

### **Process Unit Overview**

The tables below summarize the current composition of the process unit and associated drift cell. The process unit is pictured to the left

Process Unit Size	
Drainage Area	17.8 km <sup>2</sup>
Nearshore Zone	8.3 km <sup>2</sup>
Shoreline Length	8 km

Drift Cell Composition	
Divergence	13%
Transport	69%
Convergence	18%
No Appreciable Drift	0%

#### **Nearshore Process Degradation Summary**

Degradation categories reflect the extent to which anthropogenic stressors affect 11 nearshore processes, in both current and future scenarios, relative to other process units. An overall degradation group assignment is made (none, least, less, moderate, more and most) for each scenario. High degradation may indicate areas suitable for restoration while low degradation areas may be more suited towards protection. Future degradation conditions were projected into 2060 assuming current land development trends. See publication 2011-02 (Schlenger et al) for more information.

	Degra	dation
Nearshore Process	Current	Future
Sediment Input	Low	Low
Sediment Transport	Medium	Medium
Sediment Accretion	Medium	Medium
Tidal Flow	Medium	Medium
Distributary Channels*	N/A	N/A
Tidal Channels	High	High
Freshwater Input	Low	Low
Detritus Import and Export	Medium	Medium
Exchange of Aquatic Organisms	Medium	Medium
Physical Disturbance*	Medium	Medium
Solar Radiation	Low	Low
Overall Degradation	Moderately	Moderately

<sup>\*</sup>Distributary Channels Process does not apply in Shoreline Process Units. Physical Disturbance Process does not apply in Delta Process Units.

## **Recommended Management Strategy**

Table displays a preliminary management recommendation (protect, restore, or enhance) for landforms within the process unit, based on current degradation and potential to provide ecosystem goods and services. See publication 2011-04 (Cereghino et al) for more information.

Landform	Degradation	Potential	Recommendation
Barrier Embayments	High	High	Restore High
Beaches	Medium	High	Restore High

# Shoreline Alterations Historic (ca 1850-1880) and Current (ca 2000-2009)

Tables to the right show itemized changes to historic attributes such as tidal wetland areas and anthropogenic modifications (stressors) along the shore. See publication 2011-01 (Simenstad et al) for more information.

Upland	Alterations
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Modifications found upland of shoreline. Area within 200 feet of shoreline is considered adjacent upland. Watershed area includes adjacent upland.

Modification	Adjacent Upland	Watershed Area
Fish Passage Barrier	0	0
Stream Crossings	0	5
Dams	0	0

Tidal Wetland	Historic Area (sq km)	Current Area (sq km)	Change
Tidal Freshwater	0	0.03	Gain (100% Area)
Oligohaline Transition	0	0	No Change
Estuarine Mixing	1.39	0.27	Loss (-81% Area)
Euryhaline Unvegetated	d 0	0	No Change
Totals	1.39	0.3	

Shoreline Stressor	Extent of Stressor in Process Unit
Abandoned Railroads	0 km (0% of Shoreline Length)
Active Railroads	0 km (0% of Shoreline Length)
Armoring	1.1 km (14% of Shoreline Length)
Roads	0 km (0% of Shoreline Length)
Tidal Barriers	0.7 km (8% of Shoreline Length)
Breakwater/Jetties	0 Count comprising 0 km of Shoreline
Marinas	0 Count comprising 0 sq km
Nearshore Fill	0.1 sq km
Overwater Structures	1 Count comprising 0 sq km

# Landform Composition Historic (ca 1850-1880) and Current (ca 2000-2009)

Landforms are a shoreline classification system based on geomorphic processes (see publication 2006-02 [Shipman]) Differences between historic and current conditions are assumed to be due to shoreline alterations that result in landform change, but could also represent error in mapping capabilities. See publication 2011-01 (Simenstad et al) for more information.

Landfames in Duana Link	Li	Landform Count		Landform Length (km)		
Landforms in Process Unit	Historic	Current	Change	Historic	Current	Change (%)
Bluff-Backed Beach	3	3	None	2.6	2.5	-5
Barrier Beach	3	3	None	4.4	4.3	-1
Barrier Lagoon	1	1	None	2.9	1.2	-59
Closed Lagoon/Marsh	2	1	-1	5.7	1.4	-76

