

**INFORMATIONAL
CALENDAR ITEM
101**

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02/22/13

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R. B. Greenwood

**STAFF REPORT ON THE
MONITORING OF POSSIBLE SUBSIDENCE,
LONG BEACH UNIT, WILMINGTON OIL FIELD,
LOS ANGELES COUNTY**

PARTY:

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

BACKGROUND:

The East Wilmington Oil Field (Long Beach Unit) was first developed in 1965, pursuant to 1964 agreements between the State, City of Long Beach, and Field Contractors. These agreements included oil field pressure control by adjusting water injection to prevent changes in ground elevation. This six month report is a presentation of subsidence control effectiveness.

Long Beach and vicinity experienced regional ground elevation changes (subsidence) due to ground water withdrawal, sediment compaction, and folding and faulting since 1929. The first definitive subsidence that could be attributed to oil production was in the West Wilmington Oil Field in 1947. Early 1950's repressuring operations (injecting water) resulted in the cessation of subsidence in the Long Beach area by 1965.

The City of Long Beach conducts surveys twice each year, usually in May and November, for the purpose of monitoring changes in ground elevation of the Long Beach tidelands and adjacent areas. The Commission's staff reviews and interprets the benchmark elevation data from these semi-annual surveys. This report covers benchmarks surveyed in April 2012 and compares elevation changes that have occurred since completion of the previous survey in November 2011.

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Elevations throughout the Civic Center, Alamitos Bay, Naples, and offshore areas were stable (less than 0.3 inches change). The Harbor District remained stable except minor elevation changes in two harbor areas: up to 0.8 inches elevation loss on Pier S attributed to increased shallow oil production and up to 1.1 inch elevation rise on portions of Piers D, E, and T. Activities in these areas also include oil operations and surface development related to the Heim Bridge, Gerald Desmond Bridge, and Middle Harbor Port Projects. The City will continue to monitor elevations in these areas.

The results of the next regular elevation survey, to be conducted in May, 2013, will be reported to the Commission after the data have been received and analyzed by the Commission's staff.

EXHIBIT:

- A. Location Map

EXHIBIT A

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