

Date: October 14, 2015

To: Leah Forbes, Skagit County Planning & Development Services
Rebekah Padgett, Washington State Department of Ecology

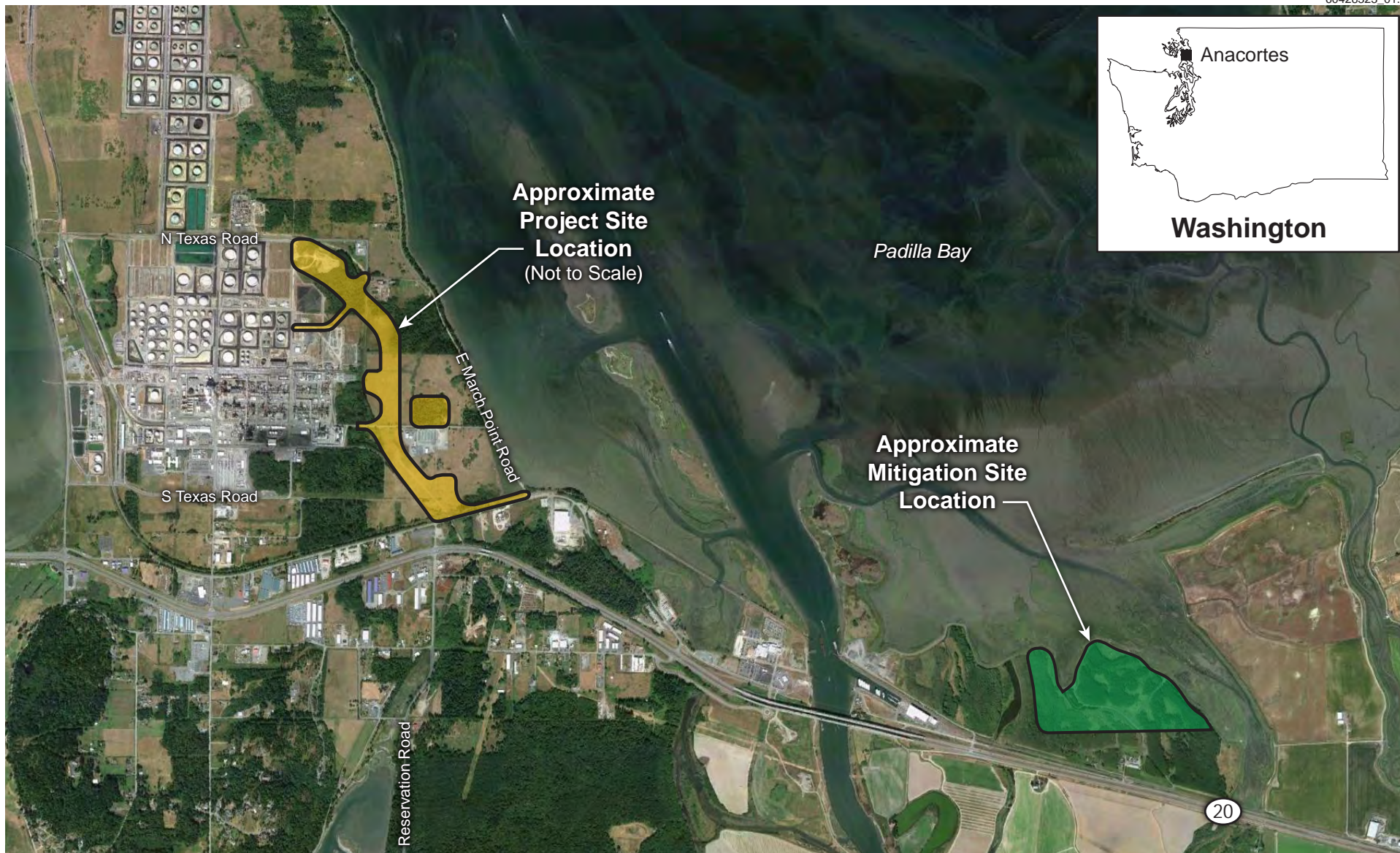
From: Jeff Walker, AECOM

Subject: **Mitigation for the Shell Puget Sound Refinery Crude by Rail Project**

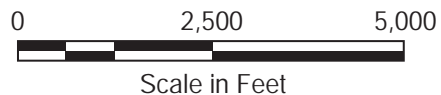
Shell Puget Sound Refinery (PSR) has applied for permits to construct a crude by rail unloading facility at its property near Anacortes, Washington. The project will result in unavoidable impacts to wetlands and buffers that will require compensatory mitigation. A Wetland Mitigation and Bank Use Plan was submitted with the original permit application. Since that time, however, Shell PSR, in consultation with the permitting agencies, has decided to initiate permittee-responsible mitigation rather than purchase credits from a mitigation bank. A conceptual mitigation plan is nearing completion and will be submitted shortly to the permitting agencies.

The proposed mitigation will restore tidal influence and estuarine habitats to approximately 73 acres currently used as a poplar plantation. The mitigation site is on diked land adjacent to Padilla Bay, approximately 2 miles east of the crude by rail project site (Figure 1). This area, along with most of the tidal marshes in Padilla Bay and the Skagit Delta, was diked and drained for agriculture starting in the late 1800s. A setback dike will be constructed and the existing dike will be partially or fully breached at strategic locations. An existing tidal channel will be connected to a series of constructed "seed" channels across the site. This will restore natural tidal flow, channel formation, and sediment transport. Over time, the goal is to restore a complex of estuarine habitats including mudflats, macroalgae beds, salt marsh, tidal channels and upland transition zones. The project is being designed to take into account existing and projected tidal elevations and sedimentation, with reference to existing salt marsh habitat adjacent to the site.

The restored area is expected to provide important ecosystem functions and values that are currently limiting in the watershed and within the larger Puget Sound region. More than 80% of estuary habitat in Puget Sound has been lost. Species expected to benefit directly from the project include fish; waterfowl, shorebirds and seabirds; and marine invertebrates. Estuarine functions will be monitored and documented over a period of several years to ensure restoration success.



Source: Google Earth Pro



Job No. 60428323

Figure 1
Project Site and Proposed Mitigation Site Locations