FAQs – Sensor Technologies for Freshwater Quality Management

Last updated May 6, 2026

Could you share more detail on the concentration ranges the government is targeting (for example, expected detection limits or typical environmental levels)?

A range of concentrations are of interest, from high concentrations that may be associated with peak loading events, to low concentrations that may be associated with performance monitoring following conservation or other nutrient control measures being implemented.

Could you share more detail on the primary application scenarios the government has in mind (such as field deployment versus fixed monitoring, and spot measurements versus continuous or near real-time monitoring)?

Field deployed continuous, real-time monitoring technologies are certainly of interest. Combined approaches where multiple technologies are used in concert to at scale to provide maximal information most cost-efficiently.

I'm hoping to get some clarification on the term "in-situ." For the DRP mission, does in situ mean several hours or several months? Our Bayonet system is capable of being deployed with hardware to monitor DRP but to better understand the mission, we would like to request information on the typical length of time a mission like this might be.

The term *in situ* in this context means field deployed and capable of collecting nutrient concentration data in near real-time. Field deployed sensors should be reliable and capable of operating within acceptable limits for extended time periods (ideally months).

Will pre-existing background IP be explicitly protected and ring-fenced in the OTA?

If your submission is deemed favorable and a RFPP is issued, terms and conditions will be negotiated by the Agreements Officer.

Will participants retain ownership of both existing IP and any new IP created under the project?

If your submission is deemed favorable and a RFPP is issued, terms and conditions will be negotiated by the Agreements Officer.

What technical data, software, or documentation will participants be required to deliver under the prototype, and what rights will the government receive in those deliverables?

If your submission is deemed favorable and a RFPP is issued, terms and conditions will be negotiated by the Agreements Officer.

Will participants retain full rights to commercialize its technology outside the US government market, including in the UK, EU, and other commercial sectors?

If your submission is deemed favorable and a RFPP is issued, terms and conditions will be negotiated by the Agreements Officer.

If the project proceeds to a follow-on production agreement, would participants IP or data rights obligations change, and could that trigger broader government rights to the underlying technology?

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Can a UK-registered SME act as prime contractor on this OTA, or is a US-based prime required?

In order to be eligible for an OT agreement, you must have a SAM account and meet one of the items listed in Part IV. Eligibility information, of the OT announcement.

Would a UK SME with no history of DoD contracts qualify as a Nontraditional Defense Contractor (NDC) as defined in the announcement?

Reference Attachment 1 of the OT announcement.

Is the $825,000 ceiling intended to fund a single award, or is the government actively planning to split it across multiple awardees? If splitting, is there a minimum viable award threshold? Can a vendor ONLY propose one aspect for example the Data Visualization portion of the solution and not the hardware identifications or integration?

The ceiling is the maximum amount available to award. Multiple awards are possible following this announcement. Minimum award amount is determined by proposed project scope. All portions of the solution are of interest.

The solicitation states 'more than one solution may be awarded.' Are awardees expected to work independently, or could the government require coordination/integration between multiple selected vendors?

Coordination/integration will be explored if your solution is accepted for a Request for Prototype Proposal (RFPP).

How is 'significant participation' by an NDC or non-profit research institution defined in practice? Is there a minimum percentage of labor, cost, or work scope, or is this assessed qualitatively by the Agreement Officer?

There is not a percentage. The "significant extent" requirement is deliberately qualitative, granting the Agreement Officer (AO) the necessary business discretion to evaluate the impact of a Partner's contribution.

For the one-third cost share requirement: is in-kind contribution (e.g., internal R&D labor, existing equipment, prior IP) acceptable, or must it be cash or direct expenditure? How must it be documented in the white paper?

The Government does not intend to cost share on this project.

Can a company that has performed FAR-based DoD subcontracts below the CAS full-coverage threshold ($50M) still qualify as an NDC under this solicitation?

Reference Attachment 1 of the OT announcement.

The agreement type is listed as Firm Fixed Price Milestones. Can you provide illustrative examples of the milestone structure anticipated (e.g., PDR, prototype delivery, field demo)? Will the government co-develop the milestone schedule with the offeror post-selection?

If your submission is deemed favorable and a RFPP is issued, additional details regarding milestones will be provided.

Data rights are listed as 'To Be Determined.' What is the government's preferred data rights posture — unlimited rights, limited rights, or a negotiated license? Will offerors retain IP ownership of novel sensor technologies developed under this OT?

If your submission is deemed favorable and a RFPP is issued, terms and conditions will be negotiated by the Agreements Officer.

If the prototype is deemed successful, what is the anticipated scope and value of the follow-on production OT or FAR-based contract referenced under 33 USC 2313(c)(2)? Is there a rough order of magnitude or program of record behind this effort?

There are no details available at this time.

Will ERDC provide any Government Furnished Equipment (GFE), site access, logistical support, or existing sensor infrastructure during the demonstration phase? If so, to what extent?

There are no GFE planned at this stage.

Are travel costs for site visits, government reviews, or demonstrations expected to be included in the $825K ceiling, or are they funded separately? Is the travel scope listed as 'TBD' likely to be material in size?

Travel costs associated with the project scope will not be covered separately. Such costs should be included in the final budget.

What DRP concentration ranges (low, typical, and spike conditions) are observed at the priority deployment sites? Are there seasonal extremes or storm-event pulses that sensors must be validated against?

Sensors of interest would be capable of quantifying low, typical, and spike conditions - both high and low concentration ranges are of interest.

What are the priority deployment environments for Year 1 demonstration, e.g. rivers, reservoirs, or tributaries? What are the representative flow velocities, turbidity levels, and temperature ranges at target sites?

Edge-of-field, streams, tributaries, reservoirs and rivers are all relevant. Turbidity and temperatures can vary widely at sites of interest. Please explain your assumptions pertaining to velocities, turbidity levels, and temperature ranges in solution proposed.

Is the 'sub-hourly resolution' requirement a hard minimum (e.g., ≤30 min intervals), or will the government consider performance trade-offs between measurement frequency and reagent/power consumption for wet-chemistry systems?

It is up to the partner on how to propose a solution.

Which specific laboratory analytical methods will serve as the accuracy benchmark during performance analysis and demonstration?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.

Does USACE have an existing telemetry infrastructure at candidate deployment sites (e.g., GOES satellite uplinks, cellular modems, LoRaWAN gateways)? What data transmission protocols or formats are currently in use?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.

What USACE data platforms and systems must the sensor solution integrate with? Specifically, is integration with CWMS (Corps Water Management System), AQUARIUS, or NWIS expected? Are there API specifications or data schemas available?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.

What is the expected maximum deployment duration between maintenance windows (e.g., reagent refill, biofouling cleaning, calibration)? Are there field personnel available at deployment sites, or must the system be fully autonomous?

The offeror should be prepared to be fully responsible for work associated with the proposed solution.

The solicitation notes nitrogen (N) is 'also of interest' alongside DRP. How heavily will N monitoring capability be weighted in evaluation relative to DRP? Is dual-analyte capability a strong differentiator or a secondary nice-to-have?

DRP is the primary target. Proposed solutions that target DRP and N will be evaluated on its merits and against the rating criteria stated in the announcement.

Is there a preferred Technology Readiness Level (TRL) range for submitted solutions? For example, will the government consider TRL 3–4 concept-stage technologies, or is a preference for TRL 6+ field-demonstrated systems implied?

There are no additional details available at this time.

Will ERDC designate specific field demonstration sites prior to RFPP issuance, or will the offeror be expected to propose demonstration sites independently? If government sites are designated, what environmental characterization data is available?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.

The solicitation references integration with 'other nutrient flux measurement technologies' at localized and very large scales. Is this an expectation for the prototype scope, or a longer-term vision for the follow-on? Are there incumbent flux monitoring platforms CTG should be aware of?

Integration at localized and very large scales is of interest for the prototype scope.

Will ERDC assign a dedicated technical point of contact or Contracting Officer's Representative (COR) who will be embedded with the vendor during the design phase? Who is the primary decision-maker for accepting prototype deliverables?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.

What is the government's expectation for interim design reviews, for example, a Preliminary Design Review (PDR) and Critical Design Review (CDR) before field demonstration? Are these formal milestones or informal checkpoints?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.

Will the government provide historical water quality datasets (e.g., prior grab sample records, flow gauge data) from candidate deployment sites to support sensor calibration and AI/ML model training during the design phase?

Available data may be provided.

What is the expected number of deployment sites for the demonstration phase — is this a single-site proof of concept, or multi-site validation across different freshwater environment types (river, reservoir, tributary)?

It depends on the nature of the proposed solution. One possibility would be multi-site field demonstration within a basin of interest.

Will the delivered data platform or software components need to comply with any specific DoD or Army cybersecurity frameworks, for example, CMMC, RMF (Risk Management Framework), or FedRAMP?

If your submission is deemed favorable and a RFPP is issued, additional details may be provided.