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Oct 29, 2025

Re: McKeand River Hydrometric Program

Fathom Scientific Ltd. (FSL) has been asked by Sea to Sky Energy Solutions (S2SES) to design and implement a hydrometric program on the McKeand River on Baffin Island. In 2024, we installed two AutoSalt systems built by FSL on two turbulent sections of the river near the intake of the proposed hydroelectric project. These are custom automated salt injection systems implementing a primary 300 L injection tank and an auxiliary 1000 L brine holding tank. Both tanks contain between 22-23% NaCl and are programmed to inject brine and capture a range of stage-discharge measurements in order to build a Rating Curve (RC) and transform the continuous stage record to a discharge hydrograph. To our knowledge this is the first attempt at automated salt dilution gauging in the Arctic.

Given the difficulty of maintaining a permanent staff gauge at this site, none was installed, nor benchmarks surveyed. We rely on the discrete flow measurements from the AutoSalt, and multiple (up to 6) concurrent pressure transducers recording stage at 4 locations.

A Google Earth image of the hydrometric sites around the McKeand project are shown in Figure 1, Figure 2, and Figure 3.

1.1 Hydrometric Program: Description

FSL and S2SES installed a total of 6 Pressure Transducers (PTs) in the river in October 2024. At each of the AutoSalt stations, a Solinst Levellogger and Barlogger pair were installed at the bottom of a pipe in the river, along with the vented PT that is part of the AutoSalt system. Downstream of Site B, AT197 and AT199 were both equipped with PTs for redundant water level.

In 2025, it was found that 4 of the 6 PTs had failed in some way, likely due to ice damage during the winter. These were Keller PTs and will be shipped back for evaluation by the manufacturer. The two PTs on AT197 and AT199, both Keller 0-4m Acculevel PTs failed due to water intrusion on July 2, exactly at the peak water level shown in Figure 6. The Solinst PT at Site B failed sometime in June, likely due to ice damage. The status of the Solinst Levellogger at Site A is unknown because during the attempt to retrieve it in high water on Sep 22, 2025, it fell to the bottom of the insitu pipe. Because the water level was higher than during installation, we could not access the bolts to remove the pipe and retrieve the datalogger, so it was left in place, and two new PTs were installed within the same pipe.

The AutoSalt PT at Site B survived the winter and recorded continuously until our last visit on Sep 24, 2025 when it was replaced with a larger range PT, a Unidata 0-20m probe. The original PT only had a range of 0-4.7 m which was exceeded on July 1. Fortunately, the PTs on AT197 and AT199 recorded the peak on July 2, 2025. We've used a linear regression to estimate a peak stage of 4.8m shown on Figure 6.

The PT at Site A was compromised when the entire AQ75 station was toppled on June 3 due to, what we believe to be, a high water event. This occurred after both tanks were emptied and used to measure the flow in the McKeand River. In Sep 2025, we moved the AQ75 system to a higher elevation and installed 0-20m Unidata PT and a Solinst 0-20m Levellogger. Additionally, we replace the NRT Satellite Modem and installed a 2-way NuPoint Camera

modem that gives us the capability to collect monitoring data and make changes to the salt dilution injection settings. We also marked out GPS points on both banks with the intent of capturing video during freshet and calculate surface Image Velocimetry measurements.

1.2 Hydrometric Program: Results

BC RISC Grading (2018) was considered for Site A and Site B. Grade A or B corresponds to:

- 3 surveyed BMs
- PT Accuracy of 2mm
- Tracking of stage offset by manual stage measurements.
- 10 points spanning the range of interest, which is 2%-200%MAD in general.
- Comparison to regional WSC hydrographs.
- Average error between RC and Valid (non-anomalous) Calibration Points.
- Grade A assumed uncertainty of less than ±7%, Grade B of ±15%, Grade C of ±30%.

Due to the lack of surveyed BMs, a relevant regional concurrent WSC Station, and no measurements above 42 m^3/s (approximately 80%MAD of ~69 cms but only 5% of the peak flow of 850 m^3/s) we have given the hydrometric program a Grade C (±30%) thus far. Once we have the second year of data and more measurements above 42 m^3/s, along with 3 surveyed BMs, we expect the program to achieve a Grade B. **We recommend surveying 3 BMs at each site, and a focus on measurement of flows above 50 m^3/s in 2026.**

1.2.1 McKeand Site A Upstream

Shown in Figure 4, Site A AutoSalt measured 96 flows in 2024-2025, but all at lower flows. The brine tank was emptied before the freshet began. The AutoSalt has been corrected to capture larger flows in 2026. This site was toppled in Jun 2025 when water level rose to the tank level. The system was moved further uphill in Sep 2025 to avoid this in 2026.

Because we lacked measurements above 42 m^3/s in 2025, we used the software BaRatin and measurements of the channel control from satellite imagery, shown in Figure 2, to estimate the peak flows and uncertainty.

1.2.2 McKeand Site B Downstream

The RC for Site B is shown in Figure 5. Similar to Site A, this site also injected its brine too early in the season. However, this site remained above the water level in freshet 2025, but the PT attached to the AutoSalt system AQ78 maxed out at 4.66m. The PT at the downstream site AT199 did not max out, and a regression analysis suggested that the peak at McKeand Site B was only 10cm above this maxed out level, at 4.76m.

Like at Site A, we used BaRatin to estimate the peak flow in 2025 from satellite imagery shown in Figure 3. The peak flow based on this maximum likelihood RC was 830m^3/s on Jul 2, 2025, shown in Figure 6.

There was a historical WSC station on McKeand River at a much further downstream site, shown in Figure 7. We've broken the 8 years historical record from 2006 to 2014 into Water Years (Oct 1, to Sep 30), and plotted these against the 2024-2025 record from Site B in Figure 8. We have not measured the relative drainage areas or average elevations between the two sites, but it appears from this figure that the McKeand WSC record has earlier and larger peak flows, suggesting a larger and lower elevation drainage area.

We recommend measuring the relative drainage areas of the two sites, installing freeze-resistant PTs, and measuring flows above 42 m^3/s.

1.3 Summary and Recommendations

The hydrometric program at McKeand River is relatively successful so far, with a complete year of water level coupled with 80+ low flow measurements. We have yet to measure flows greater than 42 m^3/s or less than 6 m^3/s. According to the historical WSC station records, we

can expect flows of zero in the winter. We've used a hydrometric hydraulic modeling software called BaRatin to extrapolate the rating curve to flood levels, but the two AutoSalt systems as Site A and Site B are primed for measurement in 2026, but should be visited in April 2026 to maximize the probability of success.

We recommend surveying BenchMarks late in 2026 and using a LIDAR survey to build a hydraulic model using HECRAS for these sites to validate the extrapolation of the rating curve. Once these 2026 activities are complete, revisit this 2024-2025 hydrometric record.

Sincerely

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1.4 References:

R. I. S. C. (RISC), 2018. "Manual of British Columbia Hydrometric Standards.," Victoria, B.C.

Hudson R. and J. Fraser. 2005. "Introduction to salt dilution gauging for streamflow measurement Part IV: The mass balance (or dry injection) method," Streamline. Watershed Management Bulletin. FORREX–Forest Research Extension Partnership., vol. 1, pp. 6-12, 2005.

Maidment, D. R. ,1992. Handbook of Hydrology. New York, McGraw-Hill.

TABLES

Table 1: Salt Dilution Measurements and Stage at Site B

C:\gsenti\in\[FATHOM_SCT\]\CUSTOMERS\Sea2Sky\Projects\xplus\[Reports\]2025-09-27 Annual Report\[McKenzie River_Hydrometric_V0.2.xlsx]McKenzieB_QRecord 2025-10-29 13:30

Date	Stage (m)	Q (m^3/s)	Uncert. (%)	Applicable RC	RC Q (m^3/s)	Abs. RC Err. (%)	State (FSL-RC004)	Notes
2024-10-01 18:33	0.649	13.134	5.2%	FSL-RC2024-1	21.75		Anomaly	
2024-10-01 23:11	0.649	14.265	4.4%	FSL-RC2024-1	21.75		Anomaly	
2024-10-02 3:26	0.649	14.874	4.4%	FSL-RC2024-1	21.75		Anomaly	
2024-10-02 12:11	0.649	19.110	4.7%	FSL-RC2024-1	21.75	13.8%	Use	
2024-10-02 20:09	0.649	17.671	4.4%	FSL-RC2024-1	21.75	23.1%	Use	
2024-10-02 23:37	0.649	13.791	4.9%	FSL-RC2024-1	21.75		Anomaly	
2024-10-03 0:00	0.649	17.683	12.9%	FSL-RC2024-1	21.75	23.0%	Use	
2024-10-03 17:40	0.649	20.552	4.7%	FSL-RC2024-1	21.75	5.8%	Use	
2024-10-03 18:27	0.649	22.907	10.6%	FSL-RC2024-1	21.75	5.0%	Use	
2024-10-03 22:51	0.649	19.271	4.7%	FSL-RC2024-1	21.75	12.9%	Use	
2024-10-03 23:31	0.649	19.473	8.0%	FSL-RC2024-1	21.75	11.7%	Use	
2024-10-04 3:06	0.649	14.512	4.9%	FSL-RC2024-1	21.75		Anomaly	
2024-10-04 3:45	0.649	24.405	8.7%	FSL-RC2024-1	21.75	10.9%	Use	
2024-10-05 8:38	0.668	17.428	6.0%	FSL-RC2024-1	22.76	30.6%	Use	
2024-10-05 8:42	0.668	18.345	5.9%	FSL-RC2024-1	22.76	24.1%	Use	
2024-10-05 8:48	0.677	17.851	6.3%	FSL-RC2024-1	23.39	31.0%	Use	
2024-10-05 9:57	0.662	22.323	7.0%	FSL-RC2024-1	22.34	0.1%	Use	
2024-10-05 10:03	0.662	21.691	6.0%	FSL-RC2024-1	22.34	3.0%	Use	
2024-10-05 14:55	0.702	27.151	4.4%	FSL-RC2024-1	25.19	7.2%	Use	
2024-10-05 15:50	0.693	23.387	6.7%	FSL-RC2024-1	24.54	4.9%	Use	
2024-10-05 15:53	0.693	22.244	12.6%	FSL-RC2024-1	24.54	10.3%	Use	
2024-10-06 0:10	0.718	26.843	4.4%	FSL-RC2024-1	26.37	1.8%	Use	
2024-10-06 0:50	0.728	24.400	6.6%	FSL-RC2024-1	27.11	11.1%	Use	
2024-10-06 1:04	0.728	23.686	6.1%	FSL-RC2024-1	27.11	14.5%	Use	
2024-10-07 16:16	0.762	31.234	4.6%	FSL-RC2024-1	29.72	4.9%	Use	
2024-10-07 16:16	0.762	24.879	5.5%	FSL-RC2024-1	29.72	19.5%	Use	
2024-10-07 19:11	0.774	37.596	9.4%	FSL-RC2024-1	30.66	18.4%	Use	
2024-10-07 19:59	0.779	25.891	6.5%	FSL-RC2024-1	31.06	20.0%	Use	
2024-10-08 2:57	0.803	39.175	15.6%	FSL-RC2024-1	32.99	15.8%	Use	
2024-10-08 3:30	0.812	32.336	10.6%	FSL-RC2024-1	33.72	4.3%	Use	
2024-10-08 23:59	0.785	30.849	5.6%	FSL-RC2024-1	31.54	2.2%	Use	
2024-10-09 0:00	0.817	35.399	5.8%	FSL-RC2024-1	34.13	3.6%	Use	
2024-10-09 0:01	0.785	31.039	5.5%	FSL-RC2024-1	31.54	1.6%	Use	
2024-10-09 4:01	0.845	34.708	5.6%	FSL-RC2024-1	36.48	5.1%	Use	
2024-10-09 4:02	0.845	39.361	5.3%	FSL-RC2024-1	36.48	7.3%	Use	
2024-10-09 4:02	0.845	36.391	5.6%	FSL-RC2024-1	36.48	0.2%	Use	
2024-10-09 12:12	0.849	38.998	22.4%	FSL-RC2024-1	36.82	5.6%	Use	
2024-10-09 12:40	0.878	38.248	6.3%	FSL-RC2024-1	39.32	2.8%	Use	
2024-10-10 4:22	0.871	44.284	5.8%	FSL-RC2024-1	38.71	12.6%	Use	
2024-10-10 4:23	0.871	35.574	5.6%	FSL-RC2024-1	38.71	8.8%	Use	
2024-10-10 4:24	0.871	36.757	6.0%	FSL-RC2024-1	38.71	5.3%	Use	
2024-10-13 0:12	0.861	38.817	15.1%	FSL-RC2024-1	37.84	2.5%	Use	
2024-10-13 0:42	0.826	34.442	6.0%	FSL-RC2024-1	34.88	1.3%	Use	
2024-10-13 0:42	0.824	41.779	6.1%	FSL-RC2024-1	34.71	16.9%	Use	
2024-10-13 0:48	0.824	27.585	5.8%	FSL-RC2024-1	34.71	25.8%	Use	
2024-10-16 12:10	0.634	24.477	4.4%	FSL-RC2024-1	21.13	13.7%	Use	
2024-10-16 12:59	0.681	28.721	7.3%	FSL-RC2024-1	23.68	17.6%	Use	
2024-10-20 0:12	0.475	12.076	4.7%	FSL-RC2024-1	14.93	23.6%	Use	
2024-10-20 13:57	0.457	14.646	4.4%	FSL-RC2024-1	14.28	2.5%	Use	
2024-10-20 20:11	0.45	9.220	4.4%	FSL-RC2024-1	14.02		Use	
2024-10-23 12:13	0.39	13.529	4.4%	FSL-RC2024-1	11.93	11.8%	Use	
2024-10-27 0:10	0.35	10.778	4.4%	FSL-RC2024-1	10.59	1.7%	Use	
2024-11-03 0:12	0.26	6.053	5.7%	FSL-RC2024-1	7.80	28.8%	Use	
2025-06-14 9:31	0.804945	40.280	15.0%	FSL-RC2024-1	33.15	17.7%	Use	
2025-06-14 17:01	0.888658	39.604	15.0%	FSL-RC2024-1	40.25	1.6%	Use	
2025-06-15 0:16	0.945	41.059	15.0%	FSL-RC2024-1	45.34	10.4%	Use	
2025-06-15 6:24	0.89	35.382	15.0%	FSL-RC2024-1	40.37	14.1%	Use	
2025-06-15 21:30	0.755	36.780	15.0%	FSL-RC2024-1	29.17	20.7%	Use	
2025-06-16 5:01	0.733783	36.814	15.0%	FSL-RC2024-1	27.55	25.2%	Use	
2025-06-16 5:39	0.735899	32.002	15.0%	FSL-RC2024-1	27.71	13.4%	Use	
2025-06-16 6:49	0.738721	30.387	15.0%	FSL-RC2024-1	27.93	8.1%	Use	
2025-06-16 9:46	0.747186	36.893	15.0%	FSL-RC2024-1	28.57	22.6%	Use	
2025-06-16 10:25	0.749302	29.705	15.0%	FSL-RC2024-1	28.74	3.3%	Use	
2025-06-16 10:30	0.748	35.587	15.0%	FSL-RC2024-1	28.63	19.5%	Use	
2025-06-16 19:37	0.79	31.436	15.0%	FSL-RC2024-1	31.94	1.6%	Use	
2025-06-16 20:28	0.731	31.878	15.0%	FSL-RC2024-1	27.34	14.2%	Use	
2025-06-16 20:33	0.731	24.761	15.0%	FSL-RC2024-1	27.34	10.4%	Use	
2025-06-18 12:08	0.721	26.052	15.0%	FSL-RC2024-1	26.59	2.1%	Use	
2025-06-18 13:06	0.704	21.942	15.0%	FSL-RC2024-1	25.34	15.5%	Use	
2025-06-19 2:46	0.65	24.977	15.0%	FSL-RC2024-1	21.79	12.7%	Use	
2025-06-19 10:17	0.626	24.261	15.0%	FSL-RC2024-1	20.80	14.3%	Use	
2025-06-19 11:05	0.614	21.131	15.0%	FSL-RC2024-1	20.31	3.9%	Use	
2025-06-19 15:15	0.631	23.657	15.0%	FSL-RC2024-1	21.01	11.2%	Use	
2025-06-19 16:07	0.619	26.587	15.0%	FSL-RC2024-1	20.51	22.8%	Use	
2025-06-19 21:16	0.595	22.666	15.0%	FSL-RC2024-1	19.54	13.8%	Use	
2025-06-19 22:11	0.586	23.622	15.0%	FSL-RC2024-1	19.18	18.8%	Use	
2025-06-20 8:15	0.553	18.020	15.0%	FSL-RC2024-1	17.88	0.8%	Use	
2025-06-20 21:30	0.502	17.222	15.0%	FSL-RC2024-1	15.93	7.5%	Use	
2025-06-20 22:28	0.505	16.963	15.0%	FSL-RC2024-1	16.04	5.4%	Use	
2025-06-21 6:16	0.493	16.626	15.0%	FSL-RC2024-1	15.60	6.2%	Use	
2025-06-21 7:12	0.514	18.181	15.0%	FSL-RC2024-1	16.38	9.9%	Use	
2025-06-21 13:12	0.499	16.808	15.0%	FSL-RC2024-1	15.82	5.9%	Use	
2025-06-21 14:17	0.52	20.456	15.0%	FSL-RC2024-1	16.61	18.8%	Use	
2025-06-21 19:31	0.511	16.947	15.0%	FSL-RC2024-1	16.27	4.0%	Use	
2025-06-21 20:28	0.519	15.835	15.0%	FSL-RC2024-1	16.57	4.7%	Use	
2025-06-22 0:08	0.477	16.923	15.0%	FSL-RC2024-1	15.00	11.3%	Use	
2025-06-22 0:57	0.507	20.289	15.0%	FSL-RC2024-1	16.12	20.5%	Use	
2025-06-22 18:08	0.569	17.867	15.0%	FSL-RC2024-1	18.51	3.6%	Use	
2025-06-22 18:45	0.571	21.174	15.0%	FSL-RC2024-1	18.59	12.2%	Use	
2025-06-25 6:47	0.774	31.796	15.0%	FSL-RC2024-1	30.66	3.6%	Use	
2025-08-08 8:29	0.966	36.027	5.2%	FSL-RC2024-1	47.30		Anomaly	
2025-08-08 8:34	0.966	31.229	5.4%	FSL-RC2024-1	47.30		Anomaly	
2025-09-22 18:27	0.79	36.414	8.6%	FSL-RC2024-1	31.94	12.3%	Use	
2025-09-23 7:47	0.7	27.827	15.2%	FSL-RC2024-1	25.04	10.0%	Use	
2025-09-23 8:05	0.7	27.098	4.9%	FSL-RC2024-1	25.04	7.6%	Use	
2025-09-23 8:05	0.7	27.006	4.9%	FSL-RC2024-1	25.04	7.3%	Use	
2025-09-23 8:05	0.7	27.006	4.9%	FSL-RC2024-1	25.04	7.3%	Use	
2025-09-23 8:05	0.7	27.006	4.9%	FSL-RC2024-1	25.04	7.3%	Use	
2025-09-23 8:05	0.7	27.006	4.9%	FSL-RC2024-1	25.04	7.3%	Use	

2024 to 2025	
#RC Points	91
Avg. RC Error	11.0%
RC Grade	B

FIGURES

Notes:
1) Apple Maps image of Site A and B showing AT Conductivity probes. Sections below the AQ Injection sites are good mixing sites, but reaches between AQ75 and AQ78 are large storage pools and riffles.

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MCKEAND RIVER	
MCKEAND RIVER SATELLITE IMAGE	
Fathom Scientific Ltd.	Figure 1
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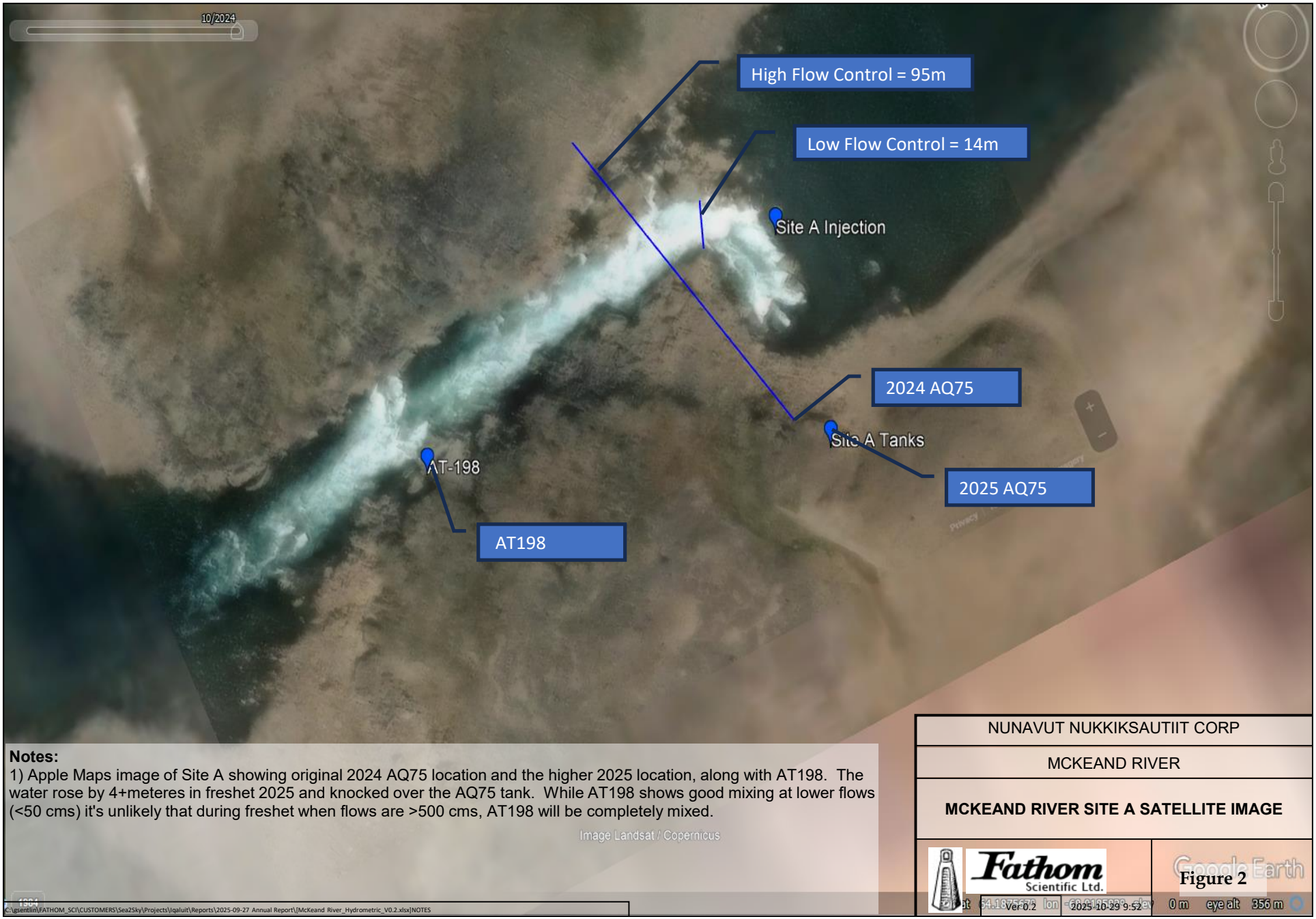
Figure 1: McKeand River Satellite Image



Notes:
1) Apple Maps image of Site A showing original 2024 AQ75 location and the higher 2025 location, along with AT198. The water rose by 4+meteres in freshet 2025 and knocked over the AQ75 tank. While AT198 shows good mixing at lower flows (<50 cms) it's unlikely that during freshet when flows are >500 cms, AT198 will be completely mixed.

NUNAVUT NUKKIKSAUTIIT CORP
MCKEAND RIVER
MCKEAND RIVER SITE A SATELLITE IMAGE
Fathom Scientific Ltd. — **Figure 2**

Figure 2: McKeand River Site A Satellite Image

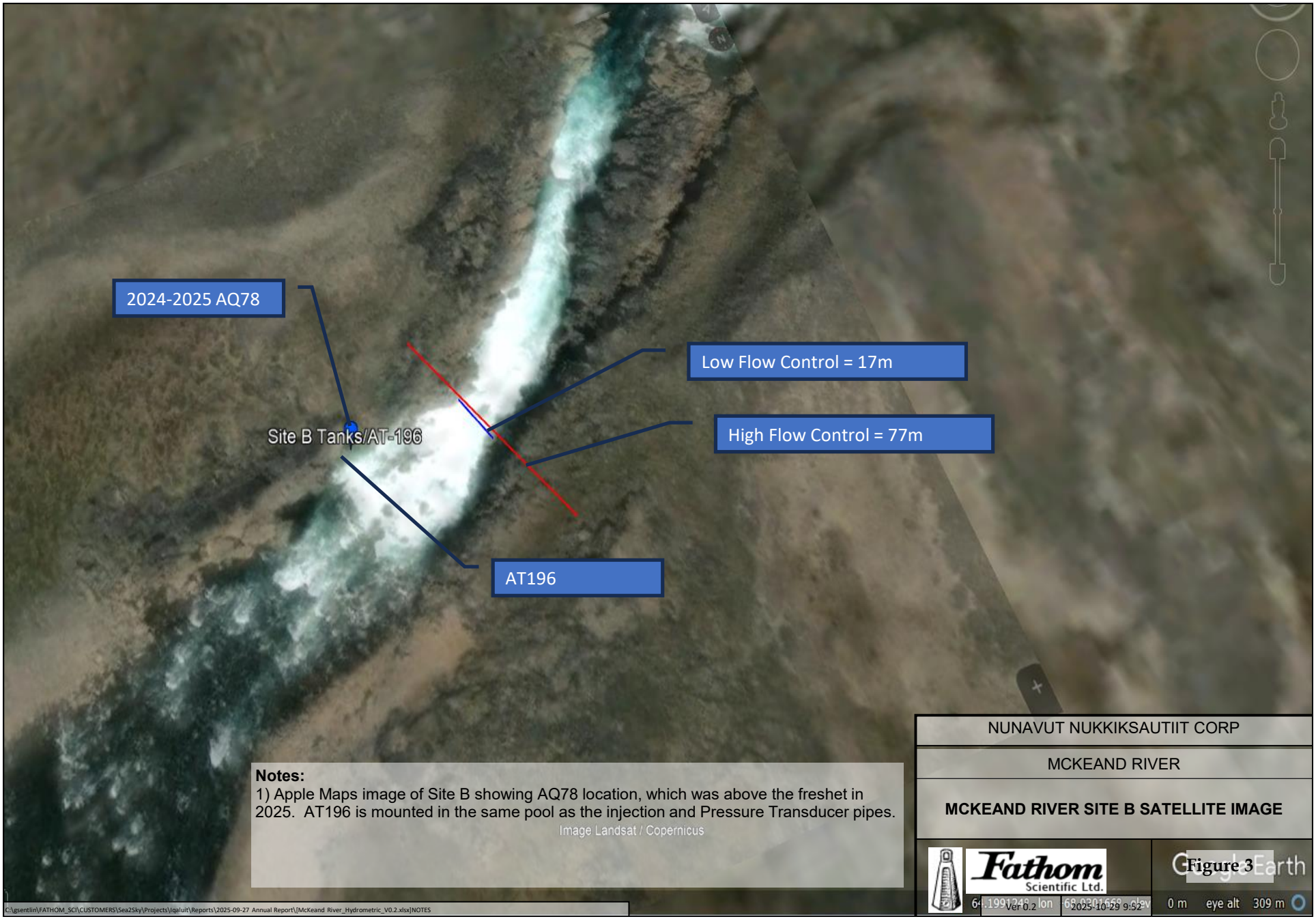
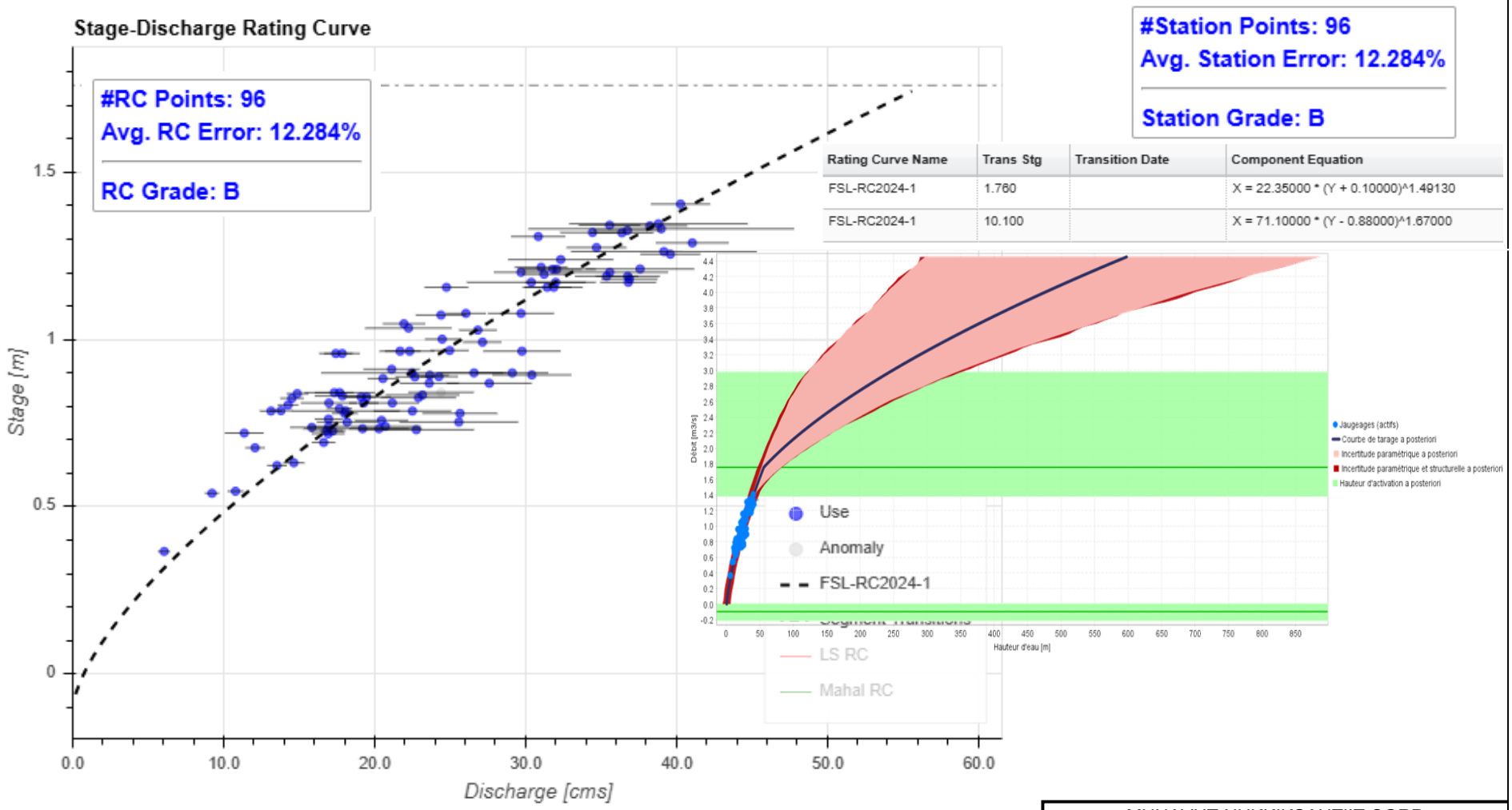


Figure 3

Figure 3: McKeand River Site B Satellite Image



Notes:

1) 96 Flow Measurements have been made ranging from 6cms to 42cms, however this covers only a small range of the flows at this site, whiich climbed to 4.67 m on July 2, 2025

2) The image on the right shows the peak stage of 4.67 m and range of flows at this stage from the BaRatin software.

MUNAVUT NUKKIKSAUTIIT CORP
MCKEAND RIVER
MCKEAND SITE A RATING CURVE 2024-2025
Fathom Scientific Ltd. — Ver 0.2 — 2025-10-29 6:15 — **Figure 4**

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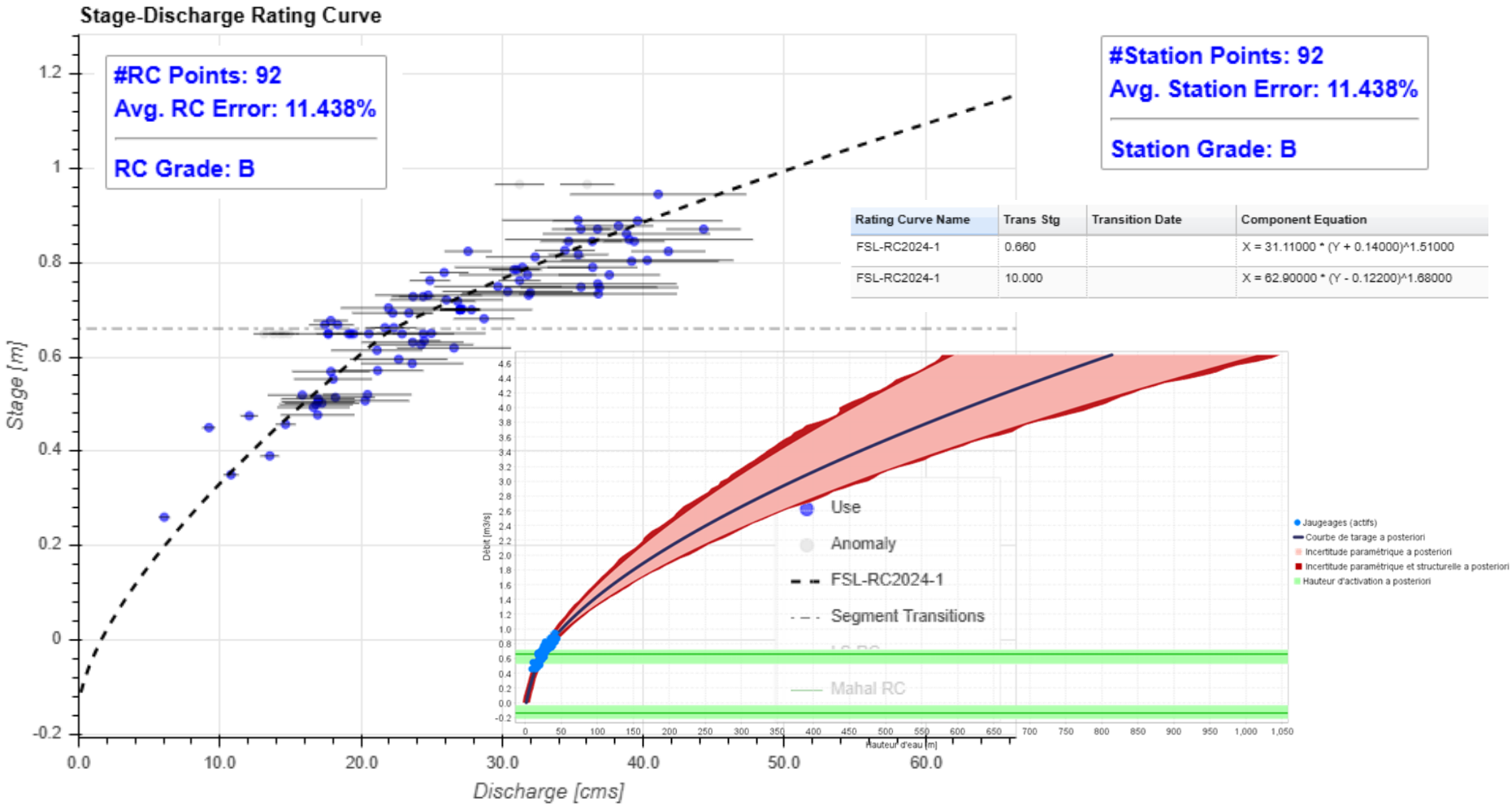
Figure 4: McKeand Site A Rating Curve 2024-2025



Notes:

1) 92 Flow Measurements have been used, ranging from 6cms to 42cms, to generate this rating curve, however this covers only a small range of the flows at this site, whiich climbed to 4.76 m on July 2, 2025

2) The BaRatin range at 4.76m is from 1050 cms to 575 cms.

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MCKEAND RIVER	
MCKEAND SITE B RATING CURVE 2024-2025	
Fathom Scientific Ltd.	Figure 5
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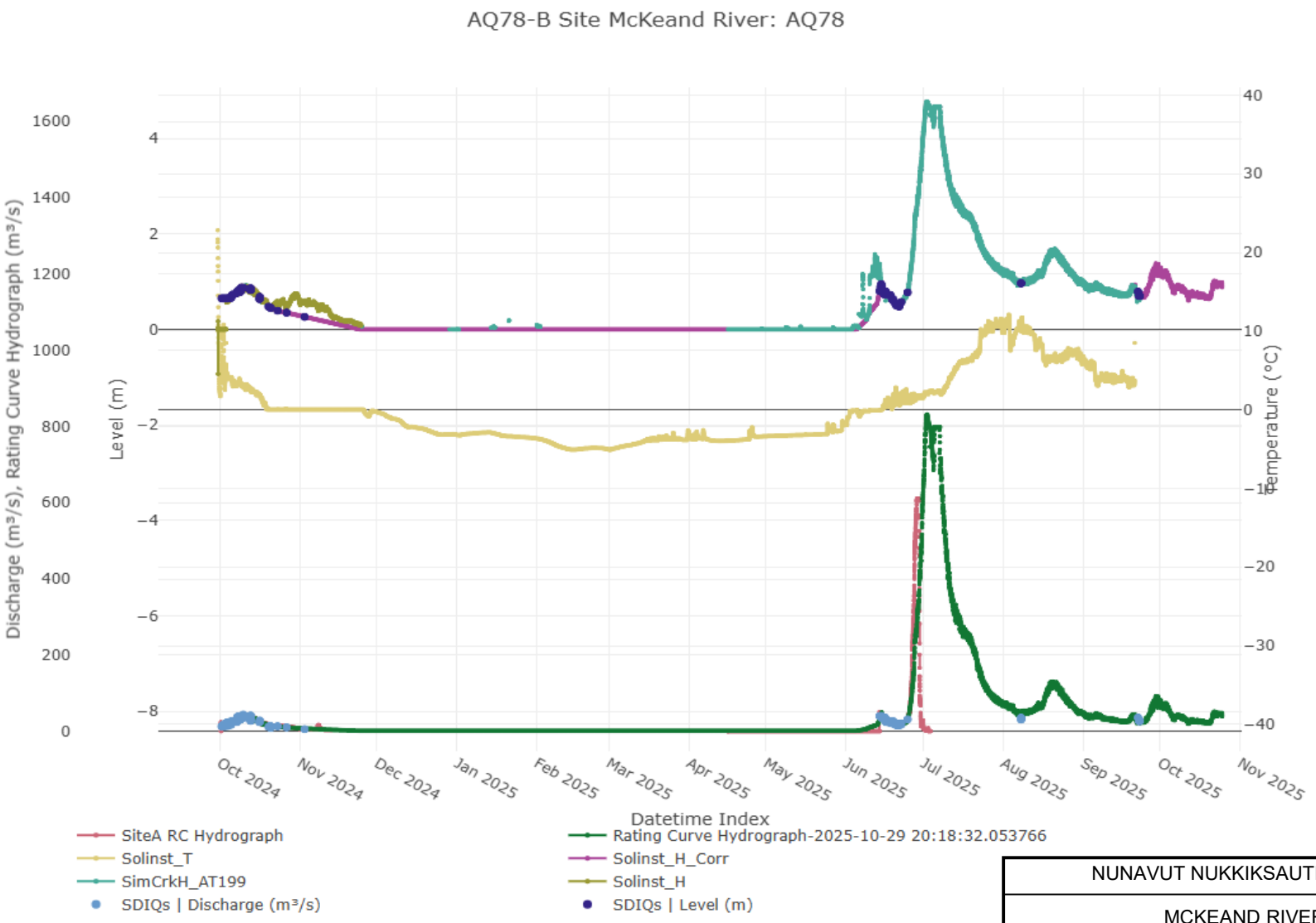
Figure 5: McKeand Site B Rating Curve



Notes:

1) We do not have Q measurements between 50 and 1000 m3/s, therefore the Rating Curve Hydrograph in this region is extrapolation with the guidance of BaRatin hydraulic modeling software. We would require LiDAR to better estimate the channel hydraulics in this region of the hydrograph, but it's far more prefereable to have measuremens from the AutoSalt.
2) The Solinst_H_Corr is from the Solinst pressure transducer, but it failed in Dec 2024 likely do to ice when temperatures dropped below freezing. The rest of the stage record is from a combination of the AutoSalt CrkH and AT199 PTDepth.
3) Ice and backwater effects have been removed from Nov 2024 to Jun 2025.

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MCKEAND RIVER	
MCKEAND RIVER SITE B PROVISIONAL HYDROGRAPH 2024-2025	
Fathom Scientific Ltd.	**Figure 6**
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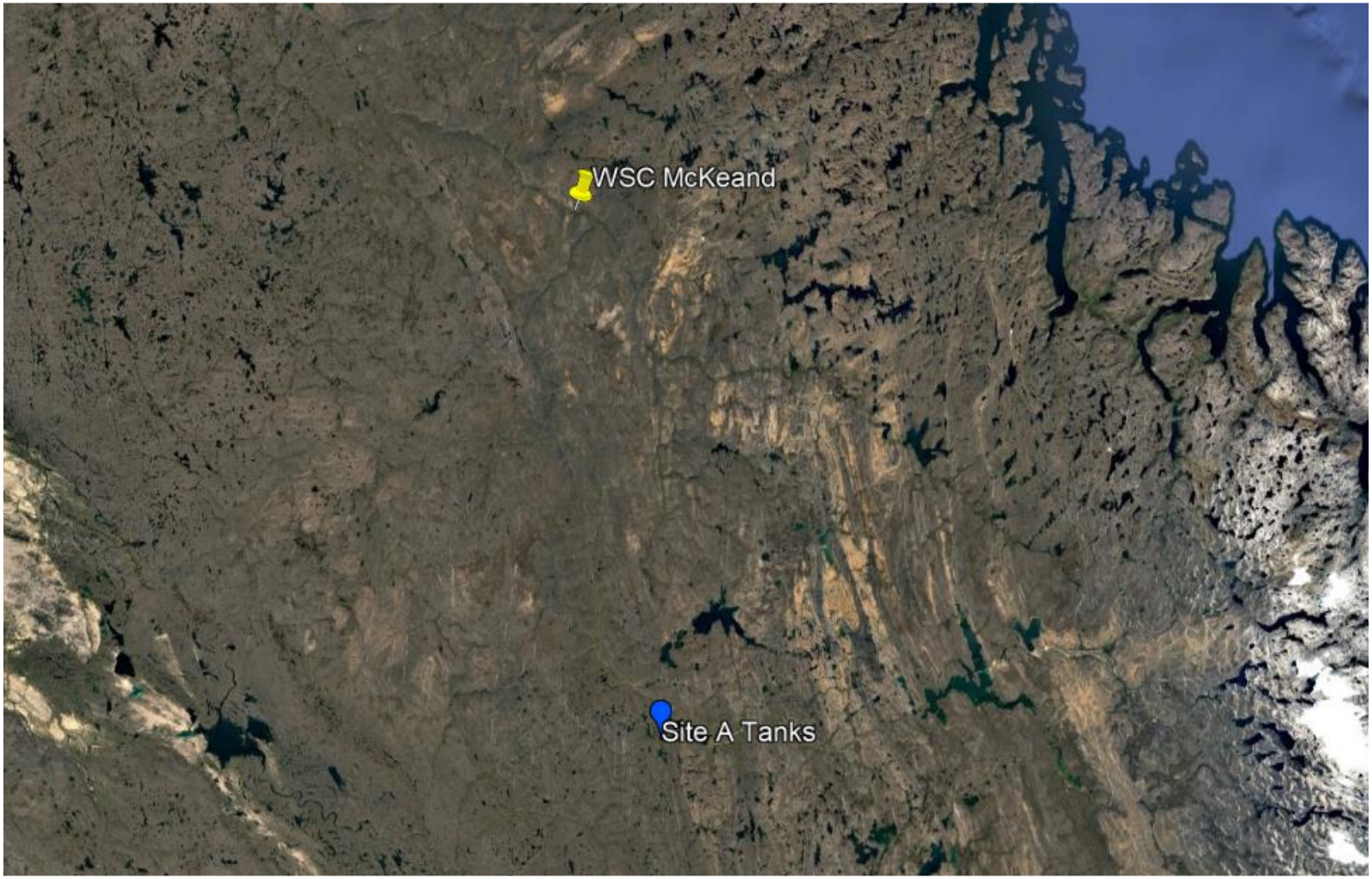
Figure 6: McKeand River Site B Provisional Hydrograph



Notes:
1) The WSC Station 10UG001 MCKEAND RIVER NEAR THE NORTH CONFLUENCE is much furter north with a larger drainage area than the Site A at the outlet of the lake.

NUNAVUT NUKKIKSAUTIIT CORP
MCKEAND RIVER
MCKEAND RIVER SATELLITE IMAGE

Fathom Scientific Ltd.

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Figure 7

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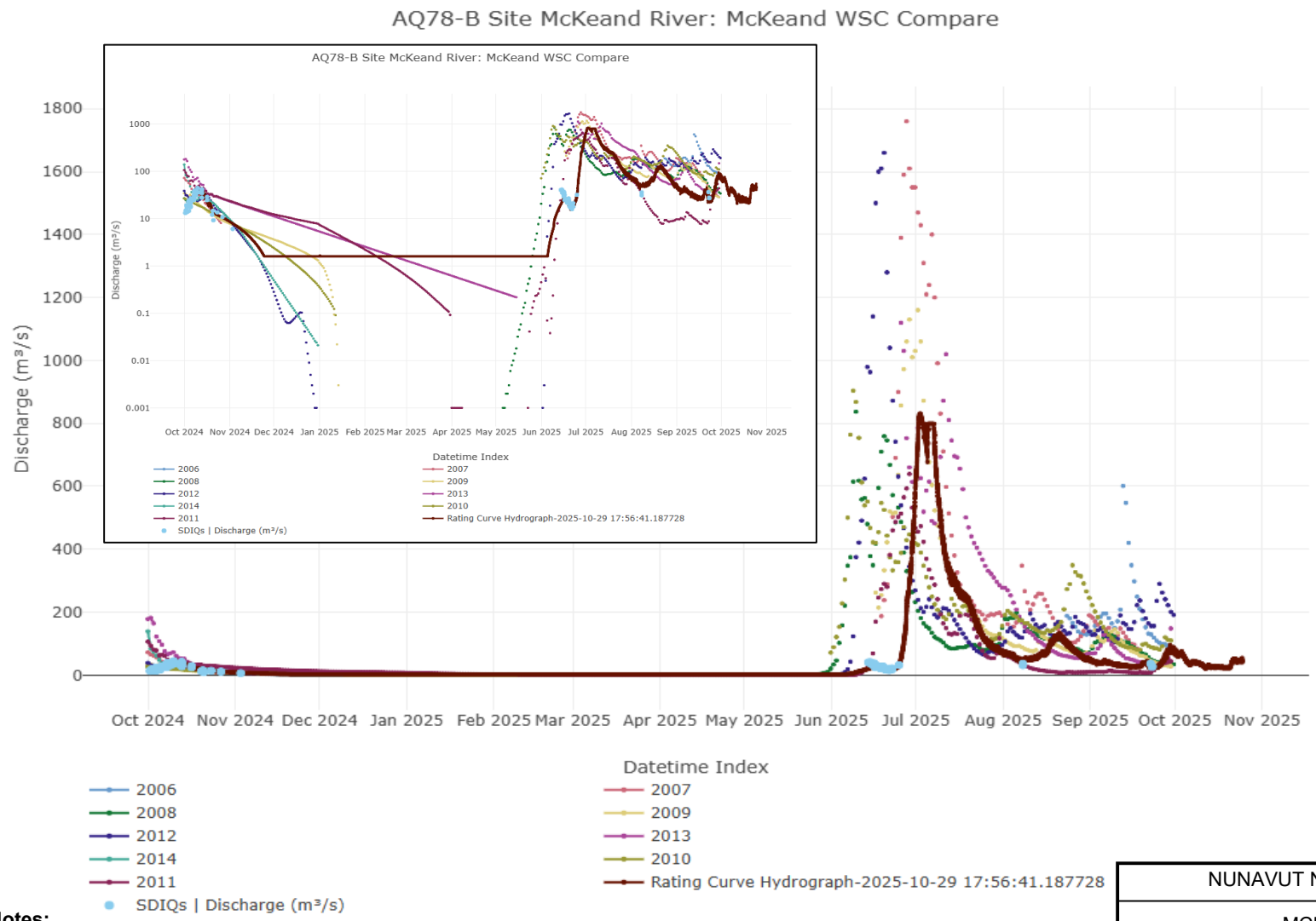
Figure 7: McKeand River Satellite Image



Notes:

1) This figure shows the hydrographs at WSC Station 10UG001 McKeand River from 2006 to 2013, plotted against the provisional hydrograph from Site B. The relative drainage areas are unknown. The inset shows the same on a logarithmic scale.

2) The peak flows at the WSC station typically occur in early June, whereas the peak at McKeand Site B occurred on July 2, 2025.

NUNAVUT NUKKIKSAUTIIT CORP	
MCKEAND RIVER	
MCKEAND RIVER REGIONAL COMPARISON	
Fathom Scientific Ltd.	**Figure 8**
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Figure 8: McKeand River Regional Comparison

Photos

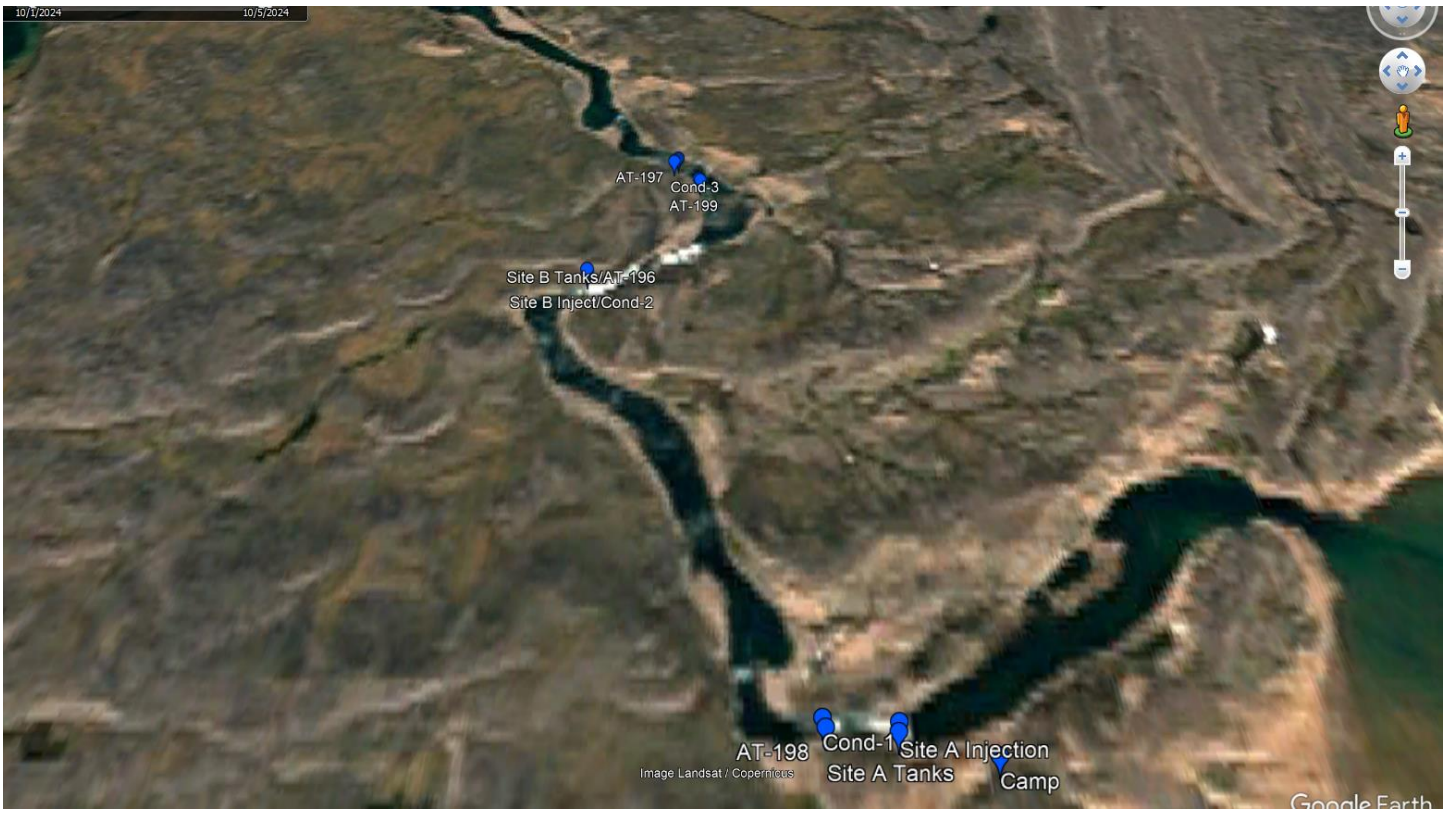

Photo 1: McKeand River Hydrometric Station Locations
This Google Earth Image shows the location of the two AutoSalt Stations and related Conductivity (AT) sites

Photo 2: McKeand River looking upstream Oct 5, 2024 from Site B

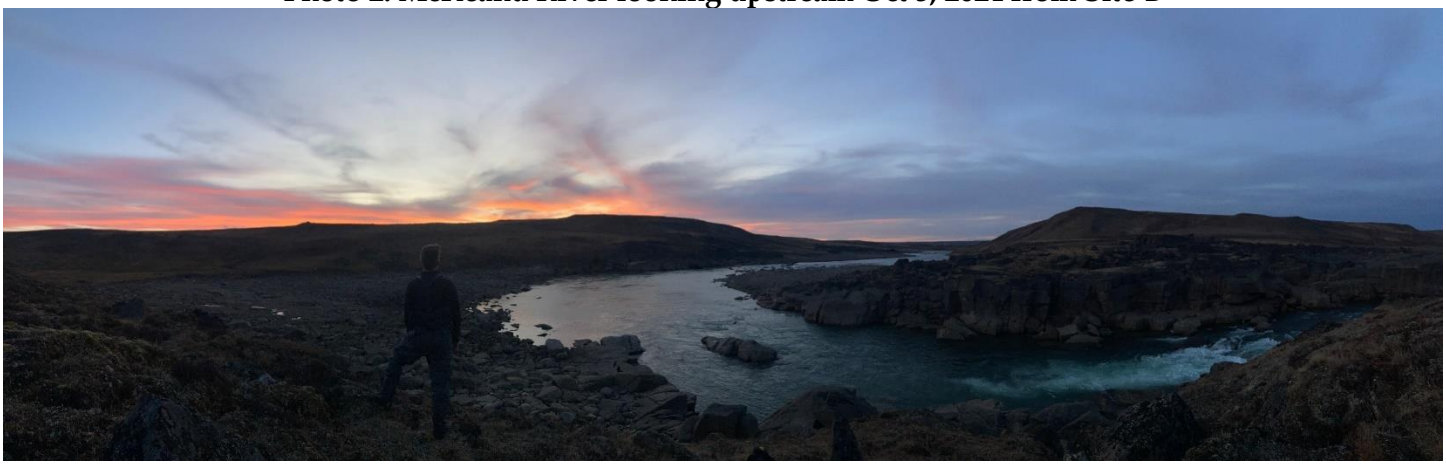

Photo 3: McKeand River looking downstream from Site A Oct 3, 2024

Photo 4: AQ75 at McKeand Site A on Oct 5, 2024.
We thought this site would be above the flood level, but the equipment was toppled by the water in Jun 2025.

Photo 5: There are two Pressure Transducers at AQ75, a wired-vented Keller Acculevel and a Solinst Levellogger

Photo 6: Both Site A and Site B include a 300L Main Brine Tank with 20% brine, the AutoSalt datalogger and control module, 2 solar panels, an NRT Satellite Modem/Datalogger, and an auxiliary 1000L brine tank
The flow in Oct 2024 was 25 cms when this photo was taken, but the flow during freshet of 2025 was closer to 1000 cms, and this site was damaged by water in freshet 2025.

Photo 7: AQ78 at McKeand Site B on Oct 5, 2024.
This site was safe from rising water level in Jun 2025.

Photo 8: AT199 Conductivity Site below McKeand River Site

Photo 9: McKeand River showing AT199 on the left, looking at river right on Oct 5, 2025
The flow was measured to be 24cms on this day.

Photo 10: McKeand River Site B April 15, 2025
In April 2025, we dug the equipment out of the snow to prepare it for freshet.

Photo 11: McKeand River Site A on April 16, 2025
We could not access the water in April so no flow measurement was made.

Photo 12: McKeand River Site A AutoSalt on Sep 23, 2025

The AutoSalt at Site A was moved up the slope to a moss covered area behind the large boulder. This should place it out of the flood zone and protect it from winds. We surveyed Ground Control Points (GCP) using GPS so that the video from the NuPoint camera can be orthorectified for image velocimetry.

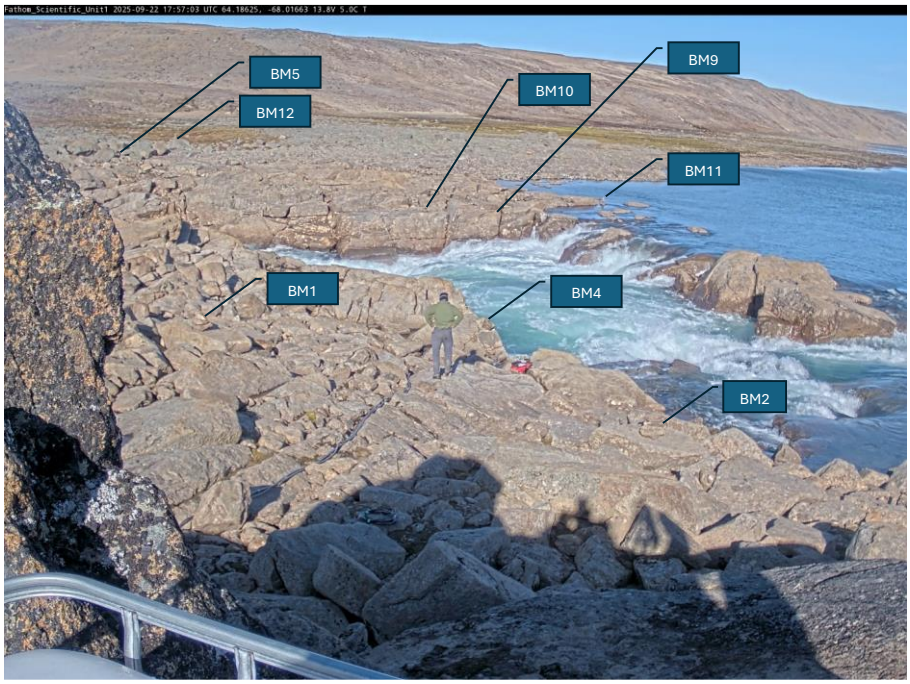

Photo 13: McKeand River Site A BMs on Sep 22, 2025

This still frame from the newly installed NuPoint camera shows where 8 BMs were surveyed to allow orthorectification of the image and possibly image velocimetry results in freshet..

Photo 14: McKeand River Site B AutoSalt Station AQ 78 on Sep 23, 2025
This station required very little maintenance, simply conduit for the PT cable and a small brine top-up..

Photo 15: McKeand River Site B Conductivity Station AT197 on Sep 23, 2025
We ran all bare wire through conduit and placed two of the 4 solar panels on masts to make winter discovery easier and provide longer solar charging potential.