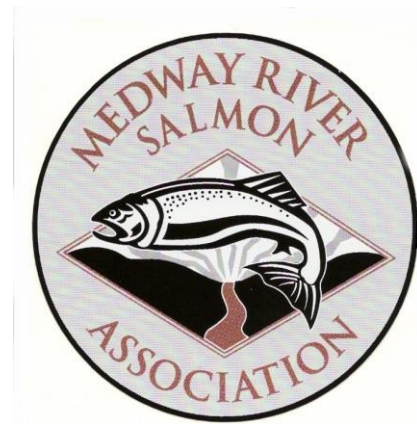


# **Medway River Tributaries Fish Habitat Restoration Plan**

Prepared for  
Medway River Salmon Association

Prepared by  
Bluenose Coastal Action Foundation  
Medway River Salmon Association

Completion Date  
March, 2014





## Medway River Tributaries Fish Habitat Restoration Plan, 2013

---

### Contact Information

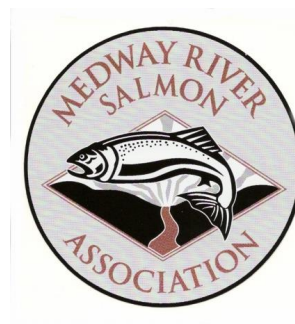
**Contact Name:** Jennifer Campbell  
**Position:** Field Coordinator  
**Group Name:** Bluenose Coastal Action Foundation

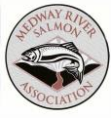
**Phone:** 1-902-634-9977  
**Fax:** 1-902-634-9979  
**Email:** Jenniferc@coastlaction.org  
**Website:** www.coastlaction.org

**Contact Name:** Brian Dulude / Horace MacPherson  
**Position:** Project Manager / President  
**Group Name:** Medway River Salmon Association

**Mailing Address:** P.O. Box 93  
Mill Village, N.S.  
B0J 2H0

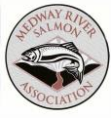
**Email:** brian77dulude@hotmail.com / horace@macpherson.ns.ca  
**Website:** <http://medwayriversalmonassociation.org>





## Table of Contents

<b>Part 1. Restoration Plan Objectives.....</b>	<b>3</b>
<b>Part 2. Overview Information – .....</b>	<b>4</b>
Watershed boundary maps.....	13
Map 1: Medway River Tributaries Study, 2013 .....	15
Map 2: Tumblingdown Brook.....	16
Map 3: Wentworth Brook.....	17
Map 4: Salters Brook.....	18
Map 5: Glode Meadow Brook.....	19
Map 6: Mink Trap Brook.....	20
<b>Part 3. Labeled 1:8 000 Maps -.....</b>	<b>20</b>
Map 1: Tumblingdown Brook.....	21-23
Map 2: Wentworth Brook.....	24-27
Map 3: Salters Brook.....	28-32
Map 4: Glode Meadow Brook.....	33-35
Map 5: Mink Trap Brook.....	36-37
<b>Part 4. Habitat Description and Restoration Opportunities.....</b>	<b>38</b>
Tumblingdown Brook.....	38-61
Wentworth Brook.....	61-76
Salters Brook.....	76-97
Glode Meadow Brook.....	97-102
Mink Trap Brook.....	102-110
<b>Part 5. Restoration Plan Summary.....</b>	<b>112</b>
<b>Reference Material.....</b>	<b>116</b>
<b>Acknowledgments.....</b>	<b>117</b>



## 1. Restoration Plan Objectives

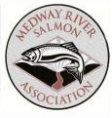
The intent of the Medway River Tributaries Fish Habitat Restoration Plan is to provide a strategy to improve fish habitat conditions to increase fish populations within the river system on a watershed-wide basis. The plan will focus on how to improve watershed conditions for fish while also taking into consideration water quality and adjacent land uses by other resident plants, wildlife, and humans. By taking a watershed-based approach to restoration, Medway River Salmon Association will gain a comprehensive look at restoration needs, and determine specific activities that can be undertaken to improve habitat and environmental conditions. Due to the large size of the watershed Medway River Salmon Association has decided to break down the watershed into smaller sub watersheds.

Objectives	<p>The main objectives of the project are as follows:</p> <ul style="list-style-type: none"><li>To assess the existing condition of fish habitat within the chosen sub-watershed</li><li>To determine likely limiting habitat factors and fish habitat restoration needs</li><li>To develop a strategy with regard to various projects and activities that can be undertaken to restore and improve the habitat on a sub-watershed basis</li></ul> <p>This document will be used to guide any future fish habitat restoration, conservation, and/or stewardship initiatives in the area.</p>
Specific Goals	<ul style="list-style-type: none"><li>• Research and compiling of data and information for the sub-watershed area</li><li>• Establish a ground-truthing plan, and acquire maps of the sub-watershed area</li><li>• Completion of surveys and assessments including: connectivity surveys and assessments, water quality sampling, habitat assessments, riparian health assessments, and land use surveys</li><li>• Compilation of data and information collected</li></ul>



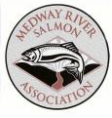
## 2. Introductory Information – Medway River Tributaries

1	Location in province (town[s], county, and region)	<b>Watershed:</b> Herring Cove / Medway Watershed <b>Location:</b> Queens County; Nova Scotia Southern Upland Region <b>Nearest Communities:</b> Mill Village, Charleston
2	Watershed area (square km)	<p>The Herring Cove / Medway Watershed is approximately 2100km<sup>2</sup>.</p> <p>Tributary sub-watersheds assessed in 2013:</p> <ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – 15.4km<sup>2</sup></li> <li>2. Wentworth Brook sub-watershed – 73.3km<sup>2</sup></li> <li>3. Salters Brook sub-watershed – 275.0km<sup>2</sup></li> <li>4. Glode Meadows Brook sub-watershed – 15.6km<sup>2</sup></li> <li>5. Mink Trap Brook sub-watershed – 49.8km<sup>2</sup></li> </ol>
3	Watershed drains into (include coordinates of confluence)	<p>The Medway River tributaries assessed in this report are a partial receiving environment for the Herring Cove / Medway Watershed. The Medway River tributaries drain into the Medway River at:</p> <ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – N 44° 9' 47.59" W 064° 39' 48.336"</li> <li>2. Wentworth Brook sub-watershed – N 44° 11' 56.929" W 064° 43' 6.533"</li> <li>3. Salters Brook sub-watershed – N 44° 10' 39.872" W 064° 39' 54.939"</li> <li>4. Glode Meadows Brook sub-watershed – N 44° 10' 51.89" W 064° 40' 30.839"</li> <li>5. Mink Trap Brooke sub-watershed – N 44° 8' 44.408" W 064° 39' 5.691"</li> </ol>
4	Distance of watercourse mouth from ocean (km)	<ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – 20.5km</li> <li>2. Wentworth Brook sub-watershed – 31.9km</li> <li>3. Salters Brook sub-watershed – 23.8km</li> <li>4. Glode Meadows Brook sub-watershed – 25.4km</li> <li>5. Mink Trap Brook sub-watershed – 17.3km</li> </ol>



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

5	Natural watercourse width at mouth (m)	<ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – 26.6m</li> <li>2. Wentworth Brook sub-watershed – 32.4m</li> <li>3. Salters Brook sub-watershed – 64.3m</li> <li>4. Glode Meadows Brook sub-watershed – 15.8m</li> <li>5. Mink Trap Brook sub-watershed – 4.6m</li> </ol>
6	Length of watercourse (km)	<ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – 6.3km</li> <li>2. Wentworth Brook sub-watershed – 10.1km</li> <li>3. Salters Brook sub-watershed – 10.6km</li> <li>4. Glode Meadows Brook sub-watershed – 4.1km</li> <li>5. Mink Trap Brook sub-watershed – 3.5km</li> </ol>
7	Elevation at headwaters (m)	<ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – 35m</li> <li>2. Wentworth Brook sub-watershed – 62m</li> <li>3. Salters Brook sub-watershed – 60m</li> <li>4. Glode Meadows Brook sub-watershed – 18m</li> <li>5. Mink Trap Brook sub-watershed – 44m</li> </ol>
8	Elevation at mouth (m)	<ol style="list-style-type: none"> <li>1. Tumblingdown Brook sub-watershed – 8m</li> <li>2. Wentworth Brook sub-watershed – 21m</li> <li>3. Salters Brook sub-watershed – 12m</li> <li>4. Glode Meadows Brooke sub-watershed – 11m</li> <li>5. Mink Trap Brook sub-watershed – 3m</li> </ol>
9	Lake(s) within watershed	<p>There are 18 lakes within the 5 sub-watershed areas.</p> <p><b>Wentworth Brook sub-watershed:</b>  <u>1. Wentworth Lake</u>  Wentworth Brook headwaters  Size: 1.78 km<sup>2</sup></p> <p>Other lakes in the sub-watershed: Little Wentworth Lake and Hills Lake</p> <p><b>Salters Brook sub-watershed:</b>  <u>1. Salters Lake</u>  Salters Brook headwaters  Size: 1.06km<sup>2</sup></p>



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

		<p><u>2. Horse Lake</u> Horse Lake discharges into Salters Brook Size: 0.74km<sup>2</sup></p> <p>Other lakes in the sub-watershed: Upper Salters Lake, Sheep Lake, Hell Lake, Manthorn Lake, Island Lake, Cranberry Lake, Spectacle Lake, Rocky Lake, Patrick Lake, Burnt Lake, Elizabeth Lake, Long Lake and Ankle Jack Lake.</p> <p><b>Glode Meadow Brook sub-watershed:</b> <u>1. Glode Meadow Lake:</u> Globe Meadow Brook headwaters Size: 0.06km<sup>2</sup></p> <p><b>Mink Trap Brook sub-watershed:</b> <u>1. Crane Lake:</u> Mink Trap Brook headwaters Size: 3.7km<sup>2</sup></p>
10	Significant tributaries within watershed	<p>The significant tributaries within the study of Herring Cove / Medway watershed in this lowest portion of the Medway River nearest Medway Harbour are:</p> <p>Salters Brook Wentworth Brook Petite Brook Oakes Mill Brook Tumblingdown Brook Murray Brook Buggy Hole Brook Glode Meadow Brook Dean Brook Mink Trap Brook Two Inch Brook Otter Pond Limestone Brook Hunsegut Brook Slatpile Brook</p>
11	Most common substrate type and size	<p>The substrate varies throughout the watershed: silt, fines, gravel, cobble, boulder and bedrock.</p>





## Medway River Tributaries Fish Habitat Restoration Plan, 2013

12	Soil type(s) and geological characteristics	<p><b>Soils:</b> Halifax sandy loam and the Bridgewater sandy loam are the predominant soils within the watershed.</p> <p>The Halifax sandy loam is a light brown sandy loam over yellowish brown sandy loam. This soil type is derived from a parent material of olive gray sandy loam till. The topography of this soil type is very gently undulating to undulating and is well drained.</p> <p>The Bridgewater sandy loam is a light brown sandy loam over yellowish brown or olive brown sandy loam. This soil type is derived from a parent material of firm and very slaty olive sandy loam till. The topography of this soil type is gently undulating to undulating and is well drained with an internal drainage that is moderately rapid.</p> <p><b>Bedrock:</b> The predominant bedrock geology is the Meguma Group broken into the Goldenville Formation and the Halifax Formation. The Goldenville formation consists of sandstone turbidites and slate, while the Halifax formation is composed of slate, siltstone, minor sandstones, and Iron-Magnesium nodules.</p>
13	Average water temperature in summer (June-September)	Summer water temperatures are not available as the ground-truthing and monitoring occurred during the fall months of 2013.
14	Peak water temperature	<p>Tumblingdown Brook sub-watershed – 16.1° at site T1 on September 9, 2013</p> <p>Wentworth Brook sub-watershed – 18.4° at site W1 on September 16 and W13 on September 17, 2013</p> <p>Salters Brook sub-watershed – 18.0° at site S16 on September 24, 2013</p> <p>Glode Meadows Brook sub-watershed – 14.0° at site M8 on October 16, 2013</p>





## Medway River Tributaries Fish Habitat Restoration Plan, 2013

		Mink Trap Brook sub-watershed – 16.1° on September 9, 2013
15	pH range	<p>Tumblingdown Brook sub-watershed: 5.14 – 5.57</p> <p>Wentworth Brook sub-watershed : 4.98 – 5.66</p> <p>Salters Brook sub-watershed: 4.90 – 5.91</p> <p>Glode Meadows Brook sub-watershed: 4.85 – 5.78</p> <p>Mink Trap Brook sub-watershed: 5.00 – 5.57</p>
16	Native fish species present	The native fish species found within the watershed are: American eel, Atlantic salmon, Gaspereau, Brook trout, Lake trout, Brown bullhead, Creek chub, Lake chub, Blacknose shiner, Common shiner, Golden shiner, White sucker, Yellow perch, White perch, and Banded killifish
17	Non-native fish species present	Smallmouth Bass in the main stem of the Medway River
18	Endangered / threatened / at risk species present (aquatic or non-aquatic)	<p>COSEWIC has listed the Southern Upland Atlantic salmon as an endangered species.</p> <p>Other species at risk found in the Medway River watershed include Blanding's Turtle, Eastern Ribbonsnake, Mainland Moose, Redroot, Long's Bulrush, Eastern Lilaeopsis and Golden Crest.</p>
19	Fish stocking	<p><b>Spring Stocking:</b> The Medway River is stocked with sea-run trout as part of the Nova Scotia Fisheries and Aquaculture spring enhancement program, at the following sites: Medway R., Westfield Medway R., Lake Pool Medway S., Brookfield Medway R., Pleasant R.</p> <p><b>Fall stocking:</b> The Medway River is stocked with sea-run trout as part of</p>



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

		the Nova Scotia Fisheries and Aquaculture fall enhancement program.
20	Angling	<p>Special angling restrictions within the Herring Cove / Medway River watershed.</p> <p><b>Artificial Fly Only:</b> Medway River, from the Highway 103 bridge upstream to McGowan Lake, not including Ponhook Lake or tributaries. May 26 to the end of all fishing seasons.</p> <p><b>Waters Closed to Angling:</b> Medway River, from a point 100m downstream from the highway bridge at Harmony upstream to, but excluding McGowan Lake including tributaries. June 1 to December 31.</p> <p>Medway River, the “Lake Pool”, upstream from the highway bridge at highway 210 at Greenfield, to a straight line drawn from grid reference 352032 4903571 to grid reference 352155 4903817 (immediately above the small island at the outlet of Ponhook Lake), June 19 to December 31.</p> <p>The Medway River has been closed to Atlantic salmon fishing since 1997. The entire Southern Upland region has been closed to Atlantic salmon fishery at present. Returning salmon are insufficient in number for a self-sustaining fishery.</p> <p>In recent years, the lower main stem of the Medway River has been closed to fishing by DFO order for all fish species during the summertime to further protect the remaining salmon. This general closure does not apply to the tributaries in this study.</p>
21	Forestry activities and impacts	The Herring Cove / Medway watershed has a long history of forestry activities; specifically Bowater Mersey Paper Company Limited was a major landowner since 1929 to 2013. As well, there were other numerous holdings by



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

		<p>private landowners and public land. Bowater Mersey had owned 98, 457 hectares of forested area within Annapolis, Queen's and Lunenburg Counties. In 2013, all of the former Bowater Mersey land was acquired by the Nova Scotia provincial government to become Crown land. Development of a plan for this and other Crown lands is detailed within Department of Natural Resources websites on Western Crown Land.</p> <p>Many streams and lakes within the Medway watershed have been dammed to generate power, to run sawmills, and to allow for log drives. Throughout their operation, Bowater Mersey endorsed principles for sustainable forests, the Stewardship Councils principles and criteria, and the standards of the Maritime Forest Region.</p> <p>However, forestry practices may have a major impact on water quality and wildlife habitat in the area. With a lack of healthy riparian areas, fish habitat may be destroyed due to a rise in water temperature due to lack of shade. As well, an increase in runoff may occur due to the decrease in bank side vegetation. This runoff may increase the fines found in the watercourse, filling in substrate and creating inadequate spawning grounds. The lack of bank side vegetation may lead to a decrease in the food supply available for aquatic species.</p>
22	Urban/residential development impacts (explain)	<p>Commercial and residential development within the Herring Cove / Medway watershed is concentrated in the lower section of the watershed between Riversdale, and Port Medway. Upstream on the main stem of the Medway River is the village of Greenfield and the cottage country surrounding Ponhook Lake.</p> <p>However, there is only limited recreational development to be found, being seasonal and occasional use cabins, on the tributaries in this study. The exceptions are the lower ½ km. portion of Mink Trap Brook and the lower 100 meters of Tumblingdown Brook, both of which passed through Mill Village.</p>
23	Agricultural impacts	<p>The Herring Cove / Medway watershed has very little agricultural impacts. Queens County has approximately 1000 hectares land utilized for agricultural production.</p>



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

		<p>Queens County has the smallest amount of arable land in the province, and all farming within the County utilizes less than one percent of the county land area.</p>
24	Other industry impacts	<p>Acid rain has a major impact on water quality, wildlife, and wildlife habitat within the watershed. The source of acid rain affecting Nova Scotia was from the historically high industry emissions produced in Central Canada and the U.S. Midwest. The soils in the Southern Upland were unable to neutralize the effects of the acid rain causing a decrease in pH of the receiving waters.</p> <p>Watersheds are affected by acidification on a spatial and seasonal basis. A pH survey was done in 1996-97 of the entire Medway River watershed (G.L.Lacroix, 2005) found Pheasant River, tributaries to Westfield River, and many of the first order streams along the main river stem to have their minimum seasonal pH below 4.5. The upper Medway River (east and west branches), tributaries to the Westfield River and in the Petite drainage were minimum seasonal pH between 4.5 and 5.0. The Medway River below Ponhook Lake saw minimum seasonal pH of at least 5.0. More than one-half of sites had pH between 5.0 and 5.5 or between 5.5 and 6.0 between March and October. However, due to the wintertime acid episodes, it was found only 40% of the sites were suitable for habitat for salmon production. It is the acid episodes that may be the limiting factor for Atlantic salmon spawning habitat.</p> <p>As well, a low pH can cause metals to precipitate out of soil and water where it may then accumulate in salmonids. This accumulation causes physical stress on the fish and may result in poor reproductive capability. Destruction of emerging fry or successfully laid eggs may occur due to low water pH.</p> <p>A study of dissolved aluminum, pH and total organic carbon in Atlantic Canada rivers was done (T.A.Clair, 2012) which included the Medway River. During fall sampling, the testing of the water showed pH of 5.5 and aluminum of 0.019 mg/L. This level of dissolved metal is not likely to be a concern as evidenced by the successful hatchery operations at McGowan Lake and by the on-going sea trout fry operations at Charleston.</p>



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

		<p>Acid rain mitigation efforts should target to reach the minimum pH objective of 5.3 for Atlantic salmon in Nova Scotia for their life stage of incubation to swim-up (White, W. 2000),</p>
25	Historical conditions, impacts and considerations	<p>The Medway River saw log drives for sawmilling in the late 1800's and early 1900's. Mechanization in harvesting and log transportation eliminated log drives by the 1950's. The rugged and twisted nature of the river, with its many rock ledges, minimized lasting damage to the watercourse. The main river stem continued to be known for its world class Atlantic salmon and brook trout fishery until recent times.</p> <p>A power dam development at McGowan Lake had included a fish ladder, but fish ladders of earlier design often failed at their purpose. Today, Nova Scotia Power as owner of the dam has been planning an improved fish ladder but installation has not been completed (2014 was indicated for this work).</p>
26	Barriers present on the main river stem	<p>No significant barriers are present in the main river stem between the Medway Harbour and the confluences of the tributaries within this study.</p>
27	Other information	<p>Waters in several tributaries are tannin- stained, due to the presence of organic acids in watershed soil. Many wetlands are located near these tributaries.</p> <p>Climate warming poses a concern in the longer term. A study on Nova Scotia river water temperatures (MacMillan, 2005) found the Medway River at Greenfield to be a warm water site not suitable for salmonids unless thermal refugia were present.</p>

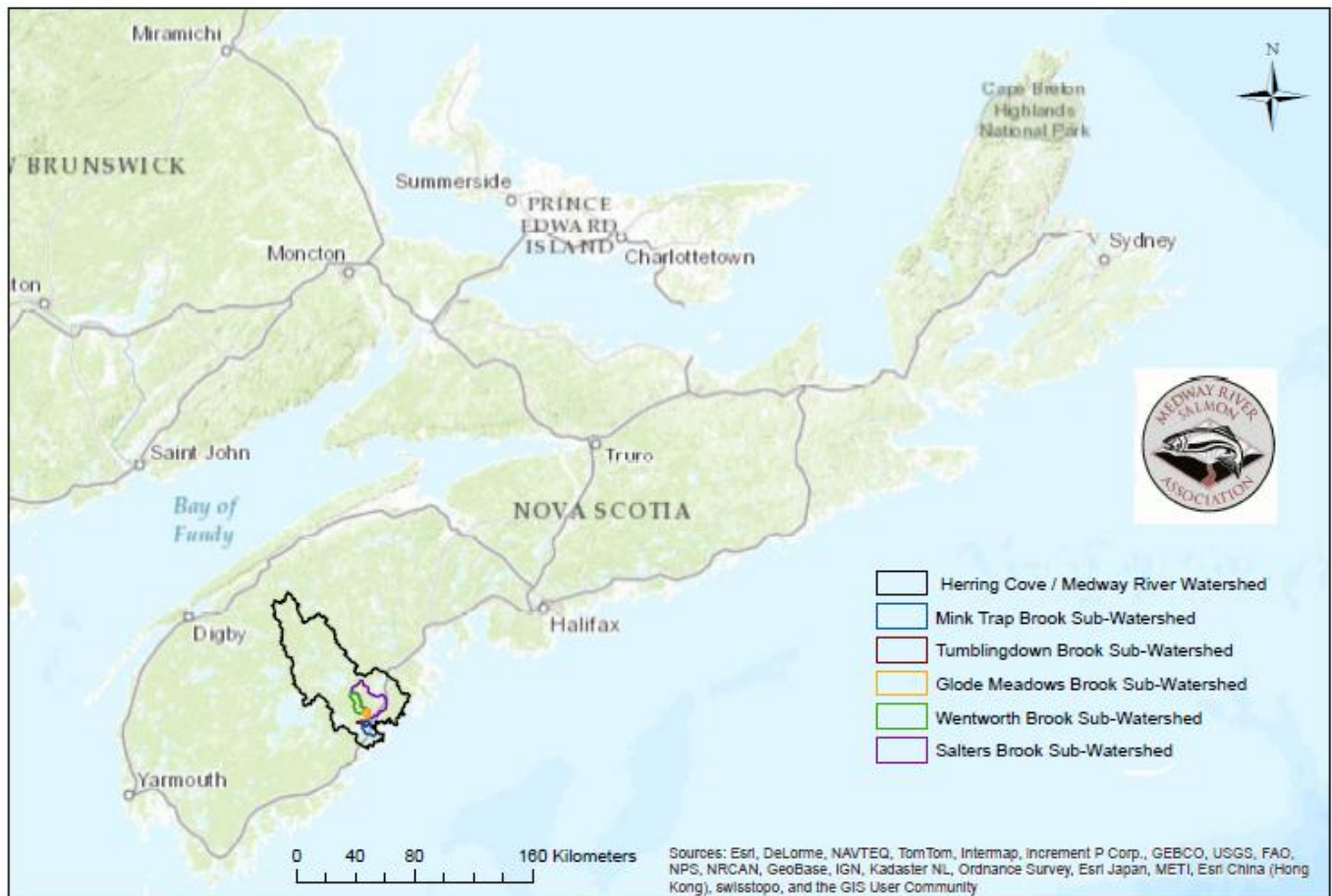


## **Medway River Sub-Watershed Boundary Maps**



## Map 1:

### Medway River Tributaries Watershed Study, Sub-Watersheds, 2013

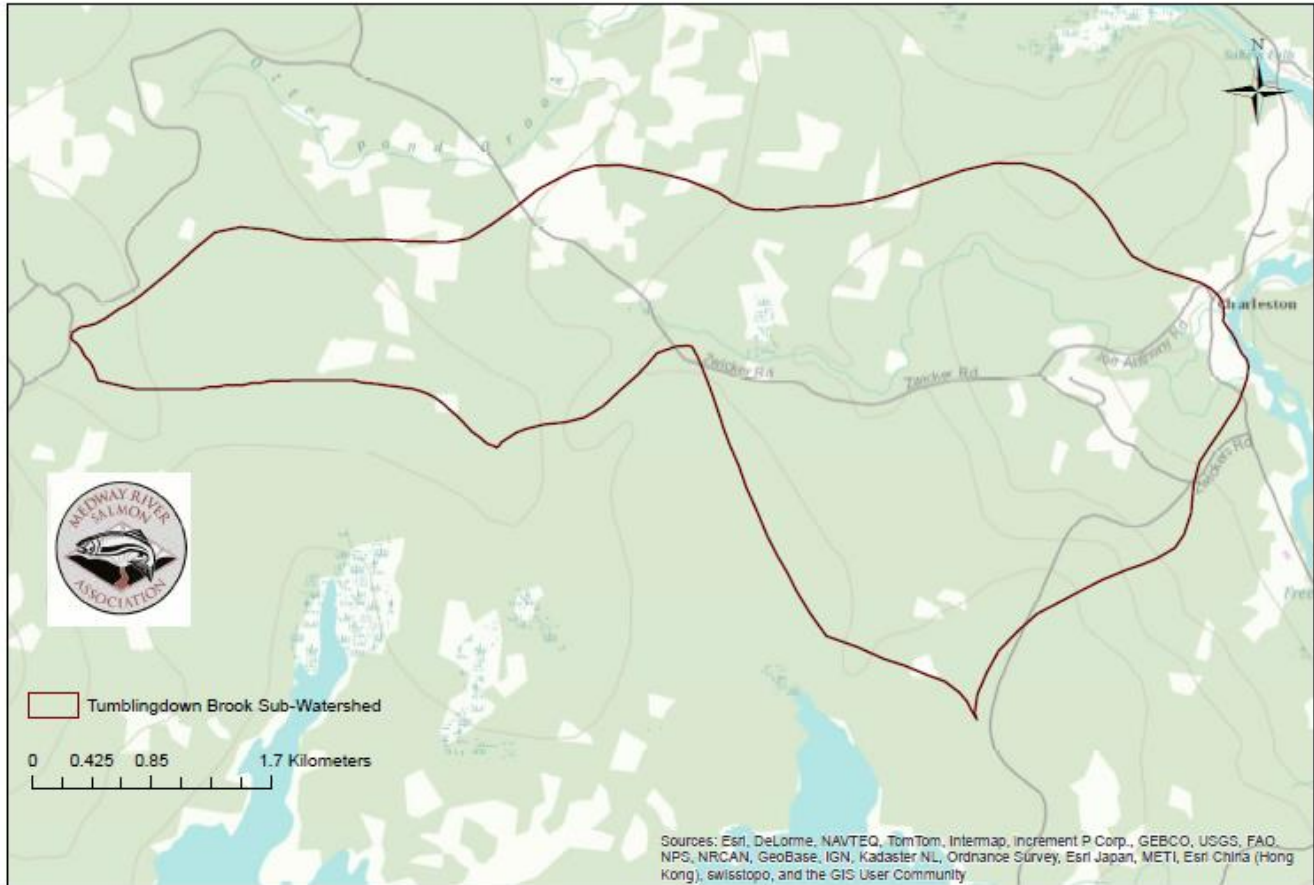






## Map 2:

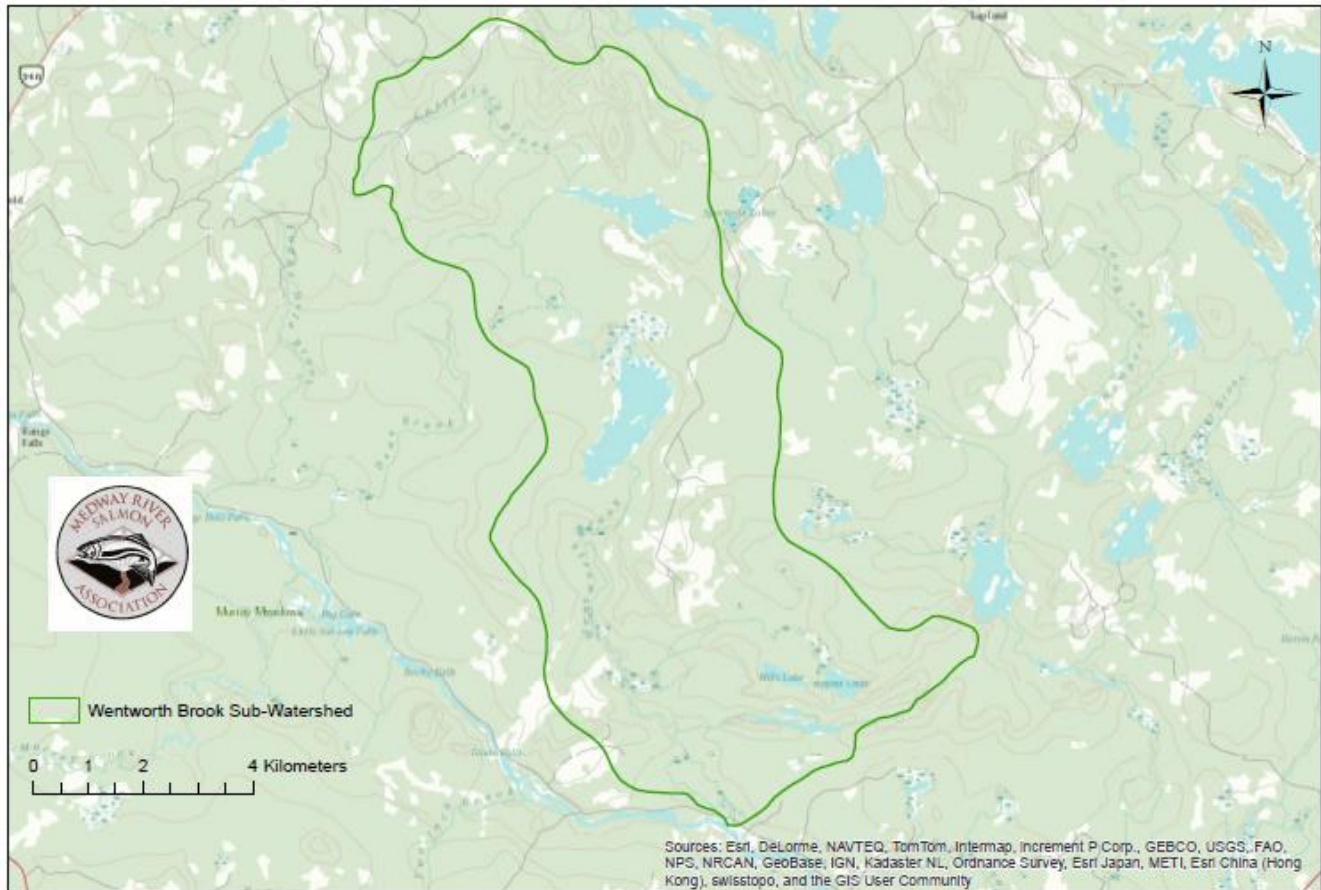
### Medway River Tributaries Watershed Study, 2013 Tumblingdown Brook Sub-Watershed





### Map 3:

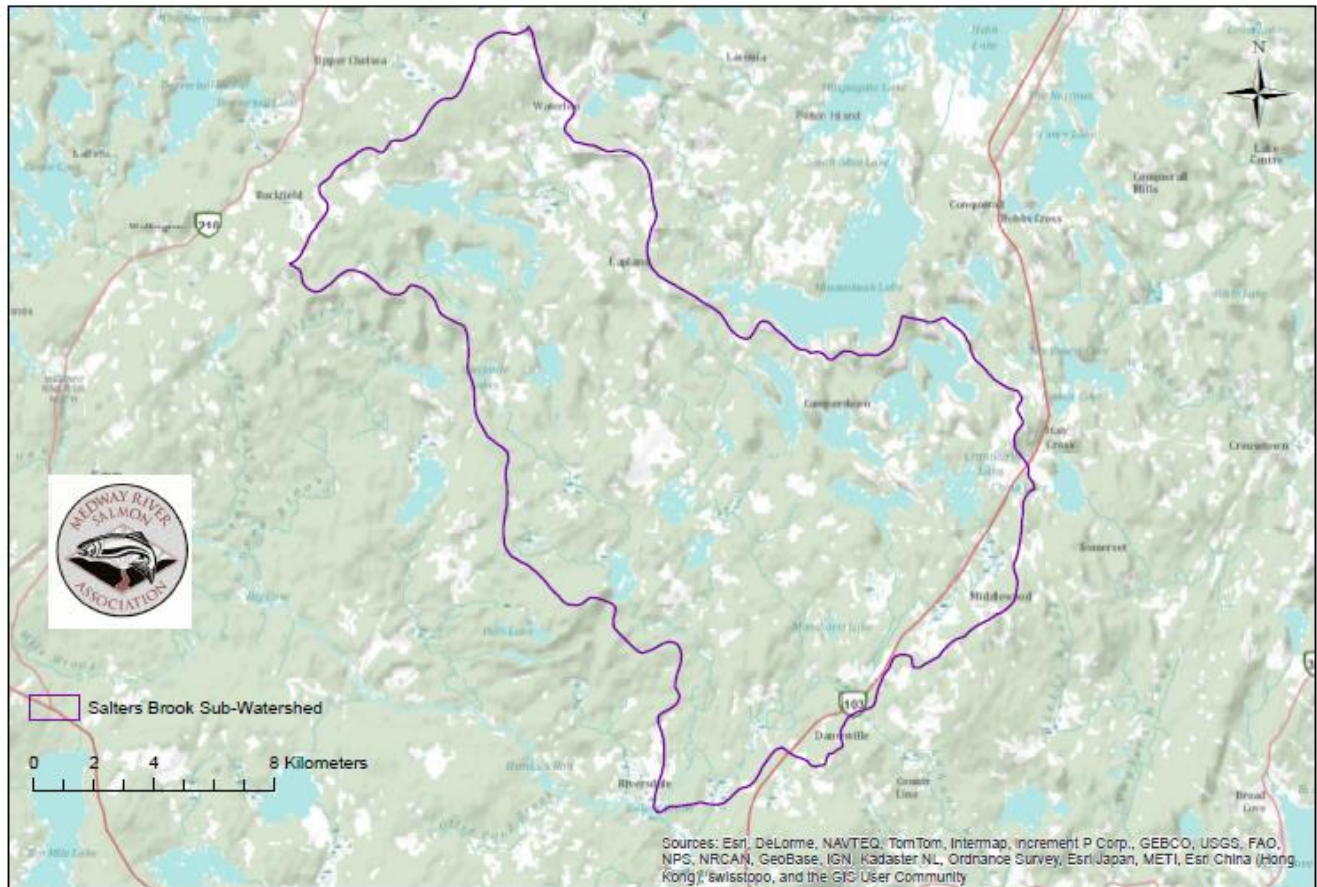
## Medway River Tributaries Watershed Study, 2013 Wentworth Brook Sub-Watershed





## Map 4:

### Medway River Tributaries Watershed Study, 2013 Salters Brook Sub-Watershed







## Map 5:

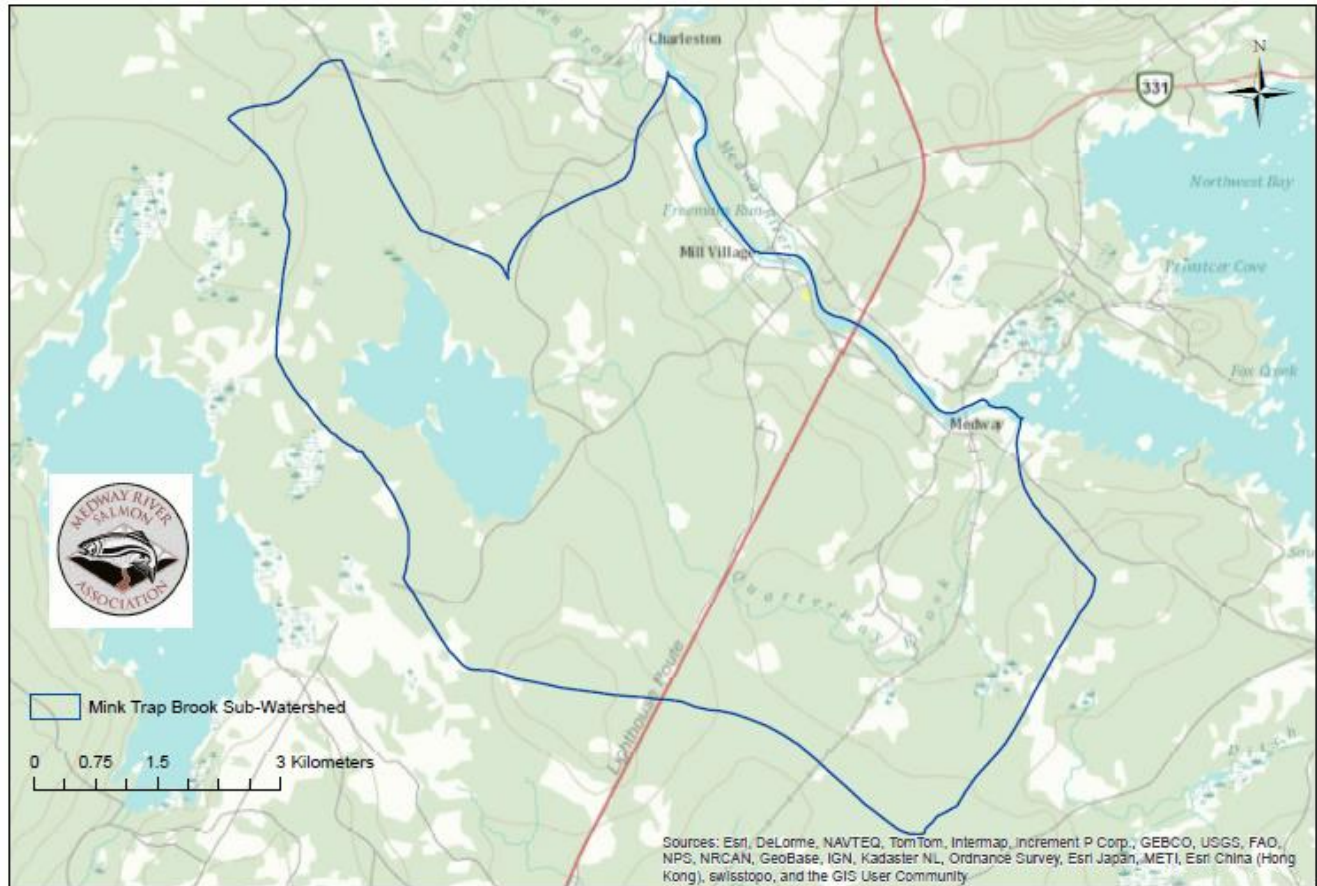
### Medway River Tributaries Watershed Study, 2013 Globe Meadows Brook Sub-Watershed

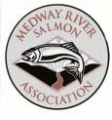




## Map 6:

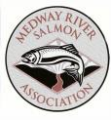
### Medway River Tributaries Watershed Study, 2013 Mink Trap Brook Sub-Watershed





### **3. Labeled 1:8, 000 Maps – Medway River Tributaries**

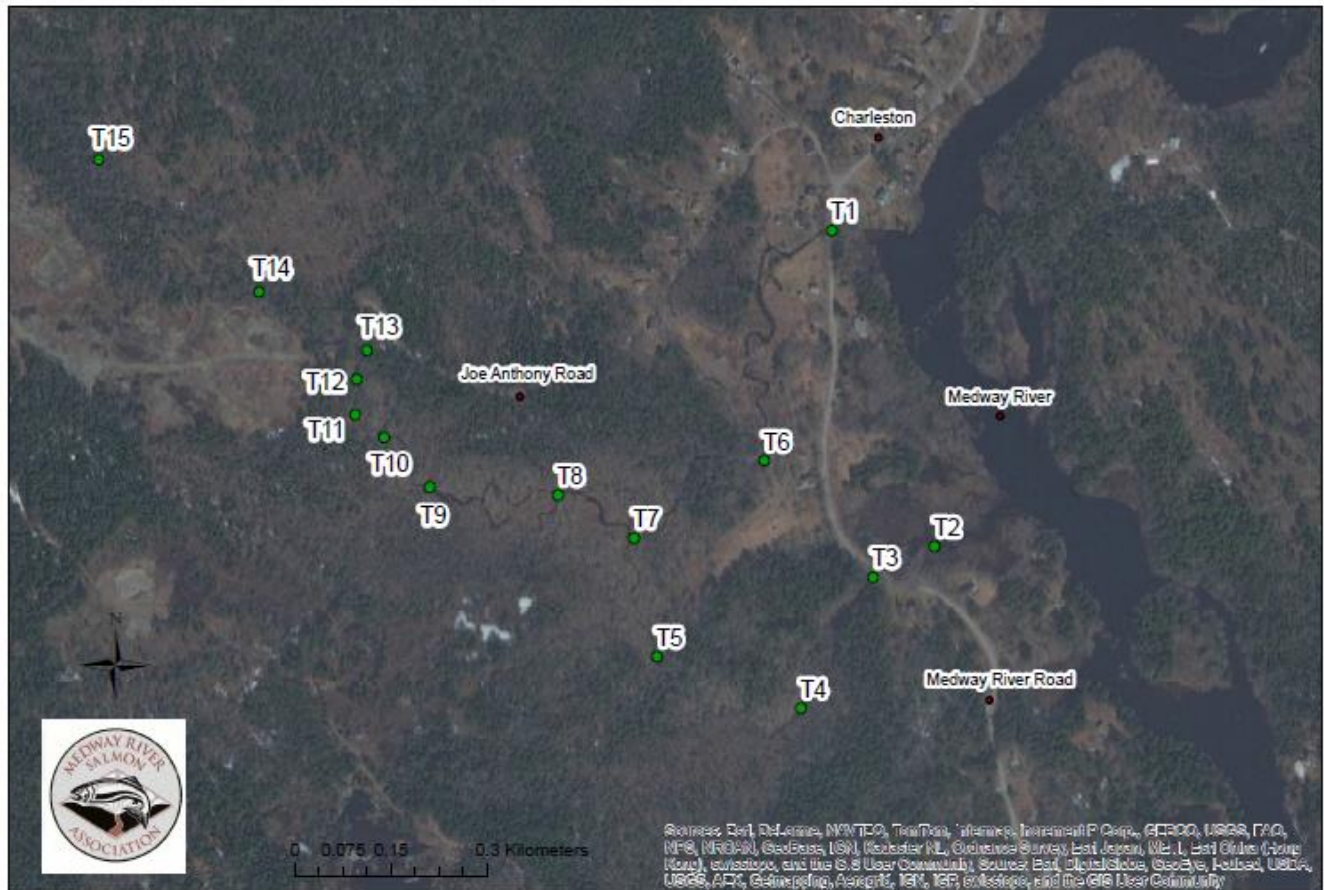
The 1:8,000 topographical maps of the watercourse found in section 3 has been divided into 5 sections representing each tributary assessed. Starting at the mouth and moving upstream, the maps are coded to the stream assessments performed over the 2013 field season. Information regarding each of these sites can be found in section 4: Habitat Description and Restoration Opportunities.



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

### 1. Tumblingdown Brook Assessment Sites

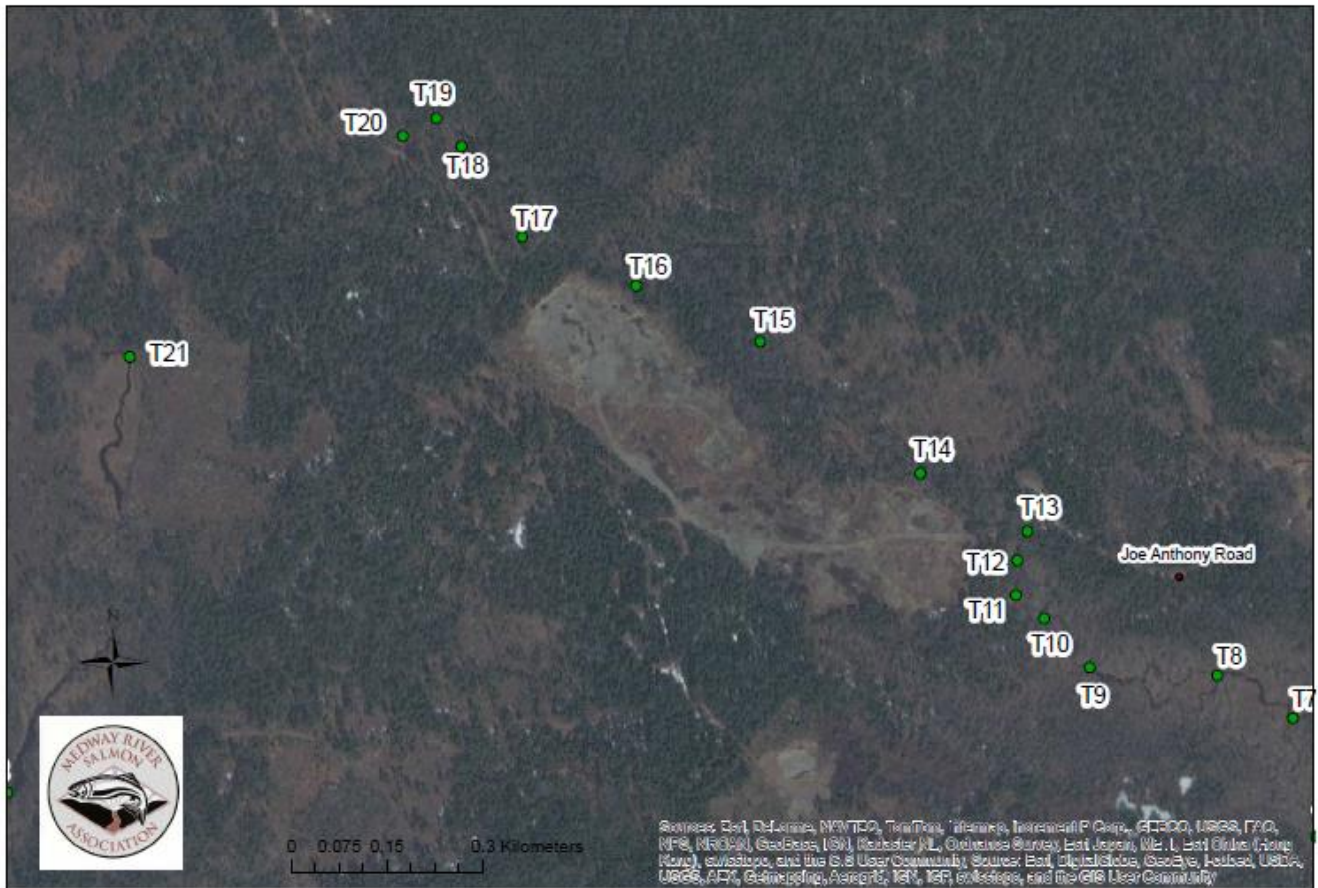
#### Tumblingdown Brook Assessment Sites, 2013







## Tumblingdown Brook Assessment Sites, 2013 (Continued)





## Tumblingdown Brook Assessment Sites, 2013 (Continued)





## 2. Wentworth Brook Assessment Sites

### Wentworth Brook Assessment Sites, 2013







## Wentworth Brook Assessment Sites, 2013 (Continued)



[illegible]



## Wentworth Brook Assessment Sites, 2013 (Continued)





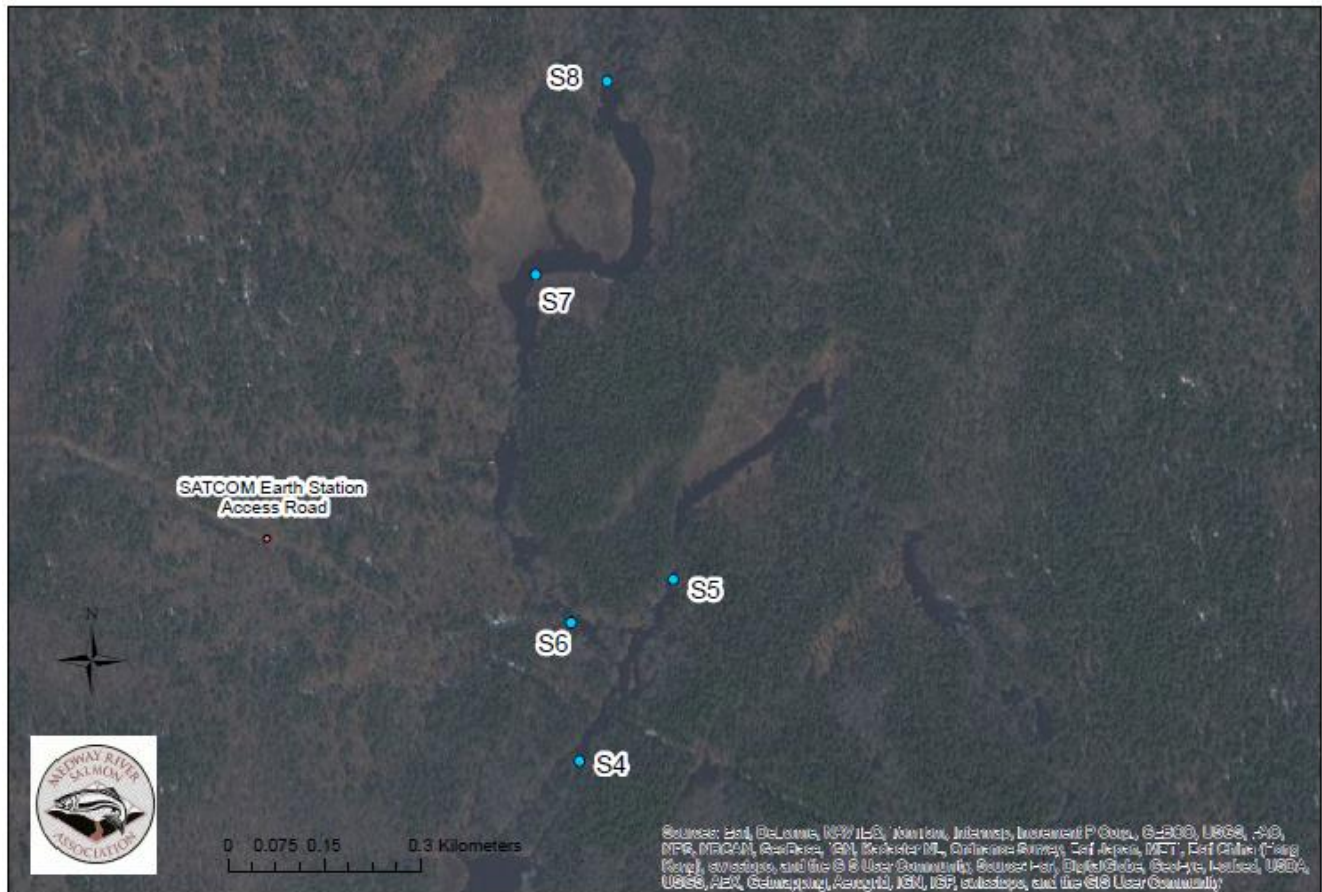


## Salters Brook Assessment Sites, 2013





## Salters Brook Assessment Sites, 2013 (Continued)





## An aerial photograph of a river system. Two sampling locations are marked with blue dots and labeled: S10 is located further upstream, and S9 is located downstream from S10. A north arrow is positioned in the lower-left corner. Below the north arrow is a circular logo for the Matkway River Salmon Association, which features a fish jumping over a waterfall. At the bottom center, there is a scale bar indicating distances of 0, 0.075, 0.15, and 0.3 Kilometers. In the bottom right corner, there is a block of small text listing various sources used in the map's creation.



Map of the Midway River watershed showing sampling sites S11, S12, S13, S14, and S15. The map includes a north arrow, a scale bar (0 to 0.3 Kilometers), and a logo for the Midway River Salmon Association. A 'Logging Trail' is also labeled. The map shows a network of streams and surrounding forested land.

Source: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., G-SPD, USGS, NPS, NRCAN, GeoEye, IGN, Wikidata, ML, OpenStreetMap, Bing, Aeris, MET, Earthstar, (Fang, King), swisstopo, and the GIS User Community. Source: Esri, DigitalGlobe, GeoEye, AeroCast, USGS, Aero, GeoEye, AeroCast, IGN, IGP, swisstopo, and the GIS User Community.





## Salters Brook Assessment Sites, 2013 (Continued)





## Medway River Tributaries Fish Habitat Restoration Plan, 2013

### 4. Glode Meadow Brook Assessment Sites

#### Glode Meadows Brook Assessment Sites, 2013





## Glode Meadows Brook Assessment Sites, 2013 Continued







## Glode Meadows Brook Assessment Sites, 2013 Continued





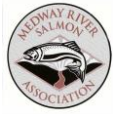


## Mink Trap Brook Assessment Sites, 2013



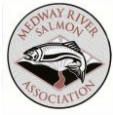
## Mink Trap Brook Assessment Sites, 2013 (Continued)





#### 4. Habitat Description and Restoration Opportunities

Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
Section 1	Tumblingdown Brook						
T1	Bridge at Medway River Road  Near confluence of Tumblingdown Brook and Medway River	N 44° 09' 47.9" W 064° 39' 49.5"	<p>The wooden creosote bridge has a double culvert creating a fish barrier. At the time the assessment occurred no water was flowing through the culvert, however, there was water flowing underneath the culvert. On the Upstream side of the bridge, the culvert opening is high and prevents a potential fish barrier. There is a wooden platform built downstream of the culvert that may be used for dip netting.</p> <p>The river width is 1.5m and average stream depth is 9cm. The habitat type is fast moving run, and there is a small pool downstream of the culvert.</p> <p>Substrate in the area consists of boulder and cobble; vegetation is growing in-stream.</p> <p>Riparian area is limited, as this is a manicured residential. Riparian vegetation consists of grasses and ferns. Water Quality: YSI MEASUREMENTS: Temp: 16.1°C,</p>	Residential Area.	Replacement of culvert	High	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			DO: 67%, DO: 6.1 mg/L, SPC: 25.7 µs/cm, TDS: 16.7 mg/L, Salinity: 0.01ppt, pH: 5.43  Riparian Health Score: 45				
T2	Meadow  Near confluence of Tumblingdown Brook and Medway River	N 44° 09' 36.4" W 064° 39' 45.4"	Large field / meadow near the confluence of Tumblingdown Brooke and Medway River. The vegetation in the field consists of high grasses and brush.  The river width is 4m and average stream depth is 1m. The habitat type is a slow moving run, and the water color is dark with suspended solids visible. Stream banks consist of grass and brush, area was flooded at time of assessment. There is no shade beyond what the grass provides.  Substrate is muddy, and consists mostly of fines.  Water Quality: YSI MEASUREMENTS: Temp: 13.6°C, DO: 70 %, DO: 7.2 mg/L, SPC: 26.9 µs/cm, TDS: 17.4 mg/L, Salinity: 0.01ppt, pH: 5.32	Residential Area Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
T3	Bridge on Medway River Road	N 44° 09' 35.0" W 064° 39' 34.77"	<p>Bridge on Medway River Road has concrete abutments, with wooden and metal railings. The bridge does not create a fish passage barrier.</p> <p>The river width is 1.8m and average stream depth is 25cm. The habitat type is a fast moving riffle, and the water color is clear. There is a natural rock sill in this section. Stream banks consist of mixed forest, and there are boulders and forest litter scattered. Shade was adequate in this area.</p> <p>Substrate consists of cobble, boulder and some fines.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.7°C, DO: 76 %, DO: 7.9 mg/L, SPC: 27.0 µs/cm, TDS: 17.5 mg/L, Salinity: 0.01ppt, pH: 5.30</p> <p>Riparian Health Score: 47</p>	Residential Area	N/A	N/A	N/A
T4	River Braiding	N 44° 09' 31.7" W 064° 39' 51.2"	Main branch of Tumblingdown Brook, and upstream of river braiding. Braiding consists of a large island, consisting of grasses and brush.	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The river width is 3.5m and average stream depth is 30cm to 1m. The habitat type is a slow, still water and the water color is tannin colored, with forest debris in the water. There are deer tracks in the area.</p> <p>Stream banks consist of grasses, with some hard wood. Shade coverage is 50%.</p> <p>Substrate consists of thick silt and is interspersed with large boulders.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.1°C, DO: 63 %, DO: 6.7 mg/L, SPC: 27.1 µs/cm, TDS: 17.6 mg/L, Salinity: 0.01ppt, pH: 5.36</p> <p>Riparian Health Score: 62</p>				
T5	Wooden Bridge	N 44° 09' 33.2" W 064° 39' 56.1"	<p>Survey performed at wooden bridge; bridge poses no physical barrier. Boulders line the riparian area along the sides of the bridge. Old logging trail / ATV trail crosses the bridge. Beaver dam upstream of bridge may create a barrier.</p> <p>The river width is 1m and average</p>	Forested Area	N/A	N/A	N/A





Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>stream depth is 40cm upstream of the bridge, and 8cm downstream. Water is clear and tannin in color. Water flow moves slowly before bridge, but picks up after the bridge into a run.</p> <p>Riparian areas consists mixed forest and forest litter along the banks. Shade coverage is 80%.</p> <p>Substrate consists of gravel, cobble, and fines.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 14.3°C, DO: 98 %, DO: 9.7 mg/L, SPC: 27.1 µs/cm, TDS: 17.7 mg/L, Salinity: 0.01ppt, pH: 5.40</p> <p>Riparian Health Score: 57</p>				
T6	Stillwater	N 44° 33' 16.8" W 064° 44' 42.5	<p>Stream reach is very rocky. This section begins at the end of a Stillwater and flows over a natural rock sill, and through debris clusters.</p> <p>This stream section is very narrow, and ranges from 30cm to 1m in width; average stream depth is 38cm upstream</p>	Forested Area Home in area	N/A	N/A	N/A





Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>of the bridge, and 8cm downstream. Water is clear and tannin in color. Habitat is a riffle/run.</p> <p>Riparian areas consists mixed forest and forest litter along the banks. Shade coverage is 80%.</p> <p>Substrate consists of cobbles, with boulders along the stream banks.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.0°C, DO: 67 %, DO: 6.6 mg/L, SPC: 27.6 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.14</p> <p>Riparian Health Score: 57</p>				
T7	Split in stream channel	N 44° 09' 38.3" W 064° 39' 57.4"	<p>Survey performed at a split in the stream channel. The two channels flow until they reach the main branch of the Medway River.</p> <p>The river width is 3m and average stream depth is 50cm. The channel prior to the split is fairly straight and slow moving. Water shows suspended solids and tannin in color. There is forest debris floating in the water. Large log lays</p>	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>across the stream, downstream of the survey site.</p> <p>Riparian areas consist of sedges and ferns, with several hardwood trees. Large sized boulders lay along the bank. Shade coverage is 50%. Large flood plain in this area: 30m+.</p> <p>Substrate consists of cobble and boulders, with fines lying over top.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 12.9°C, DO: 54 %, DO: 5.5 mg/L, SPC: 27.8 µs/cm, TDS: 18.0 mg/L, Salinity: 0.01ppt, pH: 5.34</p> <p>Riparian Health Score: 62</p>				
T8	River braiding	N 44° 09' 38.3" W 064° 40' 0.37"	<p>Survey performed at a large, marsh like island in the stream channel. The area was flooded at time of assessment.</p> <p>The river width is 3.5m and average stream depth is 50cm. The right channel had fast flowing waters, while the left channel had slow flowing stagnant water. Vegetation was growing in-stream of both channels.</p>	Forested Area	N/A	N/A	N/A

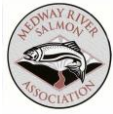


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Riparian areas consist of sedges, grass and brush. Large boulders lay along the banks downstream. Shade coverage is 60%. Large flood plain in this area: 30m+.</p> <p>Substrate consists of silt, with vegetation growing in-stream.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.6°C, DO: 75 %, DO: 7.8 mg/L, SPC: 26.9 µs/cm, TDS: 17.6 mg/L, Salinity: 0.01ppt, pH: 5.33</p> <p>Riparian Health Score: 63</p>				
T9	Stillwater	N 44° 09' 38.8" W 064° 40' 09.6"	<p>Survey performed at a section of stillwater. Area was flooded at time of assessment. A lot of frogs in the area.</p> <p>The river width is 6m and average stream depth is 2m+. Many lily pads are growing in the stream channel.</p> <p>Riparian areas consist of sedges, grass and brush. Shade coverage is 40%. Large flood plain in this area: 30m+.</p>	Forested Area	N/A	N/A	N/A

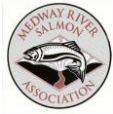


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Substrate consists of gravel, with 3-4 inches of silt lying over top.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.1°C, DO: 75 %, DO: 7.7 mg/L, SPC: 27.5 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.49</p> <p>Riparian Health Score: 45</p>				
T10	Stillwater	N 44° 09' 40.1" W 064° 40' 11.3"	<p>Survey performed at a section of slow moving stillwater, after a series of stream meanders. Area was flooded at time of assessment.</p> <p>The river width is 6mt and average stream depth is 2m+. Water is clear of solids and is tannin in color. A large log lies across the stream.</p> <p>Riparian areas consist of ferns along the water's edge, moving into a mixed forest. Shade coverage is 45%. Large flood plain in this area: 30m+.</p> <p>Substrate consists of silt along the banks, and appears to be gravel along the stream channel bottom. Vegetation is growing on substrate.</p>	Forested Area	N/A	N/A	N/A

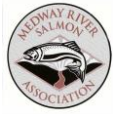




Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality:            YSI MEASUREMENTS: Temp: 12.9°C,            DO: 75 %, DO: 7.9 mg/L, SPC: 27.3            µs/cm, TDS: 17.4 mg/L, Salinity: 0.01ppt,            pH: 5.48</p> <p>Riparian Health Score: 45</p>				
T11	Stillwater	N 44° 09' 41.5" W 064° 40' 12.6"	<p>Survey performed at a section of slow moving Stillwater. Area was flooded at time of assessment. Signs of beavers in area. Pile of beer bottles along stream bank. Plenty of dragonflies and mosquitoes.</p> <p>The river width is 3.3m and average stream depth is 40cm. Water shows suspended solids and is tannin in color. A lot of forest litter floating in the water. A large log lies across the brook downstream.</p> <p>Riparian areas consist of ferns along the water's edge, moving into a mixed forest. Shade coverage is 50%. Large flood plain in this area: 30m+.</p> <p>Substrate consists of gravel, with detritus lying over top.</p>	Forested Area	Garbage Clean Up	Medium	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality:            YSI MEASUREMENTS: Temp: 12.6°C,            DO: 92 %, DO: 9.7 mg/L, SPC: 27.3            µs/cm, TDS: 17.7 mg/L, Salinity: 0.01ppt,            pH: 5.52</p> <p>Riparian Health Score: 58</p>				
T12	Stillwater	N 44° 09' 42.2" W 064° 04' 13.8"	<p>Survey performed at a section of slow moving stillwater. There is a beaver dam at the end of the still water. Area was flooded at time of assessment. Evidence of fishing: footpath on left bank, fishing bobber, beer cans.</p> <p>The river width is 6m and average stream depth is 40cm. Two large boulders lay in the center of the channel. Water shows suspended solids and is tannin in color. Wooden debris floating in the water.</p> <p>Riparian areas consist of grasses along the water's edge, moving into a mixed forest. Shade coverage is 50%. Large flood plain in this area: 30m+.</p> <p>Substrate consists of gravel, with silt lying over top.</p>	Forested Area	Garbage cleanup	Medium	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality:            YSI MEASUREMENTS: Temp: 12.4°C,            DO: 90 %, DO: 9.5 mg/L, SPC: 27.7            µs/cm, TDS: 18.0 mg/L, Salinity: 0.01ppt,            pH: 5.51</p> <p>Riparian Health Score: 61</p>				
T13	Wooden bridge	N 44° 35' 59.1" W 064° 52' 17.8"	<p>Survey performed at wooden bridge along Joe Anthony Road. The bridge does not pose a physical barrier to fish passage. However, there are cracks in the bridge which may allow for dust and dirt to land in the water, creating high levels of suspended solids. There is a beaver dam at the end of the still water. Area was flooded at time of assessment. Evidence of fishing: footpath on left bank, fishing bobber, beer cans. Evidence of beaver activity in the area. Possible dump location on left bank.</p> <p>The river width is 3m and average stream depth is 28cm. Habitat type is a slow run; there is a natural rock sill downstream of the bridge. Water is clear.</p> <p>Riparian areas consists of alders and grasses along water's edge, moving into</p>	Forested Area Road	Bridge repair Garbage cleanup	High	Incomplete

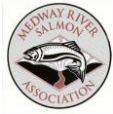


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>a mixed forest. Slight undercutting along banks. Shade coverage is 75%. Large flood plain in this area: 30m+.</p> <p>Substrate consists of boulder and cobble, with silt lying over top. More boulders lay along the left bank, as opposed to the right bank.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 12.3°C, DO: 88 %, DO: 9.4 mg/L, SPC: 27.6 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.44</p> <p>Riparian Health Score: 35</p>				
T14	Stillwater	N 44° 09' 18.7" W 064° 40' 45.2"	<p>Survey performed at a stillwater near a section of clear cutting surrounding Joe Anthony Road. Area was flooded at time of assessment. There are logs and wooden debris in the channel which likely come from the clear cut section.</p> <p>The river width is 2.4m and average stream depth is 10cm. Habitat type is a slow flowing stillwater. Water is clear.</p> <p>Riparian areas consist of grasses and ferns. Slight undercutting along banks.</p>	<p>Forested Area</p> <p>Rock Quarry</p>	Water chemistry analysis	High	Incomplete

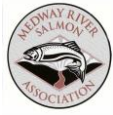




Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Shade coverage is 40%. Banks are very flat in this section and there is a large flood plain in this area: 30m+.</p> <p>Substrate consists of small pebbles and gravel.</p> <p>Water Quality:            YSI MEASUREMENTS: Temp: 15.3°C,            DO: 111 %, DO: 11.1 mg/L, SPC: 27.5 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.57            Dissolved oxygen results appear high; however, the reading was taken several times.</p> <p>Riparian Health Score: 36</p>				
T15	Right Pool	N 44° 09' 45.2" W 064° 40' 18.7"	<p>Survey performed at a section of slow moving stillwater. Area was flooded at time of assessment. Right bank pool.</p> <p>The river width is 4.5m and average stream depth is 30cm. Habitat type is a slow flowing stillwater. Water is clear and tannin colored.</p> <p>Riparian areas consist of grasses. Slight undercutting along banks. Shade coverage is 60%. Banks are very flat in</p>	<p>Forested Area</p> <p>Rock Quarry</p>	Water chemistry analysis	High	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>this section and there is a large flood plain in this area: 30m+. Rock pile on left bank.</p> <p>Substrate consists of small pebbles and gravel.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 14.0°C, DO: 102 %, DO: 10.5 mg/L, SPC: 28.3 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 9.6 Dissolved oxygen and pH results appear high; however, the reading was taken several times.</p> <p>Riparian Health Score: 36</p>				
T16	Thin riparian area	N 44° 09' 45.2" W 064° 40' 18.7"	<p>Survey performed at a section of slow moving stillwater. Area was flooded at time of assessment. Fish were seen.</p> <p>The river width is 4.5m and average stream depth is 6cm. Habitat type is a slow flowing stillwater. Water is clear and tannin colored.</p> <p>Riparian areas consist of grasses and hardwood. Riparian are is very thin on right bank, near rock quarry.</p>	<p>Forested Area</p> <p>Rock Quarry</p>	Water chemistry analysis	High	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Undercutting along banks. Shade coverage is 90%. Banks are very flat in this section and there is a large flood plain in this area: 30m+. Rock pile on left bank.</p> <p>Substrate consists of cobble, with vegetation growing in the stream.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 15.6°C, DO: 94 %, DO: 9.7 mg/L, SPC: 31.0 µs/cm, TDS: 20.1 mg/L, Salinity: 0.01ppt, pH: 5.40</p> <p>Riparian Health Score: 55</p>				
T17	Change in stream channel	N 44° 09' 53.9" W 064° 40' 38.8"	<p>Survey performed at a section of slow moving water flowing through a very rocky section of channel. Area was flooded at time of assessment.</p> <p>The river width is 4.5m and average stream depth is 6cm. Habitat type is a slow flowing run. The banks and stream channel is very rocky and covered with moss and other vegetation. Water is clear and tannin colored.</p>	Forested Area	N/A	N/A	N/A

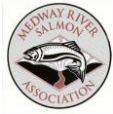


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Riparian areas consist of grasses and hardwood, and are very rocky. Slight undercutting on some area of banks. Shade coverage is 90%. Banks are very flat in this section and there is a large flood plain in this area: 30m+. Lots of hillocks in area.</p> <p>Substrate consists of cobble, with forest litter lying over top.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.0°C, DO: 90 %, DO: 9.4 mg/L, SPC: 29.4 µs/cm, TDS: 19.0 mg/L, Salinity: 0.01ppt, pH: 5.35</p> <p>Riparian Health Score: 55</p>				
T18	Stillwater	N 44° 09' 57.1" W 064° 40' 41.9"	<p>Survey performed at a section of slow flowing stillwater. Area was flooded at time of assessment. Trout were jumping in this section.</p> <p>The river width is 6m and average stream depth is 1m. Habitat type is a slow flowing stillwater. Many lily pads growing in the brook, as well, many large boulders are scattered within the channel.</p>	Forested Area	N/A	N/A	N/A





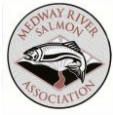
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Riparian areas consist of grasses and brush, moving into a mixed forest. Slight undercutting on some area of banks. Shade coverage is 70%. Banks are very flat in this section and there is a large flood plain in this area: 30m+.</p> <p>Substrate consists of boulder and cobble, with some silt lying over top.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.1°C, DO: 77 %, DO: 8.1 mg/L, SPC: 28.6 µs/cm, TDS: 18.6 mg/L, Salinity: 0.01ppt, pH: 5.36</p> <p>Riparian Health Score: 63</p>				
T19	Confluence of un-named feeder brook	N 44° 09' 58.2" W 064° 40' 43.1"	<p>Survey performed at confluence of un-named feeder brook. Confluence is shallow and slow moving. Area was flooded at time of assessment.</p> <p>The river width is 2.5m and average stream depth is 10cm. Habitat type is a slow flowing run. There are a lot of dead trees rotting along the banks.</p> <p>Riparian areas consist of a mixed forest</p>	Forested Area	N/A	N/A	N/A



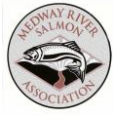
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>stand. Slight undercutting on some area of banks. Shade coverage is 90%.</p> <p>Substrate consists of cobble and gravel, with some silt lying over top.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.1°C, DO: 77 %, DO: 8.1 mg/L, SPC: 28.6 µs/cm, TDS: 18.6 mg/L, Salinity: 0.01ppt, pH: 5.36</p> <p>Riparian Health Score: 63</p>				
T20	Wooden bridge	N 44° 09' 57.6" W 064° 40' 45.8"	<p>Survey performed at wooden creosote bridge on a logging trail. Logging trail is gravel, with grass starting to grow through. There is wooden debris collecting on both sides of the bridge which may create a fish passage problem. Fish, frogs and water spiders were evident.</p> <p>The river width is 3m and average stream depth is 12cm. Habitat type is a slow flowing run.</p> <p>Riparian areas consist of a mixed forest stand. Slight undercutting on some area of banks. Shade coverage is 50%.</p>	<p>Forested Area</p> <p>Logging trail</p>	Debris cleanup	Medium	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Substrate consists of cobble with some silt lying over top. Slight braiding in river.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 14.3°C, DO: 91 %, DO: 9.3 mg/L, SPC: 28.6 µs/cm, TDS: 18.6 mg/L, Salinity: 0.01ppt, pH: 5.46</p> <p>Riparian Health Score: 57</p>				
T21	Stillwater	N 44° 09' 49.6" W 064° 40' 59.0"	<p>Survey performed at the main channel, but there are many channels at this time as the area is flooded (marshland).</p> <p>The river width is 1.5m and average stream depth is 1m+. Habitat type is a slow flowing run.</p> <p>Riparian areas consist of tall grasses and shrub, leading into a mixed forest stand. Shade coverage is 30%.</p> <p>Substrate consists of silt, some vegetation growing in the channel.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.7°C, DO: 51 %, DO: 5.2 mg/L, SPC: 29.8</p>	<p>Forested Area</p> <p>Marshland</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>us/cm, TDS: 19.4 mg/L, Salinity: 0.01ppt, pH: 5.44</p> <p>Riparian Health Score: 35</p>				
T22	Un-named feeder brook	N 44° 09' 33.8" W 064° 40' 04.9"	<p>Survey performed near an un-named feeder brook. Minnows swimming.</p> <p>The river width is 9m and average stream depth is 15cm. Habitat type is a slow flowing run.</p> <p>Riparian areas consist of tall grasses and shrub, leading into a mixed forest stand. Shade coverage is 30%.</p> <p>Substrate consists of silt, some vegetation growing in the channel.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.0°C, DO: 50 %, DO: 5.1 mg/L, SPC: 27.9 µs/cm, TDS: 18.1 mg/L, Salinity: 0.01ppt, pH: 5.50</p> <p>Riparian Health Score: 42</p>	<p>Forested Area</p> <p>Marshland</p>	N/A	N/A	N/A

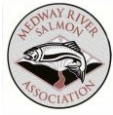


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
T23	Un-named feeder brook	N 44° 09' 33.8" W 064° 40' 04.9"	<p>Survey performed near an un-named feeder brook. Signs of beaver activity.</p> <p>The river width is 6m and average stream depth is 1.8m. Several lily pads growing in the stream. Habitat type is a slow flowing run.</p> <p>Riparian areas consist of grasses, brush, cranberries, and hillocks, leading into a hardwood forest stand on the left bank. The right bank is a steep hill with a cottage on top. Shade coverage is 30%.</p> <p>Substrate consists of silt, some vegetation growing in the channel.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 12.6 °C, DO: 46 %, DO: 4.7mg/L, SPC: 28.3 µs/cm, TDS: 18.3 mg/L, Salinity: 0.01ppt, pH: 5.44</p> <p>Riparian Health Score: 31</p>	<p>Forested Area</p> <p>Cottage</p>	N/A	N/A	N/A
T24	Old tributary from pond	N 44° 09' 47.4" W 064° 41' 55.6"	<p>Survey performed near at the old tributary leading from the headwaters. What water is flowing appears to be from ground seepage. Signs of beaver activity.</p>	Forested Area	N/A	N/A	N/A

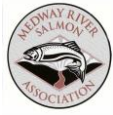




Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The river width is 1.5m, at low flow 10-20cm.</p> <p>Substrate consists of forest litter and silt as the channel bed. Many rocks (cobble) scattered, covered with moss. Downhill grade, there would have been natural rock sills at one time.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 15.0 °C, DO: 65 %, DO: 6.6mg/L, SPC: 27.0 µs/cm, TDS: 18.3 mg/L, Salinity: 0.01ppt, pH: 5.49</p> <p>Riparian Health Score: 58</p>				
T25	Sub-watershed headwaters	N 44° 09' 47.6" W 064° 41' 57.8"	<p>Survey performed at the un-named pond at the headwaters of the sub-watershed. The surrounding area is very swamp like. Lots of tall grasses growing from the pond substrate. Several large boulders were observed throughout the pond. Water height at the time of survey appeared to be low.</p> <p>There is an old logging road that crosses between the pond and Tumblingdown Brook. The pond appears to flow into the tributary by way of ground seepage, as</p>	<p>Forested Area</p> <p>Un-named pond</p> <p>Headwaters</p>	Culvert installation	Medium	Incomplete



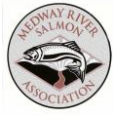
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>there is no culvert.</p> <p>Fish were observed jumping in the pond.</p> <p>The river width is 1.5m, at low flow 30cm.</p> <p>Substrate consists of forest litter and silt as the channel bed. Many rocks (cobble) scattered, covered with moss. The surrounding area is forested, and provides 60% shade coverage.</p> <p>Water Quality:            YSI MEASUREMENTS: Temp: 14.0 °C,            DO: 41 %, DO: 4.2mg/L, SPC: 27.8            µs/cm, TDS: 18.1 mg/L, Salinity: 0.01ppt,            pH: 5.94</p> <p>Riparian Health Score: 56</p>				
Section 2	Wentworth Brook						
W1	Wooden bridge on Medway River Road	N 44° 11' 57.9" W 064° 43' 03.8"	<p>Survey performed at a wooden bridge on Medway River Road. Bridge has concrete abutments and wooden railing. Bridge does not pose a physical fish passage barrier (3.6m x 5.5m opening). The road in this section drops dust into the river when vehicles cross it.</p>	<p>Forested area</p> <p>Road</p> <p>Cottage</p>	Riparian planting	Low	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The river width is 5.5m and average stream depth is 1m. Habitat type is a fast moving riffle; river meander.</p> <p>Riparian vegetation consists of hardwood trees, with few softwood trees. Left bank has a boat launch, and there is a cabin on the right bank upstream of the bridge. Both banks have been cleared. Shade coverage is 30%.</p> <p>The substrate consists of boulder and cobble.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 18.4°C, DO: 82 %, DO: 7.7mg/L, SPC: 27.6 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.02</p> <p>Riparian Health Score: 43</p>				
W2	Deep run	N 44° 12' 04.4" W 064° 43' 03.1"	<p>Survey performed at a deep run along a stream meander.</p> <p>The river width is 3.5m and average stream depth is 1.2m. Habitat type is a fast moving run; river meanders. The river is deep, but the current is quite strong. Water is clear of solids and is</p>	Forested area	N/A	N/A	N/A

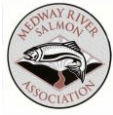


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>tannin colored.</p> <p>Riparian vegetation consists of alders and shrubs, leading into a mixed stand. Undercutting along banks.</p> <p>The substrate consists of small pebbles covered with silt. Silt is very clean smelling, not organic like the other marsh sections of the watershed.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 18.2°C, DO: 81 %, DO: 7.6mg/L, SPC: 27.5 µs/cm, TDS: 17.8 mg/L, Salinity: 0.01ppt, pH: 4.98</p> <p>Riparian Health Score: 43</p>				
W3	Stillwater	N 44°12' 10.7" W 064°43' 10.5"	<p>Survey performed at the end of a riffle / run sequence which runs into a stillwater; stream meander.</p> <p>The river width is 7.6m and average stream depth is 1.2m. Habitat type is stillwater; river meander. The river is deep, but the current is quite strong. Water is clear of solids and is tannin colored.</p> <p>Riparian vegetation consists of alders</p>	Forested area	N/A	N/A	N/A

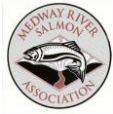


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>and shrubs, leading into a mixed stand. Undercutting along banks. Shade coverage is 80%. There is a lot of open space underneath the canopy, and the trees overhang the brook.</p> <p>The substrate consists of boulder and cobble through riffle/ run and silt in the stillwater.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 18.2°C, DO: 81 %, DO: 7.6mg/L, SPC: 27.5 µs/cm, TDS: 17.8 mg/L, Salinity: 0.01ppt, pH: 4.98</p> <p>Riparian Health Score: 58</p>				
W4	Wooden bridge	N 44° 12' 37.0" W 064° 43' 36.9"	<p>Survey performed at a wooden bridge along a logging road. Bridge appears to be old, and there are some boards that are starting to wear through. Water is running quickly underneath the bridge and there is no physical fish passage barrier here.</p> <p>The river width is 15ft and average stream depth is 16in. Water is clear of solids and is tannin colored; slight stream meander.</p>	Forested area	Bridge repair	Medium	Incomplete





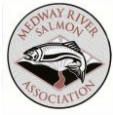
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Riparian vegetation mostly ground vegetation, with some shrubs and hardwood. Shrubs mostly appear along the right bank, and hardwood is predominant on the left bank. Shade coverage is 60%.</p> <p>The substrate consists of boulders. There is some foam collecting on the surface of the brook and the boulders.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 18.1°C, DO: 63 %, DO: 5.9 mg/L, SPC: 16.6 µs/cm, TDS: 10.7 mg/L, Salinity: 0.01ppt, pH: 5.17</p> <p>Riparian Health Score: 54</p>				
W5	Feeder brook	N 44°12' 37.0" W 064°43' 36.9"	<p>Survey performed at the confluence of an un-named feeder brook. Water is very high at this section, and is very similar to a bog.</p> <p>The river width is 9m and average stream depth is 3m. Habitat type is deep calm stillwater. Water is clear of solids and is tannin colored.</p> <p>Riparian vegetation consists of shrubs, and there are a few boulders</p>	Forested area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>interspersed along the banks. The bog area is surrounded by a mixed forest stand. Undercutting along banks. Shade coverage is 80%. There is a lot of open space underneath the canopy, and the trees overhang the brook.</p> <p>The stream may be deep enough to stratify.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.9°C, DO: 82 %, DO: 7.7 mg/L, SPC: 26.7 µs/cm, TDS: 17.4 mg/L, Salinity: 0.01ppt, pH: 5.12</p> <p>Riparian Health Score: 58</p>				
W6	Stillwater	N 44° 12' 40.6" W 064° 43' 34.7"	<p>Survey performed at along a section of stillwater after a run. Water flows into the stillwater at a fast pace. There are several logs in the brook roped together like a raft.</p> <p>The river width is 13m and average stream depth is 1.2m. Habitat type is deep calm stillwater. Water is clear of solids and is tannin colored.</p> <p>Riparian vegetation consists of alders and ground vegetation. There is not a lot</p>	Forested area	Planting	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>of shade / canopy at this section, but the alders along the banks provide for some protection.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.9°C, DO: 82 %, DO: 7.7 mg/L, SPC: 26.7 µs/cm, TDS: 17.4 mg/L, Salinity: 0.01ppt, pH: 5.12</p> <p>Riparian Health Score: 58</p>				
W7	Run / Riffle / Pool	N 44° 12' 42.2" W 064° 43' 46.5"	<p>Survey performed at a section of river meander where there is a riffle / run / pool sequence. Several logs lying across the stream, but they do not create a barrier.</p> <p>The river width is 3.6m and average stream depth is 43cm. Habitat type is a riffle / run, the stream is noticeably down grade. Water is clear of solids and is tannin colored. There is a right bank pool.</p> <p>Riparian vegetation consists of ferns and grasses. There are some scattered hardwood trees. Banks are very flat, and there is a large flood plain: 30m+.</p>	Forested area	N/A	N/A	N/A

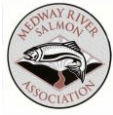


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality:            YSI MEASUREMENTS: Temp: 17.7°C,            DO: 86 %, DO: 8.2 mg/L, SPC: 17.0            µs/cm, TDS: 11.1 mg/L, Salinity: 0.01ppt,            pH: 5.05</p> <p>Riparian Health Score: 52</p>				
W8	Large pool / stillwater	N 44° 12' 44.0" W 064° 43' 58.9"	<p>Survey performed at a section of river where a run sequence flows at a swift velocity into a large pool / stillwater. There is a large right bank pool. The pool surface has collected foam. This section of river is noticeably down grade and there are plenty of boulders within the stream to allow for protection and shade.</p> <p>The river width is 15m and average stream depth is 1.5m. Habitat type is a run into a stillwater / pool. Water in this section is mostly clear of visible solids, but it is a very dark tannin color. Lily pads are scattered throughout this section.</p> <p>Riparian vegetation consists of ground vegetation and alders, which led into a mixed forests stand. Banks on both side of the river are fairly flat, with slight gentle sloping. The right bank has 80% shade coverage, and is a mixed forest stand. The left bank has very little shade</p>	Forested area	N/A	N/A	N/A

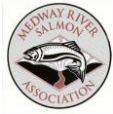


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>as it consists of mostly ground vegetation. Large flood plain: 30m+.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.7°C, DO: 80 %, DO: 7.8 mg/L, SPC: 17.0 µs/cm, TDS: 11.0 mg/L, Salinity: 0.01ppt, pH: 5.15</p> <p>Riparian Health Score: 54</p>				
W9	Stillwater	N 44° 12' 48.0" W 064° 44' 04.7"	<p>This location is downstream of a handmade bridge. The bridge consists of 3 metal beams laid across the stream, and a rope tied from on bank to the other. The bridge did not pose a fish passage issue, and the pathway in the area was very faint.</p> <p>The survey was performed at a section of river where a run sequence flows at a swift velocity into a stillwater section. There is a large right bank pool off of the main section of stillwater. The pool's surface is covered in foam and forest debris, and is approximately 3m x 3.5m, and 1m in depth. There are faint paths along both banks.</p>	<p>Forested area</p> <p>Handmade metal beam bridge</p> <p>Logging Road</p>	Removal of metal debris.	Low	Incomplete

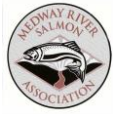




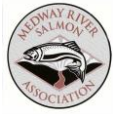
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The river width is 10m and average stream depth is 1.2m. Habitat type is a stillwater; the stream is gently down grade. Water is clear of solids and is a very dark tannin color. Likely the substrate is littered with debris due to the run section flowing into the stillwater area.</p> <p>Riparian vegetation consists of ground vegetation (mostly shrubs and ferns along stream edge) then leads into a hardwood stand. Both banks are fairly flat for ~40ft from the river's edge, and then they slope upwards sharply. There are several large boulders scattered on the right bank. Approximately 70% shade coverage. Flood plain: 40ft.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.7°C, DO: 74.0 %, DO: 7.0 mg/L, SPC: 17.0 µs/cm, TDS: 11.0 mg/L, Salinity: 0.01ppt, pH: 5.05</p> <p>Riparian Health Score: 61</p>				



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
W10	Stillwater	N 44° 12' 52.3" W 064° 44' 2.7"	<p>Survey performed at a section of stillwater upstream of handmade bridge. Still water flows into a run. Trails are visible on both stream banks. A small feeder brook flows into the still water from the right bank.</p> <p>The river width is 7.5m and average stream depth is 1.8m. Habitat type is a stillwater; the stream is noticeably down grade. Water is clear of solids and is a very dark tannin color. Many water bugs were noted. Lots of lily pads and other vegetation growing up out of the water. At the section where the stillwater flows into a run section, boulders line both banks.</p> <p>This area surrounding the stream was a marsh / bog. Riparian vegetation consists of tall grasses and sedges. Bog/marsh leads into a mixed forest stand, although it appears to be mostly soft wood. There is no canopy or shade in this section, although the grasses and sedges that are submerged along the bank edges may provide some protection. Large flood plain: 98ft+.</p>	<p>Forested area</p> <p>Marsh/Bog</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality: YSI MEASUREMENTS: Temp: 18.1°C, DO: 62.0 %, DO: 5.9 mg/L, SPC: 16.7 µs/cm, TDS: 10.8 mg/L, Salinity: 0.01ppt, pH: 5.41</p> <p>Riparian Health Score: 26</p>				
W11	Stillwater	N 44° 13' 39.2" W 064° 44' 18.3"	<p>Survey performed the bottom of a riffle/run section. This section leads into a stillwater that flows approximately 1.5km. There is a very large left bank pool, approximately 7.5m in diameter and 50cm deep. Foam gathered on the pool's surface.</p> <p>The river width is 5.4m and average stream depth is 1.2m. Habitat type is a stillwater. Tall grasses and reeds are growing out of the water. Water is clear of solids and is a light tannin color.</p> <p>Riparian vegetation consists of tall grasses and ferns. Both banks are fairly flat. The left bank has ferns and tall grasses growing along the river's edge and leads into a mature tree stand. The right bank has tall grass growing along the river's edge, and leads into a large section of alders. Approximately 40ft behind the alder stand, a tall mixed forest</p>	Forested area	N/A	N/A	N/A

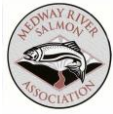


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>stand begins. Approximately 70% shade coverage. Large flood plain: 98ft+.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.6°C, DO: 78.0 %, DO: 7.5 mg/L, SPC: 16.6 µs/cm, TDS: 10.6 mg/L, Salinity: 0.01ppt, pH: 5.57</p> <p>Riparian Health Score: 57</p>				
W12	Riffle / run	N 44° 13' 40.8" W 064° 44' 19.2"	<p>Survey performed at a riffle-run section of river. Several logs lie across the stream, but do not pose a fish passage issue. The section is fairly straight , with a slight meander at the bottom of riffle/run where it flows into a stillwater</p> <p>The river width is 3m and average stream depth is 60cm. Habitat type is a riffle /run. Substrate consists of large boulders; the water flow is very rapid, and it is unlikely that smaller stones would stay in place. Stream is noticeably down grade.</p> <p>The riparian area consists of protruding boulders, surrounded by grasses and ferns, which leads into a hardwood stand. This stand provides a thick canopy. The forest ground is covered</p>	<p>Forested area</p> <p>Nova Scotia Power Power Lines</p>	N/A	N/A	N/A

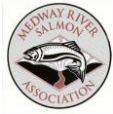


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>with thick forest litter, and small saplings. Where banks do not consist of boulders, undercutting is observed. Both banks are gently sloping. Approximately 95% shade coverage. Large flood plain: 98ft+.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.7°C, DO: 61.0 %, DO: 6.1 mg/L, SPC: 15.6 µs/cm, TDS: 10.1 mg/L, Salinity: 0.01ppt, pH: 5.58</p> <p>Riparian Health Score: 59</p>				
W13	Outflow of Wentworth Lake	N 44° 14' 27.8" W 064° 44' 02.6"	<p>Survey performed at the outflow of Wentworth Lake, which is the headwater of this sub-watershed. This is a riffle/run area that flows from the Lake into a deep stillwater. Several logs lay across falls at the top of the run. This does not present a fish passage issue, and may create shade and protection for fish.</p> <p>The river width is 4m and average stream depth is 60cm. Substrate consists of large boulders and cobbles. The flow of water is fast, and water color is light tannin.</p> <p>The riparian area consists of protruding boulders, grasses and mixed tree stand.</p>	<p>Forested area</p> <p>Sub-watershed headwaters</p>	N/A	N/A	N/A

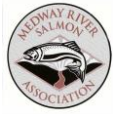




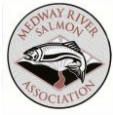
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Both banks are fairly flat, and ~70 shaded. The left bank is boggy, with the tree stand behind the riparian area. There is no shade on the left bank. Large flood plain: 98ft+.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 18.4°C, DO: 61.0 %, DO: 5.7 mg/L, SPC: 15.9 µs/cm, TDS: 10.3 mg/L, Salinity: 0.01ppt, pH: 5.66</p> <p>Riparian Health Score: 63</p>				
W14	Wentworth Lake	N 44° 14' 28.7" W 064° 44' 04.5"	<p>Survey performed at Wentworth Lake, which is the headwater of this sub-watershed. The Lake is surrounded by a mixed forest, with banks that are gently sloping. Bank vegetation consists mostly of shrubs. Shade in this area was approximately 85 %.</p> <p>We hiked through a very organic smelling bog to reach this site. The pH reading of 5.7 was higher than anticipated.</p> <p>There is evidence of recreational use in this area. Garbage and old camp equipment were observed.</p>	<p>Forested area</p> <p>Sub-watershed headwaters</p>	Garbage Clean-up	Low	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			Water Quality: YSI MEASUREMENTS: Temp: 18.0°C, DO: 69.0 %, DO: 6.4 mg/L, SPC: 15.6 µs/cm, TDS: 10.2 mg/L, Salinity: 0.01ppt, pH: 5.48				
Section 3	Salters Brook						
S1	Bridge on Medway River Rd.	N 44° 10' 41.4" W 064° 39' 54.6"	<p>Survey site is off the bridge located on Medway River Road. The bridge is similar to others on the road; wood and metal construction with concrete abutments. There is no fish passage issue associated with this bridge. However, the area surrounding the bridge located adjacent to the river is lacking in vegetation and trees. This area is very dry and dusty. There is no shade in this area apart from what the bridge provides. There is a steep gravel boat launch next to the bridge.</p> <p>The riparian area consists of tall grasses and sedges, and appears to be marsh or bog. The banks are flat, apart from the section that has been built up for the bridge.</p>	Residential Area  Paved Road	Riparian planting	Medium	Incomplete



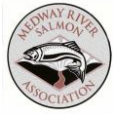
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality: YSI MEASUREMENTS: Temp: 15.3°C, DO: 90.0 %, DO: 9.2 mg/L, SPC: 27.1 µs/cm, TDS: 17.4 mg/L, Salinity: 0.01ppt, pH: 5.16</p> <p>Riparian Health Score: 25</p>				
S2	Stillwater	N 44° 10' 49.2" W 064° 39' 48.6"	<p>Survey site is upstream of the bridge located on Medway River Road.</p> <p>Survey performed at the stillwater just below a riffle/run section of stream. The water flows out of the riffle/run section into the still water at a quick velocity. Foam collects where the water slows in velocity. The stillwater opens up at the end of the riffle/run into a very large area, which flows all the way past the bridge and into the Medway River.</p> <p>The river width is 60m and average stream depth is 2m. Boulders line the perimeter of the stillwater, and there is on large boiler that protrudes from the center of river. The land surrounding this site is marsh, which leads into a mature mixed tree stand. The left bank has a belt of marsh which leads into the tree stand, whereas the right bank has no marsh</p>	<p>Forested Area</p> <p>Marsh Area</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>section. There little shade in this area, however, there appears to be undercutting along the right bank.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 14.3°C, DO: 91.0 %, DO: 9.3 mg/L, SPC: 26.2 µs/cm, TDS: 17.0 mg/L, Salinity: 0.01ppt, pH: 5.14</p> <p>Riparian Health Score: 51</p>				
S3	Stillwater	N 44° 11.0' 3.0" W 064° 39' 27.7"	<p>Survey performed at the stillwater below the confluence of Salters Brook and Slab Pile Brook</p> <p>The river width is 7m and average stream depth is 1.2m. The water is slow moving, dark tannin color, and has visible suspended solids. Boulders and lily pads are scattered throughout the stream.</p> <p>Both banks are fairly flat. The left bank is bog which leads into a mature tree stand. The right bank is similar to the left, however there is a smaller section of bog. There is little shade in this area. The sedges and grasses which are submerged along the river's edge may create some protection and shade. Large flood plain: 98ft+.</p>	<p>Confluence of Salters Brook and Slab Pile Brook</p> <p>Forested Area</p>	N/A	N/A	N/A

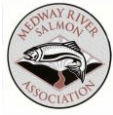


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality: YSI MEASUREMENTS: Temp: 14.0°C, DO: 95.0 %, DO: 9.7 mg/L, SPC: 26.9 µs/cm, TDS: 17.8 mg/L, Salinity: 0.01ppt, pH: 5.17</p> <p>Riparian Health Score: 31</p>				
S4	Riffle Section	N 44° 11.0' 16.4" W 064° 39' 21.5"	<p>Survey site is downstream of the SATCOM Earth Station Access Road and the Salters Brook / Slab Pile Brook Confluence.</p> <p>Survey performed at the top of a riffle within a run section.</p> <p>The river width is 6m and average stream depth is 60cm. Large boulders are interspersed along the river's edge and within the stream. The water is a dark tannin color, but it is visibly clear of suspended solids. Water spiders are observed. This section had a clearly defined thalweg.</p> <p>The riparian area consists of protruding boulders, grasses and mixed tree stand. Both banks are flat, and are covered with boulders, moss, tree litter, and decaying logs that have been cut down by beaver</p>	<p>Forested Area</p> <p>SATCOM Earth Station Access Road</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>activity. There is bank undercutting observed. The mature tree stand within the riparian area provides approximately 40% in stream canopy coverage.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.9°C, DO: 95.0 %, DO: 9.8 mg/L, SPC: 26.7 µs/cm, TDS: 17.4 mg/L, Salinity: 0.01ppt, pH: 5.30</p> <p>Riparian Health Score: 58</p>				
S5	Slab Pile Tributary	N 44° 11.0' 22.6" W 064° 39' 16.2"	<p>Survey site is located on Slab Pile Brook, 200m upstream of its confluence with Salters Brook.</p> <p>Survey performed along a reach of river where a stillwater flows over a falls and riffle section into a run. This run flows into Salter's Brook. The run section is interspersed with boulders and small pools.</p> <p>Above the falls/riffle there is a log that is laid across the stream. This log appears to have been put there as a stream crossing and there is evidence of an old trappers trail in the area. The log does not create fish passage issues.</p>	Forested Area	N/A	N/A	N/A

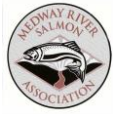




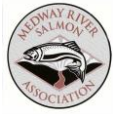
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The river width is 4.2m and average stream depth is 60cm, but this is quite variable due to the amount of boulders that make up the substrate. Along the bank edge, undercutting is observed in-between the boulders.</p> <p>The left bank is flat, and the riparian area vegetation consists of sedges and mixed forest canopy providing approximately 65% shade. The forest floor consists of young alders and leaf litter. The right bank riparian area is similar to the left bank, but is sloping at 40 degree angle.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.6°C, DO: 95.0 %, DO: 9.6 mg/L, SPC: 27.0 µs/cm, TDS: 17.5 mg/L, Salinity: 0.01ppt, pH: 4.90</p> <p>Riparian Health Score: 61</p>				
S6	Stillwater	N 44° 11.0' 21.1" W 064° 39' 20.9"	<p>Survey site is located upstream of the SATCOM Earth Station Access Road. There is a deep ditch dug on the left bank which seems to extend back to the Earth Station. This ditch was likely used for cables at one time.</p> <p>Fish were observed feeding at this site.</p>	<p>Forested Area</p> <p>SATCOM Earth Station Access Road</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Survey performed at the end of a riffle and braided section, which flows into a stillwater and pool. The riffle section is very fast flowing and joins a braided reach of river that has many boulders interspersed throughout. The braided sections consist of decaying ferns and dead hardwood trees. The water moves quickly through the braided section, but not as fast as it does through the riffle. The braided section flows into the stillwater; the water is very slow moving but you can still see a current. The river width is 7.6m and average stream depth is 60cm. The water is a dark tannin color, but it is visible clear of suspended solids within the water column; there is some leaf litter floating along the surface.</p> <p>The riparian area consists of flat banks with brown colored ferns, decaying logs, tree litter, and a mixed forest stand. Approximately 85% shade coverage.</p>				



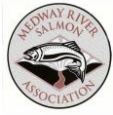
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality: YSI MEASUREMENTS: Temp: 13.8°C, DO: 87.0 %, DO: 8.8 mg/L, SPC: 27.0 µs/cm, TDS: 17.5 mg/L, Salinity: 0.01ppt, pH: 5.44</p> <p>Riparian Health Score: 65</p>				
S7	Stillwater	N 44° 11.0' 33.7" W 064° 39' 22.6"	<p>Survey performed at a meandering stillwater. This stillwater is very deep and slow flowing. We heard vehicles presumably from the distant Highway103 at this location.</p> <p>The river width is 13m and average stream depth is 1.8m. Substrate in this section is likely soft fines and is layered with forest litter and other organics. Water in this section is a dark tannin color, and has visible suspended solids.</p> <p>The riparian area is flat and consists of shrubs and spongy moss. The area is typical of bog that we have been observing. Both banks are fairly flat, and ~70 shaded. The left bank is boggy, with a mature tree stand behind the riparian area. There is no shade on the left bank. Large flood plain: 98ft+.</p>	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality: YSI MEASUREMENTS: Temp: 13.9°C, DO: 97.0 %, DO: 9.9 mg/L, SPC: 28.9 µs/cm, TDS: 18.8 mg/L, Salinity: 0.01ppt, pH: 5.49</p> <p>Riparian Health Score: 22</p>				
S8	Pool	N 44° 11.0' 33.7" W 064° 39' 22.6"	<p>Survey performed the end of a stillwater which flows into a riffle/run. Braiding in the stream is observed. There is a left bank pool (6m X4m).</p> <p>The river width is 13m and average stream depth is 1.8m. There appears to be a clearly defined thalweg. Substrate in this section appears to be large boulders. Water in this section is a dark tannin color, and has visible suspended solids. Lily pads are growing in the water. The water flows from the stillwater into the run at a moderate velocity. The water moves at a fast velocity though the riffle section.</p> <p>The riparian area is flat and consists of shrubs and spongy moss. The area is typical of bog that we have been observing, however more sedges and tall grasses are observed. Both banks are fairly flat, and the only shade provided is</p>	Forested Area	N/A	N/A	N/A

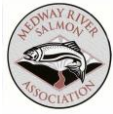


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>from tall grasses. Large flood plain: 30m+.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.9°C, DO: 91.0 %, DO: 9.4 mg/L, SPC: 27.8 µs/cm, TDS: 18.3 mg/L, Salinity: 0.01ppt, pH: 5.43</p> <p>Riparian Health Score: 22</p>				
S9	Riffle section	N 44° 11.0' 52.5" W 064° 39' 15.1"	<p>Survey performed at a section of riffle sequence which flow around two large islands within the tributary.</p> <p>The two islands are approximately 6m x 3m, and rise above the current water levels by 30cm. Both islands have mature appearing softwood trees growing on them. Each island's perimeter is covered with boulders. Grass, forest litter, and cobble cover the ground under the canopy.</p> <p>The water flow in the section follows a riffle sequence, and is very fast flowing. Water has light tannin color, and has visible suspended solids.</p> <p>The river width is 13m and average stream depth is 30cm. Substrate in this</p>	Forested Area	N/A	N/A	N/A

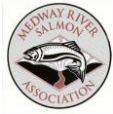


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>section is boulders, with cobble wedged in between. Smaller rocks would not stay in this section due to the fast water velocity.</p> <p>The riparian area is flat and consists of a mature tree stand. Large boulders are observed along the water's edge, with undercutting appearing where there are no boulders. Forest litter and ferns cover the ground under the canopy.</p> <p>The tributary has 90% shade coverage.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.9°C, DO: 92.0 %, DO: 9.5 mg/L, SPC: 27.9 µs/cm, TDS: 18.2 mg/L, Salinity: 0.01ppt, pH: 5.37</p> <p>Riparian Health Score: 62</p>				
S10	Stillwater Riffle/run	N 44° 11.0' 56.4" W 064° 39' 15.1"	<p>Survey performed the end of a stillwater which flows into a riffle/run.</p> <p>The river width is 4.5m and average stream depth is 40cm. Substrate in this section consists of boulders and cobble. Water in this section is a clear and free of visible suspended solids. The stillwater is surrounded by a bog, which is</p>	Forested Area	N/A	N/A	N/A

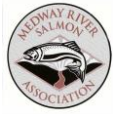




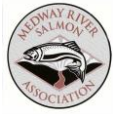
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>surrounded by a mature mixed stand. The bog vegetation consists of small shrubs and brush. The water flows from the stillwater into the run at a high velocity. The water moves at a fast velocity though the riffle. Vegetation is growing on the substrate.</p> <p>The riparian area is flat and consists of shrubs and spongy moss. The area along the water's edge is covered with boulders and the riparian vegetation consists of ferns and sedges along a flat 3m belt near the bank area. Beyond the 3m belt is a large mature mixed tree stand. Large flood plain: 30m+.</p> <p>Shade coverage in the area is 70%.</p> <p>There is evidence of recreational fishing and of beavers in the area.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.9°C, DO: 91.0 %, DO: 9.3 mg/L, SPC: 28.1 µs/cm, TDS: 18.2 mg/L, Salinity: 0.01ppt, pH: 5.30</p> <p>Riparian Health Score: 58</p>				



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
S11	Stillwater	N 44° 12.0' 46.6" W 064° 39' 11.9"	<p>Survey performed at a stillwater section, where there is a large island in the stream. Island vegetation consists of grasses, and the bank edges appear to be eroding.</p> <p>The river width is 4.5m and average stream depth is 64cm. Substrate in this section consists of boulders large boulders, which appear to be covered with silt and other forest litter. Water in this section is very still and is a dark tannin color. There are several downed logs in this section, but they do not pose a barrier issue.</p> <p>The riparian area is flat and consists of shrubs and sedges. Approximately 4m from the bank a mixed tree stand begins. The tree stand has a large canopy, with forest litter covering the ground.</p> <p>Shade coverage in the area is 30%.</p>	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Water Quality:            YSI MEASUREMENTS: Temp: 17.1°C,            DO: 55.0 %, DO: 5.3 mg/L, SPC: 24.8            µs/cm, TDS: 16.1 mg/L, Salinity: 0.01ppt,            pH: 5.91</p> <p>Riparian Health Score: 57</p>				
S12	Riffle/run Stillwater Pool	N 44° 12.0 50.1" W 064° 39' 10.3"	<p>Survey performed at the end of a stillwater where the rivers flows into a riffle/run sequence. There is a right bank pool, in which lily pads are growing. The bank of the pool is lined with large boulders.</p> <p>The river width is 4.5m and average stream depth is 30cm. There is a natural rock sill at the head of the riffle/run area. Substrate in this section consists of boulders large boulders, which appear to be covered with silt and other forest litter. Water in this section is a dark tannin color, but is free of visible suspended solids. The water surface has foam likely created from the fast flowing riffle/run. Many water spiders are observed.</p> <p>The right bank shows some undercutting and the vegetation consists of sedges and grass which lead into a mixed stand. The left bank has boulders and cobble</p>	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>lining the water's edge and the vegetation is young saplings, with forest litter covering the ground.</p> <p>Shade coverage in the area is 30%.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.5°C, DO: 92.0 %, DO: 8.7 mg/L, SPC: 26.9 µs/cm, TDS: 17.5 mg/L, Salinity: 0.01ppt, pH: 5.37</p> <p>Riparian Health Score: 49</p>				
S13	Stillwater	N 44° 12.0' 55.9" W 064° 39' 16.1"	<p>Survey performed near the end of a wide, deep stillwater, upstream of a riffle/run section.</p> <p>The river width is 30m and average stream depth is 2m. The water in this section is very calm, and there is no visible current. The water is a dark tannin color, and there are many lily pads growing in the stream.</p> <p>The left bank is fairly flat, and has many boulders and rock extrusions along the perimeter. Beyond the rocks, the riparian vegetation consists of grasses and sedges, leading into a mixed stand. The right bank is fairly flat, and riparian</p>	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>vegetation consists of sedges and grasses but does not contain any boulders.</p> <p>Shade coverage in the area is 30%.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.6°C, DO: 85.0 %, DO: 8.1 mg/L, SPC: 26.0 µs/cm, TDS: 16.9 mg/L, Salinity: 0.01ppt, pH: 5.35</p> <p>Riparian Health Score: 44</p>				
S14	Bridge on logging road	N 44° 13.0' 01.9" W 064° 39' 35.7"	<p>Survey performed off of a small bridge on a logging road. The bridge is 10m in length, and is a metal trestle overlaid with wood and dirt. This crossing does not pose a fish passage barrier. Large armor stones are placed on the banks on the sides of the crossing. On the left bank, you can observe black netting that has been placed to help stop bank erosion and the introduction of silt into the stream.</p> <p>The river width is 6m and average stream depth is 30cm. The water in this section is running at a moderate pace, and is very light in color, few suspended solids are visible. Substrate is boulder,</p>	<p>Forested Area</p> <p>Logging road</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>cobble, and gravel.</p> <p>Both left and right banks are slightly sloping and vegetation consists of mostly young saplings, with forest litter as ground cover. The left bank does show some mature trees, but looking beyond it appears the area has been clear-cut, but is now re-growing. Some undercutting is observed along the banks.</p> <p>Shade coverage in the area is 30%.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.3°C, DO: 90.0 %, DO: 8.6 mg/L, SPC: 25.6 µs/cm, TDS: 15.6 mg/L, Salinity: 0.01ppt, pH: 5.36</p>				
S15	Stillwater	N 44° 11.0' 33.7" W 064° 39' 22.6"	<p>Survey performed at a stillwater upstream of a bridge crossing on a logging road.</p> <p>The river width is 6m and average stream depth is 1.2m. There is a visible current in the stillwater, and the water itself is a very dark tannin color. There is a large amount of deadfall at the end of this section of stillwater, but there does not appear to be a fish passage barrier.</p>	Forested Area	N/A	N/A	N/A





Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The riparian area is flat and consists of shrubs and sedges; a thin belt of mixed stand surrounds this section. There is a good amount of dead wood standing. Beyond the belt of mixed stand on the right bank, you can see that the area is starting to grow back from being clear-cut. Beyond the belt of mixed stand on the left bank is what appears to be a large bog.</p> <p>Shade coverage in the area is 30%.</p> <p>Ducks are observed in the area.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 17.5°C, DO: 84.0 %, DO: 8.0 mg/L, SPC: 25.2 µs/cm, TDS: 16.4 mg/L, Salinity: 0.01ppt, pH: 5.41</p> <p>Riparian Health Score: 54</p>				
S16	Large stillwater Riffle/run	N 44° 13.0' 07.2" W 064° 40' 06.7"	<p>Survey performed at a stillwater at the end of a riffle/run section.</p> <p>The river width is 24m and average stream depth is 1.3m. The stillwater is very wide and calm. Flow from the riffle</p>	Forested Area	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>sequence creates a run that is 4m in length.</p> <p>The riparian area consists of the bog that has been observed in the sub-watershed. The bog is surrounded by a thin tree stand, which in turn leads in to a clear-cut section of forest. Near the outflow of the riffle/run there are several trees that overhang the river. The banks in the area are very flat, but are very 'soggy'. Likely the substrate consists of fines and forest litter.</p> <p>Shade coverage in the area is 50%.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 18.0°C, DO: 85.0 %, DO: 8.1 mg/L, SPC: 13.0 µs/cm, TDS: 8.5 mg/L, Salinity: 0.01ppt, pH: 5.50</p> <p>Riparian Health Score: 49</p>				
S17	Stillwater Riffle/run	N 44° 12.0' 34.0" W 064° 38' 57.3"	<p>Survey performed at a large 'marshy' stillwater at the end of a riffle/run section.</p> <p>The river width is 7.2m and average stream depth is 1.2m. There are several large boulders scattered in the river. The</p>	Forested Area	N/A	N/A	N/A



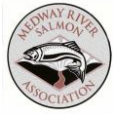
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>water color is darker than the typical tannin color that has been observed in the area.</p> <p>The left bank is fairly flat and shows large boulders along the water's edge, with some undercutting further downstream. The left bank is sloped at a 45 degree angle and does not show boulders. Riparian vegetation on both banks consists of mixed forest, with shrubs and forest litter as ground cover. There are many branches which over hang the stream in this section.</p> <p>Shade coverage in the area is 80%.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 14.5°C, DO: 86.0 %, DO: 8.7 mg/L, SPC: 13.4 µs/cm, TDS: 8.7 mg/L, Salinity: 0.01ppt, pH: 5.26</p> <p>Riparian Health Score: 60</p>				
S18	Riffle/run	N 44° 13.0' 18.1" W 064° 40' 19.3"	<p>Survey performed at a riffle/run section just downstream of Salter's Lake. The majority of this section is riffle.</p> <p>The river width is 4m and average stream depth is 30cm. Substrate is</p>	<p>Forested Area</p> <p>Salter's Lake</p>	N/A	N/A	N/A



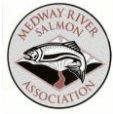
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>boulder and cobble. Water is flowing through this section at a fast velocity. The water is light tannin in color.</p> <p>Both banks are slightly sloping and have large boulders. Boulders are covered with moss. There is some undercutting observed between boulders. Riparian vegetation is a mixed forest stand, which provides a large canopy and shade coverage. There is a fair amount of ferns growing beneath the canopy. Shade coverage in the area is 80%.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 15.0°C, DO: 99.0 %, DO: 9.4 mg/L, SPC: 27.7 µs/cm, TDS: 18.7 mg/L, Salinity: 0.01ppt, pH: 5.26</p> <p>Riparian Health Score: 56</p>				
S19	Salter's Lake	N 44° 08.0' 44.3" W 064° 39' 05.7"	<p>Survey performed near the outflow of Salter's Lake. Salter's Lake is the headwaters of the Salter's Brook sub-watershed. The outflow of the lake flows into a 600m rifle/run section.</p> <p>The lake appears quite large, and has many inlets or 'arms' along the perimeter.</p>	<p>Forested Area</p> <p>Headwaters</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The banks of the lake are covered in large boulders scattered within grasses and shrubs. A mixed forest begins approximately 1m from the water's edge and provides shade. Water is very calm, and there is plenty of litter debris floating within the water column. There are some reeds growing near the shore.</p> <p>A beaver is observed swimming in the lake.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 15.1°C, DO: 78.0 %, DO: 7.7 mg/L, SPC: 27.6 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.26</p>				
Section 4	Glode Meadows Brook						
G1	<p>Bridge on Medway Rd.</p> <p>Confluence of Glode Meadows Brook and Medway River</p>	<p>N 44 11' 36.3"</p> <p>W 064 40' 38.3"</p>	<p>Survey performed off the bridge on Medway Rd., near the confluence of Glode Meadows Brook and Medway River. The road is asphalt and is a highly trafficked. The bridge is metal and wood construction, with a concrete abutment. There are armor stones placed around the abutment. The banks leading from the bridge down to the edge of the water</p>	<p>Bog</p> <p>Residential homes</p>	N/A	N/A	N/A

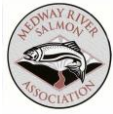


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>are very steep, and consist of gravel. There is no fish passage barrier present. Water under the bridge appears to be quite deep (1m+).</p> <p>The area surrounding the bridge is bog, and at the time of the survey the area was flooded. It was possible to see some sedges and brush rising above the current water levels. Lily pads are visible growing in the water. Surrounding the bog area is a mixed tree stand. Beyond the stand are residential homes.</p> <p>Downstream of the bridge, conditions are much the same. There is a span of approximately 20m from the bridge to the stream confluence. Water flow in the area is very calm and still.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 10.2°C, DO: 76.0 %, DO: 8.6 mg/L, SPC: 28.8 µs/cm, TDS: 18.5 mg/L, Salinity: 0.01ppt, pH: 4.85</p>				

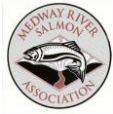


Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
G2	Stillwater	N 44 11' 36.1" W 064 40' 38.3"	<p>Survey performed at a stillwater section at the head of a large area of bog. There is 30m+ of bog on each side of the river.</p> <p>The river width is 4.2m and average stream depth is 60cm. Water in this section is very still and clear. The water has a light tannin color. Many crickets and black flies are observed.</p> <p>Both banks are flat and the vegetation is sedges and brush. The large bog area is surrounded by a predominately softwood tree stand. There appears to be a fair amount of standing dead wood.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 10.0°C, DO: 63.0 %, DO: 7.1 mg/L, SPC: 14.7 µs/cm, TDS: 9.6 mg/L, Salinity: 0.01ppt, pH: 5.19</p>	Forested Area Bog	N/A	N/A	N/A
G3	Feeder Brook	N 44 11' 41.4" W 064 40' 45.9"	<p>Survey performed at a run on the main tributary just downstream of an unnamed feeder brook. The feeder brook has a very low flow, and could be described as a 'trickle' of water.</p> <p>There is a hunter's blind on beyond the left bank. There are many black flies in</p>	Forested Area	N/A	N/A	N/A

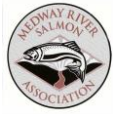




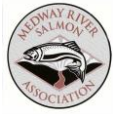
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>the area.</p> <p>The river width is 4.2m and average stream depth is 60cm. Substrate is boulder and cobble. Water is flowing through this section at a moderate velocity. The water is light tannin in color.</p> <p>The left bank is flat, and is bog that we have observed in the area (sedges and brush. Surrounding the bog is a mixed forest stand that is growing on sloped ground (approx. 30 degree slope). The right bank is similar to the left, except that the slope of the bank is approximately 15 degrees. There is a lot of bank undercutting observed in the area.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 9.7°C, DO: 60.0 %, DO: 5.7 mg/L, SPC: 29.5 µs/cm, TDS: 19.7 mg/L, Salinity: 0.01ppt, pH: 5.19</p> <p>Riparian Health Score: 47</p>				
G4	Man-made rock crossing Feeder brook	N 44 11' 46.5" W 064 41' 15.3"	Survey performed downstream of a man-made rock crossing. Survey site is located near the sub-watershed headwaters. The observation was made	Forested Area Sub-watershed headwaters	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>that this must be a man-made crossing, as the rocks appeared to be stacked in an un-natural formation to create a river crossing. However, this does seem slightly odd as the stream width is quite narrow; however, conditions can differ during times of high water.</p> <p>The river width is 60cm and average stream depth is 7cm. At this time, the tributary had very low flow. The water that did flow, flowed between a substrate of cobble.</p> <p>Downstream there is an un-named feeder brook which shows evidence of a foot-path running alongside. The feeder brook appeared to be a small ditch. It remains unclear if this is natural.</p> <p>Banks in this area are flat, and the vegetation consists of sedges, brush, and moss. There is a fair amount of standing dead wood in the area.</p> <p>This surrounding area has been clear-cut.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 10.7°C,</p>	Foot path			



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			DO: 65.0 %, DO: 7.3 mg/L, SPC: 13.5 µs/cm, TDS: 8.8 mg/L, Salinity: 0.01ppt, pH: 5.28				
G5	Glude Lake	N 44 11' 55.1" W 064 41' 12.9"	<p>Survey performed near the outflow of Glode Lake. Glode Lake is the headwater of the Glode Meadows Brook sub-watershed.</p> <p>Evidence of beavers in the area.</p> <p>This area surrounding the lake is a bog, however, it differs from what we have been observing in the area. The majority of the vegetation in the area is tall grass, shrubs, and moss. The moss in this area holds a lot of water; every step results in water climbing up over our ankles. There is a fair amount of standing dead wood throughout the bog.</p> <p>The water in this area is very clear and has an oily sheen. There is a defined channel throughout the bog; the channel width is 2.5m and 50cm in depth.</p> <p>Surrounding the lake is a softwood stand, through which you can see clear-cutting. The highway can be heard from this location.</p>	<p>Forested Area</p> <p>Glude Lake</p> <p>Sub-watershed headwaters</p>	N/A	N/A	N/A



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			Water Quality: YSI MEASUREMENTS: Temp: 10.7°C, DO: 58.0 %, DO: 6.5 mg/L, SPC: 27.6 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.78				
Section 5	Mink Trap Brook and Quarter Mile Creek						
M1	Confluence of Mink Trap Brook and Medway River	N 44 08' 5.5" W 064 39' 05.5"	<p>Survey performed at the confluence of Mink Trap Brook and Medway River. The confluence is approximately 10m downstream of a large culvert passing under Medway River Rd. There is no fish passage issues associated with the culvert.</p> <p>The river width is 60cmm and average stream depth is 35cm. The water is very clear, and appears to be free and tannins and visible suspended solids. Substrate consists of cobble and gravel. There are several large boulders alongside the banks where the tributary joins the main river.</p> <p>The riparian zone in this area is flat, and is manicured lawn. There are several large trees growing on the lawn, but they</p>	Residential Area Medway River Rd.	Sapling Planting  Speak with residents regarding keeping an acceptable riparian zone	Medium	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>provide little shade to the stream.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.2°C, DO: 99.0 %, DO: 10.4 mg/L, SPC: 28.6 µs/cm, TDS: 18.5 mg/L, Salinity: 0.01ppt, pH: 5.57</p> <p>Riparian Health Score: 43</p>				
M2	Road Crossing	N 44 08' 36.0" W 064 39' 15.9"	<p>Survey performed downstream of a road crossing in a residential area. This area is representative of approximately 150m of river and riparian area.</p> <p>The river width is 1.5m and average stream depth is 3.5cm. This area has been totally landscaped; there are very few trees. There is zero shade coverage for the stream. Stream banks appear to have been altered with machinery to even out the banks, creating a stream that resembles a ditch. The stream banks are eroding and barrier rock has been installed to try to prevent further erosion. Substrate consists of gravel.</p> <p>There are several foot bridges on the property; they do not appear to impeding fish passage.</p>	Residential Area	<p>Sapling Planting</p> <p>Investigation into the possibility of a fish passage issue stemming from a weir.</p> <p>Speak with residents regarding keeping an acceptable riparian zone</p>	<p>Medium</p> <p>High</p>	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>There is a weir on the property that requires further investigation to determine if it impedes fish passage.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 12.1°C, DO: 63 %, DO: 6.4 mg/L, SPC: 27.2 µs/cm, TDS: 18.0 mg/L, Salinity: 0.01ppt, pH: 5.17</p> <p>Riparian Health Score: 17</p>				
M3	Old stream crossing	N 44 08' 34.8" W 064 39' 18.7"	<p>Survey performed downstream of an old stream crossing, near a split in the river. The old crossing remains are metal beams which span the stream. There is no fish passage barrier associated with the old crossing. This site is where the residential and forested areas meet.</p> <p>Upstream of this site three branches of the tributary join to create the main stem of the stream.</p> <p>The river width is 3m and average stream depth is 7cm. The water is very clear, and appears to be free and tannins and visible suspended solids. Substrate consists of boulder, cobble, and gravel.</p>	<p>Forested Area</p> <p>Residential Area</p>	<p>Sapling Planting</p> <p>Digger Logs</p> <p>Bank stabilization measures.</p> <p>Speak with residents regarding keeping an acceptable riparian zone</p>	Medium	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The riparian area in this section is adequate; however, downstream the riparian zone is severely damaged due to homeowner's clear cutting to the water's edge.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 12.3°C, DO: 89.9 %, DO: 8.7 mg/L, SPC: 30.3 µs/cm, TDS: 19.6 mg/L, Salinity: 0.01ppt, pH: 5.11</p> <p>Riparian Health Score: 60</p>				
M4	Wooden Bridge	N 44 08' 25.1" W 064 39' 34.1"	<p>Survey performed downstream of an old wooden bridge. The bridge is dilapidated and while it does span the stream, it is just resting on the banks; there is no real structure left. There is 22cm of clearance under the bridge.</p> <p>The river width is 6m and average stream depth is 12cm. Water flows swiftly underneath the bridge and through the rocky substrate; substrate consists of boulders.</p> <p>There is a footpath along the right bank, and an ATV trail on the left bank.</p>	<p>Forested Area</p> <p>Footpath</p> <p>ATV trail</p>	Removal of old wooden bridge.	Medium	Incomplete





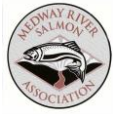
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>Both banks consist of exposed tree roots and boulders. There is undercutting observed. The riparian zone immediate to the banks is flat, and vegetation consists of mixed tree stand, sedges and grass. Shade coverage is 75%. The stream is at a visible downgrade.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 12.2°C, DO: 91.1 %, DO: 9.8 mg/L, SPC: 29.6 µs/cm, TDS: 17.9 mg/L, Salinity: 0.01ppt, pH: 5.00</p> <p>Riparian Health Score: 52</p>				
M5	Beaver activity	N 44 08' 19.1" W 064 39' 48.5"	A homeowner in the area expressed concern over a beaver dam in this location. He felt that it may impede fish passage to Crane Lake.	Forested Area	Investigation into the possible fish passage barrier (beaver dam)	Medium	Incomplete
M6	Stillwater Quarter Creek	N 44 08' 11.1" W 064 40' 23.3"	<p>After passing through a bog area where it was hard to determine where the main Mink Trap stem flow was, we believe we have picked up Quarter Mile Creek.</p> <p>Survey was performed at the end of a small riffle which flows into a stillwater. Water in this section is visibly free of tannins and suspended solids. Tree litter</p>	Forested Area	More ground-truthing in the area.	High	Incomplete



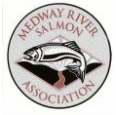
Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>is collecting on the water surface. Decomposing logs are visible lying on top of the stream substrate.</p> <p>A man-made wooden duck 'house' has been placed in the area.</p> <p>The river is 6m in width and the average depth is 60cm. Lily pads are abundant. The banks of the stillwater are flooded, but sedges and brush are visible. The left bank is flat, and has boulders scattered across. The right bank is flat, however, there is a fair amount of dead standing trees covered with hanging moss.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.6°C, DO: 67.1 %, DO: 6.9 mg/L, SPC: 13.3 µs/cm, TDS: 8.6 mg/L, Salinity: 0.01ppt, pH: 5.45</p>				
M7	Evidence of beavers	N 44 08' 07.8" W 064 40' 25.5"	<p>Survey performed downstream at a beaver lodge and two beaver dams.</p> <p>Water in this area is very clear, and appears to be free of visible tannins. There is a noticeable downhill grade to this section.</p>	<p>Forested Area</p> <p>Beaver dam</p> <p>Beaver lodge</p>	Debris removal	Medium	Incomplete



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			<p>The river width is 2m and the average stream depth is 30cm. The channel is very straight, and there is a downstream pool. A lot of forest debris is collecting in this area. There are three spots where debris build up is particularly high, and may be causing fish passage issues.</p> <p>Both banks are flat and are scattered with boulders, moss and grasses. The soil in this area is saturated, and it appears that this area is prone to flooding. The surrounding banks have a fair amount of dead fallen trees. Shade coverage is 60%.</p> <p>Approximately 50m past the left bank, clear cutting is visible. Small pines are now growing back in the area, so regeneration is occurring.</p> <p>Water Quality: YSI MEASUREMENTS: Temp: 13.6°C, DO: 81.1 %, DO: 8.5 mg/L, SPC: 26.7 µs/cm, TDS: 17.3 mg/L, Salinity: 0.01ppt, pH: 5.32</p> <p>Riparian Health Score: 45</p>				



Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
M8	Crane Lake	N 44 08' 01.0" W 064 40' 31.2"	<p>Survey performed at the outflow of Crane Lake, which is the headwater of the Mink Trap Brook sub-watershed.</p> <p>There is a vehicle or ATV trail that runs from Church Road to the lake. It appears as if persons have been using this area as a boat launch. Local knowledge tells us that there are large trout in Crane Lake.</p> <p>The lake appears quite large and is surrounded by a mixed tree stand, which overhang the water. Some sedges and grass grow underneath the canopy.</p> <p>The outflow site is very bog like; there is a lot of deep mud and organics. The area Appears prone to flooding. There is a defined channel; channel width is 2.5m and channel depth is 75cm.</p> <p>There is a lot of dead standing wood in the area, with downed and decomposing trees littering the banks and substrate. There does not appear to be fish passage issues at this time, however, during low flow this area may dry up. The bog area is surrounded by a mature tree stand</p>	<p>Forested Area</p> <p>Crane Lake</p> <p>Sub-watershed headwaters</p> <p>Vehicle / ATV trail</p>	N/A	N/A	N/A



## Medway River Tributaries Fish Habitat Restoration Plan, 2013

Section Number and Site	Stream Feature	Lower Limit (coordinates and landmarks)	Site Details	Adjacent Land Use Considerations	Prescription for Restoration	Project Priority Ranking	Project Status
			Water Quality: YSI MEASUREMENTS: Temp: 14.0°C, DO: 87.0 %, DO: 9.0 mg/L, SPC: 29.9 µs/cm, TDS: 17.5 mg/L, Salinity: 0.01ppt, pH: 5.56				



## 5. Restoration Plan Summary – Medway River Sub-Watershed

<p>Changes in the watershed - current conditions compared to historical conditions. Future changes to the natural environment expected in the watershed</p>	<p>The Herring Cove / Medway watershed has a long history of forestry activities. Forestry practices have a major impact on water quality and wildlife habitat. While traveling to and along all of the tributaries in this study, it was the norm to pass through cutting areas, some recently, some within the past 10 years and some within the last 30 years. Only the oldest cutting appeared to be close to the water course, with all more recent forestry work respecting a wide zone of no cutting within 40 meters or more back from the water course. Nevertheless, without healthy hinterland areas, fish habitat may be reduced due to a rise in water temperature due to lack of shade. As well, an increase in runoff may occur due to the decreased vegetation though current forestry practices include careful environmental measures to prevent this runoff. Runoff may increase the fines found in the watercourse, filling in substrate and creating inadequate spawning grounds. Observations of regeneration have been made over the course of the ground-truthing for this report. In general, the streamside journeys along the tributaries presented wilderness, often no sign of human activity except for a faint trail made by an unknown fisherman, hunter or trapper. Only as the streams reached the main stem of the Medway River did cottages and homes appear.</p> <p>Like most watersheds in the South-West Nova region, the Herring Cove / Medway sub-watershed is affected by acid rain. Acid rain has a major impact on water quality, wildlife, and wildlife habitat within the watershed. The major source of acid rain effecting Nova Scotia is from industry emissions produced in Central Canada and the U.S. Midwest. If soils in the area of precipitation are unable to buffer or neutralize the effects of the acid rain, then a decrease in pH of water and soils in the area will occur. This decrease in pH can cause the destruction of certain species of wildlife and vegetation which cannot thrive at a low pH.</p>
<p>Most likely limiting factors with regard to aquatic productivity in the watershed</p>	<p>The most likely limiting factors are:</p> <ol style="list-style-type: none"> <li>1. Acid rain effects</li> <li>2. Warm water temperatures during summer months</li> <li>3. Lack of riparian buffers and degraded riparian areas at specific locations as noted in the survey. This includes reduced canopy cover and shaded areas, bank erosion, and runoff.</li> <li>4. Connectivity issues within the watershed due to low water flows and beaver damming.</li> </ol>



Most important habitat restoration needs in the watershed	<p>The most significant habitat restoration needs in the sub-watershed are as follows:</p> <ol style="list-style-type: none"><li>1. Acid rain mitigation by terrestrial or in-stream liming.</li><li>2. Improvement of land-use practices.</li><li>3. Restoration of riparian buffers and degraded riparian areas.</li><li>4. Improvement of fish habitat connectivity.</li></ol>
Habitat connectivity restoration projects.	<p>The following habitat connectivity restoration projects are recommended:</p> <ol style="list-style-type: none"><li>1. Site T1 – Replacement of culvert.</li><li>2. Site T20 – Debris clean-up.</li><li>3. Site R25 – Culvert installation.</li><li>4. Site M2 – Assessment of weir.</li><li>5. Site M4 – Removal of wooden bridge.</li><li>6. Site M5 – Investigation into beaver dam</li><li>7. Site M7 – Debris removal.</li></ol>
Water quality improvement and/or monitoring projects.	<p>The following water quality monitoring projects are recommended:</p> <ol style="list-style-type: none"><li>1. Site T14 – Water quality analysis.</li><li>2. Site T15 – Water quality analysis.</li><li>3. Site T16 – Water quality analysis.</li></ol>
Riparian buffer zone restoration projects.	<p>The following riparian buffer zone restoration projects are recommended:</p> <ol style="list-style-type: none"><li>1. Site M1 - plant saplings where the riparian area has been degraded.</li><li>2. Site M2 - plant saplings where the riparian area has been degraded.</li><li>3. Site M3 - plant saplings where the riparian area has been degraded.</li></ol>





	<p>4. Site W1 - plant saplings where the riparian area has been degraded.</p> <p>5. Site W6 - plant saplings where the riparian area has been degraded.</p> <p>6. Site S1 - plant saplings where the riparian area has been degraded.</p>
Needed land use improvement practices.	<p>The following land-use improvement practices projects are recommended:</p> <p>1. Site M1 – Speak with residents regarding keeping an acceptable riparian zone.</p> <p>2. Site M2 - Speak with residents regarding keeping an acceptable riparian zone.</p> <p>3. Site M3 - Speak with residents regarding keeping an acceptable riparian zone.</p> <p>4. Site M4 - Speak with residents regarding keeping an acceptable riparian zone.</p>
Physical habitat restoration projects.	<p>The following physical habitat restoration projects are recommended:</p> <p>1. Site T11 – Garbage clean-up.</p> <p>2. Site T12 – Garbage clean-up.</p> <p>3. Site T13 – Bridge repair.</p> <p>4. Site T13 – Garbage clean-up.</p> <p>5. Site W4 – Removal of metal debris.</p> <p>6. Site W14 – Garbage clean-up.</p> <p>7. Site M3 – Digger logs.</p> <p>8. Site M3 – Bank stabilization.</p> <p>9. Site M6 – Requires further ground-truthing.</p> <p>10. Various sites at Tumblingdown Brook, Salter's Brook, Wentworth Brook, and Mink Trap Brook sub-watersheds - to restore freshwater habitat for Atlantic Salmon and Brook Trout through the terrestrial application of granular lime. Terrestrial liming is a relatively new conservation technique in Canada and has been proven to increase pH in Scandinavian countries (Clair and Hindar 2005). Terrestrial liming will restore productivity of the Brook Trout fishery in these portions of the Medway River watershed to their maximum potential biomass</p>



and will restore Atlantic Salmon habitat and encourage the recovery of the population. These projects should also collect baseline and post application water quality data through pH data loggers placed in the river. By their respective site, here are summaries of scopes of work and order of magnitude estimates:

- **Tumblingdown - \$33,600**
  - 60 tonnes of limestone
  - \$12,000 for materials
  - 4 men for 9 weeks
  - winter lake liming at pond via good logging road access on snowmobile/ATV
  - terrestrial liming on private land via good logging road/ATV access, area of 6 ha (near 44.1625, -64.6977)
- **Salters - \$63,000 to \$126,000**
  - 150 – 300 tonnes of limestone
  - \$15,000 to \$30,000 for materials
  - 4 men for 20 to 40 weeks
  - winter lake liming at outlet to brook via good logging road access on snowmobiles/ATV
  - terrestrial liming near headwater on private land via good logging road access, area of 15 ha between “S1” and “S3” (area near 44.2190, -64.6666)
  - terrestrial liming near earth station on public land via good ATV access, area of 15 ha near “S6” (area near 44.1915, -64.6579)
- **Wentworth - \$55,200 to \$82,800**
  - 120 to 180 tonnes of limestone
  - \$12,000 to \$18,000 materials
  - 4 men for 18 to 27 weeks
  - winter lake liming at outlet to brook, via long trip on logging road and snowmobile
  - terrestrial liming on public land, via long trip on logging road and hydro line, area of 12 ha between point “1” and “3” (area between 44.2404, -64.7328 and 44.2349, -64.7364)
  - terrestrial liming on public land, via good logging road/ATV access, area of 6 ha near point “6” (near 44.2123, -64.7354)
- **Mink Trap - \$27,600**
  - 60 tonnes of limestone
  - \$6,000 for materials
  - 4 men for 9 weeks
  - terrestrial liming on public land via good logging road/ATV access, area of 6 ha downstream of C1 (area near 44.1374, -64.6682)
  - in-stream channel blocking on private land via ATV access (located near 44.1425, -64.6581)



## Reference Material

Caines, S. 2012. Musquodoboit River Watershed – Based Fish Habitat Restoration. Adopt-A-Stream Program report. Nova Scotia Salmon Association.

Cann, D.B., and J.D. Hilchey. Soil Survey of Lunenburg County Nova Scotia. Report 7. Ottawa: Edmond Cloutier, C.M.G, O.A., D.S.P. Queens Printer and Controller of Stationery, 1958. eBook. <<http://sis.agr.gc.ca/cansis/publications/surveys/ns/ns7/index.html>>.

COSEWIC. 2013. Atlantic Salmon – Nova Scotia Southern Upland Population. Online document available at: [[http://www.cosewic.gc.ca/eng/sct1/searchdetail\\_e.cfm?id=672&StartRow=1&boxes\\_tatus=All&](http://www.cosewic.gc.ca/eng/sct1/searchdetail_e.cfm?id=672&StartRow=1&boxes_tatus=All&)]. Accessed in October, 2013.

DP ME 43, Version 2, 2006, Digital Version of Nova Scotia Department of Natural Resources Map ME 2000-1, Geological Map of the Province of Nova Scotia, scale 1:500 000, compiled by J. D. Keppie, 2000. Digital product compiled by B. E. Fisher and J. C. Poole.

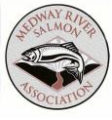
Natural Resources Canada. 2013. Toporama Map. Online Atlas available at [<http://atlas.nrcan.gc.ca/site/english/toporama/index.html#>]. Accessed November, 2013.

Nova Scotia Department of Fisheries and Aquaculture, Inland Fisheries Division. 2013. Angler's Handbook. Online Document available at [<http://www.gov.ns.ca/fish/sportfishing/angling/2013angregs.shtml>]. Accessed October, 2013.

Nova Scotia Department of Fisheries and Aquaculture, Inland Fisheries Division. 2013. Hatchery Stocking Program. Online Documents available at [<http://gov.ns.ca/fish/sportfishing/stocked>]. Accessed October, 2013.

Nova Scotia Department of Natural Resources. 2012. Nova Scotia's Species At Risk. Online document. [[http://www.speciesatrisk.ca/municipalities/mun\\_lunenburg.htm](http://www.speciesatrisk.ca/municipalities/mun_lunenburg.htm)]. Accessed November, 2013.

Nova Scotia Environment. 2012. Nova Scotia Lake Survey Program: Lake Chemistry Data Spreadsheet. Online Documents available at [<https://www.gov.ns.ca/nse/surface.water/lakesurveyprogram.asp>]. Accessed October, 2013.



## **Acknowledgments**

Habitat assessments and all other field work completed by Jennifer Campbell (BCAF), Brian Dulude (MRSA), Ron Zwicker (MRSA), Horace MacPherson (MRSA), Dell Nauss (MRSA), and Brian Holden (MRSA).