

Notice for Request for Qualifications (RFQ) Three Mile Creek Watershed Management Planning Mobile County Alabama

The Mobile Bay National Estuary Program, 4172 Commanders Drive, Mobile, AL 36615, seeks a qualified environmental planning, engineering, natural resource planning or other similar firm to prepare a Comprehensive Watershed Management Plan (WMP) for the Three Mile Creek Watershed in Mobile County, Alabama. A Request for Qualifications (RFQ) process is being used to select a firm who can develop such a conceptual engineering master plan based on available data. RFQ's must be sent to the attention of Roberta Swann and received no later than 3:00 p.m. CST, Friday, November 9, 2012.

The Mobile Bay National Estuary Program has funding to develop a WMP for the Three Mile Creek Watershed to provide a roadmap for restoring this watershed and improving water quality in Three Mile Creek and its associated tributaries by addressing the following objectives:

- Improve water quality by reducing nonpoint source pollution (including stormwater runoff and associated trash, nutrients, pathogens, erosion, and sedimentation); reducing outgoing pollutant loads into Mobile Bay, and remediating and restoring past effects of waste disposal;
- Reduce the incidence and impacts of invasive species, including Island Apple Snails, Tilapia, and Chinese Tallow trees;
- Recommendations/prioritizations for restoration (within strategies for implementation)
- Provide opportunities for increased public access, recreation, and ecotourism;
- Ensure equitable distribution of environmental burdens and assets in this diversely populated watershed;
- Identify vulnerabilities in the watershed from increased sea level rise, storm surge and precipitation events potentially due to climate change; and
- Identify opportunities to mitigate future impacts of development in the watershed, where feasible.

The plan should chart a conceptual course for transforming this degraded urban creek into a watershed that supports improved community assets that improves water quality and fish and wildlife health resulting in enhanced community health and civic pride, increases property values, and provides economic development opportunities as a unique urban ecotourism destination as well as a cultural destination that celebrates local history.

The firm selected must be able to develop a concept that maximizes environmental health and public benefit. It is our intent that the firm selected will develop a concept and plan and assist in identifying financing options for implementation. The firm selected will work with Mobile Bay National Estuary Program staff and a steering committee made up of key stakeholders in the watershed.

The most current RFQ document is available at the MBNEP website (www.mobilebaynep.com). A **mandatory** pre-submittal Conference will be held at 10:00 a.m. CST on October 15, 2012, and Statements of Qualifications are due by 3:00 p.m. CST on November 9, 2012. Potential **Respondents** interested in this RFQ should contact the MBNEP and request placement on the RFQ mailing list to ensure receipt of amendments and other relevant information. Inquiries should be directed to: Mr. Christian Miller at christian@auburn.edu or by phone at 251-438-5690.

The Three Mile Creek Watershed

Background

Three Mile Creek is a small, tidally-influenced stream that flows through the City of Mobile, Mobile County, Alabama, originating in western Mobile and flowing 14 miles in an easterly direction to its confluence with the Mobile River. Encompassing a total drainage area of about 29 square miles, this largely urbanized creek falls an average 26 feet per mile over its upper six miles and nine feet per mile over its lower eight miles and varies in width from 10 feet in the headwaters to 80 feet in the lower reaches.

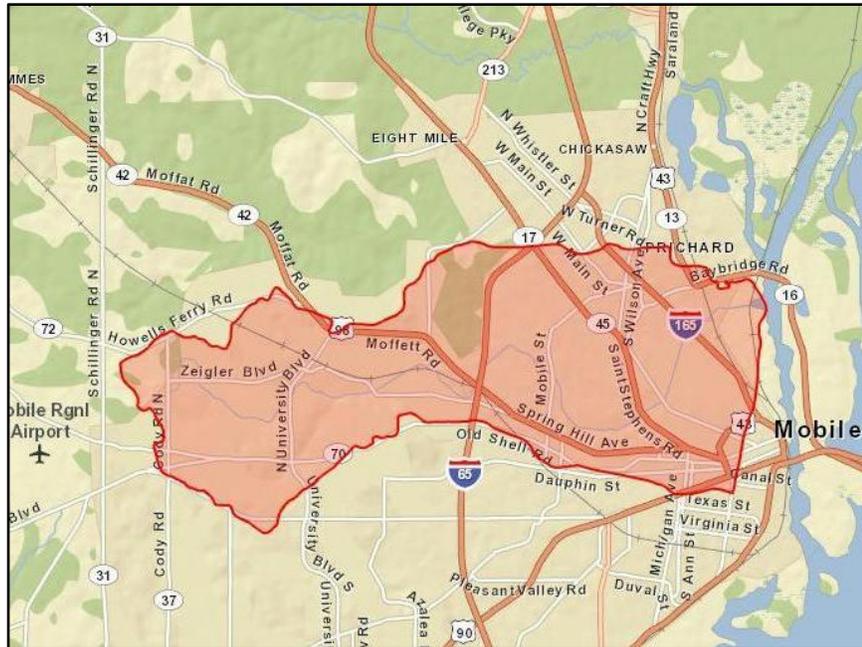
Twelve Mile Creek originates south and west of the intersection of Cody Road and Tanner Williams Road in the extreme western portion of the watershed and flows a little over three miles north and east to its confluence with Three Mile Creek. Toulmins Spring Branch originates in the northeastern portion of the watershed in the Whistler community of the City of Prichard, just north and east of the Interstate 65/U.S. Highway 45 junction. It flows approximately 2.5 miles to its confluence with Three Mile Creek directly south of the Conception St. Road Bridge.

The Three Mile Creek (TMC) Watershed is relatively narrow and bisected by Interstate 65 with a hilly western half with elevations ranging from 40 to 200 feet and a flat eastern half with elevations below 40 feet. Most of the Watershed is within the Mobile City Limits, but seven percent lies within the City of Prichard.

TMC is woven into the fabric of the Mobile community. Historical paintings depict horse races and hotels along its banks. In 1814, the creek was an important source of water for the City of Mobile. By 1940,

urbanization within its watershed had degraded the quality of the water, forcing the City to turn to Big Creek as its water supply. By the end of the 20th century the water quality and condition of TMC was degraded to the extent that ADEM classified it Agricultural and Industrial (the lowest of its seven use-classification tiers), making it unsuitable for fishing, bathing, or recreational activities.

In the early 1980's flooding problems along the Creek and in neighborhoods within the Davis/Dr. Martin Luther King Jr. (MLK) Avenue area resulted in Municipal and U. S. Army Corps of Engineers (USACE) engineering modifications that included the installation of a series of weirs/drop structures through the middle Creek and channelization/hydrologic modification in the lower Creek. The former modification resulted in interruption of tidal influences upstream of the eastern-most structure. The latter modification resulted in disruption of flow through the highly estuarine, historic streamway running through habitat-rich forested wetlands north of the MLK neighborhoods and downtown Mobile.



At present, TMC serves as a stormwater conveyance from city streets and neighborhoods to the Mobile River and as a treated sewage outfall for Mobile Area Water and Sewer Service Wright Smith Waste Water Treatment Plant and the Prichard Water Board Carlos Morris Waste Water Treatment Plant.

Demographically 65% of the population of the TMC Watershed is African-American, 32% is white, one percent is Asian, and any other ethnicity accounts for less than one percent. The majority of the City of Mobile's public housing developments, including Central Plaza Towers, Josephine Allen Homes, the Orange Grove, Roger Williams Apartments, the Gardens, and the Renaissance, are located within the TMC Watershed.

This specific project is within the scope of objectives and plans published in the Comprehensive Conservation and Management Plan (CCMP) developed by the Mobile Bay National Estuary Program, submitted by the Governor of Alabama and approved by the Administrator, EPA on 22 April 2002. The goals of several Actions contained in Volume Two (The Path to Success) of the CCMP will be addressed in the WMP, including:

- WQ-B1 Reduce Excessive Nutrient Loading within the Mobile Bay NEP. In 1996, TMC was first listed over its entire length for nutrients and organic enrichment/low dissolved oxygen resulting from municipal storm sewers, highway, road, and bridge construction, and land development. In 2000, TMC from its source to the Illinois Central Gulf Railroad remained listed for OE/DO. In 2008, a TMDL was approved for TMC, so it was delisted for DO/OE. In 2010, Toulmins Spring Branch and the unnamed tributary to TMC were added to the 303(d) list for ammonia/nutrients.
- WQ-C1 Reduce Opportunities for Pathogen Introduction. In 1996, TMC was first listed over its entire length for pathogens from the same sources as nutrients and OE/DO. In 2004, Toulmins Spring Branch and an unnamed tributary to TMC were added to the 303(d) list for pathogens. In 2010, with the approval of TMDLs for Pathogens, these two tributaries were removed from the 303(d) List.
- HM-B1 Protect or Restore SAV Habitat. From the TMC bypass channel upstream to the first weir/drop structure extensive SAV, including non-native watermilfoils, Eurasian (*Myriophyllum spicatum*) and/or Parrots feather (*M. aquaticum*) and some natives including Potamogeton, Eel-grass cover the bottom, providing critical habitat and forage for fish and invertebrates.
- HM-C1 Maintain and/or Improve Beneficial Wetland Function. Between MLK Avenue and Conception Street Road, TMC and its tributaries run through and provide a water source for extensive, habitat-rich wooded wetland areas.
- HU-A1 Develop and Implement Comprehensive Land Use Planning. This action plan includes addressing brownfields. One such brownfield area, the Hickory Street Landfill is bordered on the north by One Mile Creek, a tributary that runs from the Hank Aaron Loop to the historic streamway of TMC through wooded wetlands.
- HU-B1 Assess Hydrologic Effects of Development Practices. TMC has been the target of several hydrological modifications to manage flooding.
- HU-B3 Better Control Erosion and Sedimentation. With over 70% of the drainage basin (13,642 acres) classified as urban and impervious surface covering 34% of its surface, the TMC watershed faces increased volumes and velocities of stormwater runoff that threaten to erode its banks and those of its tributaries with concomitant impacts of sedimentation downstream, including in Mobile Bay.
- HU-C1 Increase Public Access and Eco-Tourism Opportunities. Although running through the most densely populated areas of the City of Mobile, public access to TMC is severely limited. No public boat, canoe or kayak launches exist, and the only recreational opportunity routinely utilized is subsistence fishing, most frequently in low-income, traditionally underserved neighborhoods in the MLK Avenue area.

Three Mile Creek is particularly vulnerable to many of the projected effects of climate change, most notably storm intensity, storm surge and sea level rise. Of particular concern are impacts related to salt water intrusion into ground water sources; inundation and other severe impacts related to these effects in a heavily urbanized area that is home to a high percentage of low income, African American residents; and changes to freshwater availability affecting both groundwater and habitat and species distribution.

The Watershed Management Planning Scope

Overview

A WMP based on available data is considered an essential first step in transforming Three Mile Creek into an urban environmental asset. This plan is necessary to document existing environmental challenges and provide a vision and strategy for achieving that transformation. It will be used to engage city, county, state and federal agencies and our congressional delegation in demonstrating how both private and public objectives can be achieved for community environmental and economic development benefits. The WMP will definitively identify and categorize watershed/water quality issues and problems, identify climate change vulnerabilities, reasonably ascertain the magnitude of restoration and adaptation potential, identify human and financial capital needed to implement BMPs and engineering or other actions, institute reasonable implementation timelines, and document and measure success.

The purpose of this Request for Qualifications is to solicit and select an environmental planning, engineering, or other firm or team capable of development of a WMP for the watershed. The plan will include in its objectives: arresting current impairments indicated on the ADEM's 303(d) list and Total Maximum Daily Load documentation; effecting trash and litter reductions to TMC, its tributaries, riparian areas and surrounding wetlands; identifying climate change vulnerabilities and available adaptation options, reducing the incidence and impacts of invasive nuisance species; creating and providing access to recreational opportunities in and around TMC and its tributaries, and mitigating areas degraded by past land use practices.

It is our intent that the firm selected to create the WMP may also be identified to manage future implementation or construction of the elements of the plan without further competition subject to completion of a satisfactory WMP and appropriate future contract negotiation. Henceforth in this RFQ, the term “ **Respondent**” will be used to denote any of the categories of firms or teams noted or others who, by virtue of experience, technical capability and interest, consider themselves to have the capacity and demonstrated experience to successfully handle all aspects of the concept development and planning process including: planning, designing, stakeholder involvement, identification and facilitation of necessary public-private partnerships, identification and structuring of potential financing sources, and construction management.

A RFQ process is being used to select a Planner instead of a more traditional RFP, in recognition of the need for sustained collaboration between the selected **Respondent**, municipal and county officials, local stakeholders and the MBNEP in order to develop a concept for a feasible project to successfully achieve the stated wide range of objectives. Implementation funding is not currently identified in local, state or federal budgets or from other sources. Development of a financing strategy must be included in the **Respondent's** approach. The **Respondent** must assemble resources and a team that is also capable of the design, marketing, finance and/or construction management activities necessary to implement the concept and that is acceptable to various regulatory agencies.

A strong coalition of federal, state and local agencies, county and local governments, property owners, developers, and commercial interests are providing local and regional support to guide the development of a WMP for TMC. Development and implementation of a holistic watershed-based plan usually provides the most technically sound and economically efficient means of addressing water quality problems. The WMP will address real and on-going sources and causes of nonpoint source impairments, as well as future threats, in order to assure the long-term health of TMC and ultimately Mobile Bay.

Expected Watershed Management Plan Components

It is expected that **Respondents** to this request will address the following factors in the development of the watershed management plan:

1. Clean Water Act Section 319 Watershed Plan Elements

Although many different components may be included in this watershed plan, EPA has identified nine key elements that are critical for achieving improvements in water quality. **Respondent** proposals will address how each of the following nine key elements will be developed in relation to TMC.

(http://water.epa.gov/polwaste/nps/handbook_index.cfm)

Responses to the items below shall be evaluated and presented using available geographic data and commonly utilized geographic information system techniques along with hydrologic and water quality modeling sufficient to scientifically support the projected water quality, vulnerability and biological conditions related to the proposed plan.

- a. **Identification of causes of impairment and pollutant sources** or groups of similar sources that need to be controlled to achieve needed load reductions, and any other goals identified in the watershed plan. Sources that need to be controlled should be identified at the significant subcategory level along with estimates of the extent to which they are present in the watershed
- b. **An estimate of the load reductions** expected from management measures
- c. **A description of the nonpoint source management measures** that will need to be implemented to achieve load reductions in paragraph 2, and a description of the critical areas in which those measures will be needed to implement this plan.
- d. **Estimate of the amounts of technical and financial assistance needed**, associated costs, and/or the sources and authorities that will be relied upon to implement this plan.
- e. **An information and education component** used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the nonpoint source management measures that will be implemented.
- f. **Schedule for implementing the nonpoint source management measures** identified in this plan that is reasonably expeditious.
- g. **A description of interim measurable milestones** for determining whether nonpoint source management measures or other control actions are being implemented.
- h. **A set of criteria that can be used to determine whether loading reductions are being achieved** over time and substantial progress is being made toward attaining water quality standards.
- i. **A monitoring component to evaluate the effectiveness** of the implementation efforts over time, measured against the criteria established under item h immediately above.

2. Stakeholder Engagement

The **Respondent** will set forth a strategy that incorporates the development of the following stakeholder based working committees to guide plan development and ensure community ownership of any products developed under this project.

A TMC Steering Committee will be established to guide the development of the WMP and ensure that it addresses the concerns of the different constituencies. The Steering Committee will host a series of community visioning exercises prior to the award of this contract. This visioning effort will bring together key community stakeholder groups to review the history of Three Mile Creek, to learn more about the current status of the Three Mile Creek Watershed and to work together to develop a graphic vision for the future of the watershed.

A TMC Technical Committee has been established to assist in defining the scope of the Watershed Planning effort. At a minimum this group has identified a need for the plan to address the following:

- a watershed approach to storm water runoff and nonpoint source pollution management
- maintenance or enhancement of the ecological integrity of the watershed
- protection of threatened, endangered, or otherwise “at-risk” flora and fauna
- preservation of archeologically sensitive sites (if any)
- preservation and enhancement of wetlands, particularly as they relate to flood protection, treatment of storm water runoff, and provision of wildlife and aquatic species habitat
- protection of the watershed such that no further degradation occurs as a result of implementation of any construction or management practice
- Utilization of available geographic data and commonly utilized geographic information system techniques to present conditions and options
- Utilization of hydrologic and water quality modeling sufficient to scientifically support the projected water quality, vulnerability and biological conditions related to the proposed plan.

A TMC Stakeholder Engagement Committee will be established to develop opportunities to educate and engage the diverse stakeholder residents of this watershed. Mobile Baykeeper has received a grant from the U.S. EPA to reach out to the environmental justice community in support of this watershed planning effort. Consistent local citizen input is expected to be a major component of the plan development process. The Stakeholder Engagement Committee will be available to assist with the coordination of outreach, education and input purposes.

3. Data Gathering, Inventory, Characterization

The WMP will impact more than twenty (20) linear miles of streams (Three Mile Creek, Twelve Mile Creek, Toulmins Spring Branch, One Mile Creek and unnamed tributaries to Three Mile Creek and One Mile Creek), 265 acres of open water, and 2,610 acres of wetland habitat within the USGS Hydrologic Unit Code 03160204-0504 watershed boundary. The **Respondent** will propose a strategy for identifying, utilizing, and cataloging all data available and necessary (gaps) to characterize the watershed; determine pollutant sources (including an estimate of current pollutant loads); and assess impacts from hydrologic alterations within the watershed. This strategy will include documentation of data references/sources, maps, engineering sketches of proposed structures, diagrams, and stream flow and sediment load calculations.

The **Respondent** will describe the level of detailed maps, sketches and other information that will be produced under this project to demonstrate the potential effects of proposed engineering projects (dams, sumps, retention structures, stream restorations etc.), political subdivision regulatory actions (land disturbance ordinances, cross-jurisdictional cooperation, etc.), land use planning (zoning actions or changes, establishment of buffer zones etc.) and other actions recommended.

The **Respondent** will use the following publications as guides and references in their proposals for the development of WMP:

- Assessment of Water Quality, Benthic Invertebrates, and Periphyton in the Threemile Creek Basin, Mobile, Alabama 1999-2003 U. S. Geological Survey (USGS) 2004.
- Final TMDL (OE/DO) for Threemile Creek (03160204-0504-101) – ADEM 2006
- Final TMDL (Pathogens/FC) for Toulmins Spring Branch (03160204-0504-300) – ADEM 2009
- Final TMDL (Pathogens/FC) for Unnamed Tributary to Threemile Creek (03160204-0504-500) – ADEM 2009

Empirical chemical and biological assay data collected in the aforementioned studies will provide data necessary to identify potential water quality issues and BMP implementation sites and needs. The WMP will include a list of data gaps and identify additional data collection needed.

Climate change has the potential to negatively impact significant acreage in the Three Mile Creek Watershed. To the extent possible, the WMP will incorporate information related to climate change impacts as developed through an existing agreement with U.S. EPA and the Mobile Bay National Estuary Program, and the **Respondent** will set forth a strategy for incorporating results of this assessment in the WMP that address these project objectives.

- Build a process-based model for the Three Mile Creek watershed that incorporates hydrodynamic feedbacks between surface water, land surface, soil, and groundwater zones to assess the sensitivity of the hydrological and water quality response to future climate conditions.
- Run at least three different climate change scenarios to assess impacts of, but not limited to, salt water intrusion, inundation of wetlands, water availability and quality, changes in habitat and species distribution, and increased storms on the watershed.
- Conduct a NatureServe Climate Change Vulnerability Index to identify plant and animal species within the watershed that are particularly vulnerable to the effects of climate change.
- Conduct a vulnerability assessment of the Hickory Street landfill under at least two climate change scenarios to determine possible threats to area water quality and to the surrounding environmental justice community.
- Conduct Vulnerability-Consequence Adaptation Planning Scenario (VCAPS) to assess how changes in air temperature and higher incidences of fecal coliforms will affect certain segments of the (EJ) community including those with heart problems or asthma; the elderly; the very young; and the homeless.
- Inform and incorporate climate change impacts in strategies to be included in watershed management plan.

4. Development of Management Alternatives and Restoration Opportunities

Historical and recent science-based research data and information will be used to develop management alternatives to recommend load reduction goals and achieve the objectives of the WMP. An evaluation of these alternatives will be provided with recommendations for best course of action. The WMP will not include specific engineering design specifications. However, it will provide detail, maps, sketches, and information sufficient for stakeholders to conceptualize potential engineering needs (hydrological modification, retention structures, stream restoration, etc.); address political issues (land disturbance ordinances, jurisdictional boundaries and cooperation, and environmental justice); direct land use planning (zoning actions/changes, establishment of buffer zones; easements, coastal zone enforcement/regulations, watershed management, etc.), and base overall watershed management decisions.

In developing management alternatives, the WMP should address the following Issues:

The Bypass Channel. In the mid-twentieth century, the City of Mobile channelized the Creek from then-Davis (MLK) Avenue to Conception Street Road to alleviate flooding problems in neighborhoods built on streets terminating in wooded wetlands or near the Hickory Street Landfill in the historically black community known as The Bottom. Construction of a wider, straight bypass channel effectively “cut-off” a portion of the existing streamway that meandered through the wooded wetlands between the two road crossings. Consequently, a 1,800-linear foot segment of the historic streamway running north and east from the eastern bank of the Bypass Channel was lost to siltation, resulting in a “plug” at the southern terminus of the historic streamway emanating from a confluence with the Bypass Channel directly south of Conception St. Road.

The Creek’s pre-channelization footprint (Figure 1- historical photo from John Windley) included multiple bends that historically slowed water flow in the channel. However, with reduction of flow and restriction of water movement, siltation and stagnant conditions resulted, creating an attractive nuisance for mosquito larvae to flourish and contributing to degraded water quality in the general vicinity. Since oxygen is either incorporated through the water body via internal currents or lost from the system, low dissolved oxygen (DO) levels resulted, along with elevated temperatures and low water clarity, photosynthesis, and biota (Osmond and others, 1995). Water volume in this portion of channel was dramatically reduced, making navigation impossible.

In August 2002, the City of Mobile requested that USACE, Mobile District, conduct a study to address reestablishing flow back into the original creek channel, in hopes of improving the aquatic ecosystem in the floodplain under consideration for development of an urban park. Under the authority provided by Section 206 of the Water Resources Development Act (WRDA) of 1996 as amended, USACE developed a “Preliminary Restoration Plan for Environmental Restoration at Threemile Creek, Mobile, Alabama” in September 2003. The Corps recommended construction of a structure to divert existing flow into the original channel at a projected cost of \$850,000. No action was taken based upon the recommendation.

In 2008, the USACE released a Section 1135 Project Modification to Improve the Environment Feasibility Study that investigated four alternatives (including “no action”). The preferred alternative was to excavate the old channel from the entrance to a distance approximately 1,800 feet downstream to restore the channel to its original width and depth and allow a percentage of minimum flows and flood flows to enter the channel.

In partnership with the City of Mobile, the Dauphin Island Sea Lab (DISL), and the Alabama Department of Conservation and Natural Resources (ADCNR)-State Lands Division, MBNEP began to seek funding to implement this project. In order to determine the project cost and seek a less invasive strategy, a description of the scope of work described for the preferred alternative was conveyed to a local contractor with experience in environmental restoration projects. Their proposal involved conventional bucket excavation of the historic streamway and construction of a temporary “corduroy” haul road to provide access to track hoe excavators and dump trucks for removal of excavated material at a cost of \$1.8 million. Both the proposed cost of the project and the associated negative impacts to the floodplain remained obstacles to project completion.



Conformational Changes and Installation of Weirs/Drop Structures. In the early 1980's and after Hurricane Frederic, the U.S. Army Corps of Engineers (USACE), Mobile District conducted a Feasibility Study of flood problems along TMC. The resulting flood control plan selected for implementation consisted of channel widening and deepening from about 2,000 feet downstream of MLK. Avenue to a point about 6,300 feet upstream of Interstate 65 for a total distance of 5.6 miles. Five pairs of weirs with riprap aprons were installed over this reach, along with several riprap drops to slow velocity and dissipate energy. The plan also included a recreational component (which was not included in the project construction) to provide for the development of certain recreation facilities of the type associated with urban parks.

Mobile Coal Gasification Plant. Mobile Gas owns property that was once the location of a manufactured gas plant owned and operated from 1836 to approximately 1931 by Mobile Gas Works, the predecessor of Mobile Gas. The property is located at the corner of Dr. Martin Luther King, Jr. Avenue and Broad Street in Mobile, on the banks of the headwaters of One Mile Creek. From the early 1800's to the mid 1900's, gas was manufactured through a process of heating coal and oil in enclosed ovens and extracting gases for use in lighting. Concerns have been raised regarding possible threats to public health due to potential exposure to byproducts or chemical compounds – including tar and its constituent polycyclic aromatic hydrocarbons and volatile organic compounds – that remain in the soil from the historic manufactured gas operations process. Prior to redevelopment of this property for a new use, an assessment must be made as to what must be done to make the property suitable for a new use, followed by implementation of restoration measures.

In cooperation with the Alabama Department of Environmental Management (ADEM), the City of Mobile, and the Mobile County Health Department, Mobile Gas has performed ongoing evaluations of the former gas plant property to determine if the property poses a threat to public health or the environment beginning in 1994. Beginning in 2003, ADEM performed a targeted Brownfield site inspection to assess the potential threat posed to human health and the environment. Studies concluded that there is no indication of an imminent threat to human health, as the property exists today.

Analysis performed on the environmental samples collected from groundwater, surface water, sediments, surface soil, and subsurface soil indicate the presence of chemical compounds, some of which may be attributable to the manufactured gas plant property and others which may be due to some other source. Many of the chemical compounds detected are widespread in the environment and are commonly used in industry and consumer products.

Hickory Street Landfill. In response to requests by Representative Joseph Mitchell of the Alabama House of Representatives, the Alabama Department of Environmental Management (ADEM) asked the Alabama Department of Public Health (ADPH) to provide a public health evaluation of the Hickory Street Landfill, located in the City of Mobile, Mobile County, Alabama. The Hickory Street Landfill was an open active dump dating before 1940 through the 1970s. Around 1970 the site reverted to a permitted sanitary landfill, but prior to 1970, the landfill accepted any kinds of wastes without restriction. Waste products included electroplating sludges, solvents, organic and inorganic chemicals, heavy metals, cyanide and reactive sulfide wastes.

A portion of the dumpsite is located in a wetlands area that is prone to flooding. It has been stated that this portion of the dumpsite is 12 feet below the natural grade, and there are some materials buried there. Former dumpsite employees reported that it was not uncommon to see numerous drums marked with poison symbols. Reports indicated that heavy equipment operators would crush the 55-gallon drums containing ignitable liquids, and one fatality was reported when an equipment operator crushed a drum that exploded, burning the bulldozer and the operator.

There has never been a documented removal action or cleanup of the materials placed in the approximately 57-acre landfill, which is estimated to be 50 feet higher than the existing grade. The Hickory Street Landfill was covered with a two foot clay cap in the early 1980's and an estimated 130,680,000 cubic feet of industrial and commercial waste is buried under the capped portion. It has been recently noted that some areas of the cap have been compromised by erosion.

Monitoring wells on the landfill have confirmed the presence of volatile organics such as tetrahydrofuran, toluene, methyl ethyl ketone, and metals such as lead, cadmium, copper and zinc. The pesticide chlordane was also found. Methane gas has been known to build up in the monitoring wells and pop the tops off the wells. This pressure is can be attributed to the degrading of materials buried in the landfill. There are no other methane sources off site that would migrate to the Hickory Street Landfill.

The City of Mobile has undertaken fencing the entire site, but no fencing exists along areas adjacent to One Mile Creek. Although evidence of trespassing has been found, there were no signs that the soil was disturbed by excavation which would more readily aerosolize contaminants. Since these contaminants are located at a depth below the surface, making public contact unlikely, if a trespasser did cross the site, he/she would not be exposed to levels of contaminants that would cause health problems.

The ground and surface waters have shown a need for additional testing to determine if contaminants are migrating off site into the creeks and wetlands, but contaminants from the landfill have not been detected off site in either medium to date. Based upon ADPH tissue sampling, a fish consumption advisory for the northernmost portion of TMC approximately ½ mile northeast of the landfill was issued for the chemical chlordane and this impairment was included on the 2004 303(d) list. TMC was delisted for chlordane in 2010, since fish samples failed to indicate exceedances. The residents living nearest the site obtain drinking water from the Mobile Area Water and Sewer System.

After reviewing available data, ADPH determined there are no health concerns for the residents that live ½ mile from the site. Local citizens and government entities remain concerned that the site poses a significant health hazard. ADPH has not been able to substantiate this claim.

Hickory Street Landfill is a Targeted Brownfields Assessment (TBA) site. TBA sites are usually contaminated sites that have the potential to be remediated below the maximum contaminant level and then utilized for other purposes such as recreation areas or housing developments. This site will not employ housing as part as the revitalization effort. Hickory Street Landfill is located in a remote portion of northern Mobile with the nearest home site approximately ½ mile away. The City of Mobile has targeted this area for a recreational park with riding paths, walking trails, and scenic views as part of the Brownfields initiative. There is no provision for homes or other residential or commercial structures.

City of Mobile Tricentennial Green Space Master Plan. The City of Mobile Tricentennial Green Space Master Plan created by Mobile Tricentennial, Inc. with associated landscape architects Brandon Adams and Plauche Johnson Landscape Architects, proposed installation of a Three Mile Creek Linear Park with bike/running/walking trails running along the Creek from north of MLK Avenue upstream through Tricentennial Park to Langan/Municipal Park and on to the University of South Alabama.

Island Apple Snail Invasion. Anecdotally reported in 2004, invasive Island Apple Snails (*Pomacea canaliculata*) were confirmed in the lower, 32-acre pond at Langan/Municipal Park in 2008 and have since spread downstream through TMC. These opportunistic nuisances, voracious consumers of aquatic plant material, are thought to have been introduced by aquarium releases. Apple Snails are extremely mobile and travel over bottoms or surfaces, via entrainment in drifting plant material, by floating and subsequent drifting downstream, or by flushing during flood events. They mature rapidly (60-85 days) and lay up to 2,000 eggs with an 80% hatchability rate at weekly intervals. Eggs are laid on solid surfaces and emergent vegetation above water in conspicuous, bubblegum-pink egg cases, which can be seen in riparian vegetation and pilings from the Park downstream past the MLK Avenue Bridge.

The introduction of apple snails into TMC is of great concern, since it drains into the Mobile River, providing access to the 20,000-acre, SAV-rich Mobile-Tensaw Delta and the Port of Mobile, where barges and ships could convey them to the Tombigbee and Alabama Rivers and ports outside Alabama. Alabama Department of Conservation and Natural Resources (ADWFF), Wildlife and Freshwater Fisheries Division personnel have engaged in control efforts by chemical treatment with copper sulfate, manual removal and destruction of egg cases, vegetation removal, and introduction of predator species (redeer bream, *Lepomis microlophus*).

Their population and distribution are being carefully monitored. ADWFF has received a 2-yr CIAP grant for further control work through FY14

5. Development of Implementation Program and Financing Alternatives

Detailed and specific timelines, responsibilities and resource needs will assure management measures are effectively, efficiently, opportunistically and expeditiously implemented in order to achieve short and long-term water quality protection goals and objectives. The WMP will be used as a definitive reference or “needs” document to secure political interest and human and financial capital to implement recommended actions needed to protect water quality and achieve state water quality standards. The **Respondent** will propose a strategy for developing financing mechanisms that provide a stable funding source for the management and restoration of the watershed.

6. Monitoring and Evaluation

Watershed management programs require a broad and effective monitoring and evaluation system to track performance against objectives and provide information to help managers at all levels with implementation. Although measurement of externalities is difficult, they are fundamental to the justification of many watershed management programs, and projects should be careful to include measurements of baseline data, define expected outcomes, and monitor results. Useful and affordable tools, such as remote sensing, are increasingly being made available for measurement of externalities. Modeling is also being used successfully, in particular to study dynamic phenomena at the basin, watershed, and even sub-catchment scales (Watershed Management Approaches, Policies, and Operations: Lessons for Scaling Up, The World Bank, 2008). The **Respondent** will propose a strategy for monitoring the effectiveness of the actions recommended in achieving estimated load reductions and evaluating the success of achieving other outcomes identified in the plan.

Planner Responsibilities

An overview of the anticipated responsibilities of the Planner is described below and includes but is not limited to:

- *Literature Review:* A literature search for relevant court cases; federal, state or local planning documents; scientific studies and publications; or other documents that may contain information relevant to calculating and gaining understanding of streambed sediment loading, stream flows, water use/restrictions, etc. for tributaries to TMC Watershed will be conducted. Sources will be cited in the WMP.
- *An Examination of the Regulatory Framework:* A thorough review of applicable federal, state, and local rules, regulations, laws, statutes, and ordinances addressing erosion, sediment containment, storm water management, stream restoration, etc., shall be conducted and cited in the WMP if relevant to any WMP goal or objective. Authorities and responsibilities granted to local, state, and federal entities to address water quality issues, including nutrient and pathogen control and storm water runoff will be discussed in the WMP if especially applicable to the TMC Watershed. If an enforcement or mitigation role or responsibility can be attributed to a particular resource agency under an existing authority, the agency/action should also be described.
- *On-Site Inspections:* The listing and descriptions of management actions should be based upon on-site examinations of trouble spots. The likelihood of BMP implementation success/failure rates should also be described. Written summaries and photo-documentation of the general condition/health of impaired and threatened sites will be included in the WMP. No detailed surveys are required, but on-site visits are expected to be conducted by the selected Respondent of particular known problem areas throughout the Three Mile Creek Watershed.

- *Recommendations of Specific Actions:* Based on the results of watershed assessments conducted by USGS, ADEM, or any other authoritative sources, the WMP will describe specific action items calculated to protect and improve water quality, reduce volume and velocity of storm water runoff; reduce upstream erosion and sediment loading to the TMC drainage system and nutrient and pathogen inputs to Mobile River and Mobile Bay Estuary. Recommendations may include drawings, maps, sediment load reduction estimates; descriptions of proposed traditional/innovative best management practices (BMPs) or other engineered solutions; and expectations of effectiveness, longevity, and maintenance requirements of those practices that may be required to remediate or mitigate current and future water quality impacts. A generalized schedule identifying critical project milestones or action item implementation will also be a part of the WMP.
- *Cost estimates:* A (rough order of magnitude) cost estimate will be provided for elements contained in the WMP (e.g., BMP implementation; planning design/activities, education and outreach, etc.). Real estate/right-of-way acquisition should be based on current market value with application of best economic assumptions consistent with the lack of design specifications.
- *Implementation Finance Options:* A broad range listing or discussion of potential implementation financing alternatives should be provided. Options may include summary dialogues related to public-private partnerships, issuing bonds or tax-based financing, use of state revolving funds, and seeking Congressional and State appropriations. The firm or team selected as the Planner will assist in developing and implementing financial strategy and plan.
- *Construction/Construction Management:* It is intended that the Planner selected through this RFQ will have future responsibility for overall management and detailed design for implementation options and proposed in the plan without further competition.
- *Community Relations:* The contractor will be expected to attend and participate in TMC Steering, Technical, and Outreach committees. If requested, the contractor will meet with local communities, leaders, governmental representatives and legislators to coordinate assistance and support for actions developed or proposed in the plan. WMP development is generally characterized by the expression of many varied and often conflicted opinions. This diversity of public opinions is largely attributed to the inherent complexity of the scientific and sociological issues involved with management issues, but it is also intensified by human bias and self-interest. Differences among user groups regarding perceptions of environmental health can be expected with no clear understanding or consistent prioritization of the environmental concerns about the watershed among the many and varied stakeholder groups. The inherent complexity involved in developing a WMP requires that measures be taken to guarantee that consistent, factual information is presented to all citizens, with great care to ensure that the message is understandable.
- *Plan Product:* A limited number of hard copies of the WMP will be distributed. Electronic copies will be made available on the Internet for review/download to interested watershed stakeholders.

Knowledge of RFQ and Site Investigation

Respondents who submit a Statement of Qualification (Statement) are responsible for becoming fully informed regarding all circumstances, information, laws and any other matters that might, in any way, affect the **Respondent's** roles and responsibilities in the project. Any failure to become fully knowledgeable of any other matters that might in any way affect the project shall be at the **Respondent's** sole risk. MBNEP, participants on the TMC Watershed committees, Federal, state or local agencies, Mobile County, local municipalities and individuals assume no responsibility for any interpretations made by **Respondents** on the basis of information provided in this offer or through any other sources.

Any inspection or other on-site investigation of facilities during this RFQ process must be coordinated through Tom Herder, Watershed Protection Coordinator for the MBNEP. Mr. Herder can be contacted at 251-431-6409 or therder@mobilebaynep.com. **Respondents** acknowledge that they have acquainted themselves with the available information and have investigated conditions affecting the Project. Except as specifically identified, the MBNEP, participants on the TMC Watershed committees, federal, state or local agencies, Mobile County, local municipalities and participating individuals make no representations about the environmental conditions or the presence or absence of contaminated materials at the site(s) referenced in this solicitation.

Submittal Instructions

One original and Twelve (12) copies of the Statement of Qualifications should be sealed, marked and addressed as directed in this request. Statements may be mailed or delivered in person to the MBNEP at: 4172 Commanders Drive, Mobile, Alabama 36615 no later than 3 p.m. CST on November 9, 2012.

This RFQ is conducted under applicable provisions of Alabama Bid Law. Please note that Statements in response to this RFQ are sought only from experienced consultants and developers of large scale environmental planning and construction projects. **Respondents** are asked to carefully review the RFQ. Inquiries should be directed to Mr. Christian Miller at the MBNEP. Mr. Miller can be reached at: 251-431-6409 or at christian@auburn.edu. The mailing address is: 4172 Commanders Drive, Mobile, Alabama 36615.

Potential responders interested in this RFQ should contact this office and request placement on the RFQ mailing list and attend the Pre-Submission Conference in order to ensure receipt of amendments or other relevant information. **Respondents** to the RFQ should limit their submissions to **no more than 20 single-sided pages**, excluding illustrative materials explaining Planner's ability and experience to develop the proposed concept. All proprietary information should be identified as such by the **Respondent**. The MBNEP reserves the right to cancel or amend this RFQ, and will announce revisions to it by amendment.

Respondents are advised that the MBNEP, its employees, and/or agents shall not be liable at any time for any costs associated with or related to the Project, which are incurred by any submitter during any phase of this RFQ or subsequent amendment or cancellation. The schedule of activities for this solicitation is:

Proposed Time Line:

Solicitation Issue/Advertising Date	October 1, 2012
Pre-Submittal Conference	October 15, 2012
Statement Receipt Closing Date	November 9, 2012
Shortlist Notification	November 16, 2012
Shortlist Interviews	November 26-27, 2012
Award Exclusive Negotiating Right	November 28, 2012
Delivery of Final Product	November 29, 2013

A mandatory pre-submittal conference will be conducted at 10:00 a.m. CST on October 15, 2012, at the Mobile Area Water and Sewer System Park Forest Plaza located at 4725 Moffett Rd, Mobile, AL, 36618. Respondents will also be able to participate in the pre-submittal conference via Webex and conference call.

Statement Contents:

Statements submitted in response to this RFQ shall include a complete response to the requirements in the order presented below. The information should be presented in 8 .5” X 11” size and should have tabs keyed for each section. Statements should be a straightforward delineation of the **Respondent**'s capability to satisfy the intent and requirements of this RFQ, and should not contain redundancies or conflicting statements. An officer authorized to make a binding commitment for the **Respondent** making the Statement shall sign the Statement Form. Contents of the submitted Statements must include the following to be deemed responsive for evaluation:

A. Cover Letter – The Statement must include a cover letter transmitting the Statement and acknowledging receipt of any and all issued amendments to the RFQ. The letter should be addressed to: Ms. Roberta Swann, Director, Mobile Bay National Estuary Program, Ms. Swann can be reached at: 251-431-6409 or at rswann@mobilebaynep.com. The mailing address is: 4172 Commanders Drive, Mobile, Alabama 36615.

- The letter should introduce the Respondent’s project team. The Project Team is defined as the lead plus any key team members such as engineers, environmental experts, economists, contractors, bankers, etc. who are critical for consideration by the evaluation team.
- The cover letter should include the statement that the Project Team is willing to complete the Project as defined in this RFQ. **Respondents** are also advised to include a statement that the Project will conform to all applicable Federal, State and County laws and ordinances, and that they accept responsibility to ensure compliance with applicable Federal, State and County laws.
- The cover letter must also include a statement that the firm is not in arrears in the payment of any obligation due and owing to the State of Alabama, including tax payments and employee benefits and that it shall not become so during the term of the agreement if selected; a statement that the proposing **Respondent** will negotiate in good faith with the MBNEP and appropriate local entities, and a statement that the firm grants to the MBNEP a non-exclusive right to use, or cause others to use the contents of its Statement, or any part thereof, for any purpose.

B. Conceptual Approach & Methodology – **Respondents** are requested to demonstrate their understanding of this program by submitting a conceptual approach and methodology for project implementation. This narrative of no more than 20 pages should articulate the **Respondent**'s methods and approach of engaging both partners and area stakeholders to create a feasible watershed management plan and conceptual design that advances the goals and objectives stated in this RFQ. The narrative must include information regarding an approach and methods to involve the Stakeholders in the design and construction of the Project, an approach to community and stakeholder collaboration, and an approach to pre-development activities and phasing, and construction.

C. Experience and Background – Given the unique nature of the Project and its importance to local residents and political subdivisions, it is essential to fully understand the experience and capabilities of all key members of the Project Team. Respondent should include the following information about the Project Team:

- Provide complete information that explains the relationship between team members and their respective roles and contributions to this project. An organization chart would be an appropriate attachment to the cover letter.
- Include the existing commitments of the Project Team to other projects, as measured by the number and projects. Discuss how the team members would manage the additional work that would result if the team is selected for exclusive negotiations by the MBNEP.
- Resumes of all key Project Team members to be involved in the Project are required including: education and professional licensing qualifications, relevant experience, and details regarding the specific role proposed for the Project.

- A summary of the lead planner's experience in complex, environmentally sensitive projects that required interaction with a broad range of stakeholders from both the public and private sectors.
- Please provide the names and phone numbers of public agency references for at least two completed projects for which the Project Team acted as Consultant and that may be considered comparable to the project envisioned in this RFQ. For each reference, indicate the contact person's role in the completed project and the time period of their involvement.

The following information is required for each key member of the Project Team, and Respondents are requested to highlight projects where members of the Project Team have previously collaborated.

- Description of experience within the most recent ten-year period related to: watershed and regional scale engineering and planning projects relating to storm water management, site preparation, stream modification and diversion or environmental restoration.
- Demonstration of experience in completing projects of the scale and complexity envisioned in this draft RFQ on budget and on schedule.
- Extent of the experience of specific individuals on the Respondent's proposed project team in public/private development projects, including water supply, waste disposal, stormwater management, and environmental restoration.

Projects included for reference should be described only once, and the description should include: Project size in total land and building area; project scope; project location; development value; project length from inception to completion; roles of Project Team member or members during project execution, and client reference name, phone number and authorization to contact given references.

Respondents should identify with specificity any other relevant organizational, consulting or other available resources that will be committed to the Project.

D. Financial Capability – Given the complex nature of the Project, the Evaluation Team and MBNEP must understand the Planner's financial capability to undertake and successfully complete the Project.

- Describe the **Respondent's** experience (if any) in obtaining private equity and debt for public/private developments similar in scale.
- Indicate the source(s) of both debt and equity financing for each reference project stated above, and describe the **Respondent's** commitment and capability to provide capital for this Project.
- Please provide the names and phone numbers of one commercial bank reference.
- Under separate cover and marked confidential, provide most recent audited financial statements of the **Respondent** and principal participants in the business entity proposing this project.

Selection of Planner

Statements will be reviewed by an Evaluation Committee composed of representatives from the MBNEP, state and federal agencies, the Cities of Mobile and Prichard, Mobile County, and other stakeholders. The MBNEP reserves the right to contact **Respondents** with requests for clarification or additional information, or to arrange other follow up activities it deems appropriate. Selection of a Planner will be based on: the quality, clarity and thoroughness of the submitted Statement and its compatibility with the RFQ's stated objectives, statements of intent, and submission requirements, plus the results of information gathered from interviews with shortlisted **Respondents** and client reference checks.

The following criteria, corresponding to the categories set forth in the Submittal Instructions will be used to evaluate **Respondents'** Statements. The weighted score for each category is indicated in parentheses:

A. Cover Letter / Comprehensive Project Team (5%)

1. Completeness of information on proposed project team, and explanation of relationships between members that clearly depicts the roles and contributions of various members.
2. Availability of project team members, and the effectiveness of their plans for balancing the workload associated with a potential project with other existing commitments.
3. Recommendations provided by references for the **Respondent**.

B. Approach to Implementation (10%)

1. Narrative demonstrating the potential to create feasible watershed management plan and conceptual design that advances the goals stated in this RFQ.

C. Conceptual Approach & Methodology (25%)

1. Narrative outlining **Respondent's** approach to satisfying the following four requirements: "reduce upstream sediment, pathogen, nutrient, and trash and litter loads into the TMC system, • reduce outgoing nonpoint source pollutant loads into TMC and the Mobile Bay Estuary, remediate and restore past effects of waste disposal and nutrient, pathogen, and sediment loads, identify opportunities for increased public access, recreation, and ecotourism; and mitigate future impacts of development in the watershed, where feasible."
2. Narrative outlining **Respondent's** experience and proposed approach and methods to working with multiple stakeholders, including State and City agencies, private citizens, business owners, and institutions, as well as managing the development process, in a manner that advances the goals stated in the RFQ.
3. The narrative must detail the **Respondent's** approach to ensure a project design is sensitive to adjacent neighborhoods and environmental justice issues and includes due regard for threatened and endangered species, all applicable environmental regulations and BMPs, and preservation and creation of "green space" and public access". The narrative must include information regarding an approach and methods to involve the Stakeholders in the design and construction of the Project, an approach to community and stakeholder collaboration, and an approach to pre-development activities, phasing, and construction.

D. Experience and Background (40%)

1. Demonstrated experience as a Planner working with public entities to structure and implement watershed and regional scale engineering and planning projects relating to storm water management, site preparation, stream modification and diversion, environmental restoration, and expansion or provision of public access.
2. Demonstrated experience in completing projects of the scale and complexity envisioned, on budget and on schedule.
3. Extent of the experience of specific individuals on the **Respondent's** proposed project team in public/private development projects of similar nature.

E. Financial Capacity (20%)

1. Demonstrated ability in previous projects of the scale envisioned, to obtain private equity and debt for development via public/private partnerships.
2. Quality of documentation of available financial resources through audited, references, or other sources.

Once it has completed this solicitation process, the MBNEP will be available to debrief **Respondents** who have submitted statements. The MBNEP will not share information from Statements made by other **Respondents**.

Shortlist Consideration

The MBNEP acting as an agent for the Evaluation Committee, reserves the right to accept, reject, and/or interview any or all qualified **Respondents** and intends to select a limited number of **Respondents** for interviews. Qualified **Respondents** shortlisted for interview include those responsible **Respondents** who submit Statements initially judged by the Evaluation Committee to be reasonable. Shortlisted **Respondents** selected for interview shall be notified of the time, date and location for oral presentations. Upon completion of the interview process, MBNEP reserves the right to immediately enter into negotiations with a selected **Respondent** and execute the standard MBNEP Professional Services Contract.