Meeting Date: 06/05/23

Work Order Numbers: W10442, W16001

Staff: H. Rassamdana

J. Abedi

Staff Report 88 (Informational)

PARTY:

California State Lands Commission

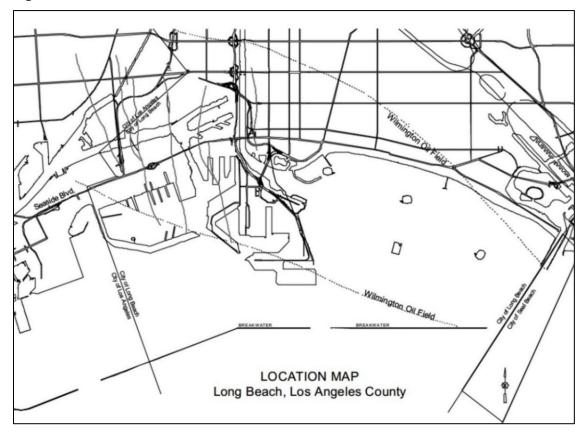
PROPOSED ACTION:

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).

Figure 1. Location



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 2022, and compares elevation changes that have occurred since completion of the previous survey. The prior report to the Commission was submitted as Item 58, April 26, 2022, and covered benchmarks surveyed in May and November 2021.

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, Central City, Alamitos Bay, Naples, the offshore islands, and the City of Long Beach north of Wilmington Oil Field were stable during the twelve-month period.

Minor annual elevation changes were observed in the Harbor District. Elevation losses of up to 0.093 foot (1.1 inches) were observed on Piers A and S, directly onshore from the Cerritos Channel. This was a continuation of the minor elevation losses recorded in the first six-month elevation survey period. A decline in elevation of up to 0.056 foot (0.67 inch) was observed on Piers T and D, directly south of the Long Beach International Gateway Bridge. These elevation changes are considered minor and are being closely monitored.

The Alamitos Beach shoreline and Shoreline Village experienced minor annual elevation changes. A rise of up to 0.060 foot (0.72 inch) was observed in Shoreline Village, directly onshore from Rainbow Harbor. An elevation loss of 0.068 foot (0.82 inch) extended from the eastern portion of Shoreline Village to the Alamitos Beach shoreline. The elevation change is minor and likely due to temporary changes in fluid injection volume. The decline is being closely monitored and is not expected to continue.

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.