



Stream Geomorphic Assessment

Agency of Natural Resources



Vermont.gov
July, 17 2024

Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: **4.53**

Reach: **M01 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|----------------|--------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 302.3 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 152.5 | 238.4 |
| | Erosion Height (ft.): | 5.0 | 1.3 |
| | Revetment Type: | Rip-Rap | None |
| | Revetment length: | 170.5 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 1 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



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Reach: M11 -0

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 76.6 | 205.4 |
| | Erosion Height (ft.): | 2.0 | 2.9 |
| | Revetment Type: | None | Rip-Rap |
| | Revetment length: | 0.0 | 35.6 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 9 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 1 |
| | Affected length: | 600 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 1 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



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Reach: **M02 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|--------------------------------|----------------------------|
| 1.2 | Alluvial Fan: | None |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> <u>Both</u> |
| | Berm Length (ft.): | 63.8 0.0 |
| | Path Length (ft.): | 0.0 0.0 |
| | Road Length (ft.): | 300.5 0.0 |
| | Railroad Lenth (ft.): | 0.0 0.0 |
| | Development Length: | 0.0 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> <u>Right</u> |
| | Erosion Length (ft.): | 228.3 144.2 |
| | Erosion Height (ft.): | 4.0 3.7 |
| | Revetment Type: | Rip-Rap None |
| | Revetment length: | 37.7 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | |
| 3.3 | <u>Riparian Corridor</u> | |
| | Mass Failures: | Multiple |
| | Average Height (ft.): | 17.0 |
| | Gullies: | Multiple |
| | Average Height (ft.): | 7.5 |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 8 |
| 4.7 | Stormwater Inputs | 1 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 1 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 2 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



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Reach: **M06 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|-----------------|--------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 56.5 | 191.8 |
| | Erosion Height (ft.): | 3.0 | 4.4 |
| | Revetment Type: | None | None |
| | Revetment length: | 0.0 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | Multiple | |
| | Average Height (ft.): | 25.6 | |
| | Gullies: | Multiple | |
| | Average Height (ft.): | 8.7 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 20 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 1 |
| | Affected length: | 500 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 1 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 1 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | Yes |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



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Reach: **M08 -C**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|----------------|--------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 119.8 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 116.9 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 246.0 | 0.0 |
| | Erosion Height (ft.): | 3.2 | 0.0 |
| | Revetment Type: | Rip-Rap | None |
| | Revetment length: | 69.7 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 5 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



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Reach: **M03 -A**

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|--------------------------------|----------------------------|
| 1.2 | Alluvial Fan: | None |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> <u>Both</u> |
| | Berm Length (ft.): | 433.9 0.0 |
| | Path Length (ft.): | 0.0 0.0 |
| | Road Length (ft.): | 236.6 0.0 |
| | Railroad Lenth (ft.): | 0.0 0.0 |
| | Development Length: | 0.0 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> <u>Right</u> |
| | Erosion Length (ft.): | 134.0 179.4 |
| | Erosion Height (ft.): | 3.0 4.2 |
| | Revetment Type: | Rip-Rap None |
| | Revetment length: | 259.3 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | |
| 3.3 | <u>Riparian Corridor</u> | |
| | Mass Failures: | Multiple |
| | Average Height (ft.): | 15.0 |
| | Gullies: | One |
| | Average Height (ft.): | 10.0 |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 7 |
| 4.7 | Stormwater Inputs | 3 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



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Reach: **M07 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|----------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 551.4 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 791.2 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 511.5 | 862.9 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 0.0 | 125.1 |
| | Erosion Height (ft.): | 0.0 | 8.0 |
| | Revetment Type: | Rip-Rap | Rip-Rap |
| | Revetment length: | 179.8 | 184.8 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 3 |
| 4.7 | Stormwater Inputs | 6 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 1 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 1 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 1 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



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Reach: **M09 -C**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|----------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 141.5 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 320.1 | 228.4 |
| | Erosion Height (ft.): | 2.5 | 2.7 |
| | Revetment Type: | Rip-Rap | Rip-Rap |
| | Revetment length: | 180.2 | 72.4 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 7 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 2 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 1 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 1 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



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Reach: **M08 -A**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|----------------|--------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 256.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 300.5 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 39.0 | 0.0 |
| | Erosion Height (ft.): | 4.0 | 0.0 |
| | Revetment Type: | Rip-Rap | None |
| | Revetment length: | 46.4 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 0 |
| 4.7 | Stormwater Inputs | 2 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



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Reach: M12 -0

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|--------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | | |
| | Erosion Height (ft.): | | |
| | Revetment Type: | | |
| | Revetment length: | | |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | | |
| | Average Height (ft.): | | |
| | Gullies: | | |
| | Average Height (ft.): | | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | |
| 4.7 | Stormwater Inputs | |
| 4.9 | Beaver Dams: | |
| | Affected length: | |
| 5.2 | Migration Features | |
| | Flood Chutes: | |
| | Neck Cutoffs: | |
| | Channel Avulsions: | |
| | Braiding: | |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | |
| | Head Cuts: | |
| 5.4 | Animal Crossings: | |
| 5.5 | Channel Alterations | |
| | Straightening: | |
| | Dredging: | |



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Reach: **M14 -B**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|-----------------|--------------|
| 1.2 | Alluvial Fan: | | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 447.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 0.0 | 82.4 |
| | Erosion Height (ft.): | 0.0 | 4.0 |
| | Revetment Type: | Rip-Rap | None |
| | Revetment length: | 81.0 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | Multiple | |
| | Average Height (ft.): | 6.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 0 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 1 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | Yes |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



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Reach: **M09 -A**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|--------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 91.1 | 39.4 |
| | Erosion Height (ft.): | 4.0 | 3.0 |
| | Revetment Type: | None | None |
| | Revetment length: | 0.0 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 2 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



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SGAT Version: **4.53**

Reach: **M05 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|-----------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 487.3 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 161.7 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 78.2 | 212.7 |
| | Erosion Height (ft.): | 3.0 | 2.5 |
| | Revetment Type: | Rip-Rap | Rip-Rap |
| | Revetment length: | 148.2 | 176.4 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | Multiple | |
| | Average Height (ft.): | 20.3 | |
| | Gullies: | One | |
| | Average Height (ft.): | 12.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 13 |
| 4.7 | Stormwater Inputs | 1 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 1 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 2 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: M14 -A

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|--------------|
| 1.2 | Alluvial Fan: | | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 0.0 | 0.0 |
| | Erosion Height (ft.): | 0.0 | 0.0 |
| | Revetment Type: | None | None |
| | Revetment length: | 0.0 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 0 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: **M15 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 0.0 | 0.0 |
| | Erosion Height (ft.): | 0.0 | 0.0 |
| | Revetment Type: | None | Rip-Rap |
| | Revetment length: | 0.0 | 160.2 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | One | |
| | Average Height (ft.): | 5.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 3 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 1 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: **M08 -B**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|--------------|
| 1.2 | Alluvial Fan: | | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 191.1 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 0.0 | 0.0 |
| | Erosion Height (ft.): | 0.0 | 0.0 |
| | Revetment Type: | None | None |
| | Revetment length: | 0.0 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 0 |
| 4.7 | Stormwater Inputs | 1 |
| 4.9 | Beaver Dams: | 4 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | Yes |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: M13 -A

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|--------------|
| 1.2 | Alluvial Fan: | | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | | |
| | Erosion Height (ft.): | | |
| | Revetment Type: | | |
| | Revetment length: | | |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | | |
| | Average Height (ft.): | | |
| | Gullies: | | |
| | Average Height (ft.): | | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | |
| 4.7 | Stormwater Inputs | |
| 4.9 | Beaver Dams: | |
| | Affected length: | |
| 5.2 | Migration Features | |
| | Flood Chutes: | |
| | Neck Cutoffs: | |
| | Channel Avulsions: | |
| | Braiding: | |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | |
| | Head Cuts: | |
| 5.4 | Animal Crossings: | |
| 5.5 | Channel Alterations | |
| | Straightening: | |
| | Dredging: | |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: **M10 -0**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|----------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 124.3 | 343.8 |
| | Erosion Height (ft.): | 2.4 | 2.0 |
| | Revetment Type: | Rip-Rap | Rip-Rap |
| | Revetment length: | 39.5 | 38.6 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 3 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 1 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: M13 -B

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 0.0 | 0.0 |
| | Erosion Height (ft.): | 0.0 | 0.0 |
| | Revetment Type: | None | Rip-Rap |
| | Revetment length: | 0.0 | 76.8 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | None | |
| | Average Height (ft.): | 0.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 1 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | Yes |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: **M03 -B**

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|--------------------------------|----------------------------|
| 1.2 | Alluvial Fan: | None |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> <u>Both</u> |
| | Berm Length (ft.): | 655.8 0.0 |
| | Path Length (ft.): | 0.0 0.0 |
| | Road Length (ft.): | 0.0 0.0 |
| | Railroad Lenth (ft.): | 0.0 0.0 |
| | Development Length: | 0.0 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> <u>Right</u> |
| | Erosion Length (ft.): | 51.7 96.8 |
| | Erosion Height (ft.): | 5.0 6.0 |
| | Revetment Type: | Rip-Rap None |
| | Revetment length: | 53.6 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | |
| 3.3 | <u>Riparian Corridor</u> | |
| | Mass Failures: | Multiple |
| | Average Height (ft.): | 20.8 |
| | Gullies: | None |
| | Average Height (ft.): | 0.0 |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 3 |
| 4.7 | Stormwater Inputs | 2 |
| 4.9 | Beaver Dams: | 0 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 2 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | Yes |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: 4.53

Reach: M04 -0

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|-----------------|----------------|
| 1.2 | Alluvial Fan: | None | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 535.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 326.7 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 170.4 | 0.0 |
| | Erosion Height (ft.): | 1.8 | 0.0 |
| | Revetment Type: | Rip-Rap | Rip-Rap |
| | Revetment length: | 119.0 | 73.9 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | Multiple | |
| | Average Height (ft.): | 12.8 | |
| | Gullies: | One | |
| | Average Height (ft.): | 20.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|----------------------|
| 4.4 | Number of Debris Jams: | 12 |
| 4.7 | Stormwater Inputs | 1 |
| 4.9 | Beaver Dams: | 2 |
| | Affected length: | 400 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 1 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 3 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | Straightening |
| | Dredging: | None |



Stream Geomorphic Assessment

Agency of Natural Resources



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Phase 2 - FIT - Legacy Data Report

Alder Brook

SGAT Version: **4.53**

Reach: **M09 -B**

| <u>Step</u> | <u>Description</u> | <u>Value</u> | |
|-------------|--------------------------------|--------------|--------------|
| 1.2 | Alluvial Fan: | | |
| 1.3 | <u>Encroachments - Side</u> | <u>One</u> | <u>Both</u> |
| | Berm Length (ft.): | 0.0 | 0.0 |
| | Path Length (ft.): | 0.0 | 0.0 |
| | Road Length (ft.): | 0.0 | 0.0 |
| | Railroad Lenth (ft.): | 0.0 | 0.0 |
| | Development Length: | 0.0 | 0.0 |
| 3.1 | <u>Erosion - Bank</u> | <u>Left</u> | <u>Right</u> |
| | Erosion Length (ft.): | 34.4 | 0.0 |
| | Erosion Height (ft.): | 3.0 | 0.0 |
| | Revetment Type: | None | None |
| | Revetment length: | 0.0 | 0.0 |
| 3.2 | <u>Buffer Less Than 25 ft.</u> | | |
| 3.3 | <u>Riparian Corridor</u> | | |
| | Mass Failures: | One | |
| | Average Height (ft.): | 6.0 | |
| | Gullies: | None | |
| | Average Height (ft.): | 0.0 | |

| <u>Step</u> | <u>Description</u> | <u>Value</u> |
|-------------|-----------------------------|--------------|
| 4.4 | Number of Debris Jams: | 0 |
| 4.7 | Stormwater Inputs | 0 |
| 4.9 | Beaver Dams: | 4 |
| | Affected length: | 0 |
| 5.2 | Migration Features | |
| | Flood Chutes: | 0 |
| | Neck Cutoffs: | 0 |
| | Channel Avulsions: | 0 |
| | Braiding: | 0 |
| 5.3 | Steep Riffles and Head Cuts | |
| | Steep Riffles: | 0 |
| | Head Cuts: | 0 |
| 5.4 | Animal Crossings: | No |
| 5.5 | Channel Alterations | |
| | Straightening: | None |
| | Dredging: | None |