

**INFORMATIONAL
CALENDAR ITEM**

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**STAFF REPORT ON THE
STATE LANDS COMMISSION'S EFFORTS
TO REMEDIATE OIL LEAKAGE IN THE
SUMMERLAND BEACH AREA,
SANTA BARBARA COUNTY**

PARTY:

California State Lands Commission
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BACKGROUND:

The Summerland Oil Field was developed in the late 1890s from shore and from wharfs that extended into the Pacific Ocean in an area of naturally occurring oil and gas seeps. The field was the first offshore oil development in the United States. No records exist of the drilling and abandonment of the wells. When production ceased to be economical in the early 1900s, operators left many of the wells and piers to deteriorate. To the extent operators performed well abandonments, they used contemporary procedures that do not meet current regulatory requirements.

John Treadwell, a mining engineer, who appeared to have a close relationship to the Southern Pacific Railroad Company, built one of the piers, the Treadwell Pier, in 1898. As the Pier was being constructed, oil wells were also being drilled. By August 1899, 18 wells had been drilled, with the average production of each well between two and four barrels of oil per day. The Pier had multiple purposes, serving as a dock for loading and unloading vessels to transfer materials to shore or the rails of the Southern Pacific railroad, and as a wharf that could anchor oil wells drilled into the ocean floor. When the Pier was completed, it extended 1,230 feet from the shore and supported 20 wells. Most historical maps and documents from the early 1900s refer to the Treadwell Pier as the Southern Pacific Company's Pier and wells.

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In the late 1960s, the California State Lands Commission (Commission) conducted a Summerland Beach Cleanup Project that included the abandonment of 60 wells with short cement plugs (about five feet) and cutting off of the casings. Well Number 10 was one of those 60 wells. In 1975, because of oil seepage near the previously abandoned Treadwell Number 10 well, the Commission re-abandoned the well using a six-foot diameter concrete filled tub to cap the well at the seafloor.

In 1993, the Commission abandoned three wells on Summerland Beach as part of its Summerland Well Abandonment Project. The objective of the program was to properly abandon wells that were not properly abandoned in 1907. The three wells differed from the Treadwell Number 10 well because they were located on the Summerland Beach and were exposed at low tide and submerged about three feet at high tide. The wells were abandoned using a rig mounted on a 20-foot high steel structure, the Surf Sled Vehicle (SSV). The project was completed for approximately \$863,000. The oil seepage from the natural seeps continues in the near shore waters at Summerland Beach.

In 1994, the Commission, the Office of Oil Spill Prevention and Response, and the offices of U.S. Senator Feinstein and State Representative Jack O'Connell requested the U.S. Coast Guard (USCG) to secure Oil Spill Liability Trust Fund revenues to re-examine the area and determine if old abandoned wells in the area might be responsible for some of the continuing oil seepage. The USCG conducted a two-phase study of the Summerland area seeps. The first phase was a geophysical/ hydrographic sight survey. A Summerland area map describing the oil well casings, oil seeps, and wharf and pier piling type hazards was developed from the survey. Forty-three potential targets were identified for further investigation. During phase two, seven of the 43 sites were identified to require excavation to determine seep sources. Oil sheens in the area were believed to be caused by natural seepage, some that may be finding their way to the surface from the outside of old well casings as a conduit. After spending about \$215,000 on the study, the USCG determined that one well could positively be identified as an oil seep source (originally drilled from the long since removed Becker Pier) and which, when excavated, leaked about ½ barrel oil. That well is described as the Becker well. Oil seepage occurring from this well becomes visible approximately 10 days every year.

In March 2011, oil was observed leaking on Summerland Beach at very low tide. Commission staff and Santa Barbara County representatives from Office of Emergency Services and Office of Planning, Development and Energy visited the Summerland Beach on the next low tide date of April 12, 2011. The oil was not present on this visit,

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but the location coincides with the inshore Becker well which was referenced in the 1994 USCG study Staff is seeking additional funds from various sources to address the problem.

EXHIBIT:

- A. Summerland Oil Field Presentation File