



THE PORT
OF LOS ANGELES

AMERICA'S PORT®

Sea Level Rise Update

November 19, 2025

Presented by:

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Presented to:

*The Propeller Club of Northern California &
The Society of American Military Engineers*

Port of Los Angeles

- Founded in 1907
- Propriety Department of the City of Los Angeles
- State Tidelands Trust Granted in 1911
- Non-Taxpayer Supported
- Cargo Reaches all 435 U.S. Congressional Districts
- By the Numbers:
 - 4,300 Acres of Land (1,740 Hectares)
 - 3,200 Acres of Water (1,295 Hectares)
 - 43 Miles of Waterfront
 - 53 Foot main Channel Water Depth
- 270 Berths and 25 Cargo Terminals
 - 7 Container Terminals
 - 83 Ship-to-Shore Gantry Cranes
- 116 Miles of Rail Tracks



**10,297,352 TEUs
CY – 2024**

2024 Lines of Business



Economic Drivers



Port of Los Angeles Air Emissions, 2024

Compared to 2005 Baseline

-90% 

Diesel Particulate Matter

-98% 

Sulfur Oxides

-18% 

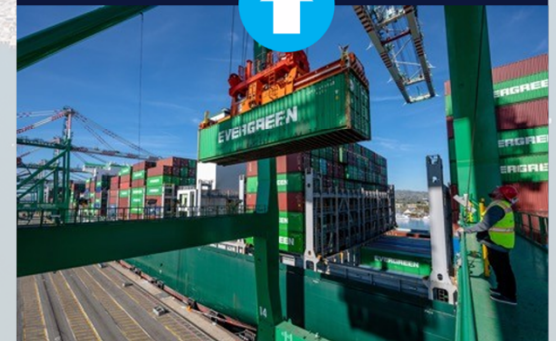
Greenhouse Gases

-73% 

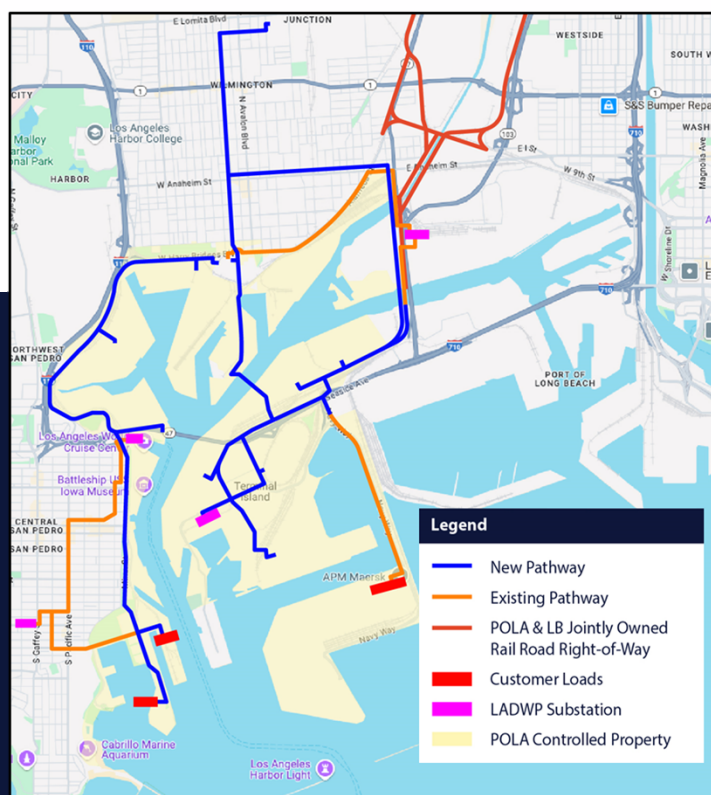
Nitrogen Oxides

+38%

TEUs



Zero Emissions Port Electrification & Operations (ZEPEO)



- **Expand LADWP's RS-C and RS-Q Receiving Stations**
 - Adds at least 200 MW for POLA
 - Increases Power Reliability and Redundancy
- **New Switching Station in Wilmington**
 - Increases Power Reliability and Redundancy
- **New 34.5kV Distribution Lines**
 - Distributes Power to each Marine Terminal

- **Project Cost: \$500.0M**
- **Const.: 2027-2030 (DWP)**

SEA LEVEL RISE STUDY OVERVIEW



2018

Task
1

Asset Inventory

Task
2

Sea Level Rise
Inundation Maps

Task
3

Vulnerability Assessment

Task
4

Development of Resiliency
Strategies

Task
5

Finalize Sea Level Rise Study

2025

Task
1

Revise Sea Level Rise Study

- ✓ UPDATED SLR PROJECTIONS
- ✓ UPDATED RESILIENCY STRATEGIES
- ✓ MAPS THROUGH 2150
- ✓ GROUNDWATER IMPACTS
- ✓ CASE STUDIES
- ✓ PLANNING & DESIGN GUIDELINE

SEA LEVEL RISE PROJECTIONS

Year	2018 POLA SLR STUDY	Draft 2024 Ocean Protection Council Guidance		
	Med-High	Intermediate	Intermediate-High	High
2030	1 ft (0.3 m)			
2050	2 ft (0.6 m)	0.7 ft (0.2 m)	0.9 ft (0.27 m)	1.1 ft (0.33 m)
2100	3 - 5.5 ft (0.9 – 1.7 m)	2.8 ft (0.8 m)	4.5 ft (1.37 m)	6.3 ft (1.9 m)
2150		5.5 ft (1.68 m)	7.7 ft (2.13 m)	11.3 ft (3.4 m)

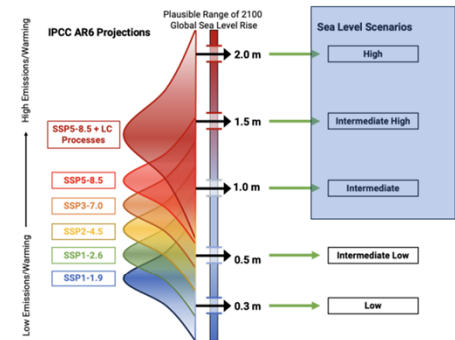
Sea Level Rise relative to year 2000

Assuming 3 Degrees of warming in 2100

Intermediate: 5% chance of exceedance

Intermediate-High: 0.1% chance of exceedance

High: <0.1% chance of exceedance



CALIFORNIA COASTAL COMMISSION
SEA LEVEL RISE POLICY GUIDANCE

*Interpretive Guidelines for Addressing
Sea Level Rise in Local Coastal Programs
and Coastal Development Permits*



Original Guidance unanimously adopted – August 12, 2010
Science Update unanimously adopted – November 7, 2018
2024 Update unanimously adopted – November 19, 2024

SLR PROJECTIONS – 2050 HIGH

Inundation Mapping MHHW + 1.1 ft SLR 2050 High Scenario

Inundation

Depth (ft NAVD)

- 0-2
- 2-4
- 4-6
- 6-8
- 8-10
- >10

Overtopping

Depth (ft NAVD)

- No Overtopping
- 0-1
- 1-2
- 2-3
- 3-4
- 4-5
- >5

Port of LA Boundary

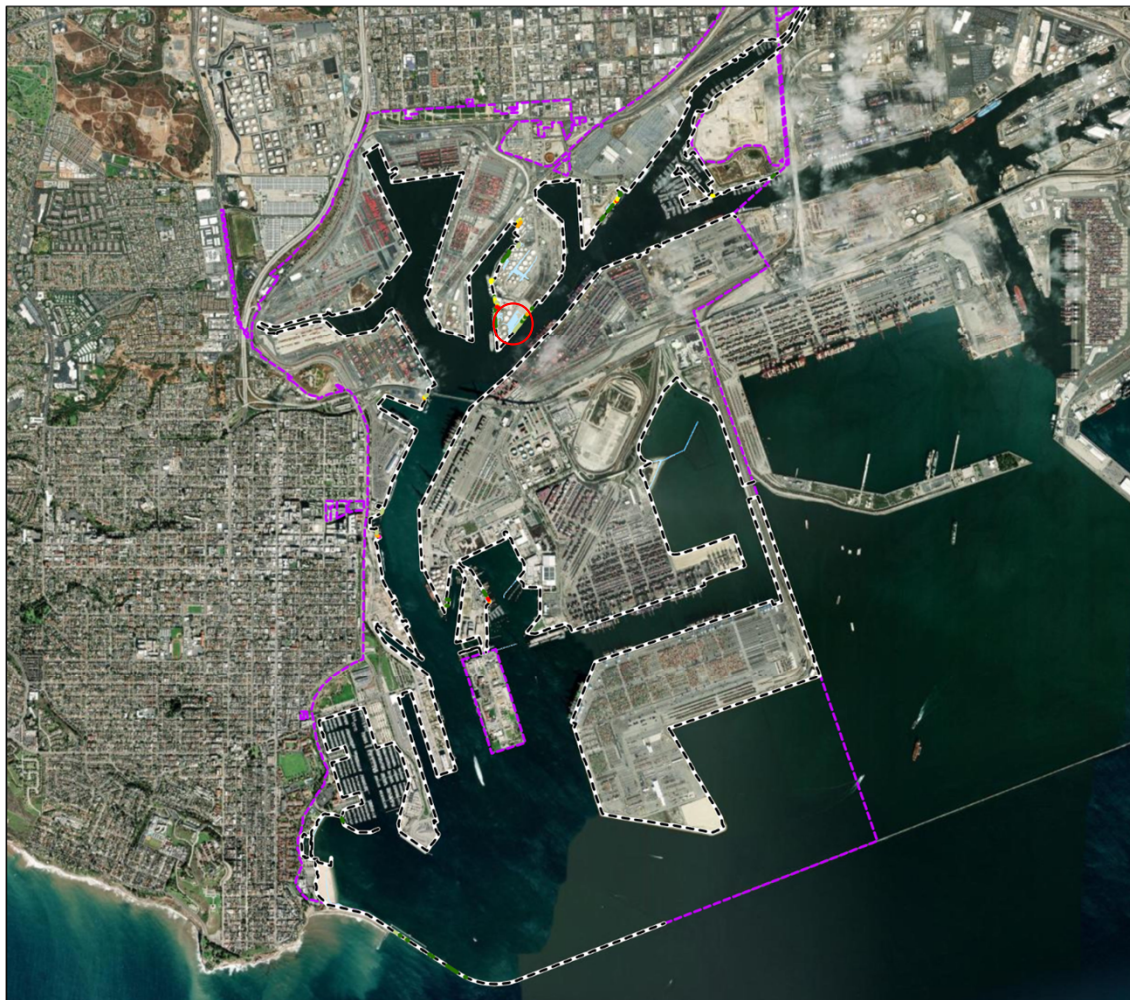


0 0.25 0.5 1 Miles



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SLR PROJECTIONS – 2100 INTERMEDIATE



Inundation Mapping MHHW + 2.8 ft SLR 2100 Intermediate Scenario

Inundation

Depth (ft NAVD)

- 0-2
- 2-4
- 4-6
- 6-8
- 8-10
- >10

Overtopping

Depth (ft NAVD)

- No Overtopping
- 0-1
- 1-2
- 2-3
- 3-4
- 4-5
- >5

Port of LA Boundary

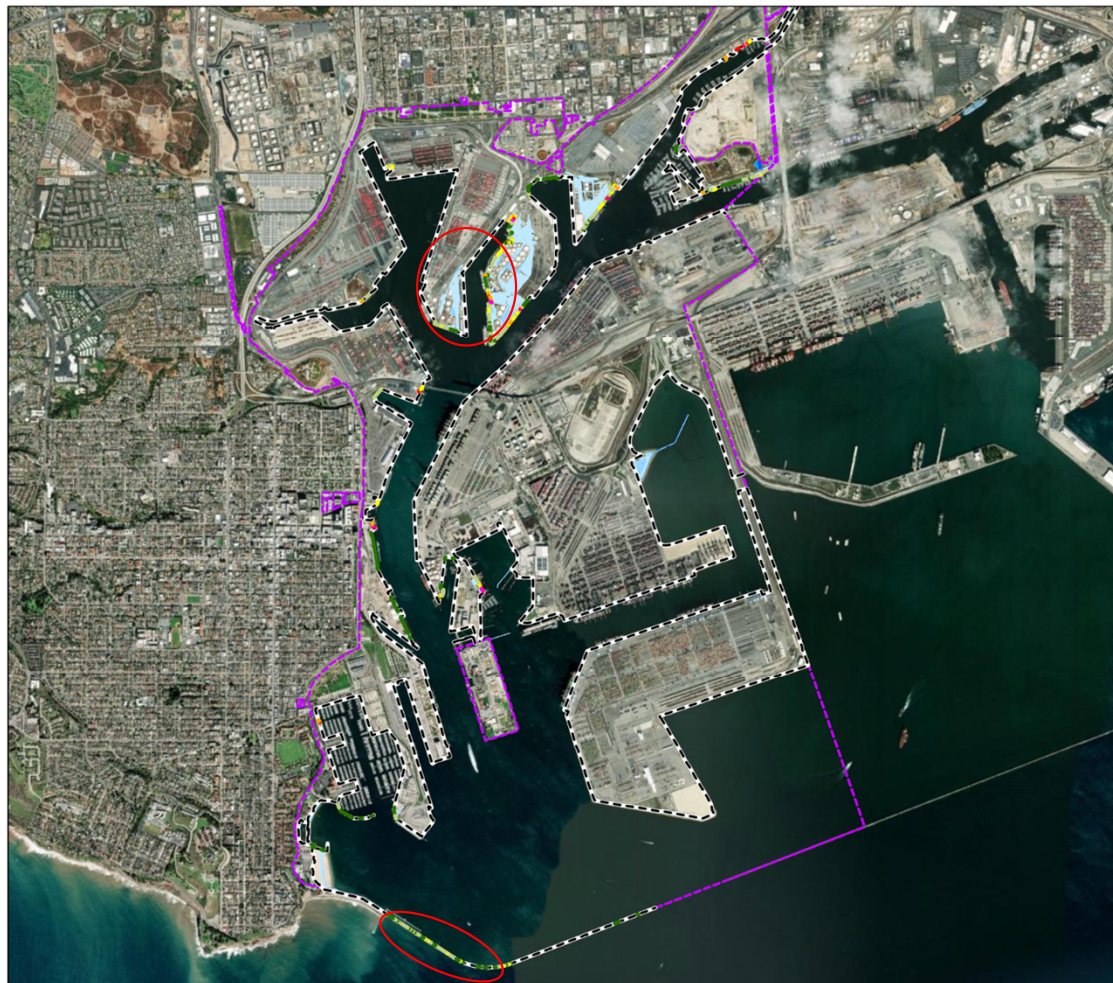


0 0.25 0.5 1 Miles



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SLR PROJECTIONS – 2100 INTERMEDIATE-HIGH



Inundation Mapping MHHW + 4.5 ft SLR 2100 Intermediate-High Scenario

Inundation

Depth (ft NAVD)

- 0-2
- 2-4
- 4-6
- 6-8
- 8-10
- >10

Overtopping

Depth (ft NAVD)

- No Overtopping
- 0-1
- 1-2
- 2-3
- 3-4
- 4-5
- >5
- Port of LA Boundary



0 0.25 0.5 1 Miles



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SLR PROJECTIONS – 2100 HIGH

Inundation Mapping MHHW + 6.3 ft SLR 2100 High Scenario

Inundation

Depth (ft NAVD)

- 0-2
- 2-4
- 4-6
- 6-8
- 8-10
- >10

Overtopping

Depth (ft NAVD)

- No Overtopping
- 0-1
- 1-2
- 2-3
- 3-4
- 4-5
- >5

Port of LA Boundary



0 0.25 0.5 1 Miles



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SEA LEVEL RISE PROJECTIONS

Inundation Mapping MHHW + 7.7 ft SLR 2150 Intermediate-High Scenario

Inundation

Depth (ft NAVD)

- 0-2
- 2-4
- 4-6
- 6-8
- 8-10
- >10

Overtopping

Depth (ft NAVD)

- No Overtopping
- 0-1
- 1-2
- 2-3
- 3-4
- 4-5
- >5

Port of LA Boundary

RESILIENCY STRATEGIES



GOVERNANCE

- SLR language in policy, planning, and design
- CCC case Studies
- SLR in Capital funded projects
- Monitor and update

INITIATIVES

- Local, State, Federal, and International collaboration
- Funding Opportunities
- Subject Matter Experts
- Climate Resilience – Advancement in Zero Emission Technology

INFRASTRUCTURE

- Temporary and Permanent protection
- Innovative solutions
- Elevating and nature based solutions



PLANNING GUIDE & CONSIDERATIONS



ASSET LIFESPAN	50
START OF CONSTRUCTION	2030 (year)
END OF CONSTRUCTION	2035 (year)
END OF SERVICE	2085

Type of Asset / Examples	Design Life / Lifespan	Acceptable Vulnerability	Risk Tolerance	Risk Aversion	SLR Scenario Guidance
Benches, trails, wetlands, living shorelines	Short (temporary to 2050)	Moderate (adaptive, low consequence)	Higher (due to adaptability)	Low	Intermediate Scenario
Non-primary transportation, warehouses, offices, storage, parking, supporting utilities, modifiable ops infrastructure	Moderately Long (2050 to 2100)	Low to Moderate (recoverable)	Medium (acceptable recovery)	Medium-High	Intermediate-High Scenario
Cargo terminals, critical facilities, primary transportation, lifeline assets, hazardous natural resources	Long (beyond 2100)	Very Low (near zero tolerance)	Very Low (resilience or staged adaptation triggers)	Extreme	High Scenario (or adaptation triggers with future upgrades)
		SLR SCENARIO	put an "X" in the correct scenario		
		Intermediate			
		Intermediate-High	X		
		High			

	Intermediate	Intermediate-High	High
2020	0.2	0.2	0.2
2030	0.3	0.4	0.4
2040	0.5	0.6	0.7
2050	0.7	0.9	1.1
2060	0.9	1.4	1.8
2070	1.2	2.1	2.7
2080	1.6	2.8	3.8
2090	2.2	3.6	5
2100	2.8	4.5	6.3
2110	3.5	5.3	7.6
2120	4	6	8.6
2130	4.5	6.6	9.5
2140	5	7.1	10.4
2150	5.5	7.7	11.3
YEAR		2085	
SLR SCENARIO		Intermediate-High	
SLR VALUE		3.2	

	1924-1932 Epoch	
Description	Elevation (ft. NAVD88)	SLR Value
100-year Storm Tide Level (FEMA BFE)	8.00	11.20
Mean Higher-High Water	5.05	8.25

- Ship/Shore Interface
- Rail Connections
- Passenger/Cruise Boarding
- Utility and Service Connections

CAPITAL PROJECT IMPLEMENTATION



*Wilmington
Waterfront
Promenade
\$77M
Resilient to 2100*



*West Harbor Development
Buildings Resilient to 2100*



*POLA/POLB Goods Movement Workforce
Training Facility
Resilient through 2100*

PIER 500

*Request for
Proposal Due
March 26, 2026*



KEY TAKEAWAYS

- 
- POLA is committed to staying resilient to climate change
 - Early Planning helps invest in the future
 - Sea Level Rise is a component of our general plan
 - Continue to Monitor Sea Level Rise



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THANK YOU

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