



West Coast Offshore Renewable Energy: Commercial Shipping & Navigation

NASEM Committee April 23, 2025

Jacqueline M. Moore

Vice President

Pacific Merchant Shipping Association



The Pacific Merchant Shipping Association (PMSA) is an independent, not-for-profit association focused on global trade on the U.S. West Coast, with offices in Oakland, Long Beach and Seattle.

PMSA represents owners and operators of marine terminals and U.S. and foreign vessels operating throughout the world.

www.pmsaship.com



The commercial shipping industry *is not opposed to offshore wind development* in practice.

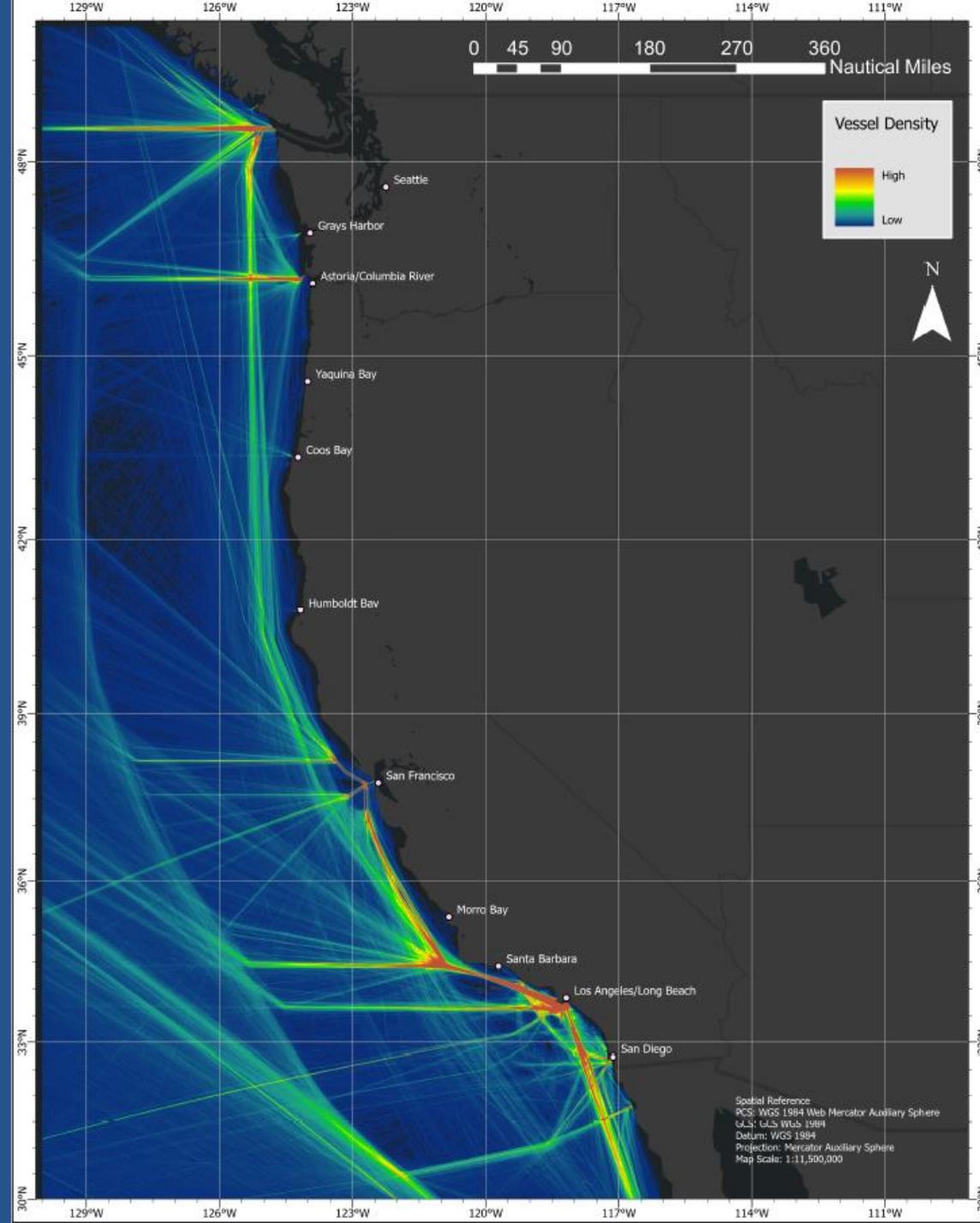
Have significant interests in offshore wind energy development.

Want to ensure the safe, economical, and efficient maintenance of vessel traffic lanes and observance of navigational rights.

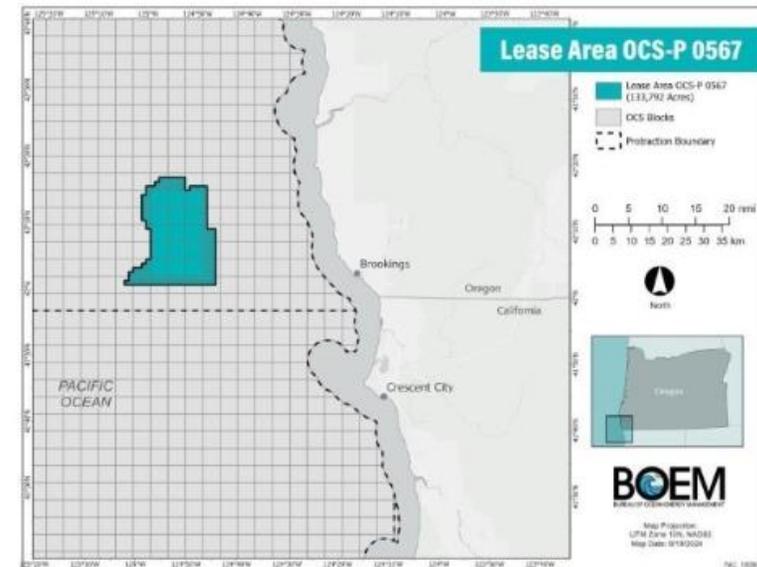
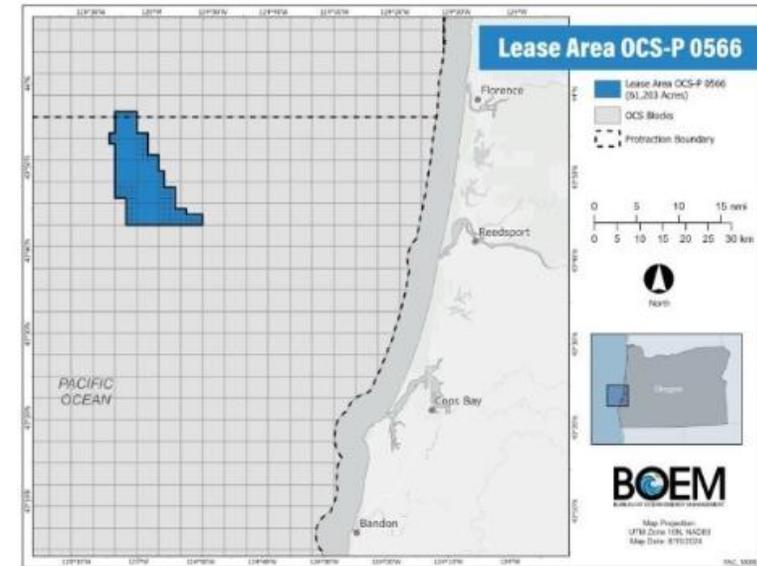
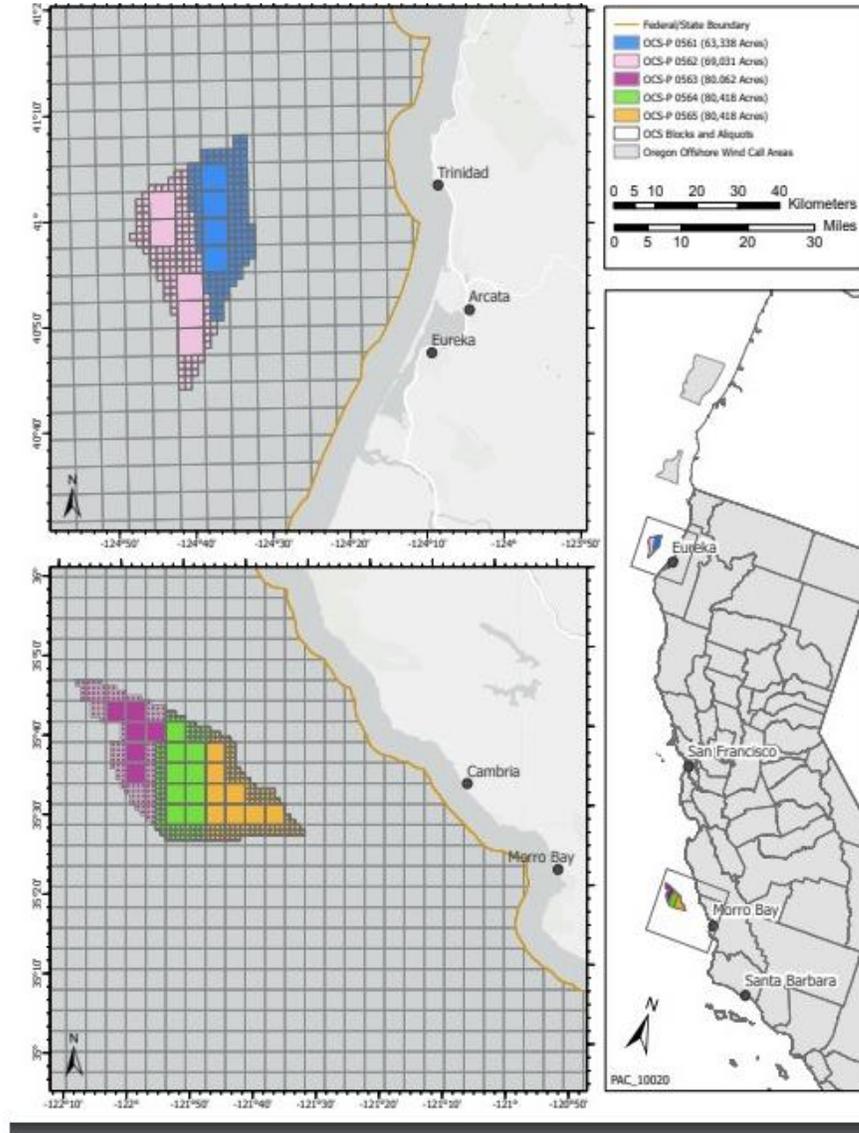


Cargo Vessel Traffic Today

Averaged 2017-2021



West Coast Offshore Wind Proposals



West Coast Offshore Wind Proposals





Potential Impacts with Navigation

- Risk to vessel and human life
- Collisions and allisions
- Oil Spills
- Radar interference
- Marine mammal impacts (?)
- Additional emissions

Potential Impacts to Navigation

Oil spill
over
coast

By MATTHEW BROWN and BR

Cargo ship hits tur wind farm: Orsted

Machine taken out of service at Gode W



The vessel collided with a turbine at Orsted's Gode Wind. (Foto: W

... anchor was buffete
... over an undersea o
... according to vessel
... Federal investigato

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

CONSENSUS STUDY REPORT

**WIND TURBINE GENERATOR IMPACTS
TO MARINE VESSEL RADAR**

sed
d off

more wind support
D

... vessel bound for Wikinger collides in

... nently opposed the
... **shipping lanes freighters**

... busiest ports on the
... Angeles Times in late

(Foto: Wasserschutzpolizei Mecklenburg-Vorpommern)

Morro Bay WEA & Vessel Traffic

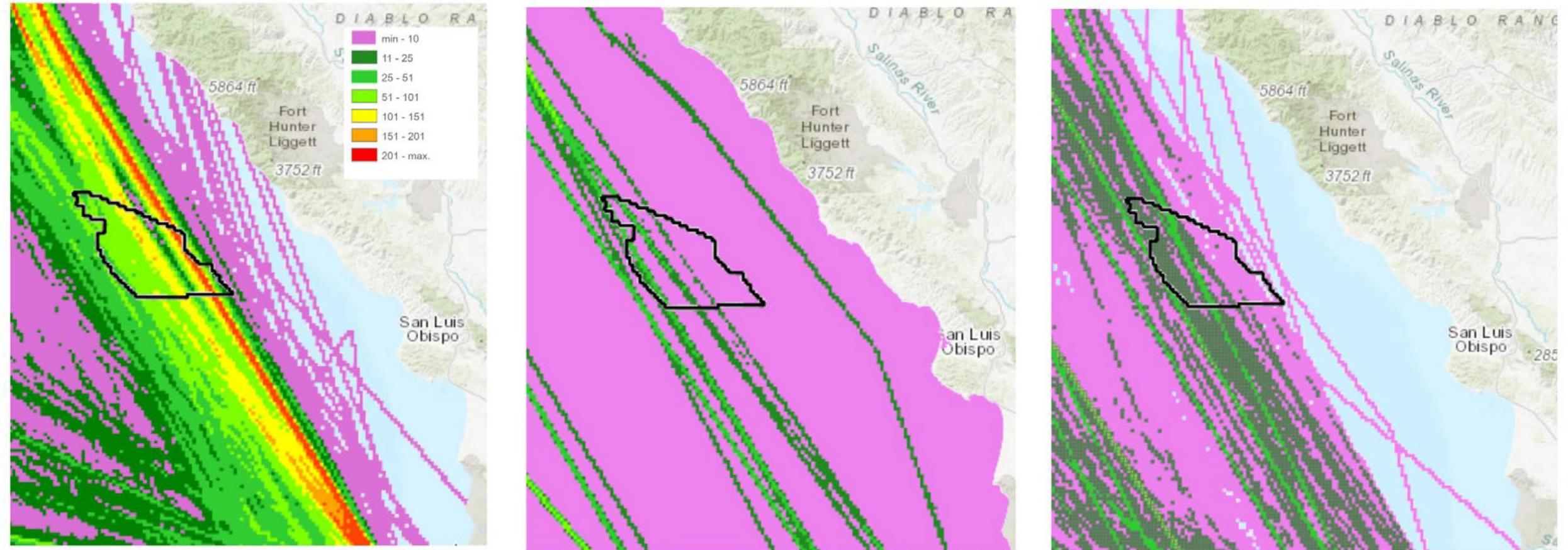
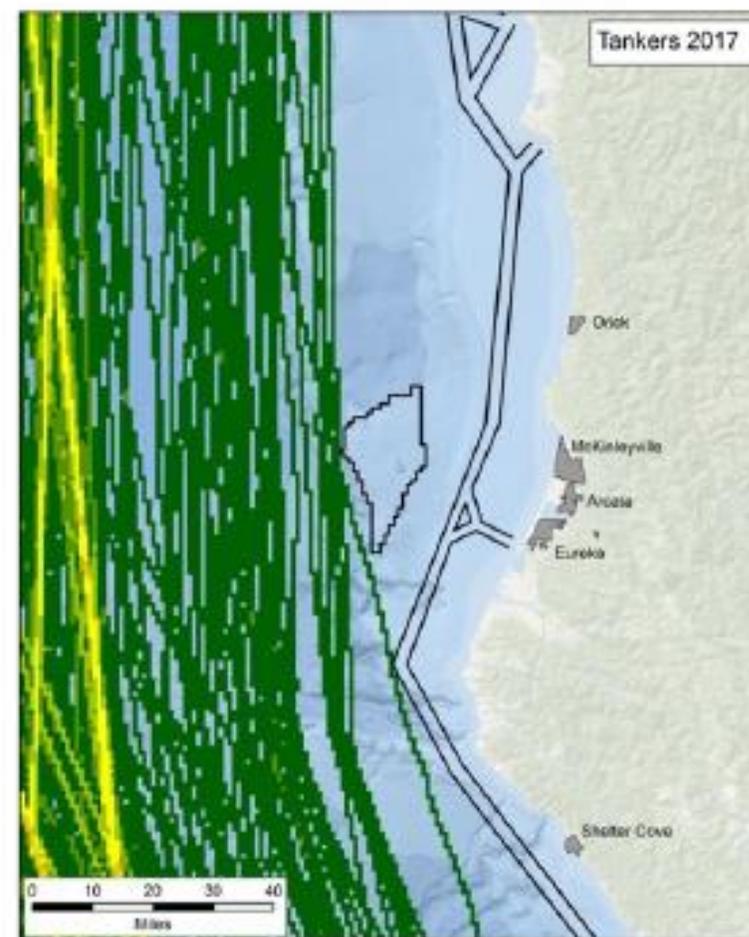
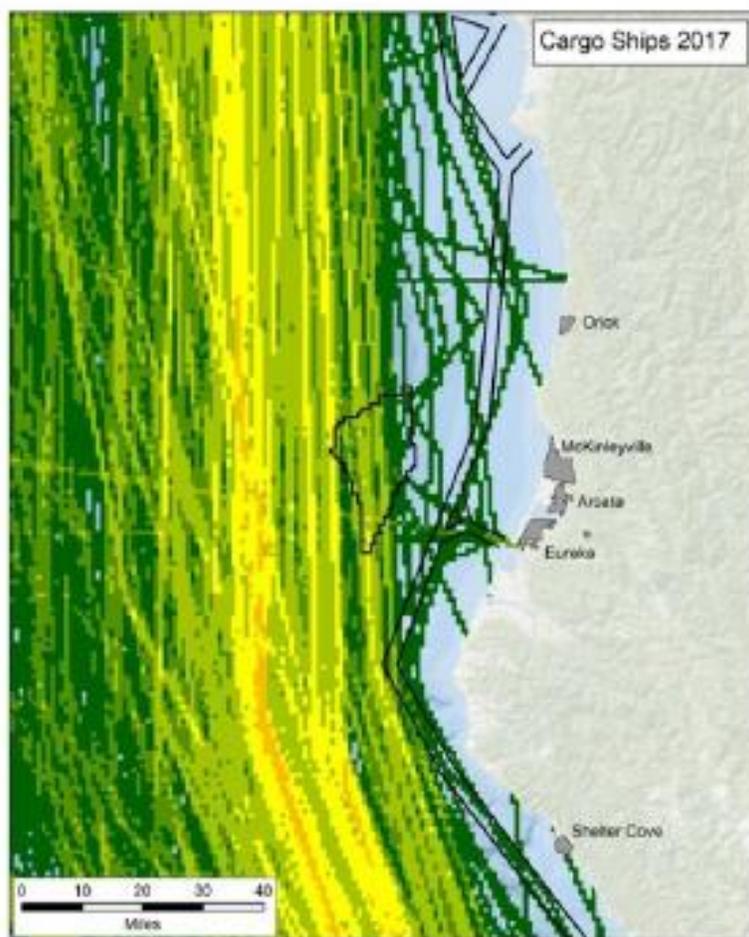
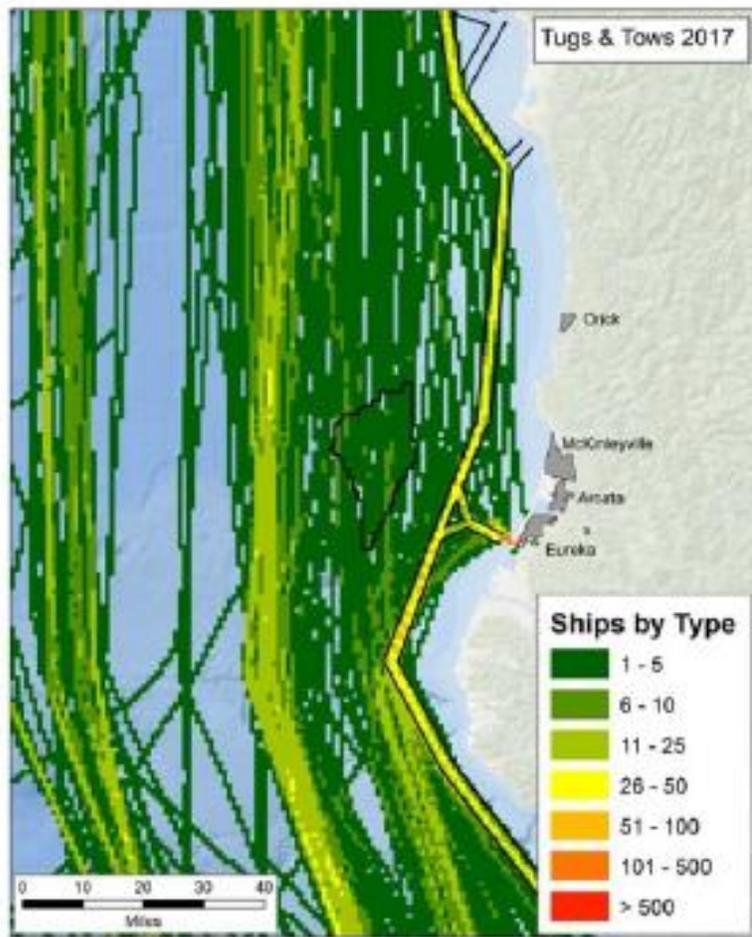
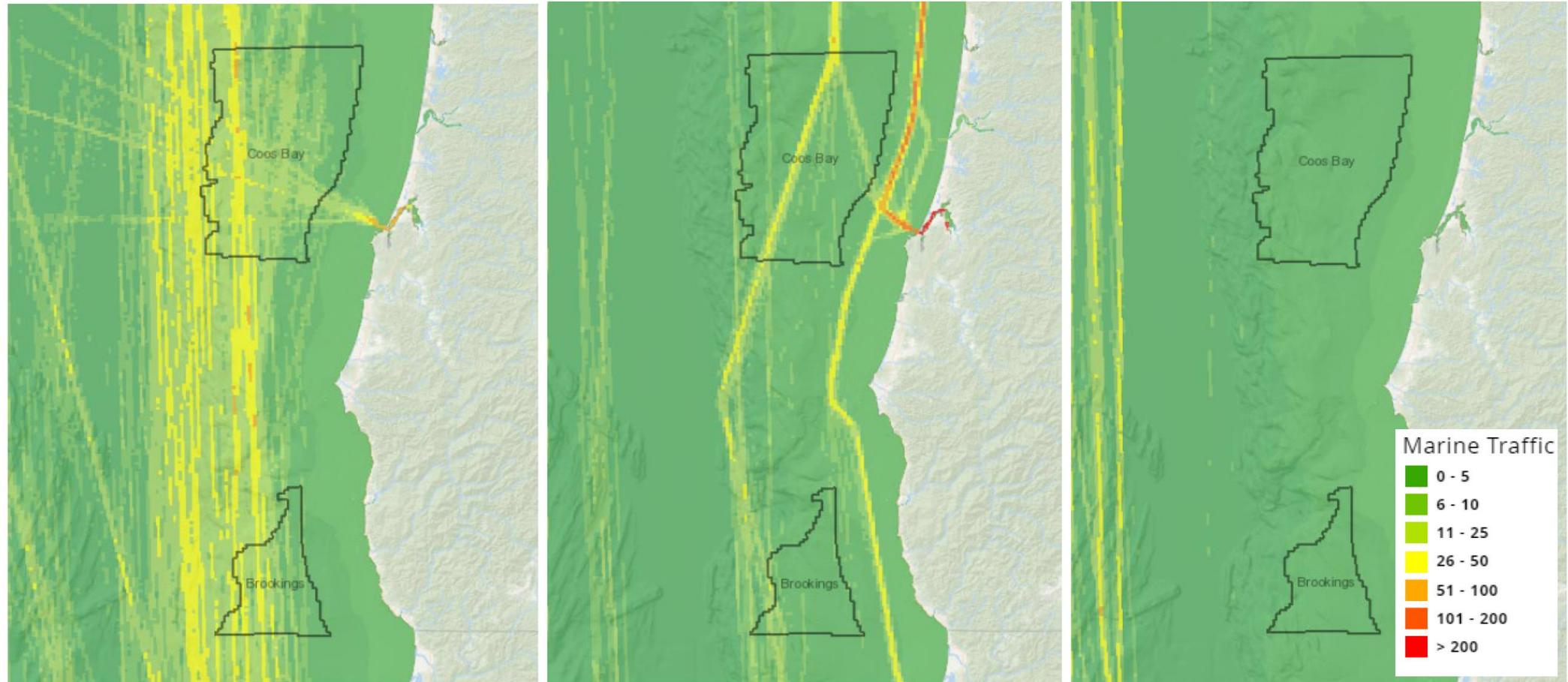


Figure 1: Vessel traffic for cargo, tug and tow and tanker vessel traffic within the Morro Bay WEA region. The

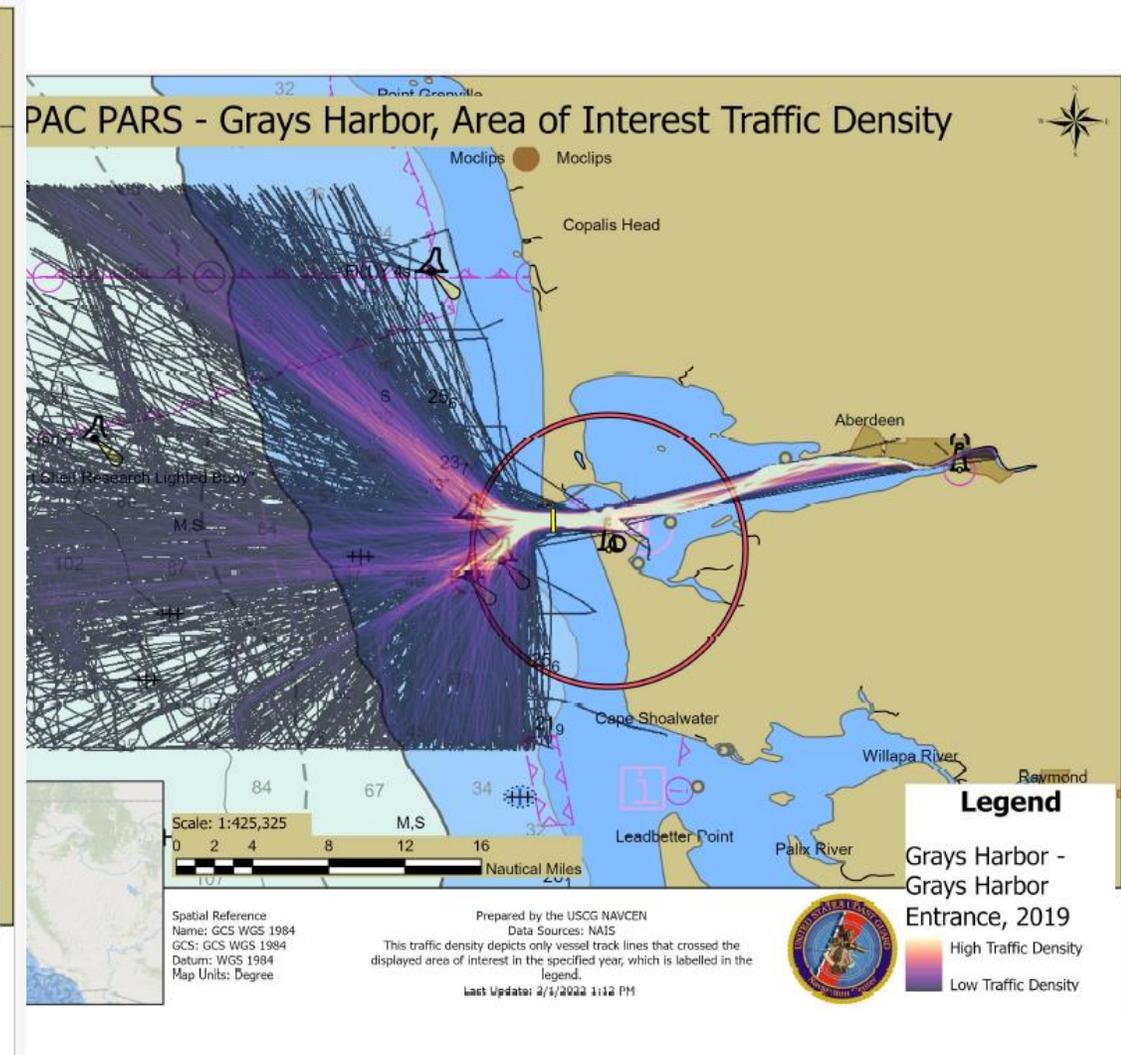
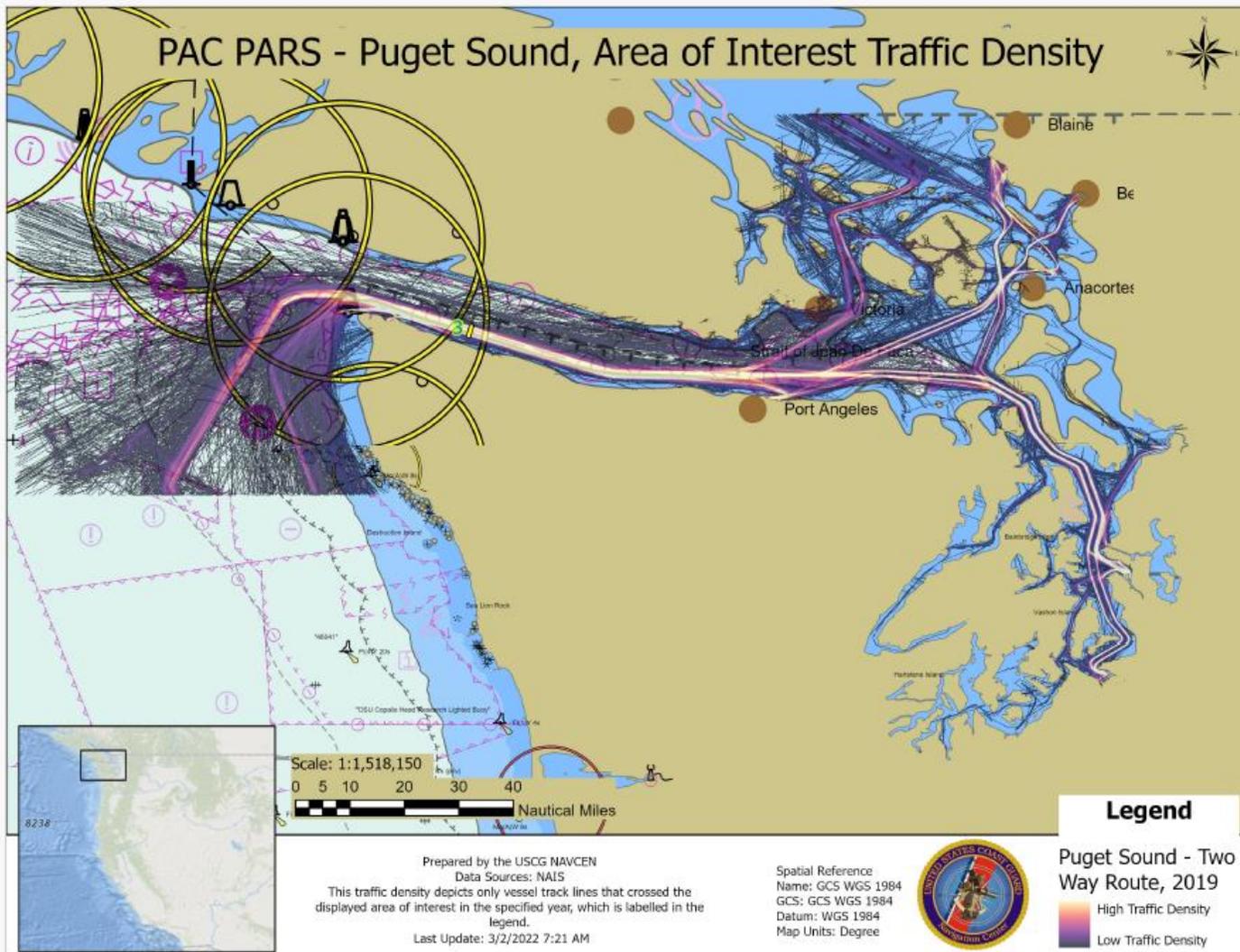
Humboldt WEA & Vessel Traffic



Coos Bay and Brookings WEAs & Vessel Traffic



Washington Vessel Traffic



Washington Vessel Traffic

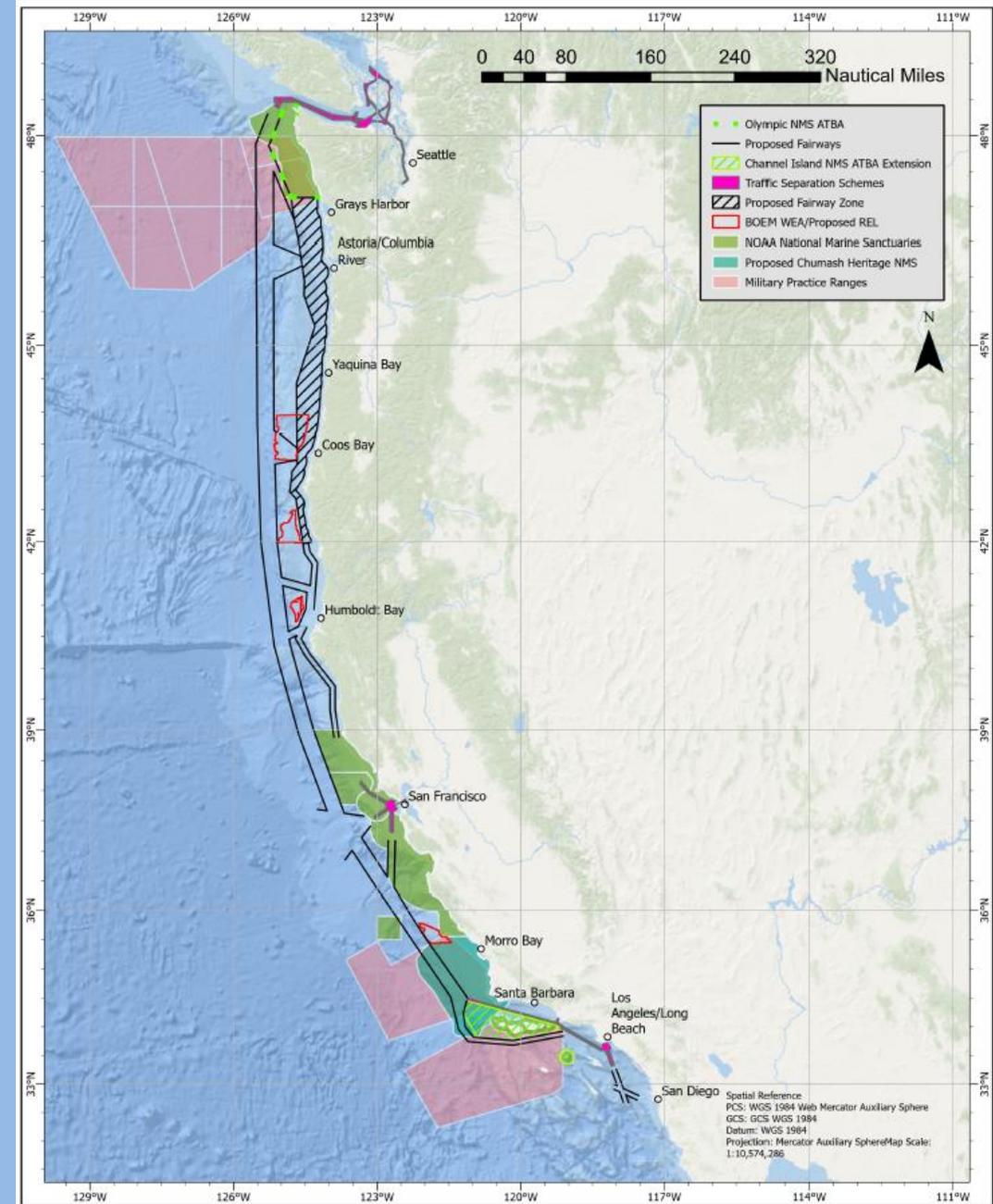
UNITED STATES COAST GUARD

Pacific Coast Port Access Route Study

Final Report

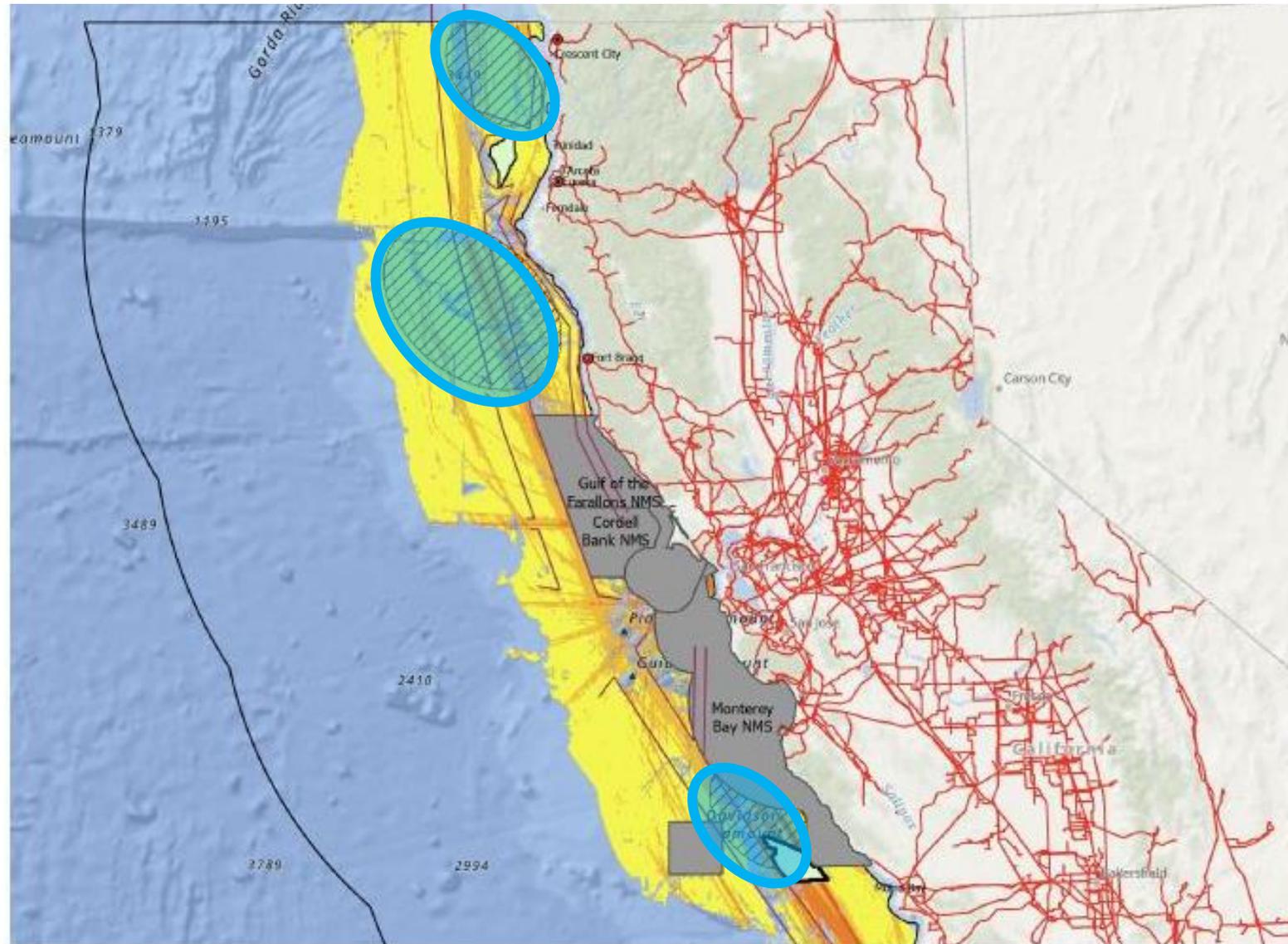
Docket Number USCG-2021-0345

PAC-PARS Workgroup
May 2023





CEC Future Offshore Areas of Interest

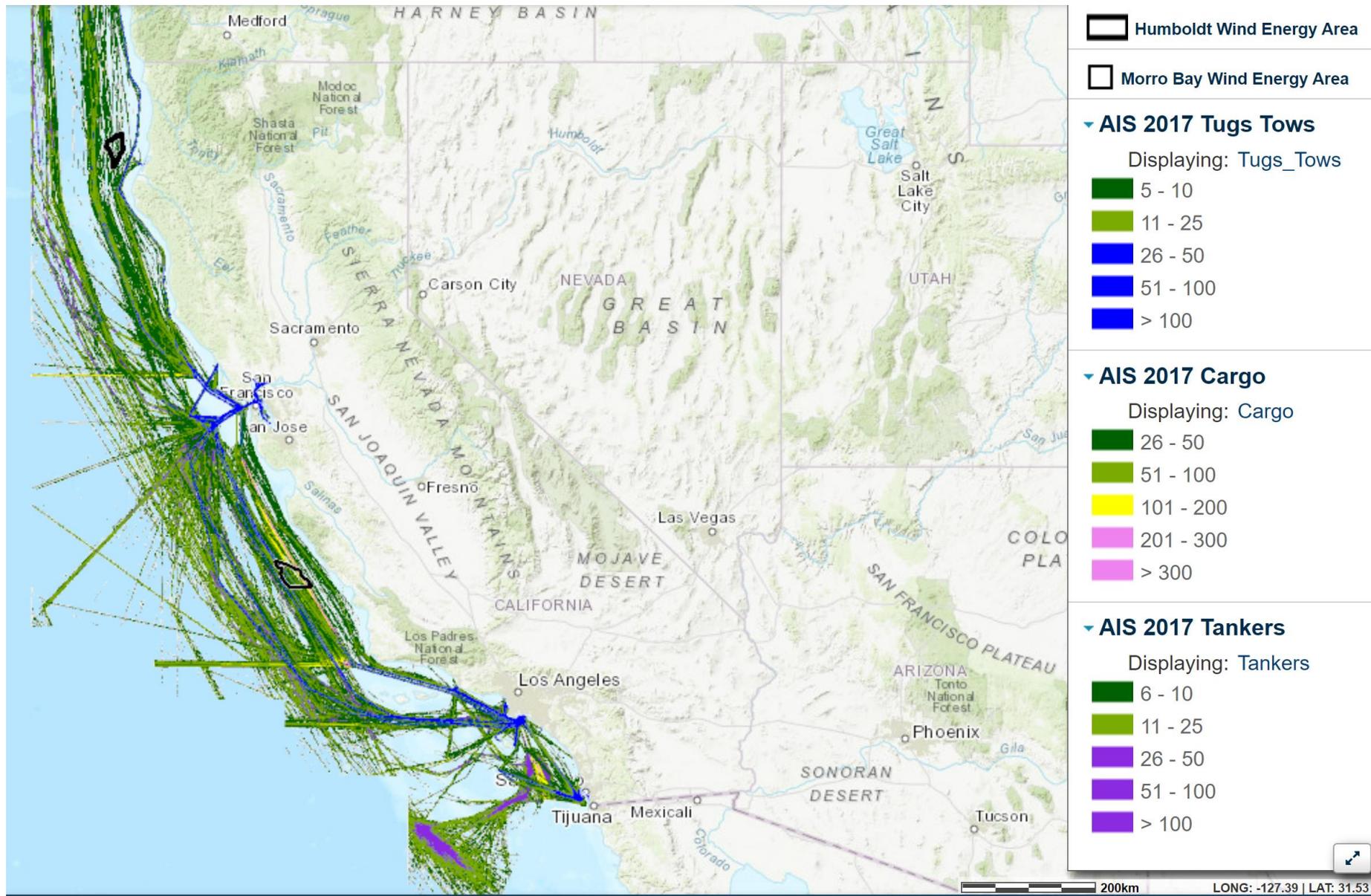


An aerial photograph of a large suspension bridge spanning a harbor. The bridge has two tall, green-painted towers. In the foreground, there's a paved area with palm trees and a walkway. The harbor is filled with various ships, including a large cargo ship with colorful containers on the right. The sky is clear and blue. A semi-transparent white box is overlaid on the center of the image, containing text.

Thank you

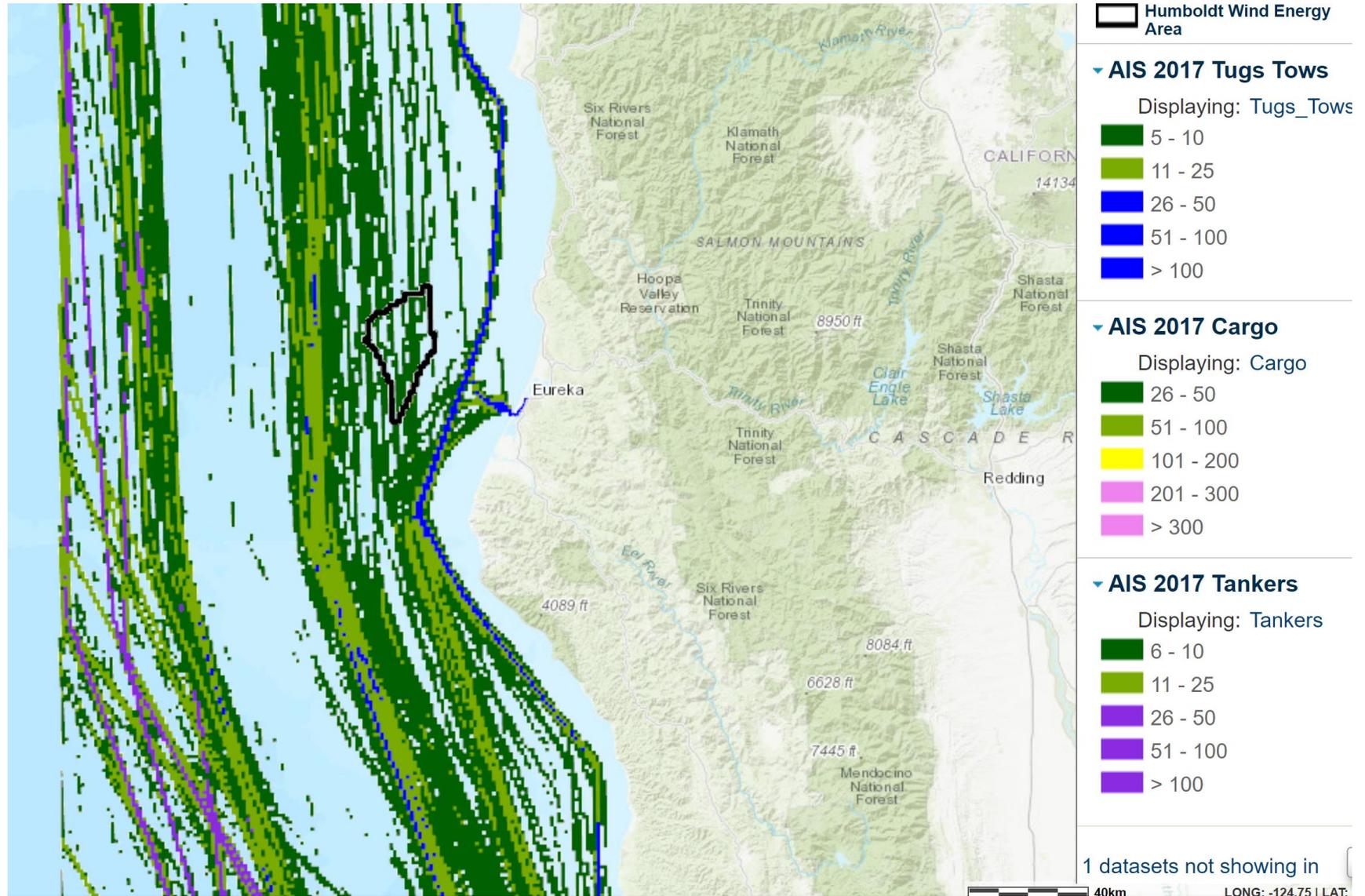
Jacqueline M. Moore
jmmoore@pmsaship.com

CA Vessel Traffic (ALL)



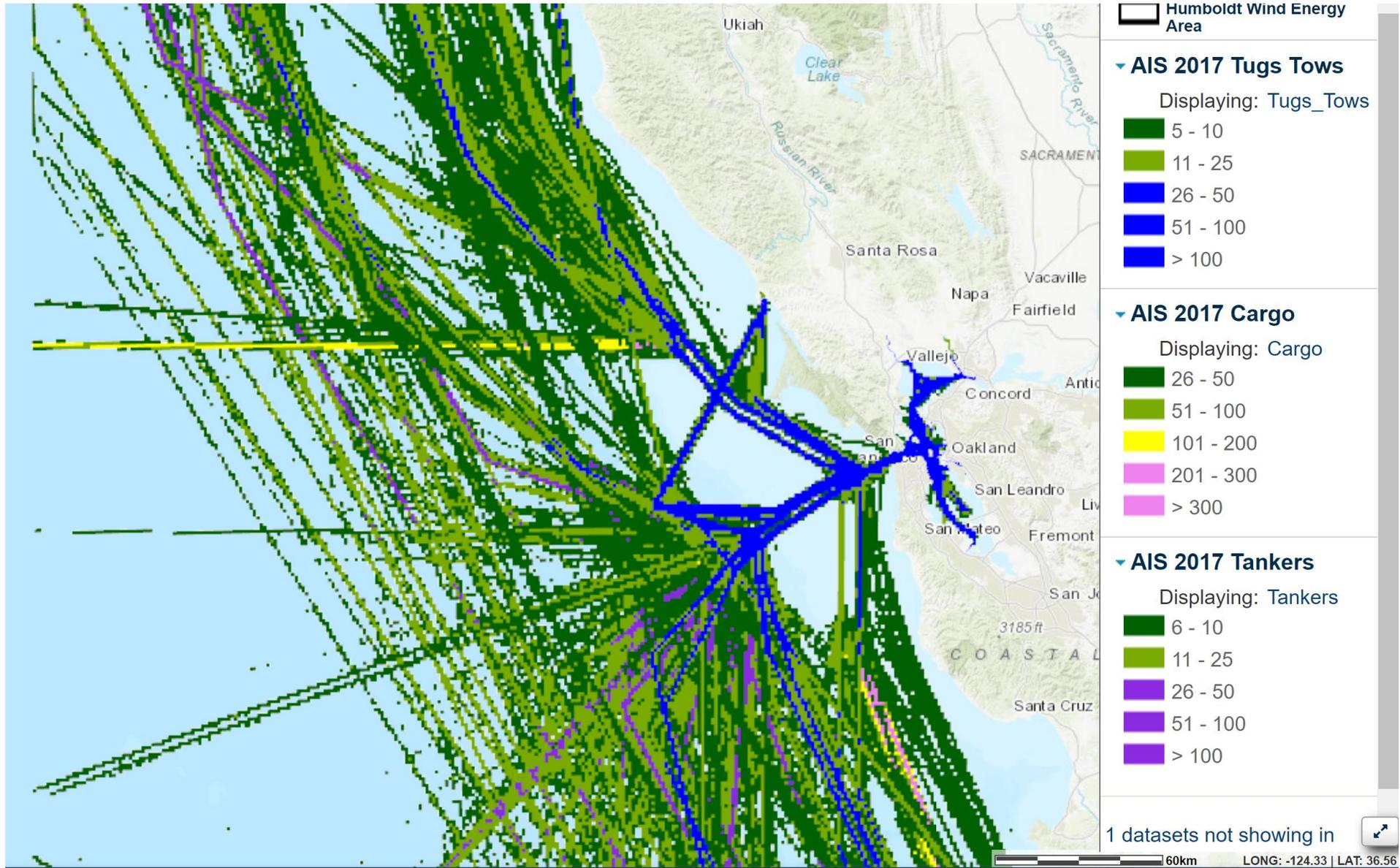
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

NORTHERN Vessel Traffic (ALL)



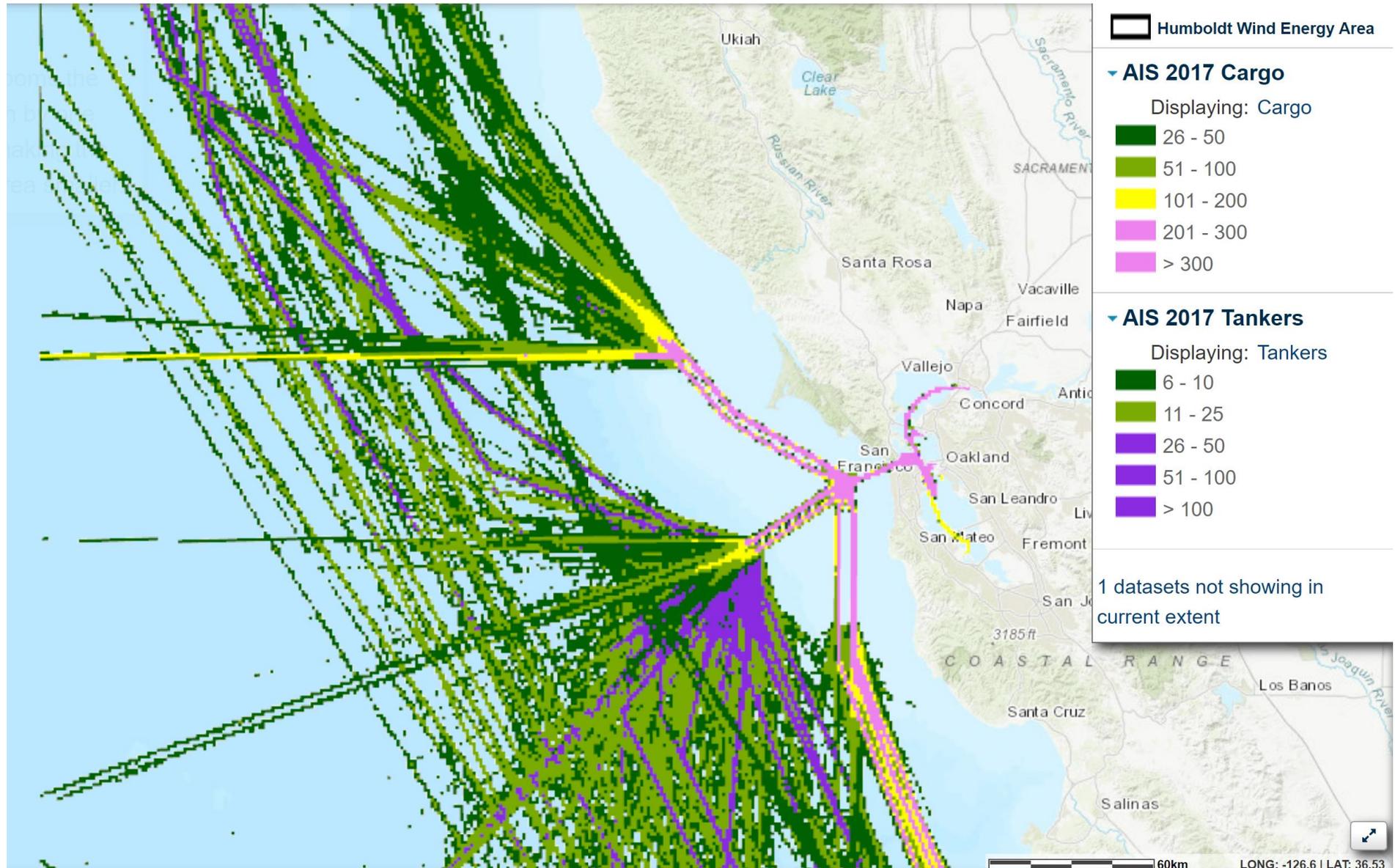
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

BAY Vessel Traffic (ALL)



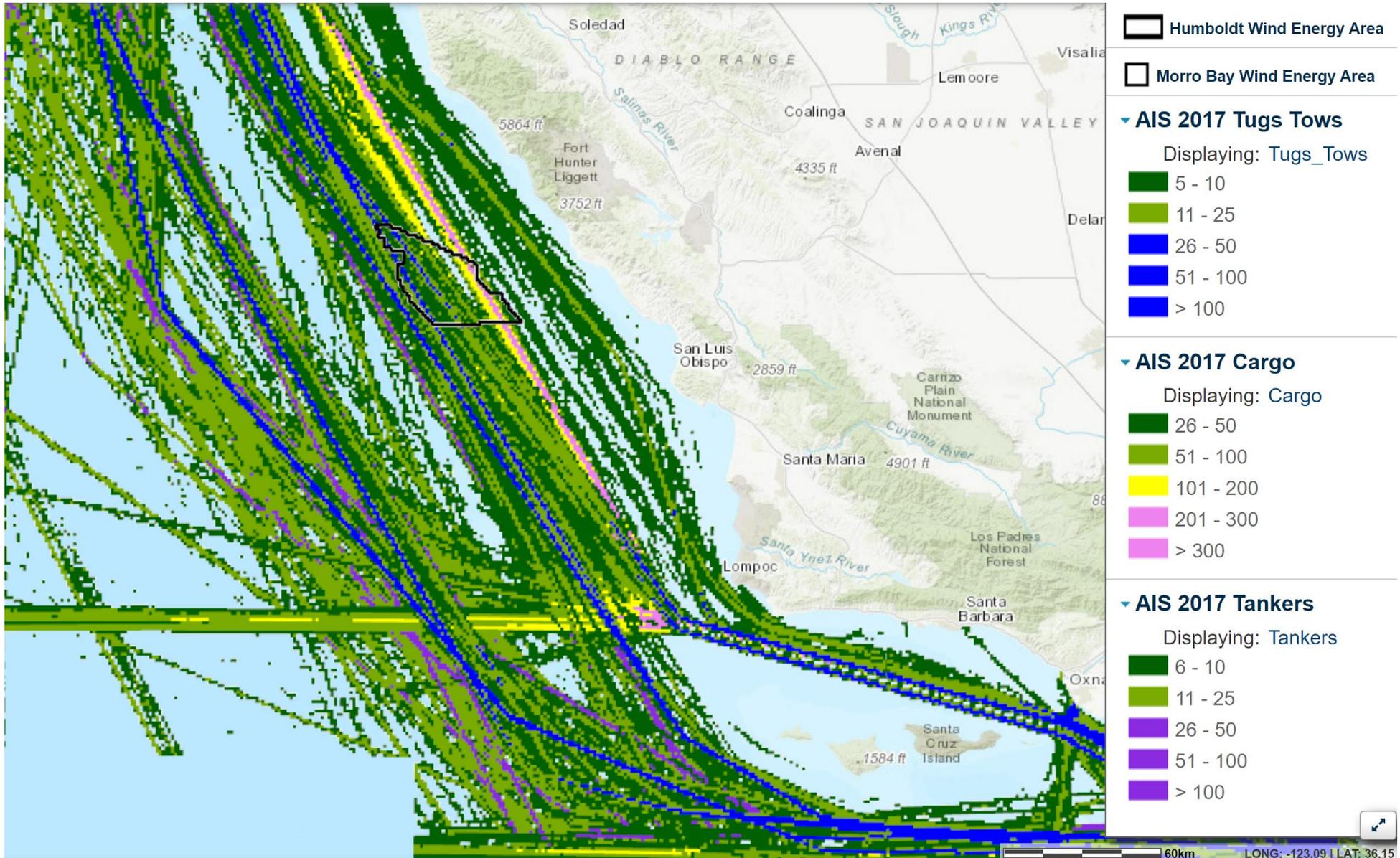
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

BAY Vessel Traffic (CARGO & TANKER)



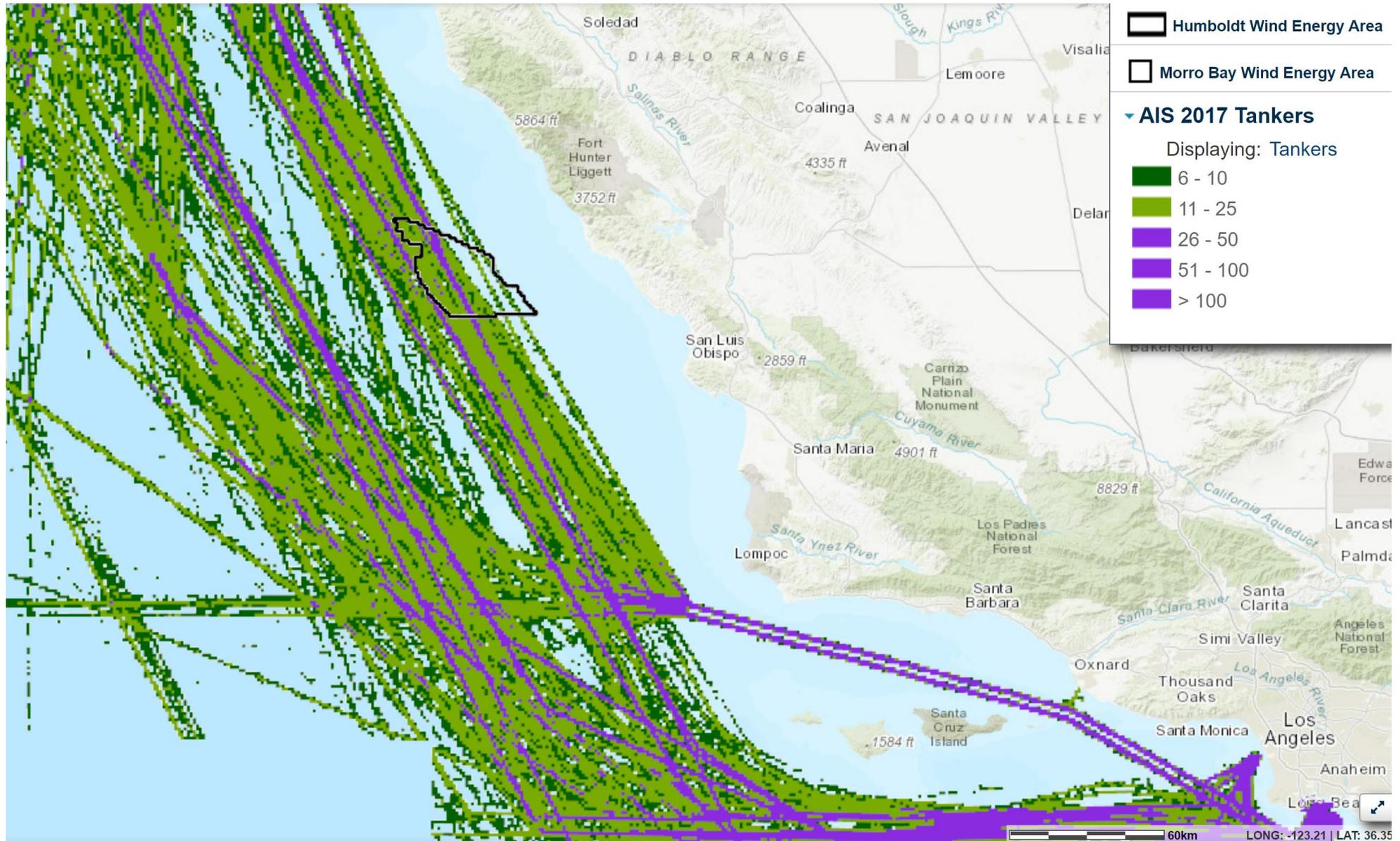
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CENTRAL Vessel Traffic (ALL)



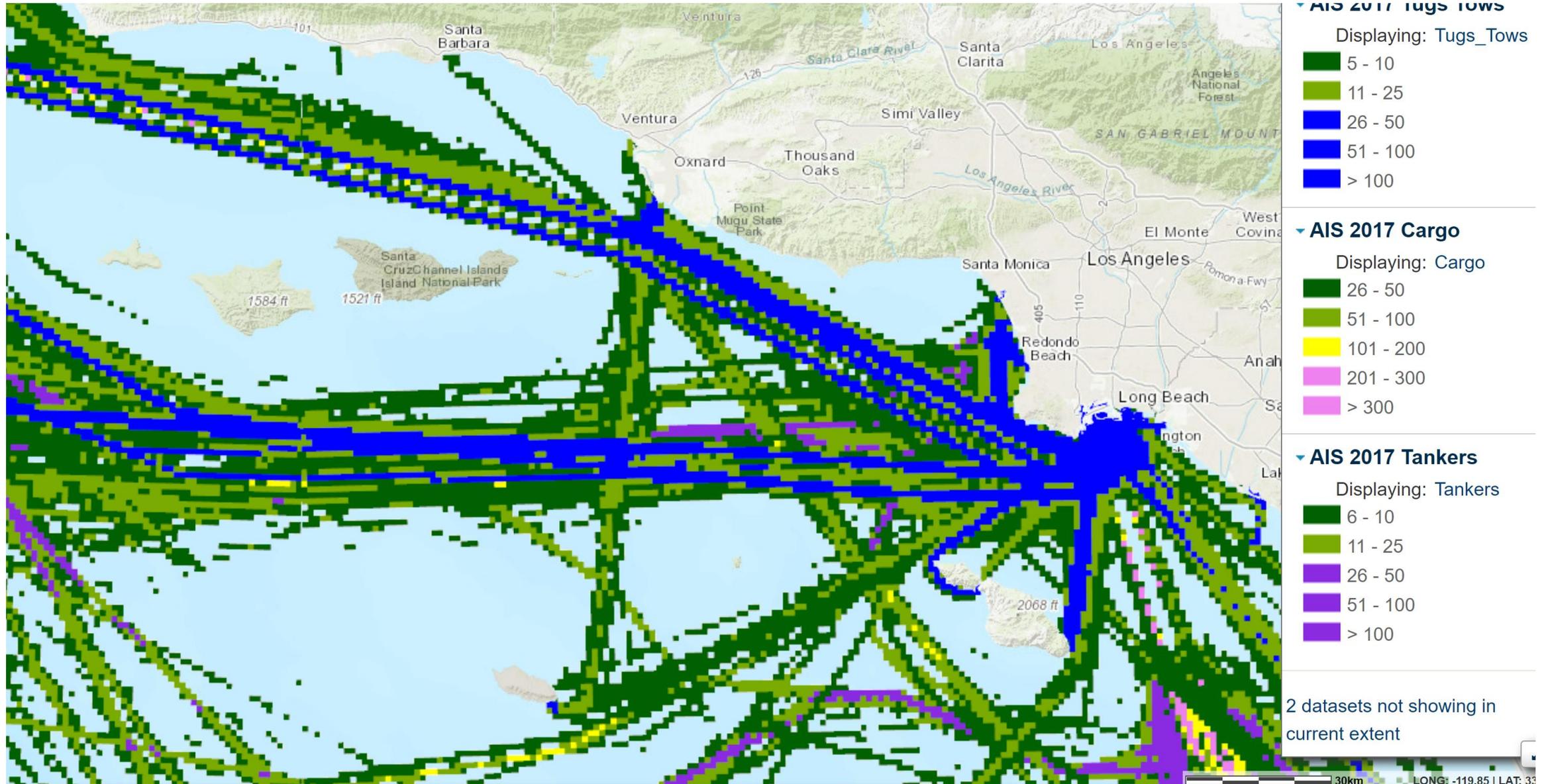
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

CENTRAL Vessel Traffic (TANKER)



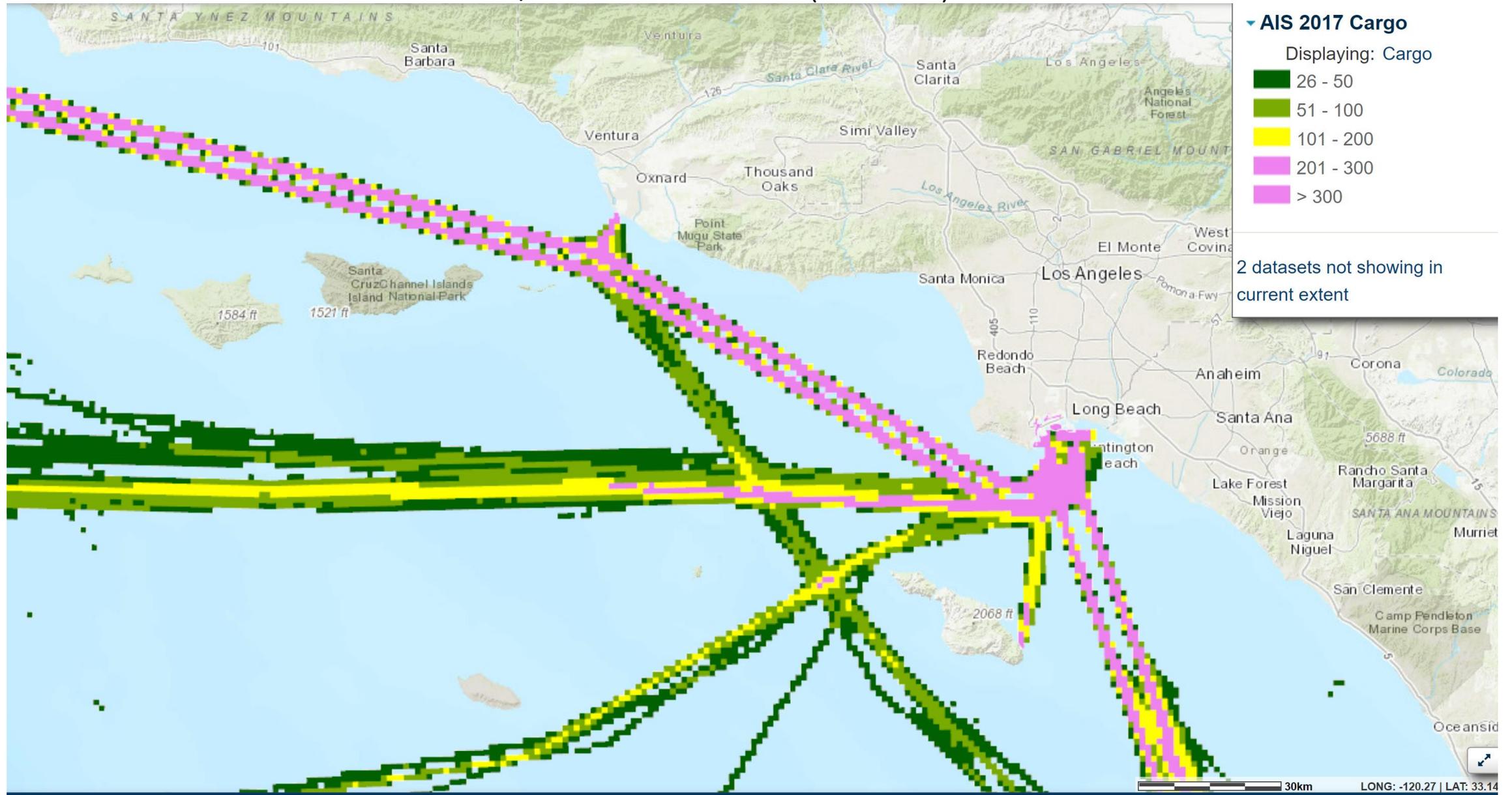
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

LA/LB Vessel Traffic (ALL)



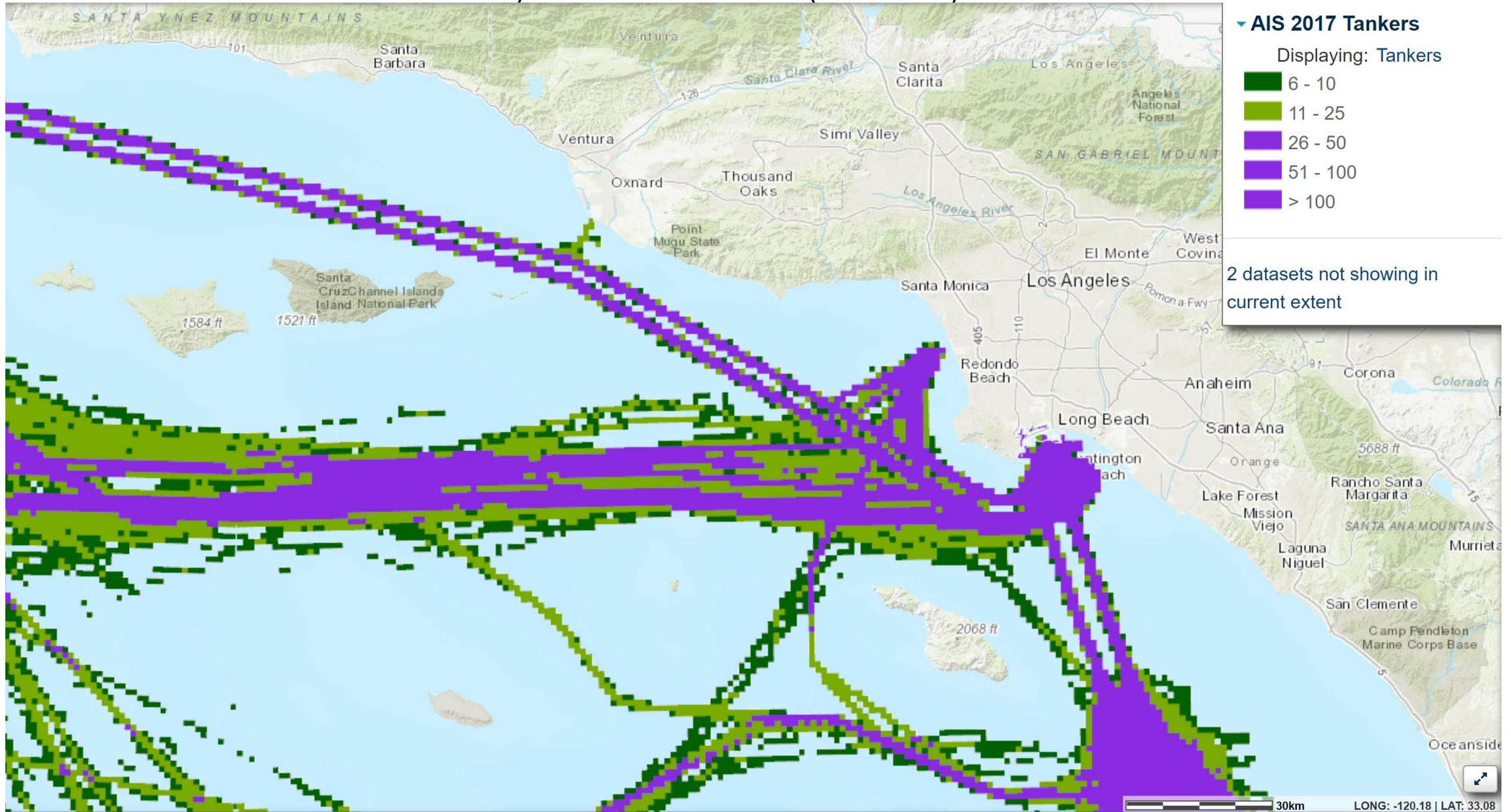
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

LA/LB Vessel Traffic (CARGO)



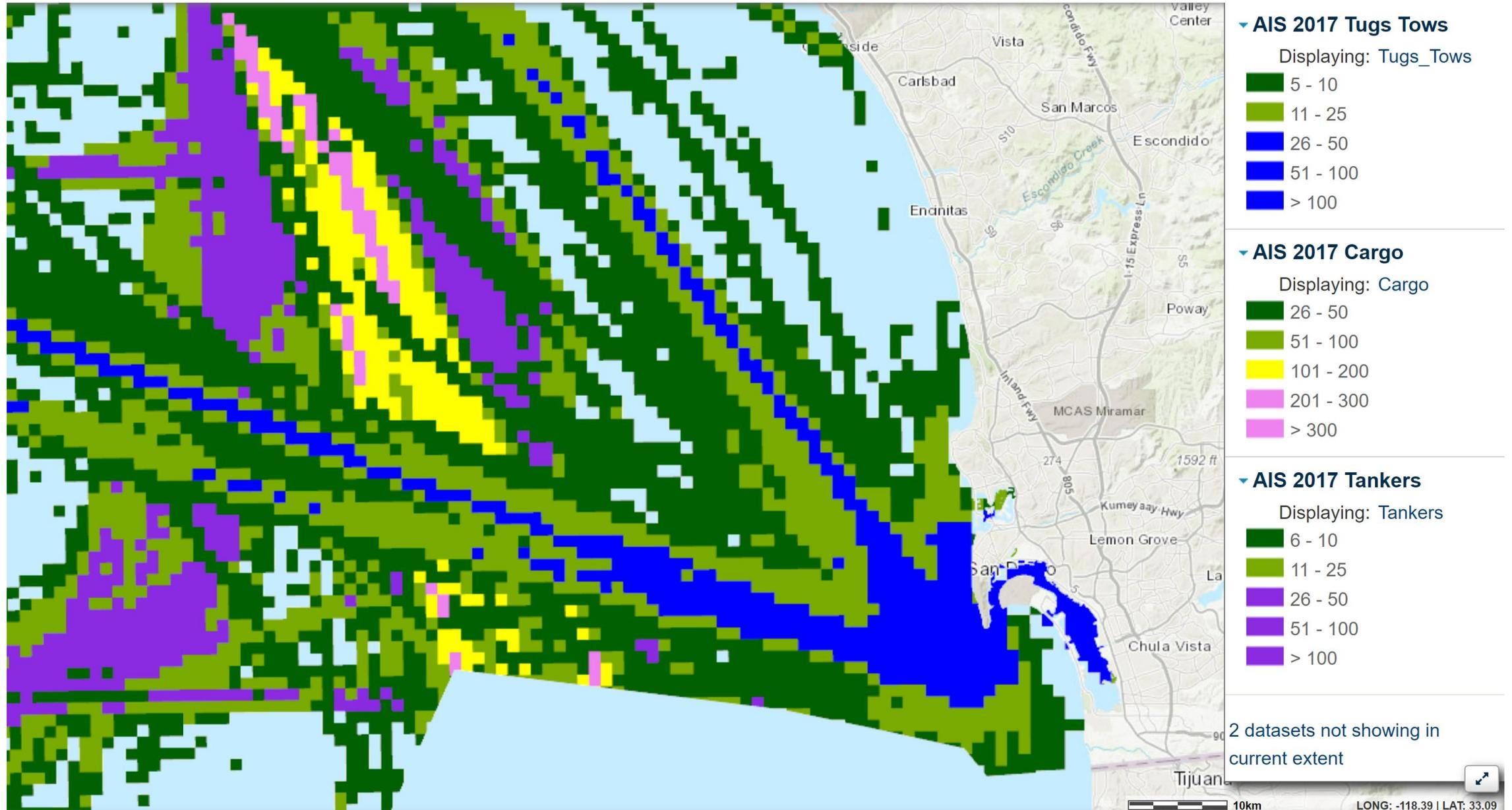
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

LA/LB Vessel Traffic (TANKER)



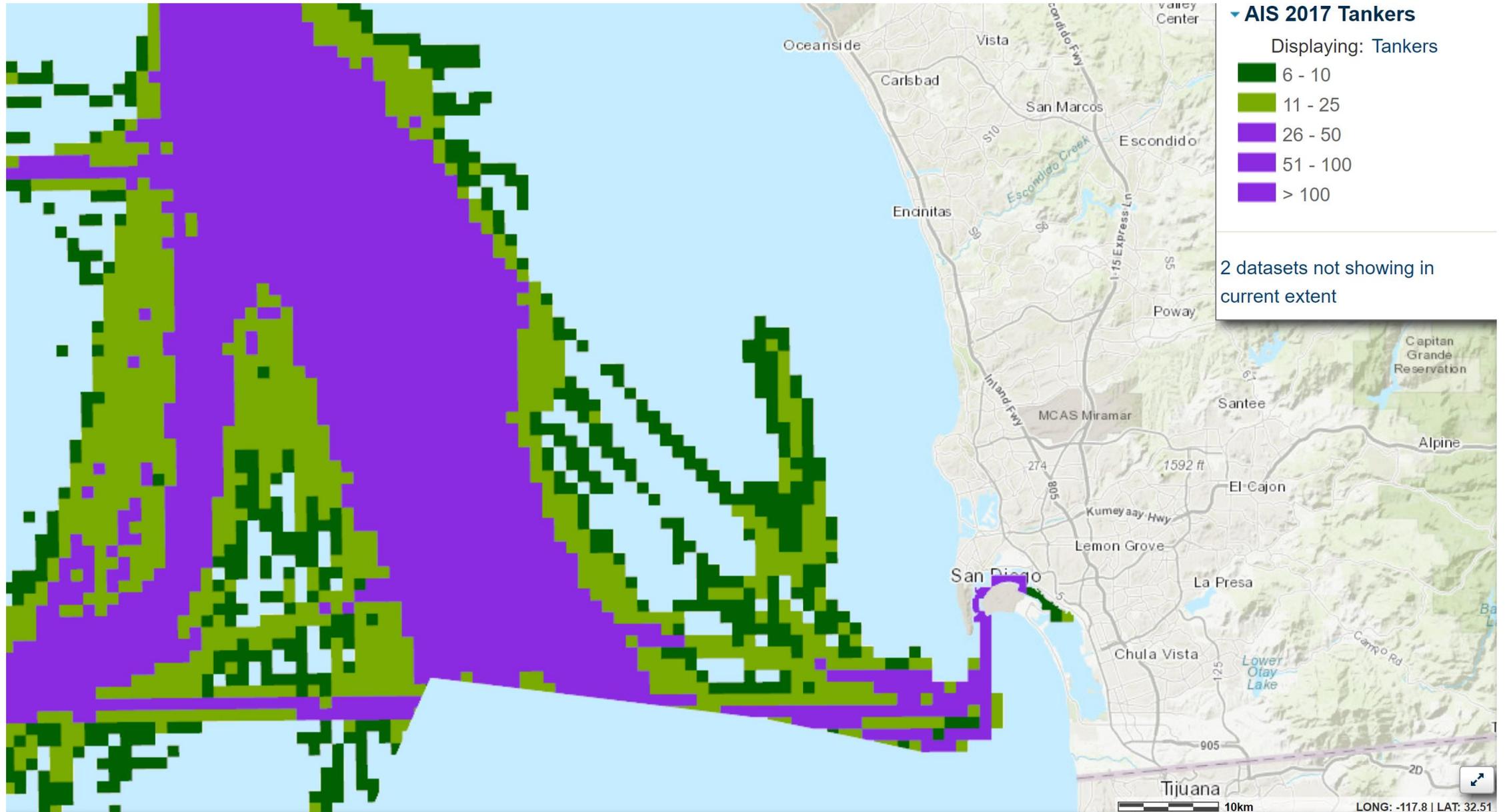
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

SD Vessel Traffic (ALL)



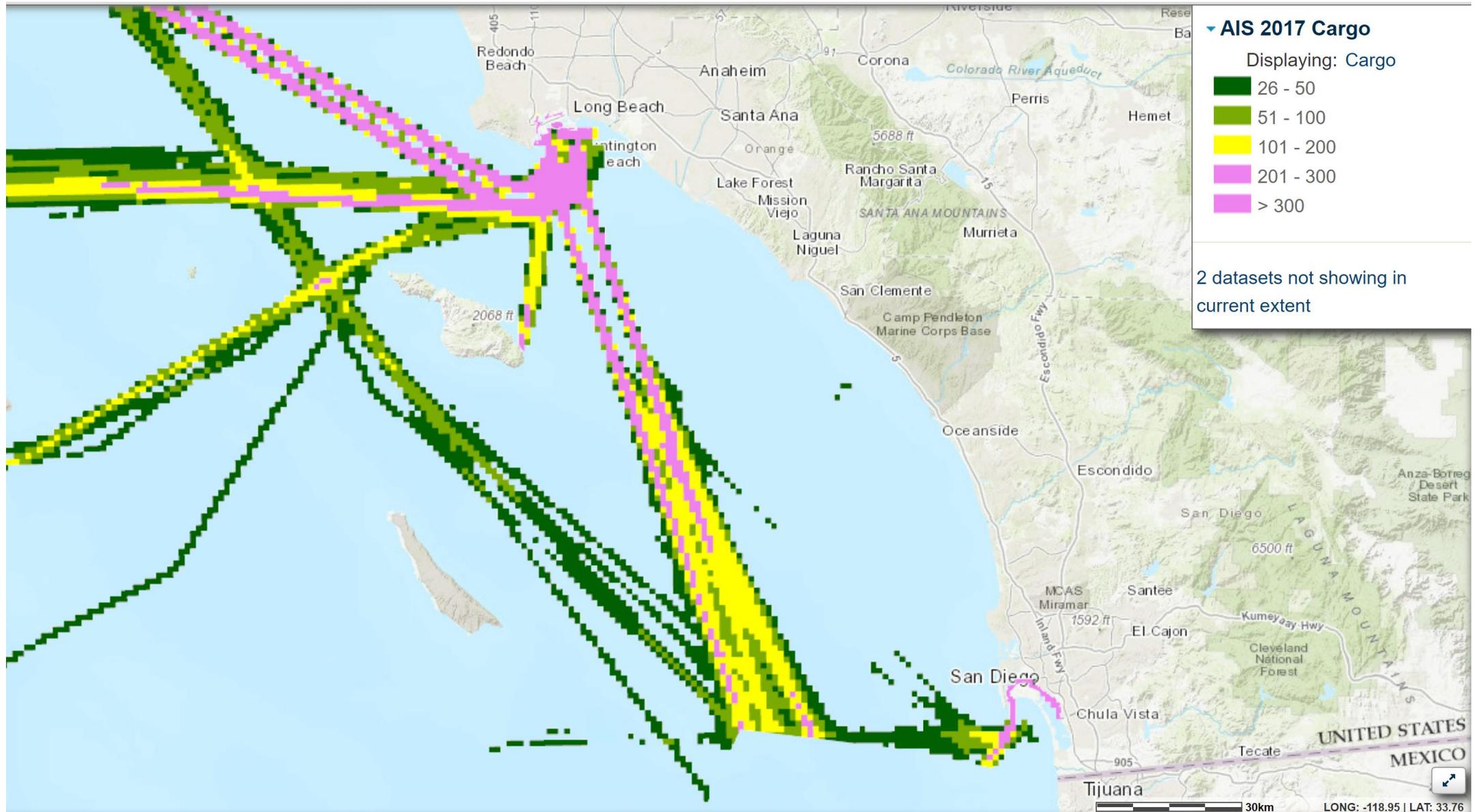
Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

SD Vessel Traffic (TANKER)



Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.

SD Vessel Traffic (CARGO)



Map created utilizing 2017 AIS Shipping Vessel Traffic data at databasin.org, PMSA.