

### SHSTMP\_PS\_Delta\_Boundaries\_2011.shp data dictionary

This layer was developed by NOAA Fisheries to delineate boundaries of major deltas within the Puget Sound region to be used as part of salmon and steelhead habitat monitoring effort by Salmon Habitat Status and Trend Monitoring Program (SHSTMP). Boundaries were digitized at 1:1000 scale using 0.3-meter resolution true-color Microsoft Global Ortho project aerial imagery with positional accuracy of 4 meters. Imagery was collected from July 8, 2010 to August 1, 2011 using Ultracam-G digital camera on an aircraft flown at an altitude of 5,000 m. The landward boundaries were guided by the two-year or 50% tidal exceedance boundary and were digitized to capture all areas likely to have contained tidal marsh or tidal channel features historically, including areas that have been blocked or filled. Areas that appear to be filled were identified and digitized based on their appearance on topographic maps and/or aerial photographs as they were too high to be mapped within the current delta polygon based on lidar elevation. Areas of tidal flooding that were confined to distributary and main channels upstream of the delta were excluded. The seaward boundaries of the deltas were digitized at the edge of vegetated marshes within the geomorphic delta fan, or – where rivers flow into a bay – at the mouth of the bay. For deltas without bays, the seaward edge of the delta boundary polygon was extended to the seaward extent of densely vegetated marsh surfaces where vegetation covers nearly 100% of the surface. Where dikes have been breached along the seaward edge of the delta, the delta boundary polygon was digitized along the seaward edge of the previous dike footprint.

For Duckabush, Quilcene, Skagit, and Stillaguamish deltas seaward boundaries were delineated with less certainty due to high tidal inundation of vegetated marshes.

Field Name	Description	Units
Delta	Delta name: DOS – Dosewallips DUC – Duckabush DUN – Dungeness DUW – Duwamish ELW – Elwha HAM – Hamma Hamma NKS – Nooksack NSQ – Nisqually PUY – Puyallup QUL – Big Quilcene SAM – Sammamish SKG – Skagit SKO – Skokomish SNO - Snohomish STL – Stillaguamish SWI – Swinomish UNI – Union	

F_Type	Feature type: Delta Boundary, Low Density Marsh	
Image_Date	Aerial imagery collection date	
Ck_MPG	Puget Sound Chinook salmon major population groups (NMFS, 2007): Central/South Basin Hood Canal Strait of Georgia Strait of Juan de Fuca Whidbey Basin	
Stl_MPG	Puget Sound steelhead salmon major population groups (NMFS, 2011): Northern Cascades Olympic South-Central Cascades	
Area_ha	Polygon area	hectares

## References

- NMFS (National Marine Fisheries Service). 2007. Puget Sound Salmon Recovery Plan, volume 1. Shared Strategy for Puget Sound, Seattle.
- NMFS (National Marine Fisheries Service). 2011. 5-Year Review: Summary & Evaluation of Puget Sound Chinook, Hood Canal Summer Chum, Puget Sound Steelhead. NMFS Northwest Region, Portland, Oregon.