12,000 years ago the ocean was up to 200 to 400 feet lower than today and the ocean was five miles off our current shoreline. This estuary was just a portion of an evolving river system cutting through the uplifting terraces and filling in low lying areas created by faults. Over time the ocean level rose and enveloped the river and turned this section into an estuary with brackish to saline water. A mix of native grasslands and oak woodlands were sustained by the native Chumash until the arrival of Europeans.

Europeans brought cattle, eliminated Chumash prescribed burning practices and began more intensive use of the land for grazing, dry farming and fruit trees. In the 1850s whaling operations required wood to render whale fat and oak trees were harvested along the coast. There were extensive oil and gas exploration and activity on the Ellwood Bluffs and the project site.

By 1995 this portion of the coast was becoming increasingly developed and residents began to realize that they were at risk of losing their unique coastal resources and open space. Localized flooding, ocean water quality problems, and a downturn in the economy also created more incentives to conserve open space and restore wetland function. The Ellwood-Devereux Joint Proposal put forth by UCSB and the County moved proposed development off the bluffs and helped conserve 652 acres of coastal lands, making this restoration project more valuable ecologically.

During the mid 20th century there was active filling of Goleta Slough to create the airport and of the upper arms of Devereux Slough to create a golf course. This active degraded the wetlands, caused erosion and sedimentation in the wetlands, and facilitated the invasion of disturbed habitats by invasive plants. The filled wetlands resulted in regular localized flooding.

After several years of grant writing, community meetings, design and planning work the project came to fruition and 350,000 cubic yards of fill were removed from the historic upper arms of Devereux Slough.

Golf Course was purchased in 2013 and donated to UC Santa Barbara for eventual restoration.

NCOS is designed to achieve multiple benefits. The restoration project brings back the historic hydrologic function by reducing flooding and mitigating for sea level rise through increased tidal connection, while also supporting increasingly rare coastal habitats and wildlife. Public access, including a safe route to school, is provided within the context of supporting endangered species and migratory birds.