



**POTW Treatment Studies for
Total Phosphorus Optimization
in the Lake Erie Basin**

Request for Proposals

Revised Key Dates

RFP Issuance	November 15, 2024
Proposal Due	January 15, 2024
Anticipated NTP	April 1, 2025
Deliverable Due	January 1, 2026

1.0 INTRODUCTION

Ohio EPA Division of Surface Water (DSW) is seeking proposals from publicly-owned treatment works (POTWs) in the Lake Erie Basin to evaluate alternative methods for further reduction of total phosphorus effluent loads. Harmful algal blooms (HABs) are a persistent concern in Lake Erie and, to a lesser extent, in other surface waters around northern Ohio. These HABs are primarily driven by phosphorus loading which can come from a variety of sources, including POTWs. For decades, most major POTWs in the Lake Erie Basin have provided basic total phosphorus treatment to comply with NPDES permit requirements. To encourage further reductions in phosphorus loads through the adoption of more advanced treatment methods, DSW is seeking proposals from major POTWs in the Lake Erie Basin to evaluate new or alternative methodologies or technologies for total phosphorus treatment and ultimately incorporate new operations at their facility.

2.0 PURPOSE OF THIS RFP

DSW has developed an initiative to provide funding for POTWs in the Lake Erie Basin to evaluate treatment methods to reduce total phosphorus loads in their effluent. The goal of the initiative is to facilitate such an evaluation in facilities where cost has been a barrier to exploring new or alternative technologies or applications that will provide new total phosphorus treatment or optimize total phosphorus reduction in existing operations. The purpose of this RFP is to give POTWs an opportunity to provide information to allow DSW to effectively evaluate proposals and select approximately 10 evaluations. DSW has approximately \$200,000 in grant funding to disburse to selected applicants to conduct an evaluation of alternatives for total phosphorus reduction. Based on the results of the initial alternatives analyses, additional funding may be available for implementation of the recommended alternative from select proposals.

3.0 ELIGIBILITY

Eligible applicants should be POTWs in the Lake Erie Basin with a design flow greater than or equal to 0.5 MGD seeking to reduce discharge phosphorus loads. Eligible proposals will present a plan for conducting an evaluation of total phosphorus treatment alternatives, which could include, but are not limited to, implementation of biological nutrient removal, new or alternative dosing points for chemical feed treatment, application of phosphorus treatments to POTW sidestream operations, etc.

4.0 SUBMITTAL REQUIREMENTS

Applications are due by January 15, 2025 and should be submitted to DSW via email to david.brumbaugh@epa.ohio.gov. At a minimum, applications should include the following elements:

1. Current Facility: a narrative summary of the treatment unit processes currently in use at the facility, with particular focus on current efforts to control total phosphorus;
2. Current Nutrient Load: characterization of total phosphorus influent and effluent quality (including concentration and load) over the past five years. If the alternatives evaluation may also address nitrogen load, please include nitrogen characterization as well;
3. Treatment Evaluation: a proposal for an alternatives evaluation to assess the feasibility of new or alternative treatments to reduce total phosphorus. The proposal should include the types of treatment to be evaluated, identify likely expenses associated with the evaluation (such as staff hours, consultant fees, or costs to acquire and install sensors or similar equipment), a summary of water quality data to be obtained (if applicable), and a methodology to identify a preferred alternative and determine if full scale implementation is advisable.

Applicants should also review the attached scoring matrix to identify information by which proposals will be evaluated and specifically address each item.

5.0 SELECTION PROCESS

DSW will perform a completeness review to ensure that the proposals contain adequate information for consideration. Proposals will be scored based on a pre-established scoring matrix which will place emphasis on:

1. Estimated cost;
2. Plan completeness, viability of proposed technologies, and method for decision making;
3. Downstream waters, potential for impact to impairments, and regulatory requirements;
4. Potential for Total Phosphorus Reductions.

Based on review of the applications through use of the scoring matrix, DSW will select up to 5 additional proposals for grant funding. DSW anticipates that selected applicants will be notified that funding has been awarded by April 1, 2025, such that applicants can plan to initiate alternative analyses in Summer 2025.

6.0 DELIVERABLES

Following implementation of the alternatives evaluation, grantees must submit to DSW a report detailing the findings of the study, including but not limited to:

1. The actual cost of the alternatives evaluation;
2. Presentation and discussion of the alternatives evaluated, including any collected data, potential environmental benefits, obstacles to implementation, etc.;

3. Identification of a preferred alternative and a statement regarding whether the applicant recommends full implementation of the preferred alternative, based on established methodology;
4. If full implementation is proposed, include:
 - A projection of the total phosphorus load reduction that would result from full implementation of the recommended alternative;
 - An estimate for the cost of full implementation of the proposed treatment at the facility (both capital cost and ongoing operation & maintenance expenses);
 - An estimated timeline to complete any needed capital projects for full implementation.

Deliverable reports on the conclusions of the alternatives evaluation are due for submission by October 1, 2025. Flexibility in the final submission date may be justifiable, depending on the details of the proposal.

7.0 DISCLAIMERS

For the purposes of this RFP, DSW makes the following statements:

1. Please note that these proposals will become public records, so refrain from including proprietary information at this phase of the process;
2. There are no guarantees made to any applicant participating in this evaluation process that funds will be awarded;
3. Proposals are due by 5:00 p.m. on Wednesday, January 15, 2025;
4. Proposals will be accepted in electronic file format only, preferably PDF.