**DeBay’s Slough (Site A)**

Seasonally Disconnected Floodplain Habitat Project: Year 1 (2021) Reconnaissance Report

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Site Map

* A1 – site outlet
* WPT 292 – small beaver dam or pile of sticks with <1 inch of water flowing through it during 9/22/2021 site visit

Diagram

Description automatically generated

Figure 1: Map of DeBay’s Slough with Relative Elevation Model (REM) showing elevation (ft) relative to the mainstem at base flows. REM developed by NSD from USGS 2016 LiDAR and provided by SRSC.

Temperature, Water Level, and Connectivity Trends

* No equipment installed at the site
* It is unclear if and when the site becomes disconnected because during each reconnaissance visit the site was connected, although just barely in one case
* Estimated Connectivity Threshold: 3,000 – 4,000 cfs (USGS Marblemount. WA)
* Given the low relative elevation of DeBay’s Slough to the Skagit mainstem, site connectivity is likely heavily influenced by mainstem discharge

6/10/2021

* Boat reconnaissance
* Site connected to Skagit mainstem at A1 (Figure 2)
* Unidentified juvenile salmonids observed

A picture containing tree, outdoor

Description automatically generated

Figure 2. DeBay’s Slough connected to Skagit mainstem at A1 outlet in narrow channel with large wood

9/20/2021

* Land reconnaissance from DeBay’s Island Rd
* Unsure of site connectivity because too far from A1 outlet
* Took temperature and DO measurements just off of DeBay’s Island Rd
  + Temperature: 16.9°C
  + DO: 5.0 mg/L
* Lots of small duckweed throughout the site (Figure 3)

A picture containing tree, outdoor, water, river

Description automatically generated

Figure 3. DeBay’s Slough facing toward outlet from DeBay’s Island Rd

9/22/2021

* Boat reconnaissance
* Site partially disconnected from Skagit mainstem at A1
* WPT 292 – small beaver dam or pile of sticks with <1 inch of water flowing through it (Figure 4)
* Was raining during site visit so possible that small amount of water in outlet channel was just from rainfall
* Took temperature and DO measurements just upstream of WPT 292
  + Temperature: 12.7°C
  + DO: 8.26 mg/L
* Could not travel very far into site because channel turns into private property but there were several shallow pools along the length of the channel that could be accessed

A couple people walking on a dirt path in the woods

Description automatically generated with low confidence

Figure 4. Small remnant beaver dam with <1 inch of water potentially passable to juvenile fish