Meeting Date: 06/07/24

Work Order Numbers: 10442, 16001

Staff: H. Rassamdana

# Staff Report 69 (Informational)

#### PARTY:

California State Lands Commission

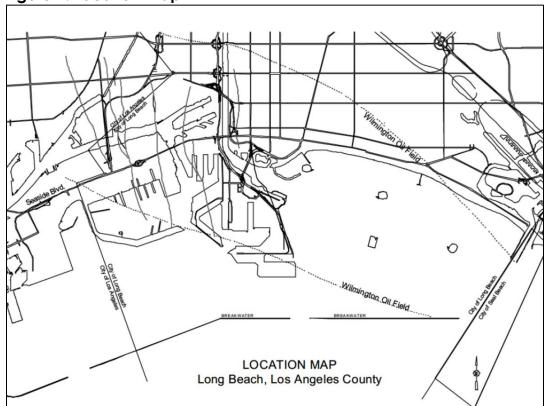
# **SUMMARY:**

Status report on the Continued Monitoring of Possible Subsidence, Long Beach Unit/Tidelands, Wilmington Oil Field, Los Angeles County.

### AREA, LAND TYPE, AND LOCATION:

Long Beach Unit/Tidelands, Wilmington Oil Field (as shown in Figure 1).





#### **BACKGROUND:**

The City of Long Beach (City) conducts surveys twice each year, usually in May and November, to monitor changes in ground elevation of the Long Beach tidelands and adjacent areas that may occur as a result of oil extraction from the Wilmington Oil Field. Staff reviews the benchmark elevation data from these semiannual reviews. The City also reports annually to the Commission on its findings. This report covers benchmarks surveyed in May and November 2023, and compares elevation changes that have occurred since completion of the previous survey. The prior report to the Commission was submitted as <a href="Item 88">Item 88</a>, June 05, 2023</a>, and covered benchmarks surveyed in May and November 2022.

Generally, elevation changes less than 0.050 feet (0.60 inches) over a six-month survey period are considered stable. Except for the minor elevation changes in the three cases mentioned below, collected data indicates that overall, the elevations have remained stable. Maintaining a balanced injection-to-production ratio in oil operations is crucial for addressing elevation changes effectively.

Staff have sought clarification from the City of Long Beach regarding subsidence-related issues. According to the City's responses, the lowest elevation loss recorded was -0.23 feet, while the highest elevation increase measured was +0.43 feet over the last decade.

Subsidence monitoring is authorized by Chapter 138, Statutes of 1964, First Extraordinary Session and the corresponding Unit and Contractor Agreements.

# STAFF ANALYSIS:

Based on the data collected by the City, elevations in the Civic Center, Alamitos Bay, Naples, and the offshore drilling islands were stable during the twelve-month period.

Minor elevation changes were observed within the Wilmington Oil Field in the Harbor District, the Central City, and along the shoreline. An elevation loss of as much as 0.092 foot (1.10 inches) was observed in the Harbor District in Pier A, Pier A West, and Terminal Island. This minor loss occurred during the second six-month survey period. Elevation losses of as much as 0.060 foot (0.72 inch) were observed in the southeast corner of Pier H, the marina mole, northeast Shoreline Drive, and Central City. Minor elevation losses of as much as 0.076 foot (0.91 inch) were observed north of the Wilmington Oil Field operated area. An elevation rise of 0.059

foot (0.71 inch) was observed north of the Seal Beach Oil Field, adjacent to the San Gabriel River.

# **OTHER PERTINENT INFORMATION:**

Staff's review of the City of Long Beach's Report on the Continued Monitoring of Possible Subsidence is consistent with the "Meeting Evolving Public Trust Needs" Strategic Focus Area of the Commission's 2021-2025 Strategic Plan.

# **CONCLUSION:**

The next informational update on possible subsidence monitoring is anticipated to be presented to the Commission in June 2025, covering benchmarks surveyed in May and November 2024.