



REGIONAL SEDIMENT MANAGEMENT SOLUTIONS IN SOUTHERN CALIFORNIA

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Pacific WEDA Meeting
October 26, 2017

SOUTHERN CALIFORNIA SEDIMENT MANAGEMENT

- Largest port complex in U.S.
- Highly urbanized watershed
- Heavily protected marine environment
- Low contaminant standards
- Local gov't and federal management responsibility
- Unique challenges for sediment management

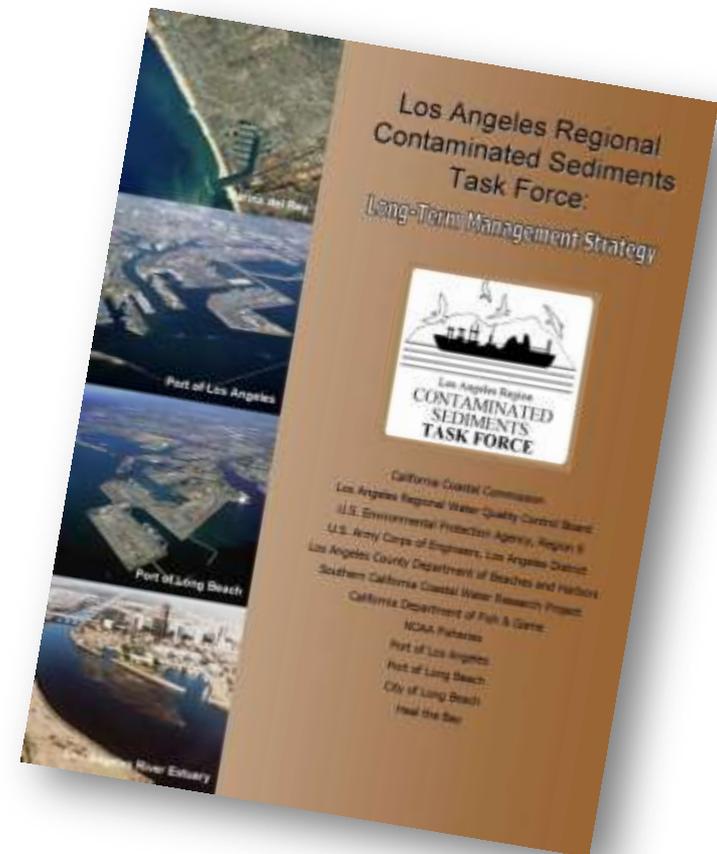




- Maintenance dredging for navigational
- Capital improvement programs to accommodate new marinas and larger vessels
- Economic pressure for ports and marina owners to improve infrastructure and remain competitive
- New regulatory pressures from regional TMDLs

REVIEW REGIONAL GOALS AS STATED IN ORIGINAL CSTF STRATEGY DOCUMENT

- Decision framework for selecting management options
- Goal for achieving 100% beneficial reuse of dredge materials
- Highest priority given to beach placement (clean) and Port fills (contaminated)
- Low priority given for other fill sites like CAD and ocean disposal
- Treatment technologies identified but additional research needed



CSTF PILOT STUDIES



- Market Survey on Reuse Products
- Sediment Treatment:
 - Sand separation/sediment washing
 - Cement stabilization
- Aquatic Capping/CAD

CSTF PILOT STUDIES

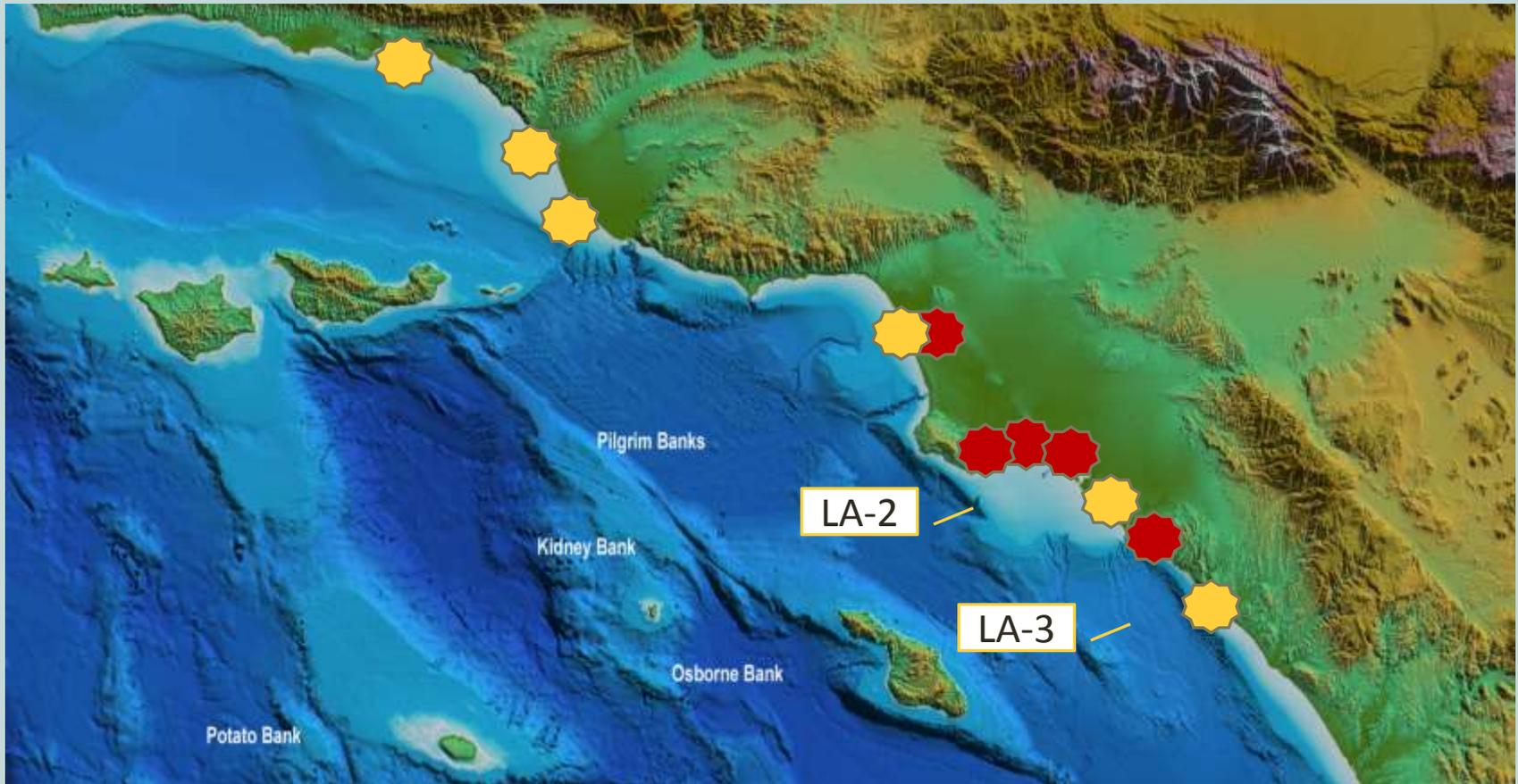


- Harbor-wide sediment management solution
- “one and done” approach with multiple benefits
- Relied on CSTF pilot study information
- Tested local use of CAD as a management approach

PORT HUENEME CONFINED AQUATIC DISPOSAL FACILITY



NATURE OF DREDGING IN REGION

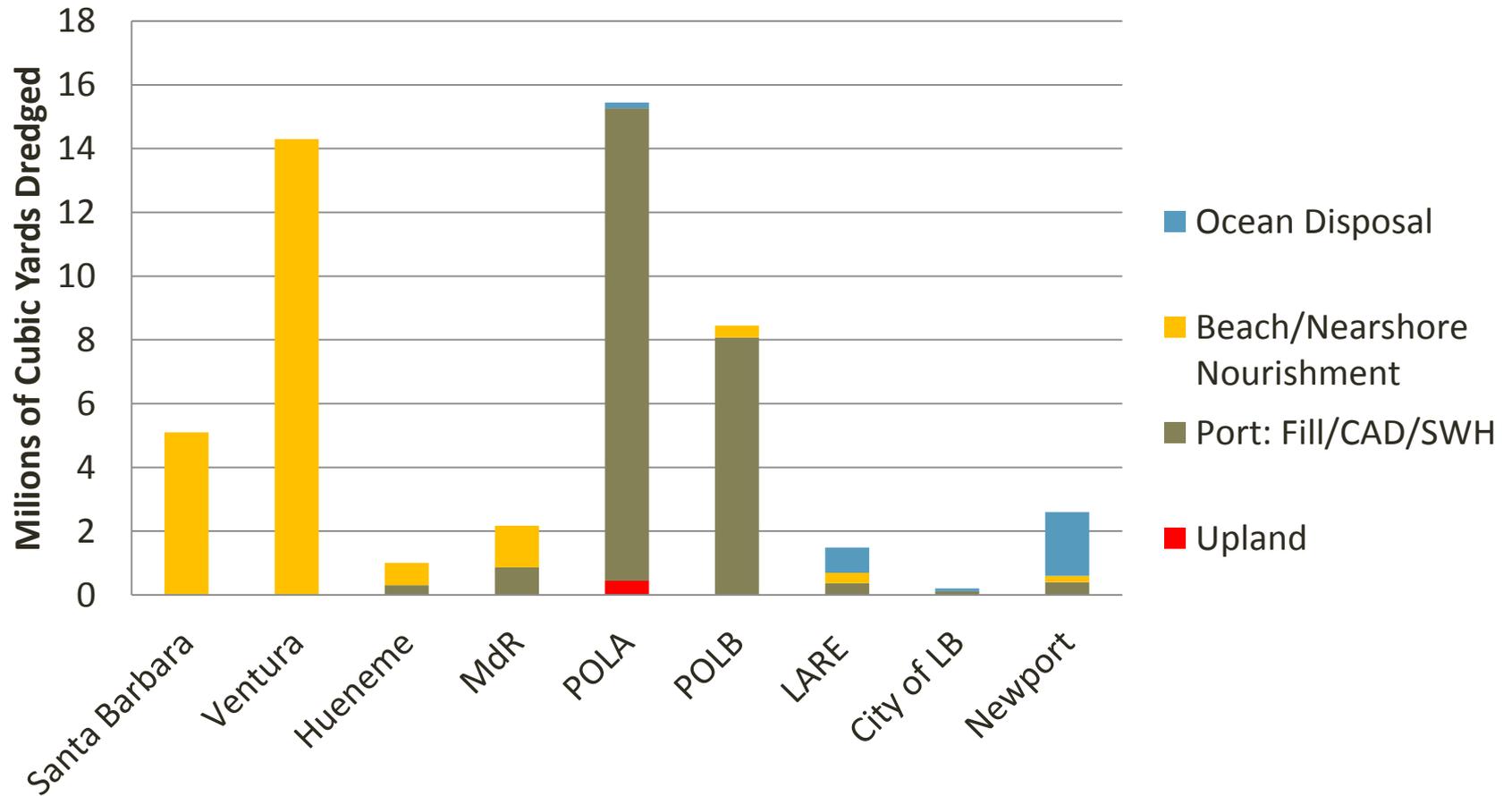


Consistent nearshore/beach nourishment



Urban runoff impacted materials/mixed placement

DREDGE MATERIAL PLACEMENT IN LA REGION 2000 TO 2017



DREDGED MATERIAL MANAGEMENT SUMMARY

- 50,600,000 cy dredged
- 92% beneficially reused
- 6% ocean disposal
- 1% upland disposal

PATTERN WITH CLEAN SEDIMENTS

- Limited by beach nourishment guidelines
- Starting to see issues associated with low-level contaminant disposal in ocean

PATTERN WITH CONTAMINATED SEDIMENTS

- Driven by Corps funding limitations and project authority
- Local sponsor responsible for difference in costs between beach/ocean disposal and confinement
- Relies on availability of Port fills or need to create own disposal site

RECENT INNOVATIONS

- Knockdown dredging permits
- Re-handling material into upper lifts of fill sites
- Development of long-term storage and disposal facilities



LONG-TERM MANAGEMENT SOLUTIONS

- Preserve capacity for contaminated material in fills
- Promote designation of shallow water habitat areas
- Align CAD/SWH development with restoration opportunities to give the financial means and regulatory acceptance for long-term management planning
- Maintain ocean disposal/nearshore placement as a viable sediment management option, invest in the science to build flexibility in placement options:
 - Threshold for placement of fines in nearshore
 - Bioaccumulation risks for ocean disposal

QUESTIONS



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