



Request for Proposals



From: Andrea Cline, Sustainable Development and Water Resource Manager
The Conservation Foundation (TCF)

Date: April 7, 2010

Subject: Lower DuPage River Watershed Planning Data Collection Effort

Deadline for Submission: Friday, April 16, 2010 at 5 p.m.

Submission Location: Interested firms are required to submit a paper and an electronic copy of their proposal addressed to:

Andrea Cline
Lower DuPage River Watershed Planning Modeling
The Conservation Foundation
10S404 Knoch Knolls Road
Naperville, Illinois 60565

Proposals must be received by 5 p.m. on April 16, 2010. Please provide concise proposals that are printed double-sided. Please provide cost information in a separate document from all other information. See "Proposal Requirements" for additional information.

Project Manager: Andrea Cline
(630) 428-4500 ext. 25 (phone)
acline@theconservationfoundation.org (email)

Project Background:

This Request For Proposals (RFP) is for consulting services to conduct biological, chemical and habitat data collection and analysis within the Lower DuPage River Watershed (see Site Map). The consultant will follow and update to make specific to the Lower DuPage River watershed the Quality Assurance Program Plan (QAPP) used by the DuPage River Salt Creek Workgroup (DRSCW) (see QAPP). The collection of additional water chemistry data will be completed under another RFP.

Project Description:

The Lower DuPage River Watershed Planning Data Collection Effort will gather biological, chemical and habitat data in order to assess the current status and associated causes and sources of biological impairment of the rivers and streams within the watershed. This will include site selection; the collection of fish, macroinvertebrates, and basic field water chemistry (temperature, DO, conductivity and pH); habitat assessments; the adaptation of the QAPP used by the DRSCW to the Lower DuPage River; and the compilation, interpretation and assessment of data and a final report.

The Lower DuPage River Watershed Coalition determined that additional data needs to be collected in the watershed to support a thorough watershed planning effort and to better determine the stressors to the aquatic system. The Coalition envisions this becoming part of a long term water quality monitoring program that will foster the development and evaluation of implementation projects that address identified stressors and will aid in restoring water quality within the watershed.

It is the goal of TCF and the Coalition that this data be used by the Illinois Environmental Protection Agency (IEPA), the Illinois Department of Natural Resources (IDNR), local decision makers and other organizations. Therefore it is essential that that data collected is accurate, precise, cost-effective and has low variability, making the results of the assessment comparable.

The sample design should complement the design done by DRSCW utilizing both geometric and targeted approach with 14-16 sampling sites located on the mainstem and 11-13 sampling sites on the tributaries.

Fish will be sampled once at each site using pulsed D.C. electrofishing at an effort of 2-3 hours per site, allowing for the collection of a representative sample and their relative abundances. Fish will be identified to species or subspecies level, where appropriate. Scientific nomenclature will follow that adopted by the American Fisheries Society (Nelson et al. 2004). Information will also be recorded on the occurrence of external abnormalities, diseases, parasites, and other abnormalities that are observed on each fish that is weighed and or counted following the methods used by the Ohio Environmental Protection Agency (1989) and further described by Sanders et al. (1999). Fish voucher information will be collected.

Macroinvertebrates will be sampled primarily using the multi-habitat method of IEPA. Macroinvertebrates will be identified to the lowest taxonomic level that is practical for most orders and families. All samples will be processed following IEPA methods. The MAIS method will be used in small streams where the application of the IEPA multihabitat method is problematic Ohio EPA (1989) and the Macroinvertebrate Aggregate Index for Streams (MAIS; Smith and Voshell 1997). Keys specified in Ohio EPA (1989) and by IEPA will be used to make the identifications.

A Qualitative Habitat Evaluation Index (QHEI) will be collected at each fish sampling site using the method developed by Rankin (1989, 1995), including the characterization and categorization of habitat attributes including substrate types and quality, cover types and extent, channel morphology and modification, riparian and bank composition and condition, pool-run-riffle quality and extent, and local gradient. Field chemical and physical parameters will be collected using a commercially available field meter capable of measuring temperature, dissolved oxygen, conductivity and pH.

The final report should detail methods, analysis and results of the data collection effort and should provide an interpretation of biological, habitat and water chemistry data to detail current status of the watershed and identification of causes and sources of stress and impairment. It should also provide recommendations of potential restoration projects.

Qualifications:

The successful firm will have qualified staff that has demonstrated proficiency with all aspects of sampling including utilization of chemical monitoring, QHEI habitat assessment methods and biological data collections on at least three projects in a watershed of this size. Field staff should include a skilled fish taxonomist with experience with the fish fauna of this region and the methods outlined for

collection as well as personnel skilled and experienced with IEPA and MAIS macroinvertebrate collection methods and proper field handling of macroinvertebrates. Field staff should also be trained and experienced in the use of QHEI. This firm should also have extensive experience working with watershed organizations and state agencies in the development and implementation of an integrated monitoring design and be able to interpret biological indexes with the aim of understanding current conditions and identifying causes and sources of stress. Provide at least three examples of projects where this type of assessment and data interpretation has been performed. All necessary sampling equipment should be on-hand at time of submittal.

Project Site Description:

The project area (see Site Map) consists of the Lower DuPage River watershed, covering approximately 175 square miles. The primary tributaries to the mainstem Lower DuPage River include Lily Cache Creek and Mink Creek. There are eleven municipalities that lie wholly or partially within the watershed: Aurora, Bolingbrook, Channahon, Crest Hill, Joliet, Minooka, Naperville, Plainfield, Rockdale, Romeoville, and Shorewood. The watershed is mostly within Will County, although portions of the watershed lie in DuPage, Grundy and Kendall Counties. There are seven wastewater treatment plants that discharge to the Lower DuPage and associated tributaries: Naperville Springbrook STP, Plainfield North STP, Bolingbrook STP #3, Joliet Aux Sable Creek WWTP, Camelot Utilities STP Shorewood, Minooka STP and Channahon STP. Residential and agricultural land uses are equally dominant within the watershed, both covering approximately 30% of the area. Additional conversion of agricultural land to residential and commercial land is expected in the near future. Two dams are located on the Lower DuPage: at Hammel Woods in Shorewood and the Channahon Dam.

Background Information:

In October 2009 The Conservation Foundation was awarded a two year grant from the Chicago Metropolitan Agency for Planning to conduct a watershed planning effort for the Lower DuPage River Watershed, originating at the confluence of the East and West Branches DuPage River in unincorporated Will County, near Naperville, and terminating at the confluence of the DuPage and Des Plaines Rivers in Channahon. The watershed plan is stakeholder driven and must meet the nine elements of an Illinois Environmental Protection Agency (IEPA) approved watershed plan as well as additional regional criteria developed by the Basinwide Management Advisory Group (B-MAG). The watershed plan must allow the group to qualify for future grant funding in order to implement the recommendations that will be developed as a part of the plan.

Segments within the watershed are listed in the 2008 Water Quality Report as impaired for aquatic life support, fish consumption and primary contact. Potential causes of impairment include chloride, DDT, hexachlorobenzene, mercury, flow regime alterations, dissolved oxygen (DO), polychlorinated biphenyls (PCBs), sedimentation/siltation, silver, fecal coliform, total suspended solids (TSS), total phosphorous, and aquatic plants. Potential sources include atmospheric deposition, contaminated sediments, impacts from hydrostructure flow regime modification, municipal point source discharges, site clearance, upstream impoundments, crop production and urban runoff. Total Maximum Daily Loads (TMDLs) are currently being developed for chloride, fecal coliform, silver and dissolved oxygen.

Project Process and Outcome:

- TCF will contract with a qualified consultant to complete the data collection effort. Consultant selection criteria will be posted on the Lower DuPage River Watershed website: <http://www.dupagerivers.org/LowerDuPageRiverWatershedPlanning.htm>

- The consultant will update and make relevant to the Lower DuPage River the Quality Assurance Protection Plan used by the DuPage River Salt Creek Workgroup.
- The consultant will work with the stakeholders in determining sampling sites (approximately 1 meeting) and will present the results to the stakeholders (1 meeting).
- Data collection will take place between June and September, 2010; analysis of the data will be completed subsequently.
- The consultant will produce a final report detailing methods, analysis and results of the data collection effort by February 1, 2011. The report should also include recommendations for restoration projects and future data collection efforts. See the DRSCW Bioassessment report for details: www.drscw.org.
- The report will be reviewed by TCF and Lower DuPage River Watershed Coalition prior to final acceptance.

Scope of Services:

The Scope of Services is attached.

Timeline:

The project shall be completed and invoiced by March 1, 2011. Site identification and the revision of the Quality Assurance Program Plan will begin immediately upon awarding of the contract. Sampling will take place over the summer of 2010. A draft of the final report will be due in December 2010 and the report will be finalized by February 1, 2011.

Budget:

The consultant shall submit a not-to-exceed budget estimate for the scope of work. The amount currently budgeted for funding the Lower DuPage River Data Collection Effort is \$70,000 which includes collection of water chemistry data.

Proposal Requirements:

Please include the following information in the proposal:

1. Proposals should be formatted so that all monetary information is included in a separate document. Applicants approach and methodology, understanding, personnel, estimated hours, experience, and any other relevant information should be in one complete document while the anticipated costs, billing rates or lump sum information are located in a separate document.
2. Detailed approach to the project, including understanding of the project, technical approach and methodology, approach to each task and project management.
3. Proposed project schedule, organized by task including deliverables and applicable deadlines.
4. Personnel that will be assigned to each task and a brief description of their experience only as it is directly relevant to the project.
5. The firm's experience with similar projects, particularly in data collection for watershed planning. Please provide a description of three similar projects that your firm has completed, a copy of an assessment report for one of the projects in an electronic format, and references for each.

6. Anticipated costs, including billing rates and estimated hours for each of the personnel identified and projected cost for each project element (this does not preclude lump-sum proposals). Costs should be itemized by task and staff.
7. Any additional information that will allow TCF and the Coalition to accurately evaluate the firm's capability.

Contract:

The consultant shall be required to enter into a contract with TCF.

Insurance:

Prior to contract execution, the consultant shall submit a certificate of insurance to TCF. TCF and CMAP shall be listed as additional insured on this certificate.

Scope of Services

Lower DuPage River Watershed Data Collection Effort

1. Selection of sampling sites.
2. Completion of the revision of the QAPP.
3. Collection of fish and macroinvertebrates using collection procedures as outlined in the QAPP.
4. Completion of the Qualitative Habitat Evaluation Index at each sampling site.
5. Global Positioning System and photographic documentation of each sampling site, regardless of whether the site was sampled (some sites may not have sufficient water at the time of sampling).
6. Obtainment of all necessary scientific permits.
7. Compilation of all data in Microsoft Excel.
8. Completion of a detailed assessment report.

Site Map



