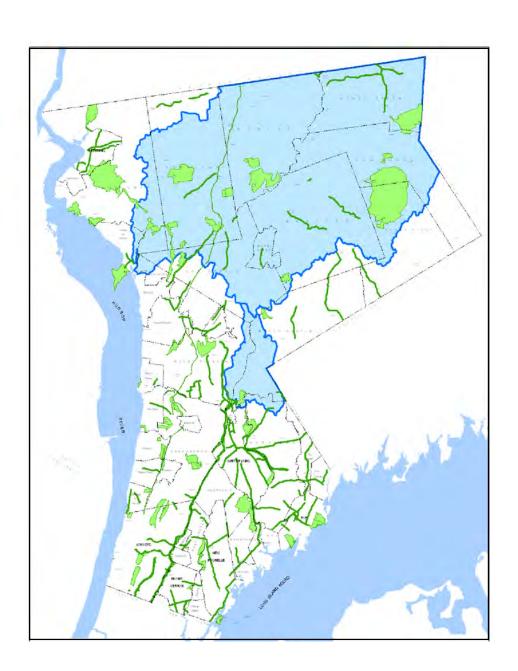
## Stormwater Infrastructure Inventory

Stormwater conveyances in 17 parks and golf courses within the Croton Watershed, and along 75 miles of County roadways were mapped this summer. In addition to location, crews recorded structural characteristics of the features (type, shape, material, size, condition), and volume, clarity (etc.) of any running or standing water they observed.



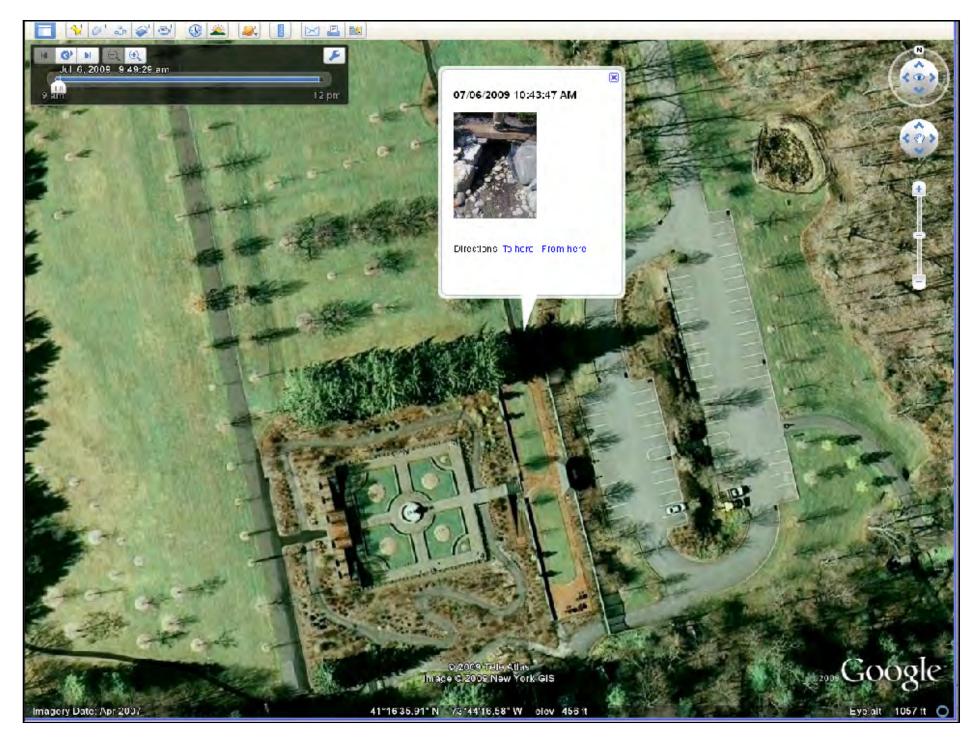
Storm drains along the Bronx River Parkway convey rainwater into the lakes and ponds of Tibbetts Brook Park in Yonkers. Major drainage renovations are underway or recently completed, including the elegantly designed cascade, upper left. Local crews are knowledgable about the drainage systems and issues at their facilities.

> Map at right shows location of County-owned facilities in relation to the Croton and Kensico watersheds, part of New York City's drinking water supply.

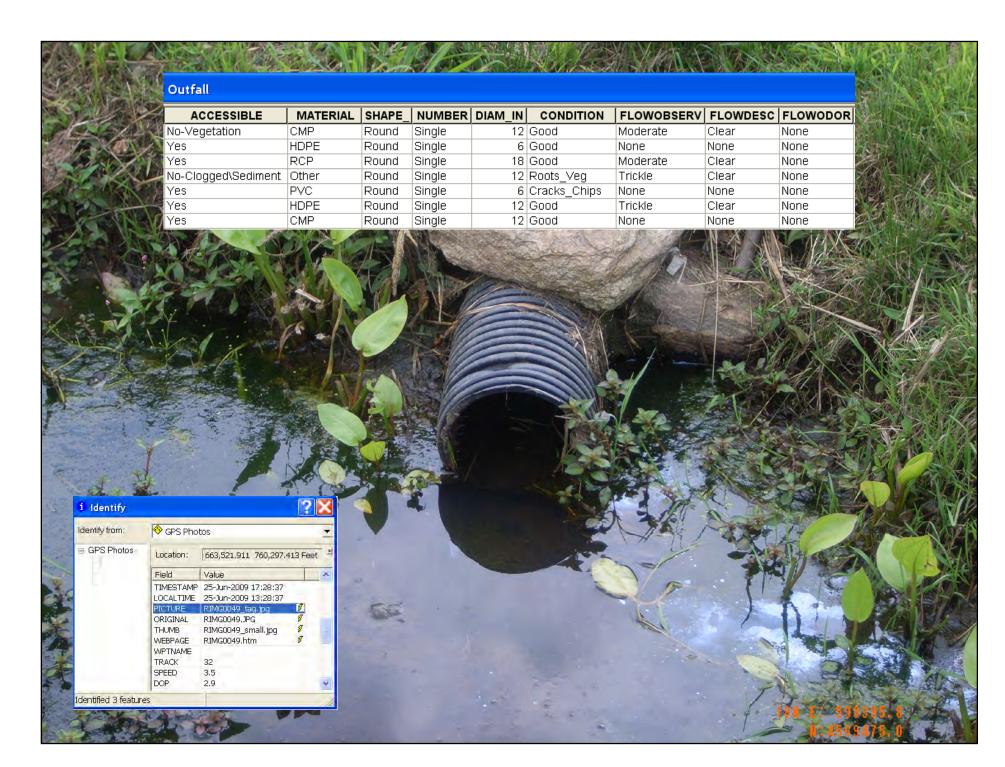




GIS staff is supporting a multi-department effort to inventory stormwater infrastructure. This is an important step in implementing Municipal Separate Storm Sewer Systems (MS4) management practices. Outfalls, culverts, catch basins and open drains in all County-owned facilities (parks, golf courses, and roadways) are being inventoried and inspected.



During the summer inventory, GIS staff also photographed each feature using a Ricoh 500SE GPS camera, adding invaluable visual documentation to each record. The GPS Photo-Link software writes JPG and GIS shapefile outputs, with timestamp, bearing, GPS quality etc., and KML files (above) - an easy and immediate way to share information between agencies.



Where signs of potential illicit discharge are observed (odor, etc.), follow-up tests will be performed. The inventory will support efforts to reduce pollutants in county waters, help identify drainage elements that may require repair or maintenance, and allocate staff and financial resources for improvements to the stormwater system.



GPS camera stamps position on each image (above)



Health Department inspectors collecting samples from outfalls in the City of Mount Vernon

The Health Department monitors water quality, collecting samples at outfalls along the County's rivers and streams, to be tested for contaminants. GIS is working with field inspectors to incorporate these known locations into the stormwater database. Inspectors plan to visit these sites following several days without rain, and during low tide – any discharges then may be illicit.



