

**JBT01 tile drain monitoring station**

PROJECT NO.

15-309

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Assessment of Tile Drainage Systems in the Jewett Brook Watershed:

March 2017 Monitoring Summary

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This report is intended to document monitoring activities during the prior month, March 2017, at 12 selected tile drain outlets in the Jewett Brook watershed in St. Albans, Vermont. At the time of writing, 9 of the 12 stations are fully operational and the remaining 3 are nearing completion.

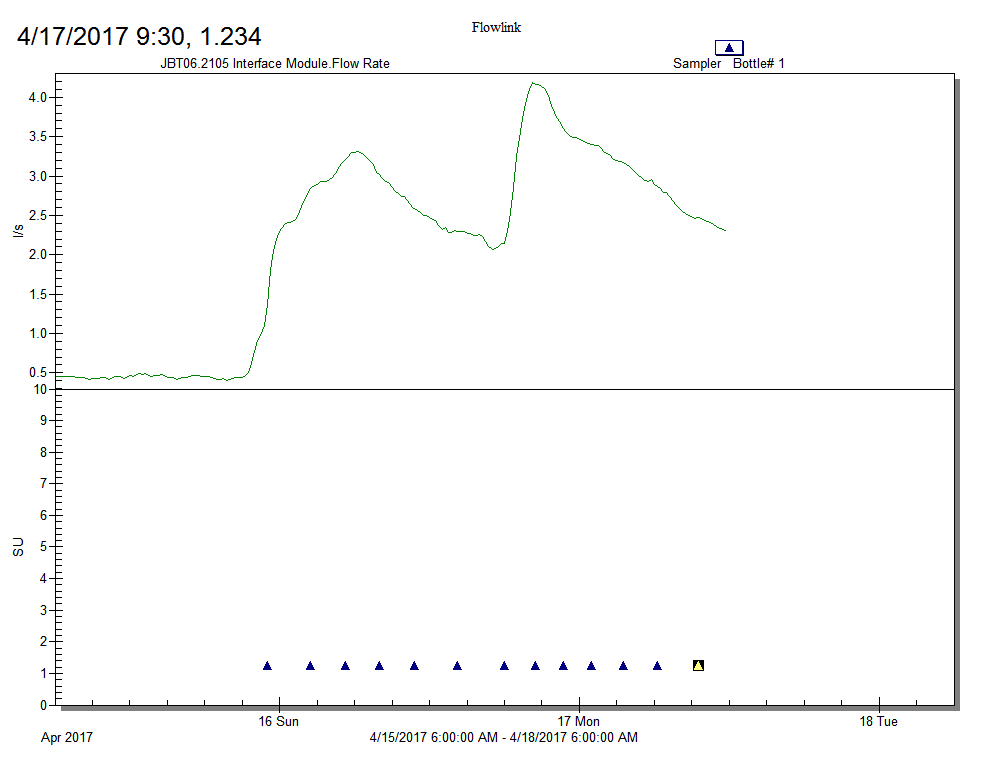


Figure . Flow rate and sampling data from Station JBT05

Flow data collection began in late March, 2017 at several sites. In subsequent reports, the flow volume associated with each composite sample will be computed.

The flow and sampling data are transmitted to Stone’s server every 30 minutes. For example, Figure 1 displays recently collected flow data (top panel) at station JBT05, along with the time each sample aliquot was dispensed to the sample carboys (bottom panel). These data are checked periodically to assess whether the sampling program is working as intended.

Sample collection commenced in April, 2017; therefore, no analytical results are presented in this March summary. Table 1 identifies the start dates for monitoring activities at each station. On April 5, 2017 autosampling programs were begun at 8 of the 12 stations (JBT01, JBT02, JBT04, JBT06, JBT07, JBT11, JBT14, and JBT16). The following week, on April 11, the first set of weekly composite samples was collected and processed, according to procedures in the project Quality Assurance Project Plan, Version 1.1 (QAPP). The autosampler programs were restarted immediately after sampling at these eight stations. In addition, autosampling was begun at station JBT13. Flow monitoring and sample collection are expected to begin at the remaining three stations on April 18, 2017.

Table 1: Start dates for monitoring activities

| **Station** | **Start flow monitoring** | **Start autosampling** | **Current condition** |
| --- | --- | --- | --- |
| JBT01 | 3/23/17 | 4/5/17 | OK |
| JBT02 | 3/23/17 | 4/5/17 | OK |
| JBT04 | 4/3/17 | 4/5/17 | OK |
| JBT05 | 4/20/17 | 4/20/17 | 1) Waterflux flowmeter bad; ISCO 2150 AV flowmeter temporarily substituted  2) Replacement modem requires activation |
| JBT06 | 4/5/17 | 4/5/17 | OK |
| JBT07 | 3/30/17 | 4/5/17 | OK |
| JBT11 | 4/5/17 | 4/5/17 | Modem problem (power) |
| JBT13 | 4/3/17 | 4/11/17 | OK |
| JBT14 | 4/5/17 | 4/5/17 | Modem problem (clock) |
| JBT16 | 3/30/17 | 4/5/17 | OK |
| JBT18 | 4/22/17 | 4/22/17 | OK |
| JBT19 | 4/22/17 | 4/22/17 | OK |