**RAPID STREAM ASSESSMENT (RSAT)**

**Date:** Oct 28st, 2024 **Site:** Freeland Creek **Crew:** Kim, Rory, Liam, Owen

**Location:** Reach 1 **GPS:** N: 46.70136**0** W: -63.98387**0**

**Weather Description:** Sunny 3**⁰**C **Recorder:** Kim Curran



|  | **Excellent** | **Good** | **Fair** | **Poor** | **Points** |
| --- | --- | --- | --- | --- | --- |
| **Channel Stability** | **9 - 11** | **6 - 8** | **3 - 5 0 - 2** | | **8** |
| **Scour / Deposition** | **7 - 8** | **5 - 6** | **3 - 4 0 - 2** | | **5** |
| **Instream Habitat** | **7 - 8** | **5 - 6** | **3 - 4 0 - 2** | | **8** |
| **Water Quality** | **7 - 8** | **5 - 6** | **3 - 4 0 - 2** | | **8** |
| **Riparian Conditions** | **6 - 7** | **4 - 5** | **2 - 3 0 - 1** | | **7** |
| **Biological Indicators** | **7 - 8** | **5 - 6** | **3 - 4 0 - 2** | | **7** |
|  |  |  | **Total:** | | **43** |

**Stability Rankings: <20 = LOW 20 - 35 = MODERA TE <35 = HIGH**

# **Channel Dimensions (Measured / Estimated)**

**Bankfull Width (m):** 6.6 m **Bankfull Depth (m):** 0.34 m

**Wetted Width (m):** 1.4 m  **Wetted Depth (m):** 0.05 m

**Gradient:** downhill **Entrenchment (m):** 6 m

## **Substrate (Pool):** gravel, sand, silt, sediment **Substrate (Riffle):** sand, cobble, pebble

## **Straight / Sinuous:** sinuous **Bend Radius:** 7.8 m

## **Bank Height (m):** 0.64 m **Bank Angle (0):** 45**⁰ -** 90**0**

**Bank Material:** clay, sand, shrub/tree roots **Vegetation:** grass, moss, shrubs, trees

**Pool - Riffle Spacing (m):** 7.3 m **Woody Debris:** yes

## **Channel Hardening:** 80% hardening with 20% sediment heading toward the estuary. Some build up where blockages are in the stream.

## **Channel Disturbance:** Hydraulic at the Conway Rd at start of reach 1.

## **Distance Walked:** 1204 m **Photos Taken:** #9874 - #9916 - #0280 - #0282

**Comments:** Trail needs to be flagged up to Keith Murphy’s property. A new trail should be placed at the end of reach 1, 800 ft in from start, through Keith’s woods to the field up farther on the Conway Road. INT owns the land between reach 1 and reach 2, which will not be disturbed during work on this stream.