

Inland Navigation Construction Organization: A New Programmatic Approach for Delivering Major Projects

Prepared For: Waterways Council, Inc. (WCI)

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January 2026

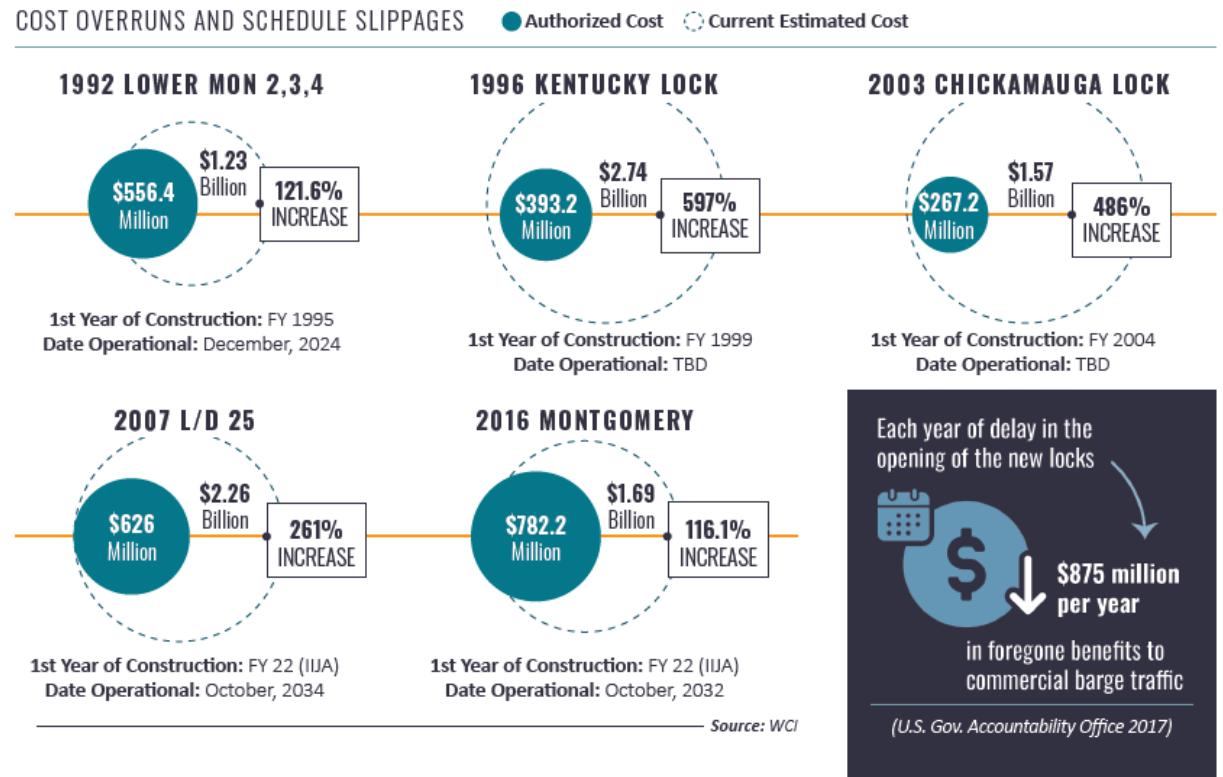
Introduction

This white paper is a follow-up to the *Recommendations for Improving the Delivery of Inland Waterway Capital Projects* report prepared in September 2025 for the Waterways Council, Inc. (WCI). The report examined how the U.S. Army Corps of Engineers (USACE) can address project delays and cost overruns. One of the report recommendations is to treat the development of large inland waterway capital projects as a program—rather than individual projects that often compete with one another for priority and funding. When run as a program, the projects can be delivered concurrently as part of a unified program to achieve overarching, strategic goals. Many components are required for an effective program, and a defined structure is necessary so that roles are not redundant or lacking. **An integrated and programmatic Inland Navigation Construction Organization (INCO) strategy is necessary to drive the multiple inland waterway projects from inception to budgeting to design and through construction, and this paper offers a recommended framework for this INCO concept—envisioned as a single person (Inland Program Manager) serving as the hub and conduit for information sharing.**

Issue Delineation

Some may ask why a program organization is necessary. USACE has years of experience executing large, challenging projects and has developed tiered oversight documentation for such “mega” projects. But as one examines the **specific struggles with the expansion and modernization of inland navigation waterway infrastructure over the past 28 years (with only three project completions) and the projected cost overruns and schedule slippages illustrated in Figure 1**, it is evident that the current policies that dictate project delivery processes must change. The challenges do not lie with any one component of the complex project life cycles, but rather breakdowns and disconnects between project prioritization, funding, design, construction, and decision-making. Because the system spans numerous states and various USACE Districts and Divisions, special emphasis must be put on the system as a whole and not discrete components in isolation from each other.

Figure 1. Illustration of cost overruns and schedule slippages for five “mega” projects



The inland navigation waterway projects are required to use traditional economic analysis methods to determine the benefit-to-cost ratios, resulting in a program funding structure that does not meet the Office of Management and Budget (OMB) budgeting requirements. Because of this complicated situation, **individual projects must be added by Congress during the appropriations cycle each year, resulting in huge “Congressionally directed spending” requests** on the order of hundreds of millions of dollars each year.

Similar to most USACE Civil Works projects, a “cost share” or “non-federal” partner also exists for this program in the form of the Inland Waterways Users Board (IWUB). The IWUB monitors and makes recommendations to Congress for utilizing the Inland Waterways Trust Fund (IWTF), which provides the 25 percent cost-shared portion of these massive projects. Many times, however, this program is treated as 100 percent federally funded—with limited consideration of the “non-federal” partner’s (that is, IWUB’s) input. This is evident in the apparent disconnect between the IWUB-informed strategic Capital Investment Strategy (CIS) and the tactical Inland Programs Plan (IPP), developed by USACE in concert with the CIS. Because USACE must rely on its partners to collaborate with Congress for this program, it is critical that both entities convey the same message; otherwise, appropriators receive conflicting messages on prioritization and miss the opportunity to have a more significant impact with their federal appropriations.

While composed of individual projects, the **IWUB serves as a programmatic “non-federal sponsor” through its oversight of the IWTF**. This emphasizes how the inland waterway program is fundamentally different from other programs in USACE and

provides the justification for USACE and Congress to treat this as a program rather than a competition between individual projects.

Effective and efficient project execution appears limited by the existing structure's overlapping communication, accountability, and oversight — as demonstrated by how the current program is split across three different divisions at USACE Headquarters: Operations, Programs Integration, and Engineering & Construction. Using the existing staff and roles with refinements to the organizational structure would help with this dilemma, and **providing a single point person that IWUB and Congress can tap into for all information regarding the program is imperative to success.**

Vision and Purpose

Building on the recently emerging requirement for all USACE Districts to communicate with USACE Headquarters regarding inland navigation capabilities, the three key focus areas/objectives for the proposed INCO are: **communication, oversight, and accountability.** Managing these projects as a program would maximize the potential to achieve the ultimate goal/outcome: **modernize and improve efficient delivery of inland navigation projects in a programmatic, timely, and cost-effective manner.** As a team, the initial output of the INCO must be to **develop SMART (SMART: Specific, Measurable, Achievable, Relevant, Time-Bound) focused goals that are coordinated at all levels of USACE—project delivery, Districts, Divisions, and Headquarters—and shared and coordinated with the IWUB and Congress.**

Inland Navigation Construction Organization (INCO)

The proposed INCO would provide additional transparency, defined accountability at all levels, and integrated management, strategy and execution. The INCO would serve as a system of checks and balances, and the sharing of program information with the IWUB and Congress would build trust and support.

Rather than appearing reactive, as with some of the recent cost increases and schedule slippages (see Figure 1), the **INCO would position USACE to function proactively across the organization** through regular project design, budget, and schedule updates. This would allow USACE to communicate, and then promptly address, issues in a timely manner, alleviating potential frustration and pushing the program forward under a unified vision.

Continuity of staff and processes throughout the program is another key factor for successful delivery — as demonstrated and exacerbated by the estimated 80,000+ years of overall USACE experience that was lost in 2025 as a result of Federal Administration initiatives to reduce the size of the overall Federal workforce. The size, infrequency, complexity, and longevity of the projects that make up the program require specialized expertise that must be shared across USACE Districts, and the **development, retention, and success planning of these highly technical teams to work continually on these projects is critical**—resulting in improved design processes that mitigate cost and construction risks. Rather than depending solely on strategy, this enhancement of the overall “delivery culture” for inland waterway projects would develop buy-in and confidence for all working throughout the program.

Functions

Similar to the role of the USACE Dam Safety Program for managing the extensive USACE portfolio of dams, the INCO would function as the key strategic integrator and collaborator, working with various tiers of USACE leadership who have the mission to modernize and improve the efficient delivery of inland navigation projects. The INCO would have the following functional framework:

- **Area of Responsibility:** mega and major rehabilitation projects with coordination-only role for Operations & Maintenance (O&M) program
- **Program-level Leadership:** serve as the unifying voice for USACE inland navigation and authorized to make program-wide decisions/recommendations for funding prioritization to USACE Headquarters
- **Project Delivery:** provide in-progress reviews and oversight of scope, schedule, and budget for design and construction of individual projects in collaboration with the USACE Inland Navigation Design Center (INDC) Director

In this capacity, the **INCO will be responsible for developing and maintaining an INCO Program Management Plan (PgMP); overseeing mega and major rehabilitation projects; coordinate and validate funding and delivery capability; provide oversight of the inland navigation program funding; and conduct in-progress reviews for individual project design and construction.** The INCO will ensure continuous coordination with inland navigation operations to inform investment decisions, assist and/or brief the IWUB, and monitor IWTF transactions. It will collaborate with USACE Districts and Divisions in addressing Congressional inquiries and frame the narrative that supports and maintains alignment with the CIS. Operating under delegated authority from USACE leadership, the INCO will be the enabler that **drives accountability, fosters communication across USACE entities, and provides strategic oversight of planning and executing the inland navigation program.**

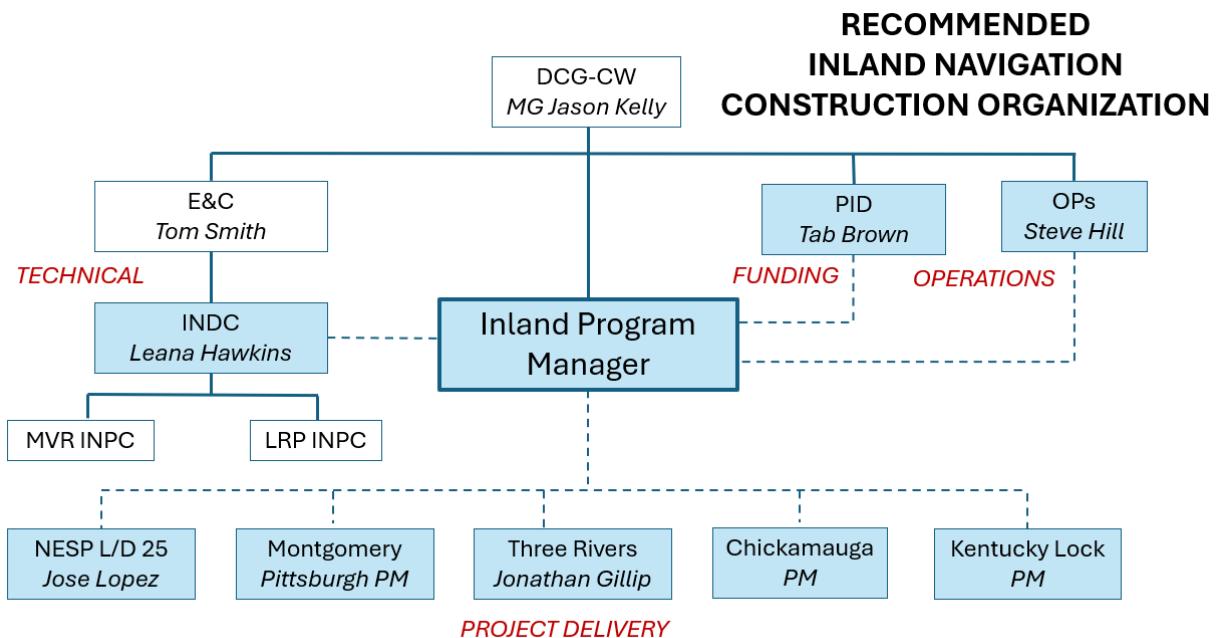
Structure and Organization

A proposed structure for how the INCO would be organized within USACE is outlined in Figure 2. This structure illustrates that the **authority for managing the INCO is delegated directly from the Deputy Commanding General for Civil Works (shown by a solid line) and strategically integrated (shown by a dotted line) with USACE Headquarters, Divisions, Districts, INDC, and project delivery teams.** This allows for management of programmatic elements of inland waterway projects (that is, prioritization, funding, and communication, including with executive-level stakeholders) at the leadership level of the USACE organization while preserving the responsibility of Divisions/Districts to deliver the design and construction of projects.

The structure provides for a **single Inland Program Manager (IPgM) who serves as the hub for the INCO and the conduit for information sharing in all directions** within USACE as well as with external stakeholders including the IWUB and Congress. It should be noted that, for clarity, the structure outlined in Figure 2 was simplified for illustrating the most direct connection of the IPgM with specific USACE Headquarters leadership and project delivery team leadership at Divisions and Districts—this does not

remove the inherent chain of command from USACE Headquarters Commanders through Division and District Commanders. Furthermore, the “dotted line” connections represent integration through communication and oversight, not a direct reporting structure.

Figure 2. Proposed INCO structure



Currently, the INDC and the associated Rock Island (MVR) and Pittsburgh (LRD) Inland Navigation Production Centers (INPCs) report up through the Rock Island District and Mississippi Valley Division (MVD) to USACE Headquarters. **The proposed INCO includes shifting the INDC and associated INPCs to report directly to the USACE Headquarters Engineering & Construction (E&C) Chief for purposes of more programmatic oversight and communication**, given that these centers provide design and production services across the entire USACE inland navigation program.

Roles and Responsibilities

The proposed roles and responsibilities for the IPgM are as follows:

- Lead development of and maintain the INCO PgMP through coordination with USACE Headquarters, Divisions, Districts, and INDC. The PgMP will provide the framework for responsibility, structure, communication, and decision-making, serving as the roadmap for the INCO.
- Serve as the integrator for programmatic inland navigation funding/prioritization:
 - Collaborate with USACE Headquarters Operations regarding critical needs for investment decisions.
 - Coordinate with Districts and Divisions regarding project prioritization and validate delivery capabilities through coordination with USACE Headquarters PID.

- Field Congressional inquiries related to inland navigation program/projects and coordinate with USACE Headquarters, Divisions, and Districts for evaluating the alignment of inquiries with program priorities.
- Develop and annually update the CIS in partnership with USACE Headquarters and IWUB, ensuring prioritization is consistent with the CIS.
- Monitor IWTF transactions (revenue/expenditures).
- Conduct in-progress reviews (IPRs) and provide oversight of the design and construction of individual projects, including scope, schedule, and budget:
 - Coordinate with individual project delivery team project managers (PMs) and INDC for regular updates.
 - Communicate with USACE Headquarters and IWUB regarding progress and address needs for any potential adjustments to project funding, prioritization, and approach.
- Serve as the primary USACE representative for IWUB and brief IWUB on the status and forecast of the INCO program and projects and coordinate as needed with the IWUB Federal Designated Officer.
- Drive accountability for execution of the inland navigation program through communication, collaboration, and coordination with USACE, IWUB, and Congress, implementing change management where needed to mitigate delivery risks that significantly affect the scope, schedule, and budget.

Logistics and Additional Features

Recognizing that the specific details of tactical INCO elements would be developed as part of initial formation of the proposed INCO, initial additional features of the proposed INCO were identified as follows:

- **Communication Roles and Plan:** a strategy framework for communication both internal and external to USACE would be developed and outlined by the INCO team as part of the overall PgMP for the INCO.
- **Funding Source and Location:** it is recommended that the INCO initially consist of one person (Inland Program Manager) physically based at USACE Headquarters who is supported by funds from the overall navigation program (that is, not the General Expenses [GE] Account monies), with an estimated budget of \$350,000 to \$400,000 (fully burdened and including overhead).
- **Function and Decision-making:** recognizing the authority for the INCO is delegated from the Deputy Commanding General for Civil Works, the INCO will collaborate, coordinate, and communicate across the USACE matrix to drive accountability for execution of the inland navigation program. The specific framework for INCO decision-making will be developed by the INCO team and associated leadership as part of the proposed PgMP.

Summary

The INCO model is a proven concept for large program delivery within USACE for IIS, MILCON, and Civil Works programs. This paper suggests extending this concept to the USACE inland waterway program and presents a potential framework for a programmatic INCO approach to delivering USACE inland navigation waterway projects. By creating an INCO and having an IPgM to oversee the mega projects and major rehabilitation projects, an overarching vision and structure would be established to help avoid the cost overruns and schedule delays that have plagued recent projects. This framework is flexible and may be modified to meet USACE's needs—it is presented here as a starting point to guide discussions of the future of the inland navigation program.