

SHSTMP_PS_MarineShoreline_2019.shp

NOAA Fisheries developed this layer as part of the Salmon Habitat Status and Trend Monitoring Program (SHSTMP) for monitoring nearshore habitats. We used the shoreline model developed by McBride et al. 2009 for the Salmon and Steelhead Habitat Inventory and Assessment Program or SSHIAP. This layer sufficiently captured the fine scale typology and diversity of shoretypes that are found along the Puget Sound Coastline.

Edits were made to the SSHIAP shoreline layer in order to conduct a landcover analysis and GeoUnits were grouped into GeoClass as defined by the SHSTMP. The nearshore landcover analysis includes a 200-m buffer upland of the shoreline or high water mark.

Field Name	Description	Units
Seg_Id	Unique segment identifier	
SegLgth_M	Length of the shoreline segment	meters
GeoUnit	GeoUnit categories are from McBride et al. 2009 model for nearshore mapping: Barrier Beach Beach Seep Closed Lagoon and Marsh Delta Delta Lagoon Depositional Beach Drowned Channel Drowned Channel Lagoon Longshore Lagoon Modified Plunging Rocky Shoreline Plunging Sediment Bluff Pocket Beach Pocket Beach Estuary Pocket Beach Lagoon Pocket Closed Lagoon and Marsh Rocky Shoreline Sediment Source Beach Tidal Channel Lagoon Tidal Channel Marsh Tidal Delta Tidal Delta Lagoon Veneered Rock Platform	

GeoClass	Grouping of GeoUnits for the SHSTMP (Beechie et al. 2017): Embayment Beach Embayment Lagoon Type Modified Open Beach Shoreline Open Rocky Shoreline	
DeltaPres	This identifies if the shoreline segment is within the delta boundaries that were identified for the Salmon Habitat Status and Trend Monitoring Program (SHSTMP)	
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	
D_LC	Percent of developed land cover adjacent to shoreline	
F_LC	Percent of forest land cover adjacent to shoreline	
Ag_LC	Percent of agriculture land cover adjacent to shoreline	
LCC	Dominant land cover class developed using C-CAP 2010 data (NOAA, 2014), aggregated into classes using methods described in Beechie et al. 2017: Ag - agriculture	

	D - developed F - forest/wetland M - mixed	
MarinBasin	Marine Basins of Puget Sound (NMFS 2007 and 2011, Rice et al. 2011): Striat of Juan de Fuca Hood Canal North Puget Sound Whidbey Basin South Central Puget Sound	
Area_km	Marine basin polygon area	kilometer

References

- Beechie, T. J., O. Stefankiv, B. Timpane-Padgham, J. E. Hall, G. R. Pess, M. Rowse, M. Liermann, K. Fresh, and M. J. Ford. 2017. Monitoring Salmon Habitat Status and Trends in Puget Sound: Development of Sample Designs, Monitoring Metrics, and Sampling Protocols for Large River, Floodplain, Delta, and Nearshore Environments. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-137. <https://doi.org/10.7289/V5/TM-NWFSC-137>.
- McBride, A., S. Todd, O. Odum, M. Koschak, and E. Beamer. 2009. Developing a Geomorphic Model for Nearshore Habitat Mapping and Analysis. Skagit River System Cooperative. [http://skagitcoop.org/wp-content/uploads/Developing-a-Geomorphic-Model-Methods_101409.pdf].
- 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.
- NOAA Coastal Services Center. 2014. Oregon and Washington 2010 Coastal Change Analysis Program Accuracy Assessment. Available: coast.noaa.gov/data/digitalcoast/pdf/ccap-assessment-oregon-washington.pdf. (August 2016).
- Rice A. Casimir , Correigh M. Greene , Paul Moran , David J. Teel , David R. Kuligowski , Reginald R. Reisenbichler , Eric M. Beamer , James R. Karr & Kurt L. Fresh (2011) Abundance, Stock Origin, and Length of Marked and Unmarked Juvenile Chinook Salmon in the Surface Waters of Greater Puget Sound, Transactions of the American Fisheries Society, 140:1, 170-189.

