



Legislation Text

File #: 20-0217, **Version:** 1

Recommendation to receive and file the attached report, "Elevation Changes in the City of Long Beach, November 2018 through October 2019." (Citywide)

The City of Long Beach, through the Energy Resources Department (ER), supervises oil production and subsidence control operations in the Wilmington Oil Field. ER conducts elevation surveys every six months to monitor elevation changes in the oil fields and adjacent city areas. This report focuses on elevation changes that have occurred from November 2018 through October 2019. The ER survey includes the following areas: Civic Center, Central City, Alamitos Bay, Naples, Harbor District, and the offshore area encompassing the four oil islands.

The results of the last two six-month surveys indicate that elevations were stable in the Civic Center, Central City, Naples, and Alamitos Bay. During the first half of the year, the offshore islands were stable except for Island Freeman. The elevation of Island Freeman declined by 0.06 foot (0.7 inch). The elevation decrease is within normal limits and did not continue in the second half of the year. Water Injection and fluid production were closely monitored for significant changes.

During the first half of the year, the Harbor District was stable, except for a small portion of Piers D, E, F and a portion of Piers A and S. The ends of Piers D, E and F experienced an elevation increase of up to 0.07 foot (0.8 inch). The increase may have been due to ongoing construction in the Middle Harbor area. The elevation of the western portion of Piers A and S also increased up to 0.07 foot (0.8 inch). The increase was within normal limits and did not appear to have resulted from any change in the oil operations. The Harbor District was stable during the second half of the year.

The ER survey uses a series of benchmarks to determine elevation changes. Studies by the Department's engineers and geologists show the benchmarks may rise and fall in such a manner as to make a survey either optimistic (slightly up in elevation) or pessimistic (slightly down in elevation). These changes in elevations may be associated with tidal cycles, drought, temperature changes, deep earth tectonic changes, dewatering activities, and/or re-pressuring operations in the oil field. Surface elevations over the active Wilmington Oil Field can be expected to fluctuate under changing water flood conditions.

This matter was reviewed by Deputy City Attorney Richard F. Anthony on February 11, 2020, and by Revenue Management Officer Geraldine Alejo on February 26, 2020.

City Council action on this matter is not time critical.

This recommendation has no staffing impact beyond the budgeted scope of duties and is consistent with existing City Council priorities. There is no fiscal or local job impact associated with this recommendation.

Approve recommendation.

ROBERT M. DOWELL
DIRECTOR OF ENERGY RESOURCES

APPROVED:

THOMAS B. MODICA
ACTING CITY MANAGER