Meeting Date: 06/07/24
Work Order Number: 10443
Staff: H. Rassamdana

Staff Report 56

GRANTEE:

City of Long Beach

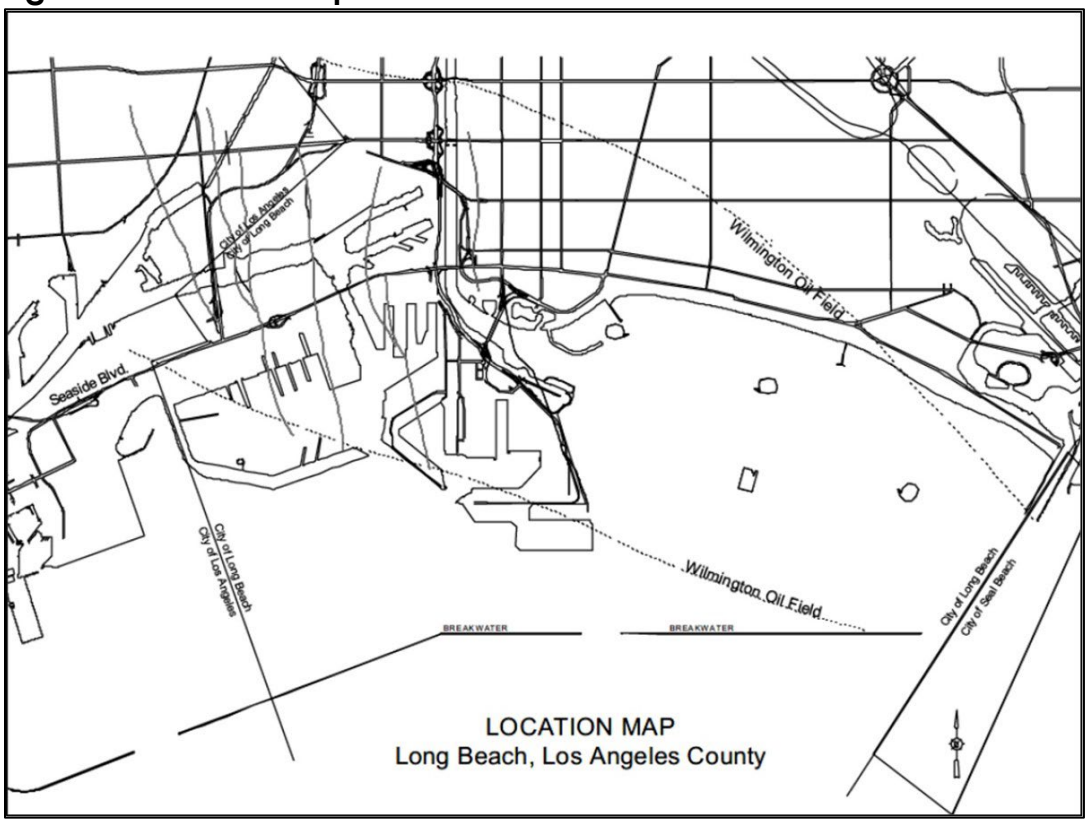
PROPOSED ACTION:

Approval of Subsidence Monitoring Costs for Vertical Measurements and Studies, 2024-2025 Fiscal Year.

AREA, LAND TYPE, AND LOCATION:

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

Figure 1: Location Map



BACKGROUND:

The City of Long Beach (City) conducts ground elevation measurement surveys and studies twice each year (fall and spring) throughout the Harbor District for the purpose of monitoring changes attributable to subsidence caused by oil and gas extraction operations. Changes in ground level caused by subsidence can indicate that an out of balance condition may exist below the surface between the hydrocarbon fluids extracted and the water injected for pressure maintenance, causing the ground to sink or rise. Costs for conducting these surveys and studies in Long Beach are deducted from the Long Beach Tidelands Oil Revenues, with the prior approval of the Commission in accordance with Chapter 138, Statutes of 1964, Extraordinary Session, section 1(e). The surveys will consist of vertical measurements and studies in the City between July 1, 2024, and June 30, 2025. The City's estimated costs to perform the surveys are set forth in Table 1.

Table 1. City's Estimated Cost of Proposed Work for Fiscal Year 2024-2025

Proposed Work	Recommended Approval
Global Positioning System (GPS) Real-Time Network (RTN) Hardware/Software	$ 60,500
Management, GPS Evaluation Surveys, and Reports (Staff)	$ 857,924
Total	**$ 918,424**

GPS AND RTN HARDWARE/SOFTWARE

The fixed Long Beach Deformation GPS Network incorporates 14 GPS base stations that continuously acquire data for periodic elevation surveys. For Fiscal Year (FY) 2024-2025, the overall estimated cost is $60,500 (as shown in Table 1, above), a decrease of $3,850 from the FY 2023-2024 budget, primarily due to GPS Firmware being under warranty. The replacement cost of one GPS Base Station is also included in the annual budget in the event of a hardware failure. A contingency of 10 percent is also added to account for any other unforeseen GPS equipment costs or repairs.

MANAGEMENT, GPS ELEVATION SURVEYS, AND REPORTS

These costs account for the City's professional staff and contractor surveyors' time to perform the GPS elevation surveys, in-house studies, evaluations, report generation/review, and conducting daily surveillance of oil-field activities to monitor subsidence. For FY 2024-2025, the estimated cost in this category (as shown

in Table 1, above) indicates an increase of $137,059 from the FY 2023-2024 budget of $785,215. According to the City of Long Beach's response to the staff inquiry, this increase is primarily due to the escalation of project contingency, which ties to the directive mandated by the California Geologic Energy Management Division (CalGEM) to significantly and expeditiously reduce the water injection gradient used in Wilmington field, while continuing to manage subsidence, necessitating additional subsidence monitoring and evaluations. Following extensive communication between CalGEM and the Water Board on one side, and the City of Long Beach and the California Resources Corporation on the other, an agreement was reached to reduce the water injection gradients over a 5-year period. The Full Field Injection Reduction Work Plan agreed upon aims to prevent potential runoff of injection water towards underground water layers.
The increase also includes a 10 percent contingency to cover the costs of additional staff time or unforeseen future increases in employee benefit costs.

STAFF ANALYSIS AND RECOMMENDATION:

Staff has reviewed the City's proposal for conducting the ground elevation measurement surveys and studies for the purpose of monitoring changes attributable to subsidence. Staff believes the City's proposal is reasonable and consistent with Chapter 138, Statutes of 1964, First Extraordinary Session. Therefore, staff recommends the Commission approve the proposed subsidence monitoring costs.

OTHER PERTINENT INFORMATION:

1. On June 27, 1979, the Commission approved proposed expenditures for subsidence maintenance and repairs and subsidence studies (Item 27, June 27, 1979). Exhibit B of that Item included the procedures for performing subsidence studies and reimbursement for associated costs. Work performed under this Fiscal Year 2024-2025 proposal will conform to the standards identified in that document. Anticipated costs for Fiscal Year 2023-2024 were presented in Item 63, April 07, 2023.
2. This action is consistent with paragraph 2b of the "Meeting Evolving Public Trust Needs" Strategic Focus Area of the Commission's 2021-2025 Strategic Plan.
3. Staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (CEQA)as a

categorically exempt project. The project is exempt under Class 6, Information Collection; California Code of Regulations, title 14, section 15306.

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15300.

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt project, Class 6, Information Collection; California Code of Regulations, title 14, section 15306.

AUTHORIZATION:

Approve subsidence costs, as defined in Chapter 138, Statutes of 1964, First Extraordinary Session, section 1(e), as shown in Table 1, above, proposed to be expended by the City of Long Beach for subsidence vertical measurements and studies to be conducted in the Long Beach Harbor District between July 1, 2024, and June 30, 2025, subject to the condition that the work conforms to the definitions and procedures for such work established by the Commission at its June 27, 1979 meeting, Item 27.