## Forensic Sediment Sampling to Support Environmental Litigation



Client: Litigation Support, Philadelphia, PA

**Brownfield Science & Technology, Inc. (BSTI)** was hired to provide local knowledge and experienced field support for a fast-paced forensic investigation of sediment transport from a high profile environmental remediation site.

BSTI evaluated the history and existing data for the site then worked with the client and a consultant specializing in environmental forensic litigation to ensure that the scope of work and sampling plan was complete and practically implementable. BSTI planned access to eight areas on a six mile stretch of an urban waterway including four separate lakes.

BSTI then implemented the sampling plan during an intense multi-day field effort in order to meet the required project timeline. Sampling required field identification of recent and historic depositional areas and retrieval of representative sample materials from a variety of environments accessible only by foot or small boat. Samples were collected by a variety of methods, selected based on conditions in the field, including small dredges and various hand coring tools. Collection of samples for laboratory analysis was implemented with a high level of quality assurance and quality control exceeding standard EPA sediment sampling protocols. A total of over 50 samples were collected from 24 separate locations within a three-day period.

**Objective:** Demonstrate the potential ongoing contaminated sediment transport from an impacted lake.

## Services

- Performed sediment assessment along six-mile waterway
- Completed river and lake sediment sampling
- Identified sediment depositional features of various ages
- Sampled core collection for metals and SVOC analysis
- Collected and froze additional sample volumes and for forensic analysis

## **Equipment and Materials**

- Small boat
- Ekman grab sampler
- Wildco hand corer
- Ogeechee sediment sampler
- Hand augers

