

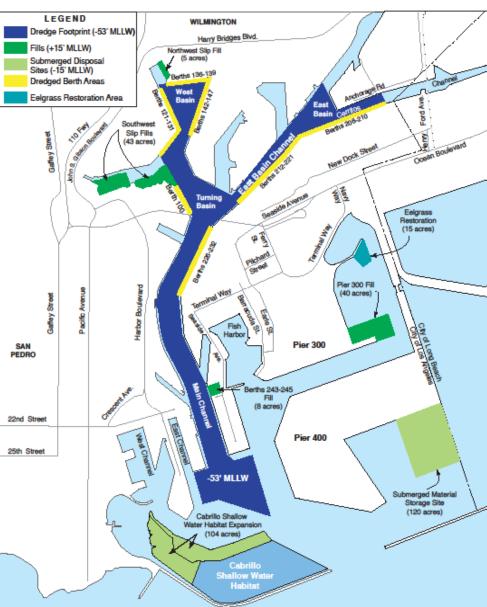
#### Port of Los Angeles Channel Deepening Project

- 2002 2013
- -53 feet depth
- 15,000,000 cy dredged
- 100% beneficial use
- \$370 million
- Cost sharing with ACOE from WRDA 2000



#### Port of Los Angeles Channel Deepening Project







# Sediment Management Challenges

- Issue with native material not going to ocean disposal site due to naturally occurring metals
- Bad quality material necessitated mining sand for fills
- Project delays
  - SEIS/R
  - Legal challenge
  - Remediation dredging project added





### Sediment Management Solutions



- Habitat improvement
  - 104 acres of Shallow Water Habitat
  - 15-ac Eelgrass Restoration Site
- 96 acres of new land fills, including two Confined Disposal Facilities
- Surcharge for new fill eventually disposed in Shallow Water Habitat



Creation of 200 –acre in-harbor Submerged Material Storage Site

## Unique Environmental Challenges

- Regulatory constraints
  - COE was lead on project
  - Port/COE coordination with other agencies early and throughout project
- Biological mitigation requirements
  - Created Shallow Water Habit and Eelgrass Restoration Site to partially compensate for impacts from new fills
  - Also used banked mitigation credits







# Unique Engineering Challenges

- Removing surcharge and building a conveyor bridge over a working terminal
- Maintaining line and grade with bottom dumps at shallow water habitat area
- Equipment and key personnel availability over a 10-year project





#### Lessons Learned

- Maximizing dredged material disposal in-harbor allows for beneficial creation of new land fills for Port uses and enhanced biological habitat, and also reduces disposal costs
- Shorter projects are better than longer projects





