

Deep Draft Navigation Planning and Risk-Informed Management Webinar

January 23, 2020

Q&A Session

Delivered by the [Deep Draft Navigation Planning Center of Expertise \(DDNPCX\)](#), this webinar provided a comprehensive overview of deep draft navigation in USACE, intended for project delivery team (PDT) members at every level and in every discipline who are looking to better understand this mission. Presenters discussed broad influences in world trade routes, described USACE deep draft ports in the nation and port characteristics, and addressed planning, economics, engineering, and environmental considerations within a feasibility study in the spirit of SMART and risk-informed planning.



Presenters from the DDNPCX included:

- Eric Bush – SAD Planning Chief and Director of the DDNPCX
- Stacey Roth – Plan Formulation Lead, Jacksonville District
- Todd Nettles – Technical Director, DDNPCX
- Max Millstein – Senior Economist, SAD
- Michael Wolz – Lead Civil Engineer, SAD
- Angela Dunn – Environmental Branch Chief, Jacksonville District

This summary of the Question / Answer session of the webinar is not a transcription; questions and responses have been edited and reordered for clarity.

What is the date of the McGraw-Hill shipping route map included on slide 6? When calculating benefits, does the DDNPCX account for increased shipping capacity or reduced shipping time through the new Arctic routes?

The first commercial traffic through the Arctic began in 2009, and by 2018 it is estimated that about 20 million tons moved through the region. Passage time from the Far East to Northern Europe/East Coast United States can be cut by 10 – 15 days through the Arctic versus the Suez Canal and the round trip can be cut in half through the Arctic versus the Panama Canal. Russia is a big proponent of these Arctic shipping routes and would like to see the traffic quadrupled by 2024.

However, the McGraw-Hill map, which reflects shipping routes from approximately 2015, doesn't show any Arctic shipping routes because they are not currently very common despite the increase in commercial traffic. The DDNPCX therefore doesn't currently account for the Arctic shipping routes, but it is possible our economists can discuss this question from a navigation standpoint during our April 2020 meeting.

What is the deciding factor in whether an anchorage area is considered a general navigation feature (GNF) or a local service facility (LSF)? They are both mentioned in [Appendix D of the Planning Guidance Notebook \(PGN\)](#), but the delineation is not clear.

Identifying whether an anchorage area is a GNF or an LSF depends on how the port is using it. If the anchorage area is used as a stopping point and there is sufficient space to dock (i.e., the channel is too narrow to allow two vessels to pass and an inbound vessel therefore stops at an anchorage area to allow an outbound vessel to pass), the anchorage area is a GNF. If there are four vessels, but the harbor only has three docks and the fourth vessel must dock at an anchorage area, then the anchorage area is an

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LSF. In this case, the anchorage area isn't being used as a navigation feature; it's being used as a place to wait.

Do larger ships and decreased trips increase inventory holding (i.e., costs)? Are those costs subtracted considered when calculating net benefits?

The DDNPCX doesn't currently count increased handling costs against benefits; however, this topic is discussed with our port and harbor partners during the feasibility phase of a project. The improvements to the Federal channel can be a small portion of the overall investment the partner is making to improve their harbor. Other improvements are likely being made (i.e., rail lines, larger cranes) as part of an overall master plan associated with the port. The planning discussion with the harbor and port authority generally includes whether they will be able to handle the increased inventory. For example, will the port be able to load and/or unload an additional 3,000 boxes from ships if the planned improvements increase the number of boxes received from 5,000 to 8,000 per vessel?

Do Clean Air Act (CAA) requirements impact deep draft navigational studies, particularly old port projects which may have existing bad air quality issues?

There can be a temporary increase in exhaust or other contaminants during construction but deepening the channel and other improvements to an older port should make shipping more environmentally friendly by increasing shipping efficiency. For example, newer ships have filters and other mechanisms on their engines that improve water quality.

Overall, a deepening project should be a benefit and should not negatively impact any current CAA concerns. However, when existing air quality isn't meeting CAA requirements in a given study area, it is especially important for the USACE analysis to be correct in the final report to avoid significant issues during the National Environmental Policy Act process and compliance with the CAA.