**WDNR Project Quarterly Reporting**

**Reporting Period:** *Jan 1 2016 – April 30, 2016*

**Project Name: Sediment Loading Assessment in the Nemadji River Basin**

**Name and Contact Info: Faith Fitzpatrick,** **fafitzpa@usgs.gov****, 608-821-3818**

**Overall Project Status Summary:**

* Collected 8 out of 10 events.
* Continued analyses of historical sediment transport relations

**Budget Update: Include amount expended, subcontracts or subgrants awarded, jobs created, and local services or products purchased (for this reporting period).**

~70% of the funds were spent.

**Work accomplished this reporting period:**

Two sets of samples were collected during spring runoff events of 2,000 and 4,700 ft3/s. We were lucky to catch a bankfull event on 4/25, which is what we planned on doing. Samples were submitted to respective labs for analyses.

Table 1. Sampled Events at the Nemadji River USGS gage.

|  |  |  |
| --- | --- | --- |
| Sample # | Date | Discharge |
| NM-1 | 7/7/2015 | 2,960 |
| NM-2 | 7/8/2015 | 1,540 |
| NM-3 | 10/28/2015 | 365 |
| NM-4 | 11/6/2015 | 300 |
| NM-5 | 11/17/2015 | 648 |
| NM-6 | 11/18/2015 | 1870 |
| NM-7 | 3/31/2016 | ~2000 |
| NM-8 | 4/25/2016 | ~4700 |
| 9 |  |  |
| 10 |  |  |

The following contains a list of the types of samples that were collected for each sampling set.

|  |  |  |
| --- | --- | --- |
| **Sample Type** | **field container type** | **Laboratory** |
| Nutrients/Weighted bottle 1 | 1/2 full clear plastic weighted bottle immediately transferred into 125 ml clear plastic acidified and refrigerated  | NWQL |
| TSS/SSC Weighted bottle 2 | Full clear plastic weighted bottle (equal split later at WI lab) | TSS @ SLOH, SSC @ KY LAB |
| TSS/SSC EWI-ETR  | ~10 glass pint milk bottles (1/10 TSS, 9/10 SSC split later at WI lab) | TSS @ SLOH, SSC/PSD @ KY LAB  |
| bed material | ~10 plastic containers | WI WSC LAB |
| bedload | 2+ plastic containers | WI WSC LAB |

**Work goals for coming reporting period:**

1. **Sediment sampling** – The last flow that we need is a low flow sample, which we hope to get during the early summer. And we have one more event that can be sampled within our budget. The historical range of MPCA TSS samples range from flows of 100 to 17,000 cfs.
2. **Sediment transport analyses –** Review of historical data will continue**.** Data compilation on rating shifts will be continued.