

Stream Team Meeting Minutes  
7:30 PM Wednesday, April 7, 2004

Present: Bill Allen, Neil Borman, Kelley Curran, Roger Edwards, Gene Fox, Sarah Low, Lee, Pollock, Bill Marshall, Shandor Szalay, Robin Timmons, and Charles Whitmore

1. Bill A. opened the meeting at 7:32 pm.
2. Kelley provided the group with another sample of laminated ISCO operating procedures. This sample is comprised of full-size sheets printed on both sides. All agreed that this was better than the previous reduced-size laminated version. Kelley will place one copy in each of the ISCO sheds. These instructions still need to be field-tested. Bill A. suggested also laminating the recently updated flow measurement SOP (when finalized) and keeping a copy in each ISCO shed. Kelley agreed to handle this. Shandor requested that a copy of the flow measurement SOP be sent to him for review. Kelley to coordinate.
3. Re: Resolution of problems/issues/concerns at monitoring locations
  - A. Fell tree at Great Brook – Sarah did not note any problems regarding the tree that has fallen across Great Brook. Moving the sampling location approximately 20 feet upstream from the previous location is not a problem.
  - B. Sarah mentioned that the desiccant at Great Brook needs to be changed out.
  - C. Exposed tubing/cables at Primrose Brook – Sarah suggest digging a small trench around the tubing/cables and then covering them with rocks/sediment to stabilize. Neil and Bill A. offered to do this on April 17.
  - D. Exposed tubing/cables at Loantaka Brook – The soil covering the tubing/cables has eroded away likely due to rainfall and has become a trip hazard. Shandor suggested using fabric and staples to rectify the problem on the sloped bank and agreed to send these materials to Kelley.
  - E. Bent staff gauges at several locations – Sarah indicated that storm events are the likely reason for the bending of the in-stream staff gauges. Shandor offered to look into an alternative material to be used for the post. Chuck indicated that he has a section of 1” square rigid steel that can be used.
  - F. Rain gauge at Black Brook – Neil mentioned that the rain gauge installed at the Black Brook monitoring location currently lies beneath tree cover. Sarah said it would be much easier to cut back the tree branches rather than move the gauge as it is currently entrenched to the ISCO unit. Gene will inquire with the property owner about cutting the tree branches to once again expose the gauge.
4. Kelley inquired if ISCO systems have a designated useful life. Sarah thought they did not. Each unit can continue to be rehabbed as necessary. Shandor recalled that ISCO typically has a 5-year service agreement that comes with new equipment. After the 5 years, a charge would be incurred for an ISCO service call. Shandor will ask ISCO about a service contract? Neil mentioned that the peristaltic pump tubing needs replacement about every three years. In addition, Sarah suggested that the internal batteries may have to be changed. This battery will require soldering and the unit will need to be reprogrammed as result.

5. Gene and Kelley spoke in brief about the Stream School seminar that they attended the week prior. The seminar was conducted by the Stroud Water Research Center and hosted by the Delaware River Basin Commission. The seminar focused on macroinvertebrate collection and identification and subsequent analysis of data using various indices to determine the overall quality of the stream in which the organisms were collected. There was also discussion on ecology of streams and habitat assessment. Both agreed that the course was well worth the time and money spent. It is our hopes that additional volunteers can be involved in macroinvertebrate collection and identification in the Great Swamp watershed to supplement Lee's ongoing work.
6. Based on Gene and Kelley's report on Stream School, a lengthy discussion on biological sampling ensued. If the GSWA sets up a volunteer biological monitoring program, it will be less rigorous than the program that Lee oversees. Shandor suggested testing Lee's method against the lower rigor volunteer paradigm to see if end result is comparable. We must also keep in mind the individual biases which are likely to occur during sampling and identification. The establishment of such a program may well require the purchase of equipment. Lee offered to host a training session for volunteers. Lee announced that he plans to do the macroinvertebrate sampling in the springs of 2004 and 2005. Following this he will retire and leave NJ. We will miss him.
7. Kelley is working to establish a visual assessment monitoring program for the five streams leading into the Great Swamp. She hopes to utilize new as well as interested current Stream Team members for this program. Visual assessment training is being coordinated with the Watershed Management Area 6 Americorps representative. Instructions on how to complete the NJDEP data sheets as well as field experience will be included in the training session. It is Kelley's hope that all reaches of the five streams will be assessed for various parameters (e.g. degree of bank erosion).
8. Chuck advised the group that he has accepted a 3-month long consulting job in Alberta. Chuck has transferred the flow probe to Gene and the GPS unit to Kelley. Bill M. offered to pick up Chuck's work and will coordinate with Gene. Best of luck Chuck!
9. ISCO training is scheduled for Saturday, April 17 rain or shine. Neil will be conducting the training session at the Passaic River station location at 9:00 am. An alternate date for Kelley to complete the training is TBD. Bill A. will contact Todd Hayes and Michael Hartwig for interest in the April 17 training.
10. Shandor brought up the topic of data management. The Stream Team has collected several years of data. Bill A. is keeping manual flow measurement data in an Access database while Robin manages chemical analytical data. Shandor suggested establishing protocols for managing data. Kelley will look into this as well as the possibility of merging all data into one database.

11. The group discussed difficulties experienced in collecting stormflow samples. One of the main impedances is the laboratory operating hours. Most of the storm events have taken place on days of the week where holding times would be exceeded and/or the lab would not be open to receive and analyze the samples. Sarah indicated that if there was enough advance notice, the lab might be able to schedule around weekend storm events to accept and analyze samples. One of the other criteria for sample collection is the quantity of rain – a 0.1-foot rise in stream level above the setting triggers the ISCO unit to collect a composite sample. Oftentimes, there is not enough precipitation to trigger the collection. Shandor will look into relaxing this criterion to 0.05 foot. If necessary, the program at each unit will need to be adjusted. An additional possibility would be to analyze for only those parameters that are not affected by holding times.
12. Robin provided the group with a color handout containing tabular and graphical analyses of chemical and flow data to date during baseflow conditions. This information was not discussed due to lack of time. Robin asked everyone to look it over. If necessary, the handout can be discussed at the next meeting.
13. The next meeting will be Wednesday, May 5, 2004.
14. The meeting came to an end at 9:33 pm.

Respectfully submitted by: Kelley Curran