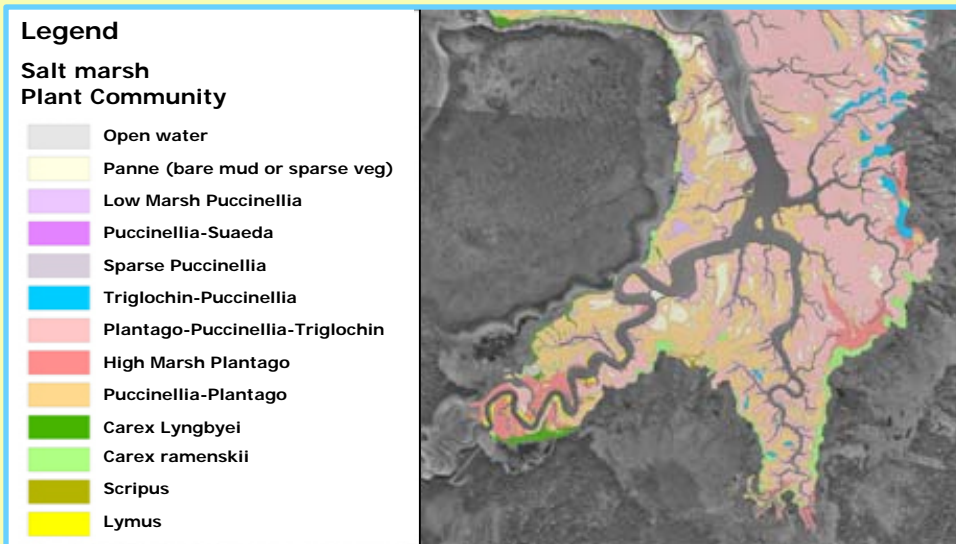


Salt Marsh Mapping

Salt marsh habitat dominates in many coastal areas of Cook Inlet, particularly on the west side. Cook Inlet RCAC is providing detailed habitat maps for major Cook Inlet salt marshes — areas for which we have little current baseline information. We partnered with Kachemak Bay Research Reserve to collect data and to produced detailed habitat maps for:

- Chickaloon Bay
- Trading Bay
- Redoubt Bay
- Iniskin By
- Iliamna Bay
- Oil Bay
- Chinitna Bays



Salt marsh habitat can be especially sensitive to spilled oil since plant roots and sediments can retain oil and cleansing by tides is minimal. Clean-up options are limited by logistics and response actions can cause more damage to the habitat than leaving the oil in place.



Salt marshes are best mapped as polygon units which can show total area of a habitat. This complements ShoreZone data which provides good regional summaries of salt marsh locations represented as lines or points along the shore.



Salt Marsh Composition

Different plant communities dominate in lower elevations, compared with areas higher up in the intertidal zone. Thus, plants with the highest salt tolerances are found in the low marsh, and those with lower tolerances to salt are found in the higher areas of the marsh.



Tidal creeks interweave across the marshes and mud flats, further influencing the distribution of the various plants within the larger salt marsh. These tidal creeks fill with seawater during high tides and drain during low tides.



The lowest tidal areas of salt marshes are mud flats composed of fine silts and clays. Mudflats can provide rich feeding areas for birds, marine invertebrates, and fish.