The Oil Fields of the Los Angeles Basin

South Coast

The beach communities of Orange County, from Seal Beach to Newport Beach, lie on top of nearly contiguous oil fields, running under the coastline, and extending under the ocean floor. Though the majority of oil is extracted from the offshore parts of the field, over a million barrels per year are extracted from wells on shore. Batteries of pumps line Pacific Coast Highway, and dot the dendritic swirl of tidelands and estuaries, yet to be redeveloped. The shore of Orange County contains the remnants of America’s most dramatic collision of land, sea, and oil derricks.

Seal Beach Oil Field
Seal Beach Oil Field extends along the coast for four miles, straddling the line between Los Angeles and Orange Counties. It is overtopped by the community of Seal Beach, the Naval Weapons station, and the remains of the estuary of the San Gabriel River. Around 100 operating wells produce half a million barrels of oil a year, with a cumulative production of 211 million barrels since its discovery in 1922, making it the ninth most productive field in Los Angeles County. In urban areas, well locations have been concentrated to reduce their footprint on valuable coastal property, but they remain spread out in the estuary and wildlife areas, partially vestigial oil field landscapes.

Huntington Beach Oil Field
Huntington Beach Oil Field produced nearly 2 million barrels of oil last year, three quarters of it from two offshore platforms and wells along the shore. The remaining 450,000 barrels from some still-pumping inland wells. The field is one of the largest in the Basin. Famous photographs from the 1920s show miles of the beach completely covered in wooden derricks. Unauthorized directional drilling began to be practiced here in the 1930s, to access oil underneath the state (and other’s) land. The practice was eventually permitted, with a royalty system established, and encouraged, as it led to the removal of wells from the beach, and into less visible back spaces, and, eventually, to offshore platforms.

Bolsa Chica is a protected wildlife area partially reclaimed from a densely developed oil well zone atop the Huntington Beach Oil Field. The state began taking control of the land after 1970, when Signal Oil proposed a major harbor and residential development in the estuary. Much of the oil field, with raised well pads, access roads, and other fill, was removed a few years ago, as part of the largest coastal wetland restoration project in Southern California. (This effort was paid for by the Ports of Los Angeles and Long Beach to offset the largest coastal landfilling project in recent Southern California history, the construction of new landmasses at the port). A connection to the ocean, restoring the tide to the tidelands, was made in 2006. Active pumping continues on the unclaimed land around the nature reserve.

West Newport Oil Field
The West Newport Oil Field is the southernmost active oil field in California. 36 million barrels have been extracted since its discovery in 1943. Last year 118,000 barrels were produced by the field’s 100 producing wells. The field is located on the coast at the edge of the town of Newport Beach, at the estuary of the Santa Ana River. The otherwise undeveloped 400-acre Banning Ranch site holds most of the remaining pumpjacks. Most of the pumps on site are operated by the West Newport Oil Company. 15 wells near the Pacific Coast Highway are owned by the city of Newport Beach.

Given the high value of real estate of the site, which overlooks the ocean, many different development plans have been posited. Some propose turning the site into the park. Another plan, proposed by a consortium of the owners of the site, including Aera Energy, LLC, is fairly far along in the approval process, and calls for over 1,200 homes and a hotel, with around 250 acres remaining as a park. While its future is debated, the pumps continue to extract the estimated 50 million barrels of recoverable oil that are thought to remain in the field.