U.S. Government Accountability Office

Army Corps of Engineers: Commercial Fishing Data Could Help Inform Budget Process

GAO-25-107447
Q&A Report to Congressional Committees
April 28, 2025

Why This Matters

Waterborne commerce, or the transport of commercial goods over waterways, plays a vital role in the nation's economy. It includes a wide variety of goods transported between ports on vessels, reflecting the many sectors of the economy. In addition, waterborne commerce can include fish caught offshore and brought to port for sale, known as commercial fish landings. According to the U.S. Army Corps of Engineers, vessels transported such commerce on more than 900 federal harbors and channels maintained by the Corps (see fig. 1).

Figure 1 – Ports of Houston, Texas and Dutch Harbor, Alaska

Sources: U.S. Army Corps of Engineers and National Oceanic and Atmospheric Administration. | GAO-25-107447

The Corps performs maintenance and construction projects at harbors and channels around the country to help ensure they remain navigable for vessels bringing goods to U.S. ports. This includes dredging to address shoaling—the accumulation of sediment at the bottom of a harbor or channel—that can impede continued and safe access to waterways for vessels, including fishing vessels. Stakeholders, such as port officials and interest groups, have raised concerns that small ports with commercial fishing activity are a low priority for the Corps' navigation projects.

The Water Resources Development Act of 2022 includes a provision for GAO to conduct a review of the Corps' Waterborne Commerce Statistics Center's (Center) collection and reporting of waterborne commerce data, including data on fishery landings and aquaculture harvest (Pub. L. No. 117-263, tit. LXXXI, § 8236(e), 136 Stat. 2395, 3772.) This report provides information on the Center's collection and use of these data.

Key Takeaways

- The Corps' Waterborne Commerce Statistics Center collects data on the tons of cargo, or tonnage, transported between or brought to U.S. ports. The Center also collects data on pounds of commercial fish landings brought to U.S. ports, using a database maintained by the National Oceanic and Atmospheric Administration.

- The Corps uses tonnage as the primary factor for informing its budget decision-making for navigation projects. The Center does not incorporate commercial fish landings into the tonnage data and has not assessed whether doing so might impact its budget decision-making.

- We recommend that the Corps assess whether incorporating commercial fish landings data into tonnage could impact its prioritization of navigation projects. If the Corps determines that including these data would impact prioritization, the agency should document a plan for incorporating landings into tonnage. The Corps concurred with our recommendation.

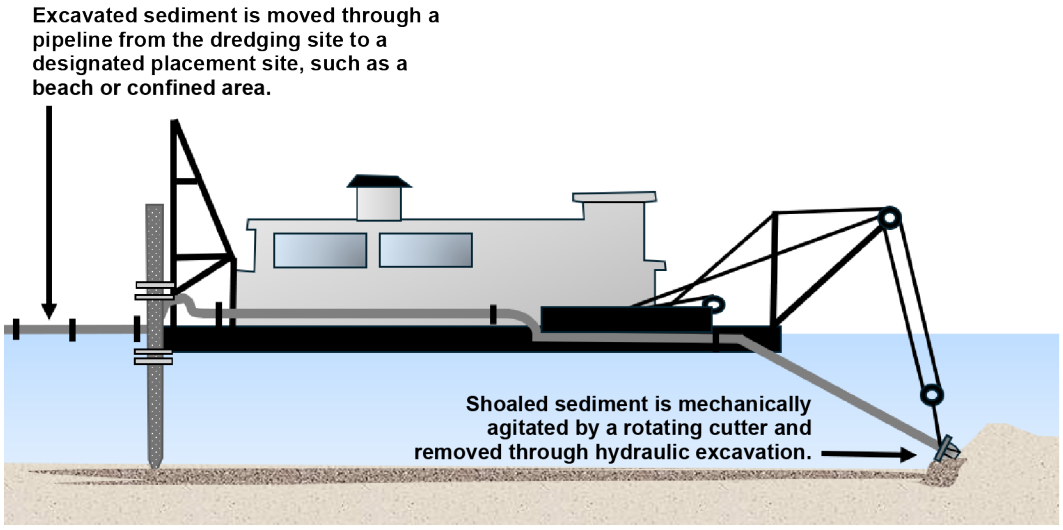
Background

Waterborne commerce in the United States includes the transport of cargo to or between U.S. ports.[1] This cargo includes products representing the many industries that contribute to the nation's economy, such as chemical, petroleum, farm, and manufacturing products, among others.[2] In addition to this cargo, waterborne commerce can include commercial fish landings brought to U.S. ports, such as shrimp, tuna, and scallops.[3] In some cases, commercial fish landings also include the harvest of aquacultural products, such as farmed salmon and oysters.[4]

Under the Rivers and Harbors Appropriation Act of 1922, as amended, operators of vessels that transport goods over the navigable waters of the United States are to report information related to their transport of goods.[5] Corps regulations further provide that all movements of vessels transporting domestic waterborne commerce are to be reported to the Corps.[6] The Corps established the Center, which is responsible for collecting and distributing data on waterborne commerce under the act.[7]

The Corps' Civil Works Navigation mission uses the Center's waterborne commerce data to inform budget decision-making for its navigation projects.[8] Dredging is a primary focus of navigation projects conducted under the Civil Works Navigation mission, as shoaling can limit the ability of vessels to safely navigate waterways—particularly if dredging has been deferred (see fig. 2). According to the Corps, appropriations for navigation projects totaled nearly $4.4 billion, or half of the Civil Works appropriations in fiscal year 2024.

Figure 2 – Pipeline Dredge Removing Sediment from the Bottom of Channel or Harbor



Source: U.S. Army Corps of Engineers. | GAO-25-107447

What data do the Center collect on cargo transported between ports?

For cargo transported between or brought to U.S. ports, the Center collects data on the tonnage of each vessel. Tonnage—or the amount of cargo moved by a vessel as measured in tons—impacts the dimensions needed for a vessel to be able to traverse a waterway, according to Corps officials. The Corps collects tonnage data for both domestic and foreign cargo.[9]

For domestic cargo, the Center collects data on the tonnage for a given vessel via *Vessel Operation Reports* that individual vessel operators are required to fill out. These reports provide the Corps with information, including tonnage data, for each good transported by a vessel. Vessel operators record the port of loading, the port of unloading, and the tonnage of each good unloaded, for each segment traveled over U.S. navigable waterways (see fig. 3). For example, if a vessel is transporting corn, soybeans, and wheat between multiple ports, operators are to report the tonnage for each good, as well as the ports where each good was loaded and unloaded. Individual vessel operators fill out the reports and submit them to the Center either electronically or via paper.

Figure 3 – Vessel Unloading Cargo at a Port

Source: U.S. Army Corps of Engineers. | GAO-25-107447

For foreign cargo, the Center collects data from other sources. The Center collects data on the tonnage of these vessels via information provided by the U.S. Bureau of the Census and the U.S. Customs and Border Protection, as well as information purchased from a third-party vendor.[10]

The Center aggregates the tonnage data it collects for each good and incorporates them into a database it maintains on waterborne commerce statistics. The Center uses these aggregate tonnage data to publish monthly updates on waterborne commerce, as well as an annual report called *Waterborne Commerce of the United States*. Parts 1 through 4 of the annual report provide detailed information on the tonnage of cargo transported between ports, while Part 5 provides summary information on this cargo, including overall tonnage data by state and port. Tonnage is reported in short tons and ton-miles.[11] The types of cargo are grouped by category—for example, coal, chemicals, food and farm products, and manufactured goods—and represent the many sectors of the economy.

What data, if any, do the Center collect on commercial fish landings?

The Center collects data on pounds of commercial fish landings brought to U.S. ports from a database maintained by the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS). NMFS uses the database, known as the Fisheries One Stop Shop (FOSS), to provide national and regional information about fisheries via a publicly available website.[12] The FOSS database includes data on commercial fish landings, which NMFS officials told us reflect the sum of data available from regional NMFS and state sources on commercial fish landed at U.S. ports (see fig. 4). NMFS and states collect commercial fish landings data based on a number of variables, including different regional structures for reporting fisheries data and the characteristics of individual fisheries. Information on commercial fish landings can come from a variety of sources, such as seafood dealer reports, fishing vessel logbooks, interviews onboard a vessel or at the dock, and biological sampling of fish.

Figure 4 – Fishing Vessels at Port

Source: National Oceanic and Atmospheric Administration. | GAO-25-107447

The data on commercial fish landings in FOSS also include some data on the harvest of marine aquaculture, or aquaculture production occurring in the ocean and estuaries, according to NMFS officials. They told us that the extent to which the data include marine aquaculture varies depending on the collection and reporting methods each state uses for fisheries and aquaculture activity. For example, in some states, commercial fish landings data may include aquaculture data, but not in a format that allows NMFS to separate aquaculture from wild-caught landings. Additionally, they reported that FOSS may not reflect the universe of marine aquaculture activity in all states. NMFS officials noted that, while it is not currently feasible to identify the extent of marine aquaculture data in FOSS, marine aquaculture is generally understood to be a small portion of the total pounds of commercial fish landings in FOSS.[13]

According to Corps officials, the Center retrieves data from the FOSS website on total commercial fish landings in pounds each year, for each state and for the top U.S. ports by landings. Corps officials told us that the Center retrieves these data independently by querying the FOSS website; the Center does not typically need to communicate with NMFS to retrieve the landings data from FOSS. Once retrieved, the Center includes the NMFS data in two tables in Part 5 of its annual *Waterborne Commerce of the United States* report. One table highlights

commercial fish landings for each state in thousands of pounds, and the other highlights commercial fish landings for the top 50 U.S. ports, as based on millions of pounds of landings.

Corps officials told us that, prior to 2000, the Center received commercial fish landings data directly from domestic fishing vessel operators. These officials stated that operators of fishing vessels would typically complete and submit vessel operation reports as would operators of other commercial vessels engaged in the domestic transportation of cargo. However, the Center discontinued this practice and began obtaining data from NMFS in the 1990s, as we discuss below.

How does the Corps use the Center's cargo data to make budget decisions?

The Corps uses the Center's cargo data, in tonnage, to inform its budget decision-making process for funding navigation projects. According to Corps' internal budget guidance, while not the only factor it considers, tonnage is the primary factor that the agency uses to prioritize funding for navigation projects.

Corps officials told us tonnage is a key factor because it impacts how large a waterway needs to be in order for it to be navigable, and the agency heavily considers the risks posed by waterways that are not navigable. The Corps' internal budget guidance notes that the agency focuses on those projects that have the greatest risk of failure if action is not taken, and that provide the greatest economic, environmental, and public safety returns to the nation.

The Corps uses its budgeting system, the Civil Works Integrated Funding Database, to categorize each navigation project into one of three categories—high, moderate, or low commercial navigation use—based on the Center's tonnage data. The Corps defines these categories for coastal projects as more than 10 million short tons, between 1 and 10 million short tons, and less than 1 million short tons, respectively.[14] The Corps' internal budget guidance notes that the agency focuses its funding on those projects with a "high or moderate level of commercial navigation use that move 99 percent of the nation's waterborne commercial cargo."[15] For projects categorized as low commercial navigation use, the Corps' internal budget guidance notes that the agency considers a range of factors other than tonnage.[16]

How does the Corps use the Center's landings data to make budget decisions?

The Corps does not use the commercial fish landings data collected by the Center to inform its budget decision-making process for navigation projects. Specifically, the Center does not incorporate data on commercial fish landings into the tonnage data the Corps uses to prioritize funding for its navigation projects.

Corps officials provided two reasons why the Center does not include commercial fish landings in the tonnage data it produces and inputs into the Corps' budgeting system. First, Corps officials stated that the agency has specific definitions for its projects based on legislatively defined boundaries, so the definitions and boundaries of Corps projects and NMFS ports may not necessarily align. However, officials stated that they are not familiar with the definitions and boundaries of ports used by NMFS in FOSS, and the Center has not completed a crosswalk to attempt to align Corps projects and NMFS ports. Second, Corps officials told us that overall commercial fish landings are likely small compared to the overall amount of cargo transported between ports. They stated that they do not believe that incorporating data on commercial fish landings would be likely to impact the Corps' overall budget decision-making for navigation projects and, as such, have not prioritized the inclusion of the fish landings data.[17] However, since the Center has not completed a crosswalk of

NMFS ports and Corps projects, the agency is not able to assess the potential impact of incorporating commercial fish landings into tonnage for individual Corps projects.

Without having assessed the potential impact of incorporating commercial fish landings into tonnage, the Corps cannot know whether these data could impact an individual project's commercial use categorization in any given year. For example, without such an assessment, the Corps cannot know whether a project categorized as low commercial navigation use based solely on cargo tonnage could shift into a moderate use categorization with the inclusion of commercial fish landings. In particular, this might be a factor for projects located in states with a high level of commercial fish landings. For example, NMFS reported that six of the top 10 ports for commercial fish landings in 2022 were located in Alaska and Louisiana. The amount of commercial fish landed in 2022 for these six ports ranged from approximately 120,000 to 310,000 short tons.[18] A senior Corps official stated that it could be informative for the agency to assess whether including commercial fish landings in tonnage might impact the prioritization of projects in states with a high level of commercial fishing.

As noted earlier, the Center previously received commercial fish landings data directly from domestic fishing vessels and incorporated it into tonnage data to inform the Corps' navigation project prioritization. Corps officials told us they could not find any documented reason for the change and have not included commercial fish landings in the aggregate tonnage data since then, despite separately including NMFS' commercial fish landings data in the *Waterborne Commerce of the United States* report. Moreover, the Corps has not compiled evidence to support the agency's decision to continue to omit commercial fish landings data from tonnage.

GAO's *Evidence-Based Policymaking* lays out key practices that can help federal leaders and employees develop and use evidence to effectively manage and assess the results of federal efforts.[19] GAO distilled these key practices from hundreds of actions identified in GAO's past work as effective for implementing federal evidence-building and performance-management activities. The practices highlight that an agency should use the evidence it collects to learn, and leverage the information learned to inform management decisions. Evidence and learning can inform a range of decisions, such as changes to existing strategies to achieve better results or the reallocation of resources. For the Corps, this includes using available information to inform its budget decision-making for navigation projects.

The Corps would be better able to substantiate its navigation project decision-making by assessing whether the Center should incorporate commercial fish landings data into tonnage. Such an assessment could be especially relevant and helpful for navigation projects located in states with significant commercial fishing activity. For example, the agency could assess if including commercial fish landings in tonnage could shift the Corps' prioritization of those projects.

Conclusions

The Corps uses waterborne commerce data collected by the Center to inform budget decisions for projects under its Civil Works Navigation mission, including navigation projects in federal harbors and channels. The Corps uses tonnage, as derived from the Center's data, as the primary factor for prioritizing its funding of navigation projects. However, the tonnage data do not include commercial fish landings. Although the Center collects data on commercial fish landings, the Corps has not assessed whether that information should be included in tonnage data. According to key practices for evidence-based policymaking, an agency

should use the evidence it collects to learn and leverage information learned to inform management decisions. By assessing whether the Center should incorporate commercial fish landings data into tonnage, particularly in states with significant commercial fishing activity, the Corps would be better able to substantiate its decision-making. For example, the agency could better assess if including commercial fish landings in tonnage for projects in some states might shift the prioritization of these projects.

Recommendation for Executive Action

The Assistant Secretary of the Army for Civil Works should ensure that the Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers conduct and document an assessment to determine whether incorporating commercial fish landings data into tonnage could impact the Corps' prioritization of navigation projects. If the agency determines that the inclusion of these data could impact the Corps' prioritization of navigation projects, it should document a plan to include commercial fish landings data in tonnage.

Agency Comments

We provided a draft of this report to the Department of Defense, which includes the Corps, for review and comment. In its written comments, reproduced in appendix I, the Office of the Assistant Secretary of the Army for Civil Works concurred with our recommendation and described actions to address it.

How GAO Did This Study

To inform our work, we analyzed and reviewed laws, regulations, policies, and guidance relevant to the Corps' collection of waterborne commerce data. For example, we reviewed Corps regulations that require vessel operators to report certain information related to the transportation of goods, as well as set forth the processes to be used for such reporting. We also reviewed agency guidance and documents related to the Corps' use of waterborne commerce data in its budget decision-making for navigation projects. This included internal guidance on how information on tonnage is to be used as part of the agency's budgeting process for funding navigation projects. We reviewed data on waterborne commerce available through the Corps' *Waterborne Commerce of the United States, Calendar Year 2022* report, including data on tonnage of cargo and pounds of commercial fish landings. We also reviewed data on commercial fish landings, for fiscal year 2022, available through the FOSS database managed by NMFS. We determined that the data were sufficiently reliable for the purposes of our work.

We met with Corps officials from the Institute of Water Resources, which houses the Center, and the Civil Works Navigation mission to better understand the Corps' collection and use of waterborne commerce data. In doing so, we focused on gathering information on whether and how the Corps was collecting and using data on commercial fishing and aquaculture to inform decision-making for the agency's navigation budget. To further clarify our understanding, we submitted information requests to the Corps on the collection and use, if any, of data on commercial fishing and aquaculture, and reviewed information the agency provided in response. To better understand the commercial fish landings data collected by the Center, we met with officials from NMFS, and reviewed information available through the agency's FOSS database. To gather information on the perspectives of commercial fishing ports, we conducted a literature review of relevant articles and met with the Pacific Northwest Waterways Association.

We conducted this performance audit from June 2024 to April 2025 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and

conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

List of Addressees

The Honorable Shelley Moore Capito
Chairman
The Honorable Sheldon Whitehouse
Ranking Member
Committee on Environment and Public Works
United States Senate

The Honorable Sam Graves
Chairman
The Honorable Rick Larsen
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

We are sending copies of this report to the appropriate congressional committees, the Secretary of Defense, the Assistant Secretary of the Army for Civil Works, the Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers, and other interested parties. In addition, the report will be available at no charge on the GAO website at https://www.gao.gov.

GAO Contact Information

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Staff Acknowledgments: Anthony Fernandez (Assistant Director), Rebecca Sandulli (Analyst in Charge), Nira Marte, Ming Chen, Cindy Gilbert, Vondalee Hunt, Gwendolyn Kirby, Ty Mitchell, Abinash Mohanty,Tricia Moye, Sara Sullivan, Andrew Von Ah.

Appendix I: Comments from the Army Corps of Engineers

DEPARTMENT OF THE ARMY
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WASHINGTON, DC 20310-0108

April 10, 2025

Cardell Johnson
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Johnson:

The Army has received the GAO Draft Report, GAO-25-107447, "Army Corps of Engineers: Commercial Fishing Data Could Help Inform Budget Process," dated March 12, 2025 (GAO Code 107447).

The Army appreciates this opportunity to review the draft report and values the GAO staff's professionalism, collaboration, and insights during this audit. The Army's comments on the Draft Report (Enclosure 1) are included with this response.

Thank you again for the opportunity to comment. My point of contact for this action is Ms. Elaine Newbaker-London, elaine.e.newbaker-london.civ@army.mil, or (571) 274-1942.

Sincerely,

D. Lee Forsgren

D. Lee Forsgren
Acting

Enclosure

ENCLOSURE 1

GAO Draft Report Dated March 12, 2025
GAO-25-107447 (GAO CODE 107447)

"ARMY CORPS OF ENGINEERS: COMMERCIAL FISHING DATA COULD HELP INFORM BUDGET PROCESS"

ARMY COMMENTS
TO THE GAO RECOMMENDATION

RECOMMENDATION 1: The Assistant Secretary of the Army for Civil Works should ensure that the Chief of Engineers and the Commanding General of the U.S. Army Corps of Engineers conduct and document an assessment to determine whether incorporating commercial fish landing data into tonnage could impact the Corps' prioritization of navigation projects. If the agency determines that the inclusion of these data could impact the Corps' prioritization of navigation projects, it should document a plan to include commercial fish landings data tonnage.

ARMY RESPONSE: Army concurs with comment.

The U.S. Army Corps of Engineers will conduct and document a limited assessment to determine whether incorporating commercial fish landing data into tonnage could impact the Corps' prioritization of navigation projects and develop a plan for incorporating if there is an impact, subject to availability of resources.

Endnotes

[1]A port refers to a location where a ship can load or unload goods.

[2]Other types of products transported as cargo between ports include, for example, coal, crude materials such as forest products, manufactured equipment, machinery, and waste products.

[3]Commercial fish landings are the weight of, or revenue from, fish that are caught, brought to shore, processed, and sold for profit.

[4]Aquaculture refers to the breeding, rearing, and harvesting of animals and plants in various water environments such as the ocean or in on-land tanks.

[5]Pub. L. No. 67-362, 42 Stat. 1038, 1043 (codified as amended at 33 U.S.C. § 555). Various entities, such as vessel owners, lessees, and operators, are responsible for reporting such information, depending on the circumstances. See 33 C.F.R. § 207.800(a)(7). For the purposes of our report, we refer to such entities collectively as "operators."

[6]See 33 C.F.R. § 207.800.

[7]Engineer Regulation (ER) 1130-2-520, Vessel Operation Report (Statement of Freight and Passengers Carried).

[8]Corps officials told us that projects are congressionally authorized, often with project-specific authorizations for particular activities or segments of work. Project authorizations often have a defined scope, according to Corps officials, and may be specified for a defined geographic area, often for a specific amount of time. Corps officials further noted that project authorizations also specify an intended project outcome such as maintaining specific dimensions for a waterway.

[9]Domestic commerce includes goods transported between contiguous and non-contiguous states and territories of the United States. Foreign commerce includes the import, export, and movement of goods over water between the United States, Puerto Rico, or the U.S. Virgin Islands and any foreign country.

[10]Third-party information is provided by the Port Import Export Reporting Service (IHS Inc.).

[11]A short ton equals 2,000 pounds. For domestic movements, ton-miles equal the cargo tonnage times the distance between the point of loading on the water and the point of unloading on the water.

[12]The Fisheries One Stop Shop is a web-based query tool that provides public access to a wide variety of fisheries data and statistics including nationwide commercial and recreational landings, foreign trade of marine products, fisheries economics, per capita consumption, and domestically-produced fisheries products. Data are updated regularly and are downloadable in a variety of formats. The Fisheries One Stop Shop can be found at: https://www.fisheries.noaa.gov/foss. A fishery is (1) one or more stocks of fish that can be treated as a unit for the purposes of conservation and management and that are identified on the basis of geographic, scientific, technical, recreational, or economic characteristics, or method of catch; or (2) any fishing for such stocks.

[13]NMFS officials reported that, while it generally constitutes a small portion of landings in the Fisheries One Stop Shop, aquaculture contributes substantially to the U.S. seafood economy.

[14]The Corps categorizes each navigation project into a high, moderate, or low commercial navigation use category based on a 5-year average of tonnage data from the Center. For coastal projects, the Corps classifies high commercial use projects as those with at least 10 million short tons of cargo annually, moderate commercial use projects as those with at least 1 million but less than 10 million short tons of cargo annually, and low commercial use projects as those with less than 1 million short tons of cargo annually. For inland projects, the Corps classifies high commercial use projects as those with at least 3 billion ton-miles of traffic annually, moderate commercial use projects as those with at least 1 billion but less than 3 billion ton-miles of traffic annually, and low commercial use projects as those with less than 1 billion ton-miles of traffic annually.

[15]The guidance notes that, following categorization as high or moderate commercial use, the Corps also considers other factors. These factors can include the condition of a project, national security, and its use by military agencies, among others.

[16]The guidance says that these factors can include, among others, the presence of U.S. Coast Guard search and rescue operations, the use of a harbor for refuge or subsistence, and whether the harbor or waterway supports public transportation. Additionally, the guidance notes that while the Corps considers these factors on a project-by-project basis, these factors do not guarantee funding. According to the guidance, though, the Corps will seek to allocate a certain percentage of total funding to emerging harbors – that is, low commercial use harbors – as called for by the Water Resources Development Act of 2020. *See* 33 U.S.C. §§ 2238(c)(3)(A), 2238 note.

[17]Corps officials told us that the agency has deprioritized the use of commercial fish landings data in its navigation budget decision-making process over time, in part due to limited resources.

[18]In 2022, NMFS reported that 15 of the top 50 ports for commercial fish landings were in Alaska and seven of the top 50 ports were in Louisiana. For the top 50 ports, the volume of commercial fish landed ranged from approximately 5,000 short tons to 310,000 short tons. The median volume of commercial fish landed was approximately 16,000 short tons and the average was approximately 43,000 short tons.

[19]GAO, *Evidence-Based Policymaking: Practices to Help Manage and Assess the Results of Federal Efforts*, GAO-23-105460. Washington, D.C.: July 12, 2023.