



Inland Waterways and Western River Tenders

June 17, 2019

Fiscal Year 2019 Report to Congress



**Homeland
Security**

United States Coast Guard

Foreword

June 17, 2019

I am pleased to present the following report, “Inland Waterways and Western River Tenders,” which has been prepared by the U.S. Coast Guard.

Senate Report 115-283 accompanying the Fiscal Year (FY) 2019 Department of Homeland Security Appropriations Act (P.L. 116-6) requires the Coast Guard to provide the acquisition plan and requirements document that detail the Coast Guard’s plans to acquire new vessels to replace the current inland waterways and western river tender fleet.

Pursuant to congressional requirements, this report is being provided to the following Members of Congress:



The Honorable Lucille Roybal-Allard
Chairwoman, House Appropriations Subcommittee on Homeland Security

The Honorable Chuck Fleischmann
Ranking Member, House Appropriations Subcommittee on Homeland Security

The Honorable Shelley Moore Capito
Chairman, Senate Appropriations Subcommittee on Homeland Security

The Honorable Jon Tester
Ranking Member, Senate Appropriations Subcommittee on Homeland Security.

I am happy to answer any further questions you may have, or your staff may contact my Senate Liaison Office at (202) 224-2913 or House Liaison Office at (202) 225-4775.

Sincerely,

A handwritten signature in blue ink that reads "Karl L. Schultz". The signature is written in a cursive style and is enclosed within a large, light blue oval shape.

Karl L. Schultz
Admiral, U. S. Coast Guard
Commandant



Inland Waterways and Western River Tenders

Table of Contents

I.	Legislative Language.....	1
II.	Background.....	2
III.	Program Status and Progress	4
	Market Research/Design Studies	4
	AA and Acquisition Plan	5
	Operational Requirements	5
	Appendix: List of Abbreviations	6

I. Legislative Language

This document responds to the language set forth in Senate Report 115-283 accompanying the Fiscal Year (FY) 2019 Department of Homeland Security (DHS) Appropriations Act (P.L. 116-6).

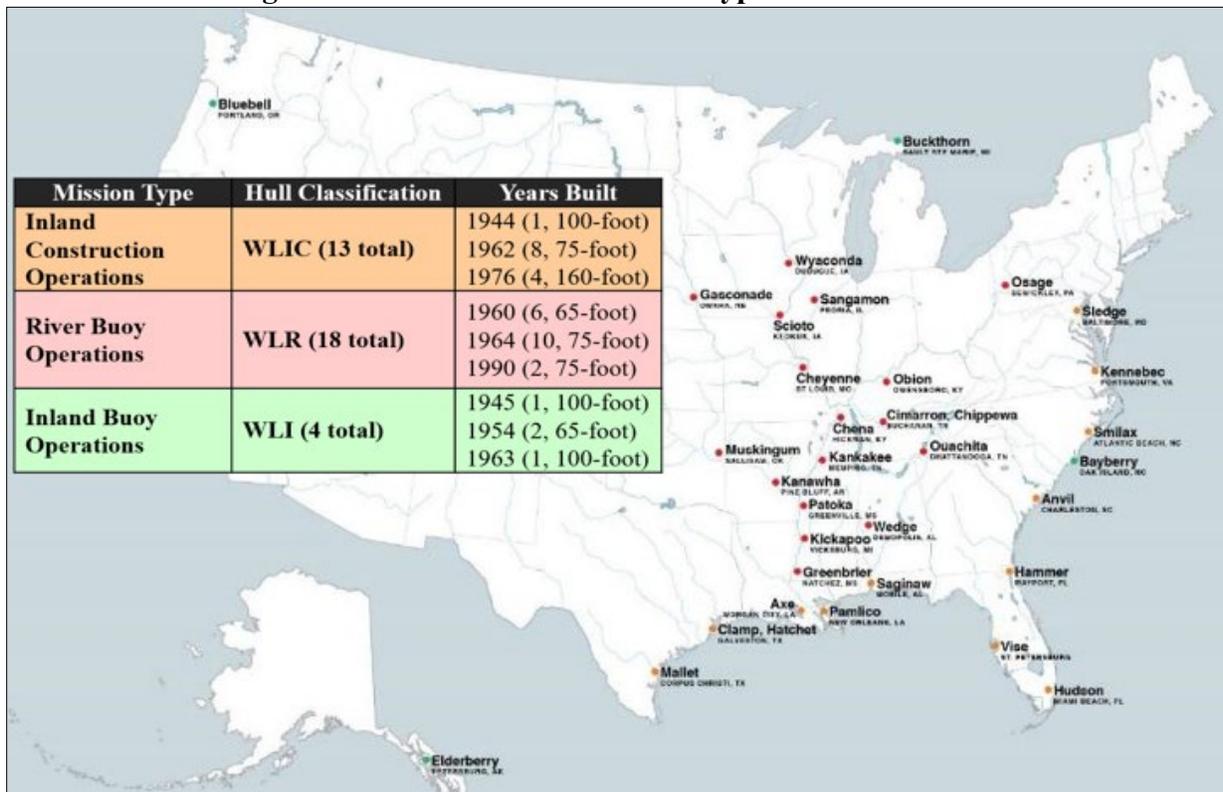
Specifically, Senate Report 115-283 states:

The Department is directed to provide, not less than 90 days after the enactment of this act, the Committee an acquisition plan and requirements document that detail the Coast Guard's plans to acquire new vessels to replace the current fleet.

II. Background

The current inland tender fleet comprises 75-foot, 100-foot, and 160-foot inland construction tenders (WLIC); 65-foot and 75-foot river buoy tenders (WLR); and 65-foot and 100-foot inland buoy tenders (WLI) that collectively average more than 55 years in age. This fleet is critical to the Nation’s economy because it supports a safe and effective marine transportation system, which accounts for \$5.4 trillion of economic activity annually and sustains 30.7 million jobs. The need to recapitalize is driven by the substantial increases in maintenance costs more than the budgeted standard support level. Throughout a 5-year span, the WLIC, WLR, and WLI maintenance costs were, respectively, 8 times, 19 times, and 3 times more than their budgeted levels. Figure 1 shows the types and distribution of the current inland tenders.

Figure 1: Current Inland Tender Types and Distribution



Each of these inland tender types has primary responsibility regarding a specific subset of maintaining aids to navigation (ATON) on critical parts of the marine transportation system. The 13 WLICs construct, repair, and maintain fixed ATON within inland waterways along the Eastern Seaboard and Gulf of Mexico. These WLICs are the only U.S. Coast Guard platform with the capability to drive and remove piles, erect range towers and major lights, and effect significant structural repairs to fixed ATON.

WLRs service short-range ATON on the western rivers. These 18 tenders set, relocate, and recover buoys to mark the navigable channel in these rivers as the water level changes, and

establish and maintain minor fixed aids (e.g., small skeleton towers), lights, and day beacons on riverbanks.

WLIs service short-range ATON along coastal and inland waterways. They maintain buoys that are beyond the capabilities of the nearest ATON team and that are located in areas either too shallow or otherwise too restricted for larger buoy tenders to reach. The four WLIs are located in Alaska, Michigan, North Carolina, and Oregon.

All of the inland tenders also provide a Federal presence for the inland waterways and western rivers, conducting ports, waterways, and coastal security; search and rescue; marine environmental protection; and marine safety missions. Any replacement of inland tender capability must account for these mission needs in addition to the ATON mission.

Despite the diversity of the current fleet, which comprises nine classes and subclasses of cutters, the Coast Guard Waterways Commerce Cutter (WCC)¹ acquisition program is planning for a replacement capability that focuses on standardization and minimizes the number of cutter classes in order to acquire and sustain this critical fleet in a more cost-effective manner. However, accomplishing the current inland tender fleet's diverse ATON mission requirements with a small number of cutter classes presents design challenges, especially when considering the physical constraints imposed by the unique operating environments currently being serviced. Additionally, the wide geographic dispersion of the inland tender fleet presents support and logistics challenges because of limited access to Coast Guard and commercial maintenance support and repair parts. Any recapitalization of the current inland tender capability must take these challenges into account to meet the Coast Guard's operational and maintenance requirements.

¹ The WCC previously was referred to as the Inland Waterways and Western River Tender program.

III. Program Status and Progress

The WCC program entered the Analyze/Select phase of the DHS acquisition lifecycle framework following DHS approval on January 19, 2018. The Coast Guard has taken steps to accelerate the WCC program by more than a year, following direction in the FY 2018 DHS Appropriations Act (P.L. 115-141). The Coast Guard is accelerating WCC acquisition primarily by concurrently (rather than sequentially) conducting activities and studies that will inform the development of the acquisition strategy and system specification expeditiously.

Under this accelerated schedule, the Coast Guard is aiming for initial operational capability (IOC)—after the first cutter or other solution has completed operational testing and evaluation successfully; all crewmembers are trained; and the cutter has been delivered to its homeport, ready for missions—by FY 2024. By comparison, the program would reach IOC in FY 2026 if complex acquisition activities were conducted sequentially instead of concurrently. The Coast Guard aims to field the capability fully by FY 2030.

The Coast Guard has participated in industry engagement to support the accelerated schedule. Members of the Coast Guard attended and presented information at the International WorkBoat Show from November 28 to 30, 2018, to communicate to industry the program’s desired schedule and projected production rate in order to achieve the following:

1. Inform vendor proposal strategies;
2. Provide industry information about the Coast Guard’s required capabilities and missions; and
3. Learn about industry’s production capacity and product capabilities to help inform the WCC program and contract strategy.

Market Research/Design Studies

Because of the unique nature of the ATON mission and the supportability challenges created by the ATON system’s geographical dispersion, it is important that the solution or solutions meet operational and maintenance needs efficiently and effectively, and can continue to do so for decades. The current fleet consists of 35 cutters in 9 subclasses; however, the WCC program aims to minimize the number of cutter variants to accomplish the mission. The Coast Guard has been conducting market research and design studies to examine what kind of configuration (tug and barge, or single-hull) should best meet the Coast Guard’s needs, as well as to determine whether the WCC should have multiple classes or configurations.

Market research has included four requests for information, released between February 2018 and February 2019, to gauge the level of interest from industry and the state of the market, including information regarding specialized equipment such as cranes and pile drivers.

Additionally, the Coast Guard would like to ensure that any design specifications released to industry are technically feasible and affordable. The Coast Guard and the Army Corps of Engineers’ Marine Design Center each are developing indicative designs and performing studies to understand cost and performance trade-offs better. These design studies are informing the

WCC program's alternatives analysis (AA), which will identify and document viable solutions to meet the Coast Guard's ATON mission needs currently covered by the inland tender fleet.

AA and Acquisition Plan

An AA is currently underway to make a cost-informed assessment of different types and combinations of materiel and nonmateriel solutions that can complete the current fleet's missions effectively. The AA began in October 2018, following DHS approval of the WCC program's AA study plan. The WCC AA satisfies the statutory requirement for an independent analysis of alternatives, as required by 14 U.S. Code 572 for DHS Level 1 acquisition programs. The Naval Sea Systems Command is conducting the AA to ensure its independence. The AA will include cost and performance trade-offs among the different types and combinations of materiel and nonmateriel solutions; these results will inform the acquisition strategy and acquisition plan.

Operational Requirements

The Coast Guard developed a preliminary operational requirements document that was approved in March 2018. This document identifies initial effectiveness requirements required of the WCC to complete its primary and secondary missions, including key performance parameters. The Coast Guard has revised this document on the basis of market research and design studies, and may revise it further on the basis of the AA's findings and recommendations.

Appendix: List of Abbreviations

Acronym	Definition
AA	Alternatives Analysis
ATON	Aids to Navigation
DHS	Department of Homeland Security
FY	Fiscal Year
IOC	Initial Operational Capability
WCC	Waterways Commerce Cutter
WLI	Inland Buoy Tenders
WLIC	Inland Construction Tenders
WLR	River Buoy Tenders