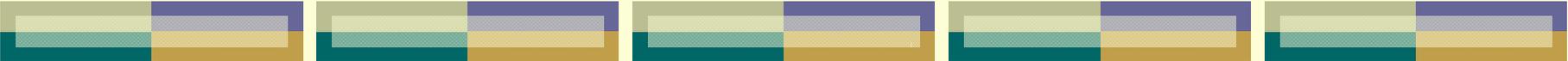


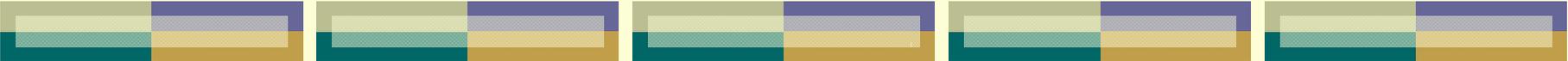
SHORELINE PROCESS





HISTORY

- Staff continues to receive questions from the public regarding the cause of shoreline erosion at Hueneme Beach.
 - Summary of local Shoreline History.
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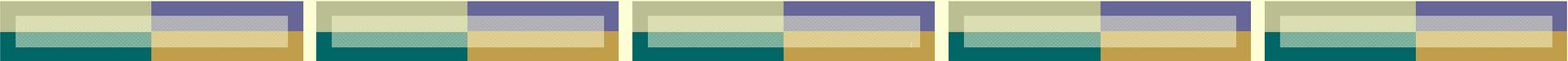


PRE-PORT

- Prior to construction of the deepwater Port, the long-shore currents supplied down-coast beaches with adequate sand.
 - The natural littoral drift moved surf-zone sand around the Point of Hueneme avoiding the offshore Hueneme submarine canyon.
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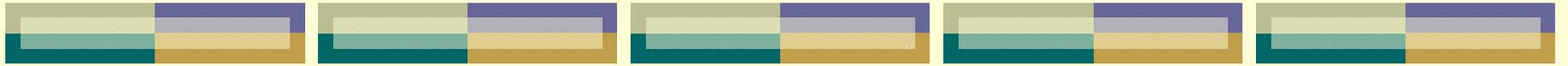
1929





1939-1940

- OHD took advantage of the offshore Hueneme submarine canyon located near the mainland point.
 - At this location, the OHD designed and constructed the deepwater Port with two entry jetties extending to the head of the canyon.
- 



1939
UNDER
CONSTRUCTION

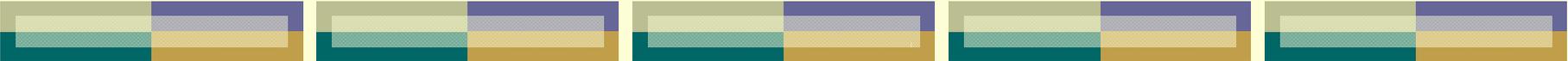
1940
CONSTRUCTION
COMPLETED



The Problem?

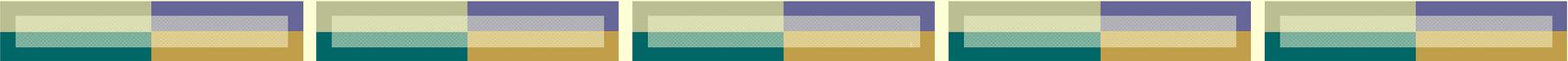
- The OHD's jetties created an almost complete barrier to the long-shore current.
- The entry jetties dramatically altered the down-coast drift of sand and caused severe shoreline erosion from Port Hueneme to Point Mugu.





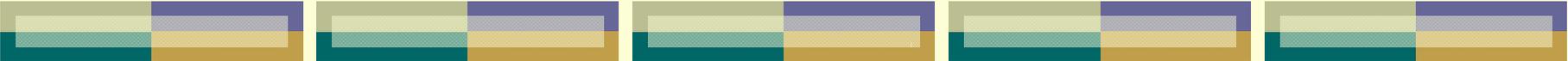
1942

- Navy acquired the Port from the OHD.
 - U.S. Army Corps began investigating the south coast erosion problem that the Navy inherited.
- 



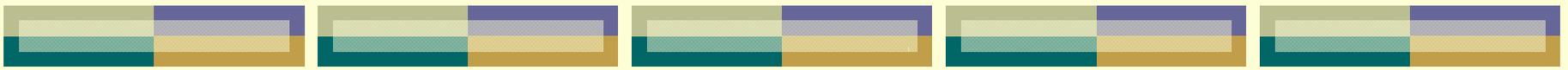
1948

- U.S. Army Corps developed a plan to mitigate the loss of sand caused by the Port jetties.
 - The plan involved construction of a sand trap and small craft harbor at Oxnard Beach.
 - The sand trap was designed to capture littoral sand before reaching the jetties and re-depositing the sand back on down-coast beaches, on a two-year dredge cycle.
- 



1954

- Congress passed the River and Harbor Act that adopted the Army Corps' plan for a sand trap.
 - The Act funded construction of the Channel Islands Harbor and authorized dredging and sand by passing from the Harbor's sand trap.
- 



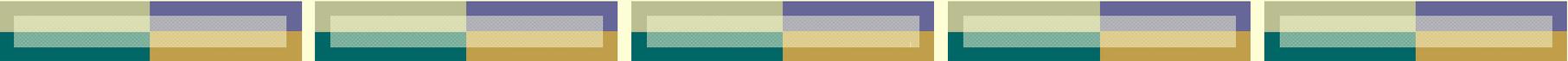
1961

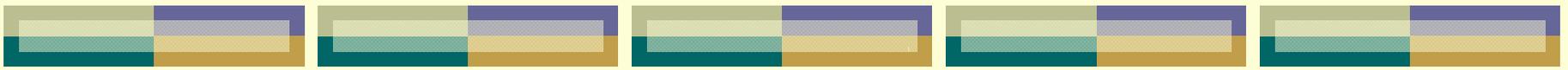
- OHD returned to the Port to recommence civilian cargo operations.
 - The Army Corps established the down-coast erosion rate to be approximately 1.2 million cubic yards per year.
- 

1963

- Army Corps commenced its biennial dredging and sand-bypassing program.



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- To our knowledge, the Army corps has not missed a two-year dredging cycle. However, federal funding reductions for dredging has led to long-term sand buildups in the sand trap, which is starving down-coast beaches starting with Hueneme Beach.
 - Under-dredging was made clear during the last sand replenishment cycle when only 400,000 cubic yards of sand was placed (vs. the targeted 2.5 million cubic yards).
- 

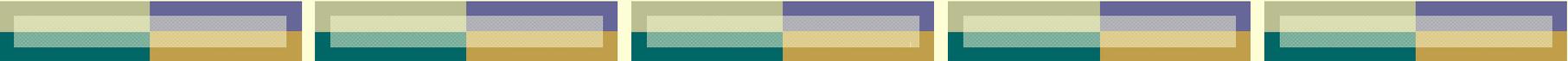


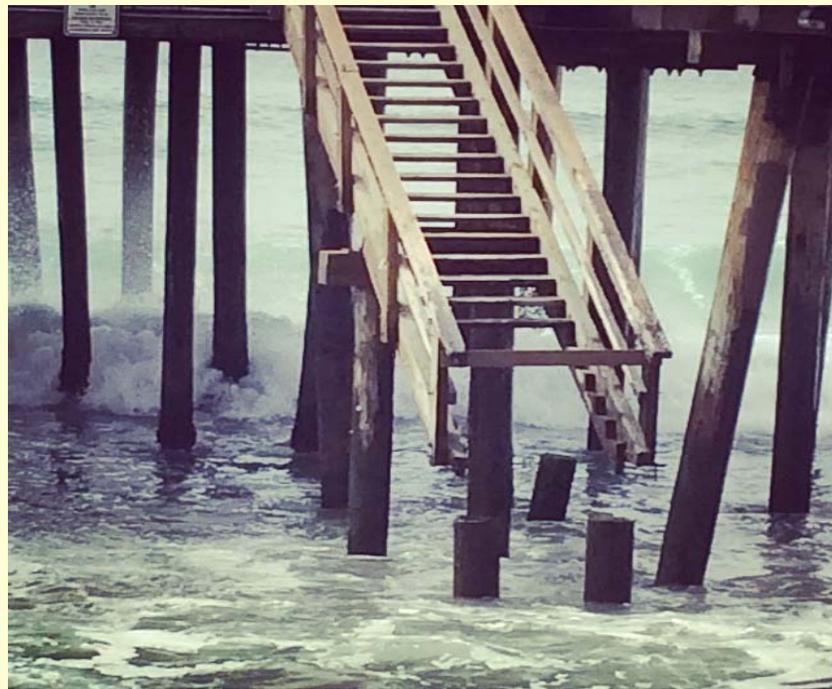
2014

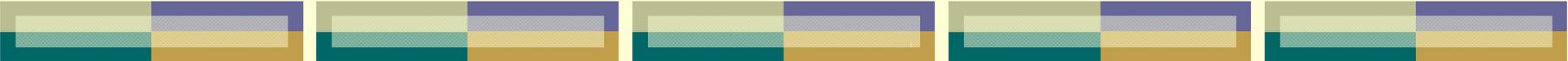
- The estimated funding for sand bypassing this fall cycle is \$14 million.
 - The Navy who jointly shares the Port with the OHD contributes approximately 19% or \$2.6 million towards sand replenishment.
- 

- In contrast, the OHD, which generates \$7 billion in cargo and over \$1 billion in economic impact from use of Port contributes \$0 to the sand bypass program.



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- So what? Down coast beaches are entirely dependent upon the sand Bypassing program.
 - Inadequate funding for sand means the local community gets harmed and is left with trying to address the adverse shoreline impacts caused by the Port.
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- The City estimates the cost for shoreline and pier damage will total around \$4 million this cycle.

The End



SILVERSTRAND BEACH

SEPTEMBER 2014



HUENEME BEACH SEPTEMBER 2014



HUENEME BEACH

SEPTEMBER 2014

