Stewarts
Reach Code: WB 4	
Designated Stream Type: Fresh Waters	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☑ Pool-Riffle	☐ Run	☑ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	8ft	Glide Depth:	6 inches
Riffle Depth:	2-3 inches	Step Height:	
Pool Depth:	8 inches	Bank Height (Right Bank):	8 inches
Run Depth:		Bank Height (Left Bank):	8 inches

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☑ >75%
Sand	☐ <5%	☑ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☑ Clear	☑ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☑ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☑ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☑ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☑ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	
Modified Channel	
Impacted Buffer	
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

WB 4

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☑ High	☑ High
Coniferous Trees	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☑ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☑ Agricultural
☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☑ Forested	☐ Suburban Residential	☑ Forested
☐ Urban Residential	☑ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☑ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☑ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 4.	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☑ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

Completed Stream Assessment Forms
Wilmot Brook

WL B1 0.52 m 519 Woodin St. HAMDEN

50 BROOKSIDE AVE NEW HAVEN

CT – NRCS
Stream Assessment Worksheet

DEGRADATION OF THE 35' ZONE ADJ. TO STREAM
Degraded Buffer

Survey Basin Code:	Date: 7-23-15
Name of Stream: WILMOT	Assessed By: BHARTA
Reach Code: WLB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

DEGRADED DUE TO MODIFIED CHANNEL AT N END
PHRAGMITES AT S. END

Mark where the degraded buffer occurs.

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer:	ft.
☒ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☐ Minimal Width	☒ Invasive Plants	☐ Other
Right Bank:	☒ Minimal Vegetation	☐ Minimal Width	☒ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☐	☒	☒	☐	☐
Right Bank	☐	☐	☐	☒	☒	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7-23-15
Name of Stream: Wilmot	Assessed By: BH AP TA
Reach Code: WLB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: 750 ft.

Estimate height of bank modification: 5 ft.

Type of Manipulation:	☐ Channelization	☒ Bank Armoring	☐ Concrete Channel	☐ Other	
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☐ Natural	☒ Rip Rap	☒ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-23
Name of Stream: WILMOT	Assessed By: BH TA AP
Reach Code: WUB-1	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched .5-2 ft.	☐ Ramped	☒ At Stream Level	
Pipe Size:	Diameter: 12"-18"			
# of Pipes:	☐ 1	☐ 2	☒ 3 + 4	

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-23
Name of Stream: Wilmot	Assessed By: BH AP TA
Reach Code: WLB-1	900-1015
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☒ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 6'	Glide Depth: —
Riffle Depth: 6"	Step Height: —
Pool Depth: 1.5'	Bank Height (Right Bank): 6'
Run Depth: 1.5'	Bank Height (Left Bank): 6'

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches) ✗	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock ✗	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	1
Modified Channel	1
Impacted Buffer	1
Trash / Debris	
Water Conditions	

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

Culverts at the bridge 12" RR 6" trickle RL 12" 2' P Dry

outfall 15" at end of dead end conc and R 12" Perch

18 Riv L outfall conc 1/2 up dead end trickle 6"

15" Riv R at Riv level conc

Developed By: CT-NRCS
January 2008

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Deciduous Trees	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

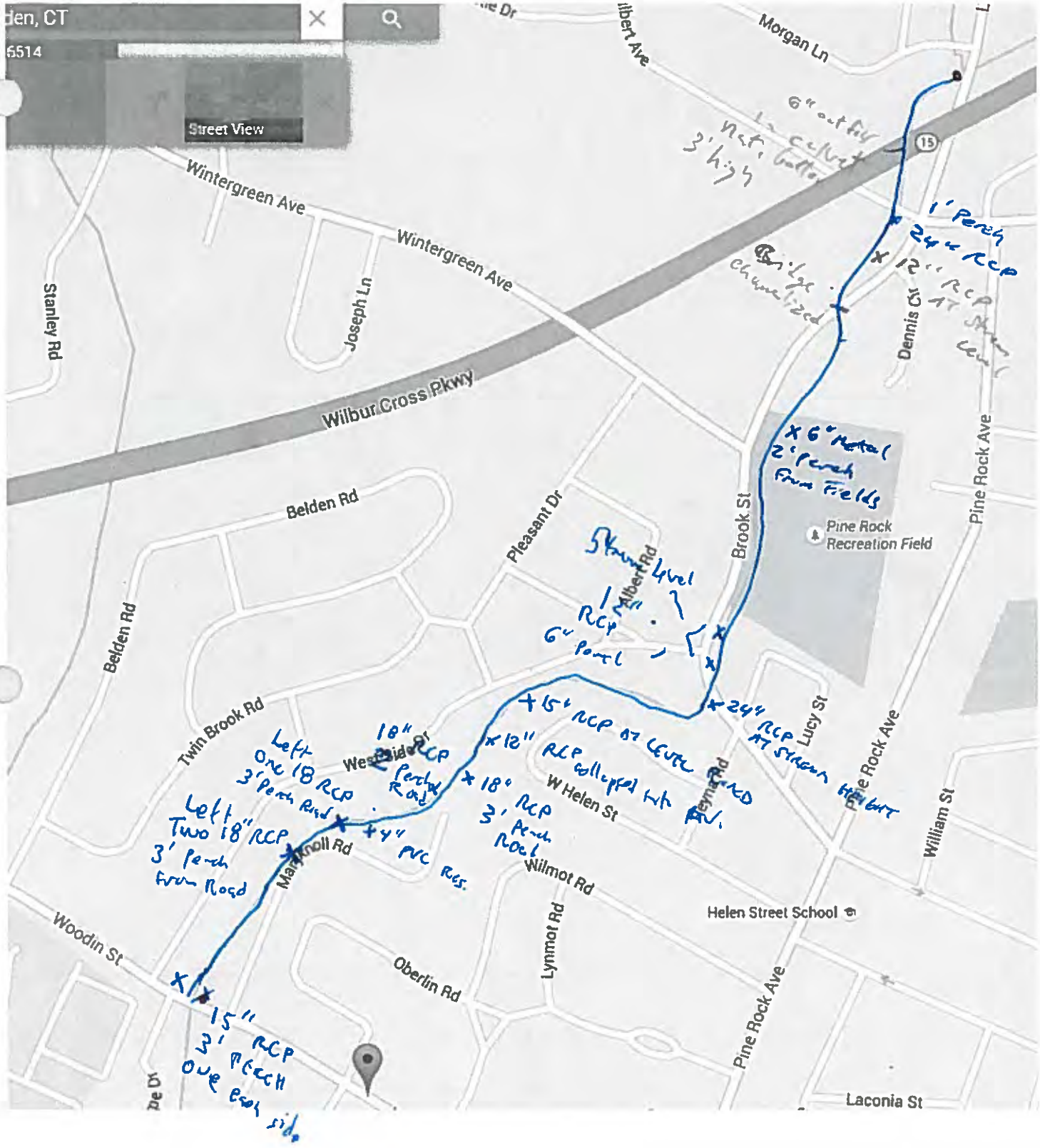
Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 4 .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)? LIGHTLY SCATTERED	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

WLB2 0.95

50 Lake St.



519 Woodin

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-16-15
Name of Stream: WILMOT BROOK	Assessed By: BH AB
Reach Code: W1B2	B45 START
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 8	Glide Depth:
Riffle Depth: 3"	Step Height:
Pool Depth: 1' AVE (UP TO 2')	Bank Height (Right Bank): 1'
Run Depth:	Bank Height (Left Bank): 1'

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay X	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches) X	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock X	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☒ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☒ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	
Storm Water Outfall	1
Modified Channel	1
Impacted Buffer	1
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Grass	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☑ Low	☑ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☑ Low	☐ Low	☑ Moderate	☑ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☒ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☐ Yes	☒ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 16 .	☑ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☑ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☑ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)? Not much ...	☑ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☑ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7·16·15
Name of Stream: UNT. UNLMOT	Assessed By: AB BH
Reach Code: WLB-2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

16 TOTAL 6" TO 2', BOTH SIDES

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☒ Corrugated Metal	☒ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other	☐ Unknown
Pipe Outlet:	☒ Perched 1-3 ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 6"-2 ft.			
# of Pipes:	☐ 1	☐ 2	☐ 3 +	☑ 16

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

SEE MAP FOR DETAILS

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7-16-15
Name of Stream: WILMOT	Assessed By: AB BH
Reach Code: WLB2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

ENTING REACH

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft. 0.95 MILE

Estimate height of bank modification: 5 ft.

Type of Manipulation:	☒ Channelization	☒ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☐ Channel Bottom	
Channel / Bank Materials:	☒ Natural	☒ Rip Rap	☒ Concrete	☐ Gabions ☐ Metal STONE

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☑ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☐ No
Is the channel connected to a floodplain?	☐ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7-16-15
Name of Stream: WILMOT	Assessed By: BA AB
Reach Code: WLB-2	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

ENTIRE REACH HAD DEGRADED BUFFER

Mark where the degraded buffer occurs.

☒ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer:	ft.
☒ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other

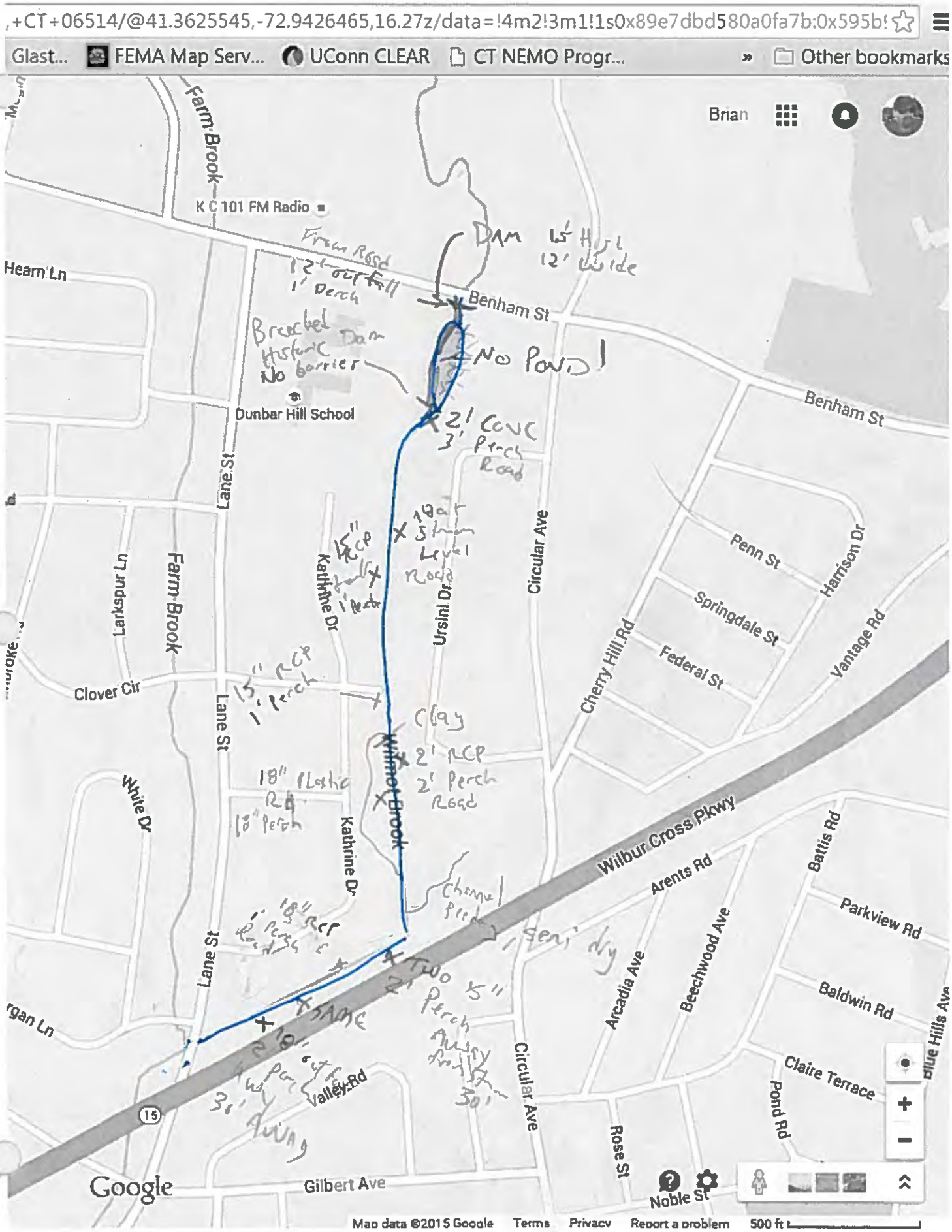
Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☐	☐	☐
Right Bank	☐	☐	☒	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

WLB3 0.57' 455 Benham



CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-16-15
Name of Stream: WILMOT	Assessed By: AB BH
Reach Code: WLB-3	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☑ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☑ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width: 8'	Glide Depth:
Riffle Depth: 4"	Step Height:
Pool Depth: 1'	Bank Height (Right Bank):
Run Depth:	Bank Height (Left Bank):

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☑ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☑ 50-75%	☐ >75%
Boulder (>10 inches)	☑ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☑ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☑ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☑ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☑ Absent	☐ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☑ >75% covered	☐ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	X
Storm Water Outfall	X
Modified Channel	X
Impacted Buffer	X
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☐ Forested	☒ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☒ Other HI-WAY	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: 12 .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7-16-15
Name of Stream: WILMOT	Assessed By: BH AB
Reach Code: WLB-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

75% OF REACH MOSTLY BEHIND RESIDENTIAL

Mark where channel modification occurs:

☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: ft. 50-75%

Estimate height of bank modification: 4 ft.

Type of Manipulation:	☒ Channelization	☐ Bank Armoring	☐ Concrete Channel		☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☒ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☐ Yes / Estimate Width: ft	☒ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7 16 15
Name of Stream: WILMOT	Assessed By: ASHA + BRIAN
Reach Code: WLB-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

12 OUTFALLS

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☒ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 12-24 ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 + ☒ 12

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7-16-15
Name of Stream: WILMOT	Assessed By: ASHA + BRIAN
Reach Code: WLB-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

END OF REACH, AT BENHAM ST

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☐ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 1½ ft.	**Length of Spillway:** 12 ft.	**Shape of Spillway:** ☑ Straight	☐ Crescent		
Materials:	☐ Stone	☒ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☒ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☒ Other CULVERT UNDER BRIDGE	

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7-16-15
Name of Stream: Wilmot Brook	Assessed By: BH AB
Reach Code: WLB-3	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

50-75' of Reach - All areas near Res. Streets

Mark where the degraded buffer occurs.

☒ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer:	ft.
☒ **Right Bank**		Estimate length of degraded buffer:	ft.

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other

Dominate Land Cover	Paved	Bare Ground	Turf Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☐	☒	☐
Right Bank	☐	☐	☒	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Erosion Assessment

Survey Basin Code:	Date:
Name of Stream:	Assessed By:
Reach Code:	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Bank Erosion: 1) Mark and label the location of the erosion on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

Mark where erosion is occurring:

☐ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Site Dimensions: Indicate all applicable measurements associated with the erosion site				
Length:	Left Bank:	ft.	Right Bank:	ft.
Bank Height:	Left Bank:	ft.	Right Bank:	ft.
Bank Angle:	Left Bank:	deg.	Right Bank:	deg.

What is the proximity of the erosion site to infrastructure (e.g. road, bridge, building, etc.)?

☐ < 15 ft.	☐ 15 - 30 ft	☐ 30 - 45 ft	☐ 45 – 60 ft	☐ 60 - 100 ft	☐ > 100 ft.

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the erosion site.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Land Ownership: Mark land ownership at the location of the erosion site.

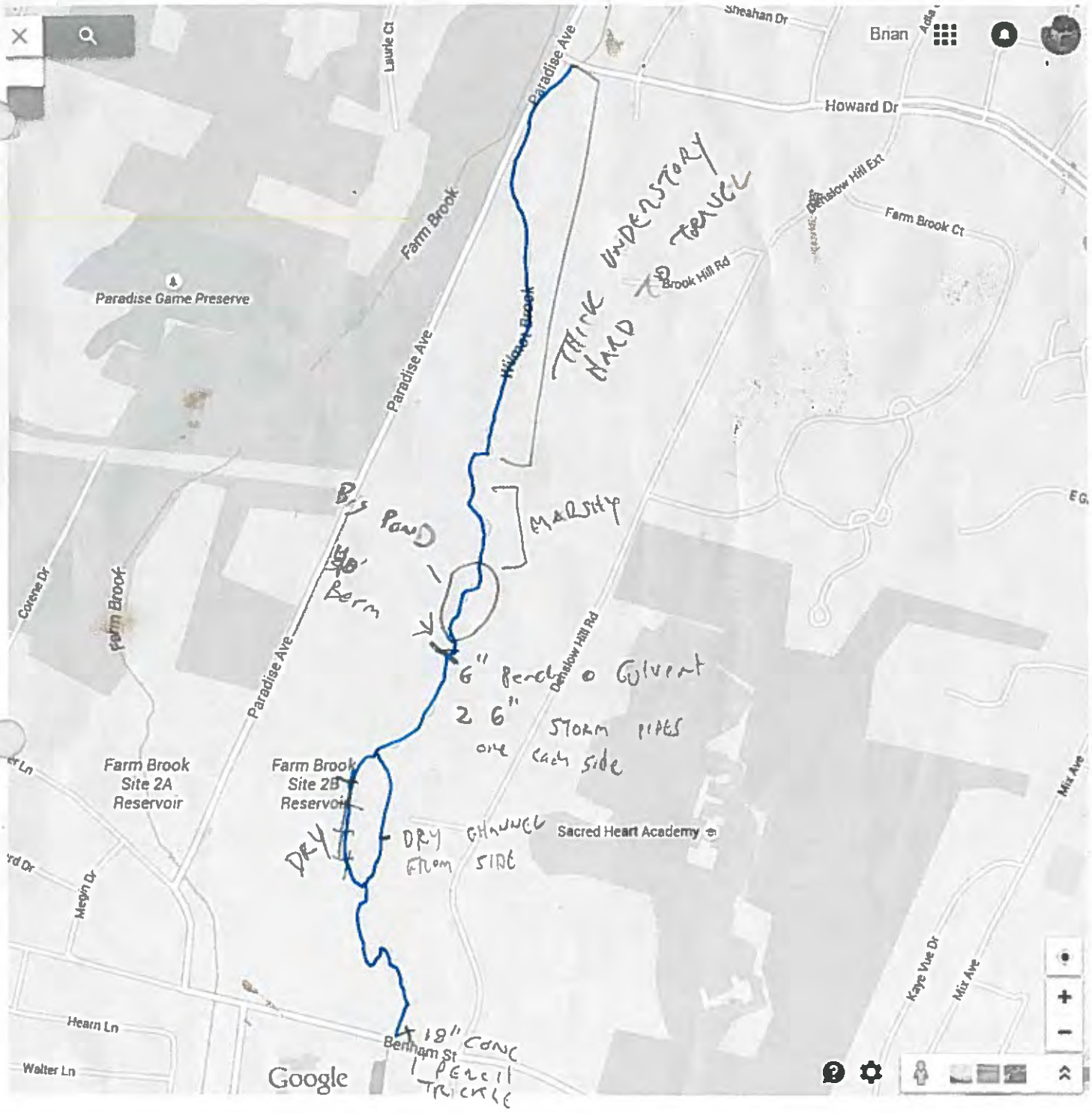
☐ Public	☐ Private	☐ Unknown

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation at the erosion site.

☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

WCB4 1.43m 423 HOWARD DRIVE



455 BENHAM ST. HAMDEN

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7-21
Name of Stream: WILMOT	Assessed By: BH, TYLER
Reach Code: WLB4	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.

☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	10'	Glide Depth:	
Riffle Depth:	3"	Step Height:	
Pool Depth:	1'	Bank Height (Right Bank):	1' STEEP BANK
Run Depth:		Bank Height (Left Bank):	1' SHALLOW BANK

Substrate Composition: Mark approximate percentages for each substrate type observed.

Silt or Clay	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☒ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.

☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:

Floating: (e.g. duck weed)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:

Floating: (e.g. planktonic)	☒ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.

☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

- Erosion
- Fish Barrier
- Storm Water Outfall
- Modified Channel
- Impacted Buffer
- Trash / Debris
- Water Conditions

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☒ Agricultural	☒ Rural Residential	☒ Agricultural	☒ Rural Residential	☒ Agricultural
☐ Suburban Residential	☒ Forested	☐ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☒ Yes	☐ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7-21
Name of Stream: WILMOT	Assessed By: BH TA
Reach Code: WLB-4	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

@ 3/4 MILE IN

Type of Barrier: Mark the type of fish barrier.

☒ Dam	☒ Culvert	☐ Velocity Barrier	☐ Other

Dam Data: Provide all relevant data.

Height of Dam: 40 ft.	**Length of Spillway:** 10 ft.	**Shape of Spillway:** ☒ Straight	☐ Crescent		
Materials:	☐ Stone	☒ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☒ Other EARTHEN
Is there other infrastructure associated with the Dam? ☒ No	☐ Yes (If yes mark the type below)				
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other	

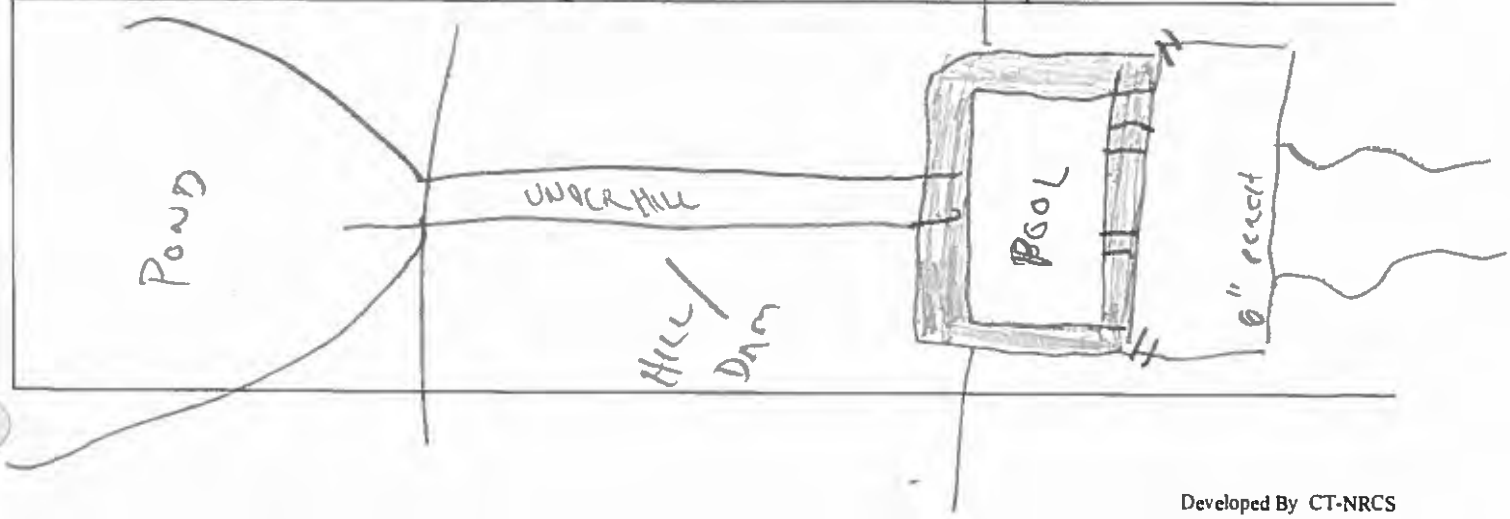
Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☒ Submerged	
Culvert Size:	Diameter: 3 ft.	Height: ft.	Width: ft.	
# of Culverts: 1	**Culvert Length:** 100 ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☒ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.



CT – NRCS
Stream Assessment Worksheet

Trash / Debris

Survey Basin Code:	Date: 7-21
Name of Stream: WILM.T	Assessed By: BLT TM
Reach Code: WLB4	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Trash or Debris: Mark and label the location of the trash or debris on the **map** and provide a brief description of the location relative to roads or other landmarks.

TRASH THROUGHOUT -

☑ Within Stream ☒ Riparian Area: ☒ Left Bank ☐ Right Bank

Type:	☒ Residential	☐ Commercial	☐ Industrial	
Material:	☐ Plastic ☐ Paper ☐ Yard Waste	☒ Tires ☒ Metal ☒ Construction	☐ Appliances ☒ Automotive ☐ Medical	☐ Other
Source:	☐ Unknown	☒ Flooding	☒ Illegal Dumping	☐ Local Outfall
Land Ownership:	☐ Private	☐ Public	☒ Unknown	

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

MOSTLY OLD, SPREAD THROUGHOUT.

2 CARS

6 TIRES

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7-21
Name of Stream: Wilmot	Assessed By: BH TA
Reach Code: WLB4	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☐ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☐ None	☒ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☐ Other	☐ Unknown
Pipe Outlet:	☑ Perched..... 1 ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 1.5 ft.			
# of Pipes:	☒ 1	☐ 2		☐ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7-21
Name of Stream: WILM-T	Assessed By: BH TA
Reach Code: WCB4	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

THROUGH
CULVERT & LARGE BERM/EARTHEN DAM @ 40' TALL
/ LARGE IMPOUNDMENT

Mark where channel modification occurs:			
☐ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
Estimate length of channel modification: 100 ft.			
Estimate height of bank modification: ft.			

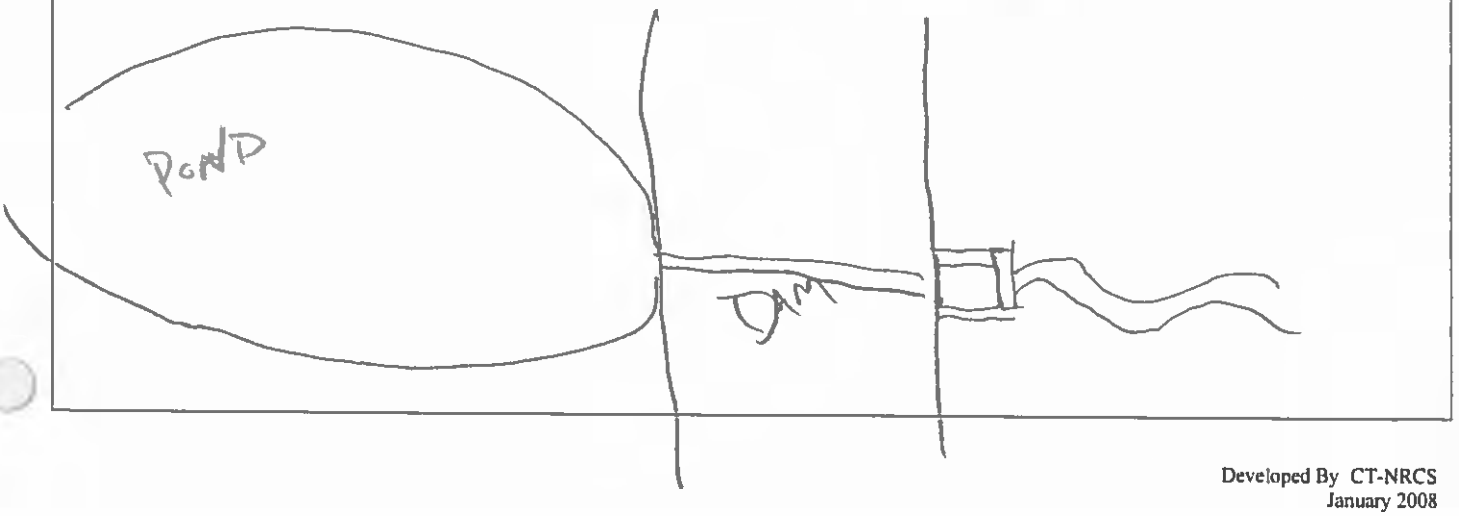
Type of Manipulation:	☒ Channelization	☐ Bank Armoring	☐ Concrete Channel		☐ Other
Extent of Manipulation:	☐ Right Bank	☐ Left Bank	☐ Channel Bottom		
Channel / Bank Materials:	☐ Natural	☐ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

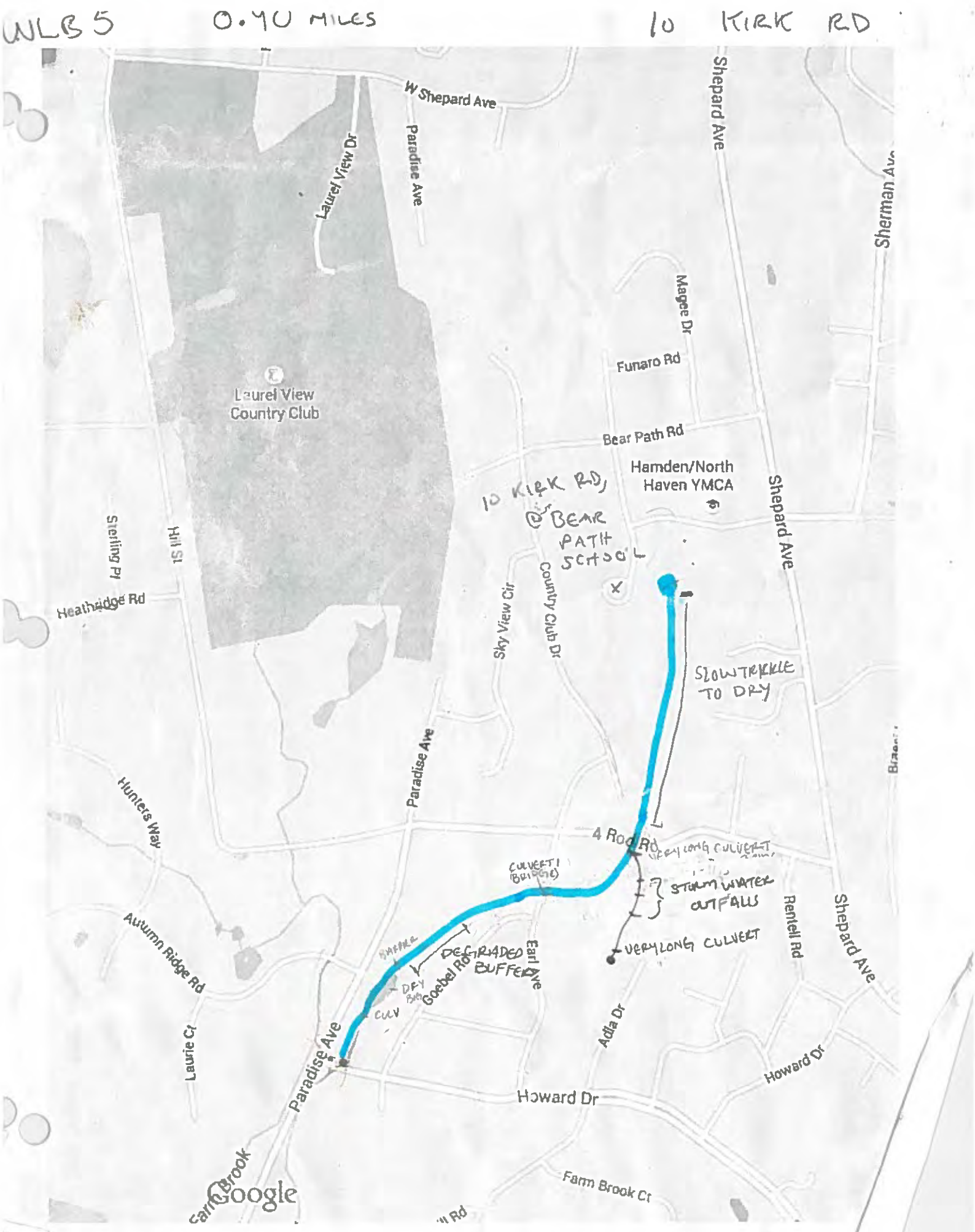
Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
☐ Suburban Residential	☐ Industrial	☒ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.				
☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☒ > 100 ft

Is there a change in the average width of the active channel?	☒ Yes / Estimate Width: 3 ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.





423 HOWARD DRIVE


ROAD TO
CULVERT
FLOWING

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/23/15 1h 1/2
Name of Stream: WILMOT	Assessed By: AB, RE
Reach Code: WLB5	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☐ Yes ☒ No, Which section(s) were not surveyed? Why?
SORRY!

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☒ Pool-Riffle	☐ Run	☒ Glide	*☐ Manipulated Channel (piped, lined, etc.)
Active Channel Width:			Glide Depth: 8"	
Riffle Depth: 3"			Step Height:	
Pool Depth: 8"-1'			Bank Height (Right Bank): 1 1/2	
Run Depth:			Bank Height (Left Bank): 1 1/2	

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Boulder (>10 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☐ Odors	*☐ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☒ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☐ 75-50% covered	☒ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	X
Storm Water Outfall	X
Modified Channel	
Impacted Buffer	X
Trash / Debris	
Water Conditions	

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.						
	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Deciduous Trees	☐ Low	☐ Low	☒ Moderate	☒ Moderate	☐ High	☐ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.					
Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested	☐ Suburban Residential	☐ Forested
☐ Urban Residential	☐ Recreational	☐ Urban Residential	☐ Recreational	☐ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☒ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.		
Is there evidence of either stream bank erosion or streambed instability within the reach?	☐ Yes	☒ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: _____.	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☐ Yes	☒ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☒ Yes	☐ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7/23/15 1h 1/2
Name of Stream: WILMOT	Assessed By: AB RE
Reach Code: WLB5	
Designated Stream Type:	
Site ID:	

Make All Observations Facing ***Downstream***

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks. NEAR END OF REACH. POND BETWEEN PARADISE AVE AND GOEBEL RD.

Type of Barrier: Mark the type of fish barrier.

☐ Dam	☐ Culvert	☐ Velocity Barrier	☒ Other DRIED POND

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials: ☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☐ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☐ Concrete	☐ Corrugated Metal	☐ Plastic	☐ Stone
Culvert Outlet:	☐ Perched:..... ft.	☐ Ramped	☐ Submerged	
Culvert Size:	Diameter: ft.	Height: ft.	Width: ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.		

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

DRIED STREAM AND POND BETWEEN TWO STRETCHES OF THE REACH

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7/23/15
Name of Stream: WILMOT	Assessed By: ABRE
Reach Code: WLB5	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☒ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

4 CULVERTS

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None	☐ Trickle	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☒ Corrugated Metal	☒ Plastic	☒ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other LAWN	☐ Unknown
Pipe Outlet:	☒ Perched..... ft.	☐ Ramped		☐ At Stream Level
Pipe Size:	Diameter: 4" ft.			
# of Pipes:	☐ 1	☐ 2		☐ 3 + ☒ 4

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Degraded Buffer

Survey Basin Code:	Date: 7/23/15
Name of Stream: WILMOT	Assessed By: AB RE
Reach Code: WLB5	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Degraded Buffer: 1) Mark and label the location of the degraded buffer on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

IN FIRST BEND OF THE REACH. LEFT BANK

Mark where the degraded buffer occurs.

☒ Meander Bend	☐ Straight Section	☐ Steep Slope/Valley Wall	☐ Other
☒ **Left Bank**		Estimate length of degraded buffer: 100 ft.	
☐ **Right Bank**		Estimate length of degraded buffer: ft.	

Type of Degradation:				
Left Bank:	☒ Minimal Vegetation	☒ Minimal Width	☐ Invasive Plants	☐ Other
Right Bank:	☐ Minimal Vegetation	☐ Minimal Width	☐ Invasive Plants	☐ Other

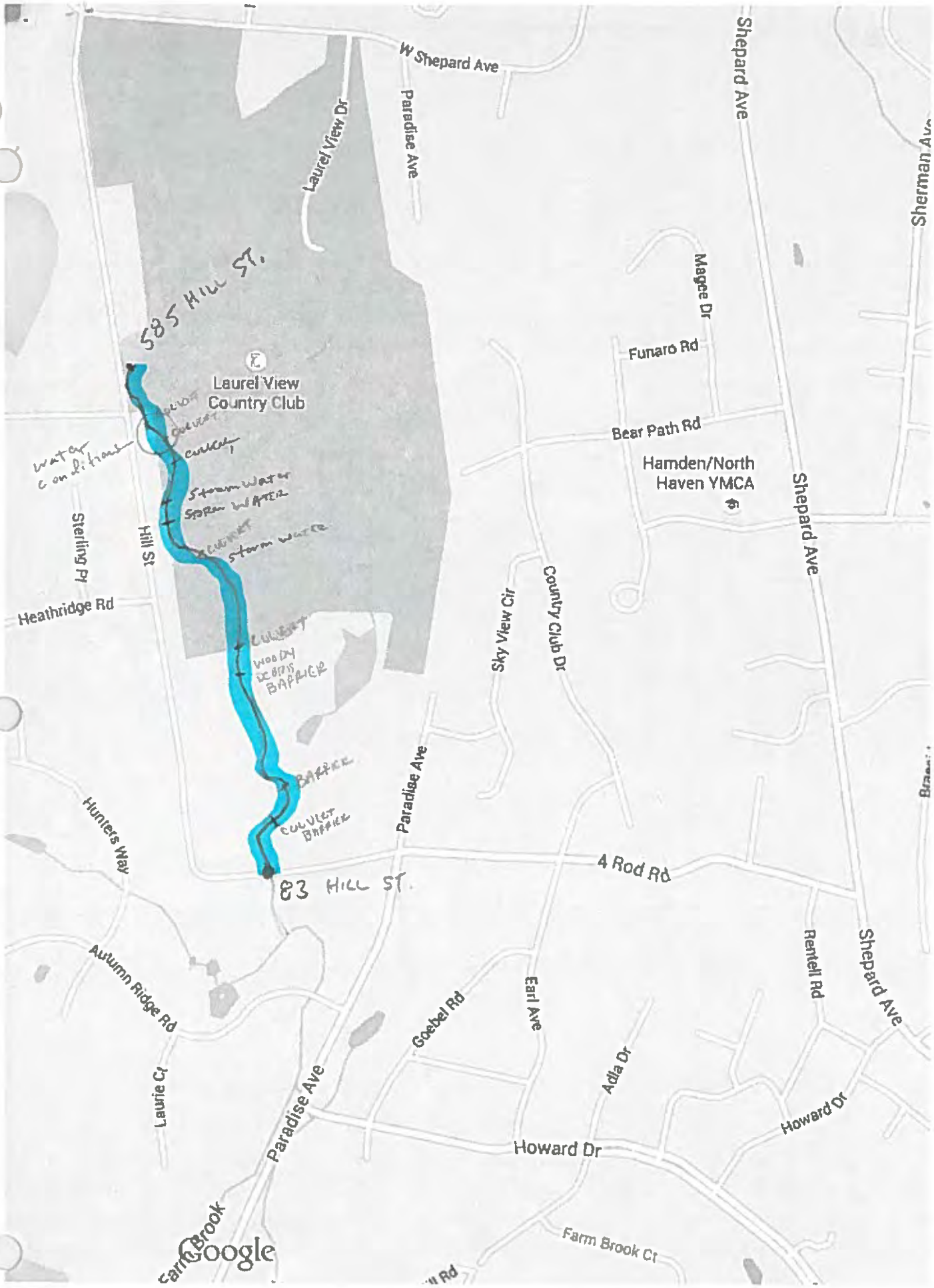
Dominate Land Cover	Paved	Bare Ground	Turf / Lawn	Tall Grass	Scrub / Shrub	Trees	Other
Left Bank	☐	☐	☒	☐	☐	☐	☐
Right Bank	☐	☐	☐	☐	☐	☐	☐

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.				
Left Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☒ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational
Right Bank:	☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
	☐ Suburban Residential	☐ Industrial	☐ Agricultural	☐ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.					
Left Bank:	☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft
Right Bank:	☐ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

WLB5A 0.81 MILES



83 HILL ST, HAMDEN TO 585 HILL ST., HAMDEN

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Survey Basin Code:	Date(s): 7/23/15 1145 - 1 PM
Name of Stream: WILMOT	Assessed By: AB DE
Reach Code: WLB5A	
Designated Stream Type:	

Make All Observations Facing *Downstream*

Was the entire reach of stream surveyed? ☒ Yes ☐ No, Which section(s) were not surveyed? Why?

Channel Morphology: Mark the predominate condition(s), and indicate the average measurements.				
☐ Step-Pool	☒ Pool-Riffle	☐ Run	☐ Glide	*☐ Manipulated Channel (piped, lined, etc.)

Active Channel Width:	Glide Depth:
Riffle Depth: 1"	Step Height:
Pool Depth: 6"	Bank Height (Right Bank): 8"
Run Depth:	Bank Height (Left Bank): 8"

Substrate Composition: Mark approximate percentages for each substrate type observed.					
Silt or Clay X	☐ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Sand	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Gravel (0.1-2 inches)	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Cobble (2-10 inches)	☐ <5%	☐ 5-25%	☐ 25-50%	☒ 50-75%	☐ >75%
Boulder (>10 inches)	☐ <5%	☒ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%
Bedrock	☒ <5%	☐ 5-25%	☐ 25-50%	☐ 50-75%	☐ >75%

Describe Water Conditions: Mark all that apply.		
☒ Clear	☐ Stained ("iced tea")	*☐ Turbid (muddy / silty)
*☐ Green	*☐ Rusty-Red	*☐ Milky
*☒ Odors	*☒ Other (foam, dyes, chemicals)	

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☐ Absent	☒ In Spots	*☐ Everywhere
Attached: (e.g. water lily)	☐ Absent	☐ In Spots	*☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	*☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☒ In Spots	*☐ Everywhere

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☒ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Area of Concern Worksheets
Indicate # and type of sheets completed for this reach assessment

Erosion	
Fish Barrier	X
Storm Water Outfall	
Modified Channel	X
Impacted Buffer	
Trash / Debris	
Water Conditions	X

Note: Items marked with an asterisk (*) indicate a potential area of concern. Please record all relevant information on the appropriate Area of Concern Worksheet(s).

CT-NRCS
Stream Assessment Sheet

Reach Level Assessment

Riparian Vegetation: Characterize the average density of vegetation in the first 35 feet adjacent to the stream for both banks.

	Left Bank	Right Bank	Left Bank	Right Bank	Left Bank	Right Bank
Turf Grass	☒ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Grass	☒ Low	☒ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Shrubs	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High
Deciduous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☒ High	☒ High
Coniferous Trees	☐ Low	☐ Low	☐ Moderate	☐ Moderate	☐ High	☐ High

Surrounding Land Use: Mark the dominate land use(s) for each "zone", if known or observed.

Immediately adjacent to stream		**< ¼ Mile from stream**		**> ¼ Mile from stream**	
☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural	☐ Rural Residential	☐ Agricultural
☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested	☒ Suburban Residential	☒ Forested
☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational	☐ Urban Residential	☒ Recreational
☐ Industrial	☐ Other	☐ Industrial	☐ Other	☐ Industrial	☐ Other
☐ Commercial		☐ Commercial		☐ Commercial	

Areas of Concern Checklist: Marking "Yes" to any of the following questions indicates that an Area of Concern Worksheet should be filled out for the appropriate concern. For each occurrence observed, complete and area of concern sheet.

Is there evidence of either stream bank erosion or streambed instability within the reach?	☒ Yes	☐ No
Are there any dams or any other possible natural or artificial barriers to fish migration?	☒ Yes	☐ No
Are there any storm water outfalls, discharge pipes or discharges within the reach? Indicate the number observed: .	☒ Yes	☐ No
Is there any portion of the channel that has been modified (not culvert) (channeled, piped, rip rap)?	☒ Yes	☐ No
Is there any portion of the reach where the riparian buffer has been compromised or is nonexistent?	☐ Yes	☒ No
Is there any portion of the reach that contains trash or other debris (cars, appliances, construction waste)?	☐ Yes	☒ No
Is there any portion of the reach that has a change in water conditions?	☒ Yes	☐ No

Notes: Use the space provided to record important observations otherwise not captured on the Reach Assessment Sheet or the Areas of Concern Worksheets.

- ENTIRE REACH IS MODIFIED BY CULVERTS
- HIGH DECOMPOSING ORGANIC MATTER
- SOME UNUSUAL ALGAE
- MANY DRIED OUT STRETCHES / MUDDY

CT – NRCS
Stream Assessment Worksheet

Fish Barrier

Survey Basin Code:	Date: 7/23/15
Name of Stream: WILMOT	Assessed By: AB RE
Reach Code: WLBSA	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Barrier: Mark and label the location of the barrier on the **map** and provide a brief description of the location of the barrier relative to roads or other landmarks.

MULTIPLE, THROUGHOUT REACH

Type of Barrier: Mark the type of fish barrier.

☐ Dam	☒ Culverts	☐ Velocity Barrier	☒ Other WOODY DEBRIS BLOCKAGE

Dam Data: Provide all relevant data.

Height of Dam: ft.	**Length of Spillway:** ft.	**Shape of Spillway:** ☐ Straight	☐ Crescent	
Materials:	☐ Stone	☐ Concrete	☐ Stone & Concrete	☐ Timber-Crib	☐ Other
Is there other infrastructure associated with the Dam? ☐ No	☐ Yes (If yes mark the type below)			
☐ Factory	☐ Hydro Facility	☐ Mill	☐ Residence	☐ Other

Culvert Data: Provide all relevant data.

Type of Culvert:	☐ Box	☒ Pipe	☐ Pipe-Arch	☐ Arch
Culvert Material:	☒ Concrete	☒ Corrugated Metal	☒ Plastic	☐ Stone
Culvert Outlet:	☒ Perched:..... ft.	☐ Ramped	☒ Submerged	
Culvert Size:	Diameter: 1-2 ft.	Height: 2-5 ft.	Width: 5-8 ft.	
# of Culverts:	**Culvert Length:** ft.			

Velocity Barrier Data: Provide all relevant data.

Nature of Barrier:	☐ Grade Control Sill	☐ Concrete Apron	☐ Channel Cross-Section	☐ Other
Length of Barrier: ft.	**Approx. Vertical Rise:** ft.			

Notes: Use the space provided to record important observations otherwise not captured on this sheet.

- LACK OF WATER IN AREAS NEAR CULVERTS MADE IT DIFFICULT TO KNOW IF THE CULVERTS WOULD BE PERMANENT BARRIERS.

PRIMARY CAUSE OF FISH BARRIERS DUE TO ABSENCE OF WATER THROUGH MANY STRETCHES OF REACH

- WOODY DEBRIS FORMED NATURAL FISH BARRIERS

CT – NRCS
Stream Assessment Worksheet

Storm Water Outfall

Survey Basin Code:	Date: 7/23/15
Name of Stream: Wilmot Brook	Assessed By: AB RE
Reach Code: WLR5A	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location of Outfall: ☒ Right Bank ☐ Left Bank Mark and label the location of the outfall on the **map** and provide a brief description of the location of the outfall relative to roads or other landmarks.

1 - off large culvert - 2 ft diameter (street) - concrete
2 - house drainage (gutters)

Outfall Type:	☒ Pipe	☐ Leak Off	☐ Channel	
Flow:	☒ None 2 small	☒ Trickle (Large on	☐ Moderate	☐ Substantial
Odor:	☒ None	☐ Sewage	☐ Rancid / Sour	☐ Sulfur (rotten eggs)
Deposits / Stains	☒ None	☐ Sediment Delta	☐ Oily Stain	☐ Black
Benthic Growth	☒ None	☐ Brown	☐ Green	☐ Orange

Pipe Data: Provide all relevant data.

Pipe Material:	☒ Concrete	☐ Corrugated Metal	☒ Plastic	☐ Other
Contributing Source(s):	☒ Road	☐ Parking Lot	☒ Other	☐ Unknown
Pipe Outlet:	☒ Perched..... ft.	☐ Ramped		☒ At Stream Level
Pipe Size:	Diameter: 2 ft.			
# of Pipes:	☐ 1	☐ 2		☒ 3 +

Leak-Off Data: Provide all relevant data.

Leak-Off Swale:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other
Length of Swale: ft.				
Width of Swale: ft.				

Channel Data: Provide all relevant data.

Channel Material:	☐ Concrete	☐ Asphalt	☐ Stone	☐ Earthen	
Contributing Source (s):	☐ Road	☐ Parking Lot	☐ Recreational Field	☐ Other	☐ Unknown
Channel Length: ft.					
Channel Width: ft.					

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CT – NRCS
Stream Assessment Worksheet

Modified Channel

Survey Basin Code:	Date: 7/23/15
Name of Stream: WILMOT	Assessed By: AB RE
Reach Code: WLBS-A	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Modified Channel: Mark and label the location of the modified channel on the **map** and provide a brief description of the location of the channel section relative to roads or other landmarks.

END OF REACH. AND MULTIPLE TIMES THROUGHOUT REACH

Mark where channel modification occurs:

☒ Meander Bend	☒ Straight Section	☐ Steep Slope/Valley Wall	☐ Other

Estimate length of channel modification: 400 ft.

Estimate height of bank modification: 5 ft.

Type of Manipulation:	☒ Channelization	☐ Bank Armoring	☐ Concrete Channel	☐ Other
Extent of Manipulation:	☒ Right Bank	☒ Left Bank	☒ Channel Bottom	
Channel / Bank Materials:	☒ Natural	☒ Rip Rap	☐ Concrete	☐ Gabions	☐ Metal

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.

☐ Rural Residential	☐ Urban Residential	☐ Commercial	☐ Forested
☐ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational

Existing Width of Riparian Vegetation: Mark the average width of riparian vegetation to the modified section.

☒ < 15 ft.	☐ 15 – 35 ft.	☐ 35 – 50 ft.	☐ 50 – 100 ft	☐ > 100 ft

Is there a change in the average width of the active channel?	☒ Yes / Estimate Width: 7 ft	☐ No
Is there evidence of sediment deposition in the channel?	☐ Yes	☒ No
Is the channel connected to a floodplain?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

CHANNEL IS MODIFIED AFTER CULVERT. GOES FROM SMALL TRICKLE TO COMPLETELY DRY

CULVERTS REROUTE STREAM UNDER GOLF COURSE

CT – NRCS
Stream Assessment Worksheet

Visual Water Conditions / Excessive Plant or Algae Growth

Survey Basin Code:	Date: 7/23/15
Name of Stream: Wilmot Brook	Assessed By: AB RE
Reach Code: WLBSA	
Designated Stream Type:	
Site ID:	

Make All Observations Facing *Downstream*

Location / Extent of Visual Water Conditions and/or Excessive Plant or Algae Growth: 1) Mark and label the location on the **map**. 2) Briefly describe the location of the site relative to roads or other landmarks.

SMALL FOOT PATH 10 ft FROM 400 HILL ST - CULVERT - LARGE POOL

Immediately Adjacent Land Use: Mark the land use(s) immediately adjacent to the modified section.			
☐ Rural Residential	☐ Urban Residential	☐ Commercial	☒ Forested
☒ Suburban Residential	☐ Industrial	☐ Agricultural	☒ Recreational

Describe Water Conditions: Mark all that apply.			
☒ Clear	☐ Stained ("iced tea")	☐ Turbid (muddy / silty)	☒ Odors
☐ Green	☒ Rusty-Red	☐ Milky	☒ Other (foam, dyes, chemicals)

Canopy Cover: Mark approximate percentage of stream covered by tree canopy.			
☐ >75% covered	☑ 75-50% covered	☐ 50%-25% covered	☐ < 25% covered

Aquatic Plants in Stream:			
Floating: (e.g. duck weed)	☒ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. water lily)	☒ Absent	☐ In Spots	☐ Everywhere

Algae in Stream:			
Floating: (e.g. planktonic)	☐ Absent	☐ In Spots	☐ Everywhere
Attached: (e.g. filamentous)	☐ Absent	☐ In Spots	☐ Everywhere

Is the change in water condition or excessive plant / algae growth located at or directly below a storm water outfall?	☐ Yes	☒ No
Is the change in water conditions or excessive plant / algae growth associated with a change in channel dimensions (depth & width)?	☒ Yes	☐ No
Is the change in water conditions or excessive plant / algae growth associated with an impoundment / dam on the stream?	☐ Yes	☒ No

Notes: Use the space provided to record important observations otherwise not captures on this sheet.

REFER TO PHOTOS. SOME STRANGE ALGAL GROWTH ? NOT SURE.