**Objective 2: Determine the likely extent or occurrence of constructed stormwater ponds that do not effectively retain phosphorus and identify conditions that likely lead to sediment phosphorus release.**

**Task A: Estimate the extent and occurrence of constructed stormwater ponds that do not effectively retain phosphorus.**

Review existing literature and contact individuals who can provide information on which to estimate the occurrence of constructed stormwater ponds that do not effectively retain phosphorus. The information to be used in the evaluation will be limited to areas with similar climate characteristics and will include Minnesota, Iowa, Michigan, Wisconsin, and Ontario, Canada.

**Task B: Identify conditions likely to contribute to phosphorus export from constructed stormwater ponds.**

* Document major biogeochemical and geochemical mechanisms driving phosphorus release from the sediments and retention by the sediments in constructed stormwater ponds.
* Develop a conceptual model of the major mechanisms.

**Task C: Compile information for constructed stormwater ponds identified as potentially exporting phosphorus into a spreadsheet or database.**

Compile the following information, if available, for constructed stormwater ponds identified as potentially exporting phosphorus into a spreadsheet or database

* Pond name
* Pond location
* Year constructed
* Maintenance record
* Design information
* As built information (if available)
* Monitoring data (if available)
* Chemistry (i.e. TP, SRP, iron, DO) data in the pond (if available)
* Chemistry in any inflows or outflows (if available)
* The occurrence of stratification of temperature, conductivity, and DO in the pond (if available)
* Soil/sediment chemistry information (if available)
* Contact information

**Task D: Conduct a high level assessment of characteristics, trends, and patterns**

* Based on the data obtained in Goal 2, Objective 2, Task C, assess if there are indicators in the data that could be correlated to a pond either retaining or releasing phosphorus.

**Task E: Submit a report**

Develop a report that includes the findings and information from Goal 2, Objective 2, Tasks A through D