

Memorandum

To: Minto Explorations Ltd.

From: Anthony Bier, Alexco Environmental Group (AEG)

CC: Scott Keesey

Date: March 29, 2016

Re: Minto and McGinty Creek 2015 Surface Hydrology Update

1 INTRODUCTION

Minto Explorations Ltd. (Minto) maintains a network of hydrometric stations as part of its regular monitoring of surface water hydrological conditions at the Minto Mine in Minto and McGinty Creeks (Figure 1). Minto personnel conduct regular discrete discharge measurements and maintenance at the stations where Solinst Levelogger and Barometric Loggers are utilized to capture continuous stage records. Alexco Environmental Group (AEG) has been retained to process these data into discharge records for the 2015 season, as it has for previous years, utilizing Aquarius Time-Series management software. This memorandum presents the methods of observations and data processing along with the results of the 2015 monitoring program.

In general, freshet appears to have occurred in late April of 2015 on Minto Creek and this was likely the case for McGinty Creek as well. Early summer flows were below normal and later summer and early fall were higher than average likely due to greater than normal precipitation. Some of the higher elevation stations continue to present challenges to continuous record production, which is typical of very small tributaries. It is likely that continuous records will not be producible at these sites unless they are relocated or artificial control structures are installed. AEG recommends reassessment of the value of continuous data at these sites and ceasing attempts at continuous data gathering where warranted, but continuation of discrete measurements. AEG also recommends the use of salt dilution gauging at these sites for greater discrete measurement accuracy.

2 METHODS

Hydrometric data are collected and managed throughout the open water season by Minto on both Minto and McGinty Creeks. Minto utilizes the Velocity-Area method of discharge calculation and measures velocity using a Hach FH950 handheld electromagnetic flow meter. Minto staff work closely with AEG to ensure they are adhering to best practices. Measurements are conducted manually and paired with staff gauge observations

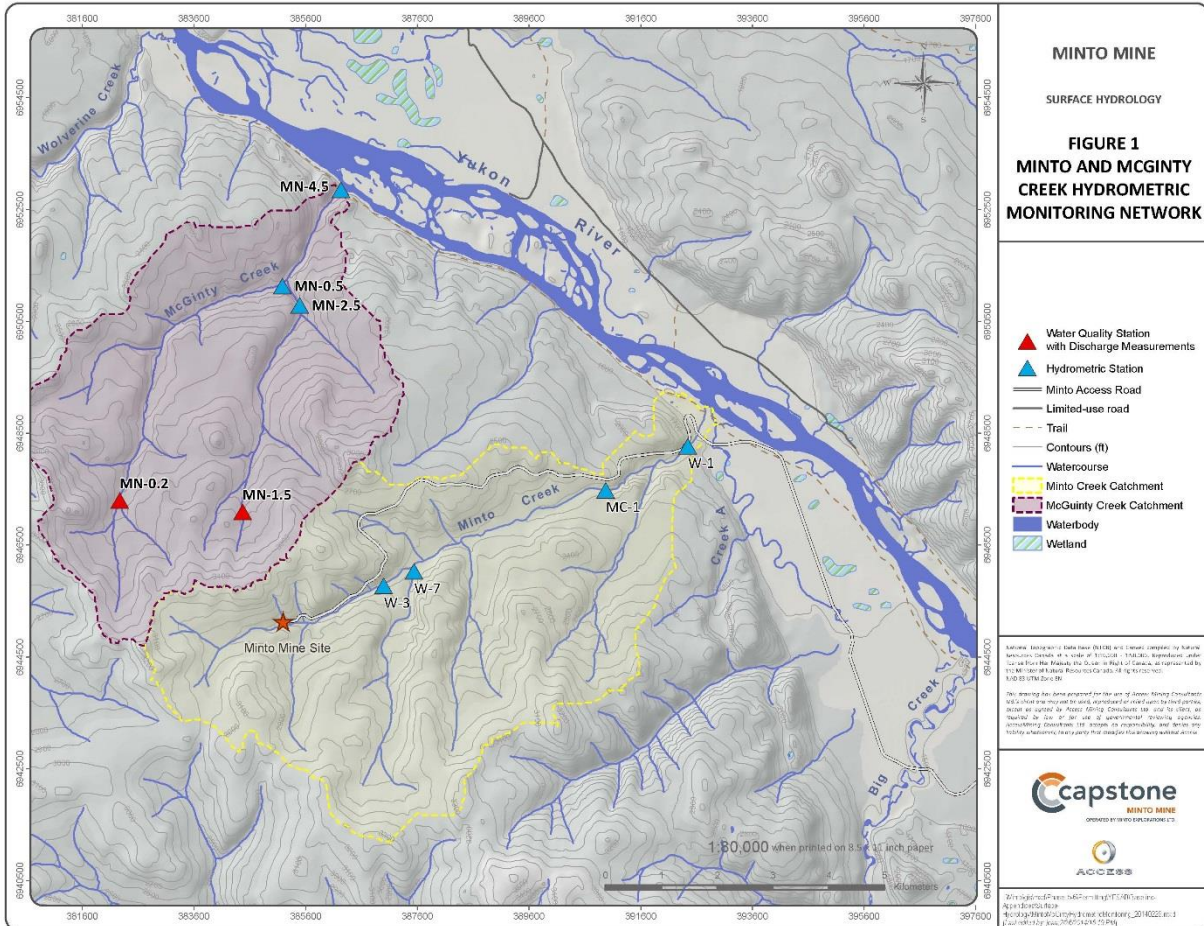
and site photographs. In general, multiple visits per month occur on Minto Creek and monthly visits occur on McGinty Creek during the open water season.

These data are checked for entry and calculation errors and suspect measurements by Minto after field personnel have entered measurements into a calculation spreadsheet. Paired Solinst Levelloggers and Barologgers are utilized to collect the continuous stage record. All rating measurements are provided to AEG along with the raw Solinst logger records to be processed.

All measurements are entered into a master spreadsheet and .CSV files are created which include date, time, staff gauge height and discharge measured. These rating measurements are then imported into Aquatic Informatics' Aquarius Time-Series (Aquarius) data management software and a rating curve is built. Suspect measurements are verified against photos and field notes (e.g. if they differ greatly from the stage-discharge relationship). This can be due to ice effects or other changing control conditions such as scour, aggradation and vegetation control. Rating curve development considers which measurements should be included and when and where shifts to the rating are appropriate. All measurements within the continuous period are included in the hydrographs (Appendix A). Rating curve shifts are used at some Minto sites when and where appropriate.

Barometrically compensated Solinst water level data are imported into Aquarius software from .CSV files which are exported from Solinst software following compensation. Aquarius allows for adjustment of the Solinst record to match the staff gauge observations, for development of rating curves with the field data, and for automatic processing of continuous discharge records. This preserves the raw data in an easy to reference format and changes can be made to the data at any time which then cascade through the various time series. For example, at new sites, rating curves may improve after several seasons and alter a previous year's continuous record as the high or low end of the rating curve becomes better defined. Stage time series are adjusted for drift, offset and erroneous data are deleted or omitted from discharge computation if they are deemed ice affected. The rating curve is automatically applied to the continuous stage record for a specified time period to create the continuous discharge time series.

Data for the 2015 season are presented in this memo. For comparison, mean monthly discharge from previous years are included where available. Hydrographs for 2015 are included in Appendix A while discrete discharge measurements are included in Appendix B.



Note this figure is a place holder. map will be inserted in the PDF as its own page.

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Figure 1 – Minto and McGinty Creek Surface Hydrology Monitoring sites

3 MINTO CREEK

The Minto Creek hydrological monitoring program includes four hydrometric stations on Minto Creek, three of which are on the main stem (W1, W3 and MC-1) and one on a small tributary, W7 (Figure 1). The W7 station was established on a southern tributary which joins the main creek just below W3. The three main stem monitoring stations are all below the mine site and include W3 (the regulated flume below the Water Storage Pond dam), MC-1 (mid-catchment) and W1 (lower Minto Creek above the road crossing and approximately 1 km upstream of the confluence with the Yukon River) (Figure 1). Mean monthly flows are presented below in separate sections for each station with a brief discussion. The annual hydrographs are included in Appendix A and discrete measurements and observations carried out by the Minto Environment staff in 2015 are presented in Appendix B.

3.1 STATION W3 - FLUME BELOW WATER STORAGE POND DAM

Water level is continuously monitored in the flume which is approximately 500m from the toe of the Minto Water Storage Pond dam via a Solinst Levellogger in combination with a barometric logger. Frequent observations by Minto staff (minimum weekly) allow for correction of the level logger to the actual height of water in the flume and confirmation of the manufacturer specified stage-discharge relationship. This provides a record with a high degree of accuracy. Figure 2 (Appendix A) shows the hydrograph for the 2015 season, marked by releases in April and May. Table 1 summarizes the continuous data as mean monthly flows. The winter stage record was interpolated using the discrete stage observations. In general, the flume typical flows at 3-4 L/s.

Table 1 – Mean monthly discharge (m³/s), Minto Creek at W3.

Year	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011						0.005	0.005	0.006	0.005			
2012						0.003	0.004	0.004	0.004			
2013						<0.001	<0.001	0.002	0.003	0.003	0.006	0.004
2014	0.003	0.006	0.006	0.057	0.086	0.003	0.003	0.003	0.004	0.004	0.006	0.026
2015	0.004	0.002	0.001	0.075	0.052	0.003	0.003	0.004	0.004	0.004	0.003	0.004

3.2 STATION MC-1 - MINTO CREEK MID-CATCHMENT

Hydrometric station MC-1 is located between the flume at W3 and is just upstream of the canyon on lower Minto Creek. This site is characterized by shallow channel slope and slower moving water above the control of the canyon. Figure 3 (Appendix A) shows the discharge time series for the 2015 open water season and Table 2 summarizes these data as mean monthly flows.

MC-1 experiences a later summer shift which is likely due to aggradation in the channel. This seasonal shift from the base rating curve appears consistently, but is not exactly the same from year to year. Minto staff report that MC-1 freezes to ground in winter. Discharge is again observed to be greater at this site than at W1 which supports the theory that Minto creek loses significant water to ground as it flows towards the Yukon River.

Table 2 – Mean monthly discharge (m³/s), Minto Creek at MC-1

Year	Month					
	May	Jun	Jul	Aug	Sep	Oct
2012	0.179	0.065	0.052	0.041	0.108	-
2013	0.358	0.085	0.103	0.044	0.089	0.064 ²
2014	0.187	0.028	0.031	0.036	0.028	0.033 ²
2015	0.862 ²	0.014	0.028	0.042	0.035	0.031 ¹

Notes: ¹ - Based on incomplete derived data
² - Based on multiple discrete measurements

3.3 STATION W1 – LOWER MINTO CREEK ABOVE ROAD CROSSING

The 2015 continuous discharge record for Minto Creek at W1 extends from the beginning of May through early October (Figure 4, Appendix A). Ice formation in early October means discharge cannot be calculated from the stage record and will be interpolated from the discrete measurements the following year. Mean monthly flows in 2015 were generally lower than previous years (Table 3). The discrete measurements indicate that peak annual flow likely occurred in late April (Figure 4, Appendix A).

Table 3 – Mean Monthly Discharge (m³/s), Minto Creek at W1

Year	Month					
	May	Jun	Jul	Aug	Sep	Oct
2012	0.269	0.073	0.052	0.051	0.078	0.056 ²
2013	0.485 ¹	0.064	0.065	0.044	0.085	0.059 ²
2014	0.138 ¹	0.022	0.020	0.014	0.031	0.025 ²
2015	0.117	0.010	0.010	0.030	0.024	0.020 ¹

Notes: ¹ - Based on incomplete derived data
² - Based on multiple discrete measurements

3.4 STATION W7 - TRIBUTARY OF MINTO CREEK

A staff gauge was established on this tributary of Minto Creek in the summer of 2013. This site is located on the most upstream of the southern tributaries meeting the main channel of Minto Creek below W3 (Figure 1). W7

had been a regularly monitored surface water quality station for a number of years prior to installation of the hydrometric station. The first staff gauge observation occurred on August 11th, 2013 and there were two rating measurements in 2013, one in August and one in September. The 2013 level record extended from August to late October (at which time it became ice affected). In 2014 the station was found to have been damaged by ice. The stilling well was repositioned in June, but the staff gauge was out of the water for most of the season. Small mountain streams are challenging sites from which to obtain continuous data and this site is a strong candidate for an artificial control such a V-notch weir. The ease of access will allow for the frequent maintenance requirements of artificial controls. Table 4 presents the discrete measurements gathered in 2015. The stage record from late June to October is shown in Figure 5 (Appendix A). Please note that the staff gauge was above water for a portion of the record and therefore there is a negative stage period. It is included only to show relative variation.

The rating measurements were examined but deemed insufficient to predict a reliable rating curve. The low discharge combined with dynamic nature of channel morphology at this site do not lend themselves to development of a continuous record. AEG recommends considering the installation of an artificial control structure if continuous discharge data are required at this location.

Table 4 – Discrete measurements at Minto Creek W7, 2015

Date	Time	Stage (m)	Discharge (m ³ /s)
10/06/2015	14:57	0.049	0.006
11/07/2015	14:40	<0	0.004
21/08/2015	14:25	<0	0.011
22/09/2015	15:32	0.048	0.011
15/10/2015	17:15	0.075	0.029

4 MCGINTY CREEK

McGinty Creek has two main sub-catchments that each have two water quality monitoring stations, one just above the confluence and one near the headwaters. MN-4.5 is located on the main stem below the confluence of the tributaries near the mouth; just above the Yukon River (Figure 1). MN-0.5 and MN-0.2 are the lower and upper stations on the west tributary, respectively. MN-2.5 and MN-1.5 are the lower and upper stations on the east tributary, respectively.

4.1 STATION MN-4.5 - MCGINTY CREEK NEAR THE MOUTH

MN-4.5, situated near the mouth of McGinty Creek, is similar in catchment area to Minto Creek, but exhibits consistently higher flows than Minto Creek. Datalogger data from 2015 extends from late-May to late mid-October, shortly after ice formation begins (Figure 6, Appendix A). Table 5 summarizes the monthly mean values from the continuous record with earlier years' values included for comparison. Discrete measurements conducted in 2015 are also included in Appendix B. June flows were far lower than the average. It appears there

may be a one day discrepancy in the logger date based on the higher measurement in late August but this would not significantly impact the mean monthly values.

Table 5 – Mean monthly discharge (m³/s), McGinty Creek at MN-4.5

Year	Month						
	Apr	May	Jun	Jul	Aug	Sep	Oct
2011	-	0.444	0.093	0.125	0.134	0.068	0.045 ¹
2012	0.212 ¹	0.230	0.180	0.082	0.053	0.109	
2013	-	-	0.054 ¹	0.103	0.093	0.116	
2014		0.230 ¹	0.041	0.037	0.026	0.046 ¹	
2015			0.013	0.046	0.049	0.029	0.029 ¹

Notes: ¹ - Based on incomplete derived data

4.2 STATION MN-2.5 - EAST TRIBUTARY OF MCGINTY CREEK

The Solinst Levellogger record extends from late May to mid-October 2015, however, ice formation renders the data unreliable at the end of September. The continuous stage record is shown in Figure 7 (Appendix A). Rating measurements obtained on 2015 were quite scattered and not in line with any previous measurements. As a result a continuous discharge record was not possible. Discrete measurements are included below (Table 6).

Similar to W7 on Minto Creek the discharge at this site is very low and the channel is very dynamic making continuous record collection challenging. Given the continued difficulties with this site, AEG recommends that the measurement reach for this station be reassessed and if necessary, relocated. One approach may be to fly over the creek in early June and identify a stable section of the creek that is expected to become ice free earlier in the season. An artificial control may also be considered. It may be that continuous discharge is not possible on this creek given the physical and climatic challenges.

Table 6 – Discrete measurements at MN-2.5 2015

Date	Time	Stage (m)	Discharge (m ³ /s)
26/05/2015	14:38	0.310	0.015
23/06/2015	16:49	0.250	0.003
13/07/2015	14:07	0.279	0.011
30/08/2015	14:15	0.245	0.038
20/09/2015	14:05	0.170	0.010
18/10/2015	15:10	0.096	0.010

4.3 STATION MN-0.5 - WEST TRIBUTARY OF MCGINTY CREEK

A discharge record was successfully obtained from station MN-0.5 in 2015. The stage and discharge hydrographs are shown in Figure 8 (Appendix A). As with other site a significant rainfall event in late August changed the control and a shift in the rating curve was observed. Mean monthly discharge was derived for July-October, though the October record is incomplete (Table 7). There are too few data in June to compute a mean. The late season start to the record is due to the persistent ice present in the channel preventing deployment of the logger and obtaining useful rating measurements challenging. Discrete measurements are also included in Appendix B.

Table 7 – Mean monthly derived discharge (m³/s) at MN0.5, 2015

Year	Month			
	Jul	Aug	Sep	Oct
2015	0.035	0.046	0.036	0.030 ¹

Notes: ¹ - Based on incomplete derived data

4.4 STATION MN-0.2 AND MN-1.5 MCGINTY CREEK HEADWATERS

These sites generally exhibit very low flows; observations for 2015 are included in Appendix B. MN-0.2 is near the headwaters of the west sub-catchment of McGinty Creek and has an average measured flow in the open water season of 0.0032 m³/s, though two of those observed flows were estimated at 1L/s. MN-1.5 is near the headwaters of the eastern sub-catchment of McGinty Creek and has an average measured flow during the open water season of 0.0034 m³/s. The mean flow at MN-0.2 and MN-1.5 were 0.0047 m³/s and 0.0028 m³/s in 2015, respectively. All measurements are included in Appendix B.

Station MN-0.2 has for the last two years shown a higher than normal flow of ~9 L/s in July. The last two flows in 2015 were also much higher than normal. There is a note in July “moved to main channel” which indicates there are multiple channels at this location. AEG recommends reassessment of this location and relocating this site if necessary to where the separate channels meet.

5 CLOSURE

AEG trusts that this review of the 2015 surface hydrometric data collected at Minto meets the needs of Minto Explorations Ltd. AEG is able to provide continuous data in CSV format on any time step which Minto or their consultants may require. This is a quick and easy request for AEG to execute at any time. Lastly, AEG thanks Minto for the opportunity to continue to support your hydrometric monitoring program.



Anthony Bier, MSc, EPT
Hydrologist
Alexco Environmental Group

APPENDIX A

HYDROGRAPHS 2015

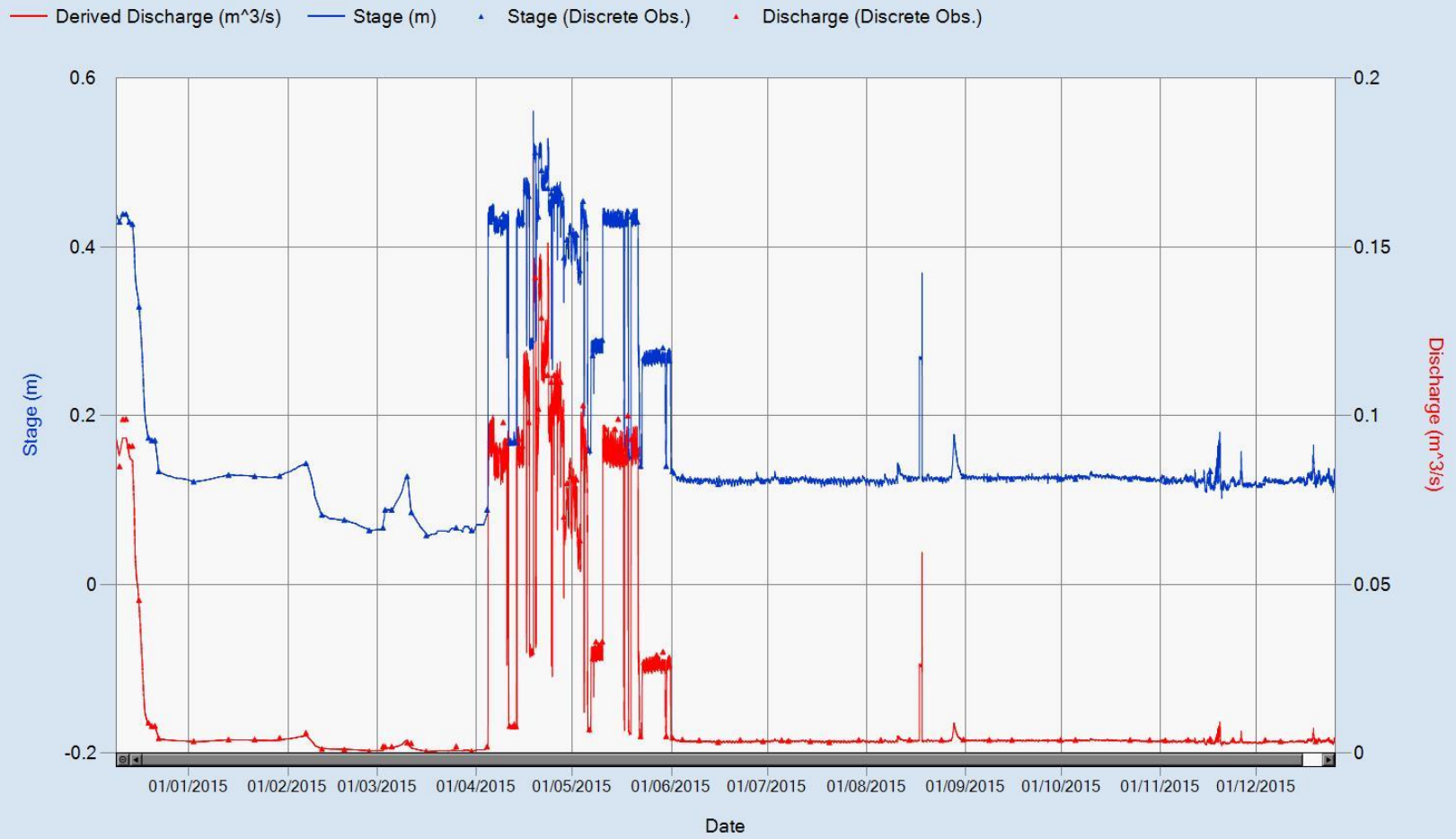


Figure 2 - Flume at W3 2015 hydrograph

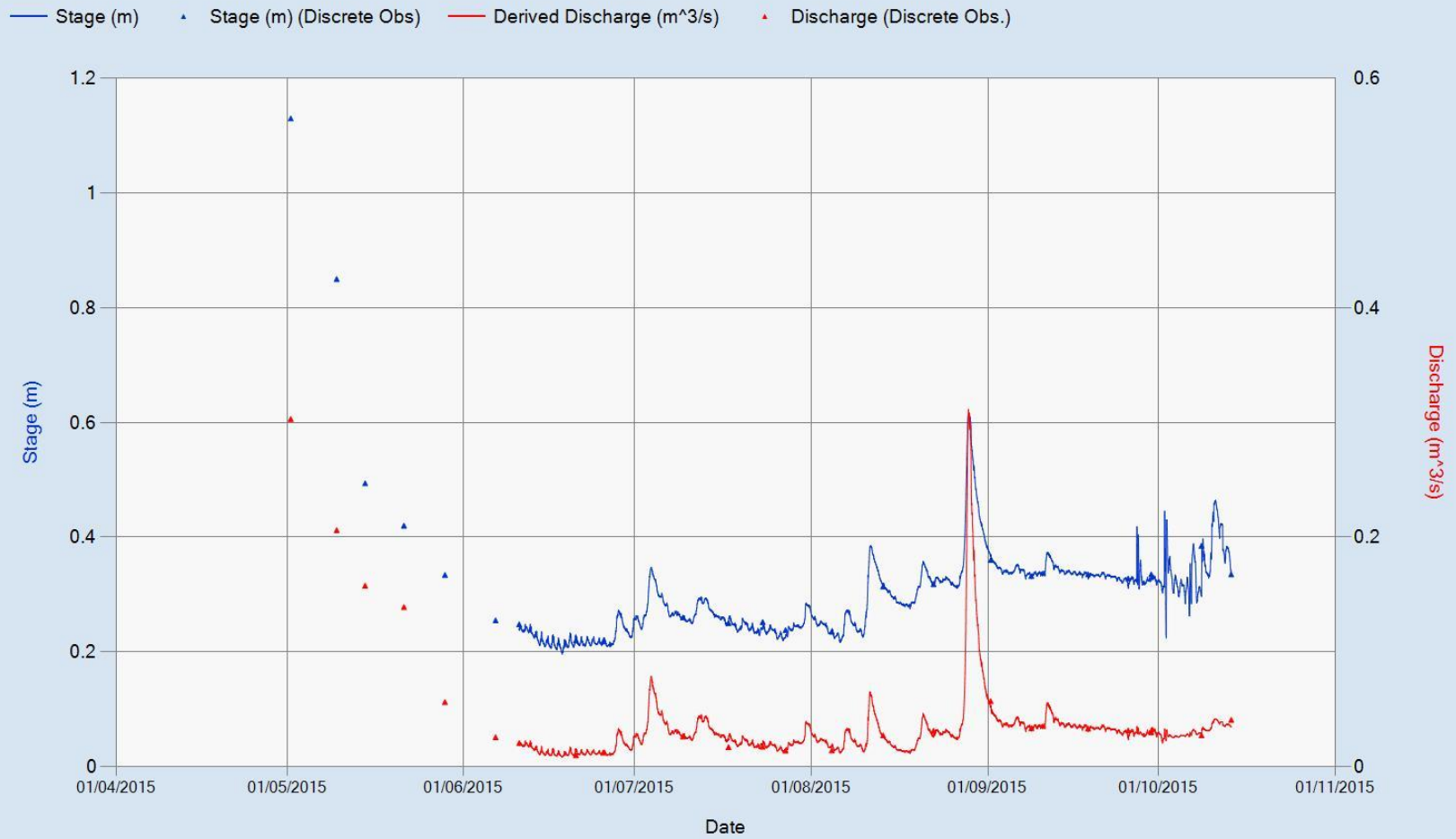


Figure 3 - Minto Creek at MC-1 2015 open water season hydrograph

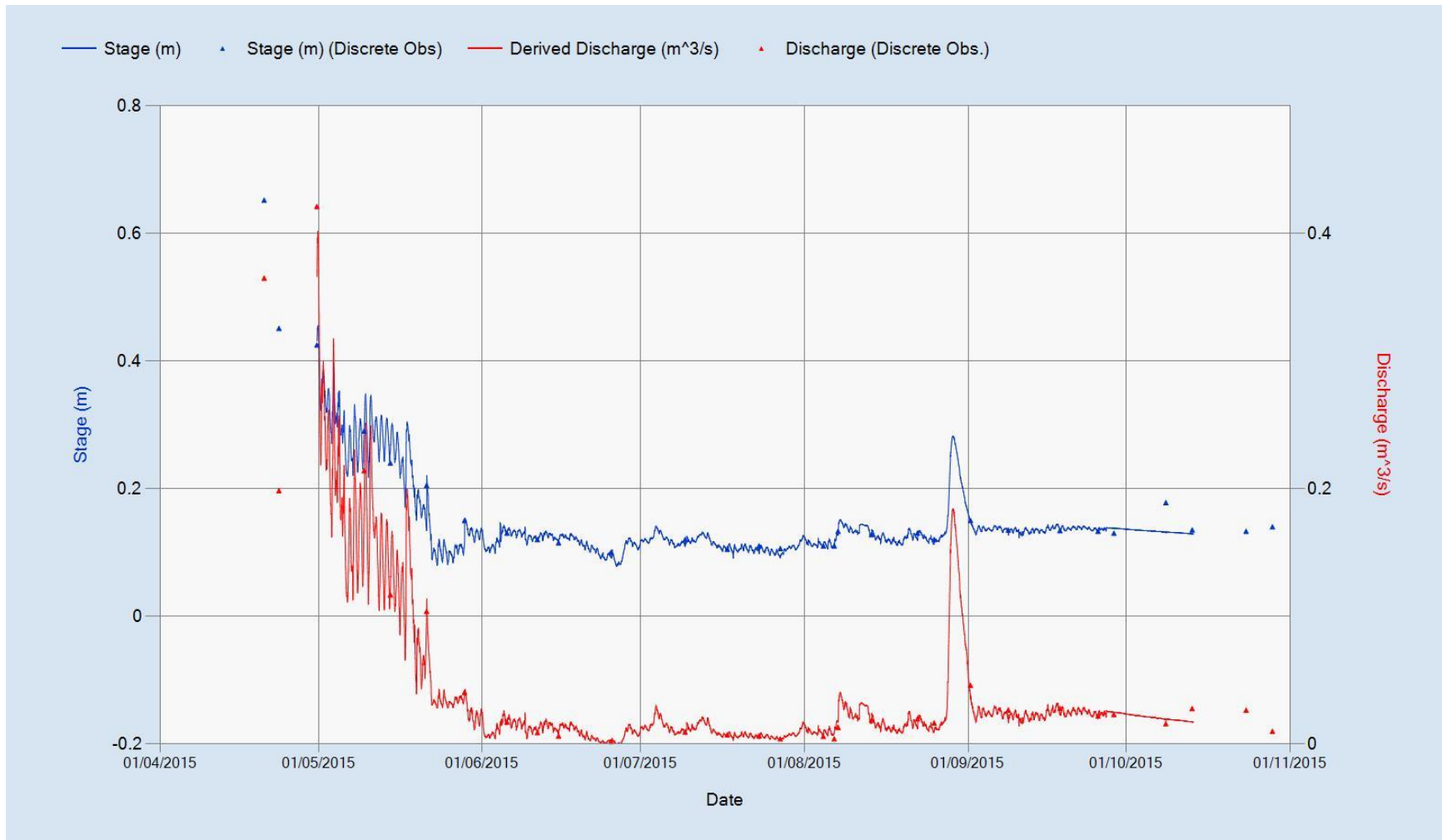


Figure 4 – Minto Creek at W1 2015 open water season hydrograph

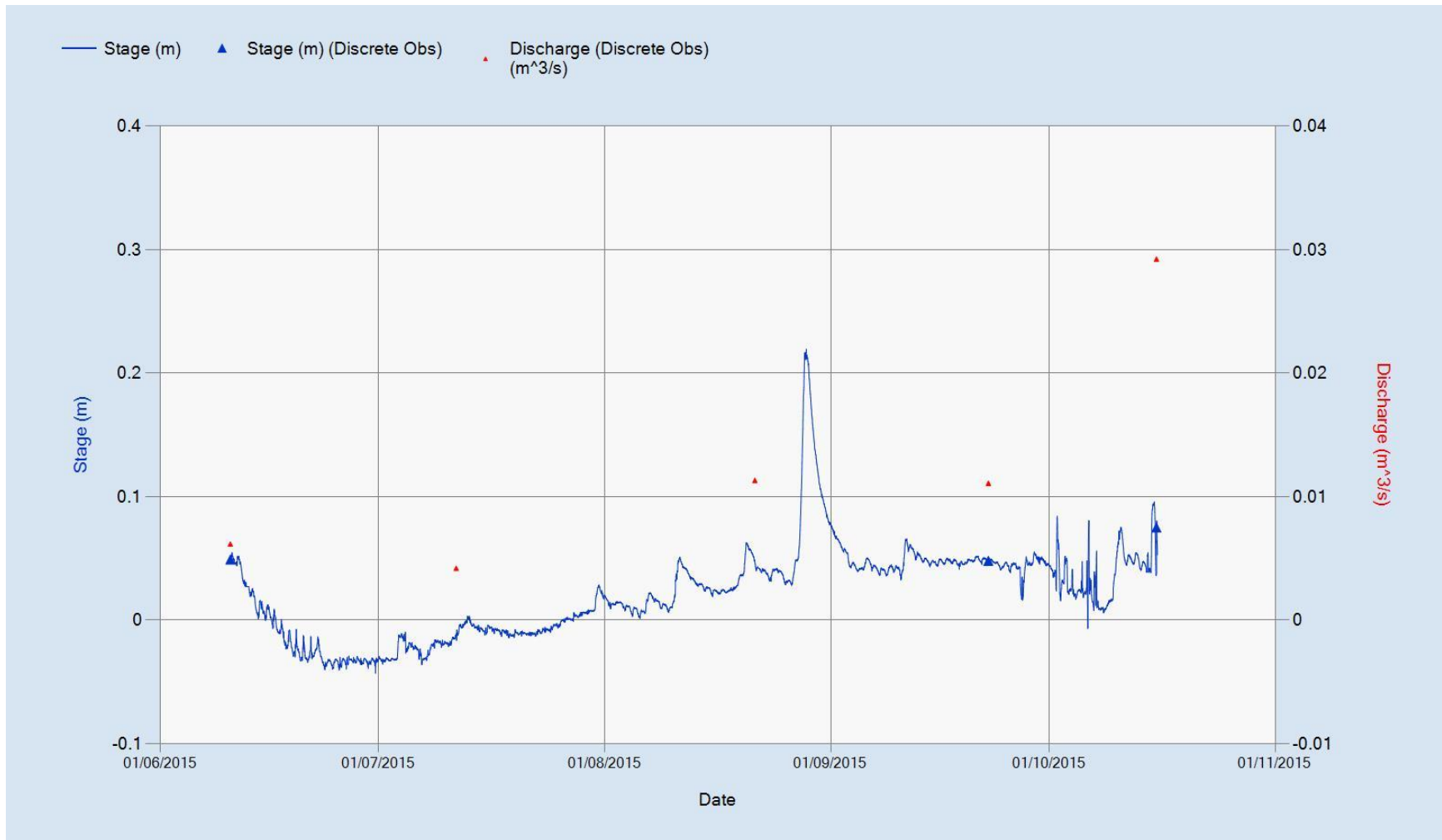


Figure 5 - Minto Creek at W7 2015 open water season hydrograph

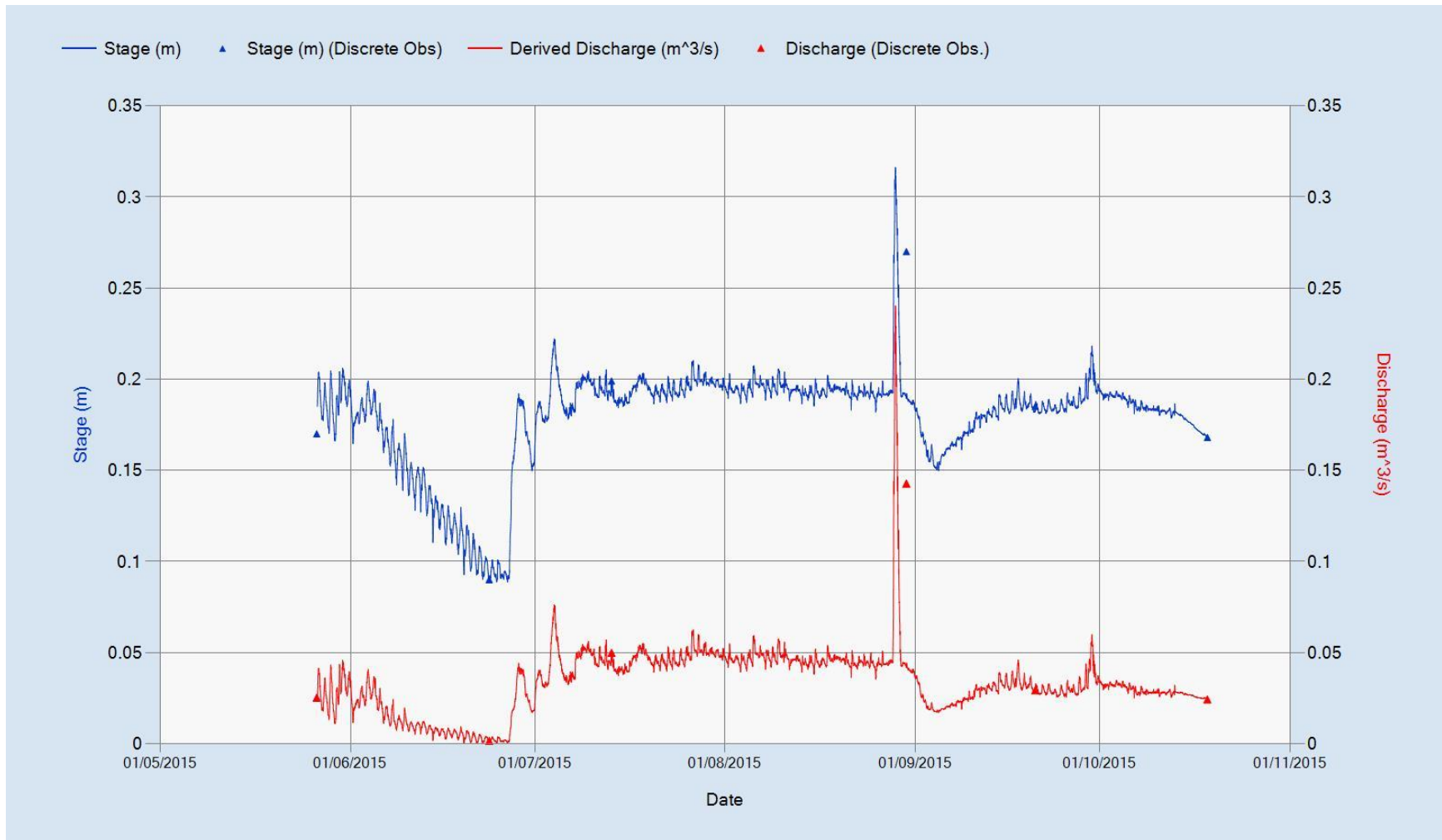


Figure 6 – McGinty Creek at MN-4.5 2015 open water season hydrograph

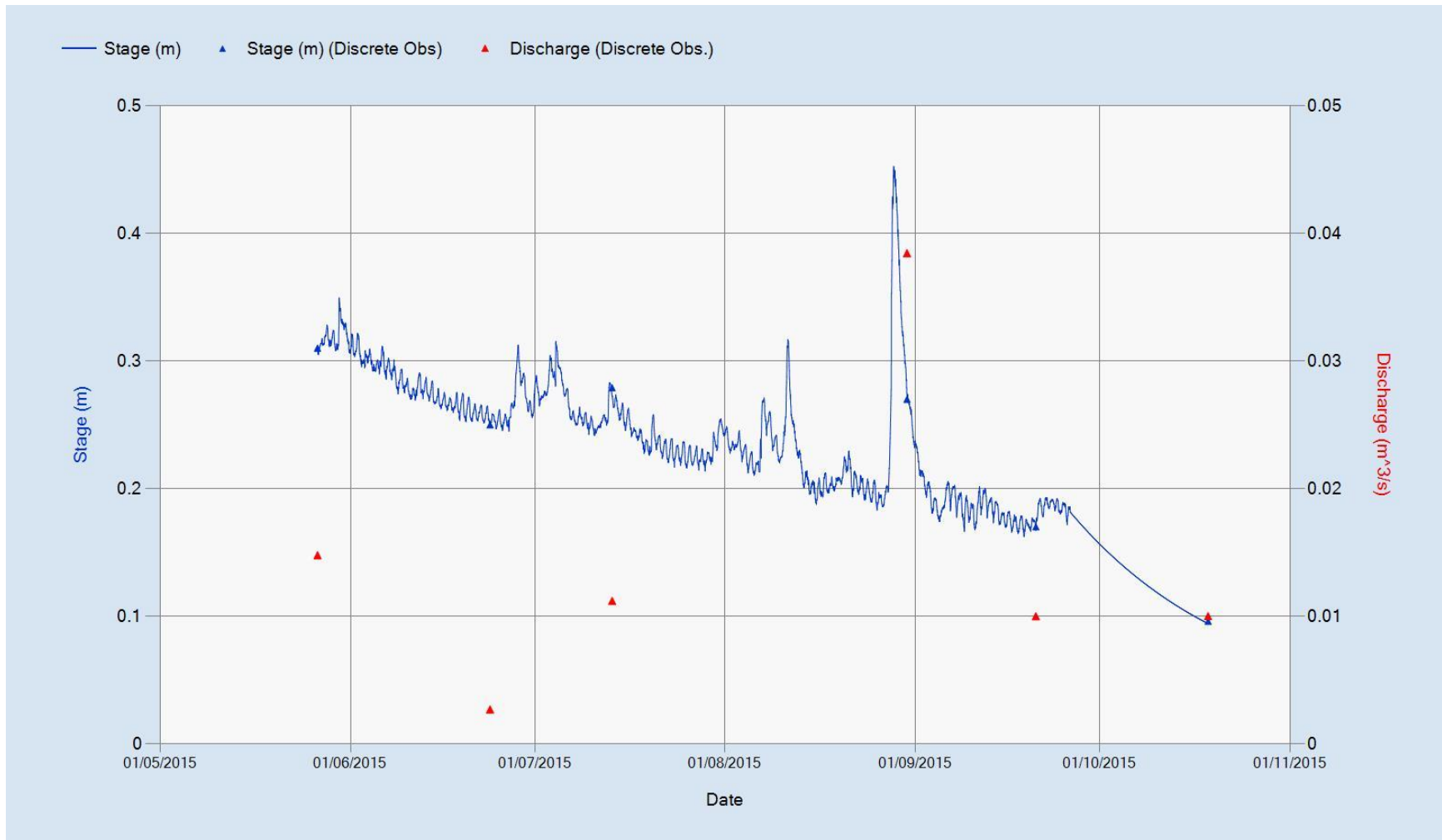


Figure 7 – McGinty Creek at MN-2.5 2015 open water season hydrograph

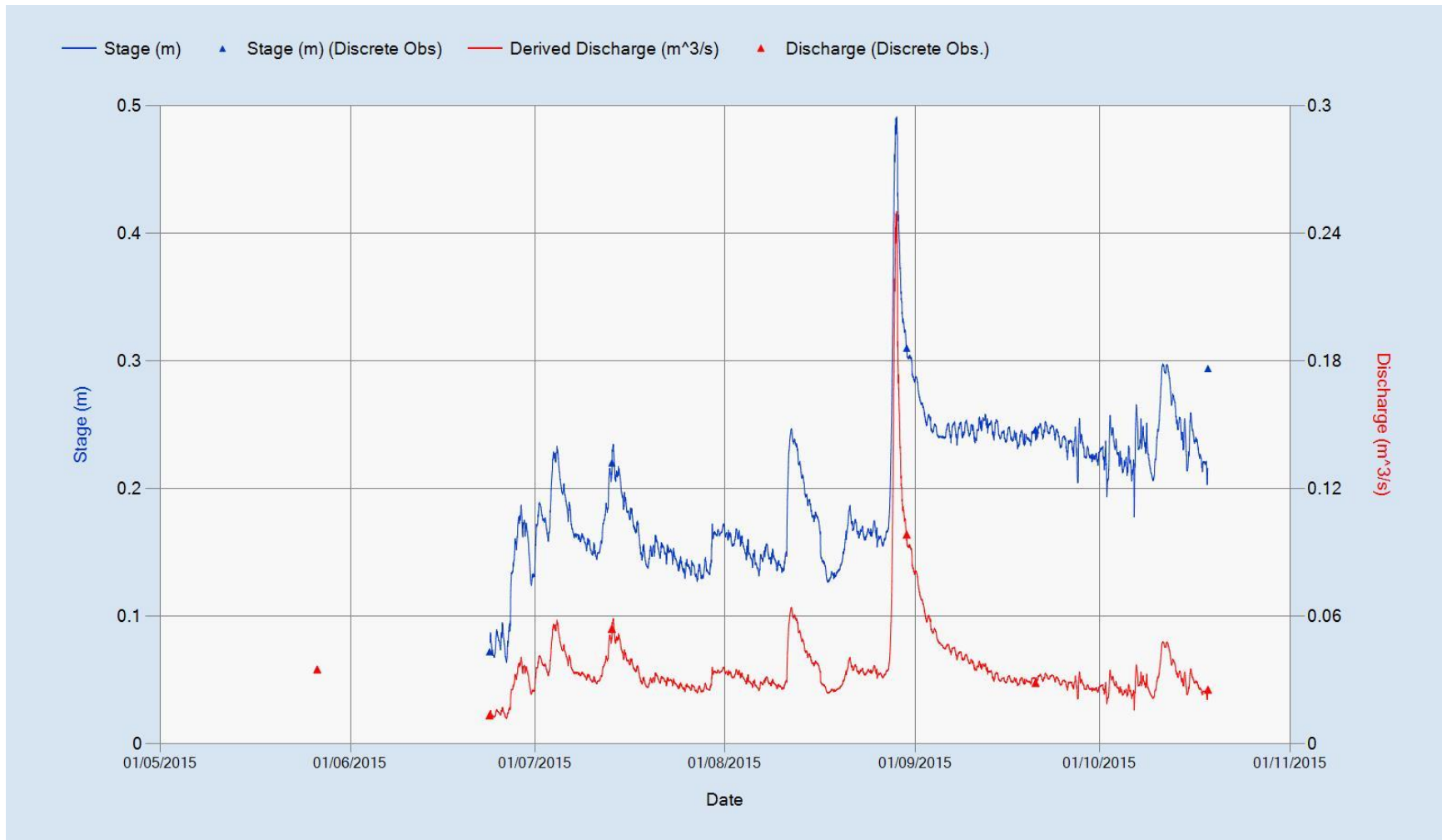


Figure 8 – McGinty Creek at MN-0.5 2015 open water season hydrograph

APPENDIX B

DISCRETE DISCHARGE MEASUREMENTS 2015

W-1			
Date	Time	Stage (m)	Discharge (m ³ /s)
04/20/15	16:15	0.652	0.365
04/23/15	11:34	0.451	0.198
04/30/15	16:03	0.425	0.421
05/09/15	14:47	0.290	0.214
05/14/15	13:58	0.240	0.117
05/21/15	10:30	0.205	0.104
05/28/15	15:02	0.150	0.040
06/05/15	16:05	0.130	0.017
06/11/15	10:25	0.120	0.009
06/15/15	10:26	0.115	0.006
06/25/15	9:20	0.100	0.002
07/09/15	9:47	0.120	0.009
07/17/15	9:37	0.105	0.007
07/23/15	9:51	0.110	0.006
07/27/15	10:24	0.106	0.004
08/04/15	14:07	0.110	0.006
08/06/15	15:37	0.110	0.004
08/07/15	8:57	0.133	0.013
08/13/15	17:03	0.128	0.018
08/22/15	9:50	0.130	0.019
08/25/15	13:46	0.120	0.016
09/01/15	10:52	0.150	0.046
09/08/15	14:37	0.135	0.026
09/18/15	9:19	0.134	0.028
09/25/15	14:25	0.133	0.022
09/28/15	14:34	0.130	0.023
10/08/15	10:39	0.178	0.016
10/13/15	10:29	0.135	0.027
10/23/15	15:27	0.133	0.026
10/28/15	15:17	0.140	0.00968

W-3			
Date	Time	Stage (m)	Discharge (m ³ /s)
01/02/15	11:05	0.122	0.0035
01/13/15	8:30	0.130	0.004
01/21/15	13:15	0.128	0.004
01/29/15	8:35	0.128	0.0045
02/06/15	14:00	0.143	0.006
02/11/15	14:10	0.082	0.0012
02/18/15	14:00	0.076	0.001
02/26/15	8:25	0.064	0.0005
03/02/15	16:15	0.067	0.002
03/03/15	8:30	0.088	0.0019
03/05/15	9:30	0.088	0.0019
03/09/15		0.000	0
03/10/15	7:20	0.128	0.0031
03/11/15	14:00	0.085	0.0029
03/16/15	6:30	0.058	0.0005
03/25/15	14:30	0.067	0.002
03/30/15	10:30	0.064	0.0005
04/04/15	7:15	0.088	0.0019
04/05/15	7:20	0.430	0.0901
04/06/15	7:15	0.433	0.091
04/07/15	7:00	0.424	0.09
04/08/15	7:00	0.427	0.09
04/09/15	7:40	0.439	0.098
04/10/15	7:45	0.427	0.09
04/11/15	7:40	0.168	0.008
04/12/15	7:45	0.168	0.0079
04/13/15	7:50	0.168	0.0079
04/14/15	7:45	0.436	0.093
04/15/15	7:45	0.430	0.091
04/16/15	7:10	0.469	0.112
04/17/15	7:20	0.460	0.098
04/18/15	7:35	0.290	0.03
04/19/15	7:35	0.512	0.141
04/20/15	8:10	0.436	0.102
04/21/15	7:30	0.491	0.129
04/22/15	6:55	0.469	0.112
04/23/15	7:15	0.469	0.112
04/24/15	7:30	0.463	0.11

MC-1			
Date	Time	Stage (m)	Discharge (m ³ /s)
05/01/15	14:52	1.13	0.303
05/09/15	16:27	0.85	0.206
05/14/15	16:30	0.494	0.158
05/21/15	11:58	0.42	0.139

05/28/15	16:40	0.334	0.056
06/06/15	13:55	0.255	0.026
06/10/15	17:45	0.248	0.020
06/20/15	16:38	0.22	0.010
06/25/15	11:47	0.185	0.012
07/09/15	11:26	0.22	0.026
07/17/15	11:26	0.25	0.017
07/23/15	11:20	0.252	0.017
07/27/15	11:36	0.238	0.014
08/04/15	14:45	0.235	0.014
08/13/15	14:37	0.314	0.027
08/22/15	11:02	0.318	0.031
09/01/15	11:54	0.36	0.057
09/08/15	15:25	0.332	0.034
09/18/15	14:02	0.335	0.033
09/25/15	15:08	0.328	0.031
09/29/15	16:04	0.335	0.030
10/08/15	11:56	0.385	0.027
10/13/15	17:10	0.335	0.041

W-7			
Date	Time	Stage (m)	Discharge (m ³ /s)
06/10/15	14:57	0.049	0.006
07/11/15	14:40	<0	0.004
08/21/15	14:25	<0	0.011
09/22/15	15:32	0.048	0.011
10/15/15	17:15	0.075	0.029

MN-4.5			
Date	Time	Stage (m)	Discharge (m ³ /s)
05/26/15	11:27	0.17	0.025
06/23/15	13:26	0.09	0.002
07/13/15	11:31	0.231	0.050
08/30/15	11:55	0.27	0.143
09/20/15	11:25	0.185	0.029
10/18/15	12:36	0.168	0.024

MN-0.5			
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04/25/15	7:30	0.469	0.112
04/26/15	7:25	0.469	0.112
04/27/15	7:40	0.463	0.11
04/28/15	7:20	0.387	0.07
04/29/15	7:20	0.408	0.08
04/30/15	7:15	0.418	0.082
05/01/15	7:20	0.415	0.081
05/02/15	7:20	0.415	0.081
05/03/15	7:40	0.372	0.063
05/04/15	7:40	0.454	0.103
05/05/15	7:20	0.427	0.09
05/06/15	6:15	0.158	0.007
05/07/15	7:25	0.271	0.028
05/08/15	7:50	0.290	0.033
05/09/15	7:45	0.287	0.032
05/10/15	7:55	0.290	0.033
05/11/15	7:40	0.436	0.096
05/12/15	7:40	0.433	0.092
05/13/15	7:50	0.427	0.09
05/14/15	7:15	0.439	0.096
05/15/15	6:50	0.442	0.099
05/16/15	7:45	0.430	0.09
05/17/15	7:25	0.430	0.09
05/18/15	7:25	0.442	0.1
05/19/15	8:20	0.436	0.093
05/20/15	7:15	0.430	0.09
05/21/15	7:25	0.430	0.09
05/22/15	7:00	0.140	0.005
05/23/15	7:10	0.268	0.027
05/24/15	7:10	0.268	0.027
05/25/15	7:10	0.268	0.027
05/26/15	7:00	0.268	0.027
05/27/15	7:15	0.277	0.029
05/28/15	7:05	0.271	0.027
05/29/15	7:15	0.280	0.03
05/30/15	7:15	0.140	0.005
05/31/15	7:20	0.265	0.026
06/01/15	6:50	0.134	0.0045

Date	Time	Stage (m)	Discharge (m ³ /s)
05/26/15	13:23	-	0.035
06/23/15	15:03	0.072	0.013
07/13/15	13:02	0.22	0.054
08/30/15	13:15	0.31	0.098
09/20/15	12:52	0.246	0.029
10/18/15	14:30	0.294	0.025

MN-0.2			
Date	Time	Stage (m)	Discharge (m ³ /s)
05/30/15	10:52	-	0.000
06/30/15	14:45	-	0.009
07/13/15	17:30	-	<0.001
08/31/15	11:35	-	<0.001
09/21/15	11:09	-	0.010
10/19/15	11:04	-	0.007

MN-2.5			
Date	Time	Stage (m)	Discharge (m ³ /s)
05/26/15	14:38	0.31	0.015
06/23/15	16:49	0.25	0.003
07/13/15	14:07	0.279	0.011
08/30/15	14:15	0.245	0.038
09/20/15	14:05	0.17	0.010
10/18/15	15:10	0.096	0.010

MN-1.5			
Date	Time	Stage (m)	Discharge (m ³ /s)
05/30/15	12:02	-	0.002
06/30/15	16:22	-	0.004
07/13/15	16:01	-	0.003
08/29/15	14:49	-	0.006
09/20/15	15:14	-	0.002
10/19/15	14:38	-	0.001

06/04/15	9:00	0.128	0.004
06/09/15	15:30	0.122	0.0038
06/15/15	13:40	0.119	0.0032
06/22/15	11:45	0.125	0.0039
06/29/15	14:35	0.122	0.0035
07/07/15	13:15	0.122	0.0036
07/14/15	9:00	0.125	0.0035
07/20/15	8:30	0.122	0.0032
07/29/15	13:35	0.125	0.0039
07/05/15	10:35	0.122	0.0038
07/14/15	9:00	0.125	0.0039
07/20/15	8:30	0.122	0.0036
07/29/15	13:35	0.125	0.0039
08/05/15	10:35	0.122	0.0039
08/14/15	10:10	0.125	0.0039
08/24/15	10:25	0.125	0.0039
08/31/15	7:50	0.128	0.004
09/08/15	9:45	0.125	0.0039
09/15/15	11:20	0.125	0.0039
09/23/15	15:00	Visted - No Reading	
09/30/15	16:35	0.125	0.0039
10/05/15	8:15	0.125	0.0039
10/22/15	10:50	0.125	0.0039
10/28/15	13:30	0.125	0.0039
11/02/15	10:50	0.122	0.0038
11/09/15	13:30	0.125	0.0039
11/16/15	11:15	0.134	0.0042
11/23/15	14:05	0.125	0.0039
12/03/15	16:00	0.125	0.0039
12/08/15	11:15	0.122	0.0035
12/19/15	10:15	0.122	0.0035
12/26/15	15:35	0.125	0.0039