MAPS AND DESIGN DRAWINGS



Figure 1: The Crescent Harbor Salt Marsh is located on Naval Air Station Whidbey Island, near Oak Harbor, Washington.



Figure 2: Pocket estuary sites within one day's migration from the Skagit River delta by fry migrant Chinook salmon. Reproduced from Skagit Chinook Recovery Plan (WDFW and SRSC 2005).



Figure 3: The historic marsh plain is divided by a series of dikes surrounding a wastewater treatment pond (WWTP). Limited tidal exchange takes place through a tide gate in the beach berm.



Figure 4: A new channel through the beach berm will be excavated beneath a bridge installed by NASWI SeaBees in 2006, and current channels and ditches will be filled.



Figure 5: A coffer dam will be constructed to exclude water while the northeast sewer intake dike is breached. A new channel will be excavated to pass through this breach, and the existing channel will be filled. The sewer intake line buried within the dike will be replaced with a UV-and exposure-resistant pipe, and will be supported and protected from damage via an aluminum cage.



Figure 6: Fill remaining onsite from past construction will be removed. Portions will be used as fill in other areas of the site, and the remainder will be wasted elsewhere onsite. An undersized

culvert that passes through the south access dike will be replaced, and a new channel will be excavated further from the WWTP dike toe. The existing channel will be filled.



Figure 7: During the summer of 2007, City of Oak Harbor Public Works will armor the west intake dike and create a notch weir to allow water to flow over the top of the buried sewer intake pipe. They will also armor portions of the wastewater treatment plant dikes to protect from tidal scour.



Figure 8: Additional tidal channels will be excavated to increase tidal circulation and allow comparison of fish habitat value and rates of tidal channel evolution between straight and sinuous channels.