

## **Watershed Management Plan – Work Plan**

Preparation of a Watershed Management Plan (WMP) shall, at a minimum, involve the following tasks and provisions. Work plans for Nine Element Watershed Management Plans will include additional tasks to ensure adherence to the EPA's Framework, including Quality Assurance Protection Plans (QAPPs) and data collection as necessary.

### **Task 1: Project Initiation Meeting**

The Contractor, the Department, and any partners responsible for managing the project, shall hold an initial meeting to review and agree upon the project scope and schedule, project requirements, roles and responsibilities, the selection process for procuring consultants, State Environmental Quality Review Act (SEQRA) compliance requirements, MWBE requirements, ADA requirements, the number of public meetings and techniques for public involvement proposed for the project, and any other information which would assist in project completion. In addition, the composition of a project advisory committee shall be discussed during the project initiation meeting. The Contractor, or a designated project partner, shall prepare and distribute to all project partners a brief meeting summary clearly indicating the agreements reached at the meeting. Work on subsequent tasks shall not proceed prior to Department approval of the proposed approach as outlined in the meeting summary.

Products: Project initiation meeting held with appropriate parties. Written meeting summary outlining agreements reached.

### **Task 2: Watershed Advisory Committee**

Establish a watershed advisory committee to facilitate communication and cooperation of the involved local governments, State agencies, and other stakeholders essential to preparation and implementation of the watershed plan. The committee will help focus the planning process, assist in reviewing consultant proposals, interact with the project administrator (if one is identified) and review work products. The committee shall be representative of project stakeholders, including representatives of State, county and municipal agencies with jurisdiction over project activities or the project area, and non-governmental and community-based organizations. A draft list of proposed members shall be circulated to the Department for review and approval prior to establishment of the committee. If appropriate, a memorandum of agreement (MOA) or other instrument that describes the purposes and responsibilities of the watershed advisory committee and its partners shall be executed.

Products: Draft and final list of proposed members of watershed advisory committee. Draft and final MOA or other instrument. Watershed advisory committee established.

### **Task 3: Procurement of Consultant (if applicable)**

Prepare a Request for Proposals (RFP) or similar instrument (if applicable) including a complete project description with site conditions, expected final results, a schedule for completion, MWBE requirements, and criteria for selecting a preferred proposal. Consultant services requested shall include all applicable tasks, activities and responsibilities outlined in the "Project Components" section of this work program.

The Contractor must actively solicit bids for contracts and subcontracts from qualified State certified MWBEs which can be identified using the NYS Directory of Certified Firms (<https://ny.newnycontracts.com/>). The Contractor must retain records of the procurement process including direct solicitation to MWBEs; results; and any actions that its subcontractors have taken toward meeting

MWBE contract participation goals. To demonstrate good faith efforts to achieve MWBE contract goals the following should be retained:

- Evidence of outreach to MWBEs: mail, email, phone calls and follow-up;
- Written responses by MWBEs to the grantee/vendor's outreach;
- Copies of search(es) of the directory and advertisements for participation by MWBEs in appropriate general circulation, trade, and minority or women-oriented publications;
- Attendance at any pre-bid, pre-award, or other meetings, if any, scheduled by the grantee with MWBEs including dates and location;
- Description of how the scope of work maximizes opportunities for MWBE participation; and
- Description of how non-MWBE subcontractors' have engaged MWBEs to undertake part of the project's work or to procure equipment/ materials/supplies.

NYS Department of State requires a licensed professional engineer, architect or landscape architect licensed to practice in New York State for preparation and certification of final designs and construction documents, and for supervision of construction.

Submit the RFP or similar instrument to the Department for review and approval prior to release for solicitation of proposals.

Products: Approved RFP or similar instrument released through advertisement in local papers, the New York State Contract Reporter, or other appropriate means. Documentation of procurement including direct solicitation to MWBEs and actions taken toward meeting MWBE contract participation goals.

#### Task 4: Subcontract and Compliance with Local Procurement Requirements

Prepare the draft subcontract(s) to conduct project work with the selected consultant(s). The subcontract(s) shall contain a detailed work plan with adequate opportunity for review at appropriate stages of product completion, a payment schedule with payments tied to receipt of products, and project costs.

Incorporate the Department's comments on the subcontract work plan, or scope of services, prior to execution of the final subcontract(s).

The municipal attorney, chief legal officer or financial administrator of the municipality shall certify in writing to the Department that the Contractor fully complied with applicable provisions of General Municipal Law and with local procurement procedures. A procurement certification form will be supplied by the Department.

The Contractor's procurement record and consultant selection are subject to approval by the Department.

The Contractor remains responsible for the legal sufficiency of the subcontract in accordance with the requirements in the Master Grant Contract and Attachment A-1.

Products: Consultant(s) selected and approved by the Department. Executed subcontracts and written certification of compliance with procurement procedures.

#### Task 5: Preparation of Community Outreach/Participation Plan

Prepare a method and process to encourage community participation in the planning process. The outreach plan will identify key individuals, organizations, and entities to be involved, and will identify the visioning process and the roles and responsibilities in coordinating the entire outreach process, logistics, and the proposed schedule of public meetings and other public engagement activities such as social media, workshops, charrettes, etc. Meetings and public engagement shall be scheduled in a manner that maximizes attendance and participation from all interested community members.

Outreach efforts should encourage participation from populations who are frequently underrepresented in this process, including immigrants, refugees, and minorities. Meetings and public engagement should be scheduled at times that are convenient to underrepresented communities (e.g., at night or on weekends instead of during the day) and at locations that are ADA accessible. Meetings shall be advertised with generous advance notice to garner maximum publicity, awareness, and participation.

All public meetings shall be publicized in the community through press releases, announcements, individual mailings, and any other appropriate means.

A summary of each public outreach session shall be made available in written form and through other appropriate means, such as websites. The outreach plan and all components, such as press releases, are subject to review and approval by the Department.

Product: Community outreach plan submitted to the Department for review and approval.

#### Task 6: Project Advisory Committee Meetings

Hold a second project meeting with the consultant(s), and Project Advisory Committee, to review project requirements, site conditions, and roles and responsibilities; identify new information needs and next steps; and transfer any information to the consultant(s) which would assist in completion of the project.

The Project Advisory Committee shall meet regularly over the course of the project to guide project development and review findings and documents. Following each meeting, the consultant(s) shall prepare and distribute a brief meeting summary including attendees, main topics discussed, decisions agreed upon by committee, and action items.

Products: Project Advisory Committee meetings. Written meeting summary of each meeting

#### Task 7: Initial Vision and Watershed Goals

Prepare an initial vision statement that expresses an idea of what the watershed will become, and clearly describes what the community hopes to accomplish. The vision will set the tone of the watershed plan and will be used throughout the planning process. In addition, an initial set of watershed goals and objectives will be created to provide a realistic framework for achieving the vision as well as help focus limited resources. See the Department's guidebook: Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning, Chapter 3, for more information.

Products: Draft initial vision statement, goals and objectives submitted to the Department for review and approval.

#### Task 8: Watershed Characterization

Task 8.1 Description and Assessment of the Waterbody(ies) and Watershed Resources

Conduct an inventory of the waterbody(ies) and watershed(s) based on existing data (e.g., DEC Waterbody Inventory and Priority Waterbody List, DEC Water Quality Classifications, Drinking Water Source Protection Program Plans, and state, county, regional or local planning and monitoring programs), and new information collected specifically for this project, as necessary. The scale for which the primary unit of analysis, presentation and recommendations for protection and restoration shall be at the subwatershed level. Based on the inventory, prepare a description and assessment that:

- Delineates the watershed and its constituent subwatershed determined by an analysis of topography, existing drainage infrastructure, surface hydrology, field observation, and other factors as appropriate.
- Identifies and describes the geographic setting and features of the watershed, including topography, geology, hydrography, floodplains, soils, areas of erosion, and precipitation.
- Identifies, describes and maps infrastructure (e.g., roads and bridges; stormwater infrastructure including outfalls; dams, and other impoundments or flow constriction structures).
- Identifies and describes well heads and public water supplies.
- Identifies and describes groundwater recharge areas contributing to aquifer replenishment, stream base flow, or wetland hydrology.
- Describes demographics, and historic, current, and projected population density.
- Describes historic, current and projected land uses and land cover.
- Describes zoning
- Identifies water quality classifications for all segments of the waterbody.
- Identifies and describes impairments to water quality and living resources.
- Identifies point sources and hot spots (i.e., NPDES Phase I & II permittees, septic and underground storage tanks, landfills and superfund sites).
- Describes living resources (e.g., fish, macroinvertebrates), and overall watershed habitat.
- Describes key water and habitat resources warranting special protection or restoration.
- Describes a projected build-out for the community(ies) based on current land use plans and regulations.
- Estimates impervious cover for each subwatershed.
- Estimate runoff and pollutant loadings for each subwatershed under current conditions, and anticipated pollutant loads resulting from new or expanded uses in the watershed.

Submit the draft Waterbody and Watershed Inventory Report to the Department for review and approval and incorporate the Department's comments in the final watershed characterization.

Products: Written Description and Assessment of the Waterbody(ies) and Watershed Resource supported by maps, tables, and graphics, submitted in either ArcGIS format, or similar product acceptable to the Department, as appropriate.

#### Task 8.2: Description and Assessment of the Ability of Local Laws and Programs to Implement Best Management Practices to Protect Water Quality

Identify and assess the ability and effectiveness of local laws and programs to implement best management practices to protect surface and groundwater quality and habitat, from point and nonpoint source pollution, including that related to new and existing development, road and bridges, onsite wastewater treatment systems, marinas, forestry and agriculture, habitat and hydrologic modification (such as channelization of streams), and riparian area management. The assessment shall be based on the nonpoint assessment tool developed by the Department to identify gaps in local programs and practices, and follow the methodology explained in Section 2, Nonpoint Assessment and Gap Analysis of Protecting Water Resources through Local Controls and Practices: An Assessment Manual for New

York Municipalities at:

[https://webgen1files.revize.com/geneseeny/Document%20Center/Archive/2006/protecting\\_water\\_resources.pdf](https://webgen1files.revize.com/geneseeny/Document%20Center/Archive/2006/protecting_water_resources.pdf), or equivalent tool determined to be acceptable to the Department. The assessment shall identify and document any gaps in data or information. The assessment tool is intended to result in the identification of strengths and gaps in a municipality's ability to effectively manage pollution, as related to local regulations, routine operation and maintenance practices, training and outreach programs.

The assessment of the ability of local laws and programs to implement best management practices shall be conducted in an interactive manner and include the following:

- A description of county and local agencies as they affect nonpoint source pollution, including stormwater management, habitat protection, and restoration in the watershed. A narrative of federal and state roles will be provided to the Contractor by the Department for incorporation into this task. Identify and describe the roles of county and local agencies.
- A description and comprehensive assessment of the ability of local land use plans, regulations, (including zoning, site plan review, subdivision regulations, stormwater management, and wetlands, watercourse and flooding regulations), programs and practices, (including road de-icing practices, basin maintenance schedules, salt storage placement and volumes, ditch maintenance, etc.), to implement best management practices to control point and nonpoint source pollution and protect habitat, including an analysis of their strengths and weaknesses as they relate to the implementation of management practices.
- Completed municipal assessment forms (see Appendix F, of Protecting Water Resources through Local Controls and Practices: An Assessment Manual for New York Municipalities).
- A listing of municipal representatives who were actively engaged by the contractor in completing the assessment forms.

Submit the draft Assessment of the Ability of Local Laws, Programs and Practices to Implement Best Management Practices to the Department for review and approval and incorporate the Department's comments in the final assessment report.

Products: Written Description and Assessment of the Ability of Local Laws and Programs to Implement Best Management Practices to Protect Water Quality

Products: Full Watershed Characterization including both a written description and assessment of the waterbody and watershed as well as an assessment of local laws, programs, and practices to control nonpoint source pollution.

Task 9: First public participation/outreach meeting

Hold a public information meeting during the watershed and waterbody characterization phase of the project, to solicit public input in defining and characterizing the nonpoint source pollution issues in the waterbody, refine the watershed vision, goals and objectives, and to review and discuss water quality and watershed protection and restoration issues. A written summary of public input obtained at this meeting shall be prepared and provided to the Department for review and comment.

Products: First public information meeting held. Minutes/summary of meeting prepared including any presentations or handouts and submitted to the Department.

Task 10: Refinement of Vision and Watershed Goals

Based on information gathered from the characterization and comments from the public, refine the initial vision statement and watershed goals and objectives, as needed. Any changes shall be submitted to the Department for review and approval.

Products: Refined vision statement, goals and objectives, submitted to the Department for review and approval.

#### Task 11: Watershed Management Recommendations to Achieve Goals and Objectives

##### A. Identify and Describe Management Strategies and Recommendations

Based on the characterization of the waterbody and its watershed, identify management strategies and recommendations to protect and restore the resources of the waterbody and its watershed. See the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, Chapter 5 & 6, for more information.

Regulatory and Programmatic actions may include:

- Land use management, such as: comprehensive plans, zoning, site plan review, erosion and sediment control.
- Improved stormwater management practices, including Low Impact Development and Green Infrastructure.
- Onsite wastewater treatment system management.
- Wetlands and watercourse protection (including buffer area establishment).
- Groundwater and aquifer protection, floodplain management.
- Open space protection and land conservation and protection and forest management.
- Training, education, and stewardship programs.
- Identification of monitoring and research needs to advance watershed management goals.

Restoration and Protection Projects may include:

- Watershed-wide and site specific actions to restore and protect water quality and living resources/habitat.
- Stormwater remediation measures to reduce pollutant loadings in each subwatershed (e.g., wetland creation, vegetative treatment systems, retrofitting, reduction of impervious surfaces).
- Identifying potential sites for fish and wildlife habitat restoration including areas within streams, stream corridors, freshwater and tidal wetlands, and ponds for potential improvement to ecological integrity (e.g., habitat structure, dynamics, connectivity, and quality).
- Structural activities such as stream restoration or stormwater treatment system retrofits.
- Establishing education programs to build awareness and stewardship. This could involve activities such as storm drain stenciling that are implemented on-the-ground and are identified during field assessments.

Available resources include: (1) [Watershed Plans; Protecting and Restoring Water Quality](#) (New York State Department of State, 2009); (2) [NYS DEC Nonpoint Source Guidance and Technical Assistance Page](#) which include links to BMP catalogues approved by the Nonpoint Source Program and consistent with Clean Water Act Section 319.

Submit the draft management strategies and recommendations to the Department for review and approval, and shall incorporate the Department's comments in the final management strategies.

Products: Identification and written descriptions of specific management strategies and recommendations for water quality and habitat protection and restoration.

B. Prioritize Recommended Projects and Actions and Key to Map(s)

Develop, and submit to the Department for review, a prioritized list of recommendations, with supporting justification, and linked to maps and should include photographs showing project locations and conditions. See the Department's guidebook: Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning, Chapter 5, for more information. The prioritization process will include:

- Evaluating subwatersheds according to impairments and/or threats to water quality and habitat.
- Identifying priorities within subwatersheds for focused nonpoint source pollution management action.
- Ranking projects and actions within each subwatershed according to anticipated reduction in nonpoint source pollution or protection of unimpaired resources. Potential ranking factors may include:
  - watershed goals, subwatershed priority, and vulnerability
  - pollutant reduction/protection afforded, water resources and/or habitat value
  - cost, permitting, and maintenance
  - land owner cooperation, public access and visibility
  - partner involvement and innovation

Products: Draft list of prioritized recommendations, keyed to maps and photographs

Task 12: Second Public Participation/Outreach Meeting

In consultation with the Department, a second public outreach/participation meeting shall be conducted to allow for public review and comment on the Watershed Management Recommendations and Prioritization. A written summary of public input obtained at this meeting shall be prepared and provided to the Department for review and comment. Public input shall be incorporated into the Final Watershed Management Plan to the satisfaction of the Department prior to finalization and/or publication of the plan.

Products: Public information meetings held. Minutes/Summary of meeting including any presentations or handouts.

Task 13: Implementation Strategy and Schedule

Prepare a strategy and schedule to implement the identified watershed management practices and approaches, including the specific projects and other actions that were identified through analysis and public participation. See the Department's guidebook: Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning, Chapter 5, for more information. The implementation strategy will:

- Clearly articulate priorities, measurable objectives and steps to implement the identified protection and restoration strategies.
- Include cost estimates, potential funding sources, and a phasing schedule noting lead/involved organizations for each action.
- Include a schedule for periodically updating the plan.
- Articulate the ongoing role of the watershed advisory committee.

The Implementation Strategy will include a matrix of prioritized projects and other actions for advancing the implementation of the goals and objectives of the watershed plan, including steps needed to implement the specific projects (e.g., feasibility, design, permitting, construction), timeframe for implementation; short term (e.g., immediate to 1 year), medium term (e.g., greater than 1 year, up to 5 yrs.), or long-term (e.g., greater than 5 years), cost estimates, potential funding sources, regulatory approvals needed, and likely project sponsor (agency or organization lead) and project partners.

Submit the draft Implementation Strategy to the Department for review and approval, and incorporate the Department's comments in the final Implementation Strategy.

Products: Draft and Final Implementation Strategy and Schedule Report

#### Task 14: Tracking and Monitoring

Prepare a plan that includes strategies for tracking implementation of projects and other actions, and monitoring water and related resources to measure success in achieving project goals and objectives. The tracking and monitoring plan shall identify methods to track implementation of projects and other actions and gather baseline data on watershed conditions toward assessing the effectiveness of implementation over time. See the Department's guidebook: Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning, Chapter 6, for more information.

The plan would include a method for tracking the implementation of projects and actions, and periodic monitoring of water and related resources. In addition, the plan may include identification of potential parties to conduct monitoring activities, potential funding sources, and methods of data management.

Submit the draft tracking and monitoring plan to the Department for review and approval, and incorporate the Department's comments in the final monitoring and tracking plan.

Products: Draft Monitoring and Tracking Plan

#### Task 15: Draft Watershed Management Plan

Prepare the Draft Watershed Management Plan, which shall include the elements described in the previous tasks. The Draft Plan shall reference all sources of information and identify any information gaps and issues requiring further study. The watershed management plan will contain six main sections: Executive Summary, Introduction, Characterization (includes the Description and Assessment of the Waterbody(ies) and Watershed Resources and Description and Assessment of the Ability of Local Laws and Programs to Implement Best Management Practices to Protect Water Quality), Watershed Management Recommendations, Implementation Strategy, Monitoring and Tracking. The executive summary and an introduction, in addition to the four sections drafted individually in this workplan will be combined into a single, cohesive Watershed Management Plan.

Executive Summary - The executive summary will provide a concise reference for the entire document. It will present key points of the watershed plan, provide a brief overview of the purpose of the watershed plan, who was involved in the planning process, and highlight the vision, main findings, and list watershed goals, and recommendations.

Introduction - The introduction will describe the watershed plan (including where the watershed is located, general facts about the watershed and the communities within its boundaries, and general demographics) and provide a basic understanding of the planning process (including partners involved and how they contributed, methodologies used to prepare the plan) to give the reader an understanding of the watershed

and why watershed planning is important. The introduction will also contain the watershed vision - what it means to the community and how it will shape the future of the watershed.

**Characterization** - The characterization will provide an inventory and analysis describing the current state of the watershed and assessment of programs and practices in place for controlling pollution. This section will delineate the watershed and subwatershed boundaries and describe its waterbodies, describe physical and biological characteristics, including how the watershed functions, explain existing land use and land cover patterns, and identify trends within the watershed. The characterization will include an identification of sensitive resource areas, water quality issues, pollutants, and corresponding activities impacting water resources. This section will also assess the programs and practices in place for controlling pollution, describe the assessment process used and discuss the gaps found during the assessment. The characterization is the basis for the development of watershed management recommendations.

**Watershed Management Recommendations** - This section will explain how water quality will be protected and restored within your watershed through a series of projects and actions developed to correct existing impairments and prevent future impacts to water quality. You should explain how you arrived at these specific recommendations and include a discussion of the assessments conducted which support the recommendations. While recommendations should be supported by data, consider moving extensive technical information into an appendix or supplemental report.

**Implementation Strategy** - This section will set the stage for implementation by identifying the actions needed to address the problems and opportunities in your watershed. It will set out an implementation schedule, lay out priorities, establish realistic expectations for partner involvement, and outline budget needs.

**Monitoring and Tracking** - This section will outline a proposed long-term monitoring and tracking plan, describe indicators and performance criteria for monitoring restoration projects, establish milestones and tracking mechanisms to evaluate progress over time, and propose mechanisms for reporting progress and updating the watershed plan. Creating a plan for observing changes in water quality will help you understand how well certain practices work and how to adapt your plan to continue to provide water quality improvement.

See the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, Chapter 5, for more information.

Submit the Draft Watershed Management Plan to the Department for review and approval. In addition, the Draft shall be distributed to members of the watershed advisory committee for review.

Products: Draft Watershed Management Plan

#### Task 16: Third Public Participation/Outreach Meeting

In consultation with the Department, a public participation/outreach meeting shall be conducted prior to preparation of the final Watershed Management Plan to allow for public review and comment on the draft document. A written summary of public input obtained at this meeting shall be prepared and provided to the Department for review and comment. Public input shall be incorporated into the Final Watershed Management Plan to the satisfaction of the Department prior to finalization and/or publication of the plan.

Products: Public information meetings held. Minutes/Summary of meeting including any presentations or handouts.

#### Task 17: Final Watershed Management Plan

Complete the Final Watershed Management Plan, which shall incorporate and reflect comments received from the Department, the watershed advisory committee, and the public. Comments and revisions suggested by the Department must be incorporated into the plan to the satisfaction of the Department prior to finalization and/or publication of the document.

Products: Final Watershed Management Plan. Electronic data for all Geographic Information System-based mapping products and associated spatial data must be submitted in either ArcGIS format, or similar product acceptable to the Department, and comply with the requirements for Contract GIS Products.

#### Task 18: MWBE Reporting

Comply with MWBE Reporting Requirements by completing the following actions:

- Submit Form C - Workforce Employment Utilization to report the actual work force utilized for this contract broken down by specified categories (every March 31, June 30, September 30 and December 31).
- Submit Form D - MWBE Utilization Plan to indicate any state-certified MWBE firms selected to work on this contract. Form D must be updated and submitted to the Department whenever changes to the selected MWBE firms occur (addition or removal).
- Record payments to MWBE subcontractors using DOS funds through the New York State Contract System (NYSCS).

Technical assistance for use of the NYSCS system can be obtained through the NYSCS website at <https://ny.newnycontracts.com> by clicking on the “Contact Us & Support” link.

Products: Ongoing reporting through NYSCS during the life of the contract. Form C submitted on a quarterly basis and Form D submitted as necessary.

#### Task 19: Project Status Reports

Submit project status reports semi-annually (every June 30 and December 31) on the form provided, including a description of the work accomplished, the status of all tasks in this work plan, schedule of completion of remaining tasks, and an explanation of any problems encountered.

Products: Completed project status reports submitted to the Department during the life of the contract.

#### Task 20: Final Project Summary Report and Measurable Results

Submit the Final Project Summary Report and Measurable Results electronically at: <https://forms.office.com/g/eZERFeEeKM>.

Products: Final Project Summary Report and Measurable Results submitted to the Department.