



Metropolitan North Georgia Water Planning District  
40 Courtland Street NE | Atlanta, Georgia 30303

**August 2016**

## **REQUEST FOR PROPOSALS**

### **Predictive Reservoir Stage Model**

The Metropolitan North Georgia Water Planning District (District) is soliciting proposals to prepare a Predictive Reservoir Stage Model to assist in decision-making as it pertains to drought-like conditions that occur in the region. The District is soliciting proposals from consulting firms, or teams of firms, to determine the project approach, schedule and cost. Based on submittals, the District, in coordination with the selected firm or firms, will negotiate a schedule and cost associated with the project. The budget for this project is \$90,000.

Please provide a description of the proposed project approach, key personnel, relevant experience, and any additional information that your firm, either individually or in cooperation with other firms, would take to accomplish the goals outlined in the Project Description provided in Exhibit A. The submittal shall provide a schedule, and include time in the schedule for review of reports and deliverables by District staff and key stakeholders.

The submittal should provide project cost estimates in the format provided in Exhibit B and B1. The consultant shall determine the level of effort for each task of the Scope of Work, which must be clearly provided in the proposal. This level of effort is to be presented in a format which includes the cost for each task.

The District will convene an evaluation committee composed of members of the District staff. The evaluation committee will review all proposals and make a consultant selection recommendation to the Chairman of the District Board.

Based on the responses to this request, the District may identify a short list of firms from the proposals received. Should it be determined that interviews are required, the shortlisted firms may be invited to participate in an interview process with the evaluation committee. The District reserves the right to award this contract based on submittals received without interviews.

The District intends to award a contract for the project in September 2016, and the work is estimated to be completed in March 2017. This schedule is not fixed, however, and may change based on District needs or consultant suggestion (as agreed to and approved by the District). The consultant

shall provide a schedule of major milestones and interim deliverables demonstrating all work to be completed in calendar years 2016 and 2017. The successful consultant or team of consultants should be prepared to begin work immediately. The District reserves the right to award all or part of the available funds for this project.

The contract will be awarded to the consultant determined to be the most qualified to perform the work based on the following evaluation criteria:

1. Experience and qualifications related to the project description of the firm (or team of firms) and individuals in the firm directly assigned to the project. (50%)
2. Proposed approach to address the goals stated in the Scope of Work in developing a comprehensive tool for predicting reservoir levels for various supply sources to be identified. (30%)
3. Consultant's cost estimates versus work provided. The cost estimate shall follow the format outlined in Exhibit B. (20%)

Disadvantaged Business Enterprises (DBE) shall have equal opportunity to participate in the performance of the District's contracts. Such DBEs are encouraged to compete, as prime consultant, consultant team members or sub-consultants and should be so identified in responses to this RFP.

Proposals should be limited to a total of no more than 15 pages (printed on one side only, and not including cover, table of contents, divider sheets, resumes, and cost proposal) and should include the following information:

1. Name of the lead firm, and other firms or sub-consultants;
2. Point of contact (name, title, email address and phone #) at lead firm;
3. Project Manager (name, title and phone number) at lead firm;
4. Qualifications and technical competence of consultant and sub-consultants;
5. Description of consultant's similar experience on projects related to the Project Description;
6. Provide three references with current contact information (name, title, email address, and phone #);
7. Identification of specific personnel committed to work on the project, the office locations of this personnel, and a description of their education and experience directly related to the Scope of Work. Provide one to two page resumes of up to 5 key staff as an appendix to the proposal;
8. A proposed work plan including:
  - a. approach to accomplishing the work described in Exhibit A;
  - b. schedule, interim deliverables and milestones;
  - c. list of anticipated data needs from the District.
9. A proposed project cost proposal in the format of Exhibit B and B1 to this RFP (not included in the page limit);
10. Any other pertinent information including potential additional services beyond the scope of work.

Questions shall be received no later than **August 18, 2016** and should be submitted in writing to Neela Ram ([nram@atlantaregional.com](mailto:nram@atlantaregional.com)). Pertinent information, including questions and responses from written questions will be posted on the District website ([www.northgeorgiawater.org](http://www.northgeorgiawater.org)) by August 23, 2016. No other direct contact related to this Request for Proposals between prospective consultants and the District staff or Board members is permitted.

The District must receive six (6) printed copies of the proposal, as well as an electronic copy in Microsoft Word or PDF format (on CD or thumb drive), **no later than 5:00 p.m. on August 29, 2016**. No responses received after this date and time will be considered.

Font size should be a minimum of 11 point.

The delivery package shall be labeled:

**Predictive Reservoir Level Model RFP**

Proposals shall be delivered to the following address:

Metropolitan North Georgia Water Planning District  
ATTN: Neela Ram  
40 Courtland Street, NE  
Atlanta, GA 30303

# **EXHIBIT A SCOPE OF WORK**

## **Introduction**

The Metropolitan North Georgia Water Planning District (the District) was created by the Georgia General Assembly in 2001 as the designated agency for water resource planning in the fifteen county metropolitan Atlanta area. The District represents 15 counties (Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Paulding and Rockdale), 93 cities and includes 55 water providers. In its 15 years of existence, the District has produced two rounds of water resource planning documents with the first release of the Water Supply and Water Conservation Management Plan, the Wastewater Management Plan, and the Watershed Management Plan in 2003 and the most recent update in 2009. The next plan update is scheduled to be completed in 2017.

Over the past 15 years, north Georgia has experienced three multi-year droughts followed by years of significant and record rainfall requiring local governments and utilities to shift between drought protection and flood prevention strategies. These weather swings demonstrate the need for future planning within the District area to help prepare for the current and projected impacts of droughts and floods. The District intends to lead a proactive effort to assess the potential impacts of dry or drought conditions on the region's water resources. This project will culminate in a model that will provide utilities with information on how dry to severe drought conditions may impact future stages in reservoirs within the District.

### **Task 1. Develop Predictive Reservoir Level Model**

The early identification of dry to extreme drought conditions, and an understanding of the potential effects such conditions may have on the level of reservoirs that serve as water supply sources, can assist water managers in adopting proactive and sensible measures to protect supplies.

The Metro Water District is looking for a consultant to develop a predictive model for the two large federal reservoirs (Lake Lanier and Allatoona Lake) as well as 4 to 7 non-Army Corps of Engineers operated reservoirs to determine the effects of dry or drought conditions on reservoir levels. This project was conceived to have a two-pronged approach: (1) to determine the probability of refill for large federal reservoirs as we experience dry conditions and (2) to provide quantitative analysis (via probability of refill or other recommended metrics) to help local governments and utilities determine the best or most effective use of the supply in non-Army Corps of Engineers operated reservoirs.

This effort should take into account scientifically established drought indicators (soil moisture, precipitation, etc.) and other appropriate hydrologic metrics (inflows, elevation, discharges, etc.) to develop a model that can predict impacts on reservoir conditions. The model software must be capable of providing visual and written outputs (charts, data summaries, tables, graphs, etc.) that can be utilized in a public setting.

The consultant shall prepare a webinar to the District staff to establish the framework for moving forward including an approach on how to model reservoir conditions given the climactic and hydrologic parameters. The consultant shall present the draft model(s) in a second webinar and provide the draft model(s) for staff use. The draft shall include all selected water supply sources and the consultant shall provide an overview of the software.

**Deliverable** – Two webinars provided to the District staff and draft model software.

### **Task 2. Finalize Model**

Upon the District’s concurrence with the draft model, the consultant shall finalize the model for distribution and future use by the District.

**Deliverable** – Provide final model software to District to be used by multiple users.

### **Task 3. Develop User Guide and Provide Training**

Upon approval of the final model, the consultant shall develop a user guide for District staff to operate, utilize and/or manipulate the model. The consultant shall also provide a minimum of 2 training opportunities for using the software.

**Deliverable** – Provide a user guide and 2 training opportunities for finalized model.

### **Task 4. Ongoing Assistance and Maintenance**

As needed, the consultant shall provide ongoing assistance and maintenance as it relates to the software for one additional year, with a right to extend for up to 3 additional years. As part of this work, the consultant may also be asked to provide upgrades as needed and as technology improves.

## **Schedule**

The following schedule is currently anticipated for this project:

Anticipated Notice to Proceed	September 15, 2016
Completion of Task 1	January 15, 2016
Completion of Tasks 2 – 3	March 15, 2017

**EXHIBIT B**  
**PROPOSED PROJECT BUDGET**

<u>1. Direct Labor</u>	<u>Estimated Hours</u>	<u>Rate/Hour</u>	<u>Total Est. Cost</u>
(List by position all professional personnel participating in project)			
<b>Total Direct Labor</b>			\$ _____
<u>2. Overhead Cost</u>			
(OMB circulators A-87 and A-122) (Overhead percentage rate) X (Total Direct Labor)			
<b>Total Overhead</b>			\$ _____
<u>3. Other Direct Costs</u>			
(List other items and basis for computing cost for each. Examples include computer services, equipment, etc.)			
<b>Total Other Direct Costs</b>			\$ _____
<u>4. Subcontracts</u>			
(For each, list identity, purpose and rate)			
<b>Total Subcontracts</b>			\$ _____
<u>5. Travel</u>			
a. Travel by common carrier from/to the ARC offices. (List number of trips and Economy class airfare, plus taxi and shuttle fares, etc.)			
b. Travel by private automobile within ARC area. (List # of days x rate)			
<b>Total Travel</b>			\$ _____
<u>6. Profit (Percentage rate X basis)</u>			
<b>Total Profit</b>			\$ _____
<b>Total Estimated Cost and Profit</b>			\$ _____

**EXHIBIT B-1**  
**BUDGET BY TASK**

Cost for each task should be a lump-sum for that task.

**Task 1:** Develop Predictive Reservoir Level Model \$ \_\_\_\_\_

**Task 2:** Finalize Model \$ \_\_\_\_\_

**Task 3:** Develop User Guide and Provide Training \$ \_\_\_\_\_

**Task 4:** Ongoing Assistance and Maintenance \$ \_\_\_\_\_

**TOTAL** \$ \_\_\_\_\_