**Goal:** Gather information for eventual incorporation into the Minnesota Stormwater Manual. The Stormwater Manual is used by stormwater practitioners to make decisions related to stormwater management, such as selecting appropriate Best Management Practices, meeting stormwater regulatory requirements, and determining pollutant and stormwater volume reductions associated with implementation of different stormwater management practices.

**Objective:** The Contractor will update existing information and provide new information on pretreatment and iron-enhanced treatments for incorporation into the Minnesota Stormwater Manual. The contractor will conduct a webinar on pretreatment updates to the manual.

**Task A.** Provide recommendations to the MPCA on sizing criteria for different types of pretreatment practices (e.g. forebay, filter strip, proprietary devices). These recommendations can be based on information in the literature, monitoring data, and/or from correspondence with stormwater practitioners.

1. Subtask a. Work with the MPCA PM and technical staff to identify appropriate approaches for pretreatment sizing.
2. Subtask b. Provide a technical memo providing recommendations to the MPCA on sizing criteria for different types of pretreatment practices (e.g. forebay, filter strip, proprietary devices). The memo includes a summary of the information used to develop the recommendations, including citing information sources. If appropriate, include example sizing calculations. NOTE: Sizing criteria may be in the form of design guidelines and/or quantitative values. For example, the Minnesota Stormwater Manual contains the following language on sizing of pretreatment practices: “It is recommended that pretreatment practices be designed for easy maintenance and capture a minimum of 25 percent of the sediment from runoff.”

**Task B.** Develop a tool for selecting the appropriate pretreatment practice.

1. Subtask a. Work with the MPCA PM and select stakeholders to identify factors used to determine the appropriate pretreatment practice for permanent structural treatment practices. Potential factors include, but are not limited to pollutant, space requirement, relative cost, ease of maintenance, and whether or not the practice has been certified or tested.
2. Subtask b. Develop a draft screening tool in a format that is easily understood and implemented by stormwater practitioners (e.g. Excel spreadsheet or embedded Drupel tool). Provide support documentation for the tool.
3. Subtask c. Distribute the tool for review by MPCA staff and external stakeholders. Incorporate suggested changes into a final version of the tool.

**Task C.** Compile information on sand filters and pond benches where iron enhanced treatments are incorporated into the practice.

1. Subtask a. Convene a scoping meeting with MPCA staff to method for identifying data collection needs and determine the appropriate platform for storing the data (e.g. Excel spreadsheet, GIS database, etc).
2. Subtask b. Develop data collection template to identify data needs.
3. Subtask c. Identify sand filter and pond bench practices where iron treatment is utilized to enhance phosphorus retention. For each practice, collect data identified in Task C, Subtask b.
4. Subtask d. Incorporate data from Task C, subtask c, into the platform identified in Task C, Subtask a.
5. Subtask e. Follow-up with data contributors to verify the accuracy of information collected and stored in the final platform.

**Task D.** Conduct a 90-minute webinar at the MPCA. The webinar will cover newly developed information on pretreatment practices and data collected for iron-enhanced treatments. MPCA will develop the material for the webinar. Consultant will review and finalize the material for the webinar. Consultant will present the technical information during the webinar.