

**Water & Wastewater Options & Strategies  
For The Carroll County**  
**Water Resources Element**

**Request for Proposals**

**Project Number: 55-F-1-08/09**



Due Date: October 13, 2008 by 10:30 a.m. (Eastern Standard Time)

Carroll County Commissioners  
Carroll County Department of Planning  
Westminster, Maryland 21157

## **Introduction**

The Board of Carroll County Commissioners (the “Board”) is soliciting written proposals from qualified firms to provide professional water resource planning and engineering services for review and update of background information, groundwater and surface water balance assessment, evaluation of future water and wastewater options, and recommendation of strategies for addressing the various water and wastewater issues as they relate to the Water Resources Element (WRE) of the Carroll County Comprehensive Plan. This project will result in a series of reports for each 8-digit watershed, a summary report analyzing the countywide situation, and a document providing supporting information, options reviewed, and recommended strategies for Carroll County as supporting documents for the Water Resources Element.

The study area covers the entire county, including all of the county’s designated growth areas and associated systems, which incorporate the eight municipalities that are located within Carroll County.

## **Project Background**

In the past decade, water quality and quantity issues have had a tremendous influence on growth and development issues. In the early part of the decade, many private wells and public water supplies were impacted due to drought conditions. These conditions brought about many changes to State policies and local development activity. Three of Carroll County’s municipalities – Mount Airy, Westminster, and Taneytown – were forced to enter into consent agreements with by the Maryland Department of the Environment (MDE) to develop additional water supplies. Most of the county’s public water supply systems have faced challenges of some sort conforming to State policies related to water quantity, which results in challenges to achieving Smart Growth.

Legislation (HB 1141) passed by the 2006 Maryland General Assembly resulted in several significant changes to land use regulations controlled by Article 66B of the Annotated Code of the State of Maryland. New watershed-based planning requirements are among the more significant changes. A Water Resources Element (WRE) must be developed and adopted by all local governments on or before October 1, 2009. This WRE must identify drinking water and other water resources needed for existing and future growth, as well as identify suitable receiving waters and land areas for stormwater management and wastewater treatment of existing and future growth. This legislation comes at a time when water quality and quantity planning is of utmost importance.

Carroll County and its municipalities are working collaboratively to develop one unified WRE document that can be adopted by all of Carroll County’s jurisdictions to satisfy the requirements of HB 1141. The results of completed background assessments of water and wastewater capacity will be provided to the consultant to contribute to the study. Data will also be provided for the water balance study.

## **Project Summary**

The goal of this project is twofold. The first is to provide an analysis and estimate of water and wastewater availability and limitations. This information and analysis will provide the basis to

evaluate options to address water supply and management, both quality and quantity. Options and alternatives will be evaluated for their feasibility in addressing the identified issues faced by the County and municipal water supply and wastewater systems. Priorities, hurdles, and next steps will be identified.

The second is to develop holistic, countywide recommendations for strategies the County and its municipalities could use in the development of its WRE. Included in these recommendations will be strategies to address wastewater supply and how to address the water quality policies and constraints, such as Tributary Strategy caps, TMDLs, Tier II Waters, and other water quality and quantity policies and limitations. Recommendations would include steps to be taken to implement each alternative and associated cost estimates.

### **Scope of Services**

Development of the “Water & Wastewater Options & Strategies for the Carroll County Water Resources Element” will incorporate background information already assembled by County and municipal staff. Each 8-digit watershed will be assessed to evaluate the available water supply within that watershed as it relates to existing water demands and to assess the potential for existing resources to meet future water demands. Reports will be generated for each watershed. Options and alternatives will be evaluated to address water and wastewater supply, quality, and limitations. A discussion of the options evaluated, their feasibility, priority, cost estimate, and next steps will be incorporated into another report. Strategies outside these step-by-step procedures will be provided in a separate report for addressing the water and wastewater issues, policies, regulations, and other requirements, as well as any other issues relevant to the water and wastewater components of the WRE.

The expected product(s) is not to draft the actual WRE plan document. Rather, the expected products will be a series of reports that Carroll County and its municipalities can use as supporting data, discussion, and documentation for the strategies and information that the staff incorporate into the WRE plan document on which they are working.

#### *Task 1: Review and update the 1988 Carroll County Water Resource Study.*

Review and update the 1988 Carroll County Water Resource Study. Provide a synthesis of critical elements of the 1988 Study and prepare a review of the Study’s recommendations and the jurisdictional accomplishments and status. The primary emphasis will be a review of the Study’s work and findings related to groundwater and surface water resources. Provide a brief update on the study’s recommendations and current water supply conditions, including limitations/changes to the original findings. The results of this task will be provided to the County in a report in the form of a technical memo, which, in addition to providing updated numbers, describes everything being updated and why it is needed to be updated.

#### *Task 2: Complete a water balance assessment for each 8-digit watershed.*

- A. Using information and background data provided by the County’s Water Resource Element Work Group, compare existing and future water demands with the available water supply capacity and water sources.

1. Review water supply data from capacity management plan worksheets to identify missing data or items to be clarified. Coordinate directly with the County or the municipality responsible for that system to obtain data needed for that system.
  2. In assessing available water supply, include both groundwater and surface water and consider all inputs and outputs to the system. Consider and discuss other factors and variables that could impact availability and water supply management, including preservation of environmental flows. Identify total estimated water availability for each watershed. The model for these watershed evaluations, with some modifications identified by Carroll County Planning staff, will be the report “An Evaluation of the Water Resources in the Catoctin Creek Watershed,” which was produced by MDE in May 2006.
- B. Identify any other technical, physical, administrative, and/or legal challenges that could be presented by water quantity policies and limitations that could impact availability and capacity for water availability in the county.
- C. Prepare a report for each individual 8-digit watershed describing the data, methodology, analysis, and results, including a discussion of limitations for each individual watershed.
- D. Prepare a report that evaluates the situation countywide and discusses demand, availability, and limitations from a countywide perspective.

*Task 3: Assess the overall limitations of wastewater.*

- A. Using information and background data provided by the County’s Water Resource Element Work Group, discuss the water quality policies and constraints, such as Tributary Strategy caps, TMDLs, Tier II Waters.
- B. Using information and background data provided by the County’s Water Resource Element Work Group, discuss the implications for individual municipal wastewater systems and countywide wastewater data, including data from wastewater capacity management plans.
- C. Identify any other technical, physical, administrative, and/or legal challenges that could be presented by water quality policies and limitations that could impact availability and capacity for wastewater systems in the county.
- D. Prepare a report describing the current situation and summarizing the limitations.

*Task 4: Evaluate options/alternatives for individual water and wastewater systems as well as countywide.*

- A. Based on the results of Tasks 1, 2, and 3, evaluate countywide impacts of water demand and availability in each individual watershed. Discuss relationship of water balance to wastewater limitations and cumulative, holistic impacts of water and wastewater conditions combined.

- B. Discuss and evaluate holistic, sustainable options and alternatives for addressing water availability across watershed boundaries. Identify the specific steps that would need to be taken to pursue each option evaluated, what the limitations or barriers might be, and if and how those limitations or barriers could be overcome. Options could include, but are not limited to:
1. a new water supply reservoir project(s) to be successfully permitted, designed, and constructed, included but not limited to:
    - , reviewing existing reports and data, prepared previously,
    - , establishing objectives and requirements for the projects,
    - , assessing tasks necessary to satisfy all Federal, State, and Local regulatory requirements relevant to new water supply projects, including 33 CFR 325, and appendices.
  2. water reuse options, and
  3. potential impacts of climate variability on water supply systems.
- C. Evaluate the impacts to wastewater of crossing watershed boundaries for each of the water options evaluated.
- D. Prioritize alternatives based on feasibility, cost, and other relevant factors, and estimate costs and timeframe for proceeding through steps identified for each alternative in Task 4B above. Meet with MDE, DNR, and/or MDP staff, as necessary, to clarify barriers and possible limitations. Include appropriate Carroll County Planning staff in meetings.
- E. Prepare a report that discusses the activities in Task 4, their results, and recommended priorities.

*Task 5: Develop recommended strategies for addressing water and wastewater issues beyond those directly related to demand and availability.*

- A. Identify other possible strategies for addressing water and wastewater issues relevant to the Water Resources Element (WRE). Discuss feasibility and limitations. Recommend strategies that the County and its municipalities could choose to incorporate into the WRE. Collaborate directly with Carroll County Planning staff on strategies that could overlap with, complement, or conflict with nonpoint source strategies to ensure that a coordinated approach to the strategies is incorporated. Carroll County Planning staff will provide preliminary nutrient loading analysis information to consider while developing wastewater strategies.
- B. Prepare a report that describes the evaluation used to identify strategies and describes the actual strategies recommended.

Carroll County Planning staff must be notified of and given the opportunity to attend and participate in all meetings with State and Federal agencies that are related to this project (including, but not limited to, MDE, DNR, MDP, USACE, etc.).

Where a task involves a report, the County reserves the right to require modifications to the draft report(s) for purposes of clarification, additional information, or to meet other needs associated with the scope of work outlined above.

### **Award of Agreement**

Award of a Services Agreement will be made with the successful firm following the evaluation process. The Agreement shall be awarded on the basis of technical and financial evaluations. The County will award an Agreement to the responsible vendor who submits a responsive proposal, and which is most advantageous to the County. The County will send written notice of its award to the successful firm. Said notice shall constitute acceptance of the successful firm's proposal. The County will notify all unsuccessful firms in writing after the award of the bid. The County reserves the right to reject the bid of any firm where the available evidence or information does not satisfy the county that the firm is qualified to carry out the terms of the contract.

### **Selection Process**

A selection team will independently review, evaluate, and score the proposals based on the evaluation criteria listed in the Request for Proposals. The team will come to consensus and determine the final rankings of the proposals. The County intends to award the professional Services Agreement (similar in form to the attached) on the basis of qualifications, experience, and proposed fees.

### **Contact Agency**

The Request for Proposals is issued on behalf of the Carroll County Board of Commissioners by the Carroll County Bureau of Purchasing. The agreement resulting from the selection process will be administered by the Carroll County Department of Planning. Additional information, if needed to interpret the information contained in this Request for Proposals, may be obtained by contacting Ms. Cindy Miller, Senior Buyer, Bureau of Purchasing, 225 North Center Street, Westminster, MD 21157; telephone: 410-386-2181. All requests for clarification must be in writing prior to 4:00 p.m. on Wednesday, October 1, 2008 in order for staff to prepare any response required to be answered by Addendum. In addition to mail, written questions may also be sent by e-mail (Purchasing@ccg.carr.org) or fax (410-840-8929).

### **Submission of Proposals**

All firms submitting proposals shall submit two (2) originals and five (5) copies of the Technical and Financial Proposals in sealed envelopes on or before Monday, October 13, 2008, no later than 10:30 a.m. EST, to the Bureau of Purchasing. Vendors should address the proposals to Ms. Cindy Miller, Senior Buyer, Bureau of Purchasing, 225 North Center Street, Room 308, Westminster, MD 21157. Firms should clearly identify proposals with "Water & Wastewater Options & Strategies for Carroll County Water Resources Element" stated on the envelope. The Financial Proposal must be submitted in a separate sealed opaque envelope marked "Financial Proposal." All firms shall submit all proposals according to the specifications as set forth in this Request for Proposals. The County reserves the right to reject any or all proposals. The County also generally reserves the right to issue supplementary information during the proposal

preparation period. All proposals become the property of the County and will be kept confidential until after an award of the successful proposal is made. Thereafter, they may become available for public use. All proposals are generally considered to establish firm offers, not to be withdrawn for ninety (90) days after the date set for proposal acceptance. Once submitted, vendors should not change proposals without prior written consent.

## **Proposal Content**

The proposal shall be structured in the following manner:

1. Letter of Transmittal
2. Title Page
3. Table of Contents
4. Project Understanding – Describe your firm’s understanding of the project and the relevant issues.
5. Technical Ability – Provide a statement of the firm’s technical ability, as well as a narrative description of comparable experience. The comparable experience must be specific to the branch office responding to the RFP and may not rely on the accomplishments of a national or regional office.
6. Qualifications of Key Staff – Provide information on the qualifications and background of each person in a supervisory or professional role who will be assigned to this project; include resumes, credentials, and specific professional experience and past responsibilities in providing service for comparable projects (describe specific projects). Explain what role and responsibilities each team member will have in this project. Do not include principals of the firm, managerial professionals, or personnel from other offices who will not have day-to-day responsibilities for this project. If subconsultants will be used, provide this information for any key staff members involved and clearly identify them as such. [Note: Any changes in proposed staff must receive prior approval by the Department of Planning before the consulting firm will be considered for activities/assignments related to this Request for Proposals. This requirement will also stand for the duration of the contract.]
7. Management Approach – Describe your firm’s approach for managing the project. How will your firm be structured for project communications with the County, within your organization, and with sub-firms (if any).
8. Timeline – Describe the timeline on which your firm intends to complete each of the main tasks and products within the given six-month timeframe.
9. Technical Approach – Describe your firm’s approach to the technical aspects of the project. Outline the order in which the technical challenges of the project will be addressed. Provide a list of federal, state, and County design standards that will be used for evaluating and recommending an integrated water management system.

10. References – For the key person who will be assigned to this project, provide and describe the last three (3) projects similar in scope and scale to this project. For each project, provide the names and **current** telephone numbers of persons whom the County can contact regarding the past performance of this key person. Include the dollar values and client references.

11. Supplementary Information – Provide any additional information indicating why your firm is best suited to perform the services requested.

12. Innovative Approach (Optional) – The County is open to entertaining alternative approaches/options; the consultant is welcome to suggest more innovative, visionary options. This information may be placed in an appendix if the proposal would otherwise exceed the maximum of 30 pages.

13. Financial Proposal/Professional Fees – Provide a fee schedule that reflects burdened hourly rates for each position that will provide services (professional fees). Burdened salaries shall include salaries, plus overhead and profit. Reimbursable or direct expenses such as prints, mileage, telephone expenses, etc., shall be listed separately.

Provide the burdened salaries for the following generic positions. It is understood that firms may use different titles for positions. However, for the purpose of comparing the proposals, it is imperative that fees be shown for the positions identified below. Hourly rates for these positions must be specifically shown in the proposal.

- Office Principal: person in the firm's office with oversight and coordination responsibility for the project
- Project Manager: person responsible for day-to-day project management, schedule, and budget
- Technical Advisors: person(s) who provides technical advice but does not devote a considerable amount of time to the project
- Project Planner: person(s) with planning and non-engineering technical responsibilities that devote a considerable amount of time to this project
- Project Engineers: person(s) responsible for engineering-related project tasks that also devote a considerable amount of time to the project
- GIS Analyst: person(s) with the responsibility for mapping and associated data

Note: If a single person will fill more than one of the above-described positions, insert that person's hourly burdened fee into both positions. If use of a subconsultant is proposed, fees for those individuals must be included as well.

The financial proposal shall cover all items listed in the Scope of Services. The cost for each major item/task shall be listed in the financial proposal. However, the cost proposal shall provide for a lump sum contract.

## **Proposal Format**

The proposal must be submitted on 8½-inch by 11-inch paper and will be limited to a maximum of thirty (30) pages (i.e., the proposal content), excluding the transmittal letter and appendices. Expensive bindings, colored displays, promotional materials, etc., are neither necessary nor desired. Emphasis should be concentrated on conformance to the RFP instructions, responsiveness to the RFP requirements, and on completeness and clarity of content.

All pages will have a minimum one (1) inch margins (top, bottom, left, and right) and characters will have a minimum font size of 12. Line spacing may be single-spaced. Each page, including attachments and exhibits, must be clearly and consecutively numbered at the bottom center of the page.

## **Evaluation Criteria**

Evaluation – A selection team comprised of County staff will evaluate all proposals received. Each firm may be invited, at its expense, for an interview. The interview, which is anticipated to last about an hour, would provide the firm the opportunity to explain and clarify information provided in their proposal.

In addition to the interview, the selection team will evaluate and rank the proposals on the criteria listed below:

- Project Understanding
- Management Approach
- Technical Approach
- Project Schedule
- Financial Proposal
- References/Relevant Project Experience
- Staffing

The above selection criteria are not binding. The Board reserves the right to select the firm which serves the interest of the Board as it deems appropriate.

## **Project Digital Data, Software, and Software Licenses**

All project data used or generated as part of the project, and all final products, shall be delivered to the County in digital form acceptable to the County. All existing County data to be used and additional data developed by the consultant and their subconsultants for this project is the sole property of Carroll County, Maryland. The consultant and their subconsultants shall not have the right of ownership to any of the data resulting from this project, including text files, mapping data, databases, spreadsheets, etc. The County shall have full rights for use and transfer of any and all data. Any transfer, sale, distribution, loan, or offering for use of existing data or data developed by the consultant or their subconsultants for this project, in whole or in part, to any person or entity outside of Carroll County Government is prohibited without prior written consent by Carroll County Government.

All software programs developed for the project will be provided to the County. The consultant will provide the County a copy of the software program(s) and associated license(s) for one seat.

The consultant will provide digital copies as well as ten (10) paper copies of all final reports and technical memos associated with the *Water & Wastewater Options & Strategies for the Carroll County Water Resources Element* project, including maps.

### **Status Reports**

The consultant shall submit a detailed monthly report indicating project completion status.

### **Compensation**

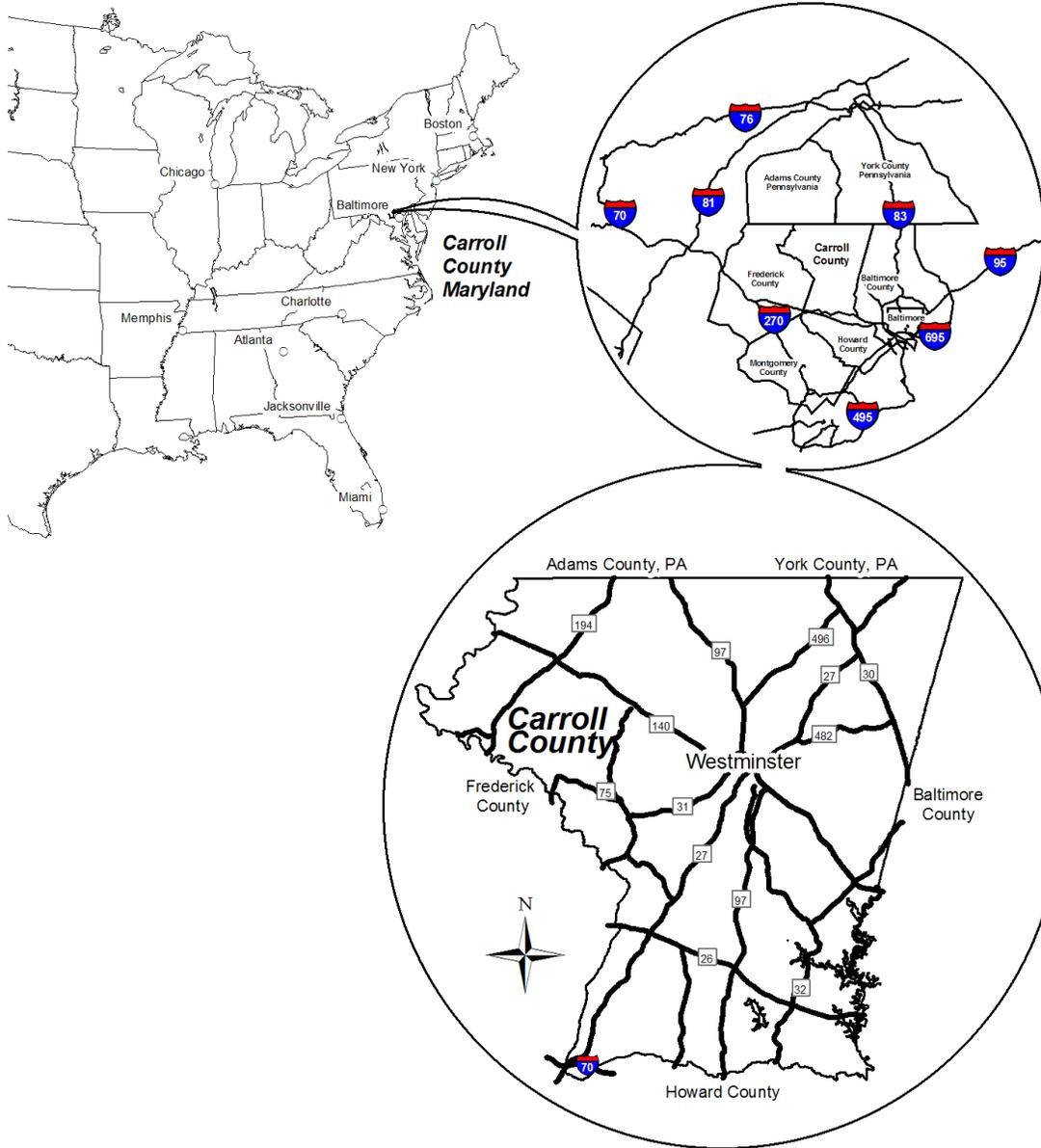
Payment for the project work will be made on a schedule as determined by the successful firm and the County. The final payment will be made upon acceptance by the County of all the final work products and completion of all tasks.

### **Time of Completion**

The consultant will begin work within one (1) week after the receipt of official notice of award of the project. Completion of the project, including final products, is required within a firm six (6) months of official notice of the award of the project.

# Regional Orientation Map

## *Carroll County, Maryland*



Prepared by the Carroll County Department of Planning (AO), Jan 27, 2006