DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS

COMPLETE STATEMENT OF

LIEUTENANT GENERAL WILLIAM H. "BUTCH" GRAHAM, JR.

CHIEF OF ENGINEERS

BEFORE

HOUSE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

ON

STATE OF THE CIVIL WORKS PROGRAM

FEBRUARY 25, 2025

Chairman Fleischmann, Ranking Member Kaptur, and Members of the Subcommittee. Thank you for the opportunity to provide testimony on the Army Civil Works program as part of this oversight hearing titled "State of the Civil Works Program."

CIVIL WORKS PROGRAM OVERVIEW

Through the Civil Works program, the U.S. Army Corps of Engineers (Corps) works with other Federal, state, Tribal, and local agencies, as well as other entities, to develop, manage, restore, and protect water resources, primarily through the study, construction, and operation and maintenance of water-related infrastructure projects. The Corps focuses on work that provides the highest economic or environmental returns to the Nation or address a significant risk to public safety. The Corps also regulates development in waters of the United States and works with other Federal agencies to help communities respond to, and recover from, floods and other natural disasters. The Corps uses its engineering expertise and its relationships with project sponsors and stakeholders to address some of the most pressing water resources challenges facing the Nation.

The Corps is involved in studies of water resources challenges and opportunities across the country and in the construction of projects based on those studies. Currently, the Corps is actively working on nearly 100 ongoing feasibility studies and general reevaluation reports. The Corps also is managing dozens of ongoing construction projects across the country.

Through its commercial navigation program, the Corps facilitates the safe and reliable movement of cargo through 237 lock chambers at 192 sites and over 12,000 miles of inland and 13,000 miles of coastal waterways. There are over 1,000 authorized Corps coastal, Great Lakes, and inland ports in 45 states and territories. A significant majority of the goods entering the United States moves through Corps-maintained coastal ports, including 98% of overseas trade, 70% of imported oil, and 48% of consumer goods bought by Americans. The Corps flood risk management program maintains 746 dams and 4,000 miles of levees to help communities reduce their flood risks. At more than 400 reservoirs, the Corps provides recreational opportunities to millions of visitors each year. The Corps is the largest owner-operator of hydro-electric power plants in the United States, with 75 plants producing approximately 25% of the Nation’s total hydropower output.

CHALLENGES

Over many years, the Corps has experienced significant project cost growth across multiple projects in the Civil Works portfolio, driven by a combination of internal and external factors. Projects often span multiple fiscal years, during which cost estimates may become outdated, and project designs may require revision. As a result, previously anticipated project costs can increase significantly. The inherent complexity of large-scale infrastructure projects, evolving market conditions, and other factors continue to pose challenges. Gaps in early project design maturity and feasibility-level engineering

have required significant changes to our cost estimates in many cases, and supply chain disruptions, workforce shortages, and inflation have also contributed to escalate costs beyond our initial projections.

In many cases, the difficulties that we face in developing an initial reliable cost estimate reflect insufficient design maturity at the feasibility phase. When the Corps shortened the study phase of our process, we sometimes deferred critical engineering analyses — such as geotechnical data collection, site surveys, and hydrology and hydraulics (H&H) modeling — to the pre-construction engineering and design, and to the construction stages. This deferral can lead to unforeseen changes in project scope and costs.

Evolving market conditions also affect the Corps' ability to complete its projects within its cost estimates. To address this concern, the Corps works with industry associations through formal and informal engagements to better understand market trends, and occasionally executes studies to obtain objective data. Observed trends in skilled labor shortages, material price volatility, and escalating project costs due to economic uncertainties have established clear correlations to observed project cost growth.

A recent observed trend in limited contractor participation in the bidding process has contributed to escalated bid prices. As project size increases, contractor availability shrinks significantly, with only 25 firms nationwide capable of bonding for large-scale projects over $500 million.

In addition, real estate acquisition and environmental compliance can lead to substantial delays and cost escalations. For many projects, securing necessary land rights can be a complex and time-consuming process, particularly when projects require acquisition from multiple landowners, involve relocations, or affect properties with legal encumbrances. Non-federal sponsors' ability to acquire Lands, Easements, Rights-of-Way, Relocations, and Disposal Areas in a timely manner is critical, yet can be constrained by legal, financial, or administrative hurdles. Additionally, projects requiring coordination with Tribal Nations, state agencies, or private entities face further complexities in negotiating easements and resolving jurisdictional concerns.

Environmental compliance, including coordination under the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and Clean Water Act, can also extend timelines, particularly when projects require extensive mitigation efforts or involve sensitive ecosystems. Unanticipated findings during environmental review, such as the discovery of protected species or the difficulty of identifying suitable habitat for restoration, must be resolved before construction can proceed.

STRATEGIES TO IMPROVE PROJECT DELIVERY

Recognizing these challenges, the Corps has implemented several strategies to enhance project delivery efficiency and cost predictability. By strengthening preconstruction engineering and design (PED) requirements and using risk management principles, the Corps is working to improve cost and schedule accuracy.

Increased industry engagement, including early contractor involvement and market research initiatives, is helping to align expectations and ensure more competitive bids.

A sustainable Civil Works program requires effective project delivery methods, and strong partnerships with federal, state, Tribal, and local stakeholders. By refining acquisition strategies, enhancing early-stage project development, and proactively managing risks, the Corps is working to ensure that its infrastructure investments will continue to provide net benefits to the Nation at a reasonable cost.

Thank you for the opportunity to testify, and I look forward to addressing questions from the subcommittee.