

U.S. Army Corps of Engineers: Continued Use of Other Transaction Agreements for Civil Works Research and Prototypes

GAO-26-108350 [Accessible Version]

Q&A Report to Congressional Committees

March 19, 2026

Why This Matters

As part of the Department of Defense (DOD), the U.S. Army Corps of Engineers operates, maintains, and manages the nation's estimated \$200 billion water resources infrastructure portfolio. This portfolio encompasses 12 million acres of land and water, including 400 miles of shoreline, 700 dams, and 13,000 miles of levees. The infrastructure is found throughout the U.S.—along the Mississippi River and Great Lakes, as well as on the East, West, and Gulf Coasts.

The Water Resources Development Act of 2018, as amended (the 2022 act) (Pub. L. No. 117-263, § 8160(a), 136 Stat. 2395, 3741-44, (codified at 33 U.S.C. § 2313(c)) granted the Corps authority to use what are known as “other transaction” (OT) agreements to carry out prototype projects and follow-on production contracts or transactions to support the basic, applied, and advanced research activities of its civilian civil works missions and authorities. These efforts can aid the Corps's management of its water resources infrastructure by, for example, helping to mitigate the risks posed by natural disasters and severe weather.

The 2022 act also includes a provision for GAO to report annually on the Corps's use of other transaction authority for its civil works missions (33 U.S.C. § 2313(c)(7)(E)). This is our third annual report and updates the status of the Corps's use of OT agreements since our December [2024 report](#).

Key Takeaways

- The Corps has awarded four civil works OT agreements since the 2022 act.
- The first was in November 2024, when the Corps awarded an OT agreement for the design of a prototype model of a waterway channel that will allow for research on hydraulic structures, such as testing the operation of lock gates and how they could fail. The Corps reported to us that, as of October 2025, the design was roughly 20 percent complete.
- In September 2025, the Corps awarded three additional OT agreements to examine effects of harmful freshwater algal blooms on Corps infrastructure.

What are the Corps's civil works responsibilities and objectives?

The Corps's many civilian missions include operating civil works projects for water resources such as waterway channels, locks, and dams. In doing so, the Corps performs activities such as investigations and surveys, design and construction, and operations and maintenance. Over the last 5 years, the Corps

completed construction on more than 60 civil works projects. Examples of this work include repairing breakwaters to mitigate the force of strong waves and deepening navigable waterways and harbors.

For fiscal year 2026, \$10.44 billion was appropriated for the Corps's Civil Works program.¹

What are OT agreements?

OT agreements differ from federal procurement contracts, cooperative agreements, and grants in that they are typically not subject to the same federal laws and regulations.² Historically, OT agreements allow agencies more flexibility and help advance the development and use of new technologies more rapidly to meet mission needs and project requirements.³ OT agreements' less restrictive requirements can attract companies and universities that traditionally have not done business with federal agencies.

Agencies use OT agreements for a variety of projects and activities, such as research, development, and demonstration activities that help advance new technologies or processes. Agencies can also use these agreements for developing prototype designs or projects. Such prototypes can be physical or virtual models that help test and evaluate the technical feasibility or utility of a particular technology, process, concept, or system.

Under what conditions is the Corps authorized to use OT agreements for civil works research and development?

The 2022 act⁴ authorizes the Secretary of the Army to use OT agreements to carry out basic, applied, and advanced research activities as required to aid in the planning, design, construction, operation, and maintenance of water resources development projects and to support the Corps's civil works missions and authorities.⁵

The 2022 act states that when using OT authority, the Secretary shall ensure that competitive procedures are used to the maximum extent practicable to award each transaction and that at least one of the following conditions is met with respect to each transaction:

- The prototype project includes significant participation by at least one nonprofit research institution or nontraditional defense contractor.
- All significant participants in the transaction other than the federal government are small business concerns.
- At least one-third of the total cost of the prototype project is to be covered by sources other than the federal government.
- The Corps notifies Congress that exceptional circumstances justify OT use and provides for innovative business arrangements or structures that would not be feasible or appropriate under a contract, cooperative agreement, or grant.

What actions has DOD taken toward implementing the use of OT agreements for civil works research and development?

We previously found that, as part of DOD's implementation of the 2022 act, the Assistant Secretary of the Army for Acquisition, Logistics and Technology issued revised policy in February 2024 for the use of OT agreements to design and

develop water resources infrastructure prototypes.⁶ This revised policy provided guidance for the use of OT agreements for the Corps's civil works missions. In April 2024, the Assistant Secretary of the Army for Civil Works issued additional guidance for contracting officers following the revised policy. This guidance remains in place. The February 2024 policy was rescinded and replaced in November 2025.⁷

In November 2024, the Corps Engineer Research & Development Center (ERDC) awarded the Corps's first OT agreement in support of its civil works missions.

What is the scope and status of the first OT agreement for civil works research and development?

In November 2024, ERDC entered into an OT agreement with an environmental engineering firm to develop a proof of concept and design for a large-scale hydraulic structures prototype model. This model will be used for testing new innovations in a controlled environment at a scale large enough to provide proof of readiness for deployment in the hydraulic structures the Corps operates nationwide. The Corps awarded the OT agreement at a fixed price of approximately \$2.6 million.⁸

Under the agreement, the engineering firm must provide design documents for the Corps's review at specified intervals during design development. As of October 2025, the Corps reported to us that the design was roughly 20 percent complete. Corps officials indicated that the firm is on schedule to provide its final design for the model in April 2026.⁹ In addition, ERDC has selected a site where the model could be assembled at its Vicksburg, Mississippi, facility.

Should the Corps determine that the model's proof of concept and design are satisfactory, Corps officials expect to proceed with assembly of the model as a separate follow-on project.¹⁰ Corps officials said that for assembly of the model, they could choose to award a new follow-on OT agreement consistent with the Corps's authority or a traditional contract subject to the Federal Acquisition Regulation and other federal laws and regulations. However, until the design is completed, no decision will be made by the Corps about the acquisition method.

What research capabilities could the hydraulic structures prototype model provide to the Corps?

The Corps anticipates that the assembled model—a first-of-its-kind prototype—will provide a waterway channel (flume) measuring approximately 20 feet wide, 20 feet tall, and 100 feet long. Within this channel, which will likely contain multiple chambers, the Corps expects to be able to test the performance of small-scale hydraulic structure components, such as lock gates, under various simulated water flow conditions.

According to preliminary design information, the model's instrumentation and controls will allow the Corps to run tests and collect data to understand:

- hydraulic and structural stresses on components (e.g., vibration and impacts on gates);
- how sediment, like mud, may impede water flow or gate operation;
- new designs, such as designs to replace older gates;
- lock failure and rapid water release;

- robotic inspection and repairs; and
- fish migration effects on water flow and gate operations.

What additional OT agreements for civil works research and development did the Corps award in fiscal year 2025?

In September 2025, ERDC awarded three additional OT agreements for research related to the Corps Harmful Algal Bloom Demonstration Program. The Corps has reported that algal blooms can impact Corps waterways, infrastructure, operations, and resources. These research prototype projects are intended to provide the proof of concept and demonstrate innovative, cost-effective, and scalable technologies for early detection and management of harmful algal blooms. The technologies to be examined under the three OT agreements are:

- a web-based geo-spatial surveillance system for early detection of algal blooms using artificial intelligence,
- a nanobubble ozone treatment for management of algal blooms, and
- synthetic clay as an alternative to algicides for scalable harmful algal bloom management.¹¹

ERDC made these OT awards upon its review of proposals submitted in response to a competitive process called Commercial Solutions Opening.¹² Consistent with its authority under the 2022 act, the Corps may use this process to solicit proposals for products, services, or research from companies or other institutions. Corps officials told us they expect to use the same process to solicit future research proposals related to their civil works programs.

Agency Comments

We provided a draft of this report to the Department of Defense for review and comment. The Department provided technical comments, which we incorporated, as appropriate.

How GAO Did This Study

In preparing this report, we reviewed Corps and Department of Defense policies and documents specific to the hydraulic structures prototype model such as the OT agreement and statement of work for its design. We also conducted interviews with officials from the Corps and Department of the Army.

We conducted this performance audit from March 2025 to March 2026 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 conclusion 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 made available at no charge on the GAO website at <http://www.gao.gov>.

GAO Contact Information

For more information, contact: Hilary M. Benedict, Director, BenedictH@gao.gov.

Public Affairs: Sarah Kaczmarek, Managing Director, Media@gao.gov.

Congressional Relations: David Powner, Managing Director, CongRel@gao.gov.

Staff Acknowledgments: Mike Armes (Assistant Director), John Bauckman (Analyst in Charge), Jehan Chase, Curtis Martin, Jenique Meekins, and Anisha RajBhandary.

Connect with GAO on [Facebook](#), [X](#), [LinkedIn](#), [Instagram](#), and [YouTube](#).

Subscribe to our [Email Updates](#). Listen to our [Podcasts](#).

Visit GAO on the web at <https://www.gao.gov>.

This is a work of the U.S. government but may include copyrighted material. For details, see <https://www.gao.gov/copyright>.

Endnotes

¹Commerce, Justice, Science; Energy and Water Development; and Interior and Environment Appropriations Act, 2026, Pub. L. No. 119-74, 140 Stat. 5, Div. B, tit. I.

²Cooperative agreements and grants are agreements between the federal government and an awardee with a principal purpose of transferring something of value to the recipient to carry out a public purpose of support or stimulation authorized by federal law, rather than acquiring property or services for direct benefit or use. Conversely, contracts are agreements between the federal government and nonfederal recipients that are generally used to acquire property or services for the direct benefit or use by the U.S. government and are subject to the Federal Acquisition Regulation. See 31 U.S.C. §§ 6303-05, 2 C.F.R. § 200.1, and FAR 1.104, FAR pt. 2.

³NASA first received OT authority in 1958, and other departments were subsequently given this authority, such as the Departments of Defense, Energy, Health and Human Services, Homeland Security, and Transportation. GAO, *Federal Acquisitions: Use of 'Other Transaction' Agreements Limited and Mostly for Research and Development Activities*, [GAO-16-209](#) (Washington, DC: Jan. 7, 2016).

⁴The Water Resources Development Act of 2018 was enacted as part of the America's Water Infrastructure Act of 2018, Pub. L. No. 115-270, 132 Stat. 3765, 3768-3840. It was amended in 2022 by the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Pub. L. No. 117-263, § 8160(a), 136 Stat. 2395, 3741-44 (codified at 33 U.S.C. § 2313(c)).

⁵Congress authorized DOD to use OT agreements in the late 1980s and has expanded the authority over several decades. GAO, *Other Transaction Agreements: Improved Contracting Data Would Help DOD Assess Effectiveness*, [GAO-25-107546](#) (Washington, D.C.: Sep. 3, 2025).

⁶We previously reported on the status of the Corps's use of OT authority for its civil works mission in 2023 and 2024. Our first report was GAO, *U.S. Army Corps of Engineers: Use of Other Transaction Agreements in Water Development Projects*, [GAO-24-106746](#) (Washington, D.C.: Nov. 16, 2023). Our second report was GAO, *U.S. Army Corps of Engineers: Actions Taken to Develop Water Resources Research Prototypes*, [GAO-25-107449](#) (Washington, D.C.: Dec. 12, 2024).

⁷In September 2025, the Acting Secretary of the Army for Acquisition, Logistics and Technology designated the Office of the Deputy Assistant Secretary of the Army (Procurement) as the office responsible for issuing the Army guidance for use of OT authority, which applies to the Corps's civil works mission among other Army missions. This action also rescinded the February 2024 policy that the Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology) replaced in November 2025. We did not review the effect of this administrative action because we received this information too late in our review.

⁸The Corps reported to us that it used its fiscal year 2025 Energy and Water, Operations and Maintenance account to fund the design. These are "no year" funds, meaning that there are no time limits on when the funds may be obligated or expended, and the funds remain available for their original purpose until expended. See, 33 U.S.C. §576, which establishes a revolving fund, to be available without fiscal year limitation, for expenses necessary for the maintenance and operation of the plant and equipment of the Corps's civil works functions, including acquisition of plant and equipment, maintenance, and repair, among other limited purposes. Corps officials also told us that the roughly \$2.6 million design cost does not include the Corps's internal management costs.

⁹When the OT agreement was initially awarded in November 2024, the Corps expected the engineering firm would complete the model's design in October 2025. Corps officials said they now expect the design will be completed in April 2026, 6 months later than expected. Corps officials said the design development was delayed, in part, because awarding the initial OT agreement at the end of 2024 took longer than the Corps anticipated.

¹⁰Corps officials told us that funding is available should they choose to proceed with assembly of the hydraulic structures prototype model.

¹¹The Corps awarded the algal bloom surveillance system project to Clemson University for \$ 684,921, the nanobubble ozone treatment project to the University of Florida for \$1,062,851, and the synthetic clay project to an engineering firm for \$2,292,500. In making these awards, the Corps told us that it used funding from its fiscal year 2024 Energy and Water, Operations and Maintenance account. These are "no year" funds meaning that there are no time limits on when the funds may be obligated or expended, and the funds remain available for their original purpose until expended. See 33 U.S.C. §576.

¹²Commercial Solutions Opening is an existing competitive procedure for DOD to acquire innovative commercial items, technologies, or services. See DFARS 212.7000.