TOGETHER, WE DELIVER.

USTRANSCOM

UNITED STATES TRANSPORTATION COMMAND

Dredging and the Strategic Seaport Program

Philip Krueger, P.E.

XX XXX 2025

Agenda

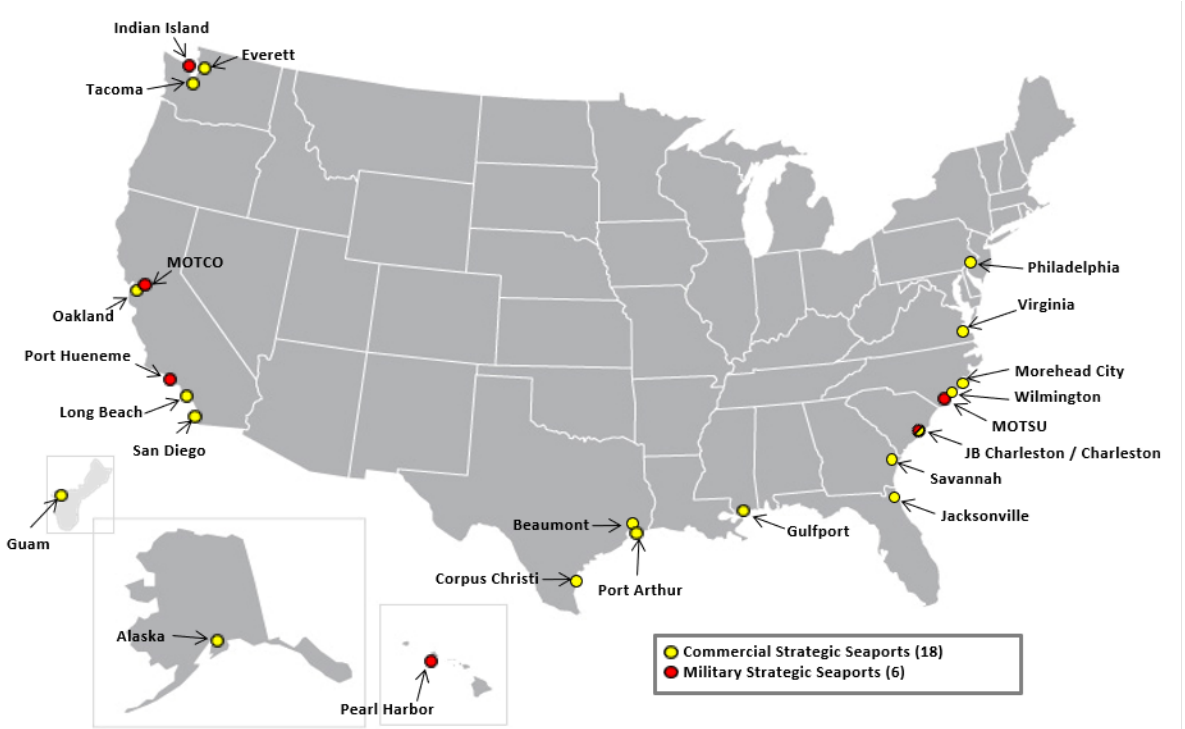
Foundational Background

- DoD Strategic Seaports
- Strategic Seaport Program (SSP)
- National Port Readiness Network (NPRN)

Impacts of Dredging Capacity on Designated Strategic Seaports

- NDAA Brief Requirement
- Briefing Development Collaboration
  - SSP Depth requirements
  - Strategic Seaport Readiness Reporting
  - U.S. Army Corps of Engineers (USACE) Dredging Program
  - Solicitation of Information / Concerns from Commercial Strategic Seaports
  - Dredging Contractors of America (DCA) Collaboration
- Conclusion

DoD Strategic Seaports



Strategic Seaports

U.S. commercial or military seaports formally designated by the Military Surface Deployment and Distribution Command Commanding General (SDDC CG) to support the deployment of U.S. Armed Forces assets in the event of war, contingency, or other national defense emergency or disaster.

Strategic Seaport Program Basis

- **Basis for the Strategic Seaport Program (SSP) exists in various government publications including Executive Order 12656, "Assignment of Emergency Preparedness Responsibilities"**

  "Federal plans should include appropriate involvement of and reliance upon private sector organizations in the response to national security emergencies."

- **Executive Order 12656 directs Federal departments to:**
  - Identify facilities and resources, both government and private, essential to the national defense and mobilization readiness
  - Assess the vulnerabilities and develop strategies, plans, and programs to provide for the security of such facilities and resources
  - Avoid or minimize disruptions of essential services during any national security emergency

It is the intent of the Strategic Seaport Program to comply with these provisions

Purpose of Strategic Seaport Designation

The purpose for Strategic Seaport designation is to **facilitate planning** for a large rapid deployment in support of war, contingency, or other national defense emergency or disaster.

- DoD perspective: Identify/verify availability of required capacity
- Commercial seaport perspective: Establish expectation of what DoD facility requirements will be to support planning and readiness reporting

Designation is typically based on **deployment requirements associated with major contingency plans.**

- Strategic Seaports support the deployment of unit equipment and containerized ammunition
- Within the Continental United States (CONUS), Strategic Seaport capacity requirements are viewed from a coastal perspective

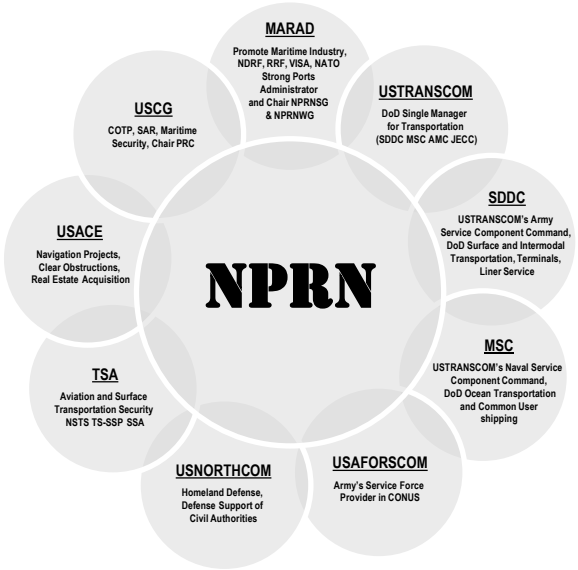
Commercial Strategic Seaports normally have capacity available to DoD.

- Available capacity is captured in Port Readiness Plans (PRPs)
- PRPs help **minimize the impact** DoD operations will have on commercial activities

DoD leverages **port self-investment** as the best value means to sustain required seaport capabilities.

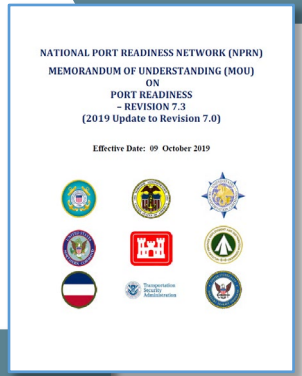
- DoD pays the ports for use of facilities based on tariffs or contracts
- Although designation does not provide funding, the Maritime Administration may consider a port's status in the SSP when evaluating discretionary grant applications.

SSP Management: National Port Readiness Network



National Port Readiness Network (NPRN)

- Provides coordination and cooperation to support the secure movement of military forces through the Strategic Seaports
- Maritime Administration (chair), USCG, USTRANSCOM, USNORTHCOM, US Forces Command, SDDC, Military Sealift Command, USACE, and TSA



NATIONAL PORT READINESS NETWORK (NPRN)
MEMORANDUM OF UNDERSTANDING (MOU)
ON
PORT READINESS
– REVISION 7.3
(2019 Update to Revision 7.0)

Effective Date: 09 October 2019

NPRN Memorandum of Understanding (MOU)

Outlines agency roles, responsibilities and authorities to support readiness last updated in Dec 2022; reviewed annually.

Major Program Elements

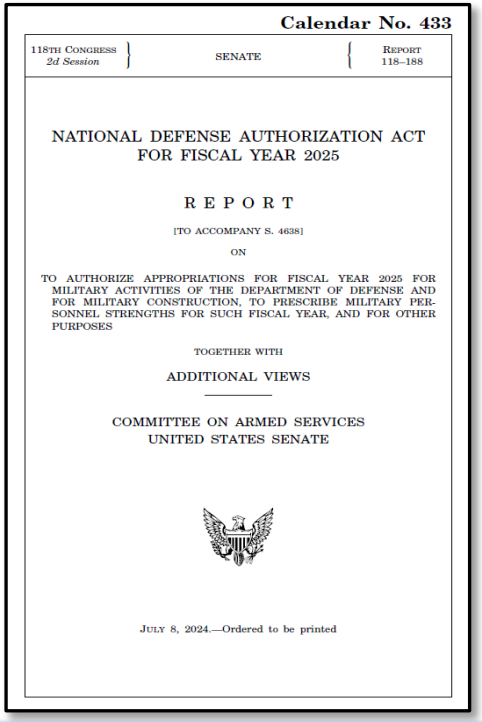
- **Port Readiness Committee (PRC):** Comprised of local port or port area representatives that coordinate, evaluate, and test military out load plans, force protection / military out load security and facilitate out loads
- **Quarterly Readiness Reports:** Report generated by the Maritime Administration with readiness status from each Strategic Seaport
- **Ports for National Defense Studies**: Comprehensive port throughput analysis conducted by SDDC Transportation Engineering Agency every 3-5 years

NDAA Brief Requirement

Page 387 of NDAA FY25 Senate Conference Report 118-188, Strategic seaports states:

"The committee recognizes that the strategic seaports designated under the Strategic Seaport Program are critical transportation nodes necessary to support U.S. military rapid deployment requirements. The committee notes that insufficient U.S. dredging capacity has created a backlog in federal navigation maintenance work limiting the readiness of some seaports.

Accordingly, the committee directs the Commander, U.S. Transportation Command to brief the Committees on Armed Services of the Senate and the House of Representatives, not later than March 1, 2025, on ***impacts that reduced dredging capacity may have had on designated strategic seaports****. The briefing shall identify any operational impacts of reduced dredging of designated strategic seaports, and if applicable, provide recommendations on the prioritization of available dredging capacity."*



Calendar No. 433

118TH CONGRESS, 2d Session | SENATE | REPORT 118–188

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2025

REPORT

[TO ACCOMPANY S. 4638]

ON

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2025 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE AND FOR MILITARY CONSTRUCTION, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR, AND FOR OTHER PURPOSES

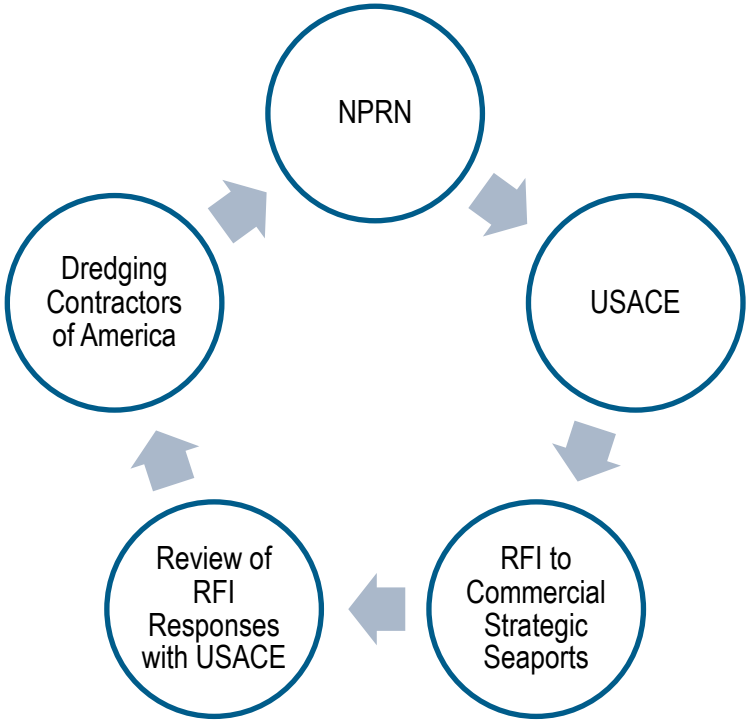
TOGETHER WITH

ADDITIONAL VIEWS

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

JULY 8, 2024.—Ordered to be printed

Briefing Development Collaboration



1. NPRN Working Group
   - Discussions on NDAA Requirement, past reported dredging issues, current knowledge of issues.
2. U.S. Army Corps of Engineers (USACE)
   - Discussions on current federal dredging program and status of dredging at Strategic Seaports.
3. Commercial Strategic Seaports
   - Through MARAD, issued a request for information to all commercial Strategic Seaports regarding past or current issues related to dredging.
4. Follow-up with USACE
   - Collaborated with USACE on responses received from Strategic Seaports.
5. Dredging Contractors of America (DCA)
   - In conjunction with USACE, gained DCA perspective on status of the dredging industry

Strategic Sealift Fleet Vessel Overview

- The Strategic Sealift Fleet supports the deployment of unit equipment and containerized ammunition from designated Strategic Seaports
  - This fleet does not typically support the distribution of containerized sustainment to deployed forces. DoD sustainment normally flows through commercial container terminals not associated with the Strategic Seaport Program.

- Organic and Commercial Strategic Sealift Fleet vessels maximum draft:
  - Range from 22 to 52 feet; average 36 feet
- However, these vessels typically *cube out* (reach volumetric capacity) before reaching maximum draft.
- Many theater (destination) seaports have less vessel draft capability than designated Strategic Seaports.

Considering Strategic Sealift Fleet attributes and DoD cargo requirements, 35 feet dredge depth has been established as the DoD requirement for designated Strategic Seaports

Strategic Seaport Port Readiness Plans

Port Readiness Plan (PRP)

Planning document identifies berth space and port facilities agreed upon to support DoD requirements.

Statement of Requirement:

- Berthing: One (preferably three) vessel position(s) of 1,100 LF w/ minimum of **35' water depth**
- Access Waterways: Minimum of **35' water depth** in channels and anchorages

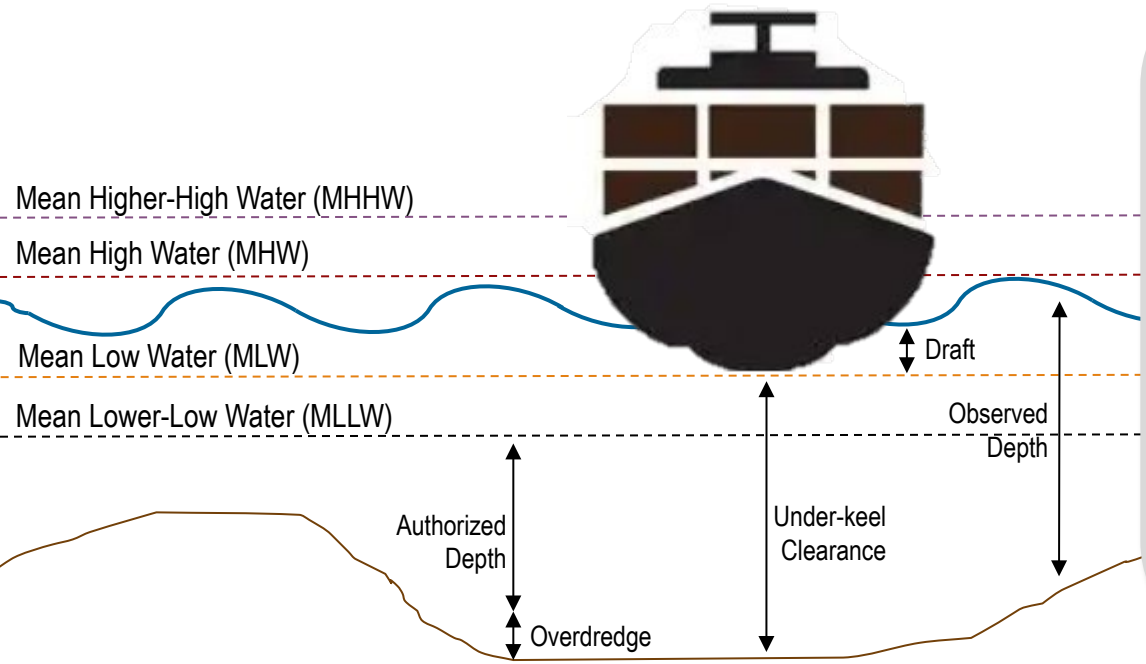
SDDC Strategic Seaport Infrastructure/Criteria

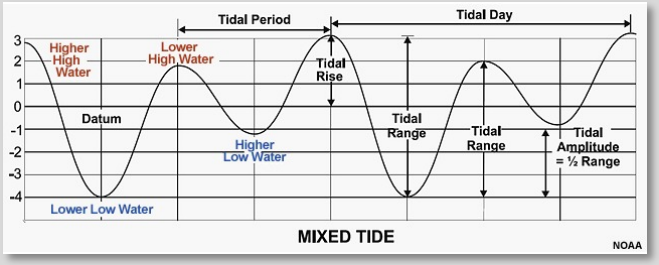
System/ Subsystem	Requirements (Updated Dec 2021)	Must-Have
Port Infrastructure/Criteria		
Berthing	- One (preferably three) vessel position(s) of 1,100 LF w/ minimum of 35' water depth - Minimum 45'-apron width per vessel position to accommodate a RORO ramp - Minimum, current-condition-based, apron strength of 500 pounds per square foot - Apron heights within range of 2 to 23 feet (i.e., exception for geographically-isolated areas) - Supports loading of twenty-foot-equivalent units (i.e., containers) via crane or ramp operations	Y Y Y Y Y
Open Staging	- 10-15 acres per vessel position that are a) paved, graveled, grassy, or dirt surfaces (i.e., preferred order), b) fenced, c) lighted, d) easily accessible to highways, and e) no more than five road miles from railheads capable of unloading 70-ton vehicles, and hold 50 trucks waiting to offload - One staging area should allow for or be adjacent (w/i 0.1 miles) to area allowing helicopter landings - Covered staging may substitute for open staging	Y --- ---
Covered Staging	- Generally accessible if it has door dimensions of at least 11' wide by 8' high and ramps to ground level - 5 acres that are helicopter-accessible, including doors with following dimensions	--- ---

Helicopter	Width (includes 1' gap each side)	Height (includes 1' gap overhead)
AH-64	20'	13.5'
CH-47	14.5'	19.5'
UH-60	24'	14.5'
OH-58	10'	14.5'

	Access Infrastructure/Criteria	
Roadways	- Less than 10 miles from seaport entrance gate to interstate highway - 14-foot vertical and lateral clearances - Turning radii meeting wheel-base-67 design standard - Bridges able to support heavy-equipment transports carrying M1 Abrams Tank	--- Y --- ---
Railways	- Commercial rail services (delivery and potential storage) of 3-4 military trains (1-mile-long each) per day - FRA-maintenance classification of 2 or higher for STRACNET and 1 or higher for STRACNET connectors - Lead tracks: - rated for at least 263,000 pounds - curvature < 17° - clearances > 20'2" high and 13' wide (i.e., additional horizontal clearance on curves at rate of 1.5 inches per degree of curvature)	Y Y Y Y
Waterways	- Minimum depths of least 35' in channels and anchorages - Anchorages for 1-3 vessels - Minimum air clearance of 135' - Two-way traffic for day- and night-time operations - Turning basins, where necessary, capable of supporting 950' vessels - 2 tugboats and 1 pilot accessible 24/7	Y --- Y --- Y Y

Common Terminology





MHHW Average of the higher-high water heights of each tidal day.

MHW Average of all high water heights over each tidal day.

MLW Average of all low water heights over each tidal day.

MLLW Average of all lower-low water heights of each tidal day.

MLLW is the basis for most navigation charts and dredge depth for conservative estimates.

RoRo vs. Container Terminals and Vessels

Commercial seaport draft requirements for channels and berths are predominately driven by commercial container terminals, not by the RoRo terminals at designated Strategic Seaports supporting the movement of DoD equipment

Roll-on / Roll-off (RoRo) Terminals

- RoRo vessels are the most efficient method of transporting military rolling stock unit equipment
- Lesser draft requirement (compared to Container Terminals).
- Majority of PRP berths are General Cargo / RoRo Terminals.
- Typical vessels: Large, Medium-Speed Roll-on/Roll-off (LMSR), commercial vehicle carriers, etc.

Container Terminals

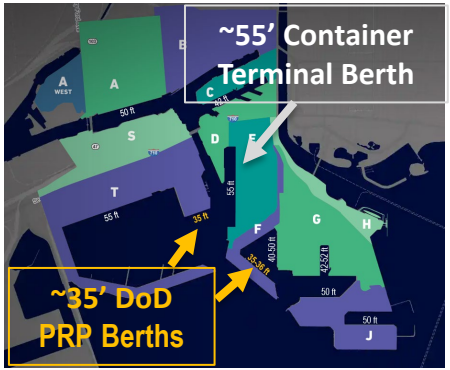
- Standardized metal containers which are lifted onto the ship via crane or other material handing equipment.
- Deeper draft requirement (some greater than 50 feet).
- Very few PRP berths are at Container Terminals to avoid interference with high-volume commercial business.
- Typical vessels: Feeder, Panamax, New Panamax, etc.

Most designated Strategic Seaports have container terminals with draft requirements that exceed DoD needs

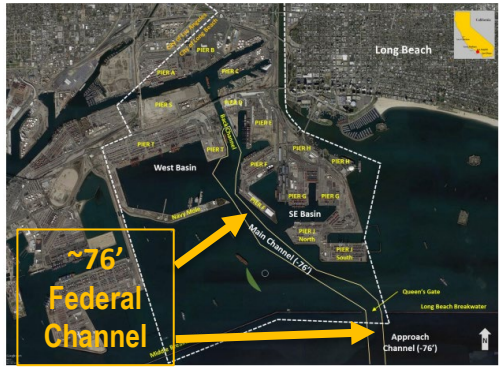
Port of Long Beach – Design Depth Example

Commercial Port dredge-depth requirements typically exceed DoD requirements

Berth drafts requirements are reflective of use; maintenance dredging is the responsibility of the local Port Authority.



USACE is responsible for the maintenance dredging of the Federal channel; new construction costs are normally cost-shared between USACE and local sponsors.



Design Depth

- **Container Berths** have larger design depths ranging from 40-55 ft to accommodate larger container vessels
- **Designated Strategic Seaport PRP berths** only require 35 ft design depths for vessels loaded with DoD unit cargo
- Channel depth must accommodate all marine traffic

Maintenance Dredge Responsibilities

- Berths – Port Authority
- Channels – USACE

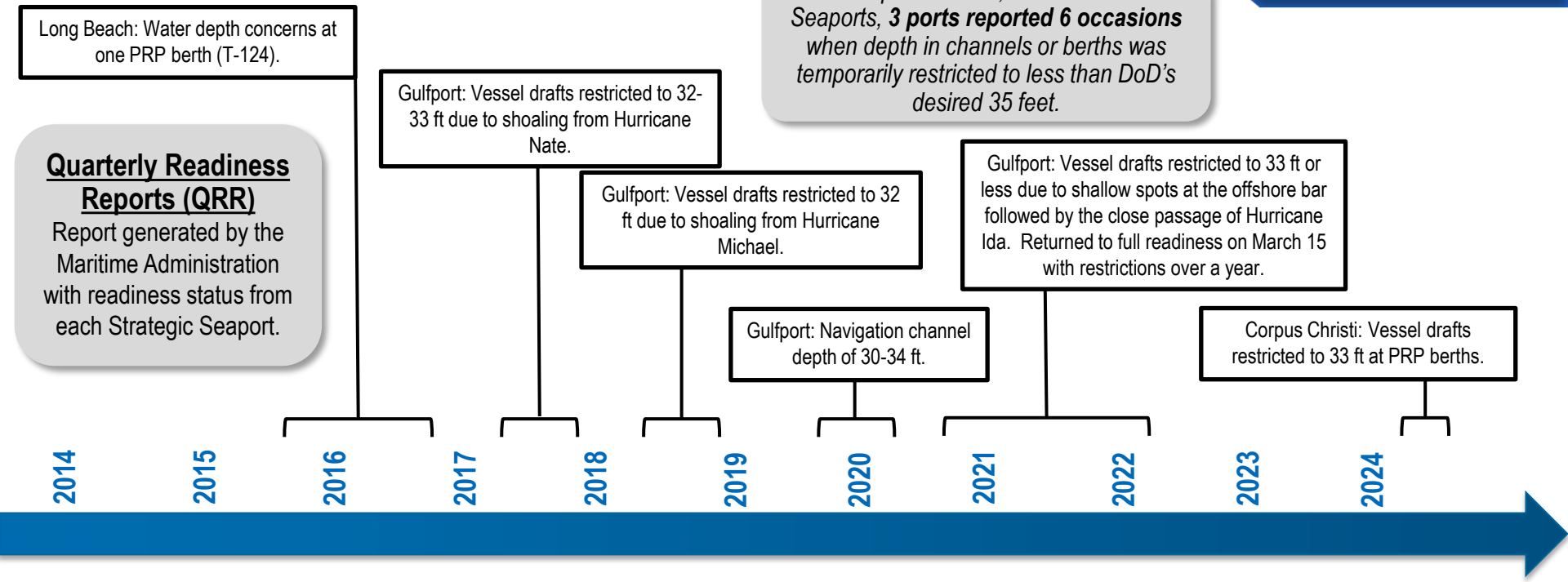
New Construction / Deepening Dredge Responsibilities

- Normally a cost-share between Port Authority and USACE

Strategic Seaport Quarterly Readiness Reports

*Over the past decade, of 18 Commercial Seaports, **3 ports reported 6 occasions** when depth in channels or berths was temporarily restricted to less than DoD's desired 35 feet.*

Quarterly Readiness Reports (QRR)
Report generated by the Maritime Administration with readiness status from each Strategic Seaport.



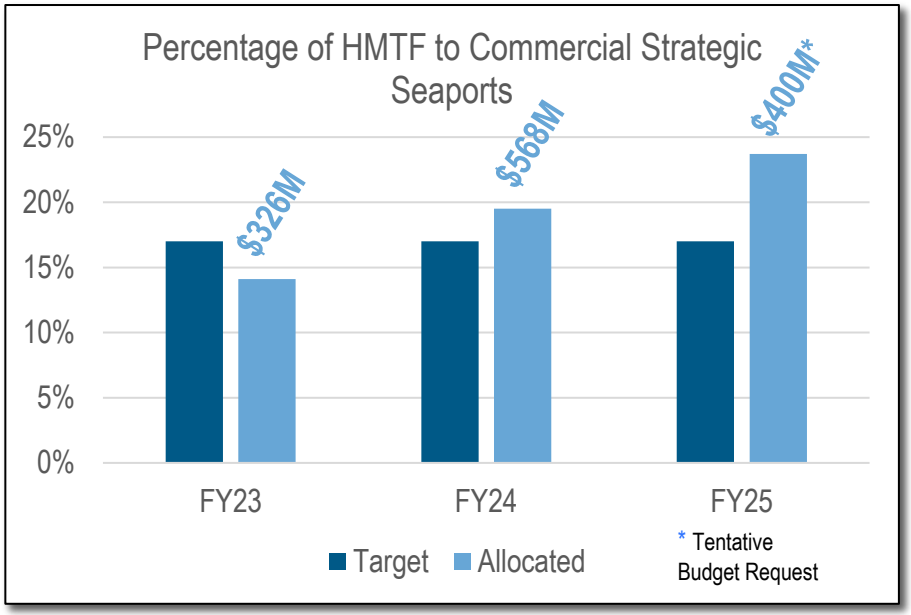
Summary of dredging-related Readiness Reports at Strategic Seaports from the last 10 years.

USACE Dredging Program

National security is a high priority of the USACE navigation mission. Currently, there are no draft restrictions or backlog impacting cargo at any of the Strategic Seaports.

- Water Resources Development Act (WRDA) 2020 (Section 102) requires USACE to disperse annual funding from the Harbor Maintenance Trust Fund (HMTF) according to specified targets.
  - For Commercial Strategic Seaports this target = **17%**.
  - The directed 17% target is typically adequate to maintain DoD-required depths in channels to designated Strategic Seaports

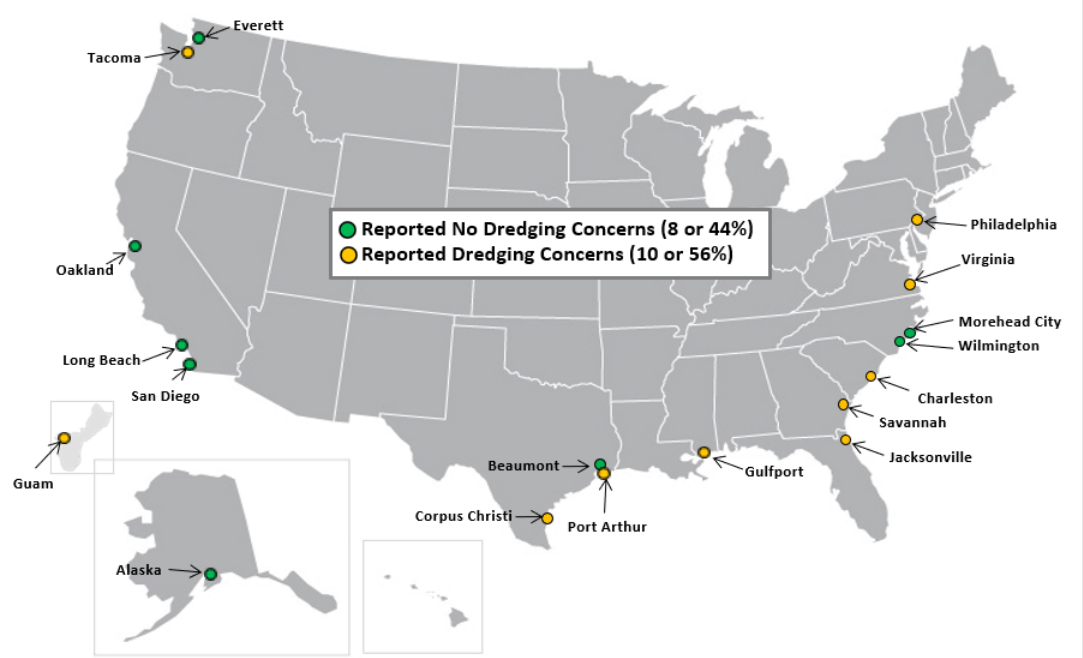
- WRDA 2022 (Section 8205) requires USACE to submit a report and recommendations to Congress on the national dredge capacity.
  - The report will be delivered in 3Q FY25.
  - Assesses overall dredging capacity and resulting impacts to the nation's federal navigation channels.
  - Report will not specifically address designated Strategic Seaports.



There are no substantial issues related to dredging at Strategic Seaports.

Request for Information (RFI) from Seaports

RFI issued through the Maritime Administration to Commercial Strategic Seaports



Are you experiencing any impacts, limitations, shortfalls, or do you have concerns related to dredging currently or in the last 5-10 years?

- What is the issue / concern?
- Within the navigation channel (Federal) or within port boundaries (private)?
- Level of delays?
- Recurring?
- Factors causing the issue / delay?
- Recommendations or suggestions?

Strategic Seaport RFI Result Synopsis

- Main Concerns of designated Strategic Seaports
  - Limited disposal areas
  - Permitting
  - Contracting
  - Share of port vs federal funding (related to new construction / deepening)
  - Availability of dredge

- Perceived Impacts of designated Strategic Seaports
  - Delays
  - Draft restrictions, cargo lost
  - Increased cost and time

Strategic Seaport RFI Result Synopsis

Recommendations from the Strategic Seaports included:

- Increase Federal funding for USACE O&M dredging operations.
- Include contract [USACE] options for unexpected or emergency dredge events.
- Initiate State specific dredge material beneficial reuse program.
- Remove hazardous classification from dredge material.
- Reduce permitting delays, authorization, and access to funding for Federal work.
- Add National Security as a listed exemption to permitting and Feasibility Studies (State, Federal, etc.).
- Ensure Federal navigation channels to Strategic Seaports have sufficient depth to serve all vessel utilized by the military.
- Decrease non-federal cost share of channel deepening projects at Strategic Seaports.
- Update cost estimates [USACE] based on current inflation rates and other cost increases.
- Reassess marine life populations and protections to update current environmental constraints.

Strategic Seaport RFI – Deeper Dive

- 10 of 18 commercial Strategic Seaports reported concerns / issues:
  - 3 Seaports [Charleston, Corpus Christi, Jacksonville] had issues in the past 5-10 years that have since been resolved.
  - 4 Seaports [Guam, Philadelphia, Port Arthur, Tacoma] have no issues with the Federal channel.
  - Remaining 3 Seaports:
    - Gulfport – USACE has sufficient funding to maintain channel for drafts of 32-33 feet, which has been suitable for vessels that currently call on the port, including military vessels. USACE requires justification to prioritize available funding for the remaining authorized dredged depth to meet the requirement of 35 feet for the Strategic Seaport Program. (The DoD has since provided justification to USACE).
    - Savannah – Ongoing conflict with environmental work windows that have caused issues in funding and awarding new contracts. USACE and industry are aware and have been actively working with both the National Marine Fisheries and US Fish and Wildlife Agencies to address the concerns and find resolution.
    - Virginia – Constraints on dredge-material placement sites based on restriction for ongoing construction of the Craney Island Rehandling Basin and the Norfolk Harbor Deepening and Improvement project. Capacity will be limited until 2027. USACE is willing to work with critical placement needs, particularly for US Navy needs. Upcoming Summitt scheduled hosted by Norfolk District to discuss these concerns.

Dredging Contractors of America (DCA)

TOGETHER, WE DELIVER.

Mission: Develop Solutions that Protect the Jones Act, Promote the Private Fleet and Create a Strong National Dredging Program.

- The Jones Act requires that all vessels in domestic commerce be American-owned, controlled, built, documented, and crewed.
- The U.S. flagged dredging fleet, both private and state-owned, totals more than **400 dredges**.
- Private dredging companies are amid a nearly **$3 Billion** recapitalization program with newly built dredges and more on the way, expanding the Jones Act fleet.

Order Book: Jones Act Dredging Private Fleet $3Billion and Growing

Company	Dredge Name	Dredge Type	Capacity	Shipyard	Status
Manson Construction	Frederick Paup	Hopper	15,000 CY	Keppel AmFELS (TX)	Expected delivery (2024)
Cashman Dredging	Mighty Quinn	Hopper (T & B)	4,000 CY	Feeney's Shipyard (NY)	In service (April 2023)
Great Lakes Dredge & Dock	Amelia Island	Hopper	6,500 CY	Conrad (LA)	Expected delivery (2025)
Great Lakes Dredge & Dock	Galveston Island	Hopper	6,500 CY	Conrad (LA)	Delivered/In service (2024)
Weeks Marine	RB Weeks	Hopper	8,550 CY	Eastern (FL)	In service (May 2023)
Callan Marine	General Bradley	Cutter Suction	28-inch	Halimar (LA)	In service (April 2022)
Callan Marine	General Arnold	Cutter Suction	32-inch	C&C (LA)	Delivered/In service (2024)
Callan Marine	General Marshall	Cutter Suction	18-inch	DSC (LA)	In service (April 2023)
The Dutra Group	ES-15	Split Hull Dump Scow	6,000 CY	Corn Island (IN)	In service (2019)
The Dutra Group	MS-16	Split Hull Dump Scow	6,000 CY	Portland (OR)	In service (2022)
The Dutra Group	CB Harry S	Liebherr 8300.2 Clamshell	35 CY Cable Arm	Conrad Amelia (LA)	In service (2022)
The Dutra Group	TBD	Hopper	10,464 CY	TBD (USA)	In final development
Orion Group	Lavaca	Cutter Suction	20-inch	Southwest Shipyard, TX	In service 2022
Callan Marine	Admiral Nimitz	Hopper	16,000 CY	TBD	Construction Tender released (June 2022)
Muddy Water Dredging, LP	Vaneta Marie	Cutter Suction	24-inch	DSC, Reserve, Louisiana	In service (April 2024)
Mike Hooks	Lorraine Hooks	Cutter Suction	27-inch	Mobile Pulley Works (AL)	n service (June 2023)
Curtin Maritime	TBD	Clam/Crane Barge/Scow		Lad Services /Corn Island	Delivery Expected (Q4 2024)
Curtin Maritime	DB Avalon	Clamshell	HL 242,000 lbs.	Curtin	In service (2022)
Curtin Maritime	Crown Point	Dump Scow	6,000 CY	Gunderson (Portland, OR)	In service (2022)
Curtin Maritime	Inspiration Point	Dump Scow	6,000 CY	Gunderson (Portland, OR)	In service (2022)
Curtin Maritime	Sand Point	Dump Scow	6,000 Y	Gunderson (Portland, OR)	In service (2022)
Marinex Construction	Wadmalaw	Cutter Suction	30-inch	Detyens Ship Yard (SC)	Nex service (2021)
Cashman Dredging	TBD	Split Hull Dump Scow	7,500 CY	TBD	Expected delivery (2025)
Callan Marine	Gen. MacArthur	Cutter Suction	32-inch	C&C (LA)	In service (2020)
Weeks Marine	JS Chatry	Cutter Suction	30-inch	C&C (LA)	In service (2019)
Great Lakes Dredge & Dock	Ellis Island	Hopper	14,800 C	Eastern (FL)	In service (2018)

*C&C Shipyard is currently building two 28" Cutter Suction Dredges (CSD) on spec for sale or lease

** Industry has made additional capital investments in cranes, tugs, barges, scows, tender boats, survey vessels, boosters, pipeline, pontoons, etc.

DCA represents the U.S. dredging and marine construction industry.

Federal Dredging Program and Industry

10-yr Average for Maintenance Dredging:

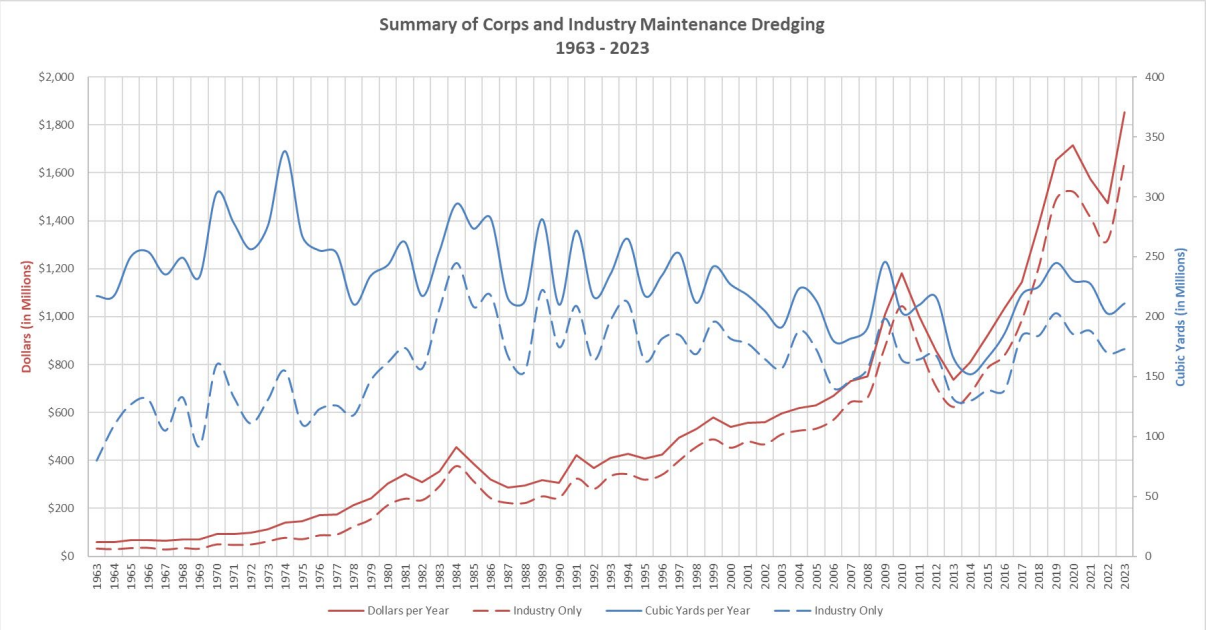
- USACE = $170M / 37.5 MCY*
- Industry = $1,188M / 169.6 MCY
- Combined = $1,358M / 207.1 MCY

**MCY = million cubic yards*

For FY23 (FY24 data not yet available):

- USACE awarded dredge work to 56 different companies
- ~$2.1 Billion awarded (+39% from FY22)
  - $1.6B in maintenance (shown in graph)
  - $470.8M in new work

Data based on the US Dredging Report: An Analysis of the FY23 Federal Dredging Market written by Michael Gerhardt



Data taken from USACE Dredging Information System (DIS), Actual Dredging Cost Data for 1963-2023 (dated July 2024).

Dredge volume has remained relatively consistent over past 50+ years; dredge cost has substantially increased

DCA Position

- The private sector dredging industry continues to rebuild and add capacity and is currently engaged in a $3 Billion capital expenditure shipbuilding program.
- DCA concurs with four of the main concerns from ports:
  - Limited disposal areas
  - Permitting
  - Contracting
  - Funding*
- Availability of dredges is not an issue.

*** The position of both designated Strategic Seaports and DCA that additional funding is needed is expected. It is rational that both commercial ports and the commercial dredging industry take a position that additional federal funding is needed. However, this is not substantiated in readiness reporting from the designated Strategic Seaports related to DoD's requirement for 35 ft navigational channels and berths.**

- **Strategic Seaport funding concerns are generally associated with dredge needs beyond DoD 35ft requirement and cost-share agreements for new construction and deepening projects**
- **DCA funding position is associated with the industry stance that they have the capacity to accept additional dredge contracts**

USACE Position

- USACE will continue to prioritize commercial Strategic Seaports.
  - In FY24 USACE allocated 19.7% ($568M) of HMTF funds to commercial Strategic Seaports (target is 17%).
- USACE will continue to coordinate with State and Federal regulatory agencies regarding dredging restrictions and the impacts of environmental windows.
- As directed in WRDA 2020 Section 8205, USACE is developing a Report and Recommendations on Dredge Capacity.
  - Anticipated delivery to Congress in 3Q FY25

USTRANSCOM Conclusion

There are no current or recent operational impacts at any of the designated Strategic Seaports due to dredging capacity.

A reduction of readiness was observed at the Port of Gulfport, MS due to its navigational channel being dredged to 32-33 feet and not the 35 feet requirement for the Strategic Seaport Program. This reduced channel depth has been sufficient for the day-to-day vessels currently calling on the Port during peacetime, including military vessels. However, there is concern that this may be inadequate to support the fully loaded LMSRs and FSSs required during a large-scale rapid deployment. USTRANSCOM sent a justification letter to USACE requesting prioritization of funding to ensure all SSP's navigation channels maintain depths of at least 35 feet MLLW.

Recent funding levels and 17% target for commercial Strategic Seaports directed by Water Resources Development Act (WRDA) 2020 (Section 102) are generally adequate to meet DoD requirements.

USACE should continue to recognize the importance of the Strategic Seaports and respond appropriately to emerging / exogenous events (e.g. shoaling caused by hurricanes).

Other observations:

- USACE maintains good communication with commercial Strategic Seaports.
- Dredging is very limited by environmental windows. Planning and scheduling are key.
- Improvements are needed to better align Federal / State objectives regarding permitting and beneficial use.

TOGETHER, WE DELIVER.

Acronyms

CG = Commanding General

DCA = Dredging Contractors of America

DoD = Department of Defense

FSS = Fast Sealift Ship

HMTF = Harbor Maintenance Trust Fund

LMSR = Large, Medium-Speed Roll-on/Roll-off

MARAD = Maritime Administration

MCY = Million Cubic Yards

MLLW = Mean Lower-Low Water

MSC = Military Sealift Command

NPRN = National Port Readiness Network

O&M = Operations and Maintenance

PRP = Port Readiness Plan

RFI = Request For Information

RoRo = Roll-on / Roll-off

SDDC = Surface Deployment and Distribution Command

SSP = Strategic Seaport Program

TSA = Transportation Security Administration

USACE = U.S. Army Corps of Engineers

USAFORSCOM = U.S. Army Forces Command

USCG = United States Coast Guard

USNORTHCOM = United States Northern Command

USTRANSCOM = United States Transportation Command

WRDA = Water Resources Development Act