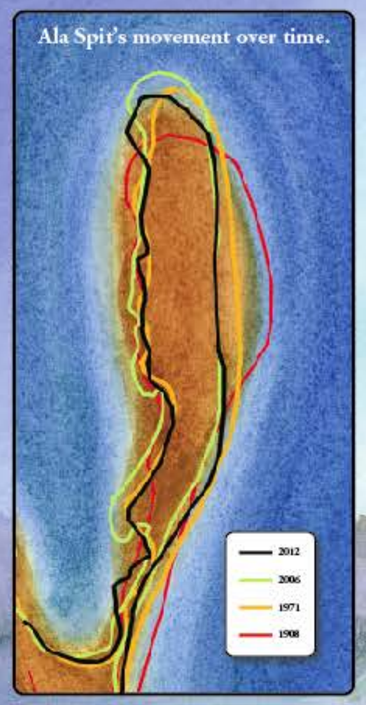
Dynamic Ala Spit

"We do not inherit the earth from our ancestors; we borrow it from our children." ~Native American Proverb



Ala Spit is a dynamic feature. Not only does sediment move alongshore and cross-shore, but the entire spit has been moving to the northwest since sea level stabilized 6000 years ago. Centuries ago the neck of the spit was located near the abandoned rock groin. This can be seen in the diagram which shows the position of the shoreline in historic maps and aerial photographs. The riprap (large rocks, concrete, etc.) which was located on the first 800 feet of the neck stopped the spit migration from between 1960 until 2011. This caused a kink to form in the spit near the end of the rock – with the unconstrained spit to the north continuing to move, while the neck remained fixed in place. Now that the riprap has been removed and natural physical processes have been restored, the spit is free to move again. In fact, it will move more dramatically than it did before as it readjusts to the wave field that formed it in the first place. This natural process could take many years.

One way to see this natural adjustment firsthand is to look for signs of erosion near the kink – exposed roots, exposed consolidated sediments, etc. In November of 2011, several intense storm events eroded large amounts of sediment, exposing roots and soil that had been buried for years. These storms also brought in large sand deposits initiating the salt marsh habitat restoration and further reinforcing the spit itself. This natural process is expected to continue to occur overtime, further expanding the spit width toward the northwest.

Pickleweed is a predominant plant in this pocket estuary and is commonly found in tidal areas where there is protection from wave action. It serves as food for birds and mammals, and provides rearing habitat for juvenile fish.

Big Logs Serve Nature's Purpose

Large drift logs provide important cover and add to the habitat complexity within the pocket estuary. They serve as a growing medium for herbs and shrubs, a place for insects and invertebrates to land or attach and then fall into the water to become food for fish. They also help shade the marsh surface from the sun's direct rays, reducing its heat and creating microhabitats in the deeper pools or channels where tidal action scours around the wood-marsh contact points. Naturally-functioning habitats such as Ala Spit are crucial to the life cycle of salmon and other fish and wildlife. Centuries of human development and shoreline alterations have taken a toll on such habitat in many other areas of Island County and Puget Sound.

First Stop on a Miraculous Journey

You are looking at Skagit Bay and the Ala Spit pocket estuary on the west side of the spit, where days-old salmon adjust from fresh to salt water. The tidal channels of the Skagit's south fork carry thousands of young salmon down current to Ala Spit's sandy shore and lagoon habitat. From here they will swim thousands of miles into the Pacific Ocean and grow to adulthood before returning to our nearby rivers to spawn again.

Ala Spit offers these young fish approximately 2 acres of natural salt marsh, mudflat and beach berm. Hillside drainage, overland runoff and shoreline ground water seep into the marsh and estuary here, diluting the more saline waters of the bay to give young salmon a chance to adjust their metabolism. The small fish find refuge in tidal channels from predators that lurk in the deeper waters. Here they feed, rest, hide and grow before venturing into deeper waters of Puget Sound. Surf smelt – a favorite food of salmon – spawn on thisnaturally sandy beach.

Juvenile Salmon

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