

Stream Team Meeting Minutes
9:00 AM Thursday, December 7, 2006

Present: Bill Allen, Deb Apruzzese, Kelley Curran, Terry Dyben, Roger Edwards, Gene Fox, Harry Gerken, Chris Mikolajczyk, Frank Stillinger, and Robin Timmons

The Stream Team meeting convened at 9:15 am.

1. The Team welcomed new member Deb Apruzzese to the group.
2. Bill motioned to approve the September meeting minutes without amendment and Gene seconded the motion.
3. Chris Mikolajczyk from Princeton Hydro presented the findings and recommendations on the TTC water quality monitoring program. Highlights include:
 - ▶ Distribution of the Executive Summary portion of the report to attendees
 - ▶ Monitoring data were segregated into two time frames for review – 1999 through 2001 (F.X. Browne) and 2002-2005 (Princeton Hydro)
 - ▶ The most impacted and impaired streams are Black Brook, Loantaka Brook, and Great Brook.
 - ▶ Loantaka Brook continues to be the most degraded stream in the watershed based on the comparison of data to both the State's water quality standard for Total Phosphorus and to the TTC's standards for the additionally monitored water quality parameters.
 - ▶ Primrose Brook and the Upper Passaic River are the "healthiest" streams in the watershed.
 - ▶ For all streams, a comparatively high percentage of the phosphorus is in a form that can readily accelerate eutrophication of the streams.
 - ▶ There is significant difficulty in computing statistically meaningful and accurate pollutant loads using the flow data generated through the ISCO samplers.
 - ▶ Despite the above limitation, new flow curves have been generated for the streams.
 - ▶ The Black Brook watershed is not substantially represented by the current location of the ISCO sampler and staff gauge.
 - ▶ Rather than relying on the ISCO samplers for generating accurate flow and loading data, a modeling approach might be utilized. To minimize the amount of error associated with flow measurements, it would be necessary to update the ratings curves at least twice annually and make use of more sensitive pressure transducers. The annual maintenance costs for the staff gauges and ISCO samplers could exceed \$5,000 - \$7,000 per site.

Recommendations include:

- ▶ Focus on the use of the ISCO samplers for the purpose of stormwater sample collection.

- ▶ Compute loading using a modeling approach that makes use of the USGS flow data recorded at the outlet from the Great Swamp.
- ▶ Should there be a continuing need or desire to measure flows, focus should be placed on Loantaka Brook. Flow transducers and staff gauges could be installed upstream of the wastewater treatment plant and down stream of Kitchell Pond for this purpose with the price tag of approximately \$11,000.

At the time of the meeting, Chris did not know when the full report would be complete. Key personnel working on the project recently resigned from Princeton Hydro. Nor was he sure of the level of involvement in the program that would be required of GSWA volunteers going forward. He did say that Princeton Hydro personnel are currently conducting monthly baseflow sample collections.

4. Kelley mentioned that TRC Omni collected stream samples on a portion of Black Brook that would be valuable to our assessment of water quality in the that subwatershed. She will contact them to see about obtaining copies of this data.
5. Chris provided Kelley with contacts at Dave Heiner Associates and Pine Environmental Services with regard to repairs on the ISCO samplers. Kelley also mentioned that the GSWA has 3 additional ISCO samplers that are on loan from Harding Township that could be put into use if needed.
6. Each active field volunteer was asked to read and sign a GSWA Volunteer Release Form.
7. The next meeting is scheduled for Thursday, January 4th at 9:00 am.

The Stream Team meeting adjourned at 10:45 am.

Respectfully submitted by Kelley Curran