



## **Request for Qualifications**

### **Water Quality Modeling and Regulatory Support**

Date of Issue: April 8, 2016

**Upper Neuse River Basin Association  
P.O. Box 270  
Butner, NC 27509**

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## REQUEST FOR QUALIFICATIONS

### Project Purpose

The Upper Neuse River Basin Association (UNRBA) is soliciting submittals for qualifications for water quality modeling, cost-benefit analysis, and regulatory support from a *Service Provider* to support the UNRBA with a reevaluation of Stage II of the Falls Lake Nutrient Management Strategy (see NCAC 15A 02B.0275 (5)) and technical support related to alternate regulatory approaches. Alternate approaches may include alternate compliance and regulatory strategies. The Falls Rules, as promulgated, involve significant costs and require actions on the part of UNRBA member governments and other regulated parties that are unprecedented. In light of the potential financial impact of these rules and importance of the resource, the UNRBA secured assistance in evaluating the technical bases and regulatory framework for the Falls Rules, particularly the more costly Stage II portion of the Rules (referred to herein as the “Technical Analysis”). The UNRBA’s consulting partner for the Technical Analysis was Cardno-ENTRIX (this company is now incorporated as Cardno),. Cardno-ENTRIX recommended a series of sampling programs, future studies, and water quality modeling approaches to provide a basis for future regulatory action (preliminarily identified in general terms on the UNRBA website: <https://unrba.org/reexamination>, Task 1 report). The UNRBA has taken the Technical Analysis recommendations under advisement and will select the appropriate water quality modeling and regulatory approaches that serve the UNRBA’s objectives. Using the Technical Analysis recommendations and other information, the selected *Service Provider* will work in cooperation with the UNRBA to develop water quality models and evaluate regulatory approaches to accomplish the desired water quality goals.

### Submittal Instructions

Offerors must submit all submittal components in Portable Document Format (PDF) transmitted through electronic mail (email). File size is limited to 15 MB. Paper, fax and oral copies will not be accepted. PDF files should include bookmarks that link to sections to allow easy document navigation. Address the Submittal to the following two parties:

Forrest.Westall@unrba.org  
Upper Neuse River Basin Association (UNRBA)  
Forrest Westall, Executive Director

And

Michelle.Woolfolk@durhamnc.gov  
City of Durham, Public Works Department  
Michelle Woolfolk, Asst. Water Quality Manager and UNRBA Workgroup Chairperson

In order for the UNRBA to evaluate qualifications fairly and completely, Offerors should clearly follow the format set out herein and provide all of the information requested.

The email should contain the subject line “Submittal for Water Quality Modeling and Regulatory Support – [Firm Name]”. Submittals must be received no later than 5:00 pm EDT on April 29,

2016. See the section “Submittal Content and Format” for additional details on submittal requirements.

### Submittal Review Schedule

The procurement process is anticipated to follow the schedule below. **Proposers’ key personnel should hold May 16<sup>th</sup> for interviews because the interview panel has already committed this day for interviews and does not anticipate moving the date.**

Table 1 Procurement Schedule

Item	Date in 2016
RFQ release date	April 8
Deadline for submittal of questions	April 15
Answers to questions posted on UNRBA website	April 20
Due date for qualifications packages	April 29, 5 pm EDT
Shortlisted teams notified	May 10
Shortlist interviews held in Butner, NC*	May 16
Selected team notified	May 18

\*Proposers’ key personnel should hold May 16, 2016 for interviews.

All submitted questions must be provided to the Executive Director, via email to [forrest.westall@unrba.org](mailto:forrest.westall@unrba.org), by April 15, 2016. All questions will be answered on the UNRBA website.

The UNRBA will make every effort to adhere to this schedule. Firms, corporations, centers or other legal entities representing themselves as *Service Providers* submitting in response to this RFQ should make arrangements to provide the UNRBA with appropriate staff for the interviews.

### Conditions

The UNRBA reserves the right to reject any or all submittals. The UNRBA will not pay any cost associated with the preparation, submittal, presentation, or evaluation of any statement of qualifications. All submittals and other materials submitted become the property of the UNRBA. Thereafter, submittals become public information.

The UNRBA anticipates issuing one contract for this RFQ to the primary contractor. The selected contractor is encouraged to use sub-contractors to perform work on this contract if needed. If an Offeror intends to use a sub-contractor(s), the Offeror must identify in their submittals the names of the sub-contractor(s), personnel to be used and the portions of the work the sub-contractor(s) will perform. The selected Service Provider may, with the UNRBA’s approval, add or delete sub-contractor(s) as necessary during contract services period.

The UNRBA is a non-profit organization composed of local governments located in the Upper Neuse River Basin. By signature on their Statement of Qualifications, Offerors certify that their business practices comply with:

- a. The laws of the State of North Carolina
- b. The applicable portion of the Federal Civil Rights Act of 1964,
- c. The Equal Employment Opportunity Act and the regulations issued there under by the federal government
- d. The Americans with Disabilities Act of 1990, and the regulations issued there under by the federal government, and
- e. All terms and conditions set out in this RFQ.

The UNRBA opposes discrimination on the basis of race and sex and urges all of its contractors to provide a fair opportunity for minorities, women, and other socially and economically disadvantaged individuals as defined in 15 U.S.C. 637 to participate in their work force and as sub-contractors and vendors under UNRBA contracts.

This RFQ seeks to secure a single contractor for the development of tools to assist the UNRBA with the evaluation of existing water quality standards and future regulatory approaches. Because the water quality modeling is linked to both the existing monitoring strategy and regulatory framework in place for Falls Lake, the water quality modeling plan must meet relevant requirements of an approved modeling framework under the Falls Lake Rules, an Offerer's familiarity and understanding of the background and basis of the development of the Falls Rules and the provisions of those Rules, Rules Revisions and "consensus principals" will be an important factor in evaluating each potential contractor.

## Background

The waters of the Upper Neuse River Basin in North Carolina have many challenges meeting the demands of society and the current environmental standards in place for those waters. Falls Lake is the primary source of drinking water for the City of Raleigh and its 530,000 customers and is immediately downstream of several urban centers, including the City of Durham. Constructed in the early 1980's, Falls Lake is a shallow Piedmont lake with inherent difficulty meeting water quality standards for chlorophyll-*a* because of its geology, morphology, and its topographic location below pre-existing and established land use.

A complex set of rules, guidance, and policies governs activities in the Falls Lake watershed. The Falls Nutrient Strategy Rules overlay several previous regulations, including the Neuse River Nutrient Strategy, NPDES Phase I and Phase II of the Clean Water Act, and state Water Supply Watershed Protection regulations.

In 2008, the North Carolina Division of Water Quality (NC DWQ) and US Environmental Protection Agency (USEPA) placed Falls Lake on the Section 303(d) list of impaired waters because of violations of the State's water quality standards for chlorophyll-*a*, a proxy for algae. DWQ and EPA also listed Falls Lake above I-85 as impaired for turbidity in 2008.

In 2005, the North Carolina General Assembly enacted SL 2005-190 (SB 981, Clean Lakes Act), which directed the North Carolina Environmental Management Commission (EMC) to develop and adopt a nutrient management strategy to reduce nitrogen and phosphorus pollution in Falls Lake by July 1, 2008 (later extended to July 1, 2009). In 2009, the General Assembly enacted SL 2009-486 (SB 1020, Improve Upper Neuse River Water Quality), which extended the deadline

again until January 15, 2011 and also allowed for a system crediting early adoption of nutrient reductions and required stricter sedimentation and erosion control measures in the watershed.

In 2010, recognizing that major political disagreements over water quality in Falls Lake would affect their ability to solve other critical regional problems, many impacted local governments developed a set of “Consensus Principles” to help shape the proposed rules. The principles included three fundamental agreements: (1) that any rules would need to protect Falls Lake for the purpose of water supply, (2) that additional water quality monitoring would provide useful information, and (3) that North Carolina should consider that new information before going beyond those actions necessary to protect Falls Lake for the purpose of water supply. The City of Durham, Durham County, Granville County, City of Raleigh, Wake County, Orange County, Person County, Butner, Creedmoor, and the South Granville Water and Sewer Authority adopted the Consensus Principles in their comments on the rules. Section Nine of the Consensus Principles, which is most relevant to this RFQ, states the following:

“The process by which the proposed regulatory scheme has been developed relied on a limited data base which will be substantially enhanced by a more rigorous program of sampling, monitoring and analysis. In addition, it may not be feasible to attain all currently designated uses in the Upper Lake and attempting to do so may result in substantial and widespread economic and social impact. The EMC should therefore begin a re-examination of its nutrient management strategy for Falls Lake by January 1, 2018 [*later changed by rule to 2021*]. **The re-examination should consider, among other things, (i) the physical, chemical, and biological conditions of the Lake with a focus on nutrient loading impacts and the potential for achieving the Stage I goal by 2021 [*later changed in the final rule to 2024*] as well as the feasibility of both achieving the Stage II reduction goals and meeting the water quality standard for chlorophyll-a in the Upper Lake, (ii) the cost of achieving, or attempting to achieve, the Stage II reduction goals and the water quality standard in the Upper Lake, (iii) the existing uses in the Upper Lake and whether alternative water quality standards would be sufficient to protect those existing uses, and (iv) the impact of the management of Falls Lake on water quality in the Upper Lake.** As the first step in the re-examination, a Scientific Advisory Board should analyze and review the information identified above along with the additional monitoring and modeling data compiled since the model was approved and should present its recommendations for changes in the Nutrient Management Strategy and its implementing rules to DWQ and the EMC by January 1, 2019 [*later changed in the final rule to 2024*]. In light of the report from the Science Advisory Board, the EMC should direct the DWQ to prepare proposed rule revisions, if any, and an updated fiscal note on Stage II by August 1, 2019 [*later changed in the final rule to 2025*]. In its development of any proposed rule revisions, DWQ shall consult with the local governments and other interested parties. Except to the extent that management measures identified as a part of Stage II are required to achieve the Stage I goal, local governments should not be required to begin implementing Stage II management measures without **a determination by the EMC of whether alternative goals and/or standards should be established for the Upper Lake.**” [emphases added]

On November 18, 2010, the EMC adopted the nutrient management rules for Falls Lake, with an effective date of January 15, 2011. The North Carolina Rules Review Commission approved the rules with minor technical language changes and the rules took permanent effect on January 15,

2011. The rules address the re-examination prior to implementing Stage II in section 15A NCAC 02B.0275. Section (5)(f) describes specific requirements of any stakeholder desiring to submit data or modeling to the NCDWQ regarding Falls Lake and the requirement to re-examine the Stage II goals. This section of the rule follows:

- (f) Recognizing the uncertainty associated with model-based load reduction targets, to ensure that allowable loads to Falls Reservoir remain appropriate as implementation proceeds, a person may at any time during implementation of the Falls nutrient strategy develop and submit for Commission approval supplemental nutrient response modeling of Falls Reservoir based on additional data collected after a period of implementation. The Commission may consider revisions to the requirements of Stage II based on the results of such modeling as follows:
  - (i) A person shall obtain Division review and approval of any monitoring study plan and description of the modeling framework to be used prior to commencement of such a study. The study plan and modeling framework shall meet any division requirements for data quality and model support or design in place at that time. Within 180 days of receipt, the division shall either approve the plan and modeling framework or notify the person seeking to perform the supplemental modeling of changes to the plan and modeling framework required by the Division;<sup>1</sup>
  - (ii) Supplemental modeling shall include a minimum of three years of lake water quality data unless the person performing the modeling can provide information to the Division demonstrating that a shorter time span is sufficient;
  - (iii) The Commission may accept modeling products and results that estimate a range of combinations of nitrogen and phosphorus percentage load reductions needed to meet the goal of the Falls nutrient strategy, along with associated allowable loads to Falls Reservoir, from the watersheds of Ellerbe Creek, Eno River, Little River, Flat River, and Knap of Reeds Creek and that otherwise comply with the requirements of this Item. Such modeling may incorporate the results of studies that provide new data on various nutrient sources such as atmospheric deposition, internal loading, and loading from tributaries other than those identified in this Sub-item. The Division shall assure that the supplemental modeling is conducted in accordance with the quality assurance requirements of the Division;
  - (iv) The Commission shall review Stage II requirements if a party submits supplemental modeling data, products and results acceptable to the Commission for this purpose. Where supplemental modeling is accepted by the Commission, and results indicate allowable loads of nitrogen and phosphorus to Falls Reservoir from the watersheds of Ellerbe Creek, Eno River, Little River, Flat River, and Knap of Reeds Creek that are

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<sup>1</sup> The term *modeling framework* is not defined in the Falls Lake Rules. For the purposes of this RFQ, a model framework is as described in EPA's Guidance on the Development, Evaluation, and Application of Environmental Models. EPA/100/K-09/003.

substantially different than those identified in Item (3), then the Commission may initiate rulemaking to establish those allowable loads as the revised objective of Stage II relative to their associated baseline values;

The full text of NCAC 02B.0275 (5) also provides requirements for data development related to assessing Lake conditions and reporting to the EMC on progress in improving water quality under these rules. It is the UNRBA's objective with its monitoring program to see that all data collected can and will be used under the provisions of the Falls Lake Rules and for all State activities related to assessment of Falls Lake.

Consistent with the Consensus Principles and beyond the formal reexamination process identified in the Falls Lake Rules, the UNRBA has done a preliminary evaluation of other regulatory actions that may be necessary to properly reflect the conclusions of its monitoring and modeling work. This preliminary identification of potential approaches was referenced earlier in the RFQ and presents the need for technical support to more fully identify and evaluate appropriate regulatory options as part of a comprehensive reexamination of the Falls Lake Nutrient Strategy.

### ***Project planning***

*Service Providers* responding to this RFQ should consider how the UNRBA is proceeding with its Falls Lake Nutrient Strategy Reexamination. The UNRBA is currently engaged in a comprehensive monitoring program to support the Reexamination (background information can be found at the UNRBA website: <https://unrba.org/>, under the appropriate tabs). The monitoring program began in August 2014 and will continue for a minimum of four years, with an additional year as an option if needed to supplement data due to unusual hydrologic or weather conditions. The UNRBA may, following the current monitoring plan, continue with an ongoing monitoring program depending on its progress toward a successful reexamination and the need for continued monitoring to evaluate the modified strategy.

The fiscal year (FY) for the UNRBA runs July 1<sup>st</sup> through the following June 30<sup>th</sup> of each year. Current total monitoring program funding is \$800,000 per year. Beginning in FY 2017, the UNRBA will establish a modeling and regulatory support contract that will run parallel to the monitoring program. The UNRBA has not established a separate funding budget for FY 2017 for this support. The modeling and regulatory support contract budget for FY 2017 will be based on evaluation and approval of the FY 2017 Monitoring Program Contract and Scope of Work. This amount is anticipated to be between \$40,000 and \$80,000. This process of establishing the separate modeling/regulatory support along with the monitoring budgets is scheduled to be completed before the end of June 2016. Available funding for the modeling and regulatory support contract will be calculated by subtracting the amount necessary to support an appropriate monitoring effort for FY 2017 from the total monitoring budget.. This means that the successful *Service Provider* for the modeling and regulatory support contract will be required to negotiate an FY 2017 contract and scope of work based upon the available funding for FY 2017. Preparing the FY 2017 modeling and regulatory support contract will be a collaborative process between the UNRBA and the *Service Provider* selected and will be based on establishing an initial priority list of activities and work products essential to the successful completion of a strategy reexamination package.



The *Service Provider* selected will be required to negotiate a contract renewal and scope revision for each fiscal year. The UNRBA anticipates increasing the funding available to the monitoring and regulatory support contract incrementally. An annual funding level between \$300,000 and \$600,000 may be available for the modeling and regulatory support contract beginning in FY2019. The selected contractor, during FY 2017 and subsequent years, will work with the UNRBA to develop an appropriate list of work activities and products for FY 2018 and following years. The budgets for FYs following FY 2017 will be projected based on the work activities and products identified and may include some portion of the current Monitoring Program budget or an alternate funding source established by the UNRBA. It is the general intent of the UNRBA to retain the same *Service Provider* over the period of time needed to develop and complete the strategy reexamination process. However, the UNRBA reserves its right to terminate this arrangement based on the availability of funding, changes in UNRBA's objectives and goals, or deficiencies in the performance or changes in the staffing of the *Service Provider*.

## SCOPE OF WORK

The UNRBA requires assistance from a qualified and experienced *Service Provider* to implement tools including a water quality modeling program that effectively supports the UNRBA's goal of providing a successful re-examination of the Stage II requirements under the Falls Lake Rules and efforts to develop other appropriate regulatory options. The tools developed under this scope of work must be acceptable to DWR and other DEQ divisions and support a successful submittal under the provisions of the re-examination process as discussed in the background section. and other established regulatory procedures (relative to seeking other regulatory options). It is the expectation of the UNRBA that the watershed model outputs will be used as inputs to the reservoir nutrient response model and the cost-benefit modeling.

As previously described, the *Service Provider* will be required to negotiate a contract renewal and scope revision for each fiscal year. For the first year, the UNRBA has developed the following anticipated initial scope tasks for the modeling and regulatory support needed.

### **Task 1. Develop a QAPP (Quality Assurance Project Plan) for the Falls Lake Nutrient Response Models and develop a Falls Lake Watershed Model(s) QAPP.**

During the first year of the contract, the *Service Provider* will develop a conceptual plan and QAPP for the lake modeling. These documents are the major deliverables for the first year of the contract with the UNRBA. The *Service Provider* will critically evaluate the monitoring data available to update the Falls Lake EFDC application. The *Service Provider* will evaluate other modeling packages (e.g., CE-QUAL-W2, WASP) to determine if any of these packages can provide a more accurate and appropriate simulation of nutrients, algae, and total organic carbon given the monitoring data collected for this purpose. The *Service Provider* will also consider simple lake modeling approaches (BATHTUB or similar) and stochastic modeling of Falls Lake, including SEM and Bayesian techniques. All information will be used to develop the lake nutrient response modeling QAPP.

The *Service Provider* will also develop a conceptual plan and QAPP for the watershed modeling. The *Service Provider* will critically evaluate the monitoring data available to update the Falls watershed WARMF application (as developed by DWR). The *Service Provider* will also

evaluate if other modeling packages (e.g., SWAT, SPARROW, PC-SWMM) can provide a more accurate and appropriate simulation of nutrients, sediment, and total organic carbon given the monitoring data collected for this purpose. This information will be used to develop the watershed modeling QAPP, which may include one or two models.

All QAPPs will be provided to the UNRBA Path Forward Committee and the NC Division of Water Resources for review prior to formal submittal. The Service Provider will be responsible for finalizing the QAPPs for submittal to the agency and assisting the UNRBA in responding to any agency comments or issues.

First Year Deliverables:

1. Lake nutrient response and watershed modeling conceptual plans,
2. Presentations to the UNRBA Path Forward committee or UNRBA Board of Directors as appropriate and needed, and
3. Draft and final Falls Lake nutrient response and watershed modeling QAPPs.

**Task 2. Develop a two-year work plan for development of the Falls Lake Nutrient Response Models, watershed models, and cost-benefit model.**

The *Service Provider* will develop a two-year work plan for tools including additional water quality modeling to implement the modeling concept plans from Task 1 and the development of the cost-benefit model that effectively supports the UNRBA's goal of providing a successful re-examination of the Stage II requirements under the Falls Lake Rules and additional regulatory options. The work plan will include detailed task breakdown structures and cost estimates for the two year period based on the local government fiscal year. The Service Provider will seek input and direction from the UNRBA Path Forward Committee regarding the development of the work plan. The work plan will be presented to the UNRBA Board of Directors for approval prior to the beginning of fiscal year 2018 (July 1, 2017 to June 30, 2018\_.

First Year Deliverables:

1. Draft and final, two-year work plan and cost estimate for the next steps in the development of the models.
2. Presentation and discussion with the UNRBA Path Forward Committee.

**Service Areas**

Specific tasks for subsequent contract years have not been determined. However, the UNRBA has identified several different service areas and skill sets that would be beneficial to completing future work. These service areas are directly applicable to the goals of completing lake and watershed modeling and development of a revised nutrient management strategy for Falls Lake.

Reservoir Nutrient Response Modeling

The *Service Provider*, in coordination with the UNRBA and its consultants, will provide reservoir water quality modeling services with a focus on nutrients, algae and total organic carbon. The NC Division of Water Resources used the Environmental Fluid Dynamics Code (EFDC) modeling package to simulate chlorophyll *a* in Falls Lake. This model was applied in

three dimensions. Falls Lake has also been evaluated using a BATHTUB model package. Cardno ENTRIX<sup>2</sup> recommended multiple modeling packages for the Falls Lake re-evaluation. This multiple model approach included the EFDC and BATHTUB modeling packages already applied to Falls Lake, and a site-specific stochastic model using techniques such as structural equation modeling (SEM) or Bayesian modeling.

As noted, during the first year of the contract, the *Service Provider* will develop a conceptual plan and QAPP for the lake modeling. Use of EPA guidance<sup>3</sup> for modeling QAPPs is strongly recommended. In subsequent years, the *Service Provider* will calibrate and validate the selected lake nutrient response modeling packages for Falls Lake. The *Service Provider* will provide regular updates to the UNRBA Path Forward Committee and the UNRBA Board, as appropriate, including presentations and memoranda describing the development of model package inputs. These will accompany comment periods to allow the UNRBA local governments to verify assumptions and information.

#### Watershed Nutrient Modeling

The *Service Provider*, in coordination with the UNRBA, will provide watershed water quality modeling services with a focus on sediment, nutrients, and total organic carbon. The NC Division of Water Resources used the Watershed Assessment and Risk Management Framework (WARMF) modeling package to simulate nutrient loads from the watershed above Interstate 85 to Falls Lake. Although the watershed area below Interstate 85 is spatially represented in the model, the Division of Water Resources did not calibrate this portion of the model. PC-SWMM and SPARROW applications also exist for the Falls Lake watershed, in addition to the existing Falls Lake watershed application of WARMF. There are other research watershed models available. The WARMF application has been updated by the City of Durham for the Ellerbe and Little Lick Creek watersheds.

In subsequent years, the *Service Provider* will calibrate and validate the selected watershed modeling packages for the Falls Lake watershed. The *Service Provider* will provide regular updates to the UNRBA Path Forward Committee and, as appropriate the Board, including presentations and memoranda describing the development of model package inputs. These will accompany comment periods to allow the UNRBA local governments to verify assumptions and information.

#### Cost-Benefit Analysis

The *Service Provider* will develop or apply an existing tool to evaluate the cost-benefits of different nutrient reduction strategies. This tool should be capable of evaluating strategies on a variety of spatial scales, including watershed and jurisdictional bases. The tool should execute within either MS Excel® or MS Access®. The tool will include not only the benefits of meeting the chlorophyll-*a* standard, but also other benefits such as reduced total organic carbon levels, increased recreation, increased or more robust aquatic life, and fishing benefits. Costs to

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<sup>2</sup> Cardno ENTRIX. 2013. Task 4: Review of Existing Models and Recommendations for Future Studies. Support of Long Term Planning and Regulatory Activities in the Falls Lake Watershed. [https://unrba.org/sites/default/files/Task4TM\\_FINALJune18.pdf](https://unrba.org/sites/default/files/Task4TM_FINALJune18.pdf)

<sup>3</sup> Environmental Protection Agency (EPA). 2002. Guidance for Quality Assurance Project Plans for Modeling. EPA QA/G-5M. EPA/240/R-02/007. Office of Environmental Information, Washington, D.C. <https://www.epa.gov/sites/production/files/2015-06/documents/g5m-final.pdf>

implement new and existing development regulations, as well as upgrades to existing wastewater treatment plants, should be included in the tool. The cost-benefit analysis completed for the UNRBA may be used to support the development of required agency fiscal impacts analyses for support of any proposed management strategy changes (Falls Lake Rules or other regulatory options).

The cost-benefit tool should be accessible, usable, and alterable by the UNRBA member governments.

There are no first-year deliverables within this service area. A majority of this work will be conducted in subsequent years, as described in the two-year work plan (See Task 2).

### Regulatory Options Support

The *Service Provider* will provide support to the UNRBA while evaluating regulatory options to meet the water quality goals identified with the modeling tools. The types of support that will be provided include developing management scenarios for meeting the water quality goals (using the water quality models and cost-benefit tools to quantitatively evaluate management scenarios), and exploring regulatory and legal approaches to management scenarios

There are no first-year deliverables within this service area. A majority of this work will be conducted in subsequent years. Regulatory options support may or may not be included in the two-year work plan (See Task 2).

## **SUBMITTAL CONTENT AND FORMAT**

Submittals must document that the *Service Provider* will comply with all of the provisions and conditions in this RFQ. Submittals must be signed by a company officer empowered to bind the firm, company, center or legal entity submitting as a *Service Provider*.

### Form, Content and Length of Statement of Qualifications

Proposers' statements of qualifications should be structured as to form, content, and length as described in this section. The statement of qualifications should provide information that allows the interview panel to understand how the proposed *Service Provider* (whether one firm or a team of firms) is able to provide the services described and fulfill the needs of the UNRBA as described in this RFQ, including specified Tasks and Service Areas. Submittals must include the complete name and address of the firm, corporation, center or other legal entity applying as the *Service Provider* and the name, mailing address, email address, and telephone number of the person the UNRBA should contact regarding the submittal.

Proposals may not use less than 10 point Times New Roman font. (Other fonts are acceptable but the size should be no smaller than 10 point in Times New Roman.) Since qualification packages are to be submitted electronically, page limitations in this section refer to pages of content. The page limitations do not include front cover, back cover, section dividers, table of contents, non-collusion certification, exceptions, and conflicts of interest.

### ***Cover Letter (Maximum of 1 page)***

The submittals should contain a cover letter, signed by a principal in the *Service Provider*, indicating his or her title that he or she has authority to submit the Statement of Qualifications on behalf of the *Service Provider*, including the cover letter. The cover letter should contain the following statement:

*“The undersigned has the authority to submit this submittal on behalf of the name of company in response to the Upper Neuse River Basin Association RFQ for “Water Quality Modeling and Regulatory Support.”*

### ***Qualifications (Maximum of 15 pages, including all sub-items)***

#### **Firm(s) description(s)**

Submittals must include a firm overview and brief description of the firm’s history. Also include the complete name and address of the firm, corporation, center or other legal entity applying as the *Service Provider* and the name, mailing address, email address, and telephone number of the person the UNRBA should contact regarding the submittal.

#### **Project organizational chart and description**

The submittal should provide a description of the project team structure and qualifications. Senior and key members of the project team should be included in the organizational chart. A quality assurance officer shall be included on the project team. Clearly identify the prime contractor and any sub-contractors, and the general roles on the project.

#### **Relevant Experience**

The submittal should include the firm, entity or center’s experience for each water quality model included in the Scope of Work, as well as any other water quality models that may be relevant to the work of the UNRBA. The submittal should also include experience that is relevant to the Association’s need for regulatory options support. Experience with the triennial review process, Total Maximum Daily Loads (TMDLs) and implementation plans, NPDES permit negotiation, site-specific standards, and use attainability analysis should be highlighted. Project descriptions will include the cost of the project, duration of the project, a short project description, and key project personnel.

#### **References**

The submittal should include at least three references, at least one of whom can describe the project manager’s experience and qualifications.

### ***Project Team Résumés (Maximum of 20 pages)***

One-page resumes of all senior and key personnel should be provided. A quality assurance officer shall be included on the project team. The office locations of each team member should be specified on the résumés. The submittal should, as a part of the information provided for subcontractors, include the names, locations, and general roles of the project team members.

### ***Non-Collusion Certification***

The Upper Neuse River Basin Association prohibits collusion, which is defined as a secret agreement for a deceitful or fraudulent purpose. Include and sign the following with your submittal:

The Upper Neuse River Basin Association prohibits collusion, which is defined as a secret agreement for a deceitful or fraudulent purpose.

*I, \_\_\_\_\_ affirm that I have not engaged in collusion with any UNRBA employee(s), other person, corporations or firms relating to this submittal. I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards.*

*Signature: \_\_\_\_\_*

### **Exceptions**

Any and all exceptions to the RFQ must be listed on an item-by-item basis and cross-referenced with the RFQ document. If there are no exceptions, Offerors must expressly state that no exceptions are taken.

### **Conflicts of Interest**

Each submittal shall include a statement indicating whether or not the firm or any individuals that may work under contract has a possible conflict of interest (e.g., anyone working for or on behalf of the State of North Carolina, the Upper Neuse River Basin Association, or one of the UNRBA's member governments) and, if so, the nature of that potential conflict. The UNRBA Board of Directors reserves the right to use this information as selection criteria if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the objectivity of the potential service provider in performing the work required. The Board's determination regarding any questions of conflict of interest shall be final.