

Intensive Survey Follow-Up

Two objectives proposed:

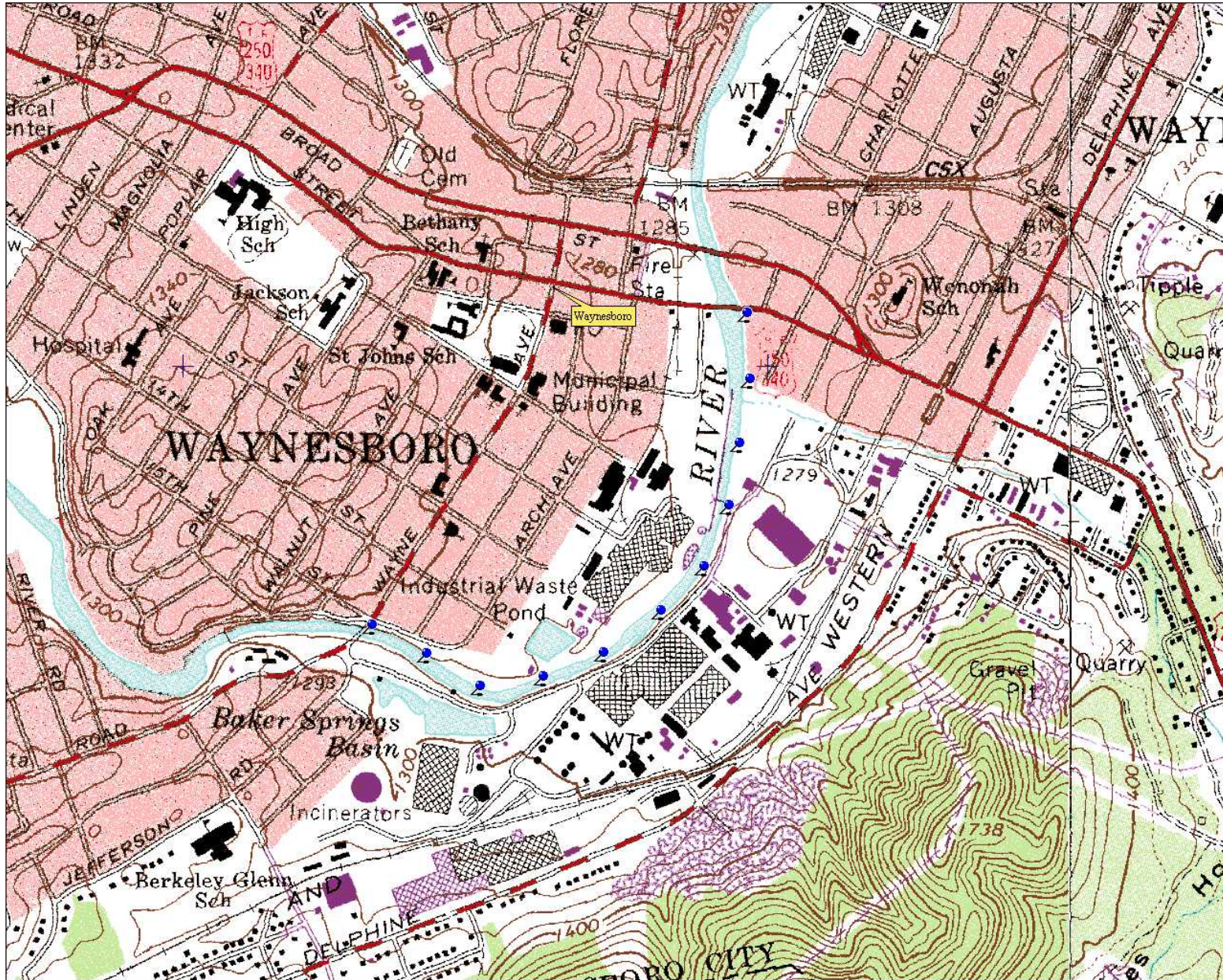
1) Revisit site #2 (observed total Hg of 449 ppt); bracket to validate, determine extent of high concentration area. Use lower detection limit TSS to determine [Hg] on TSS.

2) Expand survey area to include reach from above DuPont at the Wayne Ave. Bridge, to downstream past Jones Hollow bi-monthly Hg sampling sites; determine more precisely point at which [Hg] concentrations become elevated.

Proposed Methods

- 1) Sample for total Hg, TSS, DOC, Ions on left and right banks bracketing site # 2, take one dissolved Hg sample mid-reach.**
- 2) Sampling interval approximately 200'**
- 3) Use Hydrolabs to measure in-stream water quality (leave in water entire duration).**
- 4) For DuPont reach, sample only right bank?**
- 5) Same sampling plan as for site #2 bracket**





Sediment Sampling Objectives

- 1) To develop a method which will standardize [Hg] to various sediment characteristics including percent fines and TOC;**
- 2) To use the method to compare to historic sediment sampling events;**
- 3) To determine [Hg] in previously unsampled areas, including stream channels and cobble beds.**

Potential Methodology

- 1) Use McNeil gravel sampler to collect coarse and fine sediments at sites less than 0.5 m deep.**
- 2) Collect initial samples at historic collections sites along with bank sampled using previous methodology, to provide comparisons between methods.**
- 3) Replicate as necessary to determine variability in stream bed. Goal is to be able to predict Hg concentrations in sediments based on stream bed morphology.**
- 4) Investigate alternative methods using filtering or pumping**

