

Wetland Reconnection and Habitat Restoration on South Bachelor Island: Working in Dredge Material on the Lower Columbia River

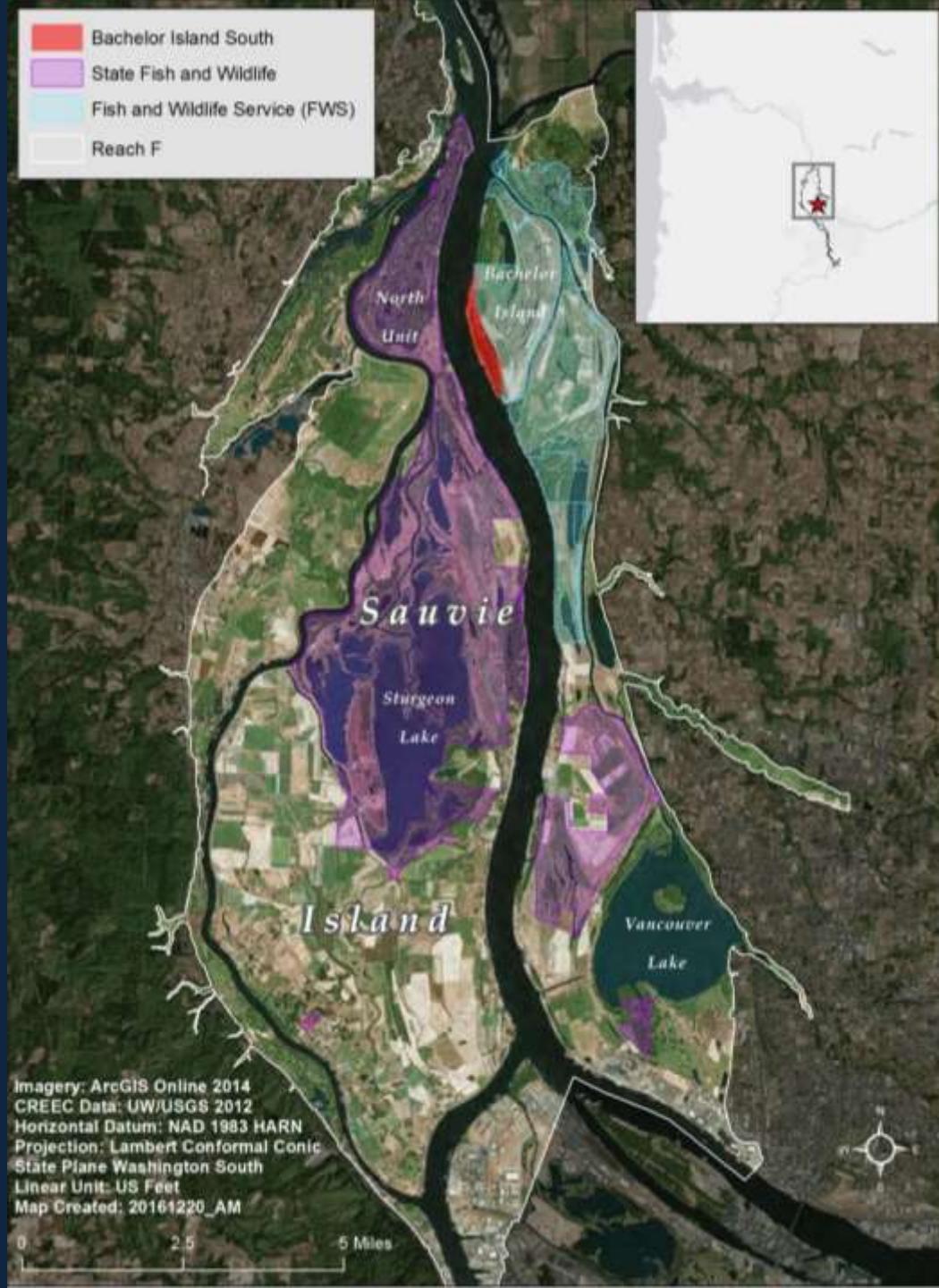
*Alex Uber¹, Nicole Czarnomski¹, Allen Lebovitz², Tom Josephson³, Eric Anderson⁴

¹Washington Department of Fish and Wildlife (WDFW), Ridgefield WA

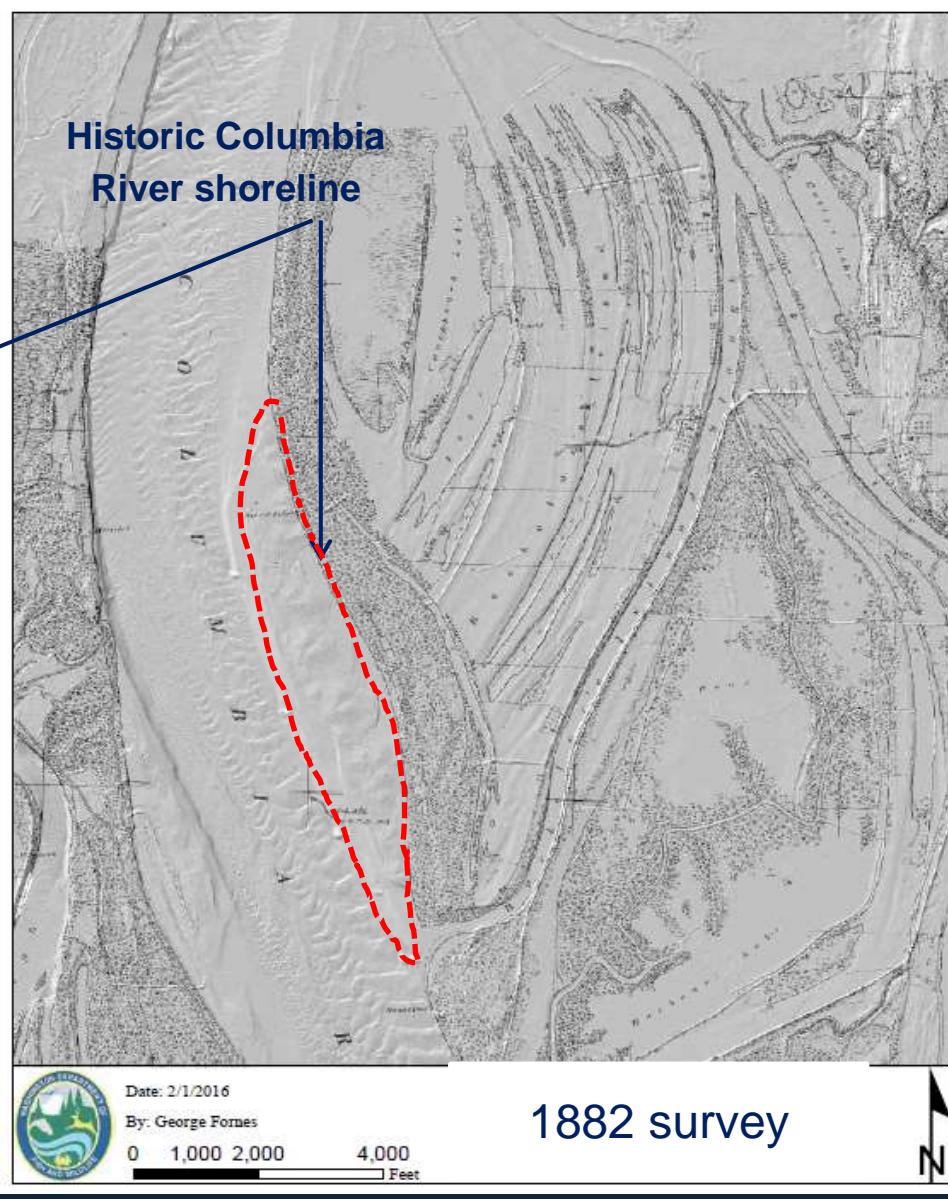
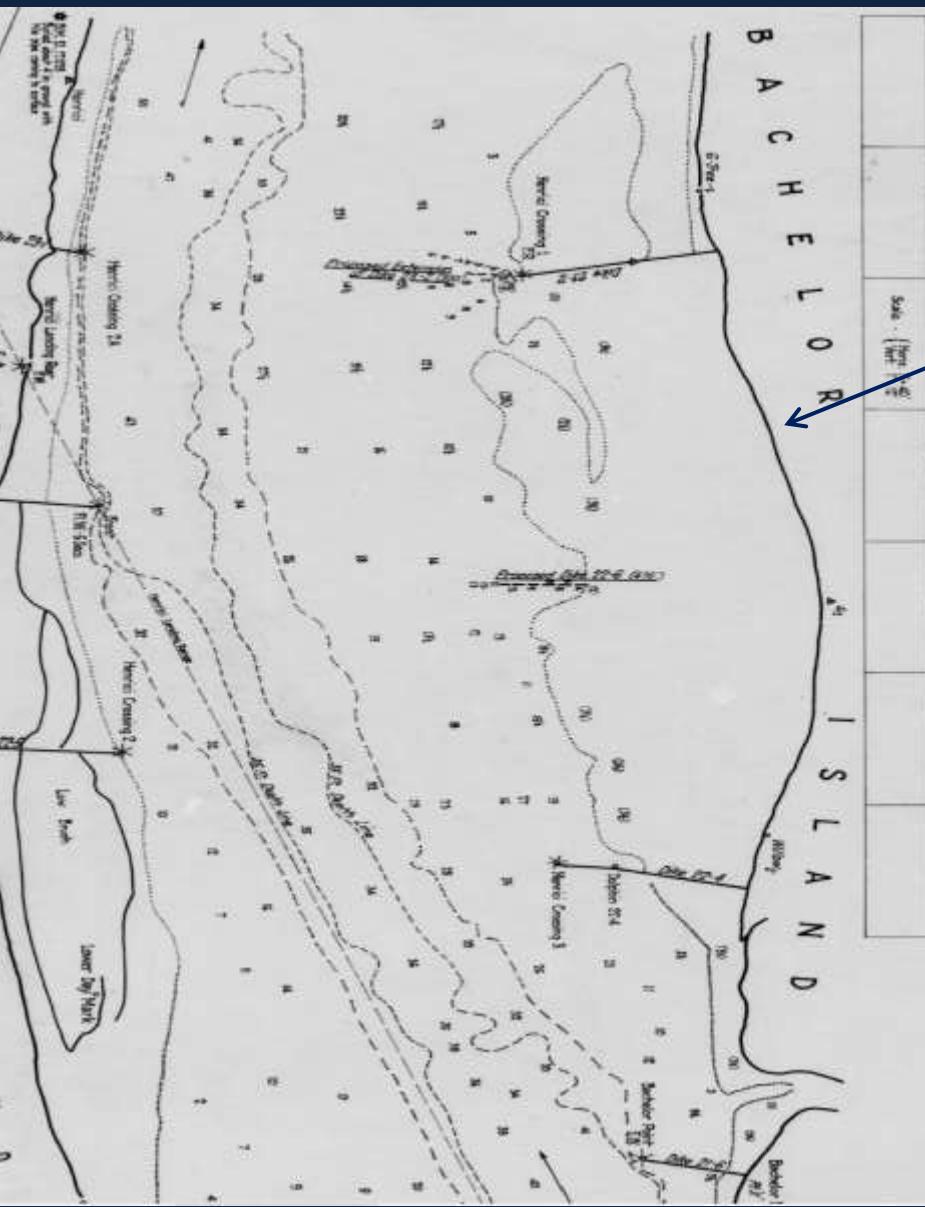
²Washington Department of Natural Resources (WADNR), Naselle WA

³Columbia River Estuary Task Force (CREST), Astoria OR

⁴USFWS Ridgefield National Wildlife Refuge, Ridgefield WA



Site History: ~1.5 million cy dredge materials placed during last 100 years



Project Goals



Connection Channel



August 2019-Channel Excavation



August 2019 Channel Excavation



Image © 2023 Maxar Technologies

2020 Channel-Lake Confluence

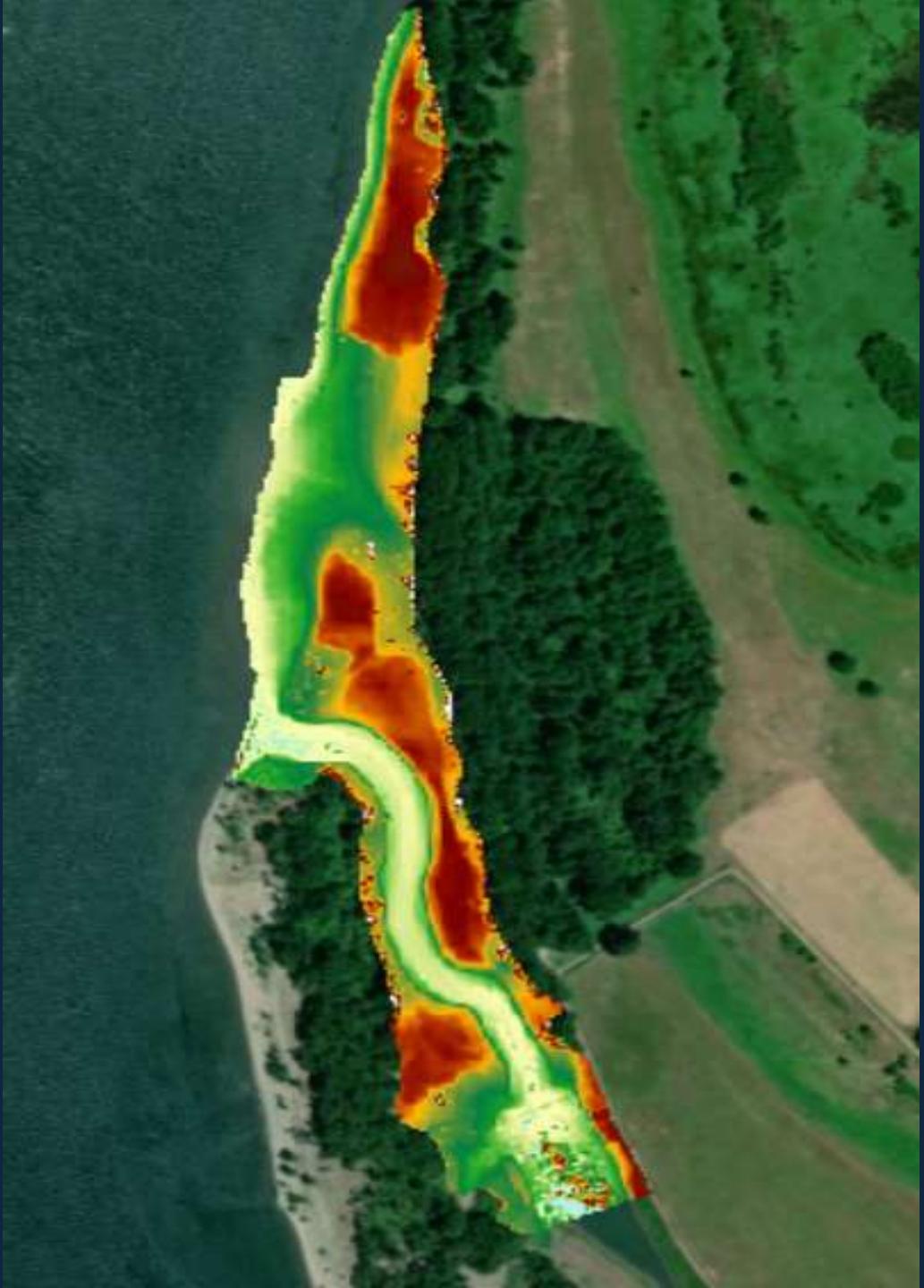


2020 Channel-River Confluence

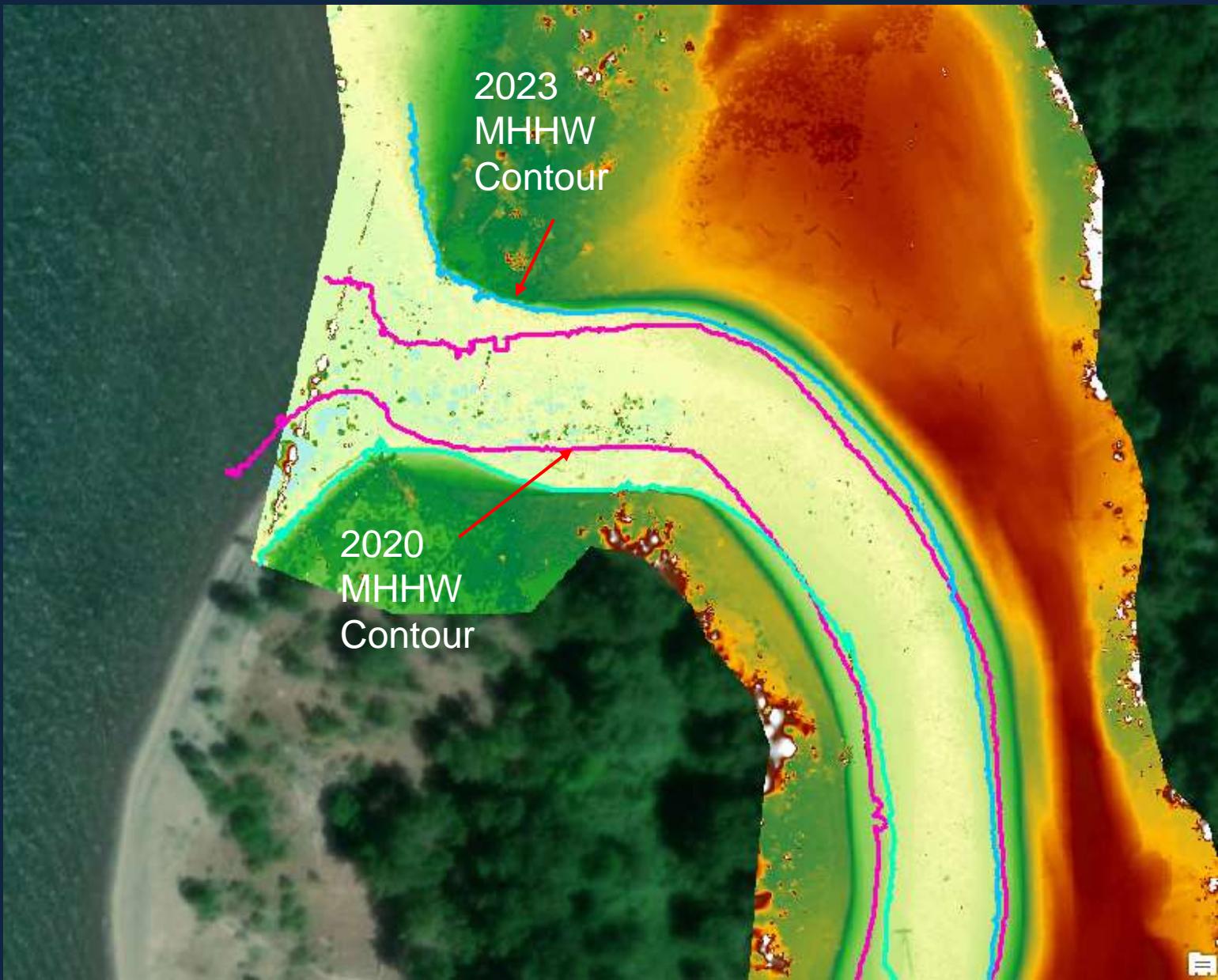


March 2023

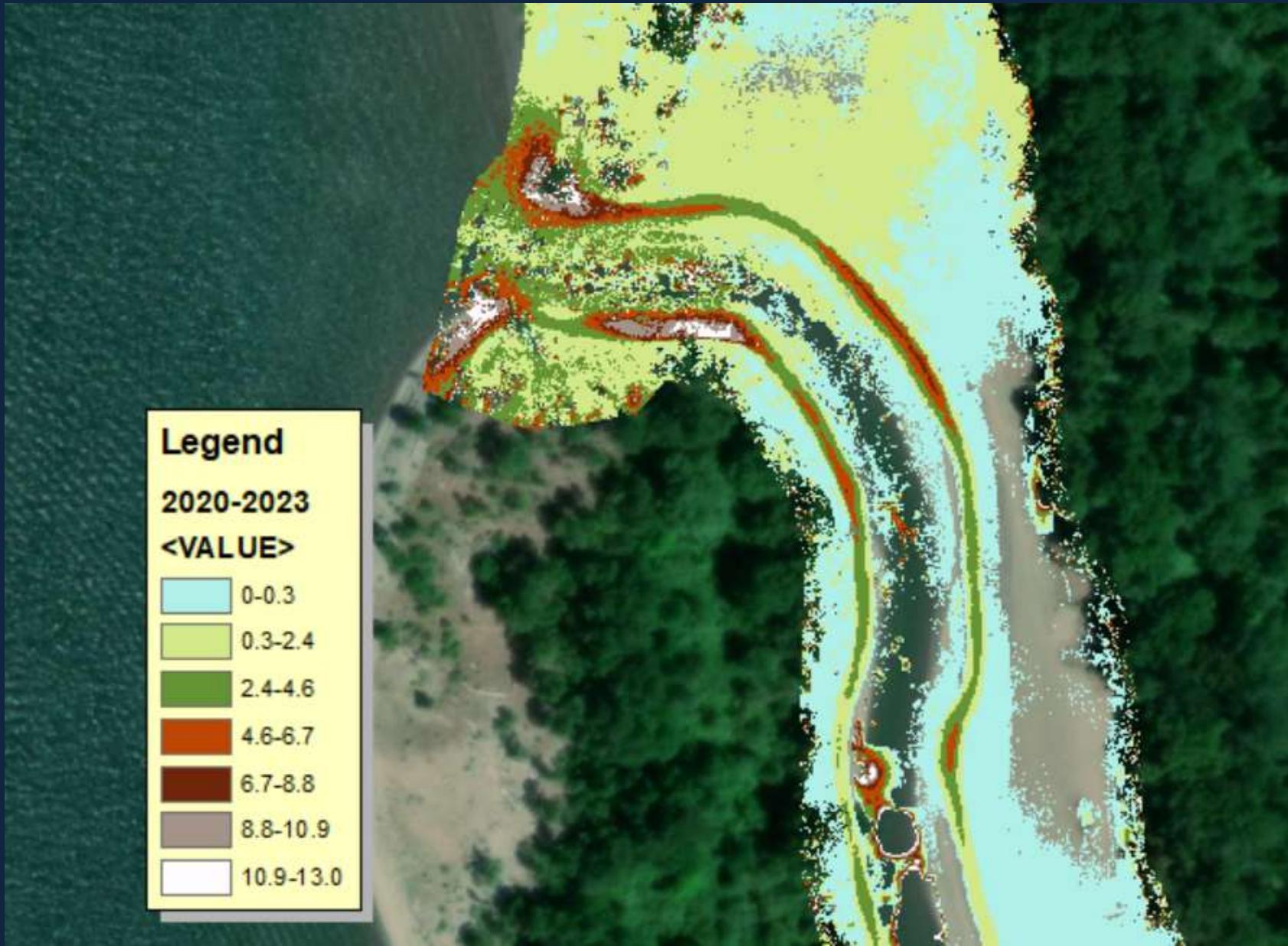
Channel Excavation and Stockpile Areas



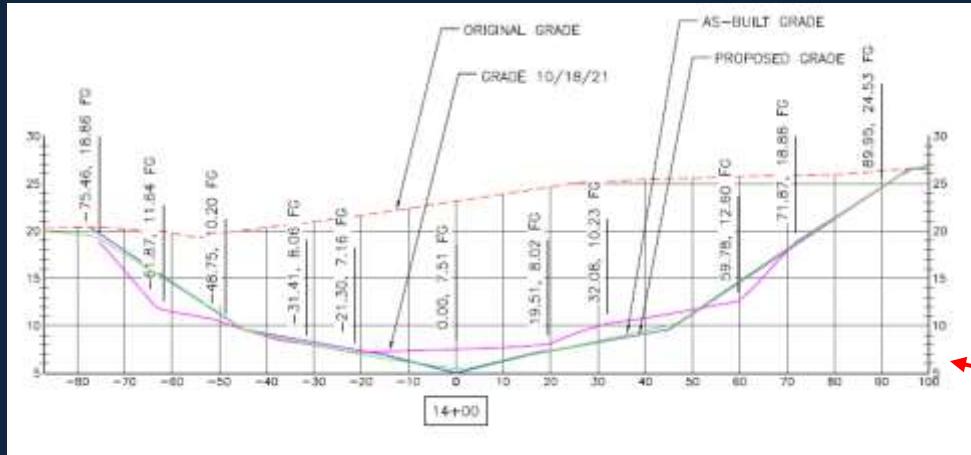
Jan 2020/2023 DEM



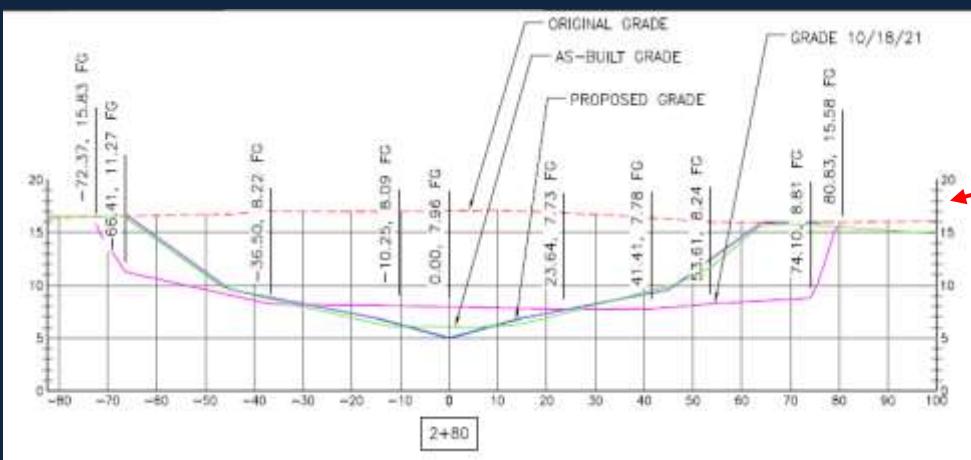
2020 DEM – 2023 DEM



Channel Cross-section Evolution

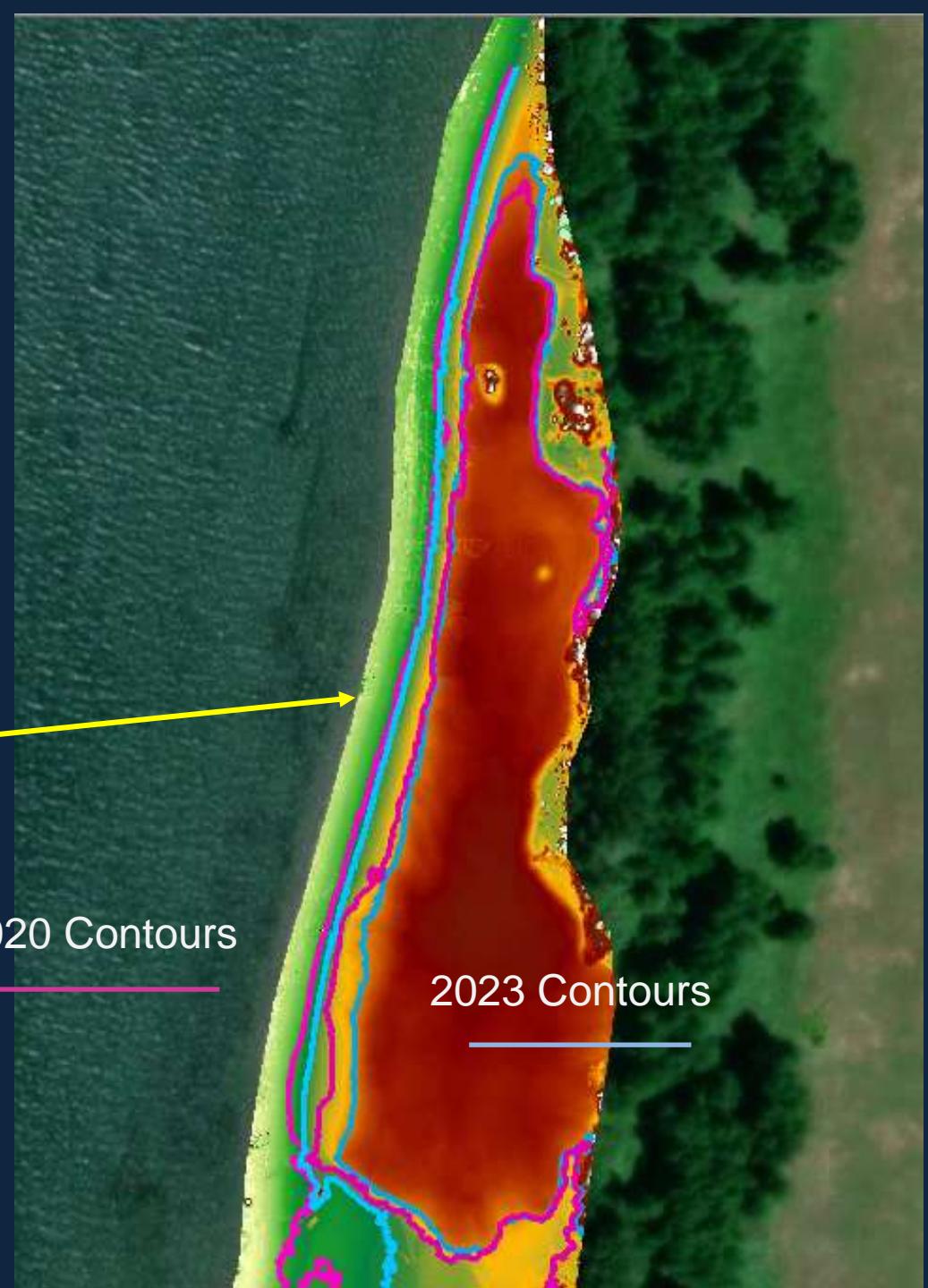
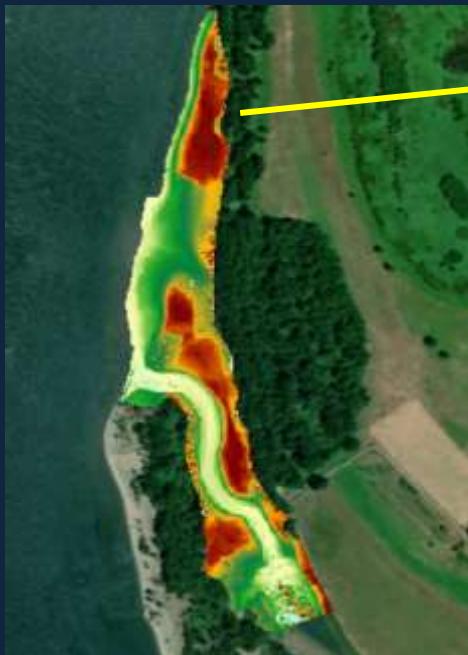


Channel-Lake Confluence



Channel-River Confluence

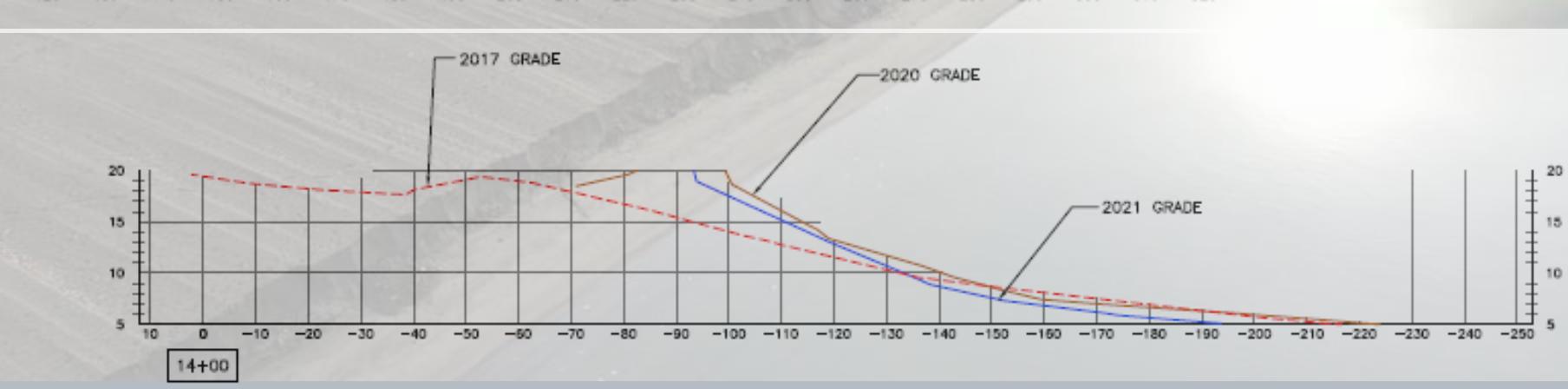
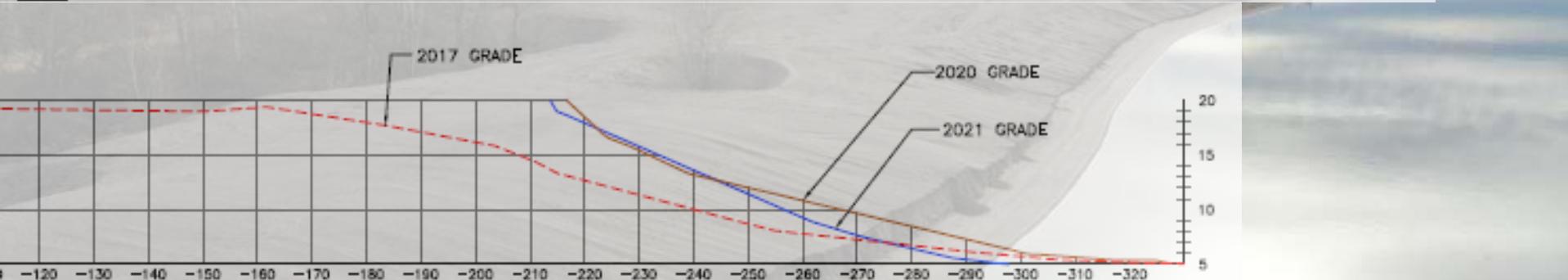
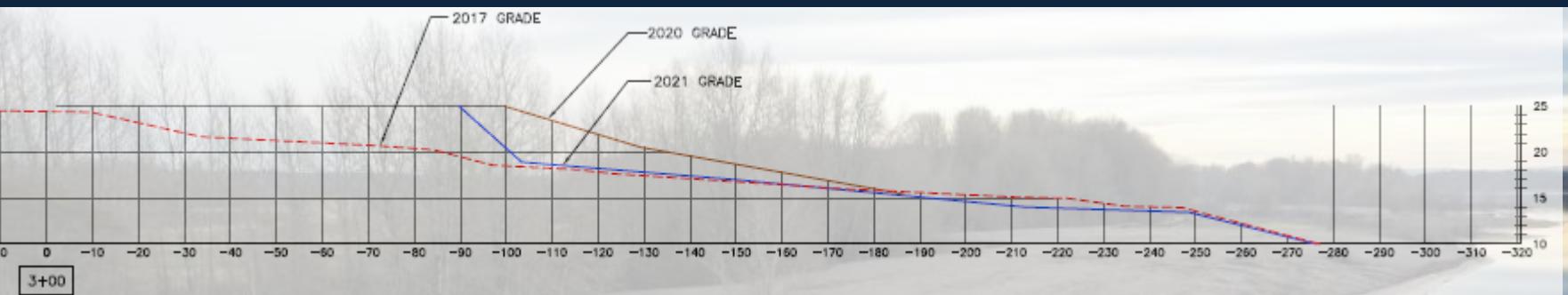
North Fill Area



2020 Contours

2023 Contours

Northern Fill Area Shoreline Change



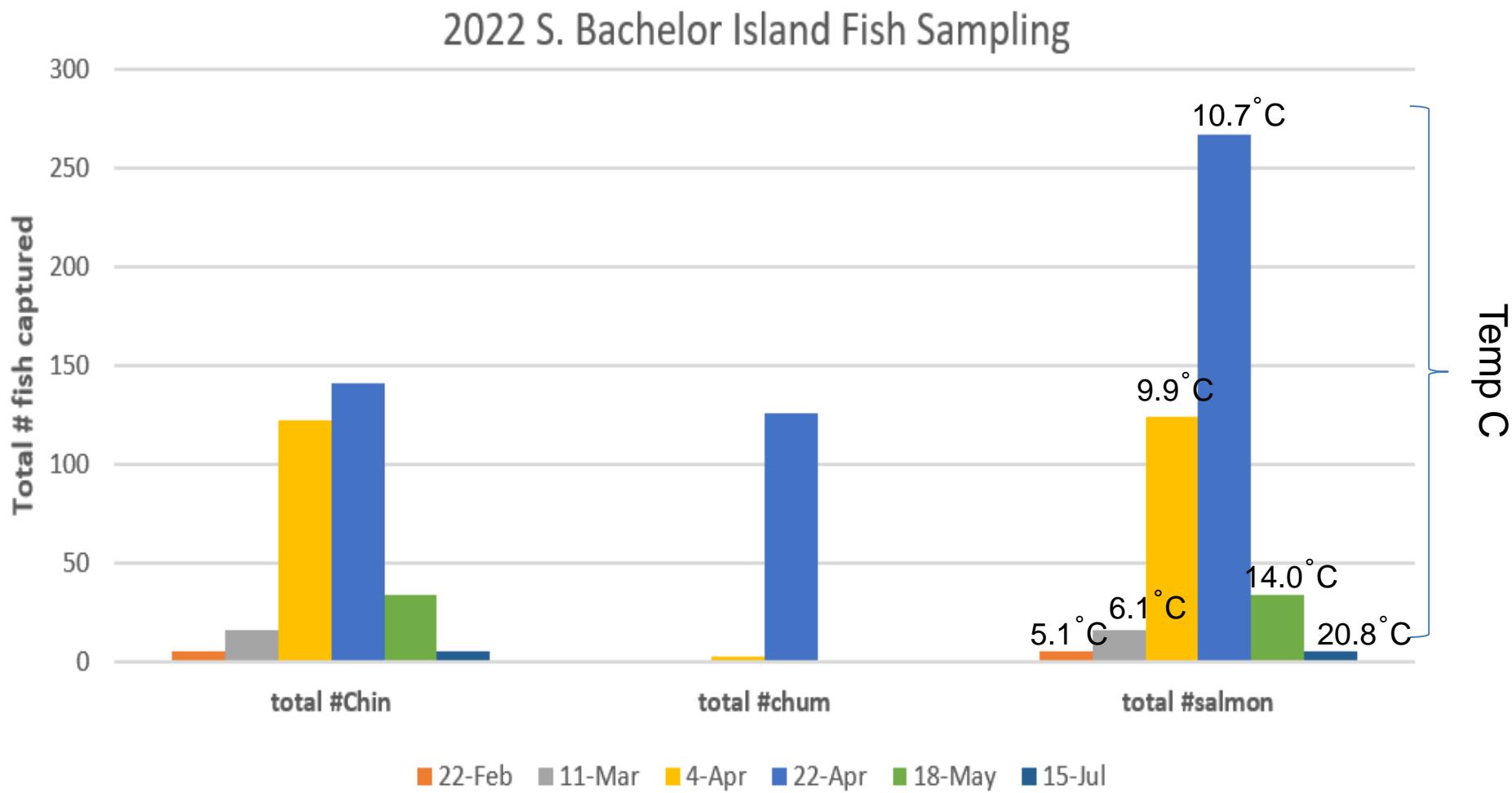
Fish Sampling



Fish Sampling locations, Chinook and Chum Salmon Catch Results March 17, 2020



2022 Fish Sampling Results



Thank You

