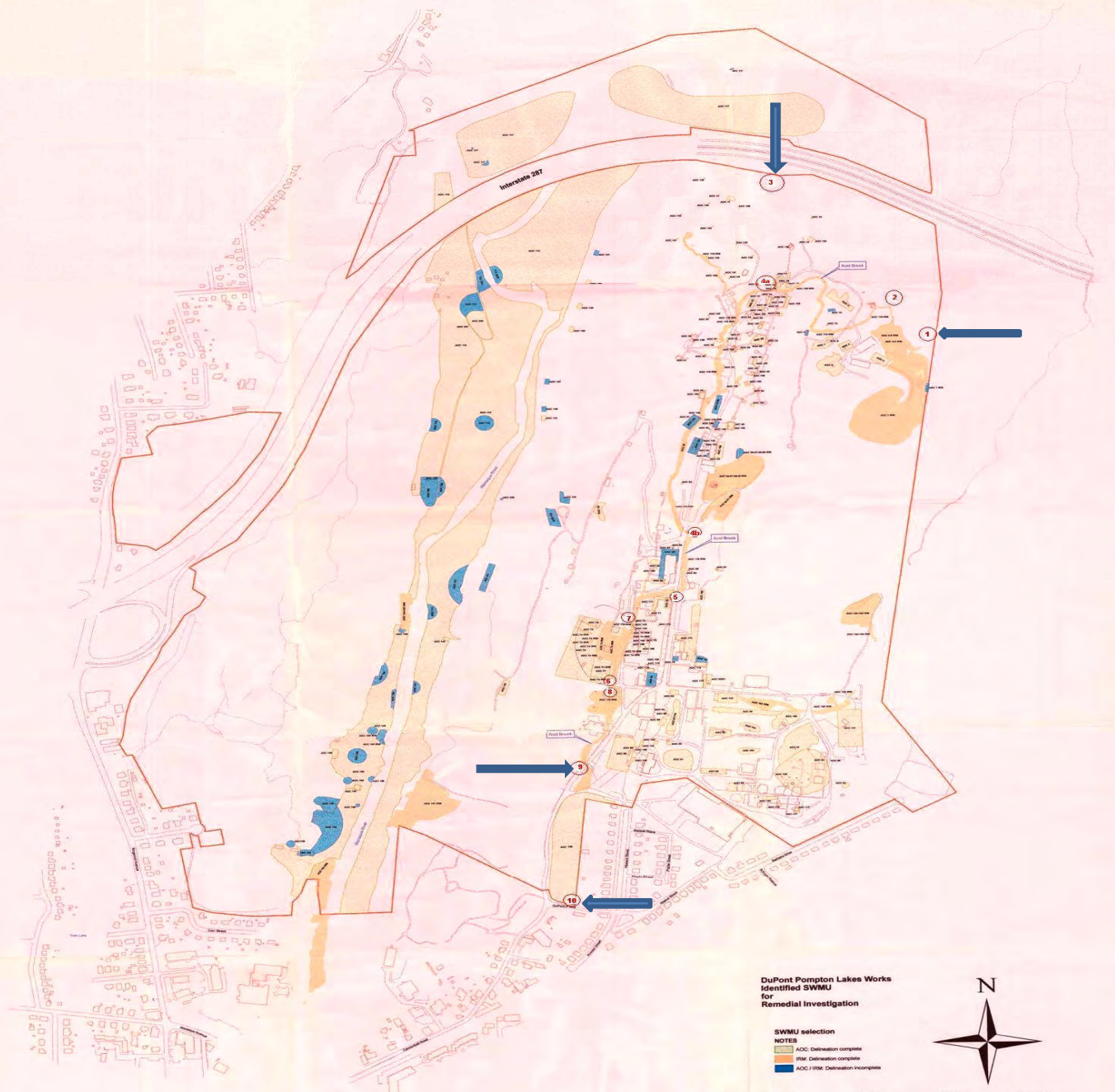
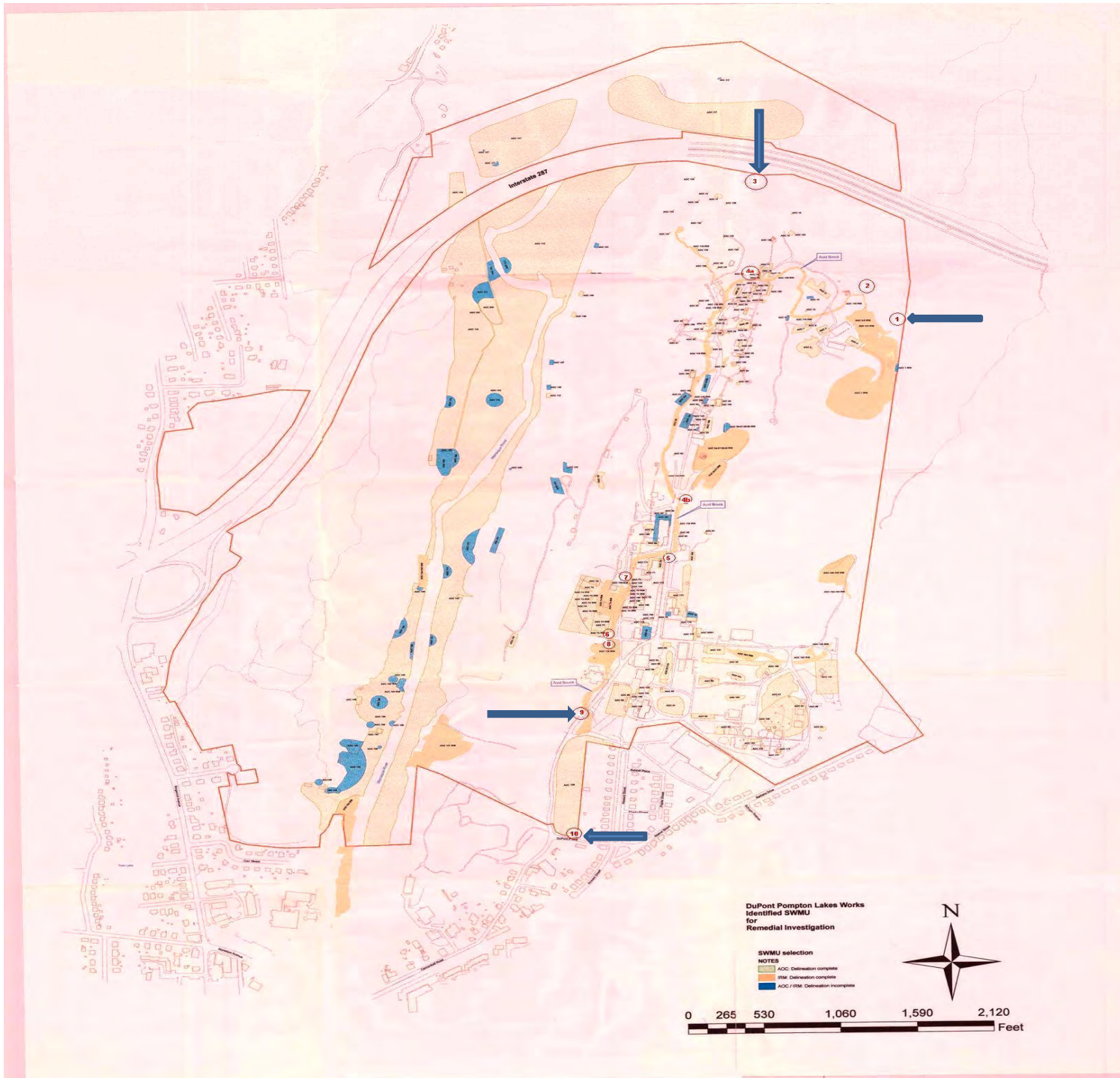


Acid Brook Sampling Update

Pompton Lakes Environmental CAG Meeting
February 1, 2012

Background

- Purpose of sampling was to determine whether site contaminants were migrating off-site
- Sampling was conducted on November 2, 2011
- Sampling was conducted at 4 different locations on DuPont's property
 - 2 at locations upgradient of former plant operations
 - 2 at locations downgradient of former plant operations
 - Weir to measure water flow leaving Retention Pond 1 (Location 09)
 - Spillway of Retention Pond 2 at property boundary (Location 10)
- Surface water and sediment samples were taken at each location





Sampling Location 09



Sampling Location 10



Sediment Sampling Results

Contaminant	Sampling Location 09 (parts per million)	Sampling Location 10 (parts per million)	NJDEP Ecological Screening Criteria (parts per million)	NJDEP Residential Direct Contact Soil Remediation Standard (Former) (parts per million)	NJDEP Residential Direct Contact Soil Remediation Standard (Current) (parts per million)
Lead	32	150	250	400	400
Mercury	2.3	13.0	2.0	14	23

Surface Water Sampling Results

Contaminant	Sampling Location 09 (parts per billion)	Sampling Location 10 (parts per billion)	NJDEP Fresh Water Human Health Standard (parts per billion)	NJDEP Fresh Water Aquatic-Chronic Ecological Screening Criteria (parts per billion)
Lead	--	--	5	5.4
Mercury	--	--	0.05	0.77
cis-1,2 Dichloroethene	1.2	0.89	--	--
Tetrachloroethene (PCE)	1.6	1.2	0.34	45

Visual Inspection of Acid Brook

- EPA (Mark Reiss) walked the Acid Brook on January 25, from the lake to the DuPont site property boundary to survey the brook for “sediment inventory”
- There’s a lack of a significant sediment source in Acid Brook
 - Approximately 50% of the run of Acid Brook is bounded by retaining walls
 - Most of Acid Brook is lined with rock
 - Sediment that is present is located at the outfalls of storm sewers coming from the neighborhood, not from the site

Discussion Item 1: Sediment

- The detection of mercury in sediment at the property boundary (Location 10) above the ecological screening criteria is a question that needs possible follow-up action by the agencies and DuPont
- Location 10 also coincides with AOC 106 which is part of the on site investigation

Discussion Item 2: Surface Water

- The exceedence of the PCE surface water human health standard does raise an issue which requires follow-up, but is not likely to affect water flowing into Pompton Lake
 - PCE would likely attenuate long before reaching the delta
 - May require refinement of on-site groundwater monitoring well network or modeling to improve contaminant delineation
- cis-1,2 Dichloroethene is a daughter product of PCE degradation
 - Currently, there are no comparison levels under NJDEP Ecological Screening Criteria or Surface Water criteria

Preliminary Conclusions and Follow-up Actions

- EPA believes that there is very little potential for Acid Brook sediment to re-contaminate Pompton Lake because of lack of a significant sediment source in Acid Brook
- EPA and NJDEP will evaluate alternatives to address the mercury/sediment results
- EPA and NJDEP will further assess the PCE/surface water results