

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M01**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location      **Reach is west of Rt 110 and begins at confluence with the White River. Reach ends just West of Branch View cemetery.**

1.1 Reach Description:  
 1.2 Towns: **Royaltown**  
 1.3 Downstream Latitude: **43.82371**  
 1.3 Downstream Longitude: **-72.52065**

Step 2. Stream Type  
 2.1 Elevation Upstream: **490**  
 2.1 Elevation Downstream: **459**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **6,355.0 ft.**      **1.20** Miles  
 2.3 Valley Slope: **0.5**  
 2.4 Channel Length: **6,855.0 ft.**      **1.30** Miles  
 2.5 Channel Slope: **0.45 %**  
 2.6 Sinuosity: **1.08**  
 2.7 Watershed Area: **104.6** Square Miles  
 2.8 Channel Width: **101.3** feet  
 2.9 Valley Width: **400.0** feet  
 2.10 Confinement Ratio: **3.9**  
 2.10 Confinement Type: **Semi-confined**  
 2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**  
 Sub-Class Slope: **None**  
 Bed Material: **Gravel**

Step 3. Basin Characteristics  
 3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **Multiple**  
 3.3 Dominant Geological Mat.: **Ice-Contact**      **65.6 %**  
 3.3 Sub-dom. Geological Mat.: **Glacial Lake**  
 3.4 Valley Slope Left: **Very Steep**  
 3.4 Valley Slope Right: **Ext. Steep**  
 3.5 Soils  
 Hydrologic Group: **A**      **47.9 %**  
 Flooding: **None/Rare**      **90.2 %**  
 Water Table Deep: **6.0**      **87.1 %**  
 Water Table Shallow: **6.0**      **87.1 %**  
 Erodibility: **Moderate**      **40.2 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest**      **81.5 %**  
 Current Sub-Dominant Land Cover: **Field**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest**      **39.2 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer      Left Bank      Right Bank  
 Dominant: **0-25**      **0-25**  
 Sub-dominant: **>100**      **>100**  
 Length w / less than 25 ft.: **258.0 ft.**      **341.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **Large Run of River**  
 Use: **Other**  
 5.2 Bridges and Culverts: **2**      **4.4 %**  
 5.3 Bank Armoring: **2,403.0**      **35.1 %**  
     Left: **1,364.1 ft.**      Right: **1,039.0 ft.**  
 5.4 Channel Straightening: **3,486.8**      **50.9 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,059.2 ft.**      **44.6**  
     One Side      Both Sides  
     Road:      ft.      ft.  
     Railroad:      ft.      ft.  
     Berm:      ft.      ft.  
     Improved Path:      ft.      ft.  
 6.2 Development: **1,640.9 ft.**      **52.6 ft.**  
 6.3 Channel Bars: **Side**  
 6.4 Meander Migration: **Flood Chute**  
 6.5 Meander Width:      ft. Ratio: **0.0**  
 6.6 Wavelength:      ft. Ratio: **0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **4359.8398438**      ft  
 7.2 Bank Height: **4**      ft  
 7.3 Ice/Debris Jam Potential: **None**

|      |      |     |      |      |      |      |      |      |      |      |     |      |      |      |      |       |
|------|------|-----|------|------|------|------|------|------|------|------|-----|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 2    | 1   | 0    | 0    | 2    | 2    | 0    | 2    | 2    | 2    | 1   | 0    | 0    | 2    | 0    | 18    |
| High | High | Low | N.S. | N.S. | High | High | N.S. | High | High | High | Low | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M02**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **West of Rt 110. Begins at Branch View cemetery. Ends where river moves to E side of Rt 110 (at bridge).**

1.1 Reach Description:

1.2 Towns: **Royalton, Tunbridge**

1.3 Downstream Latitude: **43.83663**

1.3 Downstream Longitude: **-72.51604**

Step 2. Stream Type

2.1 Elevation Upstream: **504**

2.1 Elevation Downstream: **490**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,326.0 ft. 1.77 Miles**

2.3 Valley Slope: **0.2**

2.4 Channel Length: **11,038.0 ft. 2.09 Miles**

2.5 Channel Slope: **0.13 %**

2.6 Sinuosity: **1.18**

2.7 Watershed Area: **103.8 Square Miles**

2.8 Channel Width: **101.0 feet**

2.9 Valley Width: **528.0 feet**

2.10 Confinement Ratio: **5.2**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Alluvial 45.2 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **B 61.9 %**

Flooding: **None/Rare 54.8 %**

Water Table Deep: **6.0 63.6 %**

Water Table Shallow: **6.0 45.8 %**

Erodibility: **Moderate 41.2 %**

7.4 Comments:

**Murky water.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.5 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Field 31.9 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **3,605.0 ft. 5,501.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 1.9 %**

5.3 Bank Armoring: **4,744.9 43.0 %**

Left: **2,944.0 ft.** Right: **1,800.9 ft.**

5.4 Channel Straightening: **7,020.8 63.6 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,847.8 ft. 16.7**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **242.2 ft. 0.0 ft.**

6.3 Channel Bars: **Point**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **353 ft. Ratio: 3.5**

6.6 Wavelength: **694 ft. Ratio: 6.9**

Step 7. Windshield Survey

7.1 Bank Erosion: **7090.7099609 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4  | 6.5 | 6.6 | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|-----|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 1   | 0    | 1   | 0    | 1   | 1   | 2    | 0    | 16    |
| High | High | High | N.S. | N.S. | High | High | N.S. | Low | N.S. | Low | N.S. | Low | Low | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M02-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins E of Mill Rd. Ends at intersection of East Bethel Rd and Ward Hill Rd.**

1.1 Reach Description:

1.2 Towns: **Royalton**

1.3 Downstream Latitude: **43.84146**

1.3 Downstream Longitude: **-72.51857**

Step 2. Stream Type

2.1 Elevation Upstream: **541**

2.1 Elevation Downstream: **494**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,312.0 ft. 0.44 Miles**

2.3 Valley Slope: **2.0**

2.4 Channel Length: **2,899.0 ft. 0.55 Miles**

2.5 Channel Slope: **1.62 %**

2.6 Sinuosity: **1.25**

2.7 Watershed Area: **3.3 Square Miles**

2.8 Channel Width: **22.1 feet**

2.9 Valley Width: **173.0 feet**

2.10 Confinement Ratio: **7.8**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **E**

Bedform: **Riffle-Pool**

Sub-Class Slope: **b**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Alluvial 72.6 %**

3.3 Sub-dom. Geological Mat.: **Glacial Lake**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 81.6 %**

Flooding: **Frequent 72.6 %**

Water Table Deep: **1.5 72.6 %**

Water Table Shallow: **0.0 72.6 %**

Erodibility: **Moderate 27.4 %**

7.4 Comments:

**Bifurcated flow.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 85.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 51.4 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **956.0 ft. 1,130.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: ft. Right: ft.

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: ft. ft.

Railroad: ft. ft.

Berm: ft. ft.

Improved Path: ft. ft.

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **142 ft. Ratio: 6.4**

6.6 Wavelength: **271 ft. Ratio: 12.3**

Step 7. Windshield Survey

7.1 Bank Erosion: ft

7.2 Bank Height: **Low** ft

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4 | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 1   | 7     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | Low | N.S. | N.S. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M02-S1.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Ward Hill Rd and East Bethel Rd. Ends at second bridge crossing.**

1.1 Reach Description:

1.2 Towns: **Royalton, Tunbridge**

1.3 Downstream Latitude: **43.84705**

1.3 Downstream Longitude: **-72.52111**

Step 2. Stream Type

2.1 Elevation Upstream: **863**

2.1 Elevation Downstream: **551**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,281.0 ft. 1.00 Miles**

2.3 Valley Slope: **5.9**

2.4 Channel Length: **5,582.0 ft. 1.06 Miles**

2.5 Channel Slope: **5.59 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **0.8 Square Miles**

2.8 Channel Width: **11.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 50.8 %**

3.3 Sub-dom. Geological Mat.: **Glacial Lake**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 66.7 %**

Flooding: **None/Rare 83.5 %**

Water Table Deep: **6.0 57.7 %**

Water Table Shallow: **6.0 57.7 %**

Erodibility: **Very Severe 80.2 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 79.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 57.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **3,963.0 ft. 1,562.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,633.0 ft. 29.3**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 558.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Avulsion**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 0    | 2    | 0    | 0    | 0    | 0    | 10    |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | Low | N.S. | High | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M02-S1.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Ward Hill Rd and East Bethel Rd. Ends where Bethel Rd takes a sharp left turn.**

1.1 Reach Description:

1.2 Towns: **Royalton, Tunbridge**

1.3 Downstream Latitude: **43.84683**

1.3 Downstream Longitude: **-72.52166**

Step 2. Stream Type

2.1 Elevation Upstream: **1,080**

2.1 Elevation Downstream: **541**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **11,995.0 ft. 2.27 Miles**

2.3 Valley Slope: **4.5**

2.4 Channel Length: **13,129.0 ft. 2.49 Miles**

2.5 Channel Slope: **4.11 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **2.3 Square Miles**

2.8 Channel Width: **19.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 96.2 %**

3.3 Sub-dom. Geological Mat.: **Glacial Lake**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 93.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 94.5 %**

Water Table Shallow: **1.0 91.3 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 87.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 63.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **0-25 >100**

Length w / less than 25 ft.: **4,989.0 ft. 4,201.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **6,101.0 ft. 46.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 8     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M02-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .5 mi S of intersection of Russell Rd and Rt 110. Ends at first bridge crossing.**

1.1 Reach Description:

1.2 Towns: **Royalton, Tunbridge**

1.3 Downstream Latitude: **43.85236**

1.3 Downstream Longitude: **-72.51140**

Step 2. Stream Type

2.1 Elevation Upstream: **698**

2.1 Elevation Downstream: **485**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,038.0 ft. 1.33 Miles**

2.3 Valley Slope: **3.0**

2.4 Channel Length: **8,124.0 ft. 1.54 Miles**

2.5 Channel Slope: **2.62 %**

2.6 Sinuosity: **1.15**

2.7 Watershed Area: **1.7 Square Miles**

2.8 Channel Width: **16.7 feet**

2.9 Valley Width: **175.0 feet**

2.10 Confinement Ratio: **10.5**

2.10 Confinement Type: **Very Broad**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Alluvial 51.0 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 53.8 %**

Flooding: **None/Rare 49.0 %**

Water Table Deep: **1.5 46.3 %**

Water Table Shallow: **0.0 55.8 %**

Erodibility: **Moderate 49.0 %**

7.4 Comments:

**Cows in stream, stream ford.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 78.7 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 41.9 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **4,549.0 ft. 3,330.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: ft. Right: ft.

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,554.0 ft. 19.1**

One Side

Both Sides

Road: ft. ft.

Railroad: ft. ft.

Berm: ft. ft.

Improved Path: ft. ft.

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|-----|------|------|-----|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 1   | 0    | 0    | 2    | 0    | 9     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | Low | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M02-S2.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins at second bridge crossing on Russell Rd. Ends just S of Bennett Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.87033**

1.3 Downstream Longitude: **-72.51781**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,219**

2.1 Elevation Downstream: **698**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,893.0 ft. 1.49 Miles**

2.3 Valley Slope: **6.6**

2.4 Channel Length: **8,419.0 ft. 1.59 Miles**

2.5 Channel Slope: **6.19 %**

2.6 Sinuosity: **1.07**

2.7 Watershed Area: **0.9 Square Miles**

2.8 Channel Width: **12.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Dam**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 47.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 82.9 %**

Water Table Shallow: **0.0 47.9 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 79.3 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 44.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank Right Bank**

Dominant: **>100 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **2,104.0 ft. 1,852.0 ft.**

4.4 Ground Water Inputs: **Abundant**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **1,415.0 ft. 16.8**

**One Side Both Sides**

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **421.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1 | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|-----|------|------|------|-----|-----|------|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 9     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | Low | Low | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M03**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins where river goes under Rt 110 to the east. Ends .4 mi up from there.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.85473**

1.3 Downstream Longitude: **-72.50262**

Step 2. Stream Type

2.1 Elevation Upstream: **515**

2.1 Elevation Downstream: **504**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **1,891.0 ft. 0.36 Miles**

2.3 Valley Slope: **0.6**

2.4 Channel Length: **1,892.0 ft. 0.36 Miles**

2.5 Channel Slope: **0.58 %**

2.6 Sinuosity: **1.00**

2.7 Watershed Area: **97.2 Square Miles**

2.8 Channel Width: **98.1 feet**

2.9 Valley Width: **300.0 feet**

2.10 Confinement Ratio: **3.1**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact 44.2 %**

3.3 Sub-dom. Geological Mat.: **Glacial Lake**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **A 52.8 %**

Flooding: **None/Rare 92.7 %**

Water Table Deep: **6.0 97.6 %**

Water Table Shallow: **6.0 90.3 %**

Erodibility: **Severe 60.2 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.6 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 47.9 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **51-100 26-50**

Length w / less than 25 ft.: **0.0 ft. 297.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **1,083.5 57.3 %**

Left: **355.7 ft.** Right: **727.8 ft.**

5.4 Channel Straightening: **822.8 43.5 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,444.3 ft. 76.3**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **267.0 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **525.8599854 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|-----|------|------|------|------|------|------|-----|-----|-----|------|------|------|------|-------|
| 2    | 2    | 1   | 0    | 0    | 2    | 2    | 0    | 2    | 1   | 1   | 1   | 0    | 0    | 2    | 0    | 16    |
| High | High | Low | N.S. | N.S. | High | High | N.S. | High | Low | Low | Low | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M03-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .5 mi S of covered bridge (heads east). Ends 1.3 mi up Button Hill Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.85896**

1.3 Downstream Longitude: **-72.50000**

Step 2. Stream Type

2.1 Elevation Upstream: **861**

2.1 Elevation Downstream: **519**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,848.0 ft. 0.92 Miles**

2.3 Valley Slope: **7.1**

2.4 Channel Length: **5,064.0 ft. 0.96 Miles**

2.5 Channel Slope: **6.75 %**

2.6 Sinuosity: **1.04**

2.7 Watershed Area: **1.6 Square Miles**

2.8 Channel Width: **16.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 86.1 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 56.8 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 58.6 %**

Water Table Shallow: **0.0 56.8 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 89.1 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 55.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 26-50**

Length w / less than 25 ft.: **202.0 ft. 1,012.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **851.0 ft. 16.8**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 7     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M03-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .5 mi S of covered bridge and heads west.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.85965**

1.3 Downstream Longitude: **-72.50078**

Step 2. Stream Type

2.1 Elevation Upstream: **597**

2.1 Elevation Downstream: **505**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,658.0 ft. 0.69 Miles**

2.3 Valley Slope: **2.5**

2.4 Channel Length: **3,745.0 ft. 0.71 Miles**

2.5 Channel Slope: **2.46 %**

2.6 Sinuosity: **1.02**

2.7 Watershed Area: **0.3 Square Miles**

2.8 Channel Width: **7.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Glacial Lake 79.5 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **B 84.7 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **3.5 52.3 %**

Water Table Shallow: **1.5 79.5 %**

Erodibility: **Very Severe 92.7 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 83.3 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 63.9 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **1,460.0 ft. 1,273.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4     |
| Low | Low | High | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M04**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins where river diverges from Rt 110 and heads E. Ends .1 mi S of Town Farm Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.85937**

1.3 Downstream Longitude: **-72.50059**

Step 2. Stream Type

2.1 Elevation Upstream: **528**

2.1 Elevation Downstream: **515**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,776.0 ft. 1.09 Miles**

2.3 Valley Slope: **0.2**

2.4 Channel Length: **8,663.0 ft. 1.64 Miles**

2.5 Channel Slope: **0.15 %**

2.6 Sinuosity: **1.50**

2.7 Watershed Area: **95.0 Square Miles**

2.8 Channel Width: **97.2 feet**

2.9 Valley Width: **705.0 feet**

2.10 Confinement Ratio: **7.3**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **E**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Alluvial 51.5 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **B 62.9 %**

Flooding: **None/Rare 48.5 %**

Water Table Deep: **6.0 92.8 %**

Water Table Shallow: **4.0 48.0 %**

Erodibility: **Moderate 32.5 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.5 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 36.4 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 26-50**

Length w / less than 25 ft.: **4,411.0 ft. 5,596.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 2.1 %**

5.3 Bank Armoring: **2,518.4 29.1 %**

Left: **703.6 ft.** Right: **1,814.8 ft.**

5.4 Channel Straightening: **3,932.0 45.4 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,571.6 ft. 18.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **215.4 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **99 ft. Ratio: 1.0**

6.6 Wavelength: **99 ft. Ratio: 1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **5663.1098633 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|-----|------|-----|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 1   | 0    | 1   | 2    | 2    | 2    | 2    | 0    | 20    |
| High | High | High | N.S. | N.S. | High | High | N.S. | Low | N.S. | Low | High | High | High | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M04-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .15 mi S of Belknap Brook Rd. Ends .22 mi W of Potash Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.86259**

1.3 Downstream Longitude: **-72.49757**

Step 2. Stream Type

2.1 Elevation Upstream: **1,372**

2.1 Elevation Downstream: **521**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **12,878.0 ft. 2.44 Miles**

2.3 Valley Slope: **6.6**

2.4 Channel Length: **13,287.0 ft. 2.52 Miles**

2.5 Channel Slope: **6.40 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **1.6 Square Miles**

2.8 Channel Width: **16.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 83.9 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 65.6 %**

Flooding: **None/Rare 89.7 %**

Water Table Deep: **2.0 74.0 %**

Water Table Shallow: **0.0 65.6 %**

Erodibility: **Very Severe 89.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 77.9 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 50.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **26-50 0-25**

Length w / less than 25 ft.: **2,790.0 ft. 2,657.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 15.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,811.0 ft. 28.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Farnham Branch**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M04-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .25 mi S of Town Farm Rd. Ends .22 mi W of Potash Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.87394**

1.3 Downstream Longitude: **-72.49691**

Step 2. Stream Type

2.1 Elevation Upstream: **1,036**

2.1 Elevation Downstream: **531**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **8,578.0 ft. 1.62 Miles**

2.3 Valley Slope: **5.9**

2.4 Channel Length: **8,587.0 ft. 1.63 Miles**

2.5 Channel Slope: **5.88 %**

2.6 Sinuosity: **1.00**

2.7 Watershed Area: **3.6 Square Miles**

2.8 Channel Width: **22.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 84.4 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **D 58.2 %**

Flooding: **None/Rare 94.2 %**

Water Table Deep: **2.0 73.0 %**

Water Table Shallow: **0.0 58.2 %**

Erodibility: **Very Severe 94.2 %**

7.4 Comments:

**Mass failures.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 79.6 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 52.9 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **1,116.0 ft. 2,318.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **573.0 ft. 6.7**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|-----|------|-----|------|------|------|-----|------|-------|
| 1   | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 1   | 0    | 0    | 0    | 1   | 0    | 7     |
| Low | Low | High | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | Low | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M04-S2.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .22 mi W of Potash Rd and heads S. Ends .32 mi W of cemetery.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.87087**

1.3 Downstream Longitude: **-72.46776**

Step 2. Stream Type

2.1 Elevation Upstream: **1,215**

2.1 Elevation Downstream: **1,036**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,579.0 ft. 0.87 Miles**

2.3 Valley Slope: **3.9**

2.4 Channel Length: **4,581.0 ft. 0.87 Miles**

2.5 Channel Slope: **3.91 %**

2.6 Sinuosity: **1.00**

2.7 Watershed Area: **1.0 Square Miles**

2.8 Channel Width: **13.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 98.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 100.0 %**

Water Table Shallow: **0.0 98.6 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 85.3 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 95.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2     |
| Low | Low | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Farnham Branch**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M04-S2.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** Begins .22 mi W of Potash Rd. Ends .2 mi N of jeep trail.

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.87122**

1.3 Downstream Longitude: **-72.46825**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,643**

2.1 Elevation Downstream: **1,036**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **11,773.0 ft.** **2.23** Miles

2.3 Valley Slope: **5.2**

2.4 Channel Length: **12,370.0 ft.** **2.34** Miles

2.5 Channel Slope: **4.91 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **2.7** Square Miles

2.8 Channel Width: **20.4** feet

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till** **98.5 %**

3.3 Sub-dom. Geological Mat.: **Other**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D** **60.0 %**

Flooding: **None/Rare** **100.0 %**

Water Table Deep: **2.0** **83.3 %**

Water Table Shallow: **0.0** **58.5 %**

Erodibility: **Very Severe** **98.5 %**

7.4 Comments:

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **80.3 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **36.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank** **Right Bank**

Dominant: **>100** **0-25**

Sub-dominant: **26-50** **26-50**

Length w / less than 25 ft.: **2,102.0 ft.** **4,453.0 ft.**

4.4 Ground Water Inputs: **Minimal**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4** **20.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **7,910.0 ft.** **63.9**

**One Side** **Both Sides**

Road: **ft.** **ft.**

Railroad: **ft.** **ft.**

Berm: **ft.** **ft.**

Improved Path: **ft.** **ft.**

6.2 Development: **0.0 ft.** **0.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low** **ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|-----|------|------|------|-----|------|-------|
| 1   | 2    | 2    | 0    | 2    | 0    | 0    | 0    | 2    | 0    | 1   | 0    | 0    | 0    | 1   | 0    | 11    |
| Low | High | High | N.S. | High | Unk. | Unk. | N.S. | High | N.S. | Low | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royallon**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .1 mi S of Town Farm Rd. Ends by Mill covered bridge.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.87539**

1.3 Downstream Longitude: **-72.49916**

Step 2. Stream Type

2.1 Elevation Upstream: **554**  
 2.1 Elevation Downstream: **528**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **8,274.0 ft.** **1.57 Miles**  
 2.3 Valley Slope: **0.3**  
 2.4 Channel Length: **9,549.0 ft.** **1.81 Miles**  
 2.5 Channel Slope: **0.27 %**  
 2.6 Sinuosity: **1.15**  
 2.7 Watershed Area: **89.4 Square Miles**  
 2.8 Channel Width: **94.6 feet**  
 2.9 Valley Width: **906.0 feet**  
 2.10 Confinement Ratio: **9.6**  
 2.10 Confinement Type: **Broad**  
 2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**  
 Sub-Class Slope: **None**  
 Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Alluvial** **72.1 %**  
 3.3 Sub-dom. Geological Mat.: **Ice-Contact**  
 3.4 Valley Slope Left: **Ext. Steep**  
 3.4 Valley Slope Right: **Ext. Steep**  
 3.5 Soils  
 Hydrologic Group: **B** **81.8 %**  
 Flooding: **Occasional** **59.8 %**  
 Water Table Deep: **6.0** **83.1 %**  
 Water Table Shallow: **4.0** **59.8 %**  
 Erodibility: **slight** **21.9 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **81.8 %**  
 Current Sub-Dominant Land Cover: **Field**  
 4.2 Corridor  
 Historic Land Cover: **Field**  
 Current Dominant Land Cover: **Field** **35.5 %**  
 Current Sub-Dominant Land Cover: **Crop**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **0-25** **0-25**  
 Sub-dominant: **26-50** **26-50**  
 Length w / less than 25 ft.: **3,972.0 ft.** **3,133.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **1** **0.5 %**  
 5.3 Bank Armoring: **5,202.8** **54.5 %**  
 Left: **3,016.5 ft.** Right: **2,186.3 ft.**  
 5.4 Channel Straightening: **9,548.5** **100.0 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,058.8 ft.** **32.0**  
One Side Both Sides  
 Road: **ft.** **ft.**  
 Railroad: **ft.** **ft.**  
 Berm: **ft.** **ft.**  
 Improved Path: **ft.** **ft.**  
 6.2 Development: **2,260.4 ft.** **0.0 ft.**  
 6.3 Channel Bars: **Multiple**  
 6.4 Meander Migration: **Flood Chute**  
 6.5 Meander Width: **96 ft. Ratio: 1.0**  
 6.6 Wavelength: **96 ft. Ratio: 1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **8062.1801758** **ft**  
 7.2 Bank Height: **4** **ft**  
 7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 2    | 2    | 1   | 2    | 2    | 2    | 2    | 0    | 23    |
| High | High | High | N.S. | N.S. | High | High | N.S. | High | High | Low | High | High | High | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Tunbridge Mtn Rd and Cushman Rd. Ends at intersection of Tunbridge Mtn Rd and Ordway Rd.**

1.1 Reach Description:  
 1.2 Towns: **Tunbridge**  
 1.3 Downstream Latitude: **43.88097**  
 1.3 Downstream Longitude: **-72.50558**

Step 2. Stream Type  
 2.1 Elevation Upstream: **809**  
 2.1 Elevation Downstream: **515**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **6,399.0 ft. 1.21 Miles**  
 2.3 Valley Slope: **4.6**  
 2.4 Channel Length: **6,796.0 ft. 1.29 Miles**  
 2.5 Channel Slope: **4.33 %**  
 2.6 Sinuosity: **1.06**  
 2.7 Watershed Area: **2.2 Square Miles**  
 2.8 Channel Width: **18.6 feet**  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**  
 Sub-Class Slope: **none**  
 Bed Material: **Gravel**

Step 3. Basin Characteristics  
 3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **Ledge**  
 3.3 Dominant Geological Mat.: **Till 87.7 %**  
 3.3 Sub-dom. Geological Mat.: **Glacial Lake**  
 3.4 Valley Slope Left: **Ext. Steep**  
 3.4 Valley Slope Right: **Ext. Steep**  
 3.5 Soils  
 Hydrologic Group: **C 47.7 %**  
 Flooding: **None/Rare 96.6 %**  
 Water Table Deep: **2.0 84.5 %**  
 Water Table Shallow: **1.0 44.4 %**  
 Erodibility: **Very Severe 96.6 %**

7.4 Comments:  
**Cows in stream!**

Step 4. Land Cover - Reach Hydrology  
 4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 81.8 %**  
 Current Sub-Dominant Land Cover: **Field**  
 4.2 Corridor  
 Historic Land Cover: **Field**  
 Current Dominant Land Cover: **Forest 32.9 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **51-100 >100**  
 Sub-dominant: **0-25 0-25**  
 Length w / less than 25 ft.: **2,378.0 ft. 2,038.0 ft.**  
 4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications  
 5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **3 15.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft.** Right: **ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications  
 6.1 Berms & Roads - old: **3,838.0 ft. 56.5**  
One Side Both Sides  
 Road: **ft. ft.**  
 Railroad: **ft. ft.**  
 Berm: **ft. ft.**  
 Improved Path: **ft. ft.**  
 6.2 Development: **0.0 ft. 0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey  
 7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Low ft**  
 7.3 Ice/Debris Jam Potential: **None**

|     |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |       |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 10    |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S1.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Tunbridge Mtn Rd and Ordway Rd. Ends E of where the jeep train begins.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.88452**

1.3 Downstream Longitude: **-72.52438**

Step 2. Stream Type

2.1 Elevation Upstream: **1,077**

2.1 Elevation Downstream: **807**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,004.0 ft. 0.76 Miles**

2.3 Valley Slope: **6.7**

2.4 Channel Length: **5,042.0 ft. 0.95 Miles**

2.5 Channel Slope: **5.36 %**

2.6 Sinuosity: **1.26**

2.7 Watershed Area: **0.6 Square Miles**

2.8 Channel Width: **10.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 53.4 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 91.6 %**

Water Table Shallow: **0.0 53.4 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 86.4 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Shrub**

Current Dominant Land Cover: **Forest 75.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **51-100 26-50**

Length w / less than 25 ft.: **2,521.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 20.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,509.0 ft. 49.8**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 252.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S1.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Tunbridge Mtn Rd and Ordway Rd. Ends .5 mi NW of end of Ordway Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.88520**

1.3 Downstream Longitude: **-72.52427**

Step 2. Stream Type

2.1 Elevation Upstream: **1,191**

2.1 Elevation Downstream: **809**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,142.0 ft. 1.16 Miles**

2.3 Valley Slope: **6.2**

2.4 Channel Length: **7,450.0 ft. 1.41 Miles**

2.5 Channel Slope: **5.13 %**

2.6 Sinuosity: **1.21**

2.7 Watershed Area: **0.8 Square Miles**

2.8 Channel Width: **12.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **a**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 54.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 97.4 %**

Water Table Shallow: **0.0 54.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 76.1 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Shrub**

Current Dominant Land Cover: **Forest 40.8 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **51-100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **2,607.0 ft. 2,235.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **595.0 ft. 8.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|-----|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 1   | 1   | 2    | 2    | 1   | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | Low | High | High | Low | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .23 mi N of where Cushman Rd crosses the Fist Branch.**

1.1 Reach Description:  
 1.2 Towns: **Tunbridge**  
 1.3 Downstream Latitude: **43.88328**  
 1.3 Downstream Longitude: **-72.50330**

Step 2. Stream Type

2.1 Elevation Upstream: **958**  
 2.1 Elevation Downstream: **514**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **4,912.0 ft. 0.93 Miles**  
 2.3 Valley Slope: **9.0**  
 2.4 Channel Length: **5,418.0 ft. 1.03 Miles**  
 2.5 Channel Slope: **8.19 %**  
 2.6 Sinuosity: **1.10**  
 2.7 Watershed Area: **0.5 Square Miles**  
 2.8 Channel Width: **9.5 feet**  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**  
 Sub-Class Slope: **none**  
 Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till 69.4 %**  
 3.3 Sub-dom. Geological Mat.: **Alluvial**  
 3.4 Valley Slope Left: **Ext. Steep**  
 3.4 Valley Slope Right: **Ext. Steep**  
 3.5 Soils  
 Hydrologic Group: **C 50.2 %**  
 Flooding: **None/Rare 79.8 %**  
 Water Table Deep: **2.0 65.5 %**  
 Water Table Shallow: **1.0 35.1 %**  
 Erodibility: **Very Severe 78.6 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 84.9 %**  
 Current Sub-Dominant Land Cover: **Crop**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 36.9 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100 >100**  
 Sub-dominant: **0-25 26-50**  
 Length w / less than 25 ft.: **1,246.0 ft. 433.0 ft.**  
 4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **0 0.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft. Right: ft.**  
 5.4 Channel Straightening: **1,114.0 20.6 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,163.0 ft. 21.5**  
One Side Both Sides  
 Road: **ft. ft.**  
 Railroad: **ft. ft.**  
 Berm: **ft. ft.**  
 Improved Path: **ft. ft.**  
 6.2 Development: **0.0 ft. 0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Low ft**  
 7.3 Ice/Debris Jam Potential: **Culvert**

|     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |       |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
| 1   | 2    | 2    | 0    | 0    | 0    | 2    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 10    |
| Low | High | High | N.S. | N.S. | Unk. | High | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S3.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .3 mi N of where Cushman Rd crosses the First Branch. Ends at First Branch bridge crossing on Potash Rd.**

1.1 Reach Description:  
 1.2 Towns: **Tunbridge**  
 1.3 Downstream Latitude: **43.88497**  
 1.3 Downstream Longitude: **-72.49813**

Step 2. Stream Type

2.1 Elevation Upstream: **991**  
 2.1 Elevation Downstream: **522**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **8,470.0 ft.** **1.60** Miles  
 2.3 Valley Slope: **5.5**  
 2.4 Channel Length: **8,441.0 ft.** **1.60** Miles  
 2.5 Channel Slope: **5.56 %**  
 2.6 Sinuosity: **1.00**  
 2.7 Watershed Area: **2.8** Square Miles  
 2.8 Channel Width: **20.7** feet  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**  
 Sub-Class Slope: **none**  
 Bed Material: **Boulder**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **Ledge**  
 3.3 Dominant Geological Mat.: **Till** **94.1 %**  
 3.3 Sub-dom. Geological Mat.: **Alluvial**  
 3.4 Valley Slope Left: **Very Steep**  
 3.4 Valley Slope Right: **Ext. Steep**  
 3.5 Soils  
 Hydrologic Group: **D** **50.8 %**  
 Flooding: **None/Rare** **96.9 %**  
 Water Table Deep: **2.0** **85.9 %**  
 Water Table Shallow: **0.0** **50.8 %**  
 Erodibility: **Very Severe** **94.1 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **87.5 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **41.2 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100** **>100**  
 Sub-dominant: **0-25** **51-100**  
 Length w / less than 25 ft.: **844.0 ft.** **1,350.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **2** **10.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft.** Right: **ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,454.0 ft.** **40.9**  
One Side Both Sides  
 Road: **ft.** **ft.**  
 Railroad: **ft.** **ft.**  
 Berm: **ft.** **ft.**  
 Improved Path: **ft.** **ft.**  
 6.2 Development: **0.0 ft.** **0.0 ft.**  
 6.3 Channel Bars: **Mid-channel**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Low** **ft**  
 7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 1   | 0    | 0    | 0    | 0    | 1   | 10    |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | Low | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S3.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Starts at First Branch bridge crossing on Potash Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.88111**

1.3 Downstream Longitude: **-72.46948**

Step 2. Stream Type

2.1 Elevation Upstream: **1,628**

2.1 Elevation Downstream: **991**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,777.0 ft. 2.04 Miles**

2.3 Valley Slope: **5.9**

2.4 Channel Length: **11,301.0 ft. 2.14 Miles**

2.5 Channel Slope: **5.64 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **2.0 Square Miles**

2.8 Channel Width: **17.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 88.2 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 57.0 %**

Flooding: **None/Rare 88.2 %**

Water Table Deep: **2.0 74.2 %**

Water Table Shallow: **0.0 57.0 %**

Erodibility: **Very Severe 88.2 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 87.5 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 58.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **904.0 ft. 565.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **610.0 ft. 5.4**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|-----|------|------|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 1   | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4     |
| Low | Low | Low | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S4.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .25 mile of SW of Mill covered bridge. Ends .35 mi N of Goodwin Hill Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.89098**

1.3 Downstream Longitude: **-72.49674**

Step 2. Stream Type

2.1 Elevation Upstream: **907**

2.1 Elevation Downstream: **523**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,205.0 ft. 1.74 Miles**

2.3 Valley Slope: **4.2**

2.4 Channel Length: **10,469.0 ft. 1.98 Miles**

2.5 Channel Slope: **3.67 %**

2.6 Sinuosity: **1.14**

2.7 Watershed Area: **2.7 Square Miles**

2.8 Channel Width: **20.3 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 59.7 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 81.7 %**

Flooding: **None/Rare 63.7 %**

Water Table Deep: **2.0 57.4 %**

Water Table Shallow: **1.0 47.9 %**

Erodibility: **Severe 63.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 84.5 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 37.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **5,234.0 ft. 5,862.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,506.0 ft. 33.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 523.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S4.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins at intersection of Goodwin Hill and Spring Rd. Ends at pond to NW.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.90357**

1.3 Downstream Longitude: **-72.51409**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,094**

2.1 Elevation Downstream: **831**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,405.0 ft. 0.46 Miles**

2.3 Valley Slope: **10.9**

2.4 Channel Length: **2,406.0 ft. 0.46 Miles**

2.5 Channel Slope: **10.93 %**

2.6 Sinuosity: **1.00**

2.7 Watershed Area: **0.3 Square Miles**

2.8 Channel Width: **7.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 94.6 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 94.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 94.5 %**

Water Table Shallow: **1.0 94.5 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Cows in stream - TRASHED!!!**

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 78.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank Right Bank**

Dominant: **51-100 >100**

Sub-dominant: **26-50 0-25**

Length w / less than 25 ft.: **457.0 ft. 697.0 ft.**

4.4 Ground Water Inputs: **Minimal**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **1,134.0 ft. 47.1**

**One Side Both Sides**

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 241.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|-----|-----|------|------|------|------|------|-------|
| 1   | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 2    | 1   | 1   | 0    | 0    | 0    | 2    | 0    | 13    |
| Low | High | High | High | N.S. | Unk. | Unk. | N.S. | High | Low | Low | N.S. | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S4.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at .35 mi N of Goodwin Hill Rd. Ends at Tunbridge Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.90879**

1.3 Downstream Longitude: **-72.51800**

Step 2. Stream Type

2.1 Elevation Upstream: **1,359**

2.1 Elevation Downstream: **907**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,872.0 ft. 1.30 Miles**

2.3 Valley Slope: **6.6**

2.4 Channel Length: **7,048.0 ft. 1.33 Miles**

2.5 Channel Slope: **6.41 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **1.4 Square Miles**

2.8 Channel Width: **15.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 75.1 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 100.0 %**

Flooding: **None/Rare 75.1 %**

Water Table Deep: **2.0 62.0 %**

Water Table Shallow: **1.0 62.0 %**

Erodibility: **Very Severe 75.1 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 85.9 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 38.1 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **3,805.0 ft. 4,228.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 352.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4     |
| Low | Low | High | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S4.02-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins .6 mi from the intersection with Goodwin and Spring Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.91190**

1.3 Downstream Longitude: **-72.52012**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,187**

2.1 Elevation Downstream: **961**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,177.0 ft.** **0.41** Miles

2.3 Valley Slope: **10.4**

2.4 Channel Length: **2,315.0 ft.** **0.44** Miles

2.5 Channel Slope: **9.76 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **0.2** Square Miles

2.8 Channel Width: **7.1** feet

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Gravel**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till** **100.0 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C** **63.8 %**

Flooding: **None/Rare** **100.0 %**

Water Table Deep: **2.0** **60.4 %**

Water Table Shallow: **1.0** **60.4 %**

Erodibility: **Very Severe** **100.0 %**

7.4 Comments:

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **89.9 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest** **48.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank** **Right Bank**

Dominant: **0-25** **>100**

Sub-dominant: **26-50** **26-50**

Length w / less than 25 ft.: **1,342.0 ft.** **324.0 ft.**

4.4 Ground Water Inputs: **None**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1** **0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **1,826.0 ft.** **78.9**

**One Side** **Both Sides**

Road: **ft.** **ft.**

Railroad: **ft.** **ft.**

Berm: **ft.** **ft.**

Improved Path: **ft.** **ft.**

6.2 Development: **0.0 ft.** **0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low** **ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 7     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M05-S4.03**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at river crossing with Tunbridge Rd. Ends .5 mi N of there.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.92513**

1.3 Downstream Longitude: **-72.52448**

Step 2. Stream Type

2.1 Elevation Upstream: **1,578**

2.1 Elevation Downstream: **1,359**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,895.0 ft. 0.55 Miles**

2.3 Valley Slope: **7.6**

2.4 Channel Length: **3,110.0 ft. 0.59 Miles**

2.5 Channel Slope: **7.04 %**

2.6 Sinuosity: **1.07**

2.7 Watershed Area: **0.3 Square Miles**

2.8 Channel Width: **7.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 51.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 71.6 %**

Water Table Shallow: **0.0 51.9 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 91.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 50.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 26-50**

Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 2.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2     |
| Low | Low | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M06**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at Mill covered bridge. Ends just below the tributary confluence to the E.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.89160**

1.3 Downstream Longitude: **-72.49173**

Step 2. Stream Type

2.1 Elevation Upstream: **567**

2.1 Elevation Downstream: **554**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,574.0 ft. 0.49 Miles**

2.3 Valley Slope: **0.5**

2.4 Channel Length: **2,720.0 ft. 0.52 Miles**

2.5 Channel Slope: **0.48 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **80.4 Square Miles**

2.8 Channel Width: **90.3 feet**

2.9 Valley Width: **240.0 feet**

2.10 Confinement Ratio: **2.7**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Riffle-Pool**

Sub-Class Slope: **c**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Ice-Contact 38.4 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **A 66.0 %**

Flooding: **None/Rare 87.6 %**

Water Table Deep: **6.0 100.0 %**

Water Table Shallow: **6.0 87.6 %**

Erodibility: **Very Severe 75.4 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.7 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 43.9 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **26-50 26-50**

Length w / less than 25 ft.: **1,090.0 ft. 1,139.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **Large Run of River**

Use: **Other**

5.2 Bridges and Culverts: **2 8.8 %**

5.3 Bank Armoring: **2,720.0 1.0 %**

Left: **1,576.1 ft.** Right: **1,353.1 ft.**

5.4 Channel Straightening: **2,719.5 100.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,127.6 ft. 78.2**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **765.1 ft. 0.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **1288.6999512 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|-----|------|------|------|------|------|-----|-----|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 1   | 2    | 2    | 0    | 2    | 2    | 1   | 1   | 0    | 0    | 2    | 0    | 19    |
| High | High | High | N.S. | Low | High | High | N.S. | High | High | Low | Low | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M07**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins below tributary confluence (T1.1). Ends .1 mi S of Tunbridge Central school.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.89499**

1.3 Downstream Longitude: **-72.48487**

Step 2. Stream Type

2.1 Elevation Upstream: **617**

2.1 Elevation Downstream: **567**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,962.0 ft. 1.51 Miles**

2.3 Valley Slope: **0.6**

2.4 Channel Length: **8,799.0 ft. 1.67 Miles**

2.5 Channel Slope: **0.57 %**

2.6 Sinuosity: **1.11**

2.7 Watershed Area: **80.1 Square Miles**

2.8 Channel Width: **90.1 feet**

2.9 Valley Width: **422.0 feet**

2.10 Confinement Ratio: **4.7**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact 47.1 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **A 47.1 %**

Flooding: **None/Rare 70.2 %**

Water Table Deep: **6.0 91.3 %**

Water Table Shallow: **6.0 65.7 %**

Erodibility: **Moderate 41.9 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.7 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 37.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **3,723.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 0.8 %**

5.3 Bank Armoring: **3,088.0 35.1 %**

Left: **596.7 ft.** Right: **2,491.3 ft.**

5.4 Channel Straightening: **5,372.6 61.1 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,647.4 ft. 41.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **2,663.1 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **91 ft. Ratio: 1.0**

6.6 Wavelength: **91 ft. Ratio: 1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **2449.1999512 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 2    | 2    | 2    | 1   | 2    | 2    | 2    | 0    | 23    |
| High | High | High | N.S. | N.S. | High | High | N.S. | High | High | High | Low | High | High | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M07-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .1 mi SE of Tunbridge Rd. Ends 1.5 mi up Tunbridge Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.89815**

1.3 Downstream Longitude: **-72.48520**

Step 2. Stream Type

2.1 Elevation Upstream: **1,166**

2.1 Elevation Downstream: **566**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **8,819.0 ft. 1.67 Miles**

2.3 Valley Slope: **6.8**

2.4 Channel Length: **9,366.0 ft. 1.77 Miles**

2.5 Channel Slope: **6.41 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **1.0 Square Miles**

2.8 Channel Width: **12.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Bedrock**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 86.9 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 51.9 %**

Flooding: **None/Rare 96.1 %**

Water Table Deep: **2.0 68.5 %**

Water Table Shallow: **0.0 51.9 %**

Erodibility: **Very Severe 96.1 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 63.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 29.4 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **4,776.0 ft. 4,027.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **755.0 8.1 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,467.0 ft. 37.0**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **468.0 ft. 0.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4 | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|-----|------|-----|------|------|------|-----|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 1   | 0    | 1   | 0    | 2    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 11    |
| High | High | High | N.S. | Low | Unk. | Low | N.S. | High | N.S. | Low | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M07-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Whitney Rd and Rt 110. Ends .5 mi NW of fork in Whitney Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.91048**

1.3 Downstream Longitude: **-72.48380**

Step 2. Stream Type

2.1 Elevation Upstream: **1,400**

2.1 Elevation Downstream: **592**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **11,636.0 ft. 2.20 Miles**

2.3 Valley Slope: **6.9**

2.4 Channel Length: **12,436.0 ft. 2.36 Miles**

2.5 Channel Slope: **6.50 %**

2.6 Sinuosity: **1.07**

2.7 Watershed Area: **1.8 Square Miles**

2.8 Channel Width: **17.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 93.6 %**

3.3 Sub-dom. Geological Mat.: **Glacial Lake**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 74.5 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 92.4 %**

Water Table Shallow: **1.0 74.5 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Large mass failures.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 78.7 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 36.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 51-100**

Length w / less than 25 ft.: **5,347.0 ft. 3,109.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **6 20.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **9,173.0 ft. 73.8**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 1,244.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1 | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|-----|-----|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 1   | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 2    | 0    | 12    |
| Low | High | High | Low | Low | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M07-S2.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins .62 mi up Whitney Hill Rd on right (east).**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.91577**

1.3 Downstream Longitude: **-72.49268**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,136**

2.1 Elevation Downstream: **815**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,907.0 ft. 0.55 Miles**

2.3 Valley Slope: **11.0**

2.4 Channel Length: **3,124.0 ft. 0.59 Miles**

2.5 Channel Slope: **10.28 %**

2.6 Sinuosity: **1.07**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **6.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Gravel**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 75.1 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 91.3 %**

Water Table Shallow: **1.0 66.3 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Diversion / dammed riprap.**

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 89.2 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Shrub**

Current Dominant Land Cover: **Forest 98.5 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer **Left Bank Right Bank**

Dominant: **0-25 0-25**

Sub-dominant: **>100 26-50**

Length w / less than 25 ft.: **2,249.0 ft. 1,374.0 ft.**

4.4 Ground Water Inputs: **None**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old): **Bypass**

Type:

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **0.0 ft. 0.0**

**One Side Both Sides**

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |       |
|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1 | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 5     |
| N.S. | N.S. | High | Low | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M07-S2.01-t2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.2 mi up Whitney hill rd on left (west).**

1.1 Reach Description:  
 1.2 Towns: **Tunbridge**  
 1.3 Downstream Latitude: **43.92250**  
 1.3 Downstream Longitude: **-72.49829**

Step 2. Stream Type

2.1 Elevation Upstream: **1,299**  
 2.1 Elevation Downstream: **994**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **3,699.0 ft. 0.70 Miles**  
 2.3 Valley Slope: **8.2**  
 2.4 Channel Length: **3,767.0 ft. 0.71 Miles**  
 2.5 Channel Slope: **8.10 %**  
 2.6 Sinuosity: **1.02**  
 2.7 Watershed Area: **0.4 Square Miles**  
 2.8 Channel Width: **9.1 feet**  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Semi-confined**  
 2.11 Reference Stream Type: **A**

Bedform: **Cascade**  
 Sub-Class Slope: **none**  
 Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till 100.0 %**  
 3.3 Sub-dom. Geological Mat.:  
 3.4 Valley Slope Left: **Very Steep**  
 3.4 Valley Slope Right: **Very Steep**  
 3.5 Soils  
 Hydrologic Group: **D 75.4 %**  
 Flooding: **None/Rare 100.0 %**  
 Water Table Deep: **2.0 100.0 %**  
 Water Table Shallow: **0.0 75.4 %**  
 Erodibility: **Very Severe 100.0 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 75.1 %**  
 Current Sub-Dominant Land Cover: **Field**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 89.0 %**  
 Current Sub-Dominant Land Cover: **Field**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100 >100**  
 Sub-dominant: **51-100 51-100**  
 Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **0 0.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft. Right: ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**  
One Side Both Sides  
 Road: **ft. ft.**  
 Railroad: **ft. ft.**  
 Berm: **ft. ft.**  
 Improved Path: **ft. ft.**  
 6.2 Development: **0.0 ft. 0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Medium ft**  
 7.3 Ice/Debris Jam Potential: **Bend**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 5     |
| Low | Low | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | High | Low |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

# Phase 1 - Reach Summary Report

Reach ID: **M08**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .1 mi S of Tunbridge Central School. Ends just N of Dickerman Brook.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.91486**

1.3 Downstream Longitude: **-72.47654**

Step 2. Stream Type

2.1 Elevation Upstream: **640**

2.1 Elevation Downstream: **617**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,474.0 ft. 1.42 Miles**

2.3 Valley Slope: **0.3**

2.4 Channel Length: **8,664.0 ft. 1.64 Miles**

2.5 Channel Slope: **0.27 %**

2.6 Sinuosity: **1.16**

2.7 Watershed Area: **72.2 Square Miles**

2.8 Channel Width: **86.1 feet**

2.9 Valley Width: **479.0 feet**

2.10 Confinement Ratio: **5.6**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact 66.9 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **A 66.1 %**

Flooding: **None/Rare 68.2 %**

Water Table Deep: **6.0 92.1 %**

Water Table Shallow: **6.0 66.3 %**

Erodibility: **Moderate 33.8 %**

7.4 Comments:

**Appears to be over-widened.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 50.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 26-50**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **1,412.0 ft. 3,606.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 0.7 %**

5.3 Bank Armoring: **1,877.0 21.7 %**

Left: **90.1 ft.** Right: **1,787.0 ft.**

5.4 Channel Straightening: **3,941.8 45.5 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,587.3 ft. 29.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **1,009.1 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **86 ft. Ratio: 1.0**

6.6 Wavelength: **86 ft. Ratio: 1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **2083.8701172** ft

7.2 Bank Height: **2** ft

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|-----|------|-----|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 2    | 1   | 2    | 1   | 2    | 2    | 2    | 0    | 22    |
| High | High | High | N.S. | N.S. | High | High | N.S. | High | Low | High | Low | High | High | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M08-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .27 mi NE of intersection of Foundry rd and Rt 110. Ends 1.6 miles up Foundry Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.91601**

1.3 Downstream Longitude: **-72.47195**

Step 2. Stream Type

2.1 Elevation Upstream: **1,288**

2.1 Elevation Downstream: **624**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,830.0 ft. 1.48 Miles**

2.3 Valley Slope: **8.5**

2.4 Channel Length: **8,068.0 ft. 1.53 Miles**

2.5 Channel Slope: **8.23 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **1.0 Square Miles**

2.8 Channel Width: **13.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 90.2 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 60.8 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 63.4 %**

Water Table Shallow: **0.0 60.8 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.3 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 40.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **806.0 ft. 1,452.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 15.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,039.0 ft. 25.3**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M08-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at Larkin covered bridge. Ends .12 mi NE of crossing Larkin Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.92233**

1.3 Downstream Longitude: **-72.46593**

Step 2. Stream Type

2.1 Elevation Upstream: **1,214**

2.1 Elevation Downstream: **627**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,576.0 ft. 1.81 Miles**

2.3 Valley Slope: **6.1**

2.4 Channel Length: **9,702.0 ft. 1.84 Miles**

2.5 Channel Slope: **6.05 %**

2.6 Sinuosity: **1.01**

2.7 Watershed Area: **1.9 Square Miles**

2.8 Channel Width: **17.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 90.2 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 55.4 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 67.2 %**

Water Table Shallow: **0.0 53.3 %**

Erodibility: **Very Severe 90.2 %**

7.4 Comments:

**Erosion near culvert.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 88.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 47.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **388.0 ft. 679.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **568.0 ft. 5.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **194.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|-----|-----|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|-------|
| 1   | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 5     |
| Low | Low | Low | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M09**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just N of Dickerman Brook. Ends .1 mi N of Cherry Hill Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.93140**

1.3 Downstream Longitude: **-72.46574**

Step 2. Stream Type

2.1 Elevation Upstream: **651**

2.1 Elevation Downstream: **640**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,715.0 ft. 0.70 Miles**

2.3 Valley Slope: **0.3**

2.4 Channel Length: **3,891.0 ft. 0.74 Miles**

2.5 Channel Slope: **0.28 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **63.8 Square Miles**

2.8 Channel Width: **81.6 feet**

2.9 Valley Width: **259.0 feet**

2.10 Confinement Ratio: **3.2**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **c**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact 63.9 %**

3.3 Sub-dom. Geological Mat.: **Other**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **A 49.3 %**

Flooding: **None/Rare 87.4 %**

Water Table Deep: **6.0 62.6 %**

Water Table Shallow: **6.0 62.6 %**

Erodibility: **Severe 59.2 %**

7.4 Comments:

**Stream ford.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.8 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 44.6 %**

Current Sub-Dominant Land Cover: **Crop**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **0.0 ft. 1,278.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **43.6 1.1 %**

Left: **43.6 ft.** Right: **0.0 ft.**

5.4 Channel Straightening: **2,015.5 51.8 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,230.3 ft. 57.3**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **81 ft. Ratio: 1.0**

6.6 Wavelength: **81 ft. Ratio: 1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **863.8499756 ft**

7.2 Bank Height: **2 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 2    | 0    | 2    | 0    | 1   | 1   | 2    | 2    | 2    | 0    | 18    |
| High | High | High | N.S. | N.S. | N.S. | High | N.S. | High | N.S. | Low | Low | High | High | High | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M09-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Cherry Hill Rd and Rt 110. Ends E of end of Cherry Hill Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.93882**

1.3 Downstream Longitude: **-72.46706**

Step 2. Stream Type

2.1 Elevation Upstream: **1,217**

2.1 Elevation Downstream: **644**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,341.0 ft. 1.01 Miles**

2.3 Valley Slope: **10.7**

2.4 Channel Length: **5,662.0 ft. 1.07 Miles**

2.5 Channel Slope: **10.12 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **0.3 Square Miles**

2.8 Channel Width: **7.8 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 77.8 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 46.2 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 57.6 %**

Water Table Shallow: **0.0 46.2 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Grassy swale.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 73.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 53.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **26-50 >100**

Length w / less than 25 ft.: **2,604.0 ft. 3,227.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **4,276.0 ft. 75.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |       |
|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 9     |
| High | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M10**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location      **Reach starts .1 mi North of Cherry hill Rd. Ends just North of Hunt cemetery.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.93986**

1.3 Downstream Longitude: **-72.46393**

Step 2. Stream Type

2.1 Elevation Upstream: **673**

2.1 Elevation Downstream: **651**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,431.0 ft.**      **0.65** Miles

2.3 Valley Slope: **0.6**

2.4 Channel Length: **3,975.0 ft.**      **0.75** Miles

2.5 Channel Slope: **0.55 %**

2.6 Sinuosity: **1.16**

2.7 Watershed Area: **63.1** Square Miles

2.8 Channel Width: **81.1** feet

2.9 Valley Width: **500.0** feet

2.10 Confinement Ratio: **6.2**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **C**

    Bedform: **Riffle-Pool**

    Sub-Class Slope: **None**

    Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact**      **52.4 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

    Hydrologic Group: **A**      **50.7 %**

    Flooding: **None/Rare**      **76.0 %**

    Water Table Deep: **6.0**      **68.6 %**

    Water Table Shallow: **6.0**      **51.2 %**

    Erodibility: **Moderate**      **42.3 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

    Historic Land Cover: **Forest**

    Current Dominant Land Cover: **Forest**      **81.9 %**

    Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

    Historic Land Cover: **Forest**

    Current Dominant Land Cover: **Forest**      **53.4 %**

    Current Sub-Dominant Land Cover: **Crop**

4.3 Riparian Buffer      Left Bank      Right Bank

    Dominant: **>100**      **0-25**

    Sub-dominant: **51-100**      **>100**

    Length w / less than 25 ft.: **0.0** ft.      **2,518.0** ft.

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

    Type: **None**

    Use:

5.2 Bridges and Culverts: **0**      **0.0 %**

5.3 Bank Armoring: **626.8**      **15.8 %**

    Left: **0.0** ft.      Right: **626.8** ft.

5.4 Channel Straightening: **2,891.1**      **72.7 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0** ft.      **0.0**

One Side      Both Sides

    Road:      ft.      ft.

    Railroad:      ft.      ft.

    Berm:      ft.      ft.

    Improved Path:      ft.      ft.

6.2 Development: **712.2** ft.      **0.0** ft.

6.3 Channel Bars: **Side**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **81** ft. Ratio: **1.0**

6.6 Wavelength: **81** ft. Ratio: **1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **527.0200195**      ft

7.2 Bank Height: **2**      ft

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3 | 5.4  | 5.5  | 6.1  | 6.2 | 6.3 | 6.4 | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|------|------|------|------|------|-----|------|------|------|-----|-----|-----|------|------|-----|------|-------|
| 2    | 2    | 2    | 0    | 0    | 1   | 2    | 0    | 0    | 1   | 1   | 1   | 2    | 2    | 1   | 0    | 17    |
| High | High | High | N.S. | N.S. | Low | High | N.S. | Unk. | Low | Low | Low | High | High | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M10-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** Begins .25 mi S of Flint bridge. Ends .25 mi E of pond.

1.1 Reach Description:

1.2 Towns: **Chelsea, Tunbridge**

1.3 Downstream Latitude: **43.94589**

1.3 Downstream Longitude: **-72.45691**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,264**

2.1 Elevation Downstream: **665**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **8,010.0 ft. 1.52 Miles**

2.3 Valley Slope: **7.5**

2.4 Channel Length: **8,494.0 ft. 1.61 Miles**

2.5 Channel Slope: **7.05 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **3.0 Square Miles**

2.8 Channel Width: **21.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Till 95.7 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **A 53.4 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **6.0 57.6 %**

Water Table Shallow: **6.0 57.6 %**

Erodibility: **Very Severe 90.8 %**

7.4 Comments:

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 86.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 46.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **509.0 ft. 1,019.0 ft.**

4.4 Ground Water Inputs: **Abundant**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **2 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **2,278.0 ft. 26.8**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 1   | 2    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | High | Low | High | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M11**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just N of Hunt cemetery. Ends just N of confluence with Cram Brook.**

1.1 Reach Description:

1.2 Towns: **Chelsea, Tunbridge**

1.3 Downstream Latitude: **43.94776**

1.3 Downstream Longitude: **-72.45796**

Step 2. Stream Type

2.1 Elevation Upstream: **704**

2.1 Elevation Downstream: **673**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,206.0 ft. 0.99 Miles**

2.3 Valley Slope: **0.6**

2.4 Channel Length: **6,121.0 ft. 1.16 Miles**

2.5 Channel Slope: **0.51 %**

2.6 Sinuosity: **1.18**

2.7 Watershed Area: **59.6 Square Miles**

2.8 Channel Width: **79.1 feet**

2.9 Valley Width: **400.0 feet**

2.10 Confinement Ratio: **5.1**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact 42.9 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **A 49.3 %**

Flooding: **None/Rare 81.4 %**

Water Table Deep: **6.0 86.7 %**

Water Table Shallow: **6.0 70.8 %**

Erodibility: **Severe 50.1 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.7 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 32.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 51-100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **1,154.0 ft. 2,644.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 2.0 %**

5.3 Bank Armoring: **1,838.9 30.0 %**

Left: **1,183.9 ft.** Right: **655.0 ft.**

5.4 Channel Straightening: **3,054.3 49.9 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **790.3 ft. 12.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **79 ft. Ratio: 1.0**

6.6 Wavelength: **79 ft. Ratio: 1.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **1145.5300293** ft

7.2 Bank Height: **3** ft

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|------|------|------|------|------|------|------|------|-----|------|-----|-----|------|------|-----|------|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 1   | 0    | 1   | 1   | 2    | 2    | 1   | 0    | 18    |
| High | High | High | N.S. | N.S. | High | High | N.S. | Low | N.S. | Low | Low | High | High | Low | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Step 1. Reach Location **Begins at Moxley bridge.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.95671**

1.3 Downstream Longitude: **-72.46367**

Step 2. Stream Type

2.1 Elevation Upstream: **1,422**

2.1 Elevation Downstream: **703**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,784.0 ft. 1.10 Miles**

2.3 Valley Slope: **12.4**

2.4 Channel Length: **6,080.0 ft. 1.15 Miles**

2.5 Channel Slope: **11.83 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **0.5 Square Miles**

2.8 Channel Width: **9.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 92.0 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 50.1 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **6.0 50.3 %**

Water Table Shallow: **6.0 50.3 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

# Phase 1 - Reach Summary Report

Reach ID: **M11-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 85.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 41.8 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **26-50 26-50**

Length w / less than 25 ft.: **729.0 ft. 1,216.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **5,302.0 ft. 87.2**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 122.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M12**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just N of confluence with Cram Brook. Ends just N of confluence with Jenkins Brook.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.95997**

1.3 Downstream Longitude: **-72.46424**

Step 2. Stream Type

2.1 Elevation Upstream: **794**

2.1 Elevation Downstream: **704**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,062.0 ft. 1.34 Miles**

2.3 Valley Slope: **1.3**

2.4 Channel Length: **7,605.0 ft. 1.44 Miles**

2.5 Channel Slope: **1.18 %**

2.6 Sinuosity: **1.08**

2.7 Watershed Area: **47.6 Square Miles**

2.8 Channel Width: **71.7 feet**

2.9 Valley Width: **350.0 feet**

2.10 Confinement Ratio: **4.9**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Plane Bed**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 46.0 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **A 67.2 %**

Flooding: **None/Rare 92.8 %**

Water Table Deep: **6.0 95.6 %**

Water Table Shallow: **6.0 88.4 %**

Erodibility: **Severe 74.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.6 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 46.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **1,180.0 ft. 749.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 0.6 %**

5.3 Bank Armoring: **1,440.4 18.9 %**

Left: **248.1 ft.** Right: **1,192.3 ft.**

5.4 Channel Straightening: **2,635.7 34.7 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,743.0 ft. 36.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **144.7 ft. 0.0 ft.**

6.3 Channel Bars: **Side**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **1171.4300537 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3 | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|------|------|------|------|------|-----|------|------|------|------|-----|-----|------|------|-----|------|-------|
| 2    | 2    | 2    | 0    | 0    | 1   | 2    | 0    | 2    | 0    | 1   | 1   | 0    | 0    | 1   | 0    | 14    |
| High | High | High | N.S. | N.S. | Low | High | N.S. | High | N.S. | Low | Low | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M12-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .8 mi NE of East Randolph Rd on Rt 110. Ends at pond.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97106**

1.3 Downstream Longitude: **-72.45579**

Step 2. Stream Type

2.1 Elevation Upstream: **1,601**

2.1 Elevation Downstream: **776**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,333.0 ft. 1.96 Miles**

2.3 Valley Slope: **8.0**

2.4 Channel Length: **10,656.0 ft. 2.02 Miles**

2.5 Channel Slope: **7.74 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **0.9 Square Miles**

2.8 Channel Width: **12.6 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **No Data**

3.3 Dominant Geological Mat.: **Till 90.8 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 54.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 55.3 %**

Water Table Shallow: **0.0 58.9 %**

Erodibility: **Very Severe 95.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 79.0 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 39.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **5,114.0 ft. 4,155.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **4,870.0 ft. 45.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **533.0 ft. 0.0 ft.**

6.3 Channel Bars: **No Data**

6.4 Meander Migration: **No Data**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 9     |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royallon**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M13**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just N of confluence with Jenkins Brook. Ends .33 mi N of Rt 113 & Rt 110 intersection.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97564**

1.3 Downstream Longitude: **-72.44967**

Step 2. Stream Type

2.1 Elevation Upstream: **816**

2.1 Elevation Downstream: **794**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,610.0 ft. 1.25 Miles**

2.3 Valley Slope: **0.3**

2.4 Channel Length: **7,481.0 ft. 1.42 Miles**

2.5 Channel Slope: **0.29 %**

2.6 Sinuosity: **1.13**

2.7 Watershed Area: **38.5 Square Miles**

2.8 Channel Width: **65.3 feet**

2.9 Valley Width: **429.0 feet**

2.10 Confinement Ratio: **6.6**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Alluvial 47.0 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **B 58.3 %**

Flooding: **None/Rare 53.0 %**

Water Table Deep: **6.0 89.7 %**

Water Table Shallow: **4.0 47.0 %**

Erodibility: **slight 17.9 %**

7.4 Comments:

**NULL**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.1 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover:

Current Dominant Land Cover: **Forest 32.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 51-100**

Length w / less than 25 ft.: **1,408.0 ft. 1,048.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **6 3.3 %**

5.3 Bank Armoring: **7,396.6 98.9 %**

Left: **3,602.2 ft.** Right: **3,794.4 ft.**

5.4 Channel Straightening: **7,148.4 95.6 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,370.6 ft. 18.3**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **3,795.2 ft. 1,693.8 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **345 ft. Ratio: 5.3**

6.6 Wavelength: **995 ft. Ratio: 15.2**

Step 7. Windshield Survey

7.1 Bank Erosion: **2048.5800781 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4 | 6.5  | 6.6 | 7.1  | 7.3 | Total |
|------|------|------|------|------|------|------|------|-----|------|-----|-----|------|-----|------|-----|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 0    | 1   | 2    | 1   | 1   | 0    | 1   | 2    | 1   | 19    |
| High | High | High | N.S. | N.S. | High | High | N.S. | Low | High | Low | Low | N.S. | Low | High | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M14**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .33 mi N of intersection of Rt 113 and Rt 110. Ends where the valley becomes confined.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.99287**

1.3 Downstream Longitude: **-72.44840**

Step 2. Stream Type

2.1 Elevation Upstream: **881**

2.1 Elevation Downstream: **816**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,103.0 ft. 1.35 Miles**

2.3 Valley Slope: **0.9**

2.4 Channel Length: **9,029.0 ft. 1.71 Miles**

2.5 Channel Slope: **0.72 %**

2.6 Sinuosity: **1.27**

2.7 Watershed Area: **17.1 Square Miles**

2.8 Channel Width: **45.6 feet**

2.9 Valley Width: **420.0 feet**

2.10 Confinement Ratio: **9.2**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Alluvial 60.0 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **B 81.4 %**

Flooding: **Frequent 44.3 %**

Water Table Deep: **6.0 50.8 %**

Water Table Shallow: **1.5 48.1 %**

Erodibility: **slight 21.7 %**

7.4 Comments:

**NULL**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 80.6 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Field 34.4 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **26-50 >100**

Length w / less than 25 ft.: **4,589.0 ft. 3,236.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **Small Run of River**

Use: **Recreation**

5.2 Bridges and Culverts: **5 1.4 %**

5.3 Bank Armoring: **3,942.8 43.7 %**

Left: **2,506.0 ft.** Right: **1,436.8 ft.**

5.4 Channel Straightening: **310.0 3.4 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,036.3 ft. 11.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **2,354.8 ft. 0.0 ft.**

6.3 Channel Bars: **Side**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **247 ft. Ratio: 5.4**

6.6 Wavelength: **644 ft. Ratio: 14.1**

Step 7. Windshield Survey

7.1 Bank Erosion: **3274.3999023 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4 | 6.5  | 6.6 | 7.1  | 7.3 | Total |
|------|------|------|------|------|------|------|------|-----|------|-----|-----|------|-----|------|-----|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 0    | 0    | 1   | 2    | 1   | 1   | 0    | 1   | 2    | 1   | 17    |
| High | High | High | N.S. | N.S. | High | N.S. | N.S. | Low | High | Low | Low | N.S. | Low | High | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M15**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins where valley becomes confined. Ends at pond to W of river.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.01146**

1.3 Downstream Longitude: **-72.46200**

Step 2. Stream Type

2.1 Elevation Upstream: **920**

2.1 Elevation Downstream: **881**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,655.0 ft. 0.88 Miles**

2.3 Valley Slope: **0.8**

2.4 Channel Length: **5,336.0 ft. 1.01 Miles**

2.5 Channel Slope: **0.73 %**

2.6 Sinuosity: **1.15**

2.7 Watershed Area: **15.7 Square Miles**

2.8 Channel Width: **44.0 feet**

2.9 Valley Width: **194.0 feet**

2.10 Confinement Ratio: **4.4**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 81.0 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **A 80.3 %**

Flooding: **None/Rare 85.9 %**

Water Table Deep: **6.0 81.1 %**

Water Table Shallow: **6.0 81.1 %**

Erodibility: **Very Severe 81.1 %**

7.4 Comments:

**No buffer, great location for tree planting. Channelized in downstream section.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.4 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 31.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **26-50 >100**

Length w / less than 25 ft.: **424.0 ft. 338.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 0.8 %**

5.3 Bank Armoring: **3,751.4 70.3 %**

Left: **1,403.0 ft.** Right: **2,348.4 ft.**

5.4 Channel Straightening: **2,344.6 43.9 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **557.6 ft. 10.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **520.7 ft. 0.0 ft.**

6.3 Channel Bars: **Side**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **322 ft. Ratio: 7.3**

6.6 Wavelength: **748 ft. Ratio: 17.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **1421.1700439 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1  | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2 | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|-----|------|------|------|------|------|-----|-----|-----|-----|------|------|------|-----|-------|
| 2    | 2    | 1   | 0    | 0    | 2    | 2    | 0    | 1   | 1   | 1   | 1   | 0    | 2    | 2    | 1   | 18    |
| High | High | Low | N.S. | N.S. | High | High | N.S. | Low | Low | Low | Low | N.S. | High | High | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M16**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at pond to W of river. Ends where Chelsea Rd crosses river.**

1.1 Reach Description:

1.2 Towns: **Chelsea, Washington**

1.3 Downstream Latitude: **44.02286**

1.3 Downstream Longitude: **-72.46917**

Step 2. Stream Type

2.1 Elevation Upstream: **1,052**

2.1 Elevation Downstream: **920**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,648.0 ft. 1.83 Miles**

2.3 Valley Slope: **1.4**

2.4 Channel Length: **11,145.0 ft. 2.11 Miles**

2.5 Channel Slope: **1.18 %**

2.6 Sinuosity: **1.16**

2.7 Watershed Area: **14.6 Square Miles**

2.8 Channel Width: **42.6 feet**

2.9 Valley Width: **399.0 feet**

2.10 Confinement Ratio: **9.4**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Alluvial 66.7 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **B 78.1 %**

Flooding: **Frequent 66.7 %**

Water Table Deep: **3.0 66.7 %**

Water Table Shallow: **1.5 66.7 %**

Erodibility: **Moderate 33.0 %**

7.4 Comments:

**Looks good!**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.4 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Forest 26.5 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **6,441.0 ft. 6,832.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **5 0.9 %**

5.3 Bank Armoring: **5,189.1 46.6 %**

Left: **2,970.5 ft.** Right: **2,218.6 ft.**

5.4 Channel Straightening: **6,492.9 58.3 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **755.2 ft. 6.8**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **520.1 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **304 ft. Ratio: 7.1**

6.6 Wavelength: **447 ft. Ratio: 10.5**

Step 7. Windshield Survey

7.1 Bank Erosion: **2902.8400879 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|------|------|------|------|------|------|-----|------|-----|-----|------|------|------|-----|-------|
| 2    | 2    | 2    | 0    | 0    | 2    | 2    | 2    | 1   | 0    | 1   | 1   | 0    | 0    | 2    | 1   | 18    |
| High | High | High | N.S. | N.S. | High | High | High | Low | N.S. | Low | Low | N.S. | N.S. | High | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M17**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins where Chelsea Rd crosses river. Ends .25 mi N of Sky Acres Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea, Washington**

1.3 Downstream Latitude: **44.04715**

1.3 Downstream Longitude: **-72.47623**

Step 2. Stream Type

2.1 Elevation Upstream: **1,346**

2.1 Elevation Downstream: **1,052**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **8,014.0 ft. 1.52 Miles**

2.3 Valley Slope: **3.7**

2.4 Channel Length: **8,874.0 ft. 1.68 Miles**

2.5 Channel Slope: **3.31 %**

2.6 Sinuosity: **1.11**

2.7 Watershed Area: **4.8 Square Miles**

2.8 Channel Width: **26.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **C**

Bedform: **Step-Pool**

Sub-Class Slope: **b**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 96.8 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **A 57.9 %**

Flooding: **None/Rare 96.8 %**

Water Table Deep: **6.0 63.0 %**

Water Table Shallow: **6.0 63.0 %**

Erodibility: **Very Severe 96.2 %**

7.4 Comments:

**NULL**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 87.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 35.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **451.0 ft. 203.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 1.1 %**

5.3 Bank Armoring: **5,670.8 63.9 %**

Left: **3,298.7 ft.** Right: **2,372.1 ft.**

5.4 Channel Straightening: **3,599.8 40.6 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **6,358.5 ft. 71.7**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **83.1 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **638.6699829 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1  | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1 | 7.3 | Total |
|------|------|-----|------|------|------|------|------|------|------|-----|-----|------|------|-----|-----|-------|
| 2    | 2    | 1   | 0    | 0    | 2    | 2    | 0    | 2    | 0    | 1   | 1   | 0    | 0    | 1   | 1   | 15    |
| High | High | Low | N.S. | N.S. | High | High | N.S. | High | N.S. | Low | Low | N.D. | N.D. | Low | Low |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Step 1. Reach Location **Begins at Town farm Rd.**

1.1 Reach Description:  
 1.2 Towns: **Washington**  
 1.3 Downstream Latitude: **44.05214**  
 1.3 Downstream Longitude: **-72.47305**

Step 2. Stream Type

2.1 Elevation Upstream: **1,672**  
 2.1 Elevation Downstream: **1,138**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **6,218.0 ft.** **1.18** Miles  
 2.3 Valley Slope: **8.6**  
 2.4 Channel Length: **6,417.0 ft.** **1.22** Miles  
 2.5 Channel Slope: **8.32 %**  
 2.6 Sinuosity: **1.03**  
 2.7 Watershed Area: **0.5** Square Miles  
 2.8 Channel Width: **9.4** feet  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **A**  
 Bedform: **Cascade**  
 Sub-Class Slope: **none**  
 Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till** **91.9 %**  
 3.3 Sub-dom. Geological Mat.: **Other**  
 3.4 Valley Slope Left: **Very Steep**  
 3.4 Valley Slope Right: **Ext. Steep**  
 3.5 Soils  
 Hydrologic Group: **B** **42.3 %**  
 Flooding: **None/Rare** **100.0 %**  
 Water Table Deep: **6.0** **50.7 %**  
 Water Table Shallow: **6.0** **50.7 %**  
 Erodibility: **Very Severe** **91.9 %**

7.4 Comments:

**Aggregation?**

# Phase 1 - Reach Summary Report

Reach ID: **M17-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **87.5 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **65.9 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100** **>100**  
 Sub-dominant: **51-100** **26-50**  
 Length w / less than 25 ft.: **256.0 ft.** **1,347.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **2** **5.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft.** Right: **ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **4,565.0 ft.** **71.1**  
One Side Both Sides  
 Road: **ft.** **ft.**  
 Railroad: **ft.** **ft.**  
 Berm: **ft.** **ft.**  
 Improved Path: **ft.** **ft.**  
 6.2 Development: **321.0 ft.** **0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Low** **ft**  
 7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |       |
|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 9     |
| High | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M18**  
 SGAT Version: **3**  
 Date Last Edited: **December, 19 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .25 mi N of Sky Acres Rd. Ends just S of bridge where river moves to E side of Rt 110.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.06304**

1.3 Downstream Longitude: **-72.46798**

Step 2. Stream Type

2.1 Elevation Upstream: **1,371**

2.1 Elevation Downstream: **1,346**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,141.0 ft. 0.41 Miles**

2.3 Valley Slope: **1.2**

2.4 Channel Length: **2,453.0 ft. 0.46 Miles**

2.5 Channel Slope: **1.02 %**

2.6 Sinuosity: **1.15**

2.7 Watershed Area: **2.7 Square Miles**

2.8 Channel Width: **20.3 feet**

2.9 Valley Width: **281.0 feet**

2.10 Confinement Ratio: **13.9**

2.10 Confinement Type: **Very Broad**

2.11 Reference Stream Type: **E**

Bedform: **Dune-Ripple**

Sub-Class Slope: **None**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 72.5 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **0.0 64.8 %**

Water Table Shallow: **-1.0 64.8 %**

Erodibility: **Moderate 35.2 %**

7.4 Comments:

**Wetland area.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 37.1 %**

Current Sub-Dominant Land Cover: **Wetland**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **221.0 ft. 74.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 1.6 %**

5.3 Bank Armoring: **120.0 4.9 %**

Left: **60.0 ft.** Right: **60.0 ft.**

5.4 Channel Straightening: **102.6 4.2 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **536.6 ft. 21.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **199.0 ft. 0.0 ft.**

6.3 Channel Bars: **Point**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **57 ft. Ratio: 2.8**

6.6 Wavelength: **94 ft. Ratio: 4.6**

Step 7. Windshield Survey

7.1 Bank Erosion: **0.0000000 ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|-----|------|------|------|------|------|------|-----|-----|-----|------|------|------|------|-------|
| 1   | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 1   | 1   | 2    | 2    | 0    | 0    | 13    |
| Low | High | Low | N.S. | N.S. | N.S. | N.S. | N.S. | High | Low | Low | Low | High | High | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M18-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .33 mi NW of Sky Acres Rd on W side of Rt 110.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.06355**

1.3 Downstream Longitude: **-72.46805**

Step 2. Stream Type

2.1 Elevation Upstream: **1,676**

2.1 Elevation Downstream: **1,345**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,520.0 ft. 1.42 Miles**

2.3 Valley Slope: **4.4**

2.4 Channel Length: **8,441.0 ft. 1.60 Miles**

2.5 Channel Slope: **3.92 %**

2.6 Sinuosity: **1.12**

2.7 Watershed Area: **1.1 Square Miles**

2.8 Channel Width: **13.6 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 82.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 78.4 %**

Water Table Shallow: **0.0 71.6 %**

Erodibility: **Very Severe 89.6 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 93.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 86.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **506.0 ft. 2,110.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **850.0 ft. 10.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 422.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 1   | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| Low | Low | High | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **First Branch of the White River**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royallon**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **M19**  
 SGAT Version: **3**  
 Date Last Edited: **June, 10 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just downstream of bridge on Rt 110. Ends where stream becomes seasonal.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.06851**

1.3 Downstream Longitude: **-72.46610**

Step 2. Stream Type

2.1 Elevation Upstream: **1,474**

2.1 Elevation Downstream: **1,371**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,310.0 ft. 0.82 Miles**

2.3 Valley Slope: **2.4**

2.4 Channel Length: **4,925.0 ft. 0.93 Miles**

2.5 Channel Slope: **2.09 %**

2.6 Sinuosity: **1.14**

2.7 Watershed Area: **1.5 Square Miles**

2.8 Channel Width: **15.7 feet**

2.9 Valley Width: **303.0 feet**

2.10 Confinement Ratio: **19.4**

2.10 Confinement Type: **Very Broad**

2.11 Reference Stream Type: **E**

Bedform: **Riffle-Pool**

Sub-Class Slope: **b**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 80.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 85.5 %**

Water Table Shallow: **1.0 80.9 %**

Erodibility: **Very Severe 94.2 %**

7.4 Comments:

**Wetlands.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 52.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 0-25**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **31.0 ft. 1,315.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 0.2 %**

5.3 Bank Armoring: **854.2 17.3 %**

Left: **32.7 ft.** Right: **821.5 ft.**

5.4 Channel Straightening: **1,430.2 29.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,831.9 ft. 37.2**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **12 ft. Ratio: 0.8**

6.6 Wavelength: **12 ft. Ratio: 0.8**

Step 7. Windshield Survey

7.1 Bank Erosion: **957.9500122 ft**

7.2 Bank Height: **2 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3 | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|-----|------|------|------|------|-----|------|------|------|------|-----|-----|------|------|-----|------|-------|
| 1   | 2    | 2    | 0    | 0    | 1   | 2    | 0    | 2    | 0    | 1   | 1   | 2    | 2    | 1   | 2    | 19    |
| Low | High | High | N.S. | N.S. | Low | High | N.S. | High | N.S. | Low | Low | High | High | Low | High |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **T1 - Runs along Strafford Rd in Tunbridge**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royalton**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T1.01**  
 SGAT Version: **3**  
 Date Last Edited: **July, 18 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .43 mi N of intersection of Rt 110 and Justin Smith Morrill Highway. Ends 1.68 mi up JSMH.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.89595**

1.3 Downstream Longitude: **-72.48339**

Step 2. Stream Type

2.1 Elevation Upstream: **999**

2.1 Elevation Downstream: **570**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,214.0 ft. 1.37 Miles**

2.3 Valley Slope: **5.9**

2.4 Channel Length: **7,289.0 ft. 1.38 Miles**

2.5 Channel Slope: **5.89 %**

2.6 Sinuosity: **1.01**

2.7 Watershed Area: **3.8 Square Miles**

2.8 Channel Width: **23.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **C**

Bedform: **Step-Pool**

Sub-Class Slope: **b**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Till 62.9 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **A 45.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **6.0 48.7 %**

Water Table Shallow: **6.0 48.7 %**

Erodibility: **Very Severe 83.7 %**

7.4 Comments:

**Mass failures!!**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.0 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 35.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **1,472.0 ft. 1,057.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 1.5 %**

5.3 Bank Armoring: **3,059.0 42.0 %**

Left: **2,049.6 ft.** Right: **1,009.4 ft.**

5.4 Channel Straightening: **3,914.6 53.7 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,088.6 ft. 42.4**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 189.3 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **2304.8100586 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 2    | 2    | 2    | 2    | 0    | 1   | 2    | 0    | 0    | 2    | 2    | 20    |
| Low | High | High | N.S. | N.S. | High | High | High | High | N.S. | Low | High | N.D. | N.D. | High | High |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **T1 - Runs along Strafford Rd in Tunbridge**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T1.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.68 mi up Justin Smith Morrill Highway. Ends 6.4 mi up JSMH.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.90079**

1.3 Downstream Longitude: **-72.46097**

Step 2. Stream Type

2.1 Elevation Upstream: **1,443**

2.1 Elevation Downstream: **999**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,097.0 ft. 1.72 Miles**

2.3 Valley Slope: **4.9**

2.4 Channel Length: **9,881.0 ft. 1.87 Miles**

2.5 Channel Slope: **4.49 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **2.6 Square Miles**

2.8 Channel Width: **19.8 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 87.2 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 55.7 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 53.9 %**

Water Table Shallow: **1.0 39.4 %**

Erodibility: **Very Severe 87.2 %**

7.4 Comments:

**Mass failures!!**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.5 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 41.6 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 0-25**

Sub-dominant: **51-100 26-50**

Length w / less than 25 ft.: **1,482.0 ft. 5,533.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **8 30.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **8,505.0 ft. 86.1**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 1,482.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 2    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 11    |
| Low | High | High | N.S. | High | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **T1.02-S1-Trib to Stream along Strafford Rd**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T1.02-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 2.93 mi up Justin Smith Morrill Highway on right (SE).**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.90689**

1.3 Downstream Longitude: **-72.43789**

Step 2. Stream Type

2.1 Elevation Upstream: **1,504**

2.1 Elevation Downstream: **1,298**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,216.0 ft. 0.61 Miles**

2.3 Valley Slope: **6.4**

2.4 Channel Length: **3,391.0 ft. 0.64 Miles**

2.5 Channel Slope: **6.07 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **0.7 Square Miles**

2.8 Channel Width: **11.3 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 62.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 65.4 %**

Water Table Shallow: **0.0 36.9 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 87.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 30.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **169.0 ft. 474.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **715.0 ft. 21.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6     |
| Low | High | Low | N.S. | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **T1.02-S1.01-t1-Trib to Stream along Stafford Rd**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T1.02-S1.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins .17 mi up on T1.2-S1. Ends N of Willis Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.90521**

1.3 Downstream Longitude: **-72.43504**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,449**

2.1 Elevation Downstream: **1,342**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **1,548.0 ft.** **0.29** Miles

2.3 Valley Slope: **6.9**

2.4 Channel Length: **1,635.0 ft.** **0.31** Miles

2.5 Channel Slope: **6.54 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **0.3** Square Miles

2.8 Channel Width: **7.4** feet

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till** **100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **C** **67.2 %**

Flooding: **None/Rare** **100.0 %**

Water Table Deep: **2.0** **91.1 %**

Water Table Shallow: **1.0** **58.3 %**

Erodibility: **Very Severe** **100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **93.0 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **99.5 %**

Current Sub-Dominant Land Cover:

4.3 Riparian Buffer **Left Bank** **Right Bank**

Dominant: **>100** **>100**

Sub-dominant: **51-100** **51-100**

Length w / less than 25 ft.: **0.0 ft.** **0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0** **0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **0.0 ft.** **0.0**

**One Side** **Both Sides**

Road: **ft.** **ft.**

Railroad: **ft.** **ft.**

Berm: **ft.** **ft.**

Improved Path: **ft.** **ft.**

6.2 Development: **0.0 ft.** **0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data** **ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     |
| Low | N.S. | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royallon**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T2.01**  
 SGAT Version: **3**  
 Date Last Edited: **July, 29 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Hardscrabble Rd and Rt 110. Ends 1.23 mi up Hardscrabble Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.93073**

1.3 Downstream Longitude: **-72.46601**

Step 2. Stream Type

2.1 Elevation Upstream: **951**

2.1 Elevation Downstream: **638**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,608.0 ft. 1.25 Miles**

2.3 Valley Slope: **4.7**

2.4 Channel Length: **6,642.0 ft. 1.26 Miles**

2.5 Channel Slope: **4.71 %**

2.6 Sinuosity: **1.01**

2.7 Watershed Area: **4.7 Square Miles**

2.8 Channel Width: **25.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Till 74.3 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 45.5 %**

Flooding: **None/Rare 97.5 %**

Water Table Deep: **6.0 52.0 %**

Water Table Shallow: **6.0 52.0 %**

Erodibility: **Very Severe 97.5 %**

7.4 Comments:

**NULL**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.2 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 40.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **26-50 51-100**

Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 9.0 %**

5.3 Bank Armoring: **947.3 14.3 %**

Left: **692.0 ft.** Right: **255.4 ft.**

5.4 Channel Straightening: **2,696.6 40.6 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,817.8 ft. 42.4**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **811.4 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **1783.4699707 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3 | 5.4  | 5.5  | 6.1  | 6.2 | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|-----|------|------|------|-----|-----|------|------|------|------|------|-------|
| 1   | 2    | 0    | 0    | 1   | 1   | 2    | 2    | 2    | 1   | 1   | 2    | 0    | 0    | 2    | 2    | 19    |
| Low | High | N.S. | N.S. | Low | Low | High | High | High | Low | Low | High | N.D. | N.D. | High | High |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T2.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .14 mi up Hardscrabble Rd on left. Ends 1.03 mi up Hurricane rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.93155**

1.3 Downstream Longitude: **-72.46894**

Step 2. Stream Type

2.1 Elevation Upstream: **1,604**

2.1 Elevation Downstream: **656**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **13,322.0 ft. 2.52 Miles**

2.3 Valley Slope: **7.1**

2.4 Channel Length: **14,274.0 ft. 2.70 Miles**

2.5 Channel Slope: **6.64 %**

2.6 Sinuosity: **1.07**

2.7 Watershed Area: **1.4 Square Miles**

2.8 Channel Width: **15.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 82.8 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 87.7 %**

Flooding: **None/Rare 91.8 %**

Water Table Deep: **2.0 71.8 %**

Water Table Shallow: **1.0 69.9 %**

Erodibility: **Very Severe 91.8 %**

7.4 Comments:

**Over-widened up stream of culvert.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 86.7 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 51.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **3,568.0 ft. 428.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 2    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| Low | Low | High | N.S. | Low | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Step 1. Reach Location **Begins .13 mi up Hurricane Mtn rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.93868**

1.3 Downstream Longitude: **-72.49537**

Step 2. Stream Type

2.1 Elevation Upstream: **1,525**

2.1 Elevation Downstream: **1,259**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,766.0 ft. 0.52 Miles**

2.3 Valley Slope: **9.6**

2.4 Channel Length: **3,058.0 ft. 0.58 Miles**

2.5 Channel Slope: **8.70 %**

2.6 Sinuosity: **1.11**

2.7 Watershed Area: **0.3 Square Miles**

2.8 Channel Width: **7.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 87.1 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 91.0 %**

Water Table Shallow: **1.0 87.1 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

# Phase 1 - Reach Summary Report

Reach ID: **T2.01-S1.01-t1.01**

SGAT Version: **3**

Date Last Edited:

QA Status: **Step 7 done**

Is Reach An Impoundment?: **#Error**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 96.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 99.9 %**

Current Sub-Dominant Land Cover:

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **26-50 51-100**

Length w / less than 25 ft.: **152.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     |
| Low | N.S. | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T2.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.23 mi up Hardscrabble Rd. Ends 3.22 mi up Hardscrabble and Dickerman Hill Rd.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.94234**

1.3 Downstream Longitude: **-72.48229**

Step 2. Stream Type

2.1 Elevation Upstream: **1,387**

2.1 Elevation Downstream: **953**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,926.0 ft. 2.07 Miles**

2.3 Valley Slope: **4.0**

2.4 Channel Length: **11,517.0 ft. 2.18 Miles**

2.5 Channel Slope: **3.77 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **2.8 Square Miles**

2.8 Channel Width: **20.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **b**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 58.2 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 87.4 %**

Water Table Shallow: **1.0 58.1 %**

Erodibility: **Very Severe 98.6 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 80.2 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 53.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **51-100 >100**

Sub-dominant: **0-25 26-50**

Length w / less than 25 ft.: **2,418.0 ft. 460.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **5,973.0 ft. 51.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **576.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|-----|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 1   | 0    | 10    |
| High | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T2.02-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .27 mi NW of intersection of Dickerman Rd and Hanson Rd on right.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.94988**

1.3 Downstream Longitude: **-72.48637**

Step 2. Stream Type

2.1 Elevation Upstream: **1,209**

2.1 Elevation Downstream: **1,043**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **1,574.0 ft. 0.30 Miles**

2.3 Valley Slope: **10.5**

2.4 Channel Length: **1,575.0 ft. 0.30 Miles**

2.5 Channel Slope: **10.54 %**

2.6 Sinuosity: **1.00**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **6.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 74.1 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **6.0 74.0 %**

Water Table Shallow: **6.0 74.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 79.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 45.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **1,575.0 ft. 1,575.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **2 15.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,676.0 ft. 106.4**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 158.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |     |      |      |      |      |     |      |      |      |      |     |      |       |
|------|------|------|------|-----|------|------|------|------|-----|------|------|------|------|-----|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
| 2    | 2    | 2    | 2    | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 1   | 0    | 13    |
| High | High | High | High | Low | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T2.02-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.13 miles up Dickerman Rd from intersection with Hanson Rd on left.**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.95506**

1.3 Downstream Longitude: **-72.50079**

Step 2. Stream Type

2.1 Elevation Upstream: **1,453**

2.1 Elevation Downstream: **1,235**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,040.0 ft. 0.58 Miles**

2.3 Valley Slope: **7.2**

2.4 Channel Length: **3,404.0 ft. 0.64 Miles**

2.5 Channel Slope: **6.40 %**

2.6 Sinuosity: **1.12**

2.7 Watershed Area: **0.8 Square Miles**

2.8 Channel Width: **12.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 87.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 99.3 %**

Water Table Shallow: **1.0 87.1 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 83.3 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 67.6 %**

Current Sub-Dominant Land Cover: **Crop**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     |
| Low | N.S. | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Dickerman Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T2.02-S2.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

## Step 1. Reach Location **Begins .39 mi along T2.2-S2 on right (North).**

1.1 Reach Description:

1.2 Towns: **Tunbridge**

1.3 Downstream Latitude: **43.95766**

1.3 Downstream Longitude: **-72.50965**

## Step 2. Stream Type

2.1 Elevation Upstream: **1,465**

2.1 Elevation Downstream: **1,366**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **1,871.0 ft. 0.35 Miles**

2.3 Valley Slope: **5.3**

2.4 Channel Length: **2,161.0 ft. 0.41 Miles**

2.5 Channel Slope: **4.58 %**

2.6 Sinuosity: **1.15**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **7.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **No Data**

## Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 84.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 99.0 %**

Water Table Shallow: **0.0 84.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

## Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 60.2 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Shrub**

Current Dominant Land Cover: **Forest 55.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank Right Bank**

Dominant: **0-25 0-25**

Sub-dominant: **26-50 51-100**

Length w / less than 25 ft.: **1,318.0 ft. 1,426.0 ft.**

4.4 Ground Water Inputs: **None**

## Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

## Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **503.0 ft. 23.3**

**One Side Both Sides**

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

## Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2    | 2    | 2    | 2    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 11    |
| High | High | High | High | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.01**  
 SGAT Version: **3**  
 Date Last Edited: **November, 01 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .14 mi S of intersection of E Randolph Rd and Rt 110. Ends at intersection of E Randolph Rd and Rt 110.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.95978**

1.3 Downstream Longitude: **-72.46488**

Step 2. Stream Type

2.1 Elevation Upstream: **876**

2.1 Elevation Downstream: **701**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,277.0 ft. 1.19 Miles**

2.3 Valley Slope: **2.8**

2.4 Channel Length: **6,982.0 ft. 1.32 Miles**

2.5 Channel Slope: **2.51 %**

2.6 Sinuosity: **1.11**

2.7 Watershed Area: **10.9 Square Miles**

2.8 Channel Width: **37.5 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **C**

Bedform: **Step-Pool**

Sub-Class Slope: **b**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Ice-Contact 41.9 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 39.7 %**

Flooding: **None/Rare 80.9 %**

Water Table Deep: **2.0 38.4 %**

Water Table Shallow: **1.0 27.5 %**

Erodibility: **Severe 64.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 77.6 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 49.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **82.0 ft. 84.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **5 9.0 %**

5.3 Bank Armoring: **1,112.0 15.9 %**

Left: **590.8 ft.** Right: **521.2 ft.**

5.4 Channel Straightening: **2,115.2 30.3 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **565.9 ft. 8.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **1,305.5 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **1631.8499756 ft**

7.2 Bank Height: **4 ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3 | 5.4  | 5.5  | 6.1 | 6.2 | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|------|------|-----|-----|------|------|-----|-----|-----|------|------|------|------|-----|-------|
| 2    | 2    | 0    | 0    | 1   | 1   | 2    | 0    | 1   | 1   | 1   | 0    | 0    | 0    | 2    | 1   | 14    |
| High | High | N.S. | N.S. | Low | Low | High | N.S. | Low | Low | Low | N.S. | N.D. | N.D. | High | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of E Randolph Rd and Brook Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97150**

1.3 Downstream Longitude: **-72.47940**

Step 2. Stream Type

2.1 Elevation Upstream: **1,479**

2.1 Elevation Downstream: **873**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,373.0 ft.** **1.96** Miles

2.3 Valley Slope: **5.8**

2.4 Channel Length: **10,886.0 ft.** **2.06** Miles

2.5 Channel Slope: **5.57 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **2.2** Square Miles

2.8 Channel Width: **18.6** feet

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till** **95.2 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C** **58.1 %**

Flooding: **None/Rare** **100.0 %**

Water Table Deep: **2.0** **74.8 %**

Water Table Shallow: **1.0** **50.7 %**

Erodibility: **Very Severe** **88.2 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **67.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban** **30.6 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100** **0-25**

Sub-dominant: **51-100** **>100**

Length w / less than 25 ft.: **0.0 ft.** **5,225.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **6** **25.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **7,453.0 ft.** **68.5**

One Side Both Sides

Road: **ft.** **ft.**

Railroad: **ft.** **ft.**

Berm: **ft.** **ft.**

Improved Path: **ft.** **ft.**

6.2 Development: **0.0 ft.** **2,177.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium** **ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|-----|------|-------|
| 2    | 2    | 2    | 2    | 2    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 1   | 0    | 14    |
| High | High | High | High | High | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.01-S1.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of E Randolph Rd and Hooks Rd. Ends at Allen cemetery.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97362**

1.3 Downstream Longitude: **-72.48778**

Step 2. Stream Type

2.1 Elevation Upstream: **1,435**

2.1 Elevation Downstream: **1,008**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,998.0 ft. 1.33 Miles**

2.3 Valley Slope: **6.1**

2.4 Channel Length: **7,732.0 ft. 1.46 Miles**

2.5 Channel Slope: **5.52 %**

2.6 Sinuosity: **1.10**

2.7 Watershed Area: **0.9 Square Miles**

2.8 Channel Width: **12.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 50.8 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 82.4 %**

Water Table Shallow: **0.0 42.9 %**

Erodibility: **Very Severe 92.1 %**

7.4 Comments:

**Large pile of sediment near confluence.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 71.7 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 45.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 51-100**

Sub-dominant: **26-50 26-50**

Length w / less than 25 ft.: **1,469.0 ft. 1,082.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,311.0 ft. 29.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 387.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 10    |
| Low | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.01-S1.01-t2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1 mi from intersection of E Randolph Rd and Hooks Rd. Ends along E Randolph rd.**

1.1 Reach Description:

1.2 Towns: **Brookfield, Chelsea**

1.3 Downstream Latitude: **43.97352**

1.3 Downstream Longitude: **-72.50643**

Step 2. Stream Type

2.1 Elevation Upstream: **1,459**

2.1 Elevation Downstream: **1,342**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,175.0 ft. 0.41 Miles**

2.3 Valley Slope: **5.4**

2.4 Channel Length: **2,551.0 ft. 0.48 Miles**

2.5 Channel Slope: **4.59 %**

2.6 Sinuosity: **1.17**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **7.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 94.8 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 81.1 %**

Water Table Shallow: **0.0 76.8 %**

Erodibility: **Very Severe 82.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 69.8 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 49.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 26-50**

Length w / less than 25 ft.: **1,760.0 ft. 51.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,375.0 ft. 93.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **128.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 10    |
| High | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of E Randolph Rd and Brook Rd. Ends .24 mi from intersection of Beacon Hill Rd and Brook Rd along Brook Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97160**

1.3 Downstream Longitude: **-72.47924**

Step 2. Stream Type

2.1 Elevation Upstream: **1,126**

2.1 Elevation Downstream: **876**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,150.0 ft. 1.92 Miles**

2.3 Valley Slope: **2.5**

2.4 Channel Length: **12,532.0 ft. 2.37 Miles**

2.5 Channel Slope: **1.99 %**

2.6 Sinuosity: **1.23**

2.7 Watershed Area: **9.7 Square Miles**

2.8 Channel Width: **35.7 feet**

2.9 Valley Width: **265.0 feet**

2.10 Confinement Ratio: **7.4**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **E**

Bedform: **Riffle-Pool**

Sub-Class Slope: **b**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Alluvial 65.1 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 56.4 %**

Flooding: **Frequent 65.1 %**

Water Table Deep: **1.5 48.4 %**

Water Table Shallow: **0.0 67.1 %**

Erodibility: **Moderate 34.9 %**

7.4 Comments:

**Cows fenced out, but needs buffer.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 76.5 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 44.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **6,140.0 ft. 4,511.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: ft. Right: ft.

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **7,068.0 ft. 56.4**

One Side Both Sides

Road: ft. ft.

Railroad: ft. ft.

Berm: ft. ft.

Improved Path: ft. ft.

6.2 Development: **0.0 ft. 1,253.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **158 ft. Ratio: 4.4**

6.6 Wavelength: **334 ft. Ratio: 9.4**

Step 7. Windshield Survey

7.1 Bank Erosion: ft

7.2 Bank Height: **Low** ft

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4 | 6.5 | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|-----|------|------|------|------|-----|------|-----|-----|------|------|------|-------|
| 2    | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 1   | 1   | 0    | 0    | 0    | 12    |
| High | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | Low | N.S. | Low | Low | N.S. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.02-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins at intersection of Woodworth Rd and Brook Rd and heads along Woodworth Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.98732**

1.3 Downstream Longitude: **-72.48521**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,298**

2.1 Elevation Downstream: **1,000**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,242.0 ft.** **0.42** Miles

2.3 Valley Slope: **13.3**

2.4 Channel Length: **2,528.0 ft.** **0.48** Miles

2.5 Channel Slope: **11.79 %**

2.6 Sinuosity: **1.13**

2.7 Watershed Area: **0.5** Square Miles

2.8 Channel Width: **9.8** feet

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till** **100.0 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **B** **52.2 %**

Flooding: **None/Rare** **100.0 %**

Water Table Deep: **6.0** **70.3 %**

Water Table Shallow: **6.0** **70.3 %**

Erodibility: **Very Severe** **100.0 %**

7.4 Comments:

**Missed it :(**

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **87.0 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **58.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank** **Right Bank**

Dominant: **>100** **>100**

Sub-dominant: **0-25** **26-50**

Length w / less than 25 ft.: **455.0 ft.** **530.0 ft.**

4.4 Ground Water Inputs: **Abundant**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **2** **10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **1,699.0 ft.** **67.2**

**One Side** **Both Sides**

Road: **ft.** **ft.**

Railroad: **ft.** **ft.**

Berm: **ft.** **ft.**

Improved Path: **ft.** **ft.**

6.2 Development: **0.0 ft.** **0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data** **ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 2    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 10    |
| Low | High | High | High | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.02-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .19 mi N along Brook Rd from intersection with Woodworth Rd (on the right).**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.98992**

1.3 Downstream Longitude: **-72.48477**

Step 2. Stream Type

2.1 Elevation Upstream: **1,434**

2.1 Elevation Downstream: **1,032**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,838.0 ft. 0.54 Miles**

2.3 Valley Slope: **14.2**

2.4 Channel Length: **3,329.0 ft. 0.63 Miles**

2.5 Channel Slope: **12.08 %**

2.6 Sinuosity: **1.17**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **7.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 98.0 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **A 43.4 %**

Flooding: **None/Rare 98.0 %**

Water Table Deep: **6.0 98.0 %**

Water Table Shallow: **6.0 98.0 %**

Erodibility: **Very Severe 98.0 %**

7.4 Comments:

**Missed it :(**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 83.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 61.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **699.0 ft. 998.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,378.0 ft. 41.4**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 166.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 7     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.02-S3.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .63 mi from intersection of Beacon Hill Rd and Brook Rd along Brook Rd on left.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.99614**

1.3 Downstream Longitude: **-72.48912**

Step 2. Stream Type

2.1 Elevation Upstream: **1,489**

2.1 Elevation Downstream: **1,084**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,862.0 ft. 1.30 Miles**

2.3 Valley Slope: **5.9**

2.4 Channel Length: **7,487.0 ft. 1.42 Miles**

2.5 Channel Slope: **5.41 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **1.1 Square Miles**

2.8 Channel Width: **13.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Boulder**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 89.6 %**

3.3 Sub-dom. Geological Mat.: **Other**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 40.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 66.2 %**

Water Table Shallow: **1.0 35.7 %**

Erodibility: **Very Severe 89.6 %**

7.4 Comments:

**Junk in stream!**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 85.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 40.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **5,615.0 ft. 2,994.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **4,114.0 ft. 54.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 7     |
| Low | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.03**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .24 mi from intersection of Beacon Hill Rd and Brook Rd. Ends .5 mi from intersection of West Hill Rd and Brook Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.99806**

1.3 Downstream Longitude: **-72.48937**

Step 2. Stream Type

2.1 Elevation Upstream: **1,572**

2.1 Elevation Downstream: **1,126**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,454.0 ft. 1.98 Miles**

2.3 Valley Slope: **4.3**

2.4 Channel Length: **11,092.0 ft. 2.10 Miles**

2.5 Channel Slope: **4.02 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **3.9 Square Miles**

2.8 Channel Width: **23.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 64.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 78.2 %**

Water Table Shallow: **0.0 62.6 %**

Erodibility: **Very Severe 97.7 %**

7.4 Comments:

**Cows near river, no buffer upstream end of reach.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 75.8 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 44.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **3,549.0 ft. 2,440.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **4 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **7,665.0 ft. 69.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **555.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|-----|-------|
| 2    | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 11    |
| High | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.03-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .1 mi N of intersection of Brook Rd and Woodsworth Hill Rd along Brook Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.00270**

1.3 Downstream Longitude: **-72.49083**

Step 2. Stream Type

2.1 Elevation Upstream: **1,461**

2.1 Elevation Downstream: **1,143**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,357.0 ft. 1.96 Miles**

2.3 Valley Slope: **3.1**

2.4 Channel Length: **11,236.0 ft. 2.13 Miles**

2.5 Channel Slope: **2.83 %**

2.6 Sinuosity: **1.08**

2.7 Watershed Area: **2.7 Square Miles**

2.8 Channel Width: **20.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **none**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 90.1 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 53.9 %**

Flooding: **None/Rare 90.1 %**

Water Table Deep: **2.0 64.6 %**

Water Table Shallow: **1.0 43.9 %**

Erodibility: **Severe 72.4 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 75.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 68.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **4,269.0 ft. 3,370.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,528.0 ft. 13.6**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|------|------|-----|------|------|------|-----|------|------|------|------|------|------|-----|-------|
| 2    | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 9     |
| High | High | High | N.S. | Low | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

## Step 1. Reach Location **Begins 1.04 mi along T3.3-S1.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.01698**

1.3 Downstream Longitude: **-72.49393**

## Step 2. Stream Type

2.1 Elevation Upstream: **1,629**

2.1 Elevation Downstream: **1,307**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,952.0 ft. 1.32 Miles**

2.3 Valley Slope: **4.6**

2.4 Channel Length: **7,591.0 ft. 1.44 Miles**

2.5 Channel Slope: **4.24 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **1.0 Square Miles**

2.8 Channel Width: **13.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

## Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 82.2 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 59.5 %**

Flooding: **None/Rare 82.2 %**

Water Table Deep: **2.0 55.0 %**

Water Table Shallow: **0.0 66.1 %**

Erodibility: **Severe 71.0 %**

7.4 Comments:

# Phase 1 - Reach Summary Report

Reach ID: **T3.03-S1.01-t1.01**

SGAT Version: **3**

Date Last Edited:

QA Status: **Step 7 done**

Is Reach An Impoundment?: **#Error**

## Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 73.5 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 39.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank Right Bank**

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **3,795.0 ft. 2,505.0 ft.**

4.4 Ground Water Inputs: **Abundant**

## Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

## Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,391.0 ft. 44.7**

**One Side Both Sides**

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

## Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 9     |
| High | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Cram Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T3.03-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .23 mi SE of intersection of Cram Brook and West hill Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.01302**

1.3 Downstream Longitude: **-72.50733**

Step 2. Stream Type

2.1 Elevation Upstream: **1,557**

2.1 Elevation Downstream: **1,392**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,275.0 ft. 0.43 Miles**

2.3 Valley Slope: **7.3**

2.4 Channel Length: **2,328.0 ft. 0.44 Miles**

2.5 Channel Slope: **7.09 %**

2.6 Sinuosity: **1.02**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **5.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **C**

Bedform: **Step-Pool**

Sub-Class Slope: **b**

Bed Material: **Sand**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 53.4 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 95.3 %**

Water Table Shallow: **1.0 53.4 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**No buffer!**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 80.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 39.3 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **2,328.0 ft. 2,328.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,047.0 ft. 45.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 1,164.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |       |
|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 2    | 2    | 0    | 1   | 0    | 0    | 0    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 11    |
| High | High | High | N.S. | Low | Unk. | Unk. | N.S. | High | High | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01**  
 SGAT Version: **3**  
 Date Last Edited: **April, 23 2014**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .17 mi S of intersection of Old Stafford Rd and Rt 110. Ends where the river goes under Colton Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97550**

1.3 Downstream Longitude: **-72.44918**

Step 2. Stream Type

2.1 Elevation Upstream: **1,242**

2.1 Elevation Downstream: **791**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **10,997.0 ft. 2.08 Miles**

2.3 Valley Slope: **4.1**

2.4 Channel Length: **11,988.0 ft. 2.27 Miles**

2.5 Channel Slope: **3.76 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **7.2 Square Miles**

2.8 Channel Width: **31.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 88.0 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 40.6 %**

Flooding: **None/Rare 99.2 %**

Water Table Deep: **2.0 68.3 %**

Water Table Shallow: **1.0 36.7 %**

Erodibility: **Very Severe 93.9 %**

7.4 Comments:

**Bifurcated flow.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 41.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **188.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 2.1 %**

5.3 Bank Armoring: **441.8 3.7 %**

Left: **304.6 ft.** Right: **137.2 ft.**

5.4 Channel Straightening: **1,037.7 8.7 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **812.5 ft. 0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **207.3699951 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4 | 5.5  | 6.1  | 6.2 | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|------|------|-----|------|------|-----|-----|------|------|------|------|-----|-------|
| 1   | 2    | 0    | 0    | 0    | 0    | 1   | 2    | 0    | 1   | 1   | 0    | 0    | 0    | 0    | 1   | 9     |
| Low | High | N.S. | N.S. | N.S. | N.S. | Low | High | Unk. | Low | Low | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .47 mi up Old Stafford Rd on right (South).**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97342**

1.3 Downstream Longitude: **-72.44080**

Step 2. Stream Type

2.1 Elevation Upstream: **1,348**

2.1 Elevation Downstream: **938**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,272.0 ft. 0.43 Miles**

2.3 Valley Slope: **18.0**

2.4 Channel Length: **2,315.0 ft. 0.44 Miles**

2.5 Channel Slope: **17.71 %**

2.6 Sinuosity: **1.02**

2.7 Watershed Area: **0.2 Square Miles**

2.8 Channel Width: **6.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 63.5 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 59.3 %**

Water Table Shallow: **1.0 59.3 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Water suply diversion - not in use.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 97.7 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 92.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **115.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Drinking**

Type:

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Bend**

|      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |     |       |
|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 4.1  | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
| 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 2     |
| N.S. | Low | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins 1.03 mi up Old Stafford rd on left (North).**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.97111**

1.3 Downstream Longitude: **-72.42973**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,243**

2.1 Elevation Downstream: **1,049**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,542.0 ft.** **0.48** Miles

2.3 Valley Slope: **7.6**

2.4 Channel Length: **2,589.0 ft.** **0.49** Miles

2.5 Channel Slope: **7.49 %**

2.6 Sinuosity: **1.02**

2.7 Watershed Area: **0.6** Square Miles

2.8 Channel Width: **10.7** feet

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Gravel**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till** **99.4 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **D** **77.0 %**

Flooding: **None/Rare** **100.0 %**

Water Table Deep: **2.0** **92.7 %**

Water Table Shallow: **0.0** **77.0 %**

Erodibility: **Very Severe** **100.0 %**

7.4 Comments:

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **89.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest** **92.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank** **Right Bank**

Dominant: **>100** **>100**

Sub-dominant: **0-25** **26-50**

Length w / less than 25 ft.: **388.0 ft.** **103.0 ft.**

4.4 Ground Water Inputs: **Abundant**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1** **2.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **0.0 ft.** **0.0**

**One Side** **Both Sides**

Road: **ft.** **ft.**

Railroad: **ft.** **ft.**

Berm: **ft.** **ft.**

Improved Path: **ft.** **ft.**

6.2 Development: **0.0 ft.** **0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low** **ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 1   | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 4     |
| Low | Low | Low | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S3.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins where the river goes under Colton Rd and river heads N. Ends 1.05 mi from intersection of Town Farm Rd and Colton Rd (river heading N along Town Farm Rd)**

1.1 Reach Description:  
 1.2 Towns: **Chelsea**  
 1.3 Downstream Latitude: **43.96089**  
 1.3 Downstream Longitude: **-72.41727**

Step 2. Stream Type  
 2.1 Elevation Upstream: **1,380**  
 2.1 Elevation Downstream: **1,235**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **5,717.0 ft. 1.08 Miles**  
 2.3 Valley Slope: **2.5**  
 2.4 Channel Length: **6,511.0 ft. 1.23 Miles**  
 2.5 Channel Slope: **2.23 %**  
 2.6 Sinuosity: **1.14**  
 2.7 Watershed Area: **4.0 Square Miles**  
 2.8 Channel Width: **24.1 feet**  
 2.9 Valley Width: **440.0 feet**  
 2.10 Confinement Ratio: **18.2**

2.10 Confinement Type: **Very Broad**  
 2.11 Reference Stream Type: **C**  
 Bedform: **Riffle-Pool**  
 Sub-Class Slope: **b**  
 Bed Material: **Cobble**

Step 3. Basin Characteristics  
 3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till 58.3 %**  
 3.3 Sub-dom. Geological Mat.: **Other**  
 3.4 Valley Slope Left: **Steep**  
 3.4 Valley Slope Right: **Steep**  
 3.5 Soils  
 Hydrologic Group: **D 87.3 %**  
 Flooding: **None/Rare 86.0 %**  
 Water Table Deep: **2.0 58.1 %**  
 Water Table Shallow: **0.0 59.6 %**  
 Erodibility: **Severe 58.3 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 91.5 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 72.4 %**  
 Current Sub-Dominant Land Cover: **Wetland**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100 >100**  
 Sub-dominant: **0-25 0-25**  
 Length w / less than 25 ft.: **390.0 ft. 390.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **1 5.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: ft. Right: ft.  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**  
One Side Both Sides  
 Road: ft. ft.  
 Railroad: ft. ft.  
 Berm: ft. ft.  
 Improved Path: ft. ft.  
 6.2 Development: **0.0 ft. 0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **65 ft. Ratio: 2.7**  
 6.6 Wavelength: **195 ft. Ratio: 8.1**

Step 7. Windshield Survey

7.1 Bank Erosion: ft  
 7.2 Bank Height: **Medium** ft  
 7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 4     |
| Low | N.S. | Low | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | High | N.S. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S3.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

**Step 1. Reach Location** **Begins .26 mi up along T4.1-S3.1 on right (East).**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.96323**

1.3 Downstream Longitude: **-72.41228**

**Step 2. Stream Type**

2.1 Elevation Upstream: **1,912**

2.1 Elevation Downstream: **1,309**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,820.0 ft. 1.86 Miles**

2.3 Valley Slope: **6.1**

2.4 Channel Length: **10,363.0 ft. 1.96 Miles**

2.5 Channel Slope: **5.82 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **2.0 Square Miles**

2.8 Channel Width: **17.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **No Data**

**Step 3. Basin Characteristics**

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **C 63.4 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 95.8 %**

Water Table Shallow: **1.0 62.1 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

**Step 4. Land Cover - Reach Hydrology**

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 94.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 74.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer **Left Bank Right Bank**

Dominant: **>100 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **414.0 ft. 621.0 ft.**

4.4 Ground Water Inputs: **Abundant**

**Step 5. Instream Channel Modifications**

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 10.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

**Step 6. Floodplain Modifications**

6.1 Berms & Roads - old: **1,430.0 ft. 13.8**

**One Side Both Sides**

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

**Step 7. Windshield Survey**

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2 | 4.3 | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|-----|------|-----|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 1   | 1   | 1   | 0    | 1   | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| Low | Low | Low | N.S. | Low | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S3.01-t1.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .45 mi up along T4.1-S3.1-t1 on right (South).**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.96291**

1.3 Downstream Longitude: **-72.40373**

Step 2. Stream Type

2.1 Elevation Upstream: **1,646**

2.1 Elevation Downstream: **1,423**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,315.0 ft. 0.63 Miles**

2.3 Valley Slope: **6.7**

2.4 Channel Length: **3,489.0 ft. 0.66 Miles**

2.5 Channel Slope: **6.39 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **0.7 Square Miles**

2.8 Channel Width: **11.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **D 81.7 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 86.2 %**

Water Table Shallow: **0.0 81.7 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Undersized culvert.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 98.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 96.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **279.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

|      |     |     |      |      |      |      |      |      |      |      |      |      |      |      |     |       |
|------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 4.1  | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
| 0    | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 3     |
| N.S. | Low | Low | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S3.01-t1.01-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.08 mi up along T4.1-S3.1-t1 on left (North).**

1.1 Reach Description:

1.2 Towns: **Chelsea, Vershire**

1.3 Downstream Latitude: **43.96587**

1.3 Downstream Longitude: **-72.39326**

Step 2. Stream Type

2.1 Elevation Upstream: **1,813**

2.1 Elevation Downstream: **1,551**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,606.0 ft. 0.68 Miles**

2.3 Valley Slope: **7.3**

2.4 Channel Length: **3,770.0 ft. 0.71 Miles**

2.5 Channel Slope: **6.95 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **0.4 Square Miles**

2.8 Channel Width: **9.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 78.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 89.9 %**

Water Table Shallow: **0.0 78.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 93.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 60.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **113.0 ft. 113.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| Low | Low | Low | High | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.01-S3.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .26 mi S of unnamed road crossing on Beaver Meadow Brook.**

1.1 Reach Description:

1.2 Towns: **Chelsea, Vershire**

1.3 Downstream Latitude: **43.97331**

1.3 Downstream Longitude: **-72.40678**

Step 2. Stream Type

2.1 Elevation Upstream: **1,752**

2.1 Elevation Downstream: **1,380**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,053.0 ft. 1.15 Miles**

2.3 Valley Slope: **6.1**

2.4 Channel Length: **6,194.0 ft. 1.17 Miles**

2.5 Channel Slope: **6.01 %**

2.6 Sinuosity: **1.02**

2.7 Watershed Area: **1.2 Square Miles**

2.8 Channel Width: **14.3 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 57.4 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 94.6 %**

Water Table Shallow: **1.0 56.7 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 61.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 26-50**

Length w / less than 25 ft.: **123.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **871.0 ft. 14.1**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 3     |
| Low | Low | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Jenkins Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T4.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins where the river goes under Colton Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.96040**

1.3 Downstream Longitude: **-72.41695**

Step 2. Stream Type

2.1 Elevation Upstream: **1,967**

2.1 Elevation Downstream: **1,243**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,117.0 ft. 1.73 Miles**

2.3 Valley Slope: **7.9**

2.4 Channel Length: **9,443.0 ft. 1.79 Miles**

2.5 Channel Slope: **7.67 %**

2.6 Sinuosity: **1.04**

2.7 Watershed Area: **0.8 Square Miles**

2.8 Channel Width: **12.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Boulder**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 45.5 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 70.3 %**

Water Table Shallow: **0.0 45.5 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Over-widened at culvert.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 63.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2     |
| Low | Low | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Jail Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T5.01**  
 SGAT Version: **3**  
 Date Last Edited: **April, 23 2014**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Rt 110 and Rt 113. Ends .24 miles from the intersection along Rt 113.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.98802**

1.3 Downstream Longitude: **-72.44861**

Step 2. Stream Type

2.1 Elevation Upstream: **913**

2.1 Elevation Downstream: **823**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **1,078.0 ft. 0.20 Miles**

2.3 Valley Slope: **8.3**

2.4 Channel Length: **1,438.0 ft. 0.27 Miles**

2.5 Channel Slope: **6.26 %**

2.6 Sinuosity: **1.33**

2.7 Watershed Area: **4.8 Square Miles**

2.8 Channel Width: **26.1 feet**

2.9 Valley Width: **322.0 feet**

2.10 Confinement Ratio: **12.3**

2.10 Confinement Type: **Very Broad**

2.11 Reference Stream Type: **C**

Bedform: **Riffle-Pool**

Sub-Class Slope: **None**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Ice-Contact 93.1 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Flat**

3.4 Valley Slope Right: **Flat**

3.5 Soils

Hydrologic Group: **A 100.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **6.0 100.0 %**

Water Table Shallow: **6.0 100.0 %**

Erodibility: **slight 6.9 %**

7.4 Comments:

**All rock. Ice and debris jams have been recurrent. Sediment deposit observations influenced by snagging and dredging.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.7 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover:

Current Dominant Land Cover: **Urban 56.7 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **548.0 ft. 649.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 13.9 %**

5.3 Bank Armoring: **1,438.0 1.0 %**

Left: **781.1 ft.** Right: **772.0 ft.**

5.4 Channel Straightening: **762.0 53.0 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 790.3 ft.**

6.3 Channel Bars: **Side**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **0.0000000 ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **Multiple**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 1   | 2    | 2    | 2    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 2    | 17    |
| Low | High | High | N.S. | Low | High | High | High | Unk. | High | Low | N.S. | N.D. | N.D. | N.S. | High |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Jail Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T5.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .24 miles up along Rt 113 from intersection with Rt 110. Ends 3.12 miles up Rt 113.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.98768**

1.3 Downstream Longitude: **-72.44357**

Step 2. Stream Type

2.1 Elevation Upstream: **1,576**

2.1 Elevation Downstream: **913**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **15,742.0 ft. 2.98 Miles**

2.3 Valley Slope: **4.2**

2.4 Channel Length: **16,268.0 ft. 3.08 Miles**

2.5 Channel Slope: **4.08 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **4.7 Square Miles**

2.8 Channel Width: **26.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 54.7 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 63.7 %**

Water Table Shallow: **1.0 47.5 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.9 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 41.7 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **0-25 >100**

Length w / less than 25 ft.: **3,416.0 ft. 7,157.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **9 50.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **14,559.0 ft. 89.5**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 1,627.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 2    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 10    |
| Low | High | High | N.S. | High | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Jail Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Step 1. Reach Location **Begins .2 mi up T5.2-S1.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.99327**

1.3 Downstream Longitude: **-72.42864**

Step 2. Stream Type

2.1 Elevation Upstream: **1,291**

2.1 Elevation Downstream: **1,140**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **1,199.0 ft. 0.23 Miles**

2.3 Valley Slope: **12.6**

2.4 Channel Length: **1,200.0 ft. 0.23 Miles**

2.5 Channel Slope: **12.58 %**

2.6 Sinuosity: **1.00**

2.7 Watershed Area: **1.1 Square Miles**

2.8 Channel Width: **13.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **C 60.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 95.4 %**

Water Table Shallow: **1.0 60.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

# Phase 1 - Reach Summary Report

Reach ID: **T5.02-S1.01**

SGAT Version: **3**

Date Last Edited:

QA Status: **Step 7 done**

Is Reach An Impoundment?: **#Error**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 86.6 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Field**

Current Dominant Land Cover: **Urban 34.9 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **51-100 0-25**

Sub-dominant: **0-25 26-50**

Length w / less than 25 ft.: **444.0 ft. 672.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **1 5.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **No Data**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,136.0 ft. 94.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Bend**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 1   | 2    | 2    | 2    | 1   | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 11    |
| Low | High | High | High | Low | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jail Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T5.02-S1.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.1 mi up Rt 113 on left (North). Ends 1.02 mi up Black Hawk Rd on left (North).**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.99591**

1.3 Downstream Longitude: **-72.42723**

Step 2. Stream Type

2.1 Elevation Upstream: **1,526**

2.1 Elevation Downstream: **1,155**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,300.0 ft. 0.81 Miles**

2.3 Valley Slope: **8.6**

2.4 Channel Length: **4,455.0 ft. 0.84 Miles**

2.5 Channel Slope: **8.33 %**

2.6 Sinuosity: **1.04**

2.7 Watershed Area: **0.9 Square Miles**

2.8 Channel Width: **12.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 51.9 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 92.8 %**

Water Table Shallow: **0.0 51.9 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 56.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **>100 0-25**

Length w / less than 25 ft.: **2,984.0 ft. 1,158.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old): **Impoundment**

Type:

Use:

5.2 Bridges and Culverts: **1 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,856.0 ft. 41.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 9     |
| Low | High | High | High | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Jail Brook**  
 Topo Maps:  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

# Phase 1 - Reach Summary Report

Reach ID: **T5.02-S1.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

## Step 1. Reach Location

1.1 Reach Description:  
 1.2 Towns:  
 1.3 Downstream Latitude: **43.99619**  
 1.3 Downstream Longitude: **-72.42756**

## Step 2. Stream Type

2.1 Elevation Upstream:  
 2.1 Elevation Downstream:  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **0.00** Miles  
 2.3 Valley Slope: **0.0**  
 2.4 Channel Length: **1,359.0** ft. **0.26** Miles  
 2.5 Channel Slope: **0.00** %  
 2.6 Sinuosity: **0.00**  
 2.7 Watershed Area: **0.1** Square Miles  
 2.8 Channel Width: **4.6** feet  
 2.9 Valley Width: **0.00** feet  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type:  
 2.11 Reference Stream Type:  
 Bedform:  
 Sub-Class Slope:  
 Bed Material:

## Step 3. Basin Characteristics

3.1 Alluvial Fan:  
 3.2 Grade Control:  
 3.3 Dominant Geological Mat.: **Till** **100.0** %  
 3.3 Sub-dom. Geological Mat.:  
 3.4 Valley Slope Left:  
 3.4 Valley Slope Right:  
 3.5 Soils  
 Hydrologic Group: **B** **65.5** %  
 Flooding: **None/Rare** **100.0** %  
 Water Table Deep: **6.0** **65.5** %  
 Water Table Shallow: **6.0** **65.5** %  
 Erodibility: **Very Severe** **100.0** %  
 7.4 Comments:

## Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover:  
 Current Dominant Land Cover: **Forest** **74.8** %  
 Current Sub-Dominant Land Cover: **Field**  
 4.2 Corridor  
 Historic Land Cover::  
 Current Dominant Land Cover: **Forest** **50.7** %  
 Current Sub-Dominant Land Cover: **Field**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100** **>100**  
 Sub-dominant: **51-100** **51-100**  
 Length w / less than 25 ft.: **27.0** ft. **0.0** ft.

## 4.4 Ground Water Inputs:

## Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type:  
 Use:  
 5.2 Bridges and Culverts: **0** %  
 5.3 Bank Armoring: **0.0** %  
 Left: **0.0** ft. Right: **0.0** ft.  
 5.4 Channel Straightening: **0.0** %  
 5.5 Dredging History:

## Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **808.0** ft. **59.5**  
One Side Both Sides  
 Road: **0** ft. **0** ft.  
 Railroad: **0** ft. **0** ft.  
 Berm: **0** ft. **0** ft.  
 Improved Path: **0** ft. **0** ft.  
 6.2 Development: **0** ft. **0** ft.  
 6.3 Channel Bars:  
 6.4 Meander Migration:  
 6.5 Meander Width: **0.0** ft. Ratio: **0.0**  
 6.6 Wavelength: **0.0** ft. Ratio: **0.0**

## Step 7. Windshield Survey

7.1 Bank Erosion: **0** ft  
 7.2 Bank Height: **0** ft  
 7.3 Ice/Debris Jam Potential:

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6     |
| High | High | N.S. | N.S. | Unk. | Unk. | Unk. | N.S. | High | Unk. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royallon**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

# Phase 1 - Reach Summary Report

Reach ID: **T6.01**  
 SGAT Version: **3**  
 Date Last Edited: **April, 23 2014**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .46 mi S of intersection of Rt 110 and Upper Village Rd. Ends at intersection of the Dump Rd and Taylor Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **43.99310**

1.3 Downstream Longitude: **-72.44807**

Step 2. Stream Type

2.1 Elevation Upstream: **1,003**

2.1 Elevation Downstream: **817**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **7,036.0 ft. 1.33 Miles**

2.3 Valley Slope: **2.6**

2.4 Channel Length: **7,366.0 ft. 1.40 Miles**

2.5 Channel Slope: **2.53 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **15.5 Square Miles**

2.8 Channel Width: **43.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **None**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Ice-Contact 43.5 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **A 73.2 %**

Flooding: **None/Rare 86.9 %**

Water Table Deep: **6.0 88.5 %**

Water Table Shallow: **6.0 80.8 %**

Erodibility: **Moderate 43.4 %**

7.4 Comments:

**NULL**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.7 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover:

Current Dominant Land Cover: **Urban 33.0 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 0-25**

Sub-dominant: **>100 >100**

Length w / less than 25 ft.: **1,001.0 ft. 2,303.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **6 10.9 %**

5.3 Bank Armoring: **4,110.9 55.8 %**

Left: **1,915.1 ft.** Right: **2,195.8 ft.**

5.4 Channel Straightening: **3,168.9 43.0 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **1,081.0 ft. 1,271.2 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **36.0800018 ft**

7.2 Bank Height: **3 ft**

7.3 Ice/Debris Jam Potential: **Debris**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2 | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|-----|-------|
| 2    | 2    | 2    | 0    | 1   | 2    | 2    | 2    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 1   | 17    |
| High | High | High | N.S. | Low | High | High | High | Unk. | High | Low | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Dump Rd and Taylor Rd. Ends at Kennedy Corners.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.00710**

1.3 Downstream Longitude: **-72.43780**

Step 2. Stream Type

2.1 Elevation Upstream: **1,162**

2.1 Elevation Downstream: **1,001**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,436.0 ft. 0.65 Miles**

2.3 Valley Slope: **4.7**

2.4 Channel Length: **3,800.0 ft. 0.72 Miles**

2.5 Channel Slope: **4.24 %**

2.6 Sinuosity: **1.11**

2.7 Watershed Area: **7.1 Square Miles**

2.8 Channel Width: **31.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Bedrock**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 85.1 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 85.4 %**

Water Table Shallow: **1.0 83.3 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 80.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 49.7 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **51-100 26-50**

Length w / less than 25 ft.: **456.0 ft. 1,634.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **3,307.0 ft. 87.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 190.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |       |
|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 9     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.01-S1.01-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at Kennedy Corners and heads E along Cornith Rd. Ends 1.71 miles up Cornith Rd.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.01498**

1.3 Downstream Longitude: **-72.42932**

Step 2. Stream Type

2.1 Elevation Upstream: **1,636**

2.1 Elevation Downstream: **1,158**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,705.0 ft. 1.84 Miles**

2.3 Valley Slope: **4.9**

2.4 Channel Length: **10,129.0 ft. 1.92 Miles**

2.5 Channel Slope: **4.72 %**

2.6 Sinuosity: **1.04**

2.7 Watershed Area: **2.6 Square Miles**

2.8 Channel Width: **19.8 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Boulder**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **D 68.2 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 98.2 %**

Water Table Shallow: **0.0 68.2 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.4 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 40.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **810.0 ft. 1,721.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,201.0 ft. 11.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6     |
| Low | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Step 1. Reach Location **Begins .52 miles up Cornith Rd on Left.**

1.1 Reach Description:

1.2 Towns: **Chelsea, Washington**

1.3 Downstream Latitude: **44.01459**

1.3 Downstream Longitude: **-72.41943**

Step 2. Stream Type

2.1 Elevation Upstream: **1,595**

2.1 Elevation Downstream: **1,308**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,692.0 ft. 0.89 Miles**

2.3 Valley Slope: **6.1**

2.4 Channel Length: **4,748.0 ft. 0.90 Miles**

2.5 Channel Slope: **6.04 %**

2.6 Sinuosity: **1.01**

2.7 Watershed Area: **0.7 Square Miles**

2.8 Channel Width: **11.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Hilly**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **C 56.0 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 87.9 %**

Water Table Shallow: **1.0 56.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

# Phase 1 - Reach Summary Report

Reach ID: **T6.01-S1.01-t1.01-s1.01**

SGAT Version: **3**

Date Last Edited:

QA Status: **Step 7 done**

Is Reach An Impoundment?: **#Error**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 84.2 %**

Current Sub-Dominant Land Cover: **Field**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 71.2 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **0.0 ft. 1,566.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 1   | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4     |
| Low | Low | High | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.01-S1.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at Kennedy Corners and heads NE. Ends .17 mi S of South Washington.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.01511**

1.3 Downstream Longitude: **-72.43005**

Step 2. Stream Type

2.1 Elevation Upstream: **1,362**

2.1 Elevation Downstream: **1,158**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,306.0 ft. 1.19 Miles**

2.3 Valley Slope: **3.2**

2.4 Channel Length: **6,709.0 ft. 1.27 Miles**

2.5 Channel Slope: **3.04 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **4.2 Square Miles**

2.8 Channel Width: **24.6 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 95.9 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 90.3 %**

Flooding: **None/Rare 95.9 %**

Water Table Deep: **2.0 92.1 %**

Water Table Shallow: **0.0 90.3 %**

Erodibility: **Very Severe 95.9 %**

7.4 Comments:

**Stream ford.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 78.7 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Urban 42.8 %**

Current Sub-Dominant Land Cover: **Forest**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 0-25**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **469.0 ft. 2,750.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **4,991.0 ft. 74.4**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.01-S1.02-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just S of South Washington and heads N.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.02692**

1.3 Downstream Longitude: **-72.41440**

Step 2. Stream Type

2.1 Elevation Upstream: **1,590**

2.1 Elevation Downstream: **1,357**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,832.0 ft. 1.10 Miles**

2.3 Valley Slope: **4.0**

2.4 Channel Length: **6,020.0 ft. 1.14 Miles**

2.5 Channel Slope: **3.87 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **1.2 Square Miles**

2.8 Channel Width: **14.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 87.9 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 87.8 %**

Flooding: **None/Rare 87.9 %**

Water Table Deep: **2.0 87.9 %**

Water Table Shallow: **0.0 87.8 %**

Erodibility: **Very Severe 87.9 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 87.3 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 26-50**

Length w / less than 25 ft.: **541.0 ft. 301.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,789.0 ft. 29.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **181.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 7     |
| High | High | Low | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.01-S1.03**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just downstream of South Washington and heads E.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.02678**

1.3 Downstream Longitude: **-72.41410**

Step 2. Stream Type

2.1 Elevation Upstream: **1,616**

2.1 Elevation Downstream: **1,362**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,693.0 ft. 1.08 Miles**

2.3 Valley Slope: **4.5**

2.4 Channel Length: **5,891.0 ft. 1.12 Miles**

2.5 Channel Slope: **4.31 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **1.8 Square Miles**

2.8 Channel Width: **17.1 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 88.8 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 58.6 %**

Flooding: **None/Rare 88.8 %**

Water Table Deep: **2.0 88.7 %**

Water Table Shallow: **0.0 58.6 %**

Erodibility: **Very Severe 88.8 %**

7.4 Comments:

**Small stream.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.0 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 81.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **294.0 ft. 1,119.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,904.0 ft. 32.3**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 118.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |       |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 9     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.01-S1.03-t1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins .32 mi up along T6.1-S1.3 on left (North).**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.02899**

1.3 Downstream Longitude: **-72.40858**

Step 2. Stream Type

2.1 Elevation Upstream: **1,676**

2.1 Elevation Downstream: **1,437**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,026.0 ft. 0.76 Miles**

2.3 Valley Slope: **5.9**

2.4 Channel Length: **4,388.0 ft. 0.83 Miles**

2.5 Channel Slope: **5.45 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **0.7 Square Miles**

2.8 Channel Width: **11.2 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Steep**

3.5 Soils

Hydrologic Group: **D 63.3 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 96.3 %**

Water Table Shallow: **0.0 63.3 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 72.5 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 54.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **219.0 ft. 1,491.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1  | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 2    | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 6     |
| High | Low | High | N.S. | Unk. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Dump Rd and Taylor Rd and heads NE.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.00697**

1.3 Downstream Longitude: **-72.43801**

Step 2. Stream Type

2.1 Elevation Upstream: **1,076**

2.1 Elevation Downstream: **1,003**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,456.0 ft. 0.65 Miles**

2.3 Valley Slope: **2.1**

2.4 Channel Length: **4,079.0 ft. 0.77 Miles**

2.5 Channel Slope: **1.79 %**

2.6 Sinuosity: **1.18**

2.7 Watershed Area: **7.6 Square Miles**

2.8 Channel Width: **32.0 feet**

2.9 Valley Width: **140.0 feet**

2.10 Confinement Ratio: **4.4**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **c**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Alluvial 76.3 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **B 76.3 %**

Flooding: **Frequent 76.3 %**

Water Table Deep: **3.0 76.3 %**

Water Table Shallow: **1.5 76.3 %**

Erodibility: **slight 23.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 83.4 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 56.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **2,406.0 ft. 856.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: ft. Right: ft.

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,597.0 ft. 63.7**

One Side Both Sides

Road: ft. ft.

Railroad: ft. ft.

Berm: ft. ft.

Improved Path: ft. ft.

6.2 Development: **204.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

|      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |       |
|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2 | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 9     |
| High | High | High | N.S. | N.S. | Unk. | Unk. | N.S. | High | Low | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.02-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Dump Rd and Foster Rd. Ends 2.4 mi up Foster Rd on right (East).**

1.1 Reach Description:

1.2 Towns: **Chelsea, Washington**

1.3 Downstream Latitude: **44.01678**

1.3 Downstream Longitude: **-72.44150**

Step 2. Stream Type

2.1 Elevation Upstream: **1,859**

2.1 Elevation Downstream: **1,077**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **14,121.0 ft. 2.67 Miles**

2.3 Valley Slope: **5.5**

2.4 Channel Length: **14,692.0 ft. 2.78 Miles**

2.5 Channel Slope: **5.32 %**

2.6 Sinuosity: **1.04**

2.7 Watershed Area: **1.7 Square Miles**

2.8 Channel Width: **16.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **A**

Bedform: **Step-Pool**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Multiple**

3.3 Dominant Geological Mat.: **Till 94.7 %**

3.3 Sub-dom. Geological Mat.: **Other**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 45.2 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 75.6 %**

Water Table Shallow: **1.0 44.9 %**

Erodibility: **Very Severe 93.3 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 84.1 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 55.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **1,616.0 ft. 293.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,624.0 ft. 17.9**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 441.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|-----|-----|------|------|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 2    | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| High | Low | Low | N.S. | Unk. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.03**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Dump Rd and Foster Rd. Ends 1.54 mi up Dump Rd from the intersection.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.01640**

1.3 Downstream Longitude: **-72.44201**

Step 2. Stream Type

2.1 Elevation Upstream: **1,219**

2.1 Elevation Downstream: **1,077**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **8,126.0 ft. 1.54 Miles**

2.3 Valley Slope: **1.7**

2.4 Channel Length: **8,843.0 ft. 1.67 Miles**

2.5 Channel Slope: **1.61 %**

2.6 Sinuosity: **1.09**

2.7 Watershed Area: **5.6 Square Miles**

2.8 Channel Width: **28.0 feet**

2.9 Valley Width: **229.0 feet**

2.10 Confinement Ratio: **8.2**

2.10 Confinement Type: **Broad**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **c**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Alluvial 42.7 %**

3.3 Sub-dom. Geological Mat.: **Till**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 53.9 %**

Flooding: **None/Rare 57.3 %**

Water Table Deep: **1.5 37.8 %**

Water Table Shallow: **0.0 48.3 %**

Erodibility: **Moderate 48.7 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 83.1 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 44.9 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **0-25 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **6,632.0 ft. 2,564.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: ft. Right: ft.

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,909.0 ft. 32.9**

One Side Both Sides

Road: ft. ft.

Railroad: ft. ft.

Berm: ft. ft.

Improved Path: ft. ft.

6.2 Development: **0.0 ft. 265.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **152 ft. Ratio: 5.4**

6.6 Wavelength: **459 ft. Ratio: 16.4**

Step 7. Windshield Survey

7.1 Bank Erosion: ft

7.2 Bank Height: **Low** ft

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 1   | 0    | 0    | 2    | 0    | 0    | 11    |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | Low | N.S. | N.S. | High | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.03-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just south of the upstream reach break on T6.3 and heads N.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.03307**

1.3 Downstream Longitude: **-72.45500**

Step 2. Stream Type

2.1 Elevation Upstream: **1,750**

2.1 Elevation Downstream: **1,220**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **4,677.0 ft. 0.89 Miles**

2.3 Valley Slope: **11.3**

2.4 Channel Length: **4,933.0 ft. 0.93 Miles**

2.5 Channel Slope: **10.74 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **0.3 Square Miles**

2.8 Channel Width: **7.6 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 95.6 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **C 56.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 49.7 %**

Water Table Shallow: **6.0 46.0 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Small stream.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 59.1 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 82.4 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **2,121.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **797.0 ft. 16.2**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|-----|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|-------|
| 2    | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6     |
| High | Low | High | N.S. | Unk. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.04**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.54 mi up Dump Rd from intersection of Dump Rd and Foster Rd. Ends 2.69 mi up Dump Rd from this intersection.**

1.1 Reach Description:  
 1.2 Towns: **Washington**  
 1.3 Downstream Latitude: **44.03289**  
 1.3 Downstream Longitude: **-72.45463**

Step 2. Stream Type

2.1 Elevation Upstream: **1,399**  
 2.1 Elevation Downstream: **1,219**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **6,617.0 ft. 1.25 Miles**  
 2.3 Valley Slope: **2.7**  
 2.4 Channel Length: **6,828.0 ft. 1.29 Miles**  
 2.5 Channel Slope: **2.64 %**  
 2.6 Sinuosity: **1.03**  
 2.7 Watershed Area: **4.4 Square Miles**  
 2.8 Channel Width: **25.2 feet**  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**  
 Sub-Class Slope: **none**  
 Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **Ledge**  
 3.3 Dominant Geological Mat.: **Till 96.3 %**  
 3.3 Sub-dom. Geological Mat.: **Ice-Contact**  
 3.4 Valley Slope Left: **Ext. Steep**  
 3.4 Valley Slope Right: **Very Steep**  
 3.5 Soils  
 Hydrologic Group: **C 90.9 %**  
 Flooding: **None/Rare 100.0 %**  
 Water Table Deep: **6.0 48.8 %**  
 Water Table Shallow: **6.0 48.8 %**  
 Erodibility: **Very Severe 100.0 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 86.7 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 56.3 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100 >100**  
 Sub-dominant: **51-100 51-100**  
 Length w / less than 25 ft.: **204.0 ft. 409.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **1 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft. Right: ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **661.0 ft. 9.7**  
One Side Both Sides  
 Road: **ft. ft.**  
 Railroad: **ft. ft.**  
 Berm: **ft. ft.**  
 Improved Path: **ft. ft.**  
 6.2 Development: **0.0 ft. 137.0 ft.**  
 6.3 Channel Bars: **Mid-channel**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Low ft**  
 7.3 Ice/Debris Jam Potential: **None**

|      |     |     |      |      |      |      |      |     |      |     |      |      |      |     |      |       |
|------|-----|-----|------|------|------|------|------|-----|------|-----|------|------|------|-----|------|-------|
| 4.1  | 4.2 | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
| 2    | 1   | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 1   | 0    | 0    | 0    | 1   | 0    | 7     |
| High | Low | Low | N.S. | Unk. | Unk. | Unk. | N.S. | Low | N.S. | Low | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.04-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just S of upstream reach break of T6.4 on E side.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.04621**

1.3 Downstream Longitude: **-72.43934**

Step 2. Stream Type

2.1 Elevation Upstream: **1,842**

2.1 Elevation Downstream: **1,406**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **5,104.0 ft. 0.97 Miles**

2.3 Valley Slope: **8.5**

2.4 Channel Length: **5,269.0 ft. 1.00 Miles**

2.5 Channel Slope: **8.27 %**

2.6 Sinuosity: **1.03**

2.7 Watershed Area: **0.4 Square Miles**

2.8 Channel Width: **8.3 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Hilly**

3.5 Soils

Hydrologic Group: **C 52.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 54.1 %**

Water Table Shallow: **1.0 52.5 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 94.8 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 99.1 %**

Current Sub-Dominant Land Cover: **Field**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 26-50**

Length w / less than 25 ft.: **0.0 ft. 52.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0 0.0 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     |
| Low | N.S. | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.05**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 2.69 mi Hart Hollow Rd from the intersection of Dump Rd and Foster Rd.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.04669**

1.3 Downstream Longitude: **-72.43986**

Step 2. Stream Type

2.1 Elevation Upstream: **1,682**

2.1 Elevation Downstream: **1,399**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **9,276.0 ft. 1.76 Miles**

2.3 Valley Slope: **3.1**

2.4 Channel Length: **9,873.0 ft. 1.87 Miles**

2.5 Channel Slope: **2.87 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **3.1 Square Miles**

2.8 Channel Width: **21.5 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Plane Bed**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **D 36.6 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 69.5 %**

Water Table Shallow: **0.0 36.6 %**

Erodibility: **Very Severe 100.0 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 89.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 54.3 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **1,086.0 ft. 1,184.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,148.0 ft. 21.8**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **99.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 7     |
| Low | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.05-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just upstream of T6.5 downstream reach break.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.04805**

1.3 Downstream Longitude: **-72.43999**

Step 2. Stream Type

2.1 Elevation Upstream: **1,745**

2.1 Elevation Downstream: **1,409**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **8,270.0 ft. 1.57 Miles**

2.3 Valley Slope: **4.1**

2.4 Channel Length: **10,385.0 ft. 1.97 Miles**

2.5 Channel Slope: **3.24 %**

2.6 Sinuosity: **1.26**

2.7 Watershed Area: **0.9 Square Miles**

2.8 Channel Width: **12.7 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrow**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 73.0 %**

3.3 Sub-dom. Geological Mat.: **Other**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 62.6 %**

Flooding: **None/Rare 87.4 %**

Water Table Deep: **2.0 65.9 %**

Water Table Shallow: **0.0 61.0 %**

Erodibility: **Severe 73.1 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.4 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 92.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 51-100**

Length w / less than 25 ft.: **311.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,843.0 ft. 17.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **Culvert**

| 4.1 | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3 | Total |
|-----|-----|------|------|------|------|------|------|-----|------|------|------|------|------|-----|-----|-------|
| 1   | 1   | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 1   | 5     |
| Low | Low | N.S. | N.S. | Unk. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | N.D. | N.D. | Low | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Hart Hollow Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T6.05-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 4.23 mi up Hart Hollow rd from the intersection with Foster Rd.**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.06538**

1.3 Downstream Longitude: **-72.42760**

Step 2. Stream Type

2.1 Elevation Upstream: **1,854**

2.1 Elevation Downstream: **1,605**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,350.0 ft. 0.63 Miles**

2.3 Valley Slope: **7.4**

2.4 Channel Length: **3,518.0 ft. 0.67 Miles**

2.5 Channel Slope: **7.08 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **0.7 Square Miles**

2.8 Channel Width: **11.4 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 100.0 %**

3.3 Sub-dom. Geological Mat.:

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D 50.8 %**

Flooding: **None/Rare 100.0 %**

Water Table Deep: **2.0 48.6 %**

Water Table Shallow: **6.0 44.9 %**

Erodibility: **Very Severe 93.5 %**

7.4 Comments:

**Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 90.0 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 83.7 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 51-100**

Length w / less than 25 ft.: **0.0 ft. 70.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **1,185.0 ft. 33.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **No Data ft**

7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| Low | High | N.S. | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Jones Pond Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T7.01**  
 SGAT Version: **3**  
 Date Last Edited: **August, 05 2013**  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location      **Reach is along Edwards Rd for 2.66 mi from its intersection with Rt 110.**

1.1 Reach Description:

1.2 Towns: **Chelsea**

1.3 Downstream Latitude: **44.03692**

1.3 Downstream Longitude: **-72.47567**

Step 2. Stream Type

2.1 Elevation Upstream: **1,647**

2.1 Elevation Downstream: **997**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **13,277.0 ft.**      **2.51 Miles**

2.3 Valley Slope: **4.9**

2.4 Channel Length: **13,951.0 ft.**      **2.64 Miles**

2.5 Channel Slope: **4.66 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **2.9 Square Miles**

2.8 Channel Width: **20.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **Yes**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till**      **90.5 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **D**      **38.9 %**

Flooding: **None/Rare**      **94.4 %**

Water Table Deep: **2.0**      **56.3 %**

Water Table Shallow: **0.0**      **44.5 %**

Erodibility: **Very Severe**      **94.3 %**

7.4 Comments:

**Stream ford & mass failures. Ph2-2012: debris jams common, several culvert failures (not necessarily related to debris) over time at different locations**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest**      **69.9 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest**      **42.5 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer      Left Bank      Right Bank

Dominant: **>100**      **>100**

Sub-dominant: **51-100**      **0-25**

Length w / less than 25 ft.: **0.0 ft.**      **0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **0**      **0.0 %**

5.3 Bank Armoring: **0.0**      **0.0 %**

Left: **0.0 ft.**      Right: **0.0 ft.**

5.4 Channel Straightening: **0.0**      **0.0 %**

5.5 Dredging History: **Dredging**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **357.3 ft.**      **2.6**

One Side      Both Sides

Road: **ft.**      **ft.**

Railroad: **ft.**      **ft.**

Berm: **ft.**      **ft.**

Improved Path: **ft.**      **ft.**

6.2 Development: **0.0 ft.**      **0.0 ft.**

6.3 Channel Bars: **Multiple**

6.4 Meander Migration: **Flood Chute**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **478.2000122**      **ft**

7.2 Bank Height: **3**      **ft**

7.3 Ice/Debris Jam Potential: **Multiple**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4 | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------|------|-------|
| 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 1   | 1   | 0    | 0    | 0    | 2    | 10    |
| High | High | N.S. | N.S. | N.S. | N.S. | N.S. | High | N.S. | N.S. | Low | Low | N.D. | N.D. | N.S. | High |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Jones Pond Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

# Phase 1 - Reach Summary Report

Reach ID: **T7.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

## Step 1. Reach Location **Begins up Edwards rd 1.76 mi on left (SW).**

1.1 Reach Description:  
 1.2 Towns: **Chelsea**  
 1.3 Downstream Latitude: **44.04322**  
 1.3 Downstream Longitude: **-72.50689**

## Step 2. Stream Type

2.1 Elevation Upstream: **1,640**  
 2.1 Elevation Downstream: **1,438**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **2,180.0 ft. 0.41 Miles**  
 2.3 Valley Slope: **9.3**  
 2.4 Channel Length: **2,281.0 ft. 0.43 Miles**  
 2.5 Channel Slope: **8.86 %**  
 2.6 Sinuosity: **1.05**  
 2.7 Watershed Area: **0.2 Square Miles**  
 2.8 Channel Width: **6.2 feet**  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Semi-confined**  
 2.11 Reference Stream Type: **A**  
 Bedform: **Cascade**  
 Sub-Class Slope: **none**  
 Bed Material: **No Data**

## Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till 99.7 %**  
 3.3 Sub-dom. Geological Mat.: **Alluvial**  
 3.4 Valley Slope Left: **Very Steep**  
 3.4 Valley Slope Right: **Very Steep**  
 3.5 Soils  
 Hydrologic Group: **D 88.9 %**  
 Flooding: **None/Rare 99.7 %**  
 Water Table Deep: **2.0 88.9 %**  
 Water Table Shallow: **0.0 89.2 %**  
 Erodibility: **Very Severe 99.7 %**

7.4 Comments:  
**Reach not visible for windshield survey.**

## Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 74.6 %**  
 Current Sub-Dominant Land Cover: **Field**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 99.7 %**  
 Current Sub-Dominant Land Cover:  
 4.3 Riparian Buffer **Left Bank Right Bank**  
 Dominant: **>100 >100**  
 Sub-dominant: **51-100 51-100**  
 Length w / less than 25 ft.: **0.0 ft. 0.0 ft.**

4.4 Ground Water Inputs: **None**

## Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **0 0.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft. Right: ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **None**

## Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**  
**One Side Both Sides**  
 Road: **ft. ft.**  
 Railroad: **ft. ft.**  
 Berm: **ft. ft.**  
 Improved Path: **ft. ft.**  
 6.2 Development: **0.0 ft. 0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

## Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **No Data ft**  
 7.3 Ice/Debris Jam Potential: **No Data**

| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     |
| Low | N.S. | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Jones Pond Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltan**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T7.01-S2.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins up Edwards rd 2.02 mi on left (SW).**

1.1 Reach Description:  
 1.2 Towns: **Chelsea**  
 1.3 Downstream Latitude: **44.04512**  
 1.3 Downstream Longitude: **-72.51114**

Step 2. Stream Type

2.1 Elevation Upstream: **1,618**  
 2.1 Elevation Downstream: **1,475**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **1,950.0 ft.** **0.37** Miles  
 2.3 Valley Slope: **7.3**  
 2.4 Channel Length: **1,933.0 ft.** **0.37** Miles  
 2.5 Channel Slope: **7.40 %**  
 2.6 Sinuosity: **0.99**  
 2.7 Watershed Area: **0.3** Square Miles  
 2.8 Channel Width: **7.5** feet  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **A**

Bedform: **Cascade**  
 Sub-Class Slope: **none**  
 Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till** **100.0 %**  
 3.3 Sub-dom. Geological Mat.:  
 3.4 Valley Slope Left: **Steep**  
 3.4 Valley Slope Right: **Steep**  
 3.5 Soils  
 Hydrologic Group: **D** **72.9 %**  
 Flooding: **None/Rare** **100.0 %**  
 Water Table Deep: **2.0** **100.0 %**  
 Water Table Shallow: **0.0** **72.9 %**  
 Erodibility: **Very Severe** **100.0 %**  
 7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **81.5 %**  
 Current Sub-Dominant Land Cover: **Crop**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **88.7 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100** **>100**  
 Sub-dominant: **0-25** **0-25**  
 Length w / less than 25 ft.: **193.0 ft.** **231.0 ft.**

4.4 Ground Water Inputs: **None**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **1** %  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft.** Right: **ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft.** **0.0**  
One Side Both Sides  
 Road: **ft.** **ft.**  
 Railroad: **ft.** **ft.**  
 Berm: **ft.** **ft.**  
 Improved Path: **ft.** **ft.**  
 6.2 Development: **0.0 ft.** **0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Medium** **ft**  
 7.3 Ice/Debris Jam Potential: **None**

|      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1  | 4.2 | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 2    | 1   | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5     |
| High | Low | High | N.S. | Unk. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

Basin: **White**  
 Stream Name: **Unnamed Trib to Jones Pond Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

# Phase 1 - Reach Summary Report

Reach ID: **T7.01-S3.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

## Step 1. Reach Location **Begins up Edwards rd 2.23 mi on left (SW).**

1.1 Reach Description:  
 1.2 Towns: **Chelsea**  
 1.3 Downstream Latitude: **44.04774**  
 1.3 Downstream Longitude: **-72.51329**

## Step 2. Stream Type

2.1 Elevation Upstream: **1,680**  
 2.1 Elevation Downstream: **1,510**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **1,959.0 ft. 0.37 Miles**  
 2.3 Valley Slope: **8.7**  
 2.4 Channel Length: **2,225.0 ft. 0.42 Miles**  
 2.5 Channel Slope: **7.64 %**  
 2.6 Sinuosity: **1.14**  
 2.7 Watershed Area: **0.2 Square Miles**  
 2.8 Channel Width: **6.6 feet**  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Semi-confined**  
 2.11 Reference Stream Type: **A**

Bedform: **Cascade**  
 Sub-Class Slope: **none**  
 Bed Material: **Cobble**

## Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till 100.0 %**  
 3.3 Sub-dom. Geological Mat.:  
 3.4 Valley Slope Left: **Hilly**  
 3.4 Valley Slope Right: **Steep**  
 3.5 Soils  
 Hydrologic Group: **D 75.0 %**  
 Flooding: **None/Rare 100.0 %**  
 Water Table Deep: **2.0 99.6 %**  
 Water Table Shallow: **0.0 75.0 %**  
 Erodibility: **Very Severe 100.0 %**  
 7.4 Comments:

**Small stream.**

## Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest 71.5 %**  
 Current Sub-Dominant Land Cover: **Crop**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Crop 40.7 %**  
 Current Sub-Dominant Land Cover: **Forest**  
 4.3 Riparian Buffer **Left Bank Right Bank**  
 Dominant: **51-100 0-25**  
 Sub-dominant: **>100 >100**  
 Length w / less than 25 ft.: **111.0 ft. 1,335.0 ft.**

4.4 Ground Water Inputs: **Abundant**

## Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **1 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft. Right: ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **None**

## Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**  
**One Side Both Sides**  
 Road: **ft. ft.**  
 Railroad: **ft. ft.**  
 Berm: **ft. ft.**  
 Improved Path: **ft. ft.**  
 6.2 Development: **0.0 ft. 0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

## Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **Low ft**  
 7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1 | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 7     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | Low | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Chelsea Road Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T8.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just S of intersection of Rt 110 and Chelsea Rd. Ends 1.47 mi up Chelsea Rd on left (West).**

1.1 Reach Description:

1.2 Towns: **Washington**

1.3 Downstream Latitude: **44.04717**

1.3 Downstream Longitude: **-72.47679**

Step 2. Stream Type

2.1 Elevation Upstream: **1,349**

2.1 Elevation Downstream: **1,047**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **6,836.0 ft. 1.29 Miles**

2.3 Valley Slope: **4.4**

2.4 Channel Length: **7,710.0 ft. 1.46 Miles**

2.5 Channel Slope: **3.92 %**

2.6 Sinuosity: **1.13**

2.7 Watershed Area: **5.2 Square Miles**

2.8 Channel Width: **27.0 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Boulder**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 67.9 %**

3.3 Sub-dom. Geological Mat.: **Ice-Contact**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **D 54.2 %**

Flooding: **None/Rare 89.4 %**

Water Table Deep: **2.0 55.9 %**

Water Table Shallow: **0.0 53.7 %**

Erodibility: **Very Severe 76.3 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 84.9 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 56.2 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **3,006.0 ft. 2,929.0 ft.**

4.4 Ground Water Inputs: **Minimal**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **2,930.0 ft. 38.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Chelsea Road Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T8.01-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins at intersection of Chelsea Rd and Stellar Rd and heads N.**

1.1 Reach Description:

1.2 Towns: **Washington, Williamstown**

1.3 Downstream Latitude: **44.05115**

1.3 Downstream Longitude: **-72.48499**

Step 2. Stream Type

2.1 Elevation Upstream: **1,640**

2.1 Elevation Downstream: **1,170**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **11,266.0 ft. 2.13 Miles**

2.3 Valley Slope: **4.2**

2.4 Channel Length: **11,776.0 ft. 2.23 Miles**

2.5 Channel Slope: **3.99 %**

2.6 Sinuosity: **1.05**

2.7 Watershed Area: **2.3 Square Miles**

2.8 Channel Width: **18.9 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Semi-confined**

2.11 Reference Stream Type: **B**

Bedform: **Step-Pool**

Sub-Class Slope: **a**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **Ledge**

3.3 Dominant Geological Mat.: **Till 80.8 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Very Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 54.2 %**

Flooding: **None/Rare 81.9 %**

Water Table Deep: **2.0 76.4 %**

Water Table Shallow: **1.0 54.2 %**

Erodibility: **Very Severe 81.9 %**

7.4 Comments:

**Bifurcated flow.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 80.8 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 52.6 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer

Left Bank

Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **2,944.0 ft. 824.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **3 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft. Right: ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft. 0.0**

One Side

Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **236.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **Culvert**

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |       |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-------|
| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3 | Total |
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1   | 7     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | Low |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Chelsea Road Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T8.02**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.47 miles up Chelsea Rd on left (West). Ends just after wetlands.**

1.1 Reach Description:

1.2 Towns: **Washington, Williamstown**

1.3 Downstream Latitude: **44.06179**

1.3 Downstream Longitude: **-72.49022**

Step 2. Stream Type

2.1 Elevation Upstream: **1,385**

2.1 Elevation Downstream: **1,349**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **3,171.0 ft. 0.60 Miles**

2.3 Valley Slope: **1.1**

2.4 Channel Length: **3,541.0 ft. 0.67 Miles**

2.5 Channel Slope: **1.02 %**

2.6 Sinuosity: **1.12**

2.7 Watershed Area: **2.3 Square Miles**

2.8 Channel Width: **18.8 feet**

2.9 Valley Width: **338.0 feet**

2.10 Confinement Ratio: **18.0**

2.10 Confinement Type: **Very Broad**

2.11 Reference Stream Type: **E**

Bedform: **Riffle-Pool**

Sub-Class Slope: **none**

Bed Material: **Gravel**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 75.5 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Ext. Steep**

3.4 Valley Slope Right: **Ext. Steep**

3.5 Soils

Hydrologic Group: **D 83.1 %**

Flooding: **None/Rare 75.5 %**

Water Table Deep: **2.0 66.4 %**

Water Table Shallow: **0.0 83.1 %**

Erodibility: **Very Severe 75.5 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 88.8 %**

Current Sub-Dominant Land Cover: **Urban**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 75.3 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **0-25 0-25**

Length w / less than 25 ft.: **354.0 ft. 247.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **1 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **353.0 ft. 10.0**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **None**

6.4 Meander Migration: **Migration**

6.5 Meander Width: **74 ft. Ratio: 3.9**

6.6 Wavelength: **153 ft. Ratio: 8.1**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Medium ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1 | 4.2  | 4.3 | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1 | 6.2  | 6.3  | 6.4  | 6.5 | 6.6  | 7.1  | 7.3  | Total |
|-----|------|-----|------|------|------|------|------|-----|------|------|------|-----|------|------|------|-------|
| 1   | 2    | 1   | 0    | 0    | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 1   | 0    | 0    | 0    | 6     |
| Low | High | Low | N.S. | Unk. | Unk. | Unk. | N.S. | Low | N.S. | N.S. | N.S. | Low | N.S. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Unnamed Trib to Chelsea Road Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T8.02-S1.01**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins 1.32 mi up Chelsea Rd on right (East). Ends 2.17 mi up Chelsea Rd on right (West).**

1.1 Reach Description:

1.2 Towns: **Washington, Williamstown**

1.3 Downstream Latitude: **44.06613**

1.3 Downstream Longitude: **-72.49191**

Step 2. Stream Type

2.1 Elevation Upstream: **1,547**

2.1 Elevation Downstream: **1,355**

2.1 Is Gradient Gentle?: **#Error**

2.2 Valley Length: **2,390.0 ft. 0.45 Miles**

2.3 Valley Slope: **8.0**

2.4 Channel Length: **2,535.0 ft. 0.48 Miles**

2.5 Channel Slope: **7.57 %**

2.6 Sinuosity: **1.06**

2.7 Watershed Area: **0.5 Square Miles**

2.8 Channel Width: **9.3 feet**

2.9 Valley Width: **feet**

2.10 Confinement Ratio: **0.0**

2.10 Confinement Type: **Narrowly Confined**

2.11 Reference Stream Type: **A**

Bedform: **Cascade**

Sub-Class Slope: **none**

Bed Material: **Cobble**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**

3.2 Grade Control: **None**

3.3 Dominant Geological Mat.: **Till 96.9 %**

3.3 Sub-dom. Geological Mat.: **Alluvial**

3.4 Valley Slope Left: **Steep**

3.4 Valley Slope Right: **Very Steep**

3.5 Soils

Hydrologic Group: **C 67.4 %**

Flooding: **None/Rare 96.9 %**

Water Table Deep: **2.0 96.9 %**

Water Table Shallow: **1.0 67.4 %**

Erodibility: **Very Severe 96.9 %**

7.4 Comments:

Step 4. Land Cover - Reach Hydrology

4.1 Watershed

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 74.5 %**

Current Sub-Dominant Land Cover: **Crop**

4.2 Corridor

Historic Land Cover: **Forest**

Current Dominant Land Cover: **Forest 43.1 %**

Current Sub-Dominant Land Cover: **Urban**

4.3 Riparian Buffer Left Bank Right Bank

Dominant: **>100 >100**

Sub-dominant: **51-100 0-25**

Length w / less than 25 ft.: **507.0 ft. 354.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):

Type: **None**

Use:

5.2 Bridges and Culverts: **2 %**

5.3 Bank Armoring: **0.0 %**

Left: **ft.** Right: **ft.**

5.4 Channel Straightening: **0.0 %**

5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **549.0 ft. 21.7**

One Side Both Sides

Road: **ft. ft.**

Railroad: **ft. ft.**

Berm: **ft. ft.**

Improved Path: **ft. ft.**

6.2 Development: **0.0 ft. 0.0 ft.**

6.3 Channel Bars: **Mid-channel**

6.4 Meander Migration: **None**

6.5 Meander Width: **ft. Ratio: 0.0**

6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**

7.2 Bank Height: **Low ft**

7.3 Ice/Debris Jam Potential: **None**

| 4.1  | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3 | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-------|
| 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 1   | 0    | 0    | 0    | 0    | 0    | 9     |
| High | High | High | N.S. | Unk. | Unk. | Unk. | N.S. | High | N.S. | Low | N.S. | N.D. | N.D. | N.S. | N.S. |       |

# White River - First Branch

# Phase 1 - Reach Summary Report

Basin: **White**  
 Stream Name: **Chelsea Road Brook**  
 Topo Maps: **Washington, Brookfield, Chelsea, Randolph Center, Sharon, S Royaltown**  
 Watershed: **White River**  
 Sub-watershed: **First Branch White River**

Reach ID: **T8.03**  
 SGAT Version: **3**  
 Date Last Edited:  
 QA Status: **Step 7 done**  
 Is Reach An Impoundment?: **#Error**

Step 1. Reach Location **Begins just after wetlands to east of Chelsea Rd.**

1.1 Reach Description:  
 1.2 Towns: **Williamstown**  
 1.3 Downstream Latitude: **44.07013**  
 1.3 Downstream Longitude: **-72.49302**

Step 2. Stream Type

2.1 Elevation Upstream: **1,677**  
 2.1 Elevation Downstream: **1,386**  
 2.1 Is Gradient Gentle?: **#Error**  
 2.2 Valley Length: **5,817.0 ft.** **1.10** Miles  
 2.3 Valley Slope: **5.0**  
 2.4 Channel Length: **6,375.0 ft.** **1.21** Miles  
 2.5 Channel Slope: **4.56 %**  
 2.6 Sinuosity: **1.10**  
 2.7 Watershed Area: **1.6** Square Miles  
 2.8 Channel Width: **15.9** feet  
 2.9 Valley Width: **feet**  
 2.10 Confinement Ratio: **0.0**  
 2.10 Confinement Type: **Narrowly Confined**  
 2.11 Reference Stream Type: **A**  
 Bedform: **Step-Pool**  
 Sub-Class Slope: **none**  
 Bed Material: **No Data**

Step 3. Basin Characteristics

3.1 Alluvial Fan: **None**  
 3.2 Grade Control: **None**  
 3.3 Dominant Geological Mat.: **Till** **100.0 %**  
 3.3 Sub-dom. Geological Mat.:  
 3.4 Valley Slope Left: **Very Steep**  
 3.4 Valley Slope Right: **Very Steep**  
 3.5 Soils  
 Hydrologic Group: **D** **92.3 %**  
 Flooding: **None/Rare** **100.0 %**  
 Water Table Deep: **2.0** **97.6 %**  
 Water Table Shallow: **0.0** **92.3 %**  
 Erodibility: **Very Severe** **100.0 %**

7.4 Comments: **Reach not visible for windshield survey.**

Step 4. Land Cover - Reach Hydrology

4.1 Watershed  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **93.2 %**  
 Current Sub-Dominant Land Cover: **Urban**  
 4.2 Corridor  
 Historic Land Cover: **Forest**  
 Current Dominant Land Cover: **Forest** **100. %**  
 Current Sub-Dominant Land Cover: **^**  
 4.3 Riparian Buffer Left Bank Right Bank  
 Dominant: **>100** **>100**  
 Sub-dominant: **51-100** **51-100**  
 Length w / less than 25 ft.: **0.0 ft.** **0.0 ft.**

4.4 Ground Water Inputs: **Abundant**

Step 5. Instream Channel Modifications

5.1 Flow Regulation - (old):  
 Type: **None**  
 Use:  
 5.2 Bridges and Culverts: **0** **0.0 %**  
 5.3 Bank Armoring: **0.0 %**  
 Left: **ft.** Right: **ft.**  
 5.4 Channel Straightening: **0.0 %**  
 5.5 Dredging History: **None**

Step 6. Floodplain Modifications

6.1 Berms & Roads - old: **0.0 ft.** **0.0**  
One Side Both Sides  
 Road: **ft.** **ft.**  
 Railroad: **ft.** **ft.**  
 Berm: **ft.** **ft.**  
 Improved Path: **ft.** **ft.**  
 6.2 Development: **0.0 ft.** **0.0 ft.**  
 6.3 Channel Bars: **None**  
 6.4 Meander Migration: **None**  
 6.5 Meander Width: **ft. Ratio: 0.0**  
 6.6 Wavelength: **ft. Ratio: 0.0**

Step 7. Windshield Survey

7.1 Bank Erosion: **ft**  
 7.2 Bank Height: **No Data** **ft**  
 7.3 Ice/Debris Jam Potential: **No Data**

|     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 4.1 | 4.2  | 4.3  | 5.1  | 5.2  | 5.3  | 5.4  | 5.5  | 6.1  | 6.2  | 6.3  | 6.4  | 6.5  | 6.6  | 7.1  | 7.3  | Total |
| 1   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1     |
| Low | N.S. | N.S. | N.S. | N.S. | Unk. | Unk. | N.S. | Unk. | N.S. | N.S. | N.S. | N.D. | N.D. | N.S. | N.S. |       |