

**Pennsylvania Department of Environmental Protection
Nutrient Credit Trading Program
Bid Specifications for
Coordination, Communication and Management of
CBNTT Updates for Use by Pennsylvania**

Introduction

The Chesapeake Bay Nutrient Trading Tool (CBNTT) is based on the Nutrient Tracking Tool (NTT), a user-friendly web-based application for efficiently estimating nutrient and sediment losses from crop and pasture fields at the field and farm scale. Agricultural producers can define their crop or pasture management scenarios for each field or area of interest. NTT runs a biophysical model, the Agricultural Policy/EXTender (APEX), a field-scale, biophysical model that estimates crop yield and nutrient and sediment fluxes on a given field based on soil, weather, crop management inputs, and conservation practices. NTT was developed by the Texas Institute for Applied Environmental Research (TIAER).

CBNTT was cooperatively developed by TIAER and the World Research Institute (WRI) under contract with the USDA NRCS/EPA and with input from the Chesapeake Bay watershed States (including Pennsylvania) for common use in the Chesapeake Bay watershed. WRI and TIAER also cooperatively developed the Chesapeake Bay Nutrient Trading Registry and Marketplace (Registry), a web platform for tracking and facilitating trading exchanges from credit certification and issuance to buying and selling credits.

Pennsylvania's Nutrient Credit Trading Program (Program), administered by the Department of Environmental Protection (DEP), currently uses an access database, spreadsheets, emails, and pdfs posted to a public website to manage the nutrient trading program and transfer data to participants and the public. The Program intends to move to using CBNTT and the Registry to administer nutrient credit trading in PA. Using the CBNTT and Registry will enhance data tracking and increase consistency of calculation methodology, as well as update that methodology to the current Phase 6 of the CB Watershed Model, fulfilling an understanding with EPA. Transparency will also be greatly facilitated with data sharing and real-time availability of credit information for nonpoint source participants, wastewater treatment facilities and public entities.

Scope of Work

Contract Tasks

The Contractor and its project personnel will handle the coordination, communication, and management of the updates to CBNTT for use by the Program.

The Contractor will need to complete the following tasks:

- Work with the Program to identify the administrative needs of the Program and become familiar with the requirements of nutrient credit trading in PA
- Determine what updates need to be made to CBNTT to allow its use to determine nutrient/sediment reduction credits generated for nutrient credit trading in PA
- Manage updates to CBNTT to include whatever data, factors, requirements and limitations specific to PA that are not currently incorporated, including calculation methodologies for various nonpoint source Best Management Practices (BMPs)

- Manage testing of CBNTT to ensure functionality of updates
- Provide training to users in PA on use of CBNTT

Deliverables

General

- Auto-populate as much data as possible throughout tools
- Convene states to reach agreement on terminology, etc., as needed
- Coordinate all parties involved, including phone conferences, meetings, meeting minutes and documentation of all phases of development to ensure well documented system of support upon completion
- Provide training to CBNTT administrators and users in PA

CBNTT

- Manage modifications to database to support CBNTT system modifications
- Manage CBNTT system modifications
 - Addition of manure treatment technology and poultry litter transport as "project types", with unique pages for data entry using methodology provided
 - Updated numeric baselines, as necessary
 - Incorporation of local TMDLs, with the more stringent of the local or Bay TMDLs being baseline
 - Incorporation of PA regulations into baseline consideration
 - Single sign-on for CBNTT Calculation Tool and Registry to provide one account for both tools
 - Import/export functionality to transfer Calculation Tool projects to Registry and streamline data entry
- Manage testing and deployment of CBNTT Calculation tool for use in Pennsylvania

Travel

- Trips to Harrisburg, Pennsylvania to meet with Program administrators
- Trips to TBD training locations in state of Pennsylvania

Contractor Qualifications

The Contractor and its project personnel need the following qualifications:

- Ability to access and update CBNTT
- Proven expertise in managing NTT/APEX, CBNTT/APEX
- Proven expertise in managing web development
- Strong understanding of Pennsylvania's and the greater Chesapeake Bay's water quality trading programs
- Strong understanding of the Chesapeake Bay Nutrient Trading Calculation Tool and Registry

The Contractor and its project personnel need the following experience:

- Managing development and application of the CBNTT
- Providing CBNTT training for farmers
- Working with TIAER to apply NTT in water quality trading programs
- Researching global water quality trading

- Assessing water quality trading programs worldwide
- Conducting feasibility studies
- Evaluating program effectiveness
- Advising program administrators on policies
- Developing integrated environmental and economic computer models for field, watershed, and large regional scale analysis
- Developing customized nutrient budgeting and trading tools
- Convening focus groups of stakeholders to inform the development of web platforms
- Providing web platform training for users
- Working with end users and clients, particularly state government agencies

Estimated Quantities

The contract quantities herein are estimated only and may increase or decrease depending on the needs of DEP. Contractor shall be paid at the unit price bid for actual work performed and materials supplied.

Parts and materials shall be provided at cost and itemized on the invoices. The contractor shall notify DEP what parts and materials are required before performing the work.

Additional services may be added through negotiation between the contractor and DEP.

Payment Terms

- Contractor shall be paid on a reimbursement basis for services performed. Contractor shall submit invoice within 30 (*or reasonable number*) days.

Services should be rendered during the normal work hours for the personnel involved. If additional services are required by the DEP other than the normal work hours or workdays, the Contractor shall be paid at the overtime rates in accordance with the Bid Award.

Contract Term

The contract shall commence upon execution of the Purchase Order and terminate June 30, 2022.

Further, the parties hereto may agree to renew this contract for up to an additional three (3) consecutive annual terms with a final termination date of June 30, 2025, upon the same terms and conditions set forth in the contract.

Contract renewal rates shall be negotiated between the contractor and the DEP, including up to a 3% increase of the rates currently in place upon execution of the Purchase Order.

Deliverables with Bid Submission

The following deliverables need to be included with a bid submission:

- A signed and notarized document stating that all work described above will be conducted by the contractor and that work will not be subcontracted to another entity or provider
- Documentation supporting required qualifications/experience as described above

- Contractor shall complete and submit attached Bid Award Sheet

Bid Submission:

- A. All bids must be submitted electronically through the Department of General Services' (DGS) eMarketplace website. The eMarketplace website is located at <http://www.emarketplace.state.pa.us>. DEP is not responsible for the maintenance of the eMarketplace website.
- B. DGS's Supplier Service Center ([Supplier Service Center](#)) is available to assist vendors with registration, bidding and account management. For questions regarding registration help, send an email to RA-PSC_Supplier_Requests@pa.gov or call (877) 435-7363, choose option 1. For questions regarding bidding help, send an email to srmhelp@pa.gov or call (877) 435-7363, choose option 2.
- C. DEP is not responsible for the support or functionality of any DGS website.