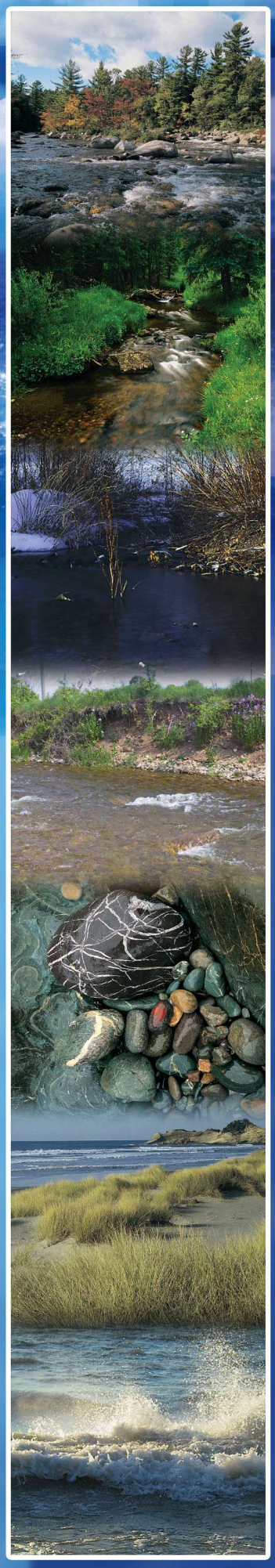

waters edge
ENVIRONMENTAL SOLUTIONS TEAM LTD.

Hydraulic Modelling Report

Parks and Jessups Creeks Floodplain Mapping Project

North Bay – Mattawa Conservation Authority

February 7, 2023

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February 7, 2023
WE 18045

Mr. Kurtis Romanchuk, P.Eng.
North Bay-Mattawa Conservation Authority 15
Janey Ave.
North Bay, Ontario
P1C 1N1

Dear Mr. Romanchuk:

RE: Parks and Jessups Creek Hydraulic Modelling, North Bay-Mattawa Conservation Authority

1. INTRODUCTION

Water's Edge was authorized by the North Bay-Mattawa Conservation Authority (NBMCA) to develop a hydraulic model of Parks and Jessups Creeks in the urban areas of North Bay following current design standards. HEC-RAS version 5.0.7 was used to develop the models. The flows used in the models were determined from the previous HEC-HMS modelling exercise. The SCS Type II 12-hour storm produced peak flows that most closely matched the expected return period flows for Parks Creek, while the 4-hour Chicago Storm best represented the flows in Jessups Creek. The Timmins Storm distribution was used for the Regional Event for both Creeks. The purpose of the hydraulic model is to determine the water surface elevations and velocities corresponding to the flow rates produced in the hydrologic model. The results of this modelling exercise will determine the elevations that will be used for mapping the return period flows.

This report includes background information of the watershed, methodology for developing the models, followed by a summary of the results.

2. BACKGROUND REVIEW

We have completed our assessment of the creek in accordance with the approved project Terms of Reference. Data sources for the analysis include:

- Background Information
  - Reports and Geospatial data from NBMCA;
- Physiography of Southern Ontario by Chapman & Putnam (digital data from Ministry of Northern Development and Mines (MNDM));
- Ontario Flow Assessment Tool (OFAT);
- Ontario Base Mapping (OBM); and,
- Discussions with NBMCA staff.

The main channel of Parks Creek is about 6.3 km long with an average slope of 0.15 %. The main channel of Jessups Creek is about 1.5 km long with an average slope of 0.3%. Both watersheds contain a large portion of wetlands in the upper reaches and include urban areas along the Lake Nipissing shoreline. The urban area of Parks Creek are in a two-zone floodplain policy area where

the 100-flow is the regulatory event. Floodplain mapping will be conducted on the major reaches in each watershed. The modelled reaches are shown in **Map 1**, attached.

2.1 Historical Flooding

Parks and Jessups Creeks have been developed more recently than many areas in North Bay and few major storms have been documented in these specific watersheds, although many large events have been documented in the adjacent Chippewa Creek watershed. Most of the extreme flooding events that were documented on Chippewa Creek occurred before significant development was present on Parks and Jessups Creeks. The last extreme flooding event to occur in North Bay was Hurricane Audrey in 1957. Hurricane Audrey was noted to have flooded 50 homes and was classified as the 100-year flood in the 1985 “Flood and Erosion Control Study Phase II” (Northland Engineering, 1985). Most of the other large flood events can be attributed to rainfall events coinciding with the spring freshet or saturated antecedent moisture conditions that led to increased runoff from storms that would otherwise not have been likely to cause flooding.

As discussed in the hydrology technical report in more detail, the lack of large events during the Chippewa Creek flow gauge period of record skewed the results of the frequency analysis to underestimate return period flows. Regional flood frequency analysis was conducted to determine an alternate estimate of return period flows that was not influenced by the flow gauge record. The results of the regional analysis produced return period flow estimates that were much closer to the observed flows than the single station flood frequency analysis.

2.2 Previous Hydraulic Modelling Efforts

A previous floodplain study was completed by Northland Engineering in 1982 to recommend measures for reducing the flood extents in the developed areas of Parks and Jessups Creeks. The study determined that there was no cost-effective solution for reducing flooding and recommended that two-zone policy areas and Special Policy Areas be considered for Parks Creek. The hydraulic modelling component was completed using HEC-2. The hydraulic model used the peak flows determined from the hydrologic analysis using HYMO.

A 1992 Environmental Assessment for flood damage mitigation was completed on Parks Creek and involved developing hydrologic and hydraulic models using OTTHYMO and HEC-2, respectively. Floodlines were also updated as part of the report. Several additional reports and investigations have utilized the 1992 modelling, but no new updates have been made to the models since then.

3. METHODOLOGY

3.1 Input Data

HEC-RAS models were developed to determine the WSELs within the study areas of Parks and Jessups Creeks. The data needed to create an accurate model includes channel geometry, structure geometry (i.e. bridges and culverts), design flow rates, Manning’s roughness coefficients for the main channel and floodplains, expansion and contraction coefficients, and the boundary conditions.

3.1.1 Geometry and Structures

The same DEM that was the basis of the hydrologic model was also used as the basis for hydraulic modelling, without additional preprocessing and hydrologic correction. The DEM was converted to a Triangular Irregular Network (TIN) in ArcMap for use with HEC-GeoRAS. The TIN was created such that the elevation at any point within each triangular face is within 10 cm of the elevation value of the DEM at the same point. This step serves to smooth the geometry and eliminate the steps between DEM cells. The TIN will provide better estimates of channel perimeter than a DEM.

As discussed in the hydrologic modelling report, low-flow channel survey data was not implemented into the DEM due to the margin of error of the LiDAR data being greater than the depth of flow in much of the watershed. The effects of not including the low-flow channel will be minor, especially during high flows, as the flood flows will be 1-2 orders of magnitude greater than the low flow. Therefore, the cross-sectional area and wetted perimeter will only be slightly underestimated in the model. HEC-GeoRAS was used to define stream reaches and cross-sections. The cross-section widths varied throughout the study reaches in order to capture higher elevations at each end that would not be inundated. A portion of upper Parks Creek was located outside of the LiDAR extents, so provincial COOP data was used to create a complete surface. The reduced resolution in upper Parks Creek is will not impact the downstream reaches, although supplemental surveys may lead to slight alterations of the flood extents.

For each structure in the provided models, expansion and contraction reaches were included to the energy losses associated with flow entering and exiting a structure. The contraction and expansion coefficients used for crossings were 0.3 and 0.5, respectively, and for all other cross-sections 0.1 and 0.3 were used. These values were recommended in the HEC-RAS Hydraulic Reference manual for typical bridge sections with subcritical flow (U.S. Army Corps of Engineering, 2018). The expansion and contraction reach lengths were determined by comparing the bankfull width of the channel to the bridge opening size, following the guidelines in the HEC-RAS manual.

The structure geometry was conducted by Water's Edge in October 2019. 14 structures were surveyed on Parks Creek, and 2 were surveyed on Jessups Creek. The railway embankments were modelled as separate structures for each reach that crossed it. Some railway embankments included multiple culverts a significant distance apart. In one location between two railway embankments, directly east of Booth Rd and Marshall Ave E., multiple culverts were present that would outlet to different reaches under different flow conditions. Each of the outlet culverts were modelled in HEC-HMS and an elevation-storage relationship was determined based on the terrain surface rather than developing a stage-storage-discharge relationship manually.

The structure survey sheets for each of the structures in the reaches where hydraulic modelling were performed are included in **APPENDIX D.**

3.1.2 Reservoir Routing

The railway embankments within Parks Creek, and a large berm in Jessups Creek lead to backwatering and reservoir storage. The areas that would be inundated do not include any significant development, so it was determined that reservoir routing was not needed in these areas. The likely drop in water surface elevations resulting from reservoir routing would represent ideal conditions, and observations made during the structure surveys indicate that debris is present at several culverts, which would increase the upstream water surface elevation. Not including reservoir effects will lead to a more conservative floodline delineation that will account for some of the observed obstructions.

As discussed in the previous section, reservoir routing was conducted at one location to determine the outlflow rates into two separate reaches. Between two railway embankments east of Booth Rd and Marshall Ave E., a reservoir is created that has an outlet culvert through each embankment, one to the north east and one to the south west. The diameter, invert elevation, and Manning's roughness were used to model the culverts in HEC-HMS, and an elevation-storage relationship was determined based on the terrain surface in AutoCAD. **Table 1** show the flows used in the HECRAS model for each of the receiving reaches.

Table 1: Flows in reaches downstream of railway storage area

Return Period	Outflow to Reach 2a (m^3/s)	Outflow to Reach 5 (m^3/s)
2y	0.60	0.37
5y	0.94	0.79
10y	1.18	1.16
25y	1.49	1.70
50y	1.67	2.18
100y	1.86	2.69
Timmins	11.34	4.36

3.1.3 Flow Rates

Flow rates were determined from the hydrologic model developed in HEC-HMS. Design storms were selected by comparing the expected return period flow and model peak flow. The storm that produced the most reasonable peak flow was then used to define the flows at other locations within the study reaches. The 12-hour SCS storm was determined to provide the best estimates of peak flows for Parks Creek, and the 4-hour Chicago Storm was selected for Jessups Creek. The selected storm durations generally match the Time of Concentration for each watershed. Flow rates for all return period storms are shown in **APPENDIX A**.

3.1.4 Manning's Roughness Coefficient

Manning's roughness coefficients will vary based on flood stage and season. Therefore, the values were selected to represent typical summer conditions. The initial estimate of Manning's roughness coefficients were selected from Open Channel Hydraulics (Chow, 1959). The values were adjusted during calibration to better match the observed water surface elevations at the gauge.

3.1.5 Expansion and Contraction Coefficients

Expansion and contraction coefficients are used to calculate the energy losses caused by changes in geometry between cross-sections and at structures. The coefficients are higher when the transition is more abrupt, such as at crossings. The values listed in the HEC-RAS user's manual were used for modelling. All cross-sections not at a structure were assigned a contraction coefficient of 0.1 and an expansion coefficient of 0.3. For cross-sections immediately upstream or downstream of a structure, the assigned contraction coefficient was 0.3 and the assigned expansion coefficient was 0.5. The use of expansion and contraction reaches (i.e. two crosssections up- and downstream of structures) ensures that gradual transitions are present as the flow narrows approaching a structure and expands after one. The cross-sections immediately adjacent to the structures typically have more abrupt transitions as the flow is constrained by a culvert or bridge piers.

3.1.6 Boundary Conditions

The upstream and downstream boundary conditions are critical for developing a hydraulic model. The downstream boundary condition is an important parameter as it impacts the extent of the backwater effects in the lower reaches of the creek. The Lake Nipissing water surface elevation is controlled by the French River dams operated by Public Services and Procurement Canada. A level gauge is present in Lake Nipissing (02DD006) and was used to conduct frequency analysis on the lake level to determine return period water surface elevations. Since the gauge used an arbitrary datum, it was correlated to an absolute datum by comparing the elevation of an edge-of water

survey point with the level gauge reading at the same time, therefore all water surface elevations use the CGVD2013 datum. The result of the frequency analysis is shown in **Table 2**. The regression used to determine the return period lake levels is shown in **APPENDIX B**.

Table 2: Lake Nipissing Return Period Water Surface Elevations

Return Period	Water Surface Elevation
1	195.8068
2	195.98
5	196.209
10	196.3822
20	196.5554
50	196.7844
100	196.9576

Using the 100-year creek flow combined with the 100-year lake level is very conservative and unlikely to occur because the watersheds of the Parks and Jessups Creeks and Lake Nipissing cover very different geographic and hydrologic areas. According to the MNRF, when the high-water conditions of the watershed and the receiving body are generated by independent flood events, the WSELs should be modelled as the higher of:

i) The 2-year return period flow combined with the 100-year return period WSEL of the receiving body, or;
ii) The 100-year return period flow combined with the 2-year return period WSEL of the receiving body.

For the other return period flows, the 2-year WSEL was used.

Several options exist for the upstream boundary conditions, based on the flow regime or a constant WSEL. The normal depth was calculated and used as the upstream boundary condition for each creek based on the slope of the channel in the reach immediately upstream.

3.1.7 Ineffective Flow Areas

Many ineffective flow areas were present in the model. They were primarily used immediately upstream and downstream of hydraulic structures so expansion and contraction losses could be accurately modelled. Additionally, some ineffective flow areas were used where a depression was present, but flow from the main channel would not fill the depression until the water level reached a certain level, such as an elevated piece of land separating the main channel form the depression. Using ineffective flow areas rather than levees is a more conservative approach for delineating floodplains that are separated from the main channel. A levee will prevent any inundation from occurring outside of the main channel, while ineffective flow areas allow ponding to occur outside of the channel, but the flow is constrained to the main channel. It is possible that inundation in overbank areas can be connected to the main channel in one cross-section, but is disconnected in another, but using a levee would force the overbank inundation back into the main channel, while an ineffective area would allow it to remain. Post-processing also allows for evaluation of results,

and overbank inundation areas can be removed from the floodplain mapping if they are entirely disconnected from the main channel.

3.2 Model Calibration

Flow gauges were not present is Parks or Jessups Creeks, so a direct calibration could not be performed. Other methods for approximating flows were utilized, but due to a large degree of uncertainty they were not suitable for calibration. Instead, the model parameter adjustments that were applied to Chippewa Creek based on its direct calibration were applied to the Parks and Jessups Creeks models. The Chippewa Creek HEC-RAS calibration used a factor of 1.18 for the Manning's roughness coefficient, which was also applied to the Parks and Jessups models. This parameter adjustment leads to slightly higher water surface elevations and a more conservative model than if it was left uncalibrated. The increase in Manning's roughness is also expected due to the large portion of vegetated areas in the watershed and debris that was observed in the channel.

3.3 Sensitivity Analysis

A sensitivity analysis is used to determine the effect that parameters have on the model results. In a hydraulic model, Manning's n is the primary parameter that can be adjusted. To determine the impact, the parameter is adjusted by multiple factors the results are plotted to determine the relationship between the parameter adjustment factors and the model outputs. The uncalibrated model was run with Manning's n values of 0.9, 1, 1.1, and 1.2 times the initial estimates. The 100year flow was used for each sensitivity analysis run.

The storm selected for the sensitivity analysis has no impact on the results of the model and is only used to identify the impact of parameter adjustments. A summary of sensitivity analysis results is shown in **Table 3**. The results are also shown graphically in **Figure 1**. The slope of each line in the graph represents the influence that Manning's n has on the resulting water surface elevations. The water surface elevations were compared upstream of Lakeshore Drive on Parks Creek and upstream of Booth Road on Jessups Creek. A location further from the Lake was selected for Jessups Creek due to extensive backwatering under the 100-year flow.

The impact of the changes in Manning's roughness coefficient were as expected, with the water surface elevation increasing with a higher Manning's n. Changes to Manning's n appeared to have a greater influence on Parks Creek WSELs. This is likely due the higher channel slope at the reference location compared to Jessups Creek, where flow velocities would be higher leading to more energy dissipation than the slow Jessups Creek flows.

Table 3: Sensitivity Analysis Summary Table

Location	Manning's n Adjustment factor			
	0.9	1	1.1	1.2
Parks Creek WSEL U/S Lakeshore Dr. (m)	196.48	196.50	196.52	196.54
Jessups Creek WSEL U/S Booth Rd. (m)	200.25	200.27	200.28	200.29

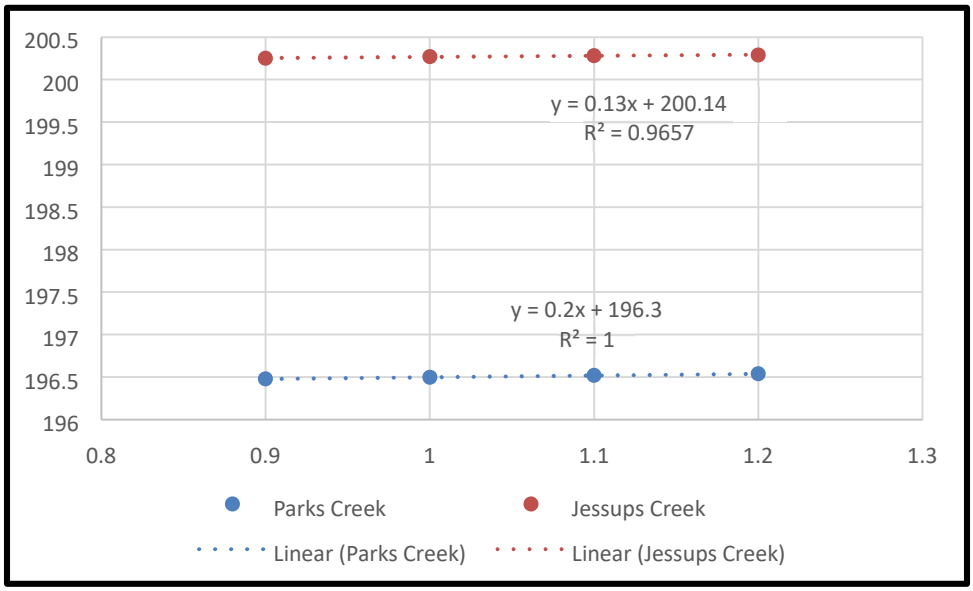

Figure 1: Sensitivity Analysis of Model Parameters

4. RESULTS

A summary of the HEC-RAS modelling results for the design storms is presented here. For detailed data on water surface elevations and flow conditions in each reach from the model, please see **APPENDIX F**. A summary of WSELs at key locations in Parks and Jessups Creeks to be used for floodline delineation for each rainfall distribution is shown in **Table 4**. The WSELs shown for the 100-year events in the table reflect the higher of the 100-year flow combined with the 2-year Lake Nipissing WSEL, and the 2-year flow combined with the 100-year Lake Nipissing WSEL. The 2year Lake Nipissing WSEL was used for the other return period storms. It was found that the 100year lake level affected the flood risk extents downstream of Marshall Park Drive on Parks Creek and downstream of the berm running approximately perpendicular to the end of Thelma Ave on Jessups Creek. These area encompass a large portion of the developed lands, which indicates that lake flooding is a high risk

Table 4: HEC-RAS Water Surface Elevation Summary Table

Return Period (years)	Water Surface Elevation (m)					
	Parks U/S Lakeshore Dr.	Parks U/S Marshall Park Dr.	Parks U/S Marshall Ave. E	Parks U/S Highway 17	Jessups U/S Lakeshore Dr.	Jessups U/S Booth Rd.
2	196.10	196.51	196.56	202.77	195.98	200.01
5	196.23	196.71	196.76	203.04	195.98	200.03
10	196.33	196.83	196.89	203.28	195.98	200.04
25	196.47	196.96	197.02	203.59	195.99	200.05
50	196.56	197.04	197.11	203.85	195.99	200.06
100	196.65	197.11	197.19	204.22	195.99	200.07
Timmins	197.59	197.73	197.93	205.81	196.07	200.23

4.1 Model Profiles

The water surface profiles for the Regulatory storm show that many of the structures in the watershed will be inundated. Several structures also showed moderate backwater effects that could lead to localized flooding in the immediate area. The profiles for Lower Parks Creek, Upper Parks Creek, and Jessups Creek are shown in **Figure 2, Figure 3**, and **Figure 4** respectively. The Crossing Risk Assessment is shown in **APPENDIX C**.

The Crossing Risk Assessment uses risk criteria from the MNRF River & Stream Systems Flooding Hazard Limit Technical Guide. The criteria provides three thresholds that indicate the risk that a person faces if they are within a flooded area in a storm. The depth criteria is 0.8 m, over which some people will become buoyant; the velocity criteria is 1.7 m/s, above which people can become unstable at small depths; the depth*velocity criteria of 0.4 m^2/s indicates the stability when both moderate depth and velocity are present. If any of the thresholds is exceeded, then the crossing is determined to be unsafe for pedestrians during floods. It is also noted that guidance for emergency vehicles indicates that 0.9-1.2 m of flood depth and velocities up to 4.5 m/s do not pose a significant risk to diesel fire vehicles with a top exhaust. All crossing depths have been calculated based on the minimum road surface elevation at the crossing relative to the WSEL.

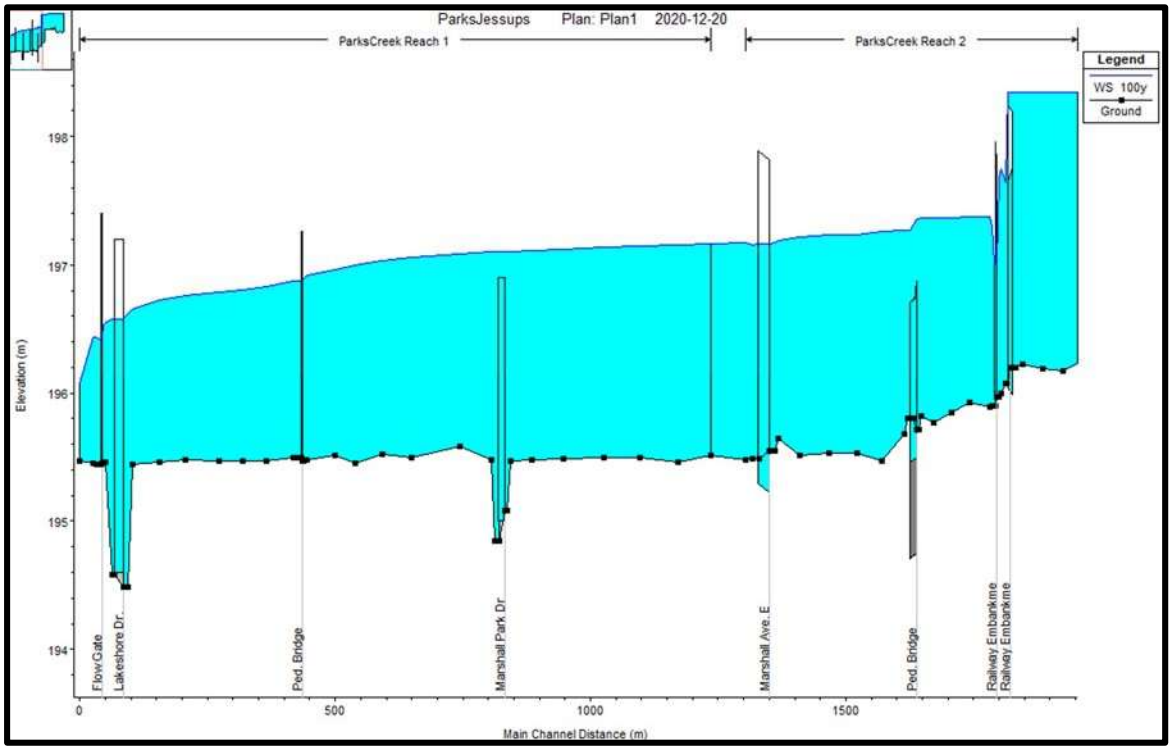

Figure 2: Lower Parks Creek (Special Policy Area) water surface profile for SCS 100-year 12-hour storm

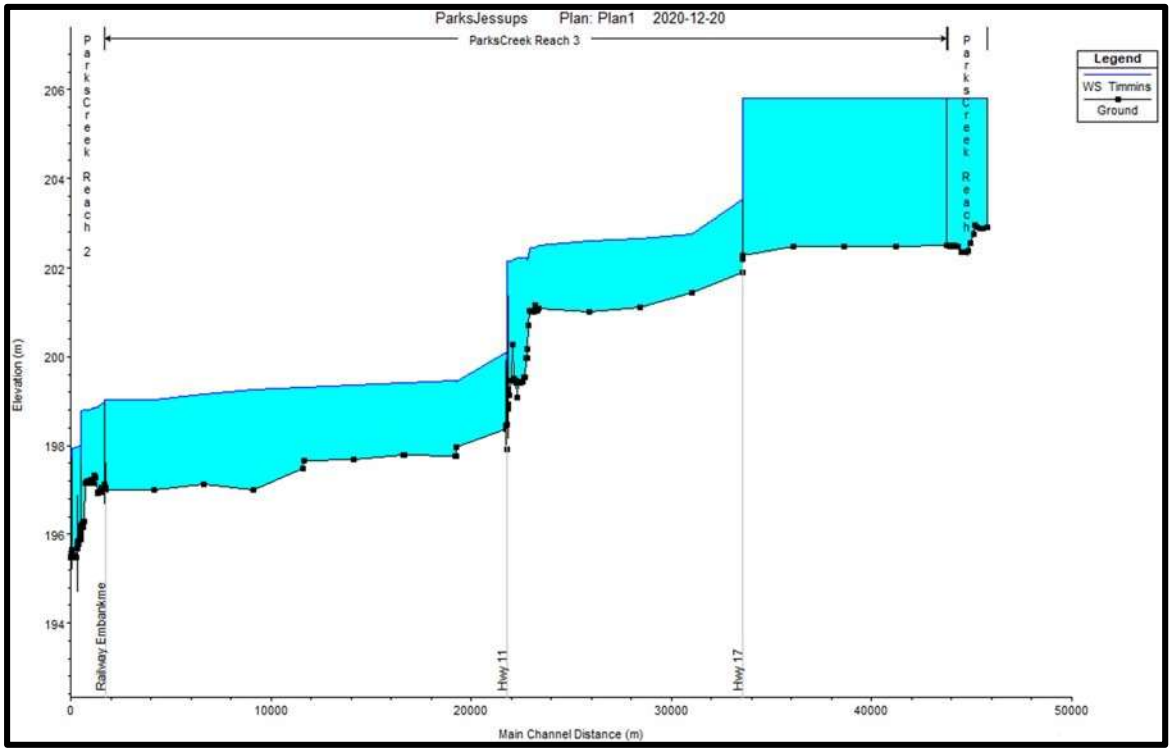

Figure 3: Upper Parks Creek water surface profile for the Timmins Storm

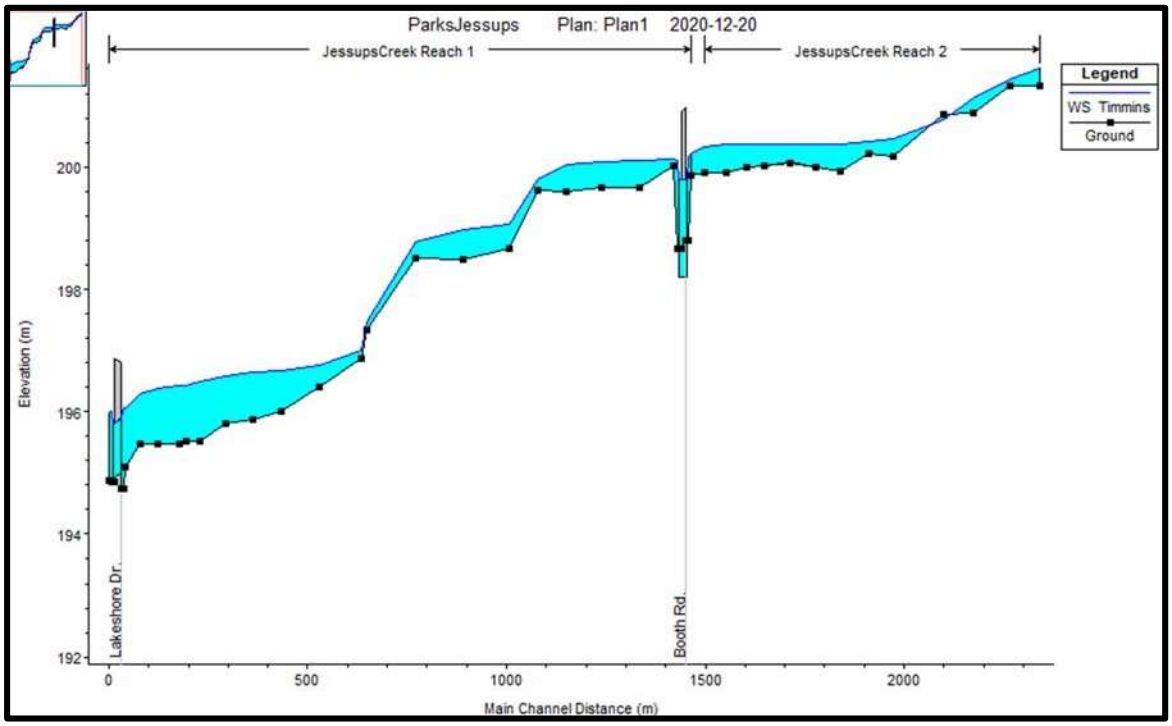

Figure 4: Jessups Creek water surface profile for the Timmins Storm

4.1.1 Spills

Two spills between adjacent watersheds were identified within the Parks and Jessups Creeks watersheds. The first is the spill from Johnson Creek to Parks Creek through Circle Lake, and the second is a likely spill from Parks Creek to Jessups Creek through wetland areas east of Booth Rd.

4.1.1.1 Johnson Creek to Circle Lake

The spill from Johnson Creek flows through a low-lying industrial development in the Parks Creek Watershed and over Wallace Rd. into Circle Lake. It was determined by analyzing the topography between the two lakes that a WSEL greater than 205.39 m would be necessary to initiate the spill, which is achieved by the 5-year flood on Chippewa Creek. 2D modelling was conducted to determine the spill flow rate and extents. The peak spill flow for the 100-year event was 2.22 m^3/s. The spill extents were primarily limited to ditches and roadways, although both the Canadore College building and the Community Living North Bay building will experience inundation depths up to 15 cm deep during the 100-year event. The spill was not significant to the peak flows on Parks Creek as the Circle Lake subcatchment produced a higher peak flow than the spill did.

4.1.1.2 Parks Creek to Jessups Creek East of Booth Rd.

A likely spill was identified that flows from Parks Creek to Jessups Creek east of Booth Rd. where flows from the railway reservoir storage flow to the southwest. Based on the topography, it is likely that a moderate portion of the flows from the railway reservoir area will flow to the south rather than into Parks Creek. Those flows travel through a wetland area and join Jessups Creek east of Booth Rd. The spill occurs upstream of the Parks Creek reach that was modelled and is not included in the model. Because the entire outflow from the railway storage area is directed towards Parks Creek in the model, the downstream flow rates through the urban area are conservative.

5. SUMMARY

In order to develop a HEC-RAS hydraulic model of Parks and Jessups Creeks, Water's Edge conducted a background review to review data provided by NBMCA, developed a HEC-HMS model to determine peak flows in the watershed, and built a hydraulic model using HEC-RAS following guidelines in the MNRF Technical Guide for River and Stream Systems: Flood Hazard Limit (MNRF, 2002) and the Federal Floodplain Mapping Framework 2.0 (Natural Resources Canada, 2018).

Based on our review and modelling, we conclude that:

1. The regulatory flood risk extents are defined by the 100-year 12-hour SCS storm on Parks Creek downstream of the OVR Railway, and by the Timmins Storm for the rest of Parks Creek and all of Jessups Creek;
2. The 100-year Lake Nipissing level is more significant than the 100-year storm downstream of Marshall Park Dr. on Parks Creek and the berm perpendicular to the end of Thelma Ave. on Jessups Creek;
3. Two spills into between watersheds were found, from Delaney Lake on Johnson Creek into Circle Lake in the Parks Creek Watershed, and from Parks Creek into Jessups Creek through a wetland area;
4. All modelling and analysis have been completed in accordance with the MNRF River & Stream Systems: Flooding Hazard Limits Technical Guide.

Respectfully submitted,

Ed Gazendam, Ph.D., P. Eng.,
President, Sr. Geomorphologist

Tim Antonio B.A.Sc. EIT
Water Resources Scientist

Water's Edge Environmental Solutions Team Ltd.

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LEGEND

- River
- Parks Creek Watershed
- Jessups Creek Watershed
- Roads
- Waterbodies/Wetlands
- City of North Bay

Reach 1
Reach 2
Reach 2a
Reach 3
Reach 4
Reach 5
Reach 6

HWY 17
HWY 11
HWY 11 & 17
ROSS DR
LAKESIDE DR
RITA RD
CAMELOT DR
IVANHOE DR
SABLE CRES
SAGE RD
MCLEAN RD
TROUT LAKE RD
HUGHES RD
WICKSTEAD AVE
SOVEREIGN DR
RODNEY DR
K & K DR
WALLACE RD
COMMERCE CRES
SEYMOUR ST
VENTURE CRES
ACME RD
MUD LAKE RD
CHOLETTE ST
FRANKLIN ST
GIROUX ST
NORMAN AVE
MACBETH CRES
EUGENE RD
GORDON DR
RANCIER ST
CONNAUGHT
ROMEO CRT
VERONICA DR
KINGSWAY AVE
MCKAY AVE
LAURENTIAN AVE
BANK ST
BRENNAN ST
SURREY DR
RIDDLE CRT
CHAPAIS ST
SKI CLUB RD
MCKEOWN AVE
ANGUS AVE
DANE AVE
FROST ST
VANIER ST
MILANI RD
SHAW ST W
OLIVE ST W
CHIPPEWA ST W
DUKE ST W
PRINCESS ST W
VICTORIA ST W
KING ST W
HIGH ST
STONES ST
MCPHAIL ST
OBRIEN ST
DUKE ST E
PRINCESS ST E
HAMMOND ST
BROOKES ST
MAHER ST
METCALFE ST
SHIRREFF AVE
SPENCER AVE
GOULD AVE
DUDLEY AVE
HILLCREST AVE
WELCH AVE
LANSDOWNE AVE
LORNE AVE
KEHOE ST
MCLEOD ST
MORIN ST
DOUGLAS ST
GALT ST
ANN ST
CEDAR ST
FRONT ST
6TH AVE W
5TH AVE W
5TH AVE E
4TH AVE E
3RD AVE E
2ND AVE E
1ST AVE E
CASSELLS ST
FERGUSON ST
WYLD ST
FISHER ST
WORTHINGTON ST E
MCINTYRE ST E
OAK ST E
OAK ST W
MAIN ST E
MAIN ST W
STANLEY ST
FORAN ST
HWY 17
OAKWOOD AVE
BEATTIE ST
VIMY ST
BLOEM ST
BROWNING ST
ALGONQUIN AVE
BURNS ST
CLARENCE ST
JANE ST
COPELAND ST
MCINTYRE ST W
MEMORIAL DR
QUEEN ST
ROWE AVE
WHITNEY AVE
CAMPBELL AVE
PARSONS AVE
LEE AVE
LAKESHORE DR
GLADSTONE AVE
VAN HORNE CRES
GERTRUDE ST E
JOSEPH ST
MULLIGAN ST
NIGHTINGALE DR
PRINCE EDWARD DR
PARLEY AVE
OLD CALLANDER RD
TWEEDSMUIR DR
LABRECHE DR
SUMMIT DR
MARSHALL AVE E
WIGSTON DR
BLAIR ST
LOVELL AVE
MASSEY DR
MARIAH ST
MARSHALL PARK DR
THELMA AVE
BANNER AVE
BOOTH RD
IMPERIAL RD
BIRCHS RD
FERRIS DR
PREMIER RD
BIRCH ST
DIVISION ST
LAMORIE ST
CALLANDER BAY RD
DUPONT RD
PRICE AVE
GIBSON ST
RIVERBEND RD
DECAIRE RD

0 425 850 1,700
Meters

NORTH BAY-MATTAWA CONSERVATION AUTHORITY

water's edge ENVIRONMENTAL SOLUTIONS TEAM LTD.

PROJECT FILE NO.	MAP NO.
19037	1
DATE	
December 21, 2020	

Parks and Jessups Creeks Floodplain Mapping Project North Bay, Ontario

Reach Names

APPENDIX A: HEC-RAS Flow Rates

Table 1: HEC-RAS Flow Rates (m^3/s)

River	Reach	Station (m)	HEC-HMS Flow Location	Event						
				2y	5y	10y	25y	50y	100y	Timmins
JessupsCreek	Reach 2	2384.2	Sub. 7	0.133	0.23	0.303	0.401	0.476	0.554	1.381
JessupsCreek	Reach 1	1508.4	Outlet	0.59	0.992	1.311	1.726	2.061	2.386	6.296
JessupsTrib	Reach 3	762.6	Sub. 6	0.078	0.133	0.173	5.402	0.266	0.307	0.702
ParksCreek	Reach 4	8355	Sub. 20	0.745	1.121	1.387	1.732	1.99	2.25	4.901
ParksCreek	Reach 3	6309.5	Reach 4 + Sub. 8	1.784	3.053	4.043	5.402	6.469	7.585	20.563
ParksCreek	Reach 2	3033.4	Reach 2 + Sub. 2	2.609	4.299	5.619	7.43	8.856	10.48	29.967
ParksCreek	Reach 1	1262.8	Outlet	3.765	6.149	7.936	10.35	12.172	14.03	44.966
ParksTribA	Reach 2a	715.3	Reach 2a + Sub. 3	0.595	0.94	1.181	1.49	1.669	1.86	11.336
ParksTribB	Reach 5	1758.1	Reach 9 + Sub. 9	0.371	0.792	1.158	1.699	2.175	2.69	4.364
ParksTribC	Reach 6	1195.1	Sub. 21	0.19	0.372	0.522	0.736	0.908	1.089	3.139

APPENDIX B:

Lake Nipissing Frequency Analysis

water's edge
ENVIRONMENTAL SOLUTIONS TEAM LTD.

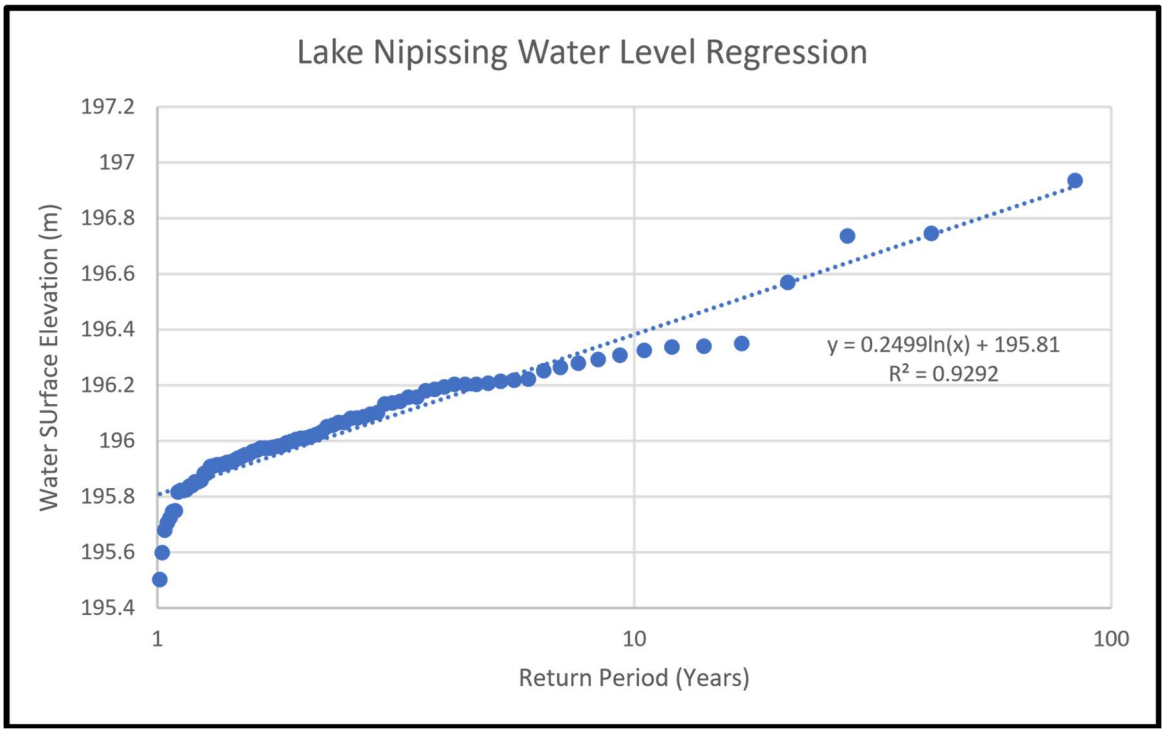


Figure 1: Lake Nipissing Water Level Regression

Table 2: Lake Nipissing Return Period Water Surface Elevations

Return Period (years)	Water Surface Elevation (m)
1	195.8068
2	195.98
5	196.209
10	196.3822
20	196.5554
50	196.7844
100	196.9576

APPENDIX C:

Crossing Risk Assessment

water's edge
ENVIRONMENTAL SOLUTIONS TEAM LTD.

Table 3: Crossing Risk Assessment

Crossing Risk Assessment

River	Reach	Station and Crossing Name	Type	Min. Deck Elevation	2y Depth	5y Depth	10y Depth	25y Depth	50y Depth	100y Depth	Timmins Depth	2y Velocity	5y Velocity	10y Velocity	25y Velocity	50y Velocity	100y Velocity	Timmins Velocity	2y Depth*Vel	5y Depth*Vel	10y Depth*Vel	25y Depth*Vel	50y Depth*Vel	100y Depth*Vel	Timmins Depth*Vel
Parks	Reach 3	5849.1 Hwy 17	Culvert	205.74	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.04	1.11	1.15	1.19	1.18	1.11	0.8	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Parks	Reach 3	3901.6 Hwy 11	Culvert	201.56	0.00	0.00	0.34	0.59	0.59	0.59	0.59	0.70	0.56	0.05	0.06	0.07	0.08	0.22	0.00	0.00	0.02	0.04	0.04	0.05	0.13
Parks	Reach 3	3857 Hwy 11	Culvert	199.63	0.00	0.30	0.30	0.30	0.29	0.29	0.46	0.77	0.16	0.22	0.29	0.35	0.41	0.69	0.00	0.05	0.07	0.09	0.10	0.12	0.32
Parks	Reach 3	3057.3 Railway Embankment	Culvert	197.79	0.05	0.16	0.24	0.36	0.49	0.66	1.24	0.09	0.09	0.09	0.08	0.06	0.05	0.06	0.00	0.01	0.02	0.03	0.03	0.03	0.07
Parks	Reach 2	1846.2 Railway Embankment	Culvert	198.17	0.00	0.00	0.00	0.00	0.00	0.17	0.62	1.02	1.07	1.09	1.19	1.24	0.31	0.30	0.00	0.00	0.00	0.00	0.00	0.05	0.18
Parks	Reach 2	1819.5 Railway Embankment	Culvert	198.03	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.62	0.75	0.79	0.93	1.02	1.10	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Parks	Reach 2	1660.6 Ped. Bridge	Culvert	197.26	0.00	0.00	0.00	0.00	0.05	0.10	0.71	0.54	0.63	0.67	0.84	0.49	0.55	0.63	0.00	0.00	0.00	0.00	0.02	0.05	0.45
Parks	Reach 2	1363 Marshall Ave. E	Culvert	197.84	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.32	0.43	0.50	0.59	0.67	0.75	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Parks	Reach 1	852.6 Marshall Park Dr	Culvert	196.73	0.00	0.00	0.10	0.22	0.30	0.38	1.00	0.21	0.29	0.28	0.31	0.32	0.32	0.31	0.00	0.00	0.03	0.07	0.10	0.12	0.31
Parks	Reach 1	458.5 Ped. Bridge	Bridge	196.86	0.00	0.00	0.00	0.00	0.00	0.04	0.77	0.43	0.55	0.63	0.73	0.80	0.86	0.78	0.00	0.00	0.00	0.00	0.00	0.03	0.60
Parks	Reach 1	103.4 Lakeshore Dr.	Culvert	197.49	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.45	0.66	0.78	0.92	1.02	1.12	1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Jessups	Reach 1	1487.7 Booth Rd.	Culvert	201.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.19	0.24	0.31	0.37	0.42	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jessups	Reach 1	65 Lakeshore Dr.	Culvert	197.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.19	0.25	0.33	0.40	0.46	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00

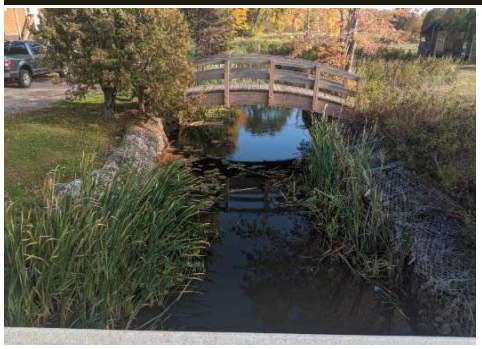
APPENDIX D:

Structure Survey Tables

Jessups Creek

Jessups Creek Structure Inventory

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Jessups Creek	
Street Location:		Lakeshore Dr		**Municipality:**		North Bay	
Structure ID:		1000		**Date of Construction:**		n/a	
Coordinates	**E:**	620403.2890m		**Temporary Benchmark**			
	N:	5124923.5946m		**Elev.**	195.000m		
Structure Shape:		Bridge		CC on sidewalk at base of south railing at west end			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Trapezoidal	**Cells:**	1	**Sag Elevation:**		n/a	
Material:	n/a n/a	**Rise:**	1.67	**Railing Height:**	1.18	**Length:**	9.842
Diameter:		**Span:**	6.06	**Elev. Left:**	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		21.03	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Gabion wingwall on left bank and right bank				Concrete block wingwall on left bank and right bank			
Upstream Elevations:				**Downstream Elevations:**			
Invert	195.00			**Invert**	194.89		
Obvert	196.50			**Obvert**	196.56		
Top	197.71			**Top**	197.56		
Comments:							



Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

Jessups Creek Structure Inventory

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Jessups Creek	
Street Location:		Booth Rd		**Municipality:**		North Bay	
Structure ID:		1005		**Date of Construction:**		n/a	
Coordinates	**E:**	621463.0590m		**Temporary Benchmark**			
	N:	5125228.8020m		**Elev.**	201.74m		
Structure Shape:		Low Crossing Concrete Bridge		CC on top of the north end of the east headwall			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	1.6	**Sag Elevation:**		n/a	
Diameter:		**Span:**	3.437	**Railing Height:**	1.0	**Length:**	77.57
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		20.24	
End Treatment: n/a				**Skew Angle:**	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment: Wingwall mitered to grade on both left bank and right bank				**Downstream Treatment:** Wingwall mitered to grade on both left bank and right bank			
Upstream Elevations:				**Downstream Elevations:**			
Invert	198.20			**Invert**	198.20		
Obvert	199.80			**Obvert**	199.80		
Top	200.35			**Top**	200.35		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

Parks Creek

Parks Creek Structure Inventory

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Booth Rd		**Municipality:**		North Bay	
Structure ID:		1010		**Date of Construction:**		n/a	
Coordinates	**E:**	620777.1800m		**Temporary Benchmark**			
	N:	5126657.5980m		**Elev.**	119.17m		
Structure Shape:		Bridge		CC on the west end of the south headwall			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Trapezoidal	**Cells:**	1	**Sag Elevation:**		n/a	
Material:	n/a n/a	**Rise:**	2.36	**Railing Height:**	1.0	**Length:**	81.368
Diameter:		**Span:**	6.16	**Elev. Left:**	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		20.18	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Natural				Natural			
Upstream Elevations:				**Downstream Elevations:**			
Invert	195.85			**Invert**	196.06		
Obvert	198.21			**Obvert**	198.10		
Top	198.81			**Top**	198.76		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		CN North		**Municipality:**		North Bay	
Structure ID:		1015		**Date of Construction:**		n/a	
Coordinates	**E:**	621081.6220m		**Temporary Benchmark**			
	N:	5126799.7050m		**Elev.**	199.304m		
Structure Shape:		Culvert		Obvert at south end of culvert			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	Steel	**Rise:**	n/a	**Sag Elevation:**		n/a	
Diameter:	700mm	**Span:**	n/a	**Railing Height:**	n/a	**Length:**	0 n/a
				Elev. Left:	n/a	**Elev. Right:**	
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		7.46	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment: Natural				**Downstream Treatment:** Natural			
Upstream Elevations:				**Downstream Elevations:**			
Invert	198.14			**Invert**	198.05		
Obvert	198.75			**Obvert**	198.60		
Top	n/a			**Top**	n/a		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		CN South		**Municipality:**		North Bay	
Structure ID:		1020		**Date of Construction:**		n/a	
Coordinates	**E:**	621247.0250m		**Temporary Benchmark**			
	N:	5126706.5630m		**Elev.**	199.370m		
Structure Shape:		Culvert		na			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	Steel	**Rise:**	n/a	**Sag Elevation:**		n/a	
Diameter:	700mm	**Span:**	n/a	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		7.36	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		197.71		**Invert**		197.85	
Obvert		198.36		**Obvert**		198.30	
Top		n/a		**Top**		n/a	
Comments:							

Description: Looking d/s

Description: Looking at d/s face

Surveyor:		Eric Gazendam		**Survey Date:**		October 7, 2019	
Street Location:		Northern RR		**Watercourse:**		Parks Creek	
Structure ID:		1025		**Municipality:**		North Bay	
Coordinates	**E:**	621356.1820m		**Date of Construction:**		n/a	
	N:	5126677.8220m		**Temporary Benchmark**			
Structure Shape:		Box Culvert		**Elev.**	199.866m		
Structure Material:		Concrete		na			
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	1.14	**Sag Elevation:**		n/a	
Diameter:		**Span:**	2.19	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		8.16	
End Treatment: n/a				**Skew Angle:**	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment: Wingwall mitered to grade				**Downstream Treatment:** Wingwall mitered to grade			
Upstream Elevations:				**Downstream Elevations:**			
Invert	197.88			**Invert**	198.20		
Obvert	199.02			**Obvert**	198.99		
Top	199.55			**Top**	199.49		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Northern RR (E of Marshall A		**Municipality:**		North Bay	
Structure ID:		1030		**Date of Construction:**		n/a	
Coordinates	**E:**	620718.1160m		**Temporary Benchmark**			
	N:	5127060.2260m		**Elev.**	198.516m		
Structure Shape:		Box Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	2.16	**Sag Elevation:**		n/a	
Diameter:		**Span:**	2.422	**Railing Height:**	n/a	**Length:**	0
Pier Configuration		**Number:**	0	**Elev. Left:**	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		7.97	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment: Wingwall mitered to grade				**Downstream Treatment:** Wingwall mitered to grade			
Upstream Elevations:				**Downstream Elevations:**			
Invert	195.99			**Invert**	196.04		
Obvert	197.58			**Obvert**	198.20		
Top	198.19			**Top**	198.19		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		CN (E of Marshall Ave E)		**Municipality:**		North Bay	
Structure ID:		1035		**Date of Construction:**		n/a	
Coordinates	**E:**	620713.4860m		**Temporary Benchmark**			
	N:	5127038.1480m		**Elev.**	198.297m		
Structure Shape:		Box Culverts		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	2				
Material:	n/a n/a	**Rise:**	1.09	**Sag Elevation:**		n/a	
Diameter:		**Span:**	5.10				
Pier Configuration		**Number:**	1	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		6.04	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		195.93		**Invert**		195.96	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Kate Pace Way (Trail)		**Municipality:**		North Bay	
Structure ID:		1040		**Date of Construction:**		n/a	
Coordinates	**E:**	620638.6280m		**Temporary Benchmark**			
	N:	5126908.6790m		**Elev.**	197.263m		
Structure Shape:		Two Culverts		Obvert at south pipe on the south end			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Countersunk	**Cells:**	2				
Material:	n/a 2.1	**Rise:**	1.24	**Sag Elevation:**		n/a	
Diameter:		**Span:**	4.662	**Railing Height:**	n/a	**Length:**	0
Pier Configuration		**Number:**	0	**Elev. Left:**	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		13.35	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		195.51		**Invert**		195.55	
Comments:							

Description: Looking u/s

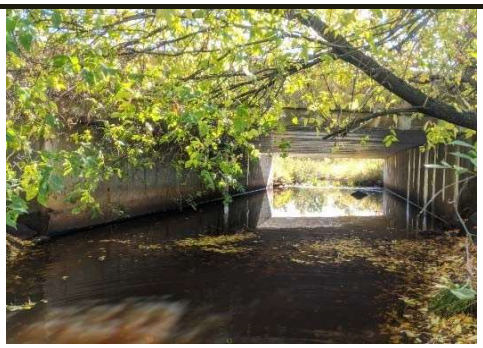
Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Marshall Ave E		**Municipality:**		North Bay	
Structure ID:		1045		**Date of Construction:**		n/a	
Coordinates	**E:**	620569.4430m		**Temporary Benchmark**			
	N:	5126642.7690m		**Elev.**	198.654m		
Structure Shape:		Bridge		CC on sidewalk at the base of the west end of the south railing			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape: **Material:** **Diameter:**	Rectangular n/a n/a	**Cells:** **Rise:** **Span:**	1 3.1 9.255				
Pier Configuration		**Number:**	0	**Sag Elevation:**		n/a	
Width:	n/a	**Location:**	n/a	**Railing Height:** **Elev. Left:**	1.3 n/a	**Length:** **Elev. Right:**	20.915 n/a
End Treatment: n/a				**Length of Culvert/Crossing:**		21.91	
				Skew Angle:	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	195.22			**Invert**	195.29		
Comments:							

Description: Looking u/s



Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:	October 7, 2019
Surveyor:		Eric Gazendam		**Watercourse:**	Parks Creek
Street Location:		117 Marshall Ave E		**Municipality:**	North Bay
Structure ID:		1050		**Date of Construction:**	n/a
Coordinates	**E:**	620663.3220m		**Temporary Benchmark**	
	N:	5126605.4820m		**Elev.**	197.689m
Structure Shape:		Culvert		CC on manhole north end of c	rim by the lvert
Structure Material:		Steel			
Opening Characteristics					
Cell Shape:	Circular	**Cells:**	1		
Material:	n/a n/a	**Rise:**	1.6		
Diameter:		**Span:**	1.6		
Pier Configuration		**Number:**	0	**Sag Elevation:**	n/a
Width:	n/a	**Location:**	n/a	**Railing Height: Elev. Left:**	n/a n/a **Length:** 0 n/a **Elev. Right:**
End Treatment: n/a				**Length of Culvert/Crossing:**	18.07
				Skew Angle:	n/a **Rise:** n/a
				Opening Face Width:	n/a
Upstream Treatment:				**Downstream Treatment:**	
Upstream Elevations:				**Downstream Elevations:**	
Invert	195.67			**Invert**	195.68
Comments:					

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

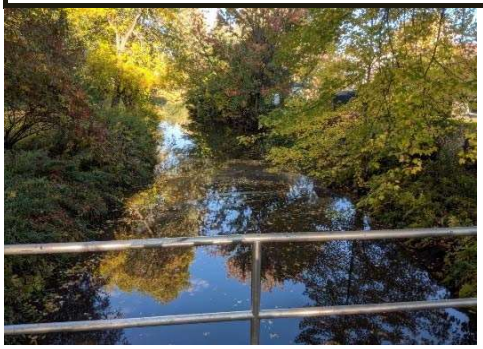
Description: Looking at d/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Marshall Park Dr		**Municipality:**		North Bay	
Structure ID:		1055		**Date of Construction:**		n/a	
Coordinates	**E:**	620352.4790m		**Temporary Benchmark**			
	N:	5126221.8300m		**Elev.**	197.350m		
Structure Shape:		Bridge		CC at the base of railing at the west end of the south railing			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape: **Material:** **Diameter:**	Trapezoidal n/a n/a	**Cells:** **Rise:** **Span:**	2 1.84 11.38				
Pier Configuration		**Number:**	1	**Sag Elevation:**		n/a	
Width:	.4	**Location:**	n/a	**Railing Height:** **Elev. Left:**	1.17 n/a	**Length:** **Elev. Right:**	22.53 n/a
End Treatment: n/a				**Length of Culvert/Crossing:**		13.41	
				Skew Angle:	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	194.97			**Invert**	194.88		
Comments:							

Description: Looking u/s

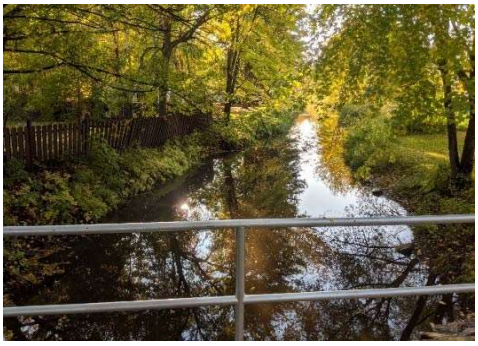
Description: Looking at u/s face

				Survey Date:		October 7, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Parks Cr Trail @ Labreche D	r	**Municipality:**		North Bay	
Structure ID:		1060		**Date of Construction:**		n/a	
Coordinates	**E:**	620025.2610m		**Temporary Benchmark**			
	N:	5126081.5170m		**Elev.**	197.993m		
Structure Shape:		Pedestrian Bridge		CC on NE corner of bridge			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	2.34				
Diameter:		**Span:**	11.38	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	.94	**Length:**	12.62
Width:	n/a	**Location:**	n/a	**Elev. Left:**	n/a	**Elev. Right:**	n/a
End Treatment:				**Length of Culvert/Crossing:**		2.44	
n/a				**Skew Angle:**	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	195.00			**Invert**	194.95		
Comments:							



Description: Looking u/s

Description: Looking at u/s face



Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Lakeshore Dr (444)		**Municipality:**		North Bay	
Structure ID:		1065		**Date of Construction:**		n/a	
Coordinates	**E:**	619756.1547m		**Temporary Benchmark**			
	N:	5125940.6166m		**Elev.**	197.490m		
Structure Shape:		Bridge		Brass cap on SE corner of bridge (horizontal), brass cap on NW corner of bridge (vertical)			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Trapezoidal	**Cells:**	1				
Material:	n/a n/a	**Rise:**	2.69				
Diameter:		**Span:**	5.97	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	1.15	**Length:**	15.21
Width:	n/a	**Location:**	n/a	**Elev. Left:**	n/a	**Elev. Right:**	n/a
End Treatment: n/a				**Length of Culvert/Crossing:**		17.71	
				Skew Angle:	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	194.59			**Invert**	194.62		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

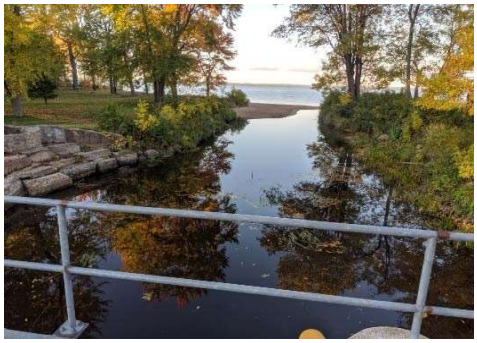
Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Eva Wardlaw Park		**Municipality:**		North Bay	
Structure ID:		1070		**Date of Construction:**		n/a	
Coordinates	**E:**	619726.2506m		**Temporary Benchmark**			
	N:	5125919.3110m		**Elev.**	197.486m		
Structure Shape:		Dam		Brass cap on Lakeshore Dr bridge on top of railing curb at the south end of the east railing			
Structure Material:		Steel/Concrete					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	3				
Material:	n/a n/a	**Rise:**	3.31	**Sag Elevation:**		n/a	
Diameter:		**Span:**	8.28	**Railing Height:**	.9	**Length:**	23.76
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	2				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		2.19	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
Rounded				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		194.36		**Invert**		194.07	
Comments:							

Description: Looking u/s

Description: Looking at u/s face



Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Old Callander Rd		**Municipality:**		North Bay	
Structure ID:		1075		**Date of Construction:**		n/a	
Coordinates	**E:**	619939.9600m		**Temporary Benchmark**			
	N:	5128254.1610m		**Elev.**	199.907m		
Structure Shape:		Two Culverts		na			
Structure Material:		Plastic					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	2				
Material:	HDPE	**Rise:**	.64	**Sag Elevation:**		n/a	
Diameter:	600mm	**Span:**	1.017	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		15.15	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		198.78		**Invert**		198.65	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Orange Trail (Beaver Dam)		**Municipality:**		North Bay	
Structure ID:		1080		**Date of Construction:**		n/a	
Coordinates	**E:**	620224.1143m		**Temporary Benchmark**			
	N:	5128709.9944m		**Elev.**	200.932m		
Structure Shape:		Boardwalk		na			
Structure Material:		Wood					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	.33				
Diameter:		**Span:**	na	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	.8	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		unknown	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		n/a		**Invert**		n/a	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Orange Trail		**Municipality:**		North Bay	
Structure ID:		1085		**Date of Construction:**		n/a	
Coordinates	**E:**	620292.1721m		**Temporary Benchmark**			
	N:	5128843.5308m		**Elev.**	202.241m		
Structure Shape:		Boardwalk		na			
Structure Material:		Wood					
Opening Characteristics							
Cell Shape:	Rectangular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	.35				
Diameter:		**Span:**	1.19				
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Sag Elevation:**		n/a	
End Treatment:				**Railing Height:**	.8	**Length:**	0
n/a				**Elev. Left:**	n/a	**Elev. Right:**	n/a
Upstream Treatment:				**Length of Culvert/Crossing:**		1.306	
Upstream Elevations:				**Skew Angle:**	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Downstream Treatment:							
Downstream Elevations:							
Invert	201.63			**Invert**	201.69		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

Surveyor:		Eric Gazendam		**Survey Date:**		October 8, 2019	
Street Location:		Hwy 17		**Watercourse:**		Parks Creek	
Structure ID:		1090		**Municipality:**		North Bay	
Coordinates	**E:**	621562.5972m		**Date of Construction:**		n/a	
	N:	5129033.5162m		**Temporary Benchmark**			
Structure Shape:		Culvert		**Elev.**	206.497m		
Structure Material:		Steel		CC on bedrock above the downstream end of the 1600mm culvert			
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	CSP	**Rise:**	.8	**Sag Elevation:**		n/a	
Diameter:	800mm	**Span:**	.8	**Railing Height:**	n/a	**Length:**	309.68
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		35.10	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		202.07		**Invert**		202.31	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 17		**Municipality:**		North Bay	
Structure ID:		1095		**Date of Construction:**		n/a	
Coordinates	**E:**	621657.5082m		**Temporary Benchmark**			
	N:	5129012.9296m		**Elev.**	206.707m		
Structure Shape:		Culvert		CC on bedrock above the downstream end of the 1600mm culvert			
Structure Material:		Steel					
Opening Characteristics				**Sag Elevation:**		n/a	
Cell Shape:	Circular	**Cells:**	1	**Railing Height:**	n/a	**Length:**	309.68
Material:	CSP	**Rise:**	.8	**Elev. Left:**	n/a	**Elev. Right:**	n/a
Diameter:	800mm	**Span:**	.8	**Length of Culvert/Crossing:**		34.04	
Pier Configuration		**Number:**	0	**Skew Angle:**	n/a	**Rise:**	n/a
Width:	n/a	**Location:**	n/a	**Opening Face Width:**		n/a	
End Treatment: n/a				**Downstream Treatment:**			
Upstream Treatment:				**Downstream Elevations:**			
Upstream Elevations:							
Invert	202.00			**Invert**	203.08		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 17		**Municipality:**		North Bay	
Structure ID:		1110		**Date of Construction:**		n/a	
Coordinates	**E:**	621725.4938m		**Temporary Benchmark**			
	N:	5128998.1824m		**Elev.**	206.927m		
Structure Shape:		Culvert		CC on bedrock above the downstream end of the 1600mm culvert			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	CSP	**Rise:**	1.61	**Sag Elevation:**		n/a	
Diameter:	1600mm	**Span:**	1.61	**Railing Height:**	n/a	**Length:**	309.68
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		33.12	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		201.76		**Invert**		201.76	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1115		**Date of Construction:**		n/a	
Coordinates	**E:**	621553.3256m		**Temporary Benchmark**			
	N:	5127781.3516m		**Elev.**	210.100m		
Structure Shape:		Unknown		na			
Structure Material:		Unknown					
Opening Characteristics							
Cell Shape:	Unknown	**Cells:**	Unknown				
Material:	n/a n/a	**Rise:**	unknown	**Sag Elevation:**		n/a	
Diameter:		**Span:**	unknown	**Railing Height:**	n/a	**Length:**	279.83
Pier Configuration		**Number:**	0	**Elev. Left:**	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		unknown	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		?		**Invert**		?	
Comments:							

Description: Looking d/s

Description: Looking at d/s face

Survey Date:	October 8, 2019

Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1120		**Date of Construction:**		n/a	
Coordinates	**E:**	621833.5263m		**Temporary Benchmark**			
	N:	5127366.8132m		**Elev.**	199.294m		
Structure Shape:		Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	2				
Diameter:		**Span:**	2	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height: Elev. Left:**	n/a n/a	**Length: Elev. Right:**	0 n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		24.68	
End Treatment: n/a				**Skew Angle:**	n/a	**Rise:**	n/a
				Opening Face Width:		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	197.91			**Invert**	198.09		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1125		**Date of Construction:**		n/a	
Coordinates	**E:**	621855.1105m		**Temporary Benchmark**			
	N:	5127398.5458m		**Elev.**	199.294m		
Structure Shape:		Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	1.25	**Sag Elevation:**		n/a	
Diameter:		**Span:**	1.25				
Pier Configuration		**Number:**	0	**Railing Height:**	n/a	**Length:**	191.91
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		45.58	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	198.64			**Invert**	197.65		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		RR		**Municipality:**		North Bay	
Structure ID:		1130		**Date of Construction:**		n/a	
Coordinates	**E:**	620899.6316m		**Temporary Benchmark**			
	N:	5127571.5334m		**Elev.**	197.676m		
Structure Shape:		2 Culverts		na			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	2				
Material:	n/a n/a	**Rise:**	.79	**Sag Elevation:**		n/a	
Diameter:		**Span:**	2	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		26.42	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		197.01		**Invert**		196.99	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		RR		**Municipality:**		North Bay	
Structure ID:		1135		**Date of Construction:**		n/a	
Coordinates	**E:**	621286.7287m		**Temporary Benchmark**			
	N:	5127421.7580m		**Elev.**	197.589m		
Structure Shape:		2 Culverts		na			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	2				
Material:	n/a n/a	**Rise:**	.88	**Sag Elevation:**		n/a	
Diameter:		**Span:**	1.87				
Pier Configuration		**Number:**	0	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		26.82	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		197.60		**Invert**		196.67	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1140		**Date of Construction:**		n/a	
Coordinates	**E:**	622579.9741m		**Temporary Benchmark**			
	N:	5126710.7959m		**Elev.**	199.294m		
Structure Shape:		2 Culverts		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	2				
Material:	n/a n/a	**Rise:**	1.27				
Diameter:		**Span:**	2.513	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		30.465	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		202.52		**Invert**		202.47	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1145		**Date of Construction:**		n/a	
Coordinates	**E:**	622617.6690m		**Temporary Benchmark**			
	N:	5126729.4092m		**Elev.**	199.294m		
Structure Shape:		Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	1.41				
Diameter:		**Span:**	1.41	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		38.41	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		202.53		**Invert**		202.38	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		RR		**Municipality:**		North Bay	
Structure ID:		1150		**Date of Construction:**		n/a	
Coordinates	**E:**	622452.1773m		**Temporary Benchmark**			
	N:	5126652.5640m		**Elev.**	202.971m		
Structure Shape:		Culvert		na			
Structure Material:		Steel					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	1.16				
Diameter:		**Span:**	1.16	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		10.66	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		201.86		**Invert**		201.81	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1155		**Date of Construction:**		n/a	
Coordinates	**E:**	623010.1688m		**Temporary Benchmark**			
	N:	5126296.3875m		**Elev.**	199.294m		
Structure Shape:		Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	.92				
Diameter:		**Span:**	.92	**Sag Elevation:**		n/a	
Pier Configuration		**Number:**	0	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		30.18	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		209.48		**Invert**		208.71	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

				Survey Date:		October 8, 2019	
Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		Hwy 11		**Municipality:**		North Bay	
Structure ID:		1160		**Date of Construction:**		n/a	
Coordinates	**E:**	622984.9380m		**Temporary Benchmark**			
	N:	5126265.1617m		**Elev.**	199.294m		
Structure Shape:		Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	.88	**Sag Elevation:**		n/a	
Diameter:		**Span:**	.88	**Railing Height:**	n/a	**Length:**	610.00
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0				
Width:	n/a	**Location:**	n/a	**Length of Culvert/Crossing:**		32.29	
End Treatment:				**Skew Angle:**	n/a	**Rise:**	n/a
n/a				**Opening Face Width:**		n/a	
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert		206.30		**Invert**		205.35	
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

Survey Date:	October 8, 2019

Surveyor:		Eric Gazendam		**Watercourse:**		Parks Creek	
Street Location:		RR		**Municipality:**		North Bay	
Structure ID:		1165		**Date of Construction:**		n/a	
Coordinates	**E:**	622847.3488m		**Temporary Benchmark**			
	N:	5126202.2264m		**Elev.**	203.854m		
Structure Shape:		Culvert		na			
Structure Material:		Concrete					
Opening Characteristics							
Cell Shape:	Circular	**Cells:**	1				
Material:	n/a n/a	**Rise:**	1.21	**Sag Elevation:**		n/a	
Diameter:		**Span:**	1.21	**Railing Height:**	n/a	**Length:**	0
				Elev. Left:	n/a	**Elev. Right:**	n/a
Pier Configuration		**Number:**	0	**Length of Culvert/Crossing:**		16.95	
Width:	n/a	**Location:**	n/a	**Skew Angle:**	n/a	**Rise:**	n/a
End Treatment:				**Opening Face Width:**		n/a	
n/a							
Upstream Treatment:				**Downstream Treatment:**			
Upstream Elevations:				**Downstream Elevations:**			
Invert	202.57			**Invert**	202.56		
Comments:							

Description: Looking u/s

Description: Looking at u/s face

Description: Looking d/s

Description: Looking at d/s face

APPENDIX E:

HEC-RAS Results Summary Table

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribC	Reach 6	1195.1	2y	0.19	203.15	203.3767	203.25	203.38	0.000394	0.11	1.78	16.86
ParksTribC	Reach 6	1195.1	5y	0.37	203.15	203.4178	203.29	203.42	0.000584	0.15	2.52	19.74
ParksTribC	Reach 6	1195.1	10y	0.52	203.15	203.3925		203.4	0.001942	0.26	2.05	17.45
ParksTribC	Reach 6	1195.1	25y	0.74	203.15	203.6317		203.63	0.000087	0.1	7.44	25.66
ParksTribC	Reach 6	1195.1	50y	0.91	203.15	203.8798		203.88	0.000017	0.06	14.26	31.24
ParksTribC	Reach 6	1195.1	100y	1.09	203.15	204.229		204.23	0.000004	0.04	28.74	49.36
ParksTribC	Reach 6	1195.1	Timmins	3.14	203.15	205.8188		205.82	0.000001	0.03	155.23	105.1
ParksTribC	Reach 6	1195.1	2y Flow 100	0.19	203.15	203.3767	203.25	203.38	0.000394	0.11	1.78	16.86
ParksTribC	Reach 6	1093.6	2y	0.19	203.17	203.2359		203.24	0.045661	0.4	0.54	26.39
ParksTribC	Reach 6	1093.6	5y	0.37	203.17	203.2674		203.27	0.008654	0.24	1.9	60.67
ParksTribC	Reach 6	1093.6	10y	0.52	203.17	203.3634		203.36	0.000124	0.05	12.4	138.88
ParksTribC	Reach 6	1093.6	25y	0.74	203.17	203.6314		203.63	0.000002	0.02	54.81	165.15
ParksTribC	Reach 6	1093.6	50y	0.91	203.17	203.8798		203.88	0.000001	0.01	96.26	169.29
ParksTribC	Reach 6	1093.6	100y	1.09	203.17	204.229		204.23	0	0.01	156.56	175.89
ParksTribC	Reach 6	1093.6	Timmins	3.14	203.17	205.8188		205.82	0	0.01	453.25	196.8
ParksTribC	Reach 6	1093.6	2y Flow 100	0.19	203.17	203.2359		203.24	0.045661	0.4	0.54	26.39
ParksTribC	Reach 6	1036	2y	0.19	203.11	203.2364		203.24	0.000017	0.02	9.54	107.22
ParksTribC	Reach 6	1036	5y	0.37	203.11	203.2627		203.26	0.000028	0.03	12.37	108.52
ParksTribC	Reach 6	1036	10y	0.52	203.11	203.3623		203.36	0.000007	0.02	23.75	118.41
ParksTribC	Reach 6	1036	25y	0.74	203.11	203.6314		203.63	0.000001	0.01	56.32	122.04
ParksTribC	Reach 6	1036	50y	0.91	203.11	203.8798		203.88	0	0.01	86.89	124.11
ParksTribC	Reach 6	1036	100y	1.09	203.11	204.229		204.23	0	0.01	131.76	137.11
ParksTribC	Reach 6	1036	Timmins	3.14	203.11	205.8188		205.82	0	0.01	371.57	162.45
ParksTribC	Reach 6	1036	2y Flow 100	0.19	203.11	203.2364		203.24	0.000017	0.02	9.54	107.22

ParksTribC	Reach 6	947.4	2y	0.19	203.11	203.2353		203.24	0.000009	0.01	13.18	152.87
ParksTribC	Reach 6	947.4	5y	0.37	203.11	203.2609		203.26	0.000015	0.02	17.11	154.73
ParksTribC	Reach 6	947.4	10y	0.52	203.11	203.3618		203.36	0.000003	0.02	33.01	158.45
ParksTribC	Reach 6	947.4	25y	0.74	203.11	203.6313		203.63	0	0.01	76.02	160.54
ParksTribC	Reach 6	947.4	50y	0.91	203.11	203.8798		203.88	0	0.01	116.11	162.75
ParksTribC	Reach 6	947.4	100y	1.09	203.11	204.229		204.23	0	0.01	173.41	165.06
ParksTribC	Reach 6	947.4	Timmins	3.14	203.11	205.8188		205.82	0	0.01	449.94	181.77
ParksTribC	Reach 6	947.4	2y Flow 100	0.19	203.11	203.2353		203.24	0.000009	0.01	13.18	152.87
ParksTribC	Reach 6	856.9	2y	0.19	203.11	203.2344		203.23	0.000012	0.01	14.05	212.21
ParksTribC	Reach 6	856.9	5y	0.37	203.11	203.2596		203.26	0.000015	0.02	19.43	215.77
ParksTribC	Reach 6	856.9	10y	0.52	203.11	203.3616		203.36	0.000002	0.01	41.74	219.64
ParksTribC	Reach 6	856.9	25y	0.74	203.11	203.6313		203.63	0	0.01	101.55	224.77
ParksTribC	Reach 6	856.9	50y	0.91	203.11	203.8798		203.88	0	0.01	158.62	233.4
ParksTribC	Reach 6	856.9	100y	1.09	203.11	204.229		204.23	0	0	240.9	239.36
ParksTribC	Reach 6	856.9	Timmins	3.14	203.11	205.8188		205.82	0	0.01	634.88	259.55
ParksTribC	Reach 6	856.9	2y Flow 100	0.19	203.11	203.2344		203.23	0.000012	0.01	14.05	212.21
ParksTribC	Reach 6	764	2y	0.19	203.13	203.2328		203.23	0.00003	0.02	9.64	167.35
ParksTribC	Reach 6	764	5y	0.37	203.13	203.2575		203.26	0.000035	0.03	13.81	170.72
ParksTribC	Reach 6	764	10y	0.52	203.13	203.3613		203.36	0.000005	0.02	32.1	181.15
ParksTribC	Reach 6	764	25y	0.74	203.13	203.6313		203.63	0	0.01	81.97	186.97
ParksTribC	Reach 6	764	50y	0.91	203.13	203.8798		203.88	0	0.01	129.35	193.17
ParksTribC	Reach 6	764	100y	1.09	203.13	204.229		204.23	0	0.01	198.31	200.22
ParksTribC	Reach 6	764	Timmins	3.14	203.13	205.8188		205.82	0	0.01	553.68	252.27
ParksTribC	Reach 6	764	2y Flow 100	0.19	203.13	203.2328		203.23	0.00003	0.02	9.64	167.35
ParksTribC	Reach 6	663.6	2y	0.19	203.13	203.2279		203.23	0.000085	0.03	5.8	103.03
ParksTribC	Reach 6	663.6	5y	0.37	203.13	203.2516		203.25	0.000105	0.04	8.32	108.68

ParksTribC	Reach 6	663.6	10y	0.52	203.13	203.3606		203.36	0.000011	0.02	20.88	120.47
ParksTribC	Reach 6	663.6	25y	0.74	203.13	203.6312		203.63	0.000001	0.01	55.1	129.87
ParksTribC	Reach 6	663.6	50y	0.91	203.13	203.8797		203.88	0	0.01	87.65	132.18

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribC	Reach 6	663.6	100y	1.09	203.13	204.229		204.23	0	0.01	134.43	136.87
ParksTribC	Reach 6	663.6	Timmins	3.14	203.13	205.8188		205.82	0	0.01	360.8	149.29
ParksTribC	Reach 6	663.6	2y Flow 100	0.19	203.13	203.2279		203.23	0.000085	0.03	5.8	103.03
ParksTribC	Reach 6	527.1	2y	0.19	203.11	203.1746	203.17	203.18	0.066768	0.4	0.48	30.3
ParksTribC	Reach 6	527.1	5y	0.37	203.11	203.1826	203.18	203.19	0.078012	0.48	0.77	40.11
ParksTribC	Reach 6	527.1	10y	0.52	203.11	203.3586		203.36	0.000021	0.03	16.66	109.23
ParksTribC	Reach 6	527.1	25y	0.74	203.11	203.631		203.63	0.000001	0.02	48	118.38
ParksTribC	Reach 6	527.1	50y	0.91	203.11	203.8797		203.88	0	0.01	77.62	119.85
ParksTribC	Reach 6	527.1	100y	1.09	203.11	204.229		204.23	0	0.01	120.03	123.36
ParksTribC	Reach 6	527.1	Timmins	3.14	203.11	205.8188		205.82	0	0.01	329.84	142.21
ParksTribC	Reach 6	527.1	2y Flow 100	0.19	203.11	203.1746	203.17	203.18	0.066768	0.4	0.48	30.3
ParksTribC	Reach 6	374.3	2y	0.19	202.52	202.9823		202.98	0	0	60.78	164.48
ParksTribC	Reach 6	374.3	5y	0.37	202.52	203.179		203.18	0	0	93.94	171.75
ParksTribC	Reach 6	374.3	10y	0.52	202.52	203.3586		203.36	0	0	125.94	187.34
ParksTribC	Reach 6	374.3	25y	0.74	202.52	203.631		203.63	0	0	178.58	199.54
ParksTribC	Reach 6	374.3	50y	0.91	202.52	203.8797		203.88	0	0	228.92	205.26
ParksTribC	Reach 6	374.3	100y	1.09	202.52	204.229		204.23	0	0	301.47	211.61
ParksTribC	Reach 6	374.3	Timmins	3.14	202.52	205.8188		205.82	0	0.01	663.26	235.89
ParksTribC	Reach 6	374.3	2y Flow 100	0.19	202.52	202.9823		202.98	0	0	60.78	164.48
ParksTribC	Reach 6	293.2	2y	0.19	202.53	202.9823		202.98	0	0	75.67	193.98
ParksTribC	Reach 6	293.2	5y	0.37	202.53	203.179		203.18	0	0	114.05	196.34

ParksTribC	Reach 6	293.2	10y	0.52	202.53	203.3586		203.36	0	0	149.5	198.09
ParksTribC	Reach 6	293.2	25y	0.74	202.53	203.631		203.63	0	0	203.63	199.1
ParksTribC	Reach 6	293.2	50y	0.91	202.53	203.8797		203.88	0	0	253.21	199.74
ParksTribC	Reach 6	293.2	100y	1.09	202.53	204.229		204.23	0	0	323.12	200.55
ParksTribC	Reach 6	293.2	Timmins	3.14	202.53	205.8188		205.82	0	0	648.02	212.53
ParksTribC	Reach 6	293.2	2y Flow 100	0.19	202.53	202.9823		202.98	0	0	75.67	193.98
ParksTribC	Reach 6	193.7	2y	0.19	202.58	202.9823		202.98	0	0.01	36.36	132.62
ParksTribC	Reach 6	193.7	5y	0.37	202.58	203.179		203.18	0	0.01	63.01	137.15
ParksTribC	Reach 6	193.7	10y	0.52	202.58	203.3586		203.36	0	0.01	87.74	138.24
ParksTribC	Reach 6	193.7	25y	0.74	202.58	203.631		203.63	0	0.01	125.66	140.46
ParksTribC	Reach 6	193.7	50y	0.91	202.58	203.8797		203.88	0	0.01	161.22	147.72
ParksTribC	Reach 6	193.7	100y	1.09	202.58	204.229		204.23	0	0.01	213.54	151.67
ParksTribC	Reach 6	193.7	Timmins	3.14	202.58	205.8188		205.82	0	0.01	467.46	167.36
ParksTribC	Reach 6	193.7	2y Flow 100	0.19	202.58	202.9823		202.98	0	0.01	36.36	132.62
ParksTribC	Reach 6	130.9	2y	0.19	202.68	202.9822		202.98	0.000003	0.01	15.13	85.87
ParksTribC	Reach 6	130.9	5y	0.37	202.68	203.1789		203.18	0.000001	0.01	32.95	92.98
ParksTribC	Reach 6	130.9	10y	0.52	202.68	203.3586		203.36	0	0.01	50.09	97.17
ParksTribC	Reach 6	130.9	25y	0.74	202.68	203.631		203.63	0	0.01	77.39	103.4
ParksTribC	Reach 6	130.9	50y	0.91	202.68	203.8797		203.88	0	0.01	103.78	108.32
ParksTribC	Reach 6	130.9	100y	1.09	202.68	204.229		204.23	0	0.01	144.22	123.39
ParksTribC	Reach 6	130.9	Timmins	3.14	202.68	205.8188		205.82	0	0.01	361.55	146.82
ParksTribC	Reach 6	130.9	2y Flow 100	0.19	202.68	202.9822		202.98	0.000003	0.01	15.13	85.87
ParksTribC	Reach 6	46	2y	0.19	202.52	202.9822		202.98	0	0	43.33	121.98
ParksTribC	Reach 6	46	5y	0.37	202.52	203.1789		203.18	0	0.01	67.41	122.81
ParksTribC	Reach 6	46	10y	0.52	202.52	203.3586		203.36	0	0.01	89.55	124.6
ParksTribC	Reach 6	46	25y	0.74	202.52	203.631		203.63	0	0.01	123.81	126.87

ParksTribC	Reach 6	46	50y	0.91	202.52	203.8797		203.88	0	0.01	156.06	131.93
ParksTribC	Reach 6	46	100y	1.09	202.52	204.229		204.23	0	0.01	202.85	135.48
ParksTribC	Reach 6	46	Timmins	3.14	202.52	205.8188		205.82	0	0.01	425.5	144.8
ParksTribC	Reach 6	46	2y Flow 100	0.19	202.52	202.9822		202.98	0	0	43.33	121.98
ParksTribB	Reach 5	1758.1	2y	0.37	198.64	198.7933		198.79	0.002269	0.22	2.53	18.88

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribB	Reach 5	1758.1	5y	0.79	198.64	198.8515		198.85	0.003106	0.32	3.66	20.11
ParksTribB	Reach 5	1758.1	10y	1.16	198.64	198.8881		198.89	0.003664	0.38	4.41	20.99
ParksTribB	Reach 5	1758.1	25y	1.7	198.64	198.9311		198.94	0.004255	0.46	5.33	21.69
ParksTribB	Reach 5	1758.1	50y	2.18	198.64	198.9619		198.97	0.004753	0.52	6.01	22.28
ParksTribB	Reach 5	1758.1	100y	2.69	198.64	198.9913		199	0.005109	0.59	6.67	22.44
ParksTribB	Reach 5	1758.1	Timmins	4.36	198.64	199.1196		199.13	0.004008	0.68	9.6	23.47
ParksTribB	Reach 5	1758.1	2y Flow 100	0.37	198.64	198.7933		198.79	0.002269	0.22	2.53	18.88
ParksTribB	Reach 5	1712.2	2y	0.37	198.62	198.7518		198.75	0.001197	0.15	4.39	51.26
ParksTribB	Reach 5	1712.2	5y	0.79	198.62	198.7968		198.8	0.001429	0.21	6.86	57.66
ParksTribB	Reach 5	1712.2	10y	1.16	198.62	198.8263		198.83	0.001539	0.25	8.61	60.97
ParksTribB	Reach 5	1712.2	25y	1.7	198.62	198.8639		198.87	0.001616	0.28	10.99	64.78
ParksTribB	Reach 5	1712.2	50y	2.18	198.62	198.8917		198.89	0.001613	0.31	12.81	66.28
ParksTribB	Reach 5	1712.2	100y	2.69	198.62	198.9194		198.92	0.001618	0.34	14.67	67.76
ParksTribB	Reach 5	1712.2	Timmins	4.36	198.62	199.0882		199.09	0.000649	0.32	26.88	75.07
ParksTribB	Reach 5	1712.2	2y Flow 100	0.37	198.62	198.7518		198.75	0.001197	0.15	4.39	51.26
ParksTribB	Reach 5	1699.9	2y	0.37	198.61	198.6856	198.68	198.71	0.048144	0.72	0.73	16.89
ParksTribB	Reach 5	1699.9	5y	0.79	198.61	198.7318		198.75	0.02635	0.66	1.68	23.21
ParksTribB	Reach 5	1699.9	10y	1.16	198.61	198.7625		198.78	0.018203	0.67	2.41	24.5

ParksTribB	Reach 5	1699.9	25y	1.7	198.61	198.7967		198.82	0.014466	0.73	3.26	24.78
ParksTribB	Reach 5	1699.9	50y	2.18	198.61	198.8212		198.84	0.013425	0.79	3.86	24.97
ParksTribB	Reach 5	1699.9	100y	2.69	198.61	198.8463		198.87	0.012474	0.85	4.5	25.17
ParksTribB	Reach 5	1699.9	Timmins	4.36	198.61	199.0591		199.07	0.00242	0.63	10.08	27.06
ParksTribB	Reach 5	1699.9	2y Flow 100	0.37	198.61	198.6856	198.68	198.71	0.048144	0.72	0.73	16.89
ParksTribB	Reach 5	1682.9	2y	0.37	198.41	198.5696		198.57	0.004543	0.35	1.61	17.78
ParksTribB	Reach 5	1682.9	5y	0.79	198.41	198.6154		198.62	0.005805	0.49	2.44	18.61
ParksTribB	Reach 5	1682.9	10y	1.16	198.41	198.644		198.66	0.00722	0.58	2.98	19.81
ParksTribB	Reach 5	1682.9	25y	1.7	198.41	198.6772		198.69	0.008769	0.66	3.69	21.67
ParksTribB	Reach 5	1682.9	50y	2.18	198.41	198.7072		198.73	0.008319	0.72	4.34	21.88
ParksTribB	Reach 5	1682.9	100y	2.69	198.41	198.7284		198.75	0.009062	0.81	4.81	22.02
ParksTribB	Reach 5	1682.9	Timmins	4.36	198.41	199.0427		199.05	0.001204	0.54	12.05	24
ParksTribB	Reach 5	1682.9	2y Flow 100	0.37	198.41	198.5696		198.57	0.004543	0.35	1.61	17.78
ParksTribB	Reach 5	1679.2	2y	0.37	198.37	198.5712		198.57	0.000075	0.04	17.91	200.5
ParksTribB	Reach 5	1679.2	5y	0.79	198.37	198.6194		198.62	0.000092	0.06	28.34	225.17
ParksTribB	Reach 5	1679.2	10y	1.16	198.37	198.6497		198.65	0.0001	0.07	35.21	228.48
ParksTribB	Reach 5	1679.2	25y	1.7	198.37	198.6853		198.69	0.000113	0.09	43.43	233.66
ParksTribB	Reach 5	1679.2	50y	2.18	198.37	198.7176		198.72	0.00011	0.1	51.02	236.91
ParksTribB	Reach 5	1679.2	100y	2.69	198.37	198.7419		198.74	0.00012	0.11	56.84	240.99
ParksTribB	Reach 5	1679.2	Timmins	4.36	198.37	199.0496		199.05	0.00002	0.07	135.02	261.49
ParksTribB	Reach 5	1679.2	2y Flow 100	0.37	198.37	198.5712		198.57	0.000075	0.04	17.91	200.5
ParksTribB	Reach 5	1629.8	2y	0.37	198.38	198.5688		198.57	0.000034	0.03	24.29	230.14
ParksTribB	Reach 5	1629.8	5y	0.79	198.38	198.6163		198.62	0.000047	0.05	35.45	237.19
ParksTribB	Reach 5	1629.8	10y	1.16	198.38	198.6461		198.65	0.000056	0.06	42.54	238.83
ParksTribB	Reach 5	1629.8	25y	1.7	198.38	198.6811		198.68	0.000067	0.07	50.93	239.81
ParksTribB	Reach 5	1629.8	50y	2.18	198.38	198.7134		198.71	0.000068	0.08	58.68	240.13

ParksTribB	Reach 5	1629.8	100y	2.69	198.38	198.7373		198.74	0.000077	0.09	64.42	240.36
ParksTribB	Reach 5	1629.8	Timmins	4.36	198.38	199.0488		199.05	0.000016	0.07	140.44	247.28
ParksTribB	Reach 5	1629.8	2y Flow 100	0.37	198.38	198.5688		198.57	0.000034	0.03	24.29	230.14
ParksTribB	Reach 5	1568.5	2y	0.37	198.44	198.5659		198.57	0.00007	0.03	18.67	195.92
ParksTribB	Reach 5	1568.5	5y	0.79	198.44	198.6124		198.61	0.000094	0.05	28.33	215.06
ParksTribB	Reach 5	1568.5	10y	1.16	198.44	198.6416		198.64	0.000106	0.06	34.74	223.31
ParksTribB	Reach 5	1568.5	25y	1.7	198.44	198.6759		198.68	0.000119	0.08	42.48	229.61
ParksTribB	Reach 5	1568.5	50y	2.18	198.44	198.7081		198.71	0.000118	0.08	49.95	234.14
ParksTribB	Reach 5	1568.5	100y	2.69	198.44	198.7314		198.73	0.00013	0.09	55.45	238.23

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribB	Reach 5	1568.5	Timmins	4.36	198.44	199.0477		199.05	0.00002	0.07	133.37	250.28
ParksTribB	Reach 5	1568.5	2y Flow 100	0.37	198.44	198.5659		198.57	0.00007	0.03	18.67	195.92
ParksTribB	Reach 5	1462.7	2y	0.37	198.43	198.5517		198.55	0.000458	0.08	7.97	97.4
ParksTribB	Reach 5	1462.7	5y	0.79	198.43	198.5938		198.59	0.000548	0.11	12.23	104.86
ParksTribB	Reach 5	1462.7	10y	1.16	198.43	198.6209		198.62	0.000586	0.13	15.09	106.14
ParksTribB	Reach 5	1462.7	25y	1.7	198.43	198.6527		198.65	0.000644	0.16	18.49	107.36
ParksTribB	Reach 5	1462.7	50y	2.18	198.43	198.6855		198.69	0.000597	0.18	22.05	109.22
ParksTribB	Reach 5	1462.7	100y	2.69	198.43	198.7064		198.71	0.00066	0.2	24.33	109.89
ParksTribB	Reach 5	1462.7	Timmins	4.36	198.43	199.0441		199.04	0.000076	0.13	66.93	139.61
ParksTribB	Reach 5	1462.7	2y Flow 100	0.37	198.43	198.5517		198.55	0.000458	0.08	7.97	97.4
ParksTribB	Reach 5	1327.2	2y	0.37	198.37	198.4733	198.42	198.47	0.001287	0.15	5.7	108.21
ParksTribB	Reach 5	1327.2	5y	0.79	198.37	198.508	198.44	198.51	0.001319	0.18	9.72	123.14
ParksTribB	Reach 5	1327.2	10y	1.16	198.37	198.5285	198.45	198.53	0.001371	0.2	12.29	126.84
ParksTribB	Reach 5	1327.2	25y	1.7	198.37	198.5366		198.54	0.002291	0.27	13.32	128.08

ParksTribB	Reach 5	1327.2	50y	2.18	198.37	198.4874		198.5	0.022325	0.69	7.28	114.43
ParksTribB	Reach 5	1327.2	100y	2.69	198.37	198.5101		198.52	0.014119	0.6	9.98	124.05
ParksTribB	Reach 5	1327.2	Timmins	4.36	198.37	199.0387		199.04	0.000038	0.1	90.92	172.34
ParksTribB	Reach 5	1327.2	2y Flow 100	0.37	198.37	198.4733	198.42	198.47	0.001287	0.15	5.7	108.21
ParksTribB	Reach 5	1219.7	2y	0.37	198.34	198.0855	198.09	198.09	0.234071		0.95	51.12
ParksTribB	Reach 5	1219.7	5y	0.79	198.34	198.0953	198.1	198.11	0.317207		1.51	60.65
ParksTribB	Reach 5	1219.7	10y	1.16	198.34	198.1043	198.1	198.12	0.271789		2.09	68.66
ParksTribB	Reach 5	1219.7	25y	1.7	198.34	198.1749		198.18	0.010475		8.09	96.41
ParksTribB	Reach 5	1219.7	50y	2.18	198.34	198.3039		198.3	0.00078		21.26	104.45
ParksTribB	Reach 5	1219.7	100y	2.69	198.34	198.4685		198.47	0.000165	0.05	39.11	114.46
ParksTribB	Reach 5	1219.7	Timmins	4.36	198.34	199.0368		199.04	0.000015	0.06	112.58	134.41
ParksTribB	Reach 5	1219.7	2y Flow 100	0.37	198.34	198.0855	198.09	198.09	0.234071		0.95	51.12
ParksTribB	Reach 5	1083	2y	0.37	197.52	197.8558		197.86	0.000023	0.04	18.38	95.73
ParksTribB	Reach 5	1083	5y	0.79	197.52	197.9708		197.97	0.000023	0.05	29.51	97.78
ParksTribB	Reach 5	1083	10y	1.16	197.52	198.0484		198.05	0.000023	0.06	37.14	99.53
ParksTribB	Reach 5	1083	25y	1.7	197.52	198.1695		198.17	0.000019	0.07	54.46	166.89
ParksTribB	Reach 5	1083	50y	2.18	197.52	198.3003		198.3	0.000013	0.06	77.29	179.13
ParksTribB	Reach 5	1083	100y	2.69	197.52	198.4666		198.47	0.000008	0.06	107.96	189.43
ParksTribB	Reach 5	1083	Timmins	4.36	197.52	199.0363		199.04	0.000003	0.05	221.16	212.5
ParksTribB	Reach 5	1083	2y Flow 100	0.37	197.52	197.8558		197.86	0.000023	0.04	18.38	95.73
ParksTribB	Reach 5	947.4	2y	0.37	197.43	197.8552		197.86	0.000003	0.02	47.24	212.85
ParksTribB	Reach 5	947.4	5y	0.79	197.43	197.97		197.97	0.000004	0.03	71.89	215.86
ParksTribB	Reach 5	947.4	10y	1.16	197.43	198.0477		198.05	0.000004	0.03	88.78	227.69
ParksTribB	Reach 5	947.4	25y	1.7	197.43	198.1688		198.17	0.000004	0.03	122.33	297.28
ParksTribB	Reach 5	947.4	50y	2.18	197.43	198.2998		198.3	0.000003	0.03	161.58	301.24
ParksTribB	Reach 5	947.4	100y	2.69	197.43	198.4663		198.47	0.000002	0.03	211.94	303.6

ParksTribB	Reach 5	947.4	Timmins	4.36	197.43	199.0362		199.04	0.000001	0.03	390.06	321.34
ParksTribB	Reach 5	947.4	2y Flow 100	0.37	197.43	197.8552		197.86	0.000003	0.02	47.24	212.85
ParksTribB	Reach 5	799.4	2y	0.37	197.51	197.8549		197.85	0.000002	0.01	70.98	324.39
ParksTribB	Reach 5	799.4	5y	0.79	197.51	197.9698		197.97	0.000002	0.01	109.01	334.01
ParksTribB	Reach 5	799.4	10y	1.16	197.51	198.0474		198.05	0.000002	0.02	135.03	340.42
ParksTribB	Reach 5	799.4	25y	1.7	197.51	198.1686		198.17	0.000002	0.02	182.26	406.14
ParksTribB	Reach 5	799.4	50y	2.18	197.51	198.2996		198.3	0.000001	0.02	235.83	410.69
ParksTribB	Reach 5	799.4	100y	2.69	197.51	198.4662		198.47	0.000001	0.02	304.45	413.42
ParksTribB	Reach 5	799.4	Timmins	4.36	197.51	199.0361		199.04	0	0.02	543.05	424.88
ParksTribB	Reach 5	799.4	2y Flow 100	0.37	197.51	197.8549		197.85	0.000002	0.01	70.98	324.39
ParksTribB	Reach 5	709.9	2y	0.37	197.27	197.8548		197.85	0.000001	0.01	81.43	366.67
ParksTribB	Reach 5	709.9	5y	0.79	197.27	197.9697		197.97	0.000001	0.01	123.84	370.07

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribB	Reach 5	709.9	10y	1.16	197.27	198.0473		198.05	0.000001	0.02	152.58	372.14
ParksTribB	Reach 5	709.9	25y	1.7	197.27	198.1685		198.17	0.000001	0.02	200.21	414.12
ParksTribB	Reach 5	709.9	50y	2.18	197.27	198.2995		198.3	0.000001	0.02	255.68	428.39
ParksTribB	Reach 5	709.9	100y	2.69	197.27	198.4661		198.47	0.000001	0.02	327.54	433.8
ParksTribB	Reach 5	709.9	Timmins	4.36	197.27	199.0361		199.04	0	0.02	577.54	441.34
ParksTribB	Reach 5	709.9	2y Flow 100	0.37	197.27	197.8548		197.85	0.000001	0.01	81.43	366.67
ParksTribB	Reach 5	632.3	2y	0.37	197.4	197.8548		197.85	0.000001	0.01	100.36	436.15
ParksTribB	Reach 5	632.3	5y	0.79	197.4	197.9696		197.97	0.000001	0.01	150.81	441.76
ParksTribB	Reach 5	632.3	10y	1.16	197.4	198.0472		198.05	0.000001	0.01	185.16	443.24
ParksTribB	Reach 5	632.3	25y	1.7	197.4	198.1684		198.17	0.000001	0.02	238.92	443.87
ParksTribB	Reach 5	632.3	50y	2.18	197.4	198.2995		198.3	0.000001	0.02	297.14	444.84

ParksTribB	Reach 5	632.3	100y	2.69	197.4	198.4661		198.47	0.000001	0.02	371.6	448.1
ParksTribB	Reach 5	632.3	Timmins	4.36	197.4	199.0361		199.04	0	0.02	628.3	452.56
ParksTribB	Reach 5	632.3	2y Flow 100	0.37	197.4	197.8548		197.85	0.000001	0.01	100.36	436.15
ParksTribB	Reach 5	560.6	2y	0.37	197.32	197.8547		197.85	0.000001	0.01	98.45	413.59
ParksTribB	Reach 5	560.6	5y	0.79	197.32	197.9696		197.97	0.000001	0.01	146.15	415.98
ParksTribB	Reach 5	560.6	10y	1.16	197.32	198.0471		198.05	0.000001	0.01	178.44	416.27
ParksTribB	Reach 5	560.6	25y	1.7	197.32	198.1684		198.17	0.000001	0.02	228.93	416.96
ParksTribB	Reach 5	560.6	50y	2.18	197.32	198.2994		198.3	0.000001	0.02	283.8	419.99
ParksTribB	Reach 5	560.6	100y	2.69	197.32	198.466		198.47	0.000001	0.02	353.85	420.83
ParksTribB	Reach 5	560.6	Timmins	4.36	197.32	199.0361		199.04	0	0.02	595.28	426.04
ParksTribB	Reach 5	560.6	2y Flow 100	0.37	197.32	197.8547		197.85	0.000001	0.01	98.45	413.59
ParksTribB	Reach 5	473.5	2y	0.37	197.4	197.8547		197.85	0.000001	0.01	90.88	376.24
ParksTribB	Reach 5	473.5	5y	0.79	197.4	197.9695		197.97	0.000001	0.01	134.19	377.91
ParksTribB	Reach 5	473.5	10y	1.16	197.4	198.0471		198.05	0.000001	0.02	163.53	378.26
ParksTribB	Reach 5	473.5	25y	1.7	197.4	198.1683		198.17	0.000001	0.02	209.4	378.7
ParksTribB	Reach 5	473.5	50y	2.18	197.4	198.2994		198.3	0.000001	0.02	259.08	379.33
ParksTribB	Reach 5	473.5	100y	2.69	197.4	198.466		198.47	0.000001	0.02	322.37	380.37
ParksTribB	Reach 5	473.5	Timmins	4.36	197.4	199.0361		199.04	0	0.02	541.64	389.44
ParksTribB	Reach 5	473.5	2y Flow 100	0.37	197.4	197.8547		197.85	0.000001	0.01	90.88	376.24
ParksTribB	Reach 5	419	2y	0.37	197.43	197.8547		197.85	0.000001	0.01	80.33	323.32
ParksTribB	Reach 5	419	5y	0.79	197.43	197.9694		197.97	0.000001	0.01	117.61	325.76
ParksTribB	Reach 5	419	10y	1.16	197.43	198.047		198.05	0.000001	0.02	142.9	326.15
ParksTribB	Reach 5	419	25y	1.7	197.43	198.1682		198.17	0.000001	0.02	182.46	326.6
ParksTribB	Reach 5	419	50y	2.18	197.43	198.2993		198.3	0.000001	0.02	225.31	327.09
ParksTribB	Reach 5	419	100y	2.69	197.43	198.466		198.47	0.000001	0.02	279.91	328.42
ParksTribB	Reach 5	419	Timmins	4.36	197.43	199.0361		199.04	0	0.02	470.75	337.84

ParksTribB	Reach 5	419	2y Flow 100	0.37	197.43	197.8547		197.85	0.000001	0.01	80.33	323.32
ParksTribB	Reach 5	341.1	2y	0.37	197.42	197.8546		197.85	0.000002	0.01	60.93	282.57
ParksTribB	Reach 5	341.1	5y	0.79	197.42	197.9693		197.97	0.000002	0.02	93.53	284.63
ParksTribB	Reach 5	341.1	10y	1.16	197.42	198.0469		198.05	0.000002	0.02	115.62	284.96
ParksTribB	Reach 5	341.1	25y	1.7	197.42	198.1681		198.17	0.000002	0.03	150.2	285.75
ParksTribB	Reach 5	341.1	50y	2.18	197.42	198.2992		198.3	0.000002	0.03	187.74	287.25
ParksTribB	Reach 5	341.1	100y	2.69	197.42	198.4659		198.47	0.000001	0.03	235.76	288.82
ParksTribB	Reach 5	341.1	Timmins	4.36	197.42	199.036		199.04	0.000001	0.02	402.59	300.15
ParksTribB	Reach 5	341.1	2y Flow 100	0.37	197.42	197.8546		197.85	0.000002	0.01	60.93	282.57
ParksTribB	Reach 5	291.9	2y	0.37	197.47	197.8545		197.85	0.000003	0.02	54.56	256.86
ParksTribB	Reach 5	291.9	5y	0.79	197.47	197.9692		197.97	0.000003	0.02	84.18	259.12
ParksTribB	Reach 5	291.9	10y	1.16	197.47	198.0468		198.05	0.000003	0.02	104.33	261.17
ParksTribB	Reach 5	291.9	25y	1.7	197.47	198.168		198.17	0.000003	0.03	136.26	265.1
ParksTribB	Reach 5	291.9	50y	2.18	197.47	198.2991		198.3	0.000002	0.03	171.16	267.4
ParksTribB	Reach 5	291.9	100y	2.69	197.47	198.4658		198.47	0.000002	0.03	216.03	271.44
ParksTribB	Reach 5	291.9	Timmins	4.36	197.47	199.036		199.04	0.000001	0.03	373.36	278.03

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribB	Reach 5	291.9	2y Flow 100	0.37	197.47	197.8545		197.85	0.000003	0.02	54.56	256.86
ParksTribB	Reach 5	262.4	2y	0.37	197.48	197.8544		197.85	0.000001	0.01	77.9	349.87
ParksTribB	Reach 5	262.4	5y	0.79	197.48	197.9691		197.97	0.000001	0.01	118.25	353.53
ParksTribB	Reach 5	262.4	10y	1.16	197.48	198.0467		198.05	0.000002	0.02	145.7	354.02
ParksTribB	Reach 5	262.4	25y	1.7	197.48	198.168		198.17	0.000001	0.02	188.66	354.67
ParksTribB	Reach 5	262.4	50y	2.18	197.48	198.2991		198.3	0.000001	0.02	235.42	357.73
ParksTribB	Reach 5	262.4	100y	2.69	197.48	198.4658		198.47	0.000001	0.02	295.18	359.26

ParksTribB	Reach 5	262.4	Timmins	4.36	197.48	199.036		199.04	0	0.02	502.01	364.67
ParksTribB	Reach 5	262.4	2y Flow 100	0.37	197.48	197.8544		197.85	0.000001	0.01	77.9	349.87
ParksTribB	Reach 5	176	2y	0.37	197.13	197.8539		197.85	0.000024	0.07	8.03	20.8
ParksTribB	Reach 5	176	5y	0.79	197.13	197.9682		197.97	0.000048	0.11	10.4	20.8
ParksTribB	Reach 5	176	10y	1.16	197.13	198.0455		198.05	0.000065	0.14	12.01	20.8
ParksTribB	Reach 5	176	25y	1.7	197.13	198.1664		198.17	0.000077	0.17	14.52	20.8
ParksTribB	Reach 5	176	50y	2.18	197.13	198.2974		198.3	0.000072	0.19	17.25	20.8
ParksTribB	Reach 5	176	100y	2.69	197.13	198.464		198.47	0.000062	0.19	20.72	20.8
ParksTribB	Reach 5	176	Timmins	4.36	197.13	199.0342		199.04	0.000038	0.2	32.57	20.8
ParksTribB	Reach 5	176	2y Flow 100	0.37	197.13	197.8539		197.85	0.000024	0.07	8.03	20.8
ParksTribB	Reach 5	142.1	2y	0.37	197.04	197.8529		197.85	0.000037	0.08	6.66	23.51
ParksTribB	Reach 5	142.1	5y	0.79	197.04	197.9663		197.97	0.000065	0.12	9.53	26
ParksTribB	Reach 5	142.1	10y	1.16	197.04	198.043		198.04	0.000081	0.15	11.53	26
ParksTribB	Reach 5	142.1	25y	1.7	197.04	198.1636		198.16	0.000085	0.17	14.66	26
ParksTribB	Reach 5	142.1	50y	2.18	197.04	198.295		198.3	0.000074	0.18	18.08	26
ParksTribB	Reach 5	142.1	100y	2.69	197.04	198.4621		198.46	0.000058	0.18	22.42	26
ParksTribB	Reach 5	142.1	Timmins	4.36	197.04	199.0333		199.03	0.000031	0.18	37.27	26
ParksTribB	Reach 5	142.1	2y Flow 100	0.37	197.04	197.8529		197.85	0.000037	0.08	6.66	23.51
ParksTribB	Reach 5	98	2y	0.37	197.04	197.8517		197.85	0.000021	0.06	7.81	26.5
ParksTribB	Reach 5	98	5y	0.79	197.04	197.9642		197.96	0.000041	0.1	10.79	26.5
ParksTribB	Reach 5	98	10y	1.16	197.04	198.0403		198.04	0.000054	0.13	12.81	26.5
ParksTribB	Reach 5	98	25y	1.7	197.04	198.1607		198.16	0.00006	0.15	16	26.5
ParksTribB	Reach 5	98	50y	2.18	197.04	198.2924		198.29	0.000055	0.16	19.49	26.5
ParksTribB	Reach 5	98	100y	2.69	197.04	198.4601		198.46	0.000045	0.17	23.93	26.5
ParksTribB	Reach 5	98	Timmins	4.36	197.04	199.0322		199.03	0.000026	0.17	39.09	26.5
ParksTribB	Reach 5	98	2y Flow 100	0.37	197.04	197.8517		197.85	0.000021	0.06	7.81	26.5

ParksTribB	Reach 5	56.5	2y	0.37	197.11	197.8511		197.85	0.000016	0.05	10.87	27.2
ParksTribB	Reach 5	56.5	5y	0.79	197.11	197.9629		197.96	0.000031	0.08	13.91	27.2
ParksTribB	Reach 5	56.5	10y	1.16	197.11	198.0386		198.04	0.000042	0.1	15.97	27.2
ParksTribB	Reach 5	56.5	25y	1.7	197.11	198.1587		198.16	0.000049	0.13	19.24	27.2
ParksTribB	Reach 5	56.5	50y	2.18	197.11	198.2906		198.29	0.000045	0.14	22.83	27.2
ParksTribB	Reach 5	56.5	100y	2.69	197.11	198.4586		198.46	0.000038	0.14	27.4	27.2
ParksTribB	Reach 5	56.5	Timmins	4.36	197.11	199.0314		199.03	0.000022	0.15	42.98	27.2
ParksTribB	Reach 5	56.5	2y Flow 100	0.37	197.11	197.8511		197.85	0.000016	0.05	10.87	27.2
ParksTribB	Reach 5	14.3	2y	0.37	197.04	197.8501		197.85	0.000027	0.06	7.69	24.66
ParksTribB	Reach 5	14.3	5y	0.79	197.04	197.9611		197.96	0.000049	0.1	10.49	25.3
ParksTribB	Reach 5	14.3	10y	1.16	197.04	198.0362		198.04	0.000061	0.12	12.39	25.3
ParksTribB	Reach 5	14.3	25y	1.7	197.04	198.1561		198.16	0.000066	0.15	15.43	25.3
ParksTribB	Reach 5	14.3	50y	2.18	197.04	198.2881		198.29	0.000057	0.15	18.77	25.3
ParksTribB	Reach 5	14.3	100y	2.69	197.04	198.4566		198.46	0.000045	0.16	23.03	25.3
ParksTribB	Reach 5	14.3	Timmins	4.36	197.04	199.0302		199.03	0.000025	0.16	37.54	25.3
ParksTribB	Reach 5	14.3	2y Flow 100	0.37	197.04	197.8501		197.85	0.000027	0.06	7.69	24.66
ParksTribA	Reach 2a	715.3	2y	0.6	198.56	198.7471		198.75	0.000471	0.14	11.19	108.16
ParksTribA	Reach 2a	715.3	5y	0.94	198.56	198.7753		198.78	0.000543	0.17	14.26	109.95
ParksTribA	Reach 2a	715.3	10y	1.18	198.56	198.7911		198.79	0.000596	0.19	16.01	110.74

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribA	Reach 2a	715.3	25y	1.49	198.56	198.8099		198.81	0.000638	0.21	18.1	111.46
ParksTribA	Reach 2a	715.3	50y	1.67	198.56	198.8196		198.82	0.000664	0.22	19.18	111.84
ParksTribA	Reach 2a	715.3	100y	1.86	198.56	198.8298		198.83	0.000685	0.23	20.32	112.34
ParksTribA	Reach 2a	715.3	Timmins	11.34	198.56	199.079		199.08	0.001443	0.56	49.3	118.48

ParksTribA	Reach 2a	715.3	2y Flow 100	0.6	198.56	198.7473		198.75	0.000467	0.14	11.22	108.18
ParksTribA	Reach 2a	663.1	2y	0.6	198.62	198.7293		198.73	0.00048	0.11	12.29	137.54
ParksTribA	Reach 2a	663.1	5y	0.94	198.62	198.755		198.76	0.000533	0.13	15.88	142.07
ParksTribA	Reach 2a	663.1	10y	1.18	198.62	198.7687		198.77	0.000588	0.15	17.84	143.84
ParksTribA	Reach 2a	663.1	25y	1.49	198.62	198.7862		198.79	0.000611	0.17	20.37	145.07
ParksTribA	Reach 2a	663.1	50y	1.67	198.62	198.7949		198.8	0.000631	0.18	21.64	145.62
ParksTribA	Reach 2a	663.1	100y	1.86	198.62	198.8045		198.8	0.00064	0.19	23.04	146.18
ParksTribA	Reach 2a	663.1	Timmins	11.34	198.62	199.0266		199.03	0.001284	0.46	56.33	152.6
ParksTribA	Reach 2a	663.1	2y Flow 100	0.6	198.62	198.7297		198.73	0.000473	0.11	12.35	137.62
ParksTribA	Reach 2a	627.9	2y	0.6	198.58	198.7144		198.71	0.000374	0.11	13.59	153.06
ParksTribA	Reach 2a	627.9	5y	0.94	198.58	198.7378		198.74	0.000445	0.13	17.21	157.73
ParksTribA	Reach 2a	627.9	10y	1.18	198.58	198.7493		198.75	0.000512	0.15	19.05	160.71
ParksTribA	Reach 2a	627.9	25y	1.49	198.58	198.7654		198.77	0.000561	0.17	21.68	166.29
ParksTribA	Reach 2a	627.9	50y	1.67	198.58	198.7735		198.77	0.000583	0.18	23.03	168
ParksTribA	Reach 2a	627.9	100y	1.86	198.58	198.7825		198.78	0.000598	0.19	24.56	169.81
ParksTribA	Reach 2a	627.9	Timmins	11.34	198.58	198.9806		198.98	0.001298	0.45	59.28	179.33
ParksTribA	Reach 2a	627.9	2y Flow 100	0.6	198.58	198.7151		198.72	0.000365	0.11	13.69	153.2
ParksTribA	Reach 2a	562.6	2y	0.6	198.59	198.6645		198.67	0.01023	0.32	4.11	101.27
ParksTribA	Reach 2a	562.6	5y	0.94	198.59	198.6708	198.64	198.67	0.016524	0.44	4.76	105.86
ParksTribA	Reach 2a	562.6	10y	1.18	198.59	198.6703	198.65	198.68	0.026996	0.56	4.71	105.41
ParksTribA	Reach 2a	562.6	25y	1.49	198.59	198.6819	198.66	198.69	0.021292	0.56	6	114.91
ParksTribA	Reach 2a	562.6	50y	1.67	198.59	198.6926	198.66	198.7	0.015402	0.53	7.25	120.82
ParksTribA	Reach 2a	562.6	100y	1.86	198.59	198.7001	198.66	198.7	0.013414	0.52	8.18	124.07
ParksTribA	Reach 2a	562.6	Timmins	11.34	198.59	198.7815	198.75	198.81	0.037296	1.35	19.54	151.22
ParksTribA	Reach 2a	562.6	2y Flow 100	0.6	198.59	198.6687		198.67	0.007578	0.29	4.55	104.29

ParksTribA	Reach 2a	507.4	2y	0.6	197.3	197.3939	197.34	197.42	0.060917	0.78	0.76	5.43
ParksTribA	Reach 2a	507.4	5y	0.94	197.3	197.5338		197.55	0.021699	0.96	1.93	13.82
ParksTribA	Reach 2a	507.4	10y	1.18	197.3	197.586		197.6	0.012934	0.85	2.68	15.11
ParksTribA	Reach 2a	507.4	25y	1.49	197.3	197.6051		197.62	0.01521	0.96	2.98	15.54
ParksTribA	Reach 2a	507.4	50y	1.67	197.3	197.5979		197.62	0.02134	1.12	2.86	15.37
ParksTribA	Reach 2a	507.4	100y	1.86	197.3	197.6009		197.63	0.025275	1.23	2.91	15.44
ParksTribA	Reach 2a	507.4	Timmins	11.34	197.3	198.2271		198.24	0.004158	0.89	22.3	42.91
ParksTribA	Reach 2a	507.4	2y Flow 100	0.6	197.3	197.3352	197.34	197.41	0.173822	0.66	0.49	3.64
ParksTribA	Reach 2a	437	2y	0.6	196.6	196.9979		197.01	0.002806	0.52	1.27	5.1
ParksTribA	Reach 2a	437	5y	0.94	196.6	197.0348		197.06	0.004614	0.71	1.47	5.32
ParksTribA	Reach 2a	437	10y	1.18	196.6	197.0415		197.08	0.006786	0.88	1.5	5.36
ParksTribA	Reach 2a	437	25y	1.49	196.6	197.1185		197.15	0.005194	0.87	1.93	5.84
ParksTribA	Reach 2a	437	50y	1.67	196.6	197.2006		197.23	0.003401	0.78	2.43	6.35
ParksTribA	Reach 2a	437	100y	1.86	196.6	197.2885		197.31	0.002401	0.71	3.02	6.99
ParksTribA	Reach 2a	437	Timmins	11.34	196.6	197.8892		197.99	0.004941	1.52	10.8	22.98
ParksTribA	Reach 2a	437	2y Flow 100	0.6	196.6	197.025		197.04	0.002056	0.47	1.41	5.26
ParksTribA	Reach 2a	385.8	2y	0.6	196.42	196.7079	196.66	196.75	0.011628	0.96	0.88	8.2
ParksTribA	Reach 2a	385.8	5y	0.94	196.42	196.8538		196.87	0.003025	0.63	3.45	28.35
ParksTribA	Reach 2a	385.8	10y	1.18	196.42	196.9729		196.98	0.000829	0.38	9.39	64.63
ParksTribA	Reach 2a	385.8	25y	1.49	196.42	197.1135		197.11	0.000215	0.24	19.37	76.66
ParksTribA	Reach 2a	385.8	50y	1.67	196.42	197.2045		197.21	0.000112	0.19	26.69	82.32
ParksTribA	Reach 2a	385.8	100y	1.86	196.42	197.295		197.3	0.000068	0.16	34.48	90.64
ParksTribA	Reach 2a	385.8	Timmins	11.34	196.42	197.9417		197.94	0.000117	0.32	104.54	130.31
ParksTribA	Reach 2a	385.8	2y Flow 100	0.6	196.42	197.0175		197.02	0.000109	0.15	12.37	68.96

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)

ParksTribA	Reach 2a	318	2y	0.6	196.14	196.61		196.61	0.000718	0.29	2.65	14.32
ParksTribA	Reach 2a	318	5y	0.94	196.14	196.8241		196.83	0.000222	0.22	7.12	29.53
ParksTribA	Reach 2a	318	10y	1.18	196.14	196.9566		196.96	0.000125	0.19	12.23	45.42
ParksTribA	Reach 2a	318	25y	1.49	196.14	197.1058		197.11	0.000071	0.17	19.98	58.28
ParksTribA	Reach 2a	318	50y	1.67	196.14	197.1994		197.2	0.000052	0.16	25.69	63.32
ParksTribA	Reach 2a	318	100y	1.86	196.14	197.2915		197.29	0.000038	0.14	31.6	65.52
ParksTribA	Reach 2a	318	Timmins	11.34	196.14	197.9321		197.93	0.000124	0.36	81.72	92.73
ParksTribA	Reach 2a	318	2y Flow 100	0.6	196.14	197.0149		197.02	0.000021	0.08	15.01	50.41
ParksTribA	Reach 2a	277.9	2y	0.6	196.07	196.5971		196.6	0.000218	0.21	3.46	13.05
ParksTribA	Reach 2a	277.9	5y	0.94	196.07	196.8179		196.82	0.000144	0.2	7.35	25.4
ParksTribA	Reach 2a	277.9	10y	1.18	196.07	196.9528		196.95	0.000094	0.18	12.16	51.92
ParksTribA	Reach 2a	277.9	25y	1.49	196.07	197.1036		197.1	0.000057	0.16	22.33	82.04
ParksTribA	Reach 2a	277.9	50y	1.67	196.07	197.198		197.2	0.000039	0.14	30.79	98.68
ParksTribA	Reach 2a	277.9	100y	1.86	196.07	197.2905		197.29	0.000028	0.13	40.72	111.74
ParksTribA	Reach 2a	277.9	Timmins	11.34	196.07	197.9307		197.93	0.000058	0.26	138.67	179.51
ParksTribA	Reach 2a	277.9	2y Flow 100	0.6	196.07	197.0142		197.01	0.000017	0.08	15.82	64.56
ParksTribA	Reach 2a	272	2y	0.6	195.84	196.5969	196.08	196.6	0.000099	0.15	3.99	11.3
ParksTribA	Reach 2a	272	5y	0.94	195.84	196.8174	196.12	196.82	0.000072	0.16	5.77	14.54
ParksTribA	Reach 2a	272	10y	1.18	195.84	196.952	196.16	196.95	0.000064	0.17	6.86	18.22
ParksTribA	Reach 2a	272	25y	1.49	195.84	197.1022	196.19	197.1	0.000059	0.18	8.08	22.49
ParksTribA	Reach 2a	272	50y	1.67	195.84	197.1962	196.21	197.2	0.000055	0.19	8.84	23.01
ParksTribA	Reach 2a	272	100y	1.86	195.84	197.2885	196.23	197.29	0.000052	0.19	9.59	23.49
ParksTribA	Reach 2a	272	Timmins	11.34	195.84	197.8963	196.69	197.93	0.000487	0.78	14.51	27.24
ParksTribA	Reach 2a	272	2y Flow 100	0.6	195.84	197.014	196.08	197.01	0.000013	0.08	7.37	21.93
ParksTribA	Reach 2a	256.1		Culvert								

ParksTribA	Reach 2a	233.4	2y	0.6	196.01	196.5957	196.15	196.6	0.000115	0.16	3.85	9.55
ParksTribA	Reach 2a	233.4	5y	0.94	196.01	196.8158	196.19	196.82	0.000083	0.17	5.63	11.31
ParksTribA	Reach 2a	233.4	10y	1.18	196.01	196.9501	196.21	196.95	0.000073	0.18	6.72	12.16
ParksTribA	Reach 2a	233.4	25y	1.49	196.01	197.1	196.24	197.1	0.000067	0.19	7.93	15.27
ParksTribA	Reach 2a	233.4	50y	1.67	196.01	197.1938	196.26	197.2	0.000062	0.2	8.69	16.21
ParksTribA	Reach 2a	233.4	100y	1.86	196.01	197.2859	196.27	197.29	0.000059	0.2	9.44	19.74
ParksTribA	Reach 2a	233.4	Timmins	11.34	196.01	197.8482	196.71	197.88	0.000589	0.84	14	40.77
ParksTribA	Reach 2a	233.4	2y Flow 100	0.6	196.01	197.0136	196.15	197.01	0.000014	0.09	7.23	12.58
ParksTribA	Reach 2a	219.2	2y	0.6	195.89	196.5938		196.6	0.000121	0.17	3.88	8.27
ParksTribA	Reach 2a	219.2	5y	0.94	195.89	196.8142		196.82	0.0001	0.18	5.85	9.69
ParksTribA	Reach 2a	219.2	10y	1.18	195.89	196.9488		196.95	0.000095	0.19	7.23	11.03
ParksTribA	Reach 2a	219.2	25y	1.49	195.89	197.0989		197.1	0.000091	0.19	9.03	12.79
ParksTribA	Reach 2a	219.2	50y	1.67	195.89	197.193		197.19	0.000081	0.19	10.77	21.48
ParksTribA	Reach 2a	219.2	100y	1.86	195.89	197.2852		197.29	0.000073	0.19	13.04	27.87
ParksTribA	Reach 2a	219.2	Timmins	11.34	195.89	197.8578		197.87	0.000332	0.55	39.89	63.96
ParksTribA	Reach 2a	219.2	2y Flow 100	0.6	195.89	197.0133		197.01	0.00002	0.09	7.97	11.91
ParksTribA	Reach 2a	163.7	2y	0.6	195.69	196.5907		196.59	0.000041	0.12	5.65	9.95
ParksTribA	Reach 2a	163.7	5y	0.94	195.69	196.8112		196.81	0.000044	0.14	8.01	11.73
ParksTribA	Reach 2a	163.7	10y	1.18	195.69	196.9459		196.95	0.000044	0.14	9.71	13.34
ParksTribA	Reach 2a	163.7	25y	1.49	195.69	197.0961		197.1	0.000042	0.15	11.87	15.5
ParksTribA	Reach 2a	163.7	50y	1.67	195.69	197.1904		197.19	0.000038	0.16	13.46	18.33
ParksTribA	Reach 2a	163.7	100y	1.86	195.69	197.2827		197.28	0.000037	0.16	15.37	23.59
ParksTribA	Reach 2a	163.7	Timmins	11.34	195.69	197.8398		197.85	0.000268	0.56	38.19	53.85
ParksTribA	Reach 2a	163.7	2y Flow 100	0.6	195.69	197.0127		197.01	0.000009	0.07	10.63	14.29
ParksTribA	Reach 2a	142.2	2y	0.6	195.67	196.5905		196.59	0.000017	0.07	21.86	83.44
ParksTribA	Reach 2a	142.2	5y	0.94	195.67	196.8115		196.81	0.000008	0.06	40.44	85.67

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksTribA	Reach 2a	142.2	10y	1.18	195.67	196.9463		196.95	0.000006	0.06	52.06	86.7
ParksTribA	Reach 2a	142.2	25y	1.49	195.67	197.0966		197.1	0.000005	0.06	65.28	89.83
ParksTribA	Reach 2a	142.2	50y	1.67	195.67	197.1909		197.19	0.000004	0.05	73.85	91.72
ParksTribA	Reach 2a	142.2	100y	1.86	195.67	197.2834		197.28	0.000004	0.05	82.46	94.56
ParksTribA	Reach 2a	142.2	Timmins	11.34	195.67	197.8468		197.85	0.000029	0.19	139.65	107.48
ParksTribA	Reach 2a	142.2	2y Flow 100	0.6	195.67	197.0128		197.01	0.000001	0.02	57.86	87.7
ParksTribA	Reach 2a	138.3	2y	0.6	195.66	196.5885	195.85	196.59	0.000074	0.19	3.15	12.94
ParksTribA	Reach 2a	138.3	5y	0.94	195.66	196.8083	195.9	196.81	0.000088	0.24	3.94	17.07
ParksTribA	Reach 2a	138.3	10y	1.18	195.66	196.9422	195.94	196.95	0.000094	0.27	4.42	18.4
ParksTribA	Reach 2a	138.3	25y	1.49	195.66	197.0915	195.97	197.1	0.000102	0.3	4.96	20.35
ParksTribA	Reach 2a	138.3	50y	1.67	195.66	197.1854	196	197.19	0.000103	0.32	5.29	21.6
ParksTribA	Reach 2a	138.3	100y	1.86	195.66	197.2773	196.02	197.28	0.000105	0.33	5.63	22.85
ParksTribA	Reach 2a	138.3	Timmins	11.34	195.66	197.8354	196.72	197.85	0.000229	0.55	57.56	119.73
ParksTribA	Reach 2a	138.3	2y Flow 100	0.6	195.66	197.0119	195.85	197.01	0.00002	0.13	4.67	19.12
ParksTribA	Reach 2a	127.1		Culvert								
ParksTribA	Reach 2a	115.3	2y	0.6	195.55	196.555	195.77	196.56	0.000061	0.18	3.34	8.29
ParksTribA	Reach 2a	115.3	5y	0.94	195.55	196.7591	195.82	196.76	0.000079	0.23	4.07	13.43
ParksTribA	Reach 2a	115.3	10y	1.18	195.55	196.881	195.85	196.88	0.000089	0.26	4.51	14.59
ParksTribA	Reach 2a	115.3	25y	1.49	195.55	197.0114	195.89	197.02	0.000101	0.3	4.98	15.73
ParksTribA	Reach 2a	115.3	50y	1.67	195.55	197.0937	195.91	197.1	0.000105	0.32	5.28	16.65
ParksTribA	Reach 2a	115.3	100y	1.86	195.55	197.1696	195.93	197.18	0.00011	0.34	5.55	17.93
ParksTribA	Reach 2a	115.3	Timmins	11.34	195.55	197.8291	196.63	197.84	0.000239	0.58	52.18	121.88
ParksTribA	Reach 2a	115.3	2y Flow 100	0.6	195.55	196.9988	195.77	197	0.000017	0.12	4.94	15.63
ParksTribA	Reach 2a	110.2	2y	0.6	195.61	196.5558		196.56	0.000018	0.07	18.24	48.57
ParksTribA	Reach 2a	110.2	5y	0.94	195.61	196.7607		196.76	0.000012	0.07	28.65	52.01
ParksTribA	Reach 2a	110.2	10y	1.18	195.61	196.8832		196.88	0.000011	0.07	35.06	52.78

ParksTribA	Reach 2a	110.2	25y	1.49	195.61	197.0143		197.01	0.00001	0.08	42.04	53.62
ParksTribA	Reach 2a	110.2	50y	1.67	195.61	197.097		197.1	0.000009	0.08	46.57	55.71
ParksTribA	Reach 2a	110.2	100y	1.86	195.61	197.1733		197.17	0.000009	0.08	50.9	57.85
ParksTribA	Reach 2a	110.2	Timmins	11.34	195.61	197.8359		197.84	0.000053	0.26	105.15	102.11
ParksTribA	Reach 2a	110.2	2y Flow 100	0.6	195.61	196.9993		197	0.000002	0.03	41.24	53.52
ParksTribA	Reach 2a	71.7	2y	0.6	195.57	196.5555		196.56	0.000007	0.05	25.79	61.95
ParksTribA	Reach 2a	71.7	5y	0.94	195.57	196.7604		196.76	0.000006	0.06	38.88	65.61
ParksTribA	Reach 2a	71.7	10y	1.18	195.57	196.883		196.88	0.000005	0.06	47.01	66.98
ParksTribA	Reach 2a	71.7	25y	1.49	195.57	197.0141		197.01	0.000005	0.06	55.9	68.47
ParksTribA	Reach 2a	71.7	50y	1.67	195.57	197.0967		197.1	0.000005	0.06	61.59	69.18
ParksTribA	Reach 2a	71.7	100y	1.86	195.57	197.1732		197.17	0.000005	0.06	66.98	74.23
ParksTribA	Reach 2a	71.7	Timmins	11.34	195.57	197.8348		197.84	0.000031	0.21	135.38	116.73
ParksTribA	Reach 2a	71.7	2y Flow 100	0.6	195.57	196.9993		197	0.000001	0.03	54.89	68.34
ParksCreek	Reach 4	8355	2y	0.75	202.92	203.1584		203.16	0.000005	0.02	39.59	197.49
ParksCreek	Reach 4	8355	5y	1.12	202.92	203.1997		203.2	0.000006	0.02	47.76	198.52
ParksCreek	Reach 4	8355	10y	1.39	202.92	203.3633		203.36	0.000002	0.02	80.35	199.64
ParksCreek	Reach 4	8355	25y	1.73	202.92	203.6325		203.63	0	0.01	134.9	205.66
ParksCreek	Reach 4	8355	50y	1.99	202.92	203.8804		203.88	0	0.01	186.62	211
ParksCreek	Reach 4	8355	100y	2.25	202.92	204.2293		204.23	0	0.01	267.3	242.07
ParksCreek	Reach 4	8355	Timmins	4.9	202.92	205.8189		205.82	0	0.01	657.14	251.36
ParksCreek	Reach 4	8355	2y Flow 100	0.75	202.92	203.1584		203.16	0.000005	0.02	39.59	197.49
ParksCreek	Reach 4	8154.8	2y	0.75	202.9	203.1579		203.16	0.000002	0.01	67.85	337.64
ParksCreek	Reach 4	8154.8	5y	1.12	202.9	203.199		203.2	0.000002	0.01	81.76	339.16
ParksCreek	Reach 4	8154.8	10y	1.39	202.9	203.3632		203.36	0.000001	0.01	137.77	344.6
ParksCreek	Reach 4	8154.8	25y	1.73	202.9	203.6324		203.63	0	0.01	232.55	359.38
ParksCreek	Reach 4	8154.8	50y	1.99	202.9	203.8804		203.88	0	0.01	322.52	366.92

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 4	8154.8	100y	2.25	202.9	204.2293		204.23	0	0.01	454.11	395.83
ParksCreek	Reach 4	8154.8	Timmins	4.9	202.9	205.8189		205.82	0	0	1117.98	420.7
ParksCreek	Reach 4	8154.8	2y Flow 100	0.75	202.9	203.1579		203.16	0.000002	0.01	67.85	337.64
ParksCreek	Reach 4	7989.6	2y	0.75	202.9	203.1577		203.16	0.000001	0.01	82.43	396.16
ParksCreek	Reach 4	7989.6	5y	1.12	202.9	203.1987		203.2	0.000001	0.01	98.71	397.3
ParksCreek	Reach 4	7989.6	10y	1.39	202.9	203.3631		203.36	0	0.01	164.21	399.5
ParksCreek	Reach 4	7989.6	25y	1.73	202.9	203.6324		203.63	0	0.01	272.63	405.48
ParksCreek	Reach 4	7989.6	50y	1.99	202.9	203.8803		203.88	0	0.01	373.92	411.58
ParksCreek	Reach 4	7989.6	100y	2.25	202.9	204.2293		204.23	0	0	519.16	424.72
ParksCreek	Reach 4	7989.6	Timmins	4.9	202.9	205.8189		205.82	0	0	1211.23	437
ParksCreek	Reach 4	7989.6	2y Flow 100	0.75	202.9	203.1577		203.16	0.000001	0.01	82.43	396.16
ParksCreek	Reach 4	7840.7	2y	0.75	202.91	203.1574		203.16	0.000003	0.02	49.3	242.35
ParksCreek	Reach 4	7840.7	5y	1.12	202.91	203.1984		203.2	0.000004	0.02	59.29	245.45
ParksCreek	Reach 4	7840.7	10y	1.39	202.91	203.363		203.36	0.000001	0.01	100.17	252.08
ParksCreek	Reach 4	7840.7	25y	1.73	202.91	203.6324		203.63	0	0.01	169.93	268.68
ParksCreek	Reach 4	7840.7	50y	1.99	202.91	203.8803		203.88	0	0.01	242.31	312.5
ParksCreek	Reach 4	7840.7	100y	2.25	202.91	204.2293		204.23	0	0.01	352.87	320.46
ParksCreek	Reach 4	7840.7	Timmins	4.9	202.91	205.8189		205.82	0	0.01	893.79	354.51
ParksCreek	Reach 4	7840.7	2y Flow 100	0.75	202.91	203.1574		203.16	0.000003	0.02	49.3	242.35
ParksCreek	Reach 4	7707.1	2y	0.75	202.97	203.1316	203.13	203.15	0.038654	0.66	1.14	22.12
ParksCreek	Reach 4	7707.1	5y	1.12	202.97	203.1872		203.2	0.008688	0.4	2.78	36.57
ParksCreek	Reach 4	7707.1	10y	1.39	202.97	203.3618		203.36	0.000206	0.11	13.1	79.46
ParksCreek	Reach 4	7707.1	25y	1.73	202.97	203.6321		203.63	0.000012	0.05	43.52	156.4

ParksCreek	Reach 4	7707.1	50y	1.99	202.97	203.8802		203.88	0.000003	0.03	90.3	219.63
ParksCreek	Reach 4	7707.1	100y	2.25	202.97	204.2292		204.23	0.000001	0.02	172.39	243.64
ParksCreek	Reach 4	7707.1	Timmins	4.9	202.97	205.8189		205.82	0	0.01	602.97	302
ParksCreek	Reach 4	7707.1	2y Flow 100	0.75	202.97	203.1316	203.13	203.15	0.038654	0.66	1.14	22.12
ParksCreek	Reach 4	7651.9	2y	0.75	202.76	202.9956		203	0.000912	0.15	4.86	50.42
ParksCreek	Reach 4	7651.9	5y	1.12	202.76	203.183		203.18	0.000052	0.07	17.3	79.65
ParksCreek	Reach 4	7651.9	10y	1.39	202.76	203.3605		203.36	0.000012	0.04	32.94	99.8
ParksCreek	Reach 4	7651.9	25y	1.73	202.76	203.6319		203.63	0.000003	0.03	74.03	193.52
ParksCreek	Reach 4	7651.9	50y	1.99	202.76	203.8802		203.88	0.000001	0.02	126.37	216.75
ParksCreek	Reach 4	7651.9	100y	2.25	202.76	204.2292		204.23	0	0.02	202.33	218.5
ParksCreek	Reach 4	7651.9	Timmins	4.9	202.76	205.8189		205.82	0	0.01	553.84	223.56
ParksCreek	Reach 4	7651.9	2y Flow 100	0.75	202.76	202.9956		203	0.000912	0.15	4.86	50.42
ParksCreek	Reach 4	7525.3	2y	0.75	202.55	202.9865		202.99	0.000026	0.04	16.57	75.73
ParksCreek	Reach 4	7525.3	5y	1.12	202.55	203.1811		203.18	0.000007	0.03	32.76	92.03
ParksCreek	Reach 4	7525.3	10y	1.39	202.55	203.3598		203.36	0.000003	0.03	54.25	137.91
ParksCreek	Reach 4	7525.3	25y	1.73	202.55	203.6317		203.63	0.000001	0.02	93.2	147.03
ParksCreek	Reach 4	7525.3	50y	1.99	202.55	203.8801		203.88	0.000001	0.02	129.91	148.5
ParksCreek	Reach 4	7525.3	100y	2.25	202.55	204.2292		204.23	0	0.02	182.51	155.93
ParksCreek	Reach 4	7525.3	Timmins	4.9	202.55	205.8189		205.82	0	0.01	505.76	220.3
ParksCreek	Reach 4	7525.3	2y Flow 100	0.75	202.55	202.9865		202.99	0.000026	0.04	16.57	75.73
ParksCreek	Reach 4	7410.6	2y	0.75	202.39	202.9858		202.99	0.000003	0.02	38.9	124.56
ParksCreek	Reach 4	7410.6	5y	1.12	202.39	203.1808		203.18	0.000001	0.02	63.94	133.36
ParksCreek	Reach 4	7410.6	10y	1.39	202.39	203.3597		203.36	0.000001	0.02	89.52	151.25
ParksCreek	Reach 4	7410.6	25y	1.73	202.39	203.6316		203.63	0	0.01	133.78	178.18
ParksCreek	Reach 4	7410.6	50y	1.99	202.39	203.88		203.88	0	0.01	179.96	196.69
ParksCreek	Reach 4	7410.6	100y	2.25	202.39	204.2292		204.23	0	0.01	250.48	205.64

ParksCreek	Reach 4	7410.6	Timmins	4.9	202.39	205.8189		205.82	0	0.01	587.13	212.2
ParksCreek	Reach 4	7410.6	2y Flow 100	0.75	202.39	202.9858		202.99	0.000003	0.02	38.9	124.56
ParksCreek	Reach 4	7308.1	2y	0.75	202.36	202.9857		202.99	0	0.01	76.68	172.83

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 4	7308.1	5y	1.12	202.36	203.1808		203.18	0	0.01	110.81	178.65
ParksCreek	Reach 4	7308.1	10y	1.39	202.36	203.3597		203.36	0	0.01	143.3	183.72
ParksCreek	Reach 4	7308.1	25y	1.73	202.36	203.6316		203.63	0	0.01	194.07	190.6
ParksCreek	Reach 4	7308.1	50y	1.99	202.36	203.88		203.88	0	0.01	242.26	198.22
ParksCreek	Reach 4	7308.1	100y	2.25	202.36	204.2292		204.23	0	0.01	314.34	211.18
ParksCreek	Reach 4	7308.1	Timmins	4.9	202.36	205.8189		205.82	0	0.01	674.07	232.7
ParksCreek	Reach 4	7308.1	2y Flow 100	0.75	202.36	202.9857		202.99	0	0.01	76.68	172.83
ParksCreek	Reach 4	7234.5	2y	0.75	202.35	202.9857		202.99	0.000001	0.01	74.07	171.02
ParksCreek	Reach 4	7234.5	5y	1.12	202.35	203.1808		203.18	0	0.01	107.73	173.77
ParksCreek	Reach 4	7234.5	10y	1.39	202.35	203.3596		203.36	0	0.01	138.95	175.51
ParksCreek	Reach 4	7234.5	25y	1.73	202.35	203.6316		203.63	0	0.01	187.3	181.68
ParksCreek	Reach 4	7234.5	50y	1.99	202.35	203.88		203.88	0	0.01	233.07	186.86
ParksCreek	Reach 4	7234.5	100y	2.25	202.35	204.2292		204.23	0	0.01	300.19	197.75
ParksCreek	Reach 4	7234.5	Timmins	4.9	202.35	205.8189		205.82	0	0.01	616.94	200.13
ParksCreek	Reach 4	7234.5	2y Flow 100	0.75	202.35	202.9857		202.99	0.000001	0.01	74.07	171.02
ParksCreek	Reach 4	7152.7	2y	0.75	202.35	202.9857		202.99	0.000001	0.01	77.68	199.48
ParksCreek	Reach 4	7152.7	5y	1.12	202.35	203.1808		203.18	0	0.01	121.14	233.07
ParksCreek	Reach 4	7152.7	10y	1.39	202.35	203.3596		203.36	0	0.01	163.21	236.6
ParksCreek	Reach 4	7152.7	25y	1.73	202.35	203.6316		203.63	0	0.01	228.21	240.75
ParksCreek	Reach 4	7152.7	50y	1.99	202.35	203.88		203.88	0	0.01	288.57	247.19

ParksCreek	Reach 4	7152.7	100y	2.25	202.35	204.2292		204.23	0	0.01	376.69	257.65
ParksCreek	Reach 4	7152.7	Timmins	4.9	202.35	205.8189		205.82	0	0.01	788.15	260.26
ParksCreek	Reach 4	7152.7	2y Flow 100	0.75	202.35	202.9857		202.99	0.000001	0.01	77.68	199.48
ParksCreek	Reach 4	7032.3	2y	0.75	202.35	202.9856		202.99	0.000001	0.01	80.02	273.14
ParksCreek	Reach 4	7032.3	5y	1.12	202.35	203.1807		203.18	0	0.01	137.46	303.5
ParksCreek	Reach 4	7032.3	10y	1.39	202.35	203.3596		203.36	0	0.01	192.14	308.64
ParksCreek	Reach 4	7032.3	25y	1.73	202.35	203.6316		203.63	0	0.01	277.86	319.11
ParksCreek	Reach 4	7032.3	50y	1.99	202.35	203.88		203.88	0	0.01	358.59	328.88
ParksCreek	Reach 4	7032.3	100y	2.25	202.35	204.2292		204.23	0	0	475.73	338.37
ParksCreek	Reach 4	7032.3	Timmins	4.9	202.35	205.8189		205.82	0	0.01	1022.56	351.38
ParksCreek	Reach 4	7032.3	2y Flow 100	0.75	202.35	202.9856		202.99	0.000001	0.01	80.02	273.14
ParksCreek	Reach 4	6892	2y	0.75	202.48	202.9855		202.99	0	0.01	114.99	329.42
ParksCreek	Reach 4	6892	5y	1.12	202.48	203.1807		203.18	0	0.01	180.76	341.2
ParksCreek	Reach 4	6892	10y	1.39	202.48	203.3596		203.36	0	0.01	242.18	345.48
ParksCreek	Reach 4	6892	25y	1.73	202.48	203.6316		203.63	0	0.01	337.25	357.82
ParksCreek	Reach 4	6892	50y	1.99	202.48	203.88		203.88	0	0	427.73	366.2
ParksCreek	Reach 4	6892	100y	2.25	202.48	204.2292		204.23	0	0	557.38	376.32
ParksCreek	Reach 4	6892	Timmins	4.9	202.48	205.8189		205.82	0	0	1184.75	400.7
ParksCreek	Reach 4	6892	2y Flow 100	0.75	202.48	202.9855		202.99	0	0.01	114.99	329.42
ParksCreek	Reach 4	6803	2y	0.75	202.48	202.9855		202.99	0.000001	0.01	79.05	208.83
ParksCreek	Reach 4	6803	5y	1.12	202.48	203.1807		203.18	0	0.01	120.39	214.39
ParksCreek	Reach 4	6803	10y	1.39	202.48	203.3596		203.36	0	0.01	159.21	218.96
ParksCreek	Reach 4	6803	25y	1.73	202.48	203.6316		203.63	0	0.01	219.25	222.83
ParksCreek	Reach 4	6803	50y	1.99	202.48	203.88		203.88	0	0.01	275.41	228.66
ParksCreek	Reach 4	6803	100y	2.25	202.48	204.2292		204.23	0	0.01	356.55	236.31
ParksCreek	Reach 4	6803	Timmins	4.9	202.48	205.8189		205.82	0	0.01	782.46	315.75

ParksCreek	Reach 4	6803	2y Flow 100	0.75	202.48	202.9855		202.99	0.000001	0.01	79.05	208.83
ParksCreek	Reach 4	6720.7	2y	0.75	202.51	202.9853		202.99	0.000007	0.03	24.53	70.99
ParksCreek	Reach 4	6720.7	5y	1.12	202.51	203.1805		203.18	0.000003	0.03	38.46	72.08
ParksCreek	Reach 4	6720.7	10y	1.39	202.51	203.3595		203.36	0.000002	0.03	51.55	74.12
ParksCreek	Reach 4	6720.7	25y	1.73	202.51	203.6315		203.63	0.000001	0.02	72.28	78.19
ParksCreek	Reach 4	6720.7	50y	1.99	202.51	203.88		203.88	0.000001	0.02	92.37	82.19
ParksCreek	Reach 4	6720.7	100y	2.25	202.51	204.2292		204.23	0	0.02	122.13	87.78

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 4	6720.7	Timmins	4.9	202.51	205.8189		205.82	0	0.02	277.44	110.74
ParksCreek	Reach 4	6720.7	2y Flow 100	0.75	202.51	202.9853		202.99	0.000007	0.03	24.53	70.99
ParksCreek	Reach 4	6671.5	2y	0.75	202.52	202.9849		202.99	0.00001	0.04	20.79	63.93
ParksCreek	Reach 4	6671.5	5y	1.12	202.52	203.1803		203.18	0.000005	0.03	33.65	68.35
ParksCreek	Reach 4	6671.5	10y	1.39	202.52	203.3594		203.36	0.000003	0.03	46.23	71.82
ParksCreek	Reach 4	6671.5	25y	1.73	202.52	203.6314		203.63	0.000001	0.03	66.2	76.57
ParksCreek	Reach 4	6671.5	50y	1.99	202.52	203.8799		203.88	0.000001	0.02	85.46	78.36
ParksCreek	Reach 4	6671.5	100y	2.25	202.52	204.2291		204.23	0	0.02	113.21	80.68
ParksCreek	Reach 4	6671.5	Timmins	4.9	202.52	205.8189		205.82	0	0.02	261.73	106.46
ParksCreek	Reach 4	6671.5	2y Flow 100	0.75	202.52	202.9849		202.99	0.00001	0.04	20.79	63.93
ParksCreek	Reach 4	6613.1	2y	0.75	202.5	202.9844		202.98	0.000009	0.03	23.64	80.28
ParksCreek	Reach 4	6613.1	5y	1.12	202.5	203.1801		203.18	0.000004	0.03	39.51	82
ParksCreek	Reach 4	6613.1	10y	1.39	202.5	203.3592		203.36	0.000002	0.03	54.35	83.42
ParksCreek	Reach 4	6613.1	25y	1.73	202.5	203.6314		203.63	0.000001	0.02	77.3	85.4
ParksCreek	Reach 4	6613.1	50y	1.99	202.5	203.8799		203.88	0.000001	0.02	98.77	87.38
ParksCreek	Reach 4	6613.1	100y	2.25	202.5	204.2291		204.23	0	0.02	129.85	90.73

ParksCreek	Reach 4	6613.1	Timmins	4.9	202.5	205.8189		205.82	0	0.02	283.76	102.24
ParksCreek	Reach 4	6613.1	2y Flow 100	0.75	202.5	202.9844		202.98	0.000009	0.03	23.64	80.28
ParksCreek	Reach 4	6533.3	2y	0.75	202.52	202.9834		202.98	0.000015	0.05	16.42	47.46
ParksCreek	Reach 4	6533.3	5y	1.12	202.52	203.1796		203.18	0.000008	0.04	26.18	52.49
ParksCreek	Reach 4	6533.3	10y	1.39	202.52	203.359		203.36	0.000004	0.04	35.76	54.01
ParksCreek	Reach 4	6533.3	25y	1.73	202.52	203.6312		203.63	0.000002	0.03	50.68	55.5
ParksCreek	Reach 4	6533.3	50y	1.99	202.52	203.8798		203.88	0.000001	0.03	64.65	57.03
ParksCreek	Reach 4	6533.3	100y	2.25	202.52	204.2291		204.23	0.000001	0.03	85.01	62.89
ParksCreek	Reach 4	6533.3	Timmins	4.9	202.52	205.8188		205.82	0	0.02	207.35	107.96
ParksCreek	Reach 4	6533.3	2y Flow 100	0.75	202.52	202.9834		202.98	0.000015	0.05	16.42	47.46
ParksCreek	Reach 4	6484.1	2y	0.75	202.47	202.983		202.98	0.000007	0.03	24.29	73.69
ParksCreek	Reach 4	6484.1	5y	1.12	202.47	203.1794		203.18	0.000003	0.03	39.01	76.08
ParksCreek	Reach 4	6484.1	10y	1.39	202.47	203.3588		203.36	0.000002	0.03	52.77	77.3
ParksCreek	Reach 4	6484.1	25y	1.73	202.47	203.6312		203.63	0.000001	0.02	74.24	80.68
ParksCreek	Reach 4	6484.1	50y	1.99	202.47	203.8798		203.88	0.000001	0.02	94.53	82.57
ParksCreek	Reach 4	6484.1	100y	2.25	202.47	204.229		204.23	0	0.02	123.86	85.38
ParksCreek	Reach 4	6484.1	Timmins	4.9	202.47	205.8188		205.82	0	0.02	306.48	154.47
ParksCreek	Reach 4	6484.1	2y Flow 100	0.75	202.47	202.983		202.98	0.000007	0.03	24.29	73.69
ParksCreek	Reach 4	6409.6	2y	0.75	202.51	202.9827		202.98	0.000003	0.02	36.11	104.13
ParksCreek	Reach 4	6409.6	5y	1.12	202.51	203.1792		203.18	0.000002	0.02	57.06	108.25
ParksCreek	Reach 4	6409.6	10y	1.39	202.51	203.3588		203.36	0.000001	0.02	76.98	111.94
ParksCreek	Reach 4	6409.6	25y	1.73	202.51	203.6311		203.63	0.000001	0.02	108.5	122.64
ParksCreek	Reach 4	6409.6	50y	1.99	202.51	203.8797		203.88	0	0.01	139.44	126.96
ParksCreek	Reach 4	6409.6	100y	2.25	202.51	204.229		204.23	0	0.01	184.54	130.26
ParksCreek	Reach 4	6409.6	Timmins	4.9	202.51	205.8188		205.82	0	0.01	416.66	155.46
ParksCreek	Reach 4	6409.6	2y Flow 100	0.75	202.51	202.9827		202.98	0.000003	0.02	36.11	104.13

ParksCreek	Reach 3	6309.5	2y	1.78	202.5	202.9818		202.98	0.000014	0.05	34.68	80.64
ParksCreek	Reach 3	6309.5	5y	3.05	202.5	203.1786		203.18	0.000012	0.06	50.74	82.08
ParksCreek	Reach 3	6309.5	10y	4.04	202.5	203.3582		203.36	0.000009	0.06	65.56	82.96
ParksCreek	Reach 3	6309.5	25y	5.4	202.5	203.6307		203.63	0.000006	0.06	88.47	85.14
ParksCreek	Reach 3	6309.5	50y	6.47	202.5	203.8794		203.88	0.000004	0.06	109.86	86.89
ParksCreek	Reach 3	6309.5	100y	7.59	202.5	204.2288		204.23	0.000003	0.05	140.78	90.19
ParksCreek	Reach 3	6309.5	Timmins	20.56	202.5	205.8185		205.82	0.000002	0.07	298	119.81
ParksCreek	Reach 3	6309.5	2y Flow 100	1.78	202.5	202.9818		202.98	0.000014	0.05	34.68	80.64
ParksCreek	Reach 3	6168.2	2y	1.78	202.49	202.9603		202.96	0.000006	0.03	58.07	149.79
ParksCreek	Reach 3	6168.2	5y	3.05	202.49	203.1619		203.16	0.000004	0.03	88.75	154.77

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	6168.2	10y	4.04	202.49	203.3461		203.35	0.000003	0.03	117.55	158.27
ParksCreek	Reach 3	6168.2	25y	5.4	202.49	203.6228		203.62	0.000002	0.03	162.04	164.84
ParksCreek	Reach 3	6168.2	50y	6.47	202.49	203.8738		203.87	0.000001	0.03	203.91	168.7
ParksCreek	Reach 3	6168.2	100y	7.59	202.49	204.2254		204.23	0.000001	0.03	264.41	175.58
ParksCreek	Reach 3	6168.2	Timmins	20.56	202.49	205.8162		205.82	0.000001	0.04	569.68	201.67
ParksCreek	Reach 3	6168.2	2y Flow 100	1.78	202.49	202.9603		202.96	0.000006	0.03	58.07	149.79
ParksCreek	Reach 3	6064.1	2y	1.78	202.47	202.9475		202.95	0.000005	0.03	63.14	155.9
ParksCreek	Reach 3	6064.1	5y	3.05	202.47	203.1523		203.15	0.000003	0.03	95.24	157.57
ParksCreek	Reach 3	6064.1	10y	4.04	202.47	203.3391		203.34	0.000003	0.03	124.92	160.84
ParksCreek	Reach 3	6064.1	25y	5.4	202.47	203.6182		203.62	0.000002	0.03	170.04	162.43
ParksCreek	Reach 3	6064.1	50y	6.47	202.47	203.8707		203.87	0.000001	0.03	211.26	164.13
ParksCreek	Reach 3	6064.1	100y	7.59	202.47	204.2234		204.22	0.000001	0.03	269.54	166.96
ParksCreek	Reach 3	6064.1	Timmins	20.56	202.47	205.8148		205.81	0.000001	0.04	557.15	188.78

ParksCreek	Reach 3	6064.1	2y Flow 100	1.78	202.47	202.9475		202.95	0.000005	0.03	63.14	155.9
ParksCreek	Reach 3	5977.7	2y	1.78	202.48	202.9396		202.94	0.000002	0.02	88.02	208.93
ParksCreek	Reach 3	5977.7	5y	3.05	202.48	203.1463		203.15	0.000002	0.02	131.34	210.32
ParksCreek	Reach 3	5977.7	10y	4.04	202.48	203.3347		203.33	0.000001	0.02	171.34	215.42
ParksCreek	Reach 3	5977.7	25y	5.4	202.48	203.6154		203.62	0.000001	0.02	232.44	219.81
ParksCreek	Reach 3	5977.7	50y	6.47	202.48	203.8686		203.87	0.000001	0.02	288.43	222.61
ParksCreek	Reach 3	5977.7	100y	7.59	202.48	204.2221		204.22	0	0.02	368.08	228.48
ParksCreek	Reach 3	5977.7	Timmins	20.56	202.48	205.8139		205.81	0	0.03	750.32	249.99
ParksCreek	Reach 3	5977.7	2y Flow 100	1.78	202.48	202.9396		202.94	0.000002	0.02	88.02	208.93
ParksCreek	Reach 3	5873.6	2y	1.78	202.29	202.7707	202.77	202.9	0.028071	1.62	1.1	4.2
ParksCreek	Reach 3	5873.6	5y	3.05	202.29	203.0377		203.12	0.01174	1.28	2.39	6.69
ParksCreek	Reach 3	5873.6	10y	4.04	202.29	203.2772		203.32	0.005944	0.89	4.52	13.05
ParksCreek	Reach 3	5873.6	25y	5.4	202.29	203.5876		203.61	0.001527	0.59	9.15	17.9
ParksCreek	Reach 3	5873.6	50y	6.47	202.29	203.8527		203.86	0.000548	0.44	18.93	62.92
ParksCreek	Reach 3	5873.6	100y	7.59	202.29	204.2158		204.22	0.00013	0.26	57.72	155.85
ParksCreek	Reach 3	5873.6	Timmins	20.56	202.29	205.8117		205.81	0.000007	0.1	488.81	376.12
ParksCreek	Reach 3	5873.6	2y Flow 100	1.78	202.29	202.7707	202.77	202.9	0.028071	1.62	1.1	4.2
ParksCreek	Reach 3	5866.8	2y	1.78	202.21	202.7276	202.54	202.78	0.004935	1.04	1.72	5.74
ParksCreek	Reach 3	5866.8	5y	3.05	202.21	203.0159	202.67	203.08	0.003011	1.11	2.76	6.9
ParksCreek	Reach 3	5866.8	10y	4.04	202.21	203.223	202.75	203.29	0.002383	1.15	3.5	7.76
ParksCreek	Reach 3	5866.8	25y	5.4	202.21	203.5171	202.86	203.59	0.001767	1.19	4.56	8.85
ParksCreek	Reach 3	5866.8	50y	6.47	202.21	203.7797	202.94	203.85	0.001354	1.18	5.5	9.69
ParksCreek	Reach 3	5866.8	100y	7.59	202.21	204.1475	203.02	204.21	0.000908	1.11	6.82	11.41
ParksCreek	Reach 3	5866.8	Timmins	20.56	202.21	205.7776	203.75	205.81	0.000374	0.8	40.48	142.92
ParksCreek	Reach 3	5866.8	2y Flow 100	1.78	202.21	202.7276	202.54	202.78	0.004935	1.04	1.72	5.74

ParksCreek	Reach 3	5849.1 Hwy 17		Culvert								
ParksCreek	Reach 3	5830.1	2y	1.78	201.89	202.3246	202.32	202.48	0.026012	1.74	1.03	6.46
ParksCreek	Reach 3	5830.1	5y	3.05	201.89	202.4639	202.46	202.67	0.023602	2.03	1.51	8.72
ParksCreek	Reach 3	5830.1	10y	4.04	201.89	202.5506	202.55	202.8	0.022168	2.22	1.82	9.16
ParksCreek	Reach 3	5830.1	25y	5.4	201.89	202.6579	202.66	202.96	0.020886	2.45	2.2	9.74
ParksCreek	Reach 3	5830.1	50y	6.47	201.89	202.7371	202.74	203.08	0.019996	2.6	2.49	10.24
ParksCreek	Reach 3	5830.1	100y	7.59	201.89	202.8118	202.81	203.2	0.01956	2.76	2.75	10.76
ParksCreek	Reach 3	5830.1	Timmins	20.56	201.89	203.5446	203.54	204.29	0.015435	3.82	5.38	14.64
ParksCreek	Reach 3	5830.1	2y Flow 100	1.78	201.89	202.3246	202.32	202.48	0.026012	1.74	1.03	6.46
ParksCreek	Reach 3	5810.7	2y	1.78	201.43	202.1959		202.2	0.000016	0.04	40.5	128.65
ParksCreek	Reach 3	5810.7	5y	3.05	201.43	202.3547		202.35	0.000012	0.05	61.79	138.55
ParksCreek	Reach 3	5810.7	10y	4.04	201.43	202.2929		202.29	0.000035	0.08	53.32	135.43
ParksCreek	Reach 3	5810.7	25y	5.4	201.43	202.3359		202.34	0.000045	0.09	59.19	137.72
ParksCreek	Reach 3	5810.7	50y	6.47	201.43	202.368		202.37	0.000051	0.1	63.64	139.09

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	5810.7	100y	7.59	201.43	202.4		202.4	0.000056	0.11	68.11	140.06
ParksCreek	Reach 3	5810.7	Timmins	20.56	201.43	202.7503		202.75	0.000071	0.17	119.03	150.87
ParksCreek	Reach 3	5810.7	2y Flow 100	1.78	201.43	202.1959		202.2	0.000016	0.04	40.5	128.65
ParksCreek	Reach 3	5684.6	2y	1.78	201.12	202.1908		202.19	0.000001	0.02	97.85	120.63
ParksCreek	Reach 3	5684.6	5y	3.05	201.12	202.3473		202.35	0.000001	0.03	117.01	124.01
ParksCreek	Reach 3	5684.6	10y	4.04	201.12	202.2754		202.28	0.000003	0.04	108.15	122.54
ParksCreek	Reach 3	5684.6	25y	5.4	201.12	202.3094		202.31	0.000004	0.05	112.32	123.23
ParksCreek	Reach 3	5684.6	50y	6.47	201.12	202.3342		202.33	0.000006	0.06	115.39	123.74
ParksCreek	Reach 3	5684.6	100y	7.59	201.12	202.3586		202.36	0.000008	0.06	118.42	124.17
ParksCreek	Reach 3	5684.6	Timmins	20.56	201.12	202.6531		202.65	0.000023	0.13	155.54	128.6
ParksCreek	Reach 3	5684.6	2y Flow 100	1.78	201.12	202.1908		202.19	0.000001	0.02	97.85	120.63
ParksCreek	Reach 3	5589.3	2y	1.78	201.01	202.1897		202.19	0	0.01	136.69	129.98

ParksCreek	Reach 3	5589.3	5y	3.05	201.01	202.3454		202.35	0.000001	0.02	157.19	133.04
ParksCreek	Reach 3	5589.3	10y	4.04	201.01	202.2711		202.27	0.000001	0.03	147.35	131.87
ParksCreek	Reach 3	5589.3	25y	5.4	201.01	202.3025		202.3	0.000002	0.04	151.5	132.44
ParksCreek	Reach 3	5589.3	50y	6.47	201.01	202.325		202.33	0.000002	0.04	154.48	132.82
ParksCreek	Reach 3	5589.3	100y	7.59	201.01	202.3468		202.35	0.000003	0.05	157.39	133.06
ParksCreek	Reach 3	5589.3	Timmins	20.56	201.01	202.6114		202.61	0.000012	0.11	193.02	137.11
ParksCreek	Reach 3	5589.3	2y Flow 100	1.78	201.01	202.1897		202.19	0	0.01	136.69	129.98
ParksCreek	Reach 3	5480	2y	1.78	201.08	202.1868		202.19	0.000178	0.09	20.93	152.29
ParksCreek	Reach 3	5480	5y	3.05	201.08	202.3409		202.34	0.000043	0.07	44.55	154.15
ParksCreek	Reach 3	5480	10y	4.04	201.08	202.2606		202.26	0.00022	0.13	32.2	153.4
ParksCreek	Reach 3	5480	25y	5.4	201.08	202.2858		202.29	0.000269	0.15	36.06	153.64
ParksCreek	Reach 3	5480	50y	6.47	201.08	202.3029		202.3	0.000306	0.17	38.69	153.8
ParksCreek	Reach 3	5480	100y	7.59	201.08	202.3186		202.32	0.000344	0.18	41.12	153.94
ParksCreek	Reach 3	5480	Timmins	20.56	201.08	202.5187		202.52	0.000395	0.29	72.1	155.99
ParksCreek	Reach 3	5480	2y Flow 100	1.78	201.08	202.1868		202.19	0.000178	0.09	20.93	152.29
ParksCreek	Reach 3	5394.4	2y	1.78	201.03	202.1795		202.18	0.000051	0.05	33.44	188.14
ParksCreek	Reach 3	5394.4	5y	3.05	201.03	202.3387		202.34	0.000018	0.05	63.53	189.77
ParksCreek	Reach 3	5394.4	10y	4.04	201.03	202.2497		202.25	0.000087	0.09	46.67	188.81
ParksCreek	Reach 3	5394.4	25y	5.4	201.03	202.2716		202.27	0.000117	0.11	50.82	189.02
ParksCreek	Reach 3	5394.4	50y	6.47	201.03	202.2862		202.29	0.000141	0.12	53.58	189.16
ParksCreek	Reach 3	5394.4	100y	7.59	201.03	202.2994		202.3	0.000166	0.14	56.07	189.27
ParksCreek	Reach 3	5394.4	Timmins	20.56	201.03	202.4946		202.5	0.000228	0.22	93.24	191.41
ParksCreek	Reach 3	5394.4	2y Flow 100	1.78	201.03	202.1795		202.18	0.000051	0.05	33.44	188.14
ParksCreek	Reach 3	5329.7	2y	1.78	201.04	202.1702		202.17	0.000789	0.11	16.04	242.05
ParksCreek	Reach 3	5329.7	5y	3.05	201.04	202.3371		202.34	0.000035	0.05	57.12	247.43
ParksCreek	Reach 3	5329.7	10y	4.04	201.04	202.2389		202.24	0.000381	0.12	32.85	246.58

ParksCreek	Reach 3	5329.7	25y	5.4	201.04	202.2579		202.26	0.000437	0.14	37.54	246.75
ParksCreek	Reach 3	5329.7	50y	6.47	201.04	202.2702		202.27	0.000484	0.16	40.57	246.85
ParksCreek	Reach 3	5329.7	100y	7.59	201.04	202.2807		202.28	0.000541	0.18	43.18	246.94
ParksCreek	Reach 3	5329.7	Timmins	20.56	201.04	202.4772		202.48	0.000324	0.22	91.87	248.65
ParksCreek	Reach 3	5329.7	2y Flow 100	1.78	201.04	202.1702		202.17	0.000789	0.11	16.04	242.05
ParksCreek	Reach 3	5287.2	2y	1.78	201.17	201.84	201.84	202.05	0.030178	2.05	0.87	2.08
ParksCreek	Reach 3	5287.2	5y	3.05	201.17	202.0421	202.04	202.31	0.029872	2.27	1.34	2.73
ParksCreek	Reach 3	5287.2	10y	4.04	201.17	202.1384	202.14	202.18	0.086887	0.89	4.52	101.47
ParksCreek	Reach 3	5287.2	25y	5.4	201.17	202.1543	202.15	202.19	0.067103	0.85	6.32	124.87
ParksCreek	Reach 3	5287.2	50y	6.47	201.17	202.1643	202.16	202.2	0.062731	0.84	7.67	146.96
ParksCreek	Reach 3	5287.2	100y	7.59	201.17	202.1894		202.21	0.031352	0.61	12.35	227.25
ParksCreek	Reach 3	5287.2	Timmins	20.56	201.17	202.4574		202.46	0.000602	0.28	74.08	231.09
ParksCreek	Reach 3	5287.2	2y Flow 100	1.78	201.17	201.84	201.84	202.05	0.030178	2.05	0.87	2.08
ParksCreek	Reach 3	5231.7	2y	1.78	201.02	201.3682		201.37	0.000019	0.05	35.91	108.93

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	5231.7	5y	3.05	201.02	201.4751		201.48	0.000022	0.06	47.64	110.57
ParksCreek	Reach 3	5231.7	10y	4.04	201.02	201.9329		201.93	0.000003	0.04	99.63	115.26
ParksCreek	Reach 3	5231.7	25y	5.4	201.02	202.1756		202.18	0.000003	0.04	127.74	116.46
ParksCreek	Reach 3	5231.7	50y	6.47	201.02	202.1871		202.19	0.000004	0.05	129.07	116.54
ParksCreek	Reach 3	5231.7	100y	7.59	201.02	202.2009		202.2	0.000005	0.06	130.68	116.64
ParksCreek	Reach 3	5231.7	Timmins	20.56	201.02	202.4566		202.46	0.000019	0.13	160.98	120.72
ParksCreek	Reach 3	5231.7	2y Flow 100	1.78	201.02	201.3682		201.37	0.000019	0.05	35.91	108.93
ParksCreek	Reach 3	5157.1	2y	1.78	201.02	201.366		201.37	0.000043	0.07	24.19	76.99
ParksCreek	Reach 3	5157.1	5y	3.05	201.02	201.4725		201.47	0.000049	0.09	32.47	78.31
ParksCreek	Reach 3	5157.1	10y	4.04	201.02	201.9325		201.93	0.000007	0.06	69.5	82.36

ParksCreek	Reach 3	5157.1	25y	5.4	201.02	202.1752		202.18	0.000006	0.06	89.71	84.35
ParksCreek	Reach 3	5157.1	50y	6.47	201.02	202.1865		202.19	0.000008	0.07	90.66	84.49
ParksCreek	Reach 3	5157.1	100y	7.59	201.02	202.2001		202.2	0.00001	0.08	91.81	84.72
ParksCreek	Reach 3	5157.1	Timmins	20.56	201.02	202.4537		202.46	0.000038	0.18	113.81	88.01
ParksCreek	Reach 3	5157.1	2y Flow 100	1.78	201.02	201.366		201.37	0.000043	0.07	24.19	76.99
ParksCreek	Reach 3	5101.5	2y	1.78	201.02	201.3621		201.36	0.000101	0.11	16.28	53.91
ParksCreek	Reach 3	5101.5	5y	3.05	201.02	201.468		201.47	0.000112	0.14	22.07	55.77
ParksCreek	Reach 3	5101.5	10y	4.04	201.02	201.9317		201.93	0.000015	0.08	48.8	59.28
ParksCreek	Reach 3	5101.5	25y	5.4	201.02	202.1745		202.17	0.000012	0.09	63.41	60.88
ParksCreek	Reach 3	5101.5	50y	6.47	201.02	202.1856		202.19	0.000016	0.1	64.08	60.94
ParksCreek	Reach 3	5101.5	100y	7.59	201.02	202.1989		202.2	0.000021	0.12	64.89	61.01
ParksCreek	Reach 3	5101.5	Timmins	20.56	201.02	202.4488		202.45	0.000079	0.26	80.38	62.85
ParksCreek	Reach 3	5101.5	2y Flow 100	1.78	201.02	201.3621		201.36	0.000101	0.11	16.28	53.91
ParksCreek	Reach 3	5054.4	2y	1.78	201.04	201.355		201.36	0.000217	0.14	12.68	51.72
ParksCreek	Reach 3	5054.4	5y	3.05	201.04	201.4606		201.46	0.000199	0.17	18.31	54.47
ParksCreek	Reach 3	5054.4	10y	4.04	201.04	201.9308		201.93	0.000019	0.09	46.97	66.67
ParksCreek	Reach 3	5054.4	25y	5.4	201.04	202.1739		202.17	0.000014	0.09	63.54	70.18
ParksCreek	Reach 3	5054.4	50y	6.47	201.04	202.1847		202.19	0.000019	0.11	64.3	70.36
ParksCreek	Reach 3	5054.4	100y	7.59	201.04	202.1977		202.2	0.000026	0.13	65.21	70.54
ParksCreek	Reach 3	5054.4	Timmins	20.56	201.04	202.4443		202.45	0.000093	0.28	82.92	73.16
ParksCreek	Reach 3	5054.4	2y Flow 100	1.78	201.04	201.355		201.36	0.000217	0.14	12.68	51.72
ParksCreek	Reach 3	5017.2	2y	1.78	201.03	201.3405		201.34	0.000574	0.24	7.45	28.09
ParksCreek	Reach 3	5017.2	5y	3.05	201.03	201.4458		201.45	0.000568	0.29	10.49	29.67
ParksCreek	Reach 3	5017.2	10y	4.04	201.03	201.9288		201.93	0.000057	0.16	26.99	37.37
ParksCreek	Reach 3	5017.2	25y	5.4	201.03	202.1722		202.17	0.000041	0.16	36.65	44.7
ParksCreek	Reach 3	5017.2	50y	6.47	201.03	202.1823		202.18	0.000057	0.19	37.1	45.28

ParksCreek	Reach 3	5017.2	100y	7.59	201.03	202.1945		202.2	0.000075	0.22	37.66	46.31
ParksCreek	Reach 3	5017.2	Timmins	20.56	201.03	202.4309		202.44	0.000273	0.47	49.06	49.42
ParksCreek	Reach 3	5017.2	2y Flow 100	1.78	201.03	201.3405		201.34	0.000574	0.24	7.45	28.09
ParksCreek	Reach 3	4979	2y	1.78	201.03	201.3025		201.31	0.00176	0.32	5.51	30.58
ParksCreek	Reach 3	4979	5y	3.05	201.03	201.4155		201.42	0.001036	0.34	9.01	31.29
ParksCreek	Reach 3	4979	10y	4.04	201.03	201.9265		201.93	0.000059	0.16	25.8	34.07
ParksCreek	Reach 3	4979	25y	5.4	201.03	202.1705		202.17	0.000043	0.16	34.22	34.92
ParksCreek	Reach 3	4979	50y	6.47	201.03	202.18		202.18	0.000059	0.19	34.55	34.95
ParksCreek	Reach 3	4979	100y	7.59	201.03	202.1914		202.19	0.000079	0.22	34.95	34.98
ParksCreek	Reach 3	4979	Timmins	20.56	201.03	202.4187		202.43	0.0003	0.49	42.98	35.66
ParksCreek	Reach 3	4979	2y Flow 100	1.78	201.03	201.3025		201.31	0.00176	0.32	5.51	30.58
ParksCreek	Reach 3	4950.3	2y	1.78	200.71	201.0464	201.04	201.17	0.027247	1.6	1.27	5.31
ParksCreek	Reach 3	4950.3	5y	3.05	200.71	201.1543	201.15	201.32	0.025466	1.9	1.87	5.85
ParksCreek	Reach 3	4950.3	10y	4.04	200.71	201.9036		201.92	0.00085	0.65	9.15	18.4
ParksCreek	Reach 3	4950.3	25y	5.4	200.71	202.1522		202.17	0.000627	0.62	15.65	34.37
ParksCreek	Reach 3	4950.3	50y	6.47	200.71	202.1539		202.18	0.000893	0.74	15.71	34.43
ParksCreek	Reach 3	4950.3	100y	7.59	200.71	202.156		202.19	0.001218	0.86	15.78	34.5

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	4950.3	Timmins	20.56	200.71	202.2189		202.39	0.007132	2.13	18.05	38.22
ParksCreek	Reach 3	4950.3	2y Flow 100	1.78	200.71	201.0464	201.04	201.17	0.027247	1.6	1.27	5.31
ParksCreek	Reach 3	4915.9	2y	1.78	200.16	200.6655		200.72	0.007166	1.06	1.83	5.19
ParksCreek	Reach 3	4915.9	5y	3.05	200.16	201.0637		201.09	0.002038	0.76	4.44	7.83
ParksCreek	Reach 3	4915.9	10y	4.04	200.16	201.9025		201.91	0.000149	0.35	17.74	25.86
ParksCreek	Reach 3	4915.9	25y	5.4	200.16	202.1505		202.16	0.000131	0.37	25.15	38.37
ParksCreek	Reach 3	4915.9	50y	6.47	200.16	202.1514		202.16	0.000187	0.44	25.19	38.42

ParksCreek	Reach 3	4915.9	100y	7.59	200.16	202.1526		202.16	0.000256	0.52	25.23	38.49
ParksCreek	Reach 3	4915.9	Timmins	20.56	200.16	202.1798		202.26	0.001746	1.37	26.3	40.01
ParksCreek	Reach 3	4915.9	2y Flow 100	1.78	200.16	200.6655		200.72	0.007166	1.06	1.83	5.19
ParksCreek	Reach 3	4871.8	2y	1.78	199.97	200.7008		200.7	0.000019	0.08	22.67	37.84
ParksCreek	Reach 3	4871.8	5y	3.05	199.97	201.0813		201.08	0.000012	0.09	38.24	43.24
ParksCreek	Reach 3	4871.8	10y	4.04	199.97	201.9058		201.91	0.000003	0.06	75.99	49
ParksCreek	Reach 3	4871.8	25y	5.4	199.97	202.1538		202.15	0.000003	0.07	88.49	51.62
ParksCreek	Reach 3	4871.8	50y	6.47	199.97	202.1562		202.16	0.000005	0.09	88.62	51.65
ParksCreek	Reach 3	4871.8	100y	7.59	199.97	202.1592		202.16	0.000007	0.1	88.77	51.68
ParksCreek	Reach 3	4871.8	Timmins	20.56	199.97	202.2254		202.23	0.000043	0.27	92.22	52.53
ParksCreek	Reach 3	4871.8	2y Flow 100	1.78	199.97	200.7008		200.7	0.000019	0.08	22.67	37.84
ParksCreek	Reach 3	4837.5	2y	1.78	199.97	200.7005		200.7	0.000007	0.05	37.85	58.22
ParksCreek	Reach 3	4837.5	5y	3.05	199.97	201.0812		201.08	0.000005	0.05	60.61	60.98
ParksCreek	Reach 3	4837.5	10y	4.04	199.97	201.9058		201.91	0.000001	0.04	112.71	65.02
ParksCreek	Reach 3	4837.5	25y	5.4	199.97	202.1539		202.15	0.000001	0.05	128.97	66.11
ParksCreek	Reach 3	4837.5	50y	6.47	199.97	202.1563		202.16	0.000002	0.06	129.13	66.13
ParksCreek	Reach 3	4837.5	100y	7.59	199.97	202.1592		202.16	0.000003	0.07	129.33	66.14
ParksCreek	Reach 3	4837.5	Timmins	20.56	199.97	202.2259		202.23	0.000018	0.17	133.74	66.38
ParksCreek	Reach 3	4837.5	2y Flow 100	1.78	199.97	200.7005		200.7	0.000007	0.05	37.85	58.22
ParksCreek	Reach 3	4792.2	2y	1.78	199.55	200.7		200.7	0.00001	0.07	25.58	29.83
ParksCreek	Reach 3	4792.2	5y	3.05	199.55	201.0807		201.08	0.000009	0.09	37.48	32.21
ParksCreek	Reach 3	4792.2	10y	4.04	199.55	201.9056		201.91	0.000003	0.07	65.77	36.4
ParksCreek	Reach 3	4792.2	25y	5.4	199.55	202.1535		202.15	0.000004	0.08	74.94	37.68
ParksCreek	Reach 3	4792.2	50y	6.47	199.55	202.1558		202.16	0.000005	0.1	75.02	37.7
ParksCreek	Reach 3	4792.2	100y	7.59	199.55	202.1586		202.16	0.000007	0.11	75.13	37.72
ParksCreek	Reach 3	4792.2	Timmins	20.56	199.55	202.2214		202.23	0.000047	0.3	77.51	38.19

ParksCreek	Reach 3	4792.2	2y Flow 100	1.78	199.55	200.7		200.7	0.00001	0.07	25.58	29.83
ParksCreek	Reach 3	4733.6	2y	1.78	199.55	200.7001		200.7	0.000001	0.02	84.07	79.79
ParksCreek	Reach 3	4733.6	5y	3.05	199.55	201.0808		201.08	0.000001	0.03	115.73	86.61
ParksCreek	Reach 3	4733.6	10y	4.04	199.55	201.9057		201.91	0	0.02	191.59	99.37
ParksCreek	Reach 3	4733.6	25y	5.4	199.55	202.1537		202.15	0	0.03	216.48	101.46
ParksCreek	Reach 3	4733.6	50y	6.47	199.55	202.156		202.16	0.000001	0.03	216.71	101.49
ParksCreek	Reach 3	4733.6	100y	7.59	199.55	202.1589		202.16	0.000001	0.04	217	101.53
ParksCreek	Reach 3	4733.6	Timmins	20.56	199.55	202.2235		202.22	0.000005	0.1	223.59	102.25
ParksCreek	Reach 3	4733.6	2y Flow 100	1.78	199.55	200.7001		200.7	0.000001	0.02	84.07	79.79
ParksCreek	Reach 3	4709.6	2y	1.78	199.55	200.7001		200.7	0	0.02	109.29	102.71
ParksCreek	Reach 3	4709.6	5y	3.05	199.55	201.0808		201.08	0	0.02	148.95	105.89
ParksCreek	Reach 3	4709.6	10y	4.04	199.55	201.9057		201.91	0	0.02	240.21	115.61
ParksCreek	Reach 3	4709.6	25y	5.4	199.55	202.1537		202.15	0	0.02	269.2	118.01
ParksCreek	Reach 3	4709.6	50y	6.47	199.55	202.156		202.16	0	0.03	269.47	118.03
ParksCreek	Reach 3	4709.6	100y	7.59	199.55	202.1589		202.16	0	0.03	269.81	118.06
ParksCreek	Reach 3	4709.6	Timmins	20.56	199.55	202.2236		202.22	0.000003	0.08	277.48	119.53
ParksCreek	Reach 3	4709.6	2y Flow 100	1.78	199.55	200.7001		200.7	0	0.02	109.29	102.71
ParksCreek	Reach 3	4676.6	2y	1.78	199.44	200.7001		200.7	0.000001	0.02	87.92	78.51
ParksCreek	Reach 3	4676.6	5y	3.05	199.44	201.0808		201.08	0.000001	0.03	118.2	80.54

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	4676.6	10y	4.04	199.44	201.9057		201.91	0	0.02	186.74	85.83
ParksCreek	Reach 3	4676.6	25y	5.4	199.44	202.1537		202.15	0	0.03	208.19	86.98
ParksCreek	Reach 3	4676.6	50y	6.47	199.44	202.156		202.16	0.000001	0.03	208.39	86.99
ParksCreek	Reach 3	4676.6	100y	7.59	199.44	202.1588		202.16	0.000001	0.04	208.65	86.99

ParksCreek	Reach 3	4676.6	Timmins	20.56	199.44	202.2232		202.22	0.000005	0.1	214.25	87.19
ParksCreek	Reach 3	4676.6	2y Flow 100	1.78	199.44	200.7001		200.7	0.000001	0.02	87.92	78.51
ParksCreek	Reach 3	4650.9	2y	1.78	199.44	200.7		200.7	0.000001	0.02	73.81	62.37
ParksCreek	Reach 3	4650.9	5y	3.05	199.44	201.0807		201.08	0.000001	0.03	97.77	63.51
ParksCreek	Reach 3	4650.9	10y	4.04	199.44	201.9056		201.91	0	0.03	151.39	66.39
ParksCreek	Reach 3	4650.9	25y	5.4	199.44	202.1536		202.15	0.000001	0.03	167.92	66.98
ParksCreek	Reach 3	4650.9	50y	6.47	199.44	202.1559		202.16	0.000001	0.04	168.08	66.98
ParksCreek	Reach 3	4650.9	100y	7.59	199.44	202.1588		202.16	0.000001	0.05	168.27	66.99
ParksCreek	Reach 3	4650.9	Timmins	20.56	199.44	202.2228		202.22	0.000007	0.12	172.56	67.16
ParksCreek	Reach 3	4650.9	2y Flow 100	1.78	199.44	200.7		200.7	0.000001	0.02	73.81	62.37
ParksCreek	Reach 3	4608.1	2y	1.78	199.44	200.7		200.7	0	0.02	97.32	82.84
ParksCreek	Reach 3	4608.1	5y	3.05	199.44	201.0807		201.08	0.000001	0.02	129.22	84.64
ParksCreek	Reach 3	4608.1	10y	4.04	199.44	201.9056		201.91	0	0.02	201.23	90.53
ParksCreek	Reach 3	4608.1	25y	5.4	199.44	202.1536		202.15	0	0.03	223.88	91.89
ParksCreek	Reach 3	4608.1	50y	6.47	199.44	202.1559		202.16	0	0.03	224.09	91.9
ParksCreek	Reach 3	4608.1	100y	7.59	199.44	202.1588		202.16	0.000001	0.04	224.36	91.92
ParksCreek	Reach 3	4608.1	Timmins	20.56	199.44	202.2228		202.22	0.000004	0.09	230.25	92.2
ParksCreek	Reach 3	4608.1	2y Flow 100	1.78	199.44	200.7		200.7	0	0.02	97.32	82.84
ParksCreek	Reach 3	4579	2y	1.78	199.4	200.7		200.7	0	0.02	104.02	87.58
ParksCreek	Reach 3	4579	5y	3.05	199.4	201.0807		201.08	0	0.02	137.58	88.69
ParksCreek	Reach 3	4579	10y	4.04	199.4	201.9056		201.91	0	0.02	212.32	93.06
ParksCreek	Reach 3	4579	25y	5.4	199.4	202.1536		202.15	0	0.02	235.5	93.97
ParksCreek	Reach 3	4579	50y	6.47	199.4	202.1559		202.16	0	0.03	235.72	93.98
ParksCreek	Reach 3	4579	100y	7.59	199.4	202.1588		202.16	0.000001	0.03	235.99	93.99
ParksCreek	Reach 3	4579	Timmins	20.56	199.4	202.2227		202.22	0.000004	0.09	242.01	94.24
ParksCreek	Reach 3	4579	2y Flow 100	1.78	199.4	200.7		200.7	0	0.02	104.02	87.58

ParksCreek	Reach 3	4546	2y	1.78	199.44	200.7		200.7	0	0.02	94.49	81.77
ParksCreek	Reach 3	4546	5y	3.05	199.44	201.0807		201.08	0.000001	0.02	125.93	83.31
ParksCreek	Reach 3	4546	10y	4.04	199.44	201.9056		201.91	0	0.02	196.21	87.28
ParksCreek	Reach 3	4546	25y	5.4	199.44	202.1536		202.15	0	0.03	217.99	88.33
ParksCreek	Reach 3	4546	50y	6.47	199.44	202.1559		202.16	0	0.03	218.19	88.33
ParksCreek	Reach 3	4546	100y	7.59	199.44	202.1588		202.16	0.000001	0.04	218.45	88.34
ParksCreek	Reach 3	4546	Timmins	20.56	199.44	202.2225		202.22	0.000004	0.09	224.09	88.5
ParksCreek	Reach 3	4546	2y Flow 100	1.78	199.44	200.7		200.7	0	0.02	94.49	81.77
ParksCreek	Reach 3	4516.1	2y	1.78	199.43	200.7		200.7	0.000001	0.02	82.4	70.03
ParksCreek	Reach 3	4516.1	5y	3.05	199.43	201.0807		201.08	0.000001	0.03	109.43	72.02
ParksCreek	Reach 3	4516.1	10y	4.04	199.43	201.9056		201.91	0	0.02	170.56	76.33
ParksCreek	Reach 3	4516.1	25y	5.4	199.43	202.1536		202.15	0	0.03	189.66	77.79
ParksCreek	Reach 3	4516.1	50y	6.47	199.43	202.1559		202.16	0.000001	0.03	189.83	77.81
ParksCreek	Reach 3	4516.1	100y	7.59	199.43	202.1587		202.16	0.000001	0.04	190.06	77.83
ParksCreek	Reach 3	4516.1	Timmins	20.56	199.43	202.2222		202.22	0.000005	0.11	195.01	78.23
ParksCreek	Reach 3	4516.1	2y Flow 100	1.78	199.43	200.7		200.7	0.000001	0.02	82.4	70.03
ParksCreek	Reach 3	4480.5	2y	1.78	199.43	200.6999		200.7	0.000002	0.03	51.38	44.5
ParksCreek	Reach 3	4480.5	5y	3.05	199.43	201.0806		201.08	0.000002	0.04	68.54	45.64
ParksCreek	Reach 3	4480.5	10y	4.04	199.43	201.9056		201.91	0.000001	0.04	111.1	58.9
ParksCreek	Reach 3	4480.5	25y	5.4	199.43	202.1535		202.15	0.000001	0.05	125.89	61.22
ParksCreek	Reach 3	4480.5	50y	6.47	199.43	202.1557		202.16	0.000002	0.05	126.03	61.26
ParksCreek	Reach 3	4480.5	100y	7.59	199.43	202.1586		202.16	0.000002	0.06	126.2	61.31
ParksCreek	Reach 3	4480.5	Timmins	20.56	199.43	202.2211		202.22	0.000014	0.17	130.11	63.14

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)

ParksCreek	Reach 3	4480.5	2y Flow 100	1.78	199.43	200.6999		200.7	0.000002	0.03	51.38	44.5
ParksCreek	Reach 3	4439.2	2y	1.78	199.44	200.6998		200.7	0.000001	0.02	74	63.78
ParksCreek	Reach 3	4439.2	5y	3.05	199.44	201.0805		201.08	0.000001	0.03	98.46	64.84
ParksCreek	Reach 3	4439.2	10y	4.04	199.44	201.9056		201.91	0	0.03	153.08	67.5
ParksCreek	Reach 3	4439.2	25y	5.4	199.44	202.1535		202.15	0.000001	0.03	169.92	68.39
ParksCreek	Reach 3	4439.2	50y	6.47	199.44	202.1557		202.16	0.000001	0.04	170.07	68.4
ParksCreek	Reach 3	4439.2	100y	7.59	199.44	202.1586		202.16	0.000001	0.05	170.26	68.41
ParksCreek	Reach 3	4439.2	Timmins	20.56	199.44	202.2211		202.22	0.000007	0.12	174.55	68.66
ParksCreek	Reach 3	4439.2	2y Flow 100	1.78	199.44	200.6998		200.7	0.000001	0.02	74	63.78
ParksCreek	Reach 3	4385	2y	1.78	199.07	200.6996		200.7	0.000005	0.06	29.17	24.74
ParksCreek	Reach 3	4385	5y	3.05	199.07	201.0801		201.08	0.000006	0.08	38.74	25.61
ParksCreek	Reach 3	4385	10y	4.04	199.07	201.9053		201.91	0.000003	0.07	60.8	27.89
ParksCreek	Reach 3	4385	25y	5.4	199.07	202.1531		202.15	0.000004	0.08	67.81	28.71
ParksCreek	Reach 3	4385	50y	6.47	199.07	202.1552		202.16	0.000005	0.1	67.87	28.72
ParksCreek	Reach 3	4385	100y	7.59	199.07	202.1578		202.16	0.000007	0.12	67.95	28.73
ParksCreek	Reach 3	4385	Timmins	20.56	199.07	202.2159		202.22	0.000048	0.31	69.62	28.92
ParksCreek	Reach 3	4385	2y Flow 100	1.78	199.07	200.6996		200.7	0.000005	0.06	29.17	24.74
ParksCreek	Reach 3	4341.3	2y	1.78	199.47	200.6963		200.7	0.000106	0.23	9.37	13.98
ParksCreek	Reach 3	4341.3	5y	3.05	199.47	201.0762		201.08	0.000096	0.27	15.19	17.65
ParksCreek	Reach 3	4341.3	10y	4.04	199.47	201.9037		201.91	0.000028	0.18	32.4	22.75
ParksCreek	Reach 3	4341.3	25y	5.4	199.47	202.1512		202.15	0.000034	0.21	38.3	24.94
ParksCreek	Reach 3	4341.3	50y	6.47	199.47	202.1525		202.16	0.000049	0.25	38.33	24.95
ParksCreek	Reach 3	4341.3	100y	7.59	199.47	202.1542		202.16	0.000067	0.29	38.37	24.97
ParksCreek	Reach 3	4341.3	Timmins	20.56	199.47	202.1904		202.21	0.000462	0.78	39.28	25.25
ParksCreek	Reach 3	4341.3	2y Flow 100	1.78	199.47	200.6963		200.7	0.000106	0.23	9.37	13.98

ParksCreek	Reach 3	4304.5	2y	1.78	199.41	200.6974		200.7	0.000007	0.06	52.63	50.67
ParksCreek	Reach 3	4304.5	5y	3.05	199.41	201.0777		201.08	0.000007	0.08	72.95	56.4
ParksCreek	Reach 3	4304.5	10y	4.04	199.41	201.9044		201.9	0.000003	0.06	123.43	67.24
ParksCreek	Reach 3	4304.5	25y	5.4	199.41	202.1521		202.15	0.000003	0.07	140.2	68
ParksCreek	Reach 3	4304.5	50y	6.47	199.41	202.1537		202.15	0.000005	0.08	140.31	68
ParksCreek	Reach 3	4304.5	100y	7.59	199.41	202.1558		202.16	0.000006	0.1	140.46	68.01
ParksCreek	Reach 3	4304.5	Timmins	20.56	199.41	202.2018		202.2	0.000044	0.26	143.59	68.09
ParksCreek	Reach 3	4304.5	2y Flow 100	1.78	199.41	200.6974		200.7	0.000007	0.06	52.63	50.67
ParksCreek	Reach 3	4220.4	2y	1.78	199.51	200.6957		200.7	0.000064	0.13	19.26	30.69
ParksCreek	Reach 3	4220.4	5y	3.05	199.51	201.076		201.08	0.000044	0.13	33.44	44.09
ParksCreek	Reach 3	4220.4	10y	4.04	199.51	201.9039		201.9	0.000007	0.08	72.64	49.9
ParksCreek	Reach 3	4220.4	25y	5.4	199.51	202.1515		202.15	0.000008	0.1	85.13	50.93
ParksCreek	Reach 3	4220.4	50y	6.47	199.51	202.1528		202.15	0.000011	0.12	85.19	50.94
ParksCreek	Reach 3	4220.4	100y	7.59	199.51	202.1546		202.16	0.000015	0.14	85.28	50.94
ParksCreek	Reach 3	4220.4	Timmins	20.56	199.51	202.1935		202.2	0.000102	0.36	87.27	51.06
ParksCreek	Reach 3	4220.4	2y Flow 100	1.78	199.51	200.6957		200.7	0.000064	0.13	19.26	30.69
ParksCreek	Reach 3	4150	2y	1.78	200.28	200.5659	200.57	200.67	0.029851	1.43	1.25	6.2
ParksCreek	Reach 3	4150	5y	3.05	200.28	201.0585		201.07	0.001132	0.42	8.01	27.22
ParksCreek	Reach 3	4150	10y	4.04	200.28	201.9022		201.9	0.000034	0.15	35.73	37.83
ParksCreek	Reach 3	4150	25y	5.4	200.28	202.1497		202.15	0.000031	0.16	45.46	40.51
ParksCreek	Reach 3	4150	50y	6.47	200.28	202.1503		202.15	0.000044	0.19	45.48	40.52
ParksCreek	Reach 3	4150	100y	7.59	200.28	202.1511		202.15	0.000061	0.22	45.52	40.53
ParksCreek	Reach 3	4150	Timmins	20.56	200.28	202.1695		202.18	0.000427	0.58	46.26	40.72
ParksCreek	Reach 3	4150	2y Flow 100	1.78	200.28	200.5659	200.57	200.67	0.029851	1.43	1.25	6.2
ParksCreek	Reach 3	4081.1	2y	1.78	199.47	199.9514		199.97	0.001949	0.52	3.42	9.91
ParksCreek	Reach 3	4081.1	5y	3.05	199.47	201.0558		201.06	0.00004	0.17	18.5	18.03

ParksCreek	Reach 3	4081.1	10y	4.04	199.47	201.9011		201.9	0.000011	0.13	35.96	22.94

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	4081.1	25y	5.4	199.47	202.1483		202.15	0.000014	0.15	41.78	24.08
ParksCreek	Reach 3	4081.1	50y	6.47	199.47	202.1483		202.15	0.00002	0.18	41.78	24.08
ParksCreek	Reach 3	4081.1	100y	7.59	199.47	202.1483		202.15	0.000027	0.22	41.78	24.08
ParksCreek	Reach 3	4081.1	Timmins	20.56	199.47	202.1485		202.17	0.000197	0.58	41.78	24.08
ParksCreek	Reach 3	4081.1	2y Flow 100	1.78	199.47	199.9514		199.97	0.001949	0.52	3.42	9.91
ParksCreek	Reach 3	4016.2	2y	1.78	199.14	199.9395		199.94	0.000123	0.2	12.21	22.69
ParksCreek	Reach 3	4016.2	5y	3.05	199.14	201.0554		201.06	0.00001	0.1	44.21	33.11
ParksCreek	Reach 3	4016.2	10y	4.04	199.14	201.9011		201.9	0.000004	0.08	72.94	35.17
ParksCreek	Reach 3	4016.2	25y	5.4	199.14	202.1483		202.15	0.000005	0.1	81.74	35.98
ParksCreek	Reach 3	4016.2	50y	6.47	199.14	202.1483		202.15	0.000007	0.12	81.74	35.98
ParksCreek	Reach 3	4016.2	100y	7.59	199.14	202.1484		202.15	0.000009	0.14	81.74	35.98
ParksCreek	Reach 3	4016.2	Timmins	20.56	199.14	202.1492		202.15	0.00007	0.38	81.77	35.98
ParksCreek	Reach 3	4016.2	2y Flow 100	1.78	199.14	199.9395		199.94	0.000123	0.2	12.21	22.69
ParksCreek	Reach 3	3957.3	2y	1.78	199.27	199.9296		199.93	0.000212	0.22	10.76	25.38
ParksCreek	Reach 3	3957.3	5y	3.05	199.27	201.0549		201.06	0.000009	0.09	49.04	40.27
ParksCreek	Reach 3	3957.3	10y	4.04	199.27	201.9009		201.9	0.000003	0.07	85.6	45.9
ParksCreek	Reach 3	3957.3	25y	5.4	199.27	202.1481		202.15	0.000004	0.08	97.04	46.68
ParksCreek	Reach 3	3957.3	50y	6.47	199.27	202.1481		202.15	0.000005	0.1	97.04	46.68
ParksCreek	Reach 3	3957.3	100y	7.59	199.27	202.148		202.15	0.000007	0.12	97.04	46.68
ParksCreek	Reach 3	3957.3	Timmins	20.56	199.27	202.1466		202.15	0.000054	0.32	96.97	46.67
ParksCreek	Reach 3	3957.3	2y Flow 100	1.78	199.27	199.9296		199.93	0.000212	0.22	10.76	25.38
ParksCreek	Reach 3	3932.4	2y	1.78	198.94	199.9144		199.92	0.000504	0.39	6.54	14.65

ParksCreek	Reach 3	3932.4	5y	3.05	198.94	201.0544		201.05	0.000019	0.1	60.07	138.45
ParksCreek	Reach 3	3932.4	10y	4.04	198.94	201.9009		201.9	0.000001	0.04	265.96	339.53
ParksCreek	Reach 3	3932.4	25y	5.4	198.94	202.1482		202.15	0.000001	0.04	352.83	368.02
ParksCreek	Reach 3	3932.4	50y	6.47	198.94	202.1482		202.15	0.000002	0.05	352.83	368.02
ParksCreek	Reach 3	3932.4	100y	7.59	198.94	202.1482		202.15	0.000002	0.06	352.83	368.02
ParksCreek	Reach 3	3932.4	Timmins	20.56	198.94	202.148		202.15	0.000018	0.17	352.73	368
ParksCreek	Reach 3	3932.4	2y Flow 100	1.78	198.94	199.9144		199.92	0.000504	0.39	6.54	14.65
ParksCreek	Reach 3	3928.6	2y	1.78	198.82	199.8955	199.24	199.92	0.000789	0.7	3.31	33.35
ParksCreek	Reach 3	3928.6	5y	3.05	198.82	201.0399	199.39	201.05	0.00019	0.56	7.09	58.82
ParksCreek	Reach 3	3928.6	10y	4.04	198.82	201.9009	199.5	201.9	0.000002	0.05	214.28	222
ParksCreek	Reach 3	3928.6	25y	5.4	198.82	202.1482	199.63	202.15	0.000002	0.06	274.97	278.16
ParksCreek	Reach 3	3928.6	50y	6.47	198.82	202.1481	199.72	202.15	0.000003	0.07	274.97	278.15
ParksCreek	Reach 3	3928.6	100y	7.59	198.82	202.1481	199.81	202.15	0.000004	0.08	274.96	278.15
ParksCreek	Reach 3	3928.6	Timmins	20.56	198.82	202.1473	200.67	202.15	0.00003	0.22	274.73	278.09
ParksCreek	Reach 3	3928.6	2y Flow 100	1.78	198.82	199.8955	199.24	199.92	0.000789	0.7	3.31	33.35
ParksCreek	Reach 3	3901.6	Hwy 11	Culvert								
ParksCreek	Reach 3	3876.7	2y	1.78	197.91	199.5033	198.37	199.51	0.000179	0.4	4.72	15.04
ParksCreek	Reach 3	3876.7	5y	3.05	197.91	199.9183	198.51	199.93	0.000227	0.54	6.08	20.42
ParksCreek	Reach 3	3876.7	10y	4.04	197.91	199.9107	198.61	199.94	0.000404	0.71	6.06	20.36
ParksCreek	Reach 3	3876.7	25y	5.4	197.91	199.8966	198.73	199.94	0.000739	0.96	6.01	20.23
ParksCreek	Reach 3	3876.7	50y	6.47	197.91	199.882	198.82	199.95	0.001088	1.16	5.96	20.1
ParksCreek	Reach 3	3876.7	100y	7.59	197.91	199.8654	198.91	199.96	0.001542	1.37	5.91	19.95
ParksCreek	Reach 3	3876.7	Timmins	20.56	197.91	199.7097	199.71	200.53	0.015264	4.07	5.4	17.94
ParksCreek	Reach 3	3876.7	2y Flow 100	1.78	197.91	199.5033	198.37	199.51	0.000179	0.4	4.72	15.04
ParksCreek	Reach 3	3874.4	2y	1.78	198.46	199.5089		199.51	0.000002	0.03	143.49	221.51
ParksCreek	Reach 3	3874.4	5y	3.05	198.46	199.9282		199.93	0.000001	0.03	241.35	252.58
ParksCreek	Reach 3	3874.4	10y	4.04	198.46	199.9283		199.93	0.000002	0.04	241.36	252.59
ParksCreek	Reach 3	3874.4	25y	5.4	198.46	199.9283		199.93	0.000004	0.05	241.39	252.62

ParksCreek	Reach 3	3874.4	50y	6.47	198.46	199.9283		199.93	0.000005	0.06	241.37	252.6
ParksCreek	Reach 3	3874.4	100y	7.59	198.46	199.9302		199.93	0.000007	0.07	241.86	253.15

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	3874.4	Timmins	20.56	198.46	200.104		200.1	0.000033	0.17	289.3	286.61
ParksCreek	Reach 3	3874.4	2y Flow 100	1.78	198.46	199.5089		199.51	0.000002	0.03	143.49	221.51
ParksCreek	Reach 3	3873.8	2y	1.78	198.46	199.484	198.83	199.51	0.000979	0.77	3.24	23.21
ParksCreek	Reach 3	3873.8	5y	3.05	198.46	199.9273	198.99	199.93	0.000036	0.16	64.1	256.24
ParksCreek	Reach 3	3873.8	10y	4.04	198.46	199.9266	199.09	199.93	0.000063	0.22	63.93	255.95
ParksCreek	Reach 3	3873.8	25y	5.4	198.46	199.9254	199.23	199.93	0.000114	0.29	63.62	255.39
ParksCreek	Reach 3	3873.8	50y	6.47	198.46	199.924	199.32	199.93	0.000165	0.35	63.27	254.76
ParksCreek	Reach 3	3873.8	100y	7.59	198.46	199.9243	199.42	199.93	0.000227	0.41	63.35	254.91
ParksCreek	Reach 3	3873.8	Timmins	20.56	198.46	200.0918	199.69	200.1	0.000537	0.69	109.88	289.42
ParksCreek	Reach 3	3873.8	2y Flow 100	1.78	198.46	199.484	198.83	199.51	0.000979	0.77	3.24	23.21
ParksCreek	Reach 3	3857 Hwy 11		Culvert								
ParksCreek	Reach 3	3839.8	2y	1.78	198.44	199.049	198.81	199.1	0.003711	1	1.79	22.22
ParksCreek	Reach 3	3839.8	5y	3.05	198.44	199.183	198.94	199.28	0.005305	1.38	2.22	23.17
ParksCreek	Reach 3	3839.8	10y	4.04	198.44	199.2474	199.04	199.39	0.006917	1.67	2.42	23.68
ParksCreek	Reach 3	3839.8	25y	5.4	198.44	199.2852	199.15	199.52	0.010494	2.12	2.54	23.97
ParksCreek	Reach 3	3839.8	50y	6.47	198.44	199.2847	199.24	199.62	0.015085	2.55	2.54	23.97
ParksCreek	Reach 3	3839.8	100y	7.59	198.44	199.321	199.32	199.74	0.017866	2.85	2.66	24.22
ParksCreek	Reach 3	3839.8	Timmins	20.56	198.44	200.0619	199.95	200.1	0.000891	0.95	45.62	141.6
ParksCreek	Reach 3	3839.8	2y Flow 100	1.78	198.44	199.049	198.81	199.1	0.003711	1	1.79	22.22
ParksCreek	Reach 3	3835	2y	1.78	198.37	199.0827		199.08	0.000067	0.13	23.97	69.39
ParksCreek	Reach 3	3835	5y	3.05	198.37	199.2482		199.25	0.000071	0.16	38.7	111.5
ParksCreek	Reach 3	3835	10y	4.04	198.37	199.3446		199.35	0.000074	0.18	50.74	134.52
ParksCreek	Reach 3	3835	25y	5.4	198.37	199.4434		199.44	0.000077	0.2	65.75	172.41
ParksCreek	Reach 3	3835	50y	6.47	198.37	199.5132		199.51	0.000077	0.21	78.65	197.16

ParksCreek	Reach 3	3835	100y	7.59	198.37	199.5782		199.58	0.000085	0.23	92.02	212.57
ParksCreek	Reach 3	3835	Timmins	20.56	198.37	200.0866		200.09	0.000082	0.29	230.38	365.54
ParksCreek	Reach 3	3835	2y Flow 100	1.78	198.37	199.0827		199.08	0.000067	0.13	23.97	69.39
ParksCreek	Reach 3	3763.5	2y	1.78	197.97	198.3373	198.34	198.45	0.02722	1.61	1.49	7.51
ParksCreek	Reach 3	3763.5	5y	3.05	197.97	198.4571	198.46	198.58	0.022176	1.75	2.7	11.85
ParksCreek	Reach 3	3763.5	10y	4.04	197.97	198.5251	198.53	198.65	0.0207	1.81	3.64	16.93
ParksCreek	Reach 3	3763.5	25y	5.4	197.97	198.5961	198.6	198.73	0.019672	1.9	5.05	22.49
ParksCreek	Reach 3	3763.5	50y	6.47	197.97	198.6127	198.61	198.78	0.024471	2.16	5.44	25.29
ParksCreek	Reach 3	3763.5	100y	7.59	197.97	198.7767		198.84	0.009281	1.47	10.34	32.59
ParksCreek	Reach 3	3763.5	Timmins	20.56	197.97	199.4435		199.48	0.002209	1.24	33.99	37.43
ParksCreek	Reach 3	3763.5	2y Flow 100	1.78	197.97	198.3373	198.34	198.45	0.02722	1.61	1.49	7.51
ParksCreek	Reach 3	3733.5	2y	1.78	197.75	198.2847		198.29	0.000083	0.13	27.57	73.81
ParksCreek	Reach 3	3733.5	5y	3.05	197.75	198.4287		198.43	0.000087	0.16	38.29	75.26
ParksCreek	Reach 3	3733.5	10y	4.04	197.75	198.5202		198.52	0.000092	0.18	45.26	77.52
ParksCreek	Reach 3	3733.5	25y	5.4	197.75	198.6309		198.63	0.000095	0.21	53.89	78.2
ParksCreek	Reach 3	3733.5	50y	6.47	197.75	198.717		198.72	0.000093	0.22	60.63	78.56
ParksCreek	Reach 3	3733.5	100y	7.59	197.75	198.8122		198.81	0.000089	0.23	68.14	79.08
ParksCreek	Reach 3	3733.5	Timmins	20.56	197.75	199.4591		199.46	0.000111	0.35	121.49	87.31
ParksCreek	Reach 3	3733.5	2y Flow 100	1.78	197.75	198.2847		198.29	0.000083	0.13	27.57	73.81
ParksCreek	Reach 3	3671.7	2y	1.78	197.75	198.2837		198.28	0.000014	0.04	79.95	210.96
ParksCreek	Reach 3	3671.7	5y	3.05	197.75	198.4278		198.43	0.000015	0.06	110.57	214.05
ParksCreek	Reach 3	3671.7	10y	4.04	197.75	198.5193		198.52	0.000015	0.06	130.23	215.45
ParksCreek	Reach 3	3671.7	25y	5.4	197.75	198.6301		198.63	0.000015	0.07	154.16	216.58
ParksCreek	Reach 3	3671.7	50y	6.47	197.75	198.7163		198.72	0.000015	0.08	172.91	218.95
ParksCreek	Reach 3	3671.7	100y	7.59	197.75	198.8116		198.81	0.000015	0.08	193.88	220.65
ParksCreek	Reach 3	3671.7	Timmins	20.56	197.75	199.4592		199.46	0.000018	0.13	339.3	232.89

ParksCreek	Reach 3	3671.7	2y Flow 100	1.78	197.75	198.2837		198.28	0.000014	0.04	79.95	210.96

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	3620.7	2y	1.78	197.79	198.2415		198.24	0.000017	0.05	77.53	224.61
ParksCreek	Reach 3	3620.7	5y	3.05	197.79	198.3868		198.39	0.000016	0.06	110.36	227.25
ParksCreek	Reach 3	3620.7	10y	4.04	197.79	198.4779		198.48	0.000016	0.06	131.1	228.04
ParksCreek	Reach 3	3620.7	25y	5.4	197.79	198.5882		198.59	0.000016	0.07	156.3	228.9
ParksCreek	Reach 3	3620.7	50y	6.47	197.79	198.6753		198.68	0.000015	0.08	176.25	229.42
ParksCreek	Reach 3	3620.7	100y	7.59	197.79	198.7732		198.77	0.000014	0.08	198.76	230
ParksCreek	Reach 3	3620.7	Timmins	20.56	197.79	199.4133		199.41	0.000016	0.13	347.21	233.74
ParksCreek	Reach 3	3620.7	2y Flow 100	1.78	197.79	198.2415		198.24	0.000017	0.05	77.53	224.61
ParksCreek	Reach 3	3572.8	2y	1.78	197.79	198.2409		198.24	0.000013	0.05	82.54	219.62
ParksCreek	Reach 3	3572.8	5y	3.05	197.79	198.3863		198.39	0.000013	0.06	114.53	220.35
ParksCreek	Reach 3	3572.8	10y	4.04	197.79	198.4774		198.48	0.000014	0.06	134.68	222.05
ParksCreek	Reach 3	3572.8	25y	5.4	197.79	198.5876		198.59	0.000014	0.07	159.23	223.07
ParksCreek	Reach 3	3572.8	50y	6.47	197.79	198.6747		198.67	0.000014	0.08	178.7	224.23
ParksCreek	Reach 3	3572.8	100y	7.59	197.79	198.7727		198.77	0.000013	0.08	200.73	224.96
ParksCreek	Reach 3	3572.8	Timmins	20.56	197.79	199.4127		199.41	0.000016	0.13	346.77	229.54
ParksCreek	Reach 3	3572.8	2y Flow 100	1.78	197.79	198.2409		198.24	0.000013	0.05	82.54	219.62
ParksCreek	Reach 3	3509.6	2y	1.78	197.68	198.2035		198.2	0.000015	0.05	75.86	195.3
ParksCreek	Reach 3	3509.6	5y	3.05	197.68	198.3478		198.35	0.000015	0.06	104.61	203.85
ParksCreek	Reach 3	3509.6	10y	4.04	197.68	198.4372		198.44	0.000016	0.07	123.08	210.15
ParksCreek	Reach 3	3509.6	25y	5.4	197.68	198.5459		198.55	0.000017	0.08	146.36	218.48
ParksCreek	Reach 3	3509.6	50y	6.47	197.68	198.6335		198.63	0.000017	0.09	165.75	224.14
ParksCreek	Reach 3	3509.6	100y	7.59	197.68	198.7344		198.73	0.000015	0.09	188.62	229.42

ParksCreek	Reach 3	3509.6	Timmins	20.56	197.68	199.3666		199.37	0.000018	0.14	343.83	249.9
ParksCreek	Reach 3	3509.6	2y Flow 100	1.78	197.68	198.2035		198.2	0.000015	0.05	75.86	195.3
ParksCreek	Reach 3	3463.7	2y	1.78	197.66	198.1622		198.16	0.000016	0.05	70.74	176.92
ParksCreek	Reach 3	3463.7	5y	3.05	197.66	198.3034		198.3	0.000018	0.07	96.3	184.83
ParksCreek	Reach 3	3463.7	10y	4.04	197.66	198.3898		198.39	0.00002	0.08	112.44	188.33
ParksCreek	Reach 3	3463.7	25y	5.4	197.66	198.4964		198.5	0.000021	0.09	132.64	190.81
ParksCreek	Reach 3	3463.7	50y	6.47	197.66	198.5849		198.59	0.00002	0.1	149.67	194.48
ParksCreek	Reach 3	3463.7	100y	7.59	197.66	198.6901		198.69	0.000018	0.1	170.24	196.12
ParksCreek	Reach 3	3463.7	Timmins	20.56	197.66	199.3128		199.31	0.000023	0.16	293.76	199.79
ParksCreek	Reach 3	3463.7	2y Flow 100	1.78	197.66	198.1622		198.16	0.000016	0.05	70.74	176.92
ParksCreek	Reach 3	3403.6	2y	1.78	197.49	198.1616		198.16	0.000011	0.05	77.99	187.65
ParksCreek	Reach 3	3403.6	5y	3.05	197.49	198.3027		198.3	0.000014	0.07	105.86	206.53
ParksCreek	Reach 3	3403.6	10y	4.04	197.49	198.389		198.39	0.000015	0.08	124	213.9
ParksCreek	Reach 3	3403.6	25y	5.4	197.49	198.4955		198.5	0.000017	0.09	147.29	221.89
ParksCreek	Reach 3	3403.6	50y	6.47	197.49	198.584		198.58	0.000017	0.1	166.96	222.41
ParksCreek	Reach 3	3403.6	100y	7.59	197.49	198.6893		198.69	0.000015	0.1	190.45	224.34
ParksCreek	Reach 3	3403.6	Timmins	20.56	197.49	199.3119		199.31	0.000019	0.15	334.61	237.57
ParksCreek	Reach 3	3403.6	2y Flow 100	1.78	197.49	198.1616		198.16	0.000011	0.05	77.99	187.65
ParksCreek	Reach 3	3311.3	2y	1.78	197	198.1277		198.13	0.000018	0.08	55.11	155.77
ParksCreek	Reach 3	3311.3	5y	3.05	197	198.2613		198.26	0.000022	0.1	76.54	163.74
ParksCreek	Reach 3	3311.3	10y	4.04	197	198.3432		198.34	0.000025	0.12	90.11	167.2
ParksCreek	Reach 3	3311.3	25y	5.4	197	198.4445		198.44	0.000027	0.13	107.19	169.31
ParksCreek	Reach 3	3311.3	50y	6.47	197	198.5337		198.53	0.000027	0.14	122.33	170.29
ParksCreek	Reach 3	3311.3	100y	7.59	197	198.644		198.64	0.000024	0.14	141.17	171.16
ParksCreek	Reach 3	3311.3	Timmins	20.56	197	199.2549		199.26	0.000031	0.2	246.44	173.29
ParksCreek	Reach 3	3311.3	2y Flow 100	1.78	197	198.1277		198.13	0.000018	0.08	55.11	155.77

ParksCreek	Reach 3	3228.5	2y	1.78	197.12	198.056		198.06	0.000061	0.12	36.01	138.88
ParksCreek	Reach 3	3228.5	5y	3.05	197.12	198.1773		198.18	0.000065	0.14	53.56	146.96
ParksCreek	Reach 3	3228.5	10y	4.04	197.12	198.2532		198.25	0.000066	0.15	64.8	148.57
ParksCreek	Reach 3	3228.5	25y	5.4	197.12	198.3513		198.35	0.000063	0.16	79.41	149.24
ParksCreek	Reach 3	3228.5	50y	6.47	197.12	198.4448		198.45	0.000055	0.16	93.39	149.94

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 3	3228.5	100y	7.59	197.12	198.5697		198.57	0.000043	0.16	112.17	150.5
ParksCreek	Reach 3	3228.5	Timmins	20.56	197.12	199.1659		199.17	0.000048	0.23	202.27	152.52
ParksCreek	Reach 3	3228.5	2y Flow 100	1.78	197.12	198.056		198.06	0.000061	0.12	36.01	138.88
ParksCreek	Reach 3	3145.9	2y	1.78	197.01	197.8704		197.87	0.000109	0.16	29.24	112.84
ParksCreek	Reach 3	3145.9	5y	3.05	197.01	197.983		197.98	0.000115	0.18	42.07	114.9
ParksCreek	Reach 3	3145.9	10y	4.04	197.01	198.0572		198.06	0.000118	0.19	50.66	116.67
ParksCreek	Reach 3	3145.9	25y	5.4	197.01	198.1732		198.17	0.0001	0.19	64.28	117.94
ParksCreek	Reach 3	3145.9	50y	6.47	197.01	198.3001		198.3	0.000075	0.18	79.35	119.52
ParksCreek	Reach 3	3145.9	100y	7.59	197.01	198.4642		198.46	0.000051	0.17	99.36	123.09
ParksCreek	Reach 3	3145.9	Timmins	20.56	197.01	199.0387		199.04	0.000067	0.26	171	126.72
ParksCreek	Reach 3	3145.9	2y Flow 100	1.78	197.01	197.8704		197.87	0.000109	0.16	29.24	112.84
ParksCreek	Reach 3	3087.8	2y	1.78	197.01	197.8414		197.84	0.000005	0.03	157.57	621.46
ParksCreek	Reach 3	3087.8	5y	3.05	197.01	197.9511		197.95	0.000005	0.04	228.81	685.42
ParksCreek	Reach 3	3087.8	10y	4.04	197.01	198.0259		198.03	0.000005	0.04	280.82	706.04
ParksCreek	Reach 3	3087.8	25y	5.4	197.01	198.1472		198.15	0.000004	0.04	368.81	765.93
ParksCreek	Reach 3	3087.8	50y	6.47	197.01	198.2819		198.28	0.000003	0.04	473.82	788.86
ParksCreek	Reach 3	3087.8	100y	7.59	197.01	198.4526		198.45	0.000002	0.03	610.81	820.86
ParksCreek	Reach 3	3087.8	Timmins	20.56	197.01	199.0253		199.03	0.000002	0.05	1096.28	878.52

ParksCreek	Reach 3	3087.8	2y Flow 100	1.78	197.01	197.8414		197.84	0.000005	0.03	157.57	621.46
ParksCreek	Reach 3	3080.1	2y	1.78	197.04	197.8411	197.34	197.84	0.000033	0.09	61.45	379.78
ParksCreek	Reach 3	3080.1	5y	3.05	197.04	197.9509	197.44	197.95	0.000029	0.09	111.04	554.15
ParksCreek	Reach 3	3080.1	10y	4.04	197.04	198.0257	197.51	198.03	0.000023	0.09	157.57	677.87
ParksCreek	Reach 3	3080.1	25y	5.4	197.04	198.1471	197.61	198.15	0.000014	0.08	245.59	750.95
ParksCreek	Reach 3	3080.1	50y	6.47	197.04	198.2818	197.67	198.28	0.000007	0.06	348.8	778.28
ParksCreek	Reach 3	3080.1	100y	7.59	197.04	198.4526	197.73	198.45	0.000004	0.05	483.56	797.74
ParksCreek	Reach 3	3080.1	Timmins	20.56	197.04	199.0252	197.81	199.03	0.000003	0.06	962.11	872.25
ParksCreek	Reach 3	3080.1	2y Flow 100	1.78	197.04	197.8411	197.34	197.84	0.000033	0.09	61.45	379.78
ParksCreek	Reach 3	3057.3	Railway Emba	Culvert								
ParksCreek	Reach 3	3043.4	2y	1.78	197.09	197.8412	197.57	197.84	0.000012	0.03	115.85	473.62
ParksCreek	Reach 3	3043.4	5y	3.05	197.09	197.9509	197.57	197.95	0.000012	0.04	170.98	542.37
ParksCreek	Reach 3	3043.4	10y	4.04	197.09	198.0256	197.57	198.03	0.000011	0.05	212.96	581.58
ParksCreek	Reach 3	3043.4	25y	5.4	197.09	198.1468	197.57	198.15	0.000008	0.05	288.34	689.59
ParksCreek	Reach 3	3043.4	50y	6.47	197.09	198.2814	197.57	198.28	0.000006	0.04	389.05	783.41
ParksCreek	Reach 3	3043.4	100y	7.59	197.09	198.4519	197.57	198.45	0.000003	0.04	523.97	799.03
ParksCreek	Reach 3	3043.4	Timmins	20.56	197.09	199.0228	197.62	199.02	0.000003	0.05	1000.29	868.16
ParksCreek	Reach 3	3043.4	2y Flow 100	1.78	197.09	197.8412	197.57	197.84	0.000012	0.03	115.85	473.62
ParksCreek	Reach 3	3043.2	2y	1.78	197.12	197.8412		197.84	0.000011	0.03	122.46	495.66
ParksCreek	Reach 3	3043.2	5y	3.05	197.12	197.9509		197.95	0.00001	0.04	178.9	543.98
ParksCreek	Reach 3	3043.2	10y	4.04	197.12	198.0256		198.03	0.00001	0.04	220.72	582.95
ParksCreek	Reach 3	3043.2	25y	5.4	197.12	198.1468		198.15	0.000007	0.04	297.77	680.14
ParksCreek	Reach 3	3043.2	50y	6.47	197.12	198.2814		198.28	0.000005	0.04	396.06	781.76
ParksCreek	Reach 3	3043.2	100y	7.59	197.12	198.4519		198.45	0.000003	0.04	530.82	797.16
ParksCreek	Reach 3	3043.2	Timmins	20.56	197.12	199.0228		199.02	0.000003	0.05	1008.55	867.26

ParksCreek	Reach 3	3043.2	2y Flow 100	1.78	197.12	197.8412		197.84	0.000011	0.03	122.46	495.66
ParksCreek	Reach 2	3033.4	2y	2.61	197	197.8343		197.84	0.001023	0.37	8.36	25.5
ParksCreek	Reach 2	3033.4	5y	4.3	197	197.9401		197.95	0.001121	0.47	11.06	25.5
ParksCreek	Reach 2	3033.4	10y	5.62	197	198.0119		198.02	0.001163	0.53	12.89	25.5
ParksCreek	Reach 2	3033.4	25y	7.43	197	198.1311		198.15	0.001019	0.56	15.93	25.5
ParksCreek	Reach 2	3033.4	50y	8.86	197	198.2661		198.28	0.000763	0.56	19.37	25.5
ParksCreek	Reach 2	3033.4	100y	10.48	197	198.4376		198.45	0.000548	0.54	23.75	25.5
ParksCreek	Reach 2	3033.4	Timmins	29.97	197	198.9748		199.02	0.001008	0.98	37.45	25.5
ParksCreek	Reach 2	3033.4	2y Flow 100	2.61	197	197.8343		197.84	0.001023	0.37	8.36	25.5

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	2981.5	2y	2.61	196.94	197.7882		197.79	0.000886	0.32	12.29	44
ParksCreek	Reach 2	2981.5	5y	4.3	196.94	197.8936		197.9	0.000855	0.39	16.93	44
ParksCreek	Reach 2	2981.5	10y	5.62	196.94	197.9665		197.97	0.000832	0.43	20.13	44
ParksCreek	Reach 2	2981.5	25y	7.43	196.94	198.0956		198.1	0.000647	0.44	25.82	44
ParksCreek	Reach 2	2981.5	50y	8.86	196.94	198.2425		198.25	0.000442	0.42	32.28	44
ParksCreek	Reach 2	2981.5	100y	10.48	196.94	198.4226		198.43	0.000302	0.4	40.2	44
ParksCreek	Reach 2	2981.5	Timmins	29.97	196.94	198.9557		198.97	0.000546	0.73	63.66	44
ParksCreek	Reach 2	2981.5	2y Flow 100	2.61	196.94	197.7882		197.79	0.000886	0.32	12.29	44
ParksCreek	Reach 2	2930.7	2y	2.61	196.94	197.7766		197.78	0.000134	0.14	40.88	147.11
ParksCreek	Reach 2	2930.7	5y	4.3	196.94	197.8835		197.88	0.000131	0.16	56.67	148
ParksCreek	Reach 2	2930.7	10y	5.62	196.94	197.9575		197.96	0.000125	0.17	67.63	148
ParksCreek	Reach 2	2930.7	25y	7.43	196.94	198.09		198.09	0.000095	0.18	87.24	148
ParksCreek	Reach 2	2930.7	50y	8.86	196.94	198.2397		198.24	0.000064	0.17	109.39	148
ParksCreek	Reach 2	2930.7	100y	10.48	196.94	198.4216		198.42	0.000044	0.16	136.32	148

ParksCreek	Reach 2	2930.7	Timmins	29.97	196.94	198.9592		198.96	0.000078	0.28	215.88	148
ParksCreek	Reach 2	2930.7	2y Flow 100	2.61	196.94	197.7766		197.78	0.000134	0.14	40.88	147.11
ParksCreek	Reach 2	2878.2	2y	2.61	196.99	197.7686		197.77	0.000174	0.16	31.89	97.9
ParksCreek	Reach 2	2878.2	5y	4.3	196.99	197.8752		197.88	0.000187	0.19	42.32	97.9
ParksCreek	Reach 2	2878.2	10y	5.62	196.99	197.9493		197.95	0.000189	0.22	49.57	97.9
ParksCreek	Reach 2	2878.2	25y	7.43	196.99	198.0833		198.08	0.000153	0.23	62.7	97.9
ParksCreek	Reach 2	2878.2	50y	8.86	196.99	198.2349		198.24	0.000107	0.22	77.54	97.9
ParksCreek	Reach 2	2878.2	100y	10.48	196.99	198.4181		198.42	0.000076	0.21	95.48	97.9
ParksCreek	Reach 2	2878.2	Timmins	29.97	196.99	198.9518		198.96	0.000146	0.39	147.72	97.9
ParksCreek	Reach 2	2878.2	2y Flow 100	2.61	196.99	197.7686		197.77	0.000174	0.16	31.89	97.9
ParksCreek	Reach 2	2822.5	2y	2.61	197.04	197.7552		197.76	0.00034	0.23	20.75	66.63
ParksCreek	Reach 2	2822.5	5y	4.3	197.04	197.8603		197.86	0.000384	0.27	27.85	68.3
ParksCreek	Reach 2	2822.5	10y	5.62	197.04	197.934		197.94	0.000383	0.3	32.88	68.3
ParksCreek	Reach 2	2822.5	25y	7.43	197.04	198.0708		198.07	0.000296	0.31	42.23	68.3
ParksCreek	Reach 2	2822.5	50y	8.86	197.04	198.2259		198.23	0.000202	0.3	52.82	68.3
ParksCreek	Reach 2	2822.5	100y	10.48	197.04	198.4116		198.41	0.00014	0.28	65.5	68.3
ParksCreek	Reach 2	2822.5	Timmins	29.97	197.04	198.9371		198.94	0.000272	0.52	101.4	68.3
ParksCreek	Reach 2	2822.5	2y Flow 100	2.61	197.04	197.7552		197.76	0.00034	0.23	20.75	66.63
ParksCreek	Reach 2	2765.6	2y	2.61	196.95	197.7358		197.74	0.000334	0.24	18.14	52.4
ParksCreek	Reach 2	2765.6	5y	4.3	196.95	197.8373		197.84	0.000401	0.3	23.46	52.4
ParksCreek	Reach 2	2765.6	10y	5.62	196.95	197.9101		197.91	0.000422	0.34	27.27	52.4
ParksCreek	Reach 2	2765.6	25y	7.43	196.95	198.0516		198.06	0.00034	0.35	34.68	52.4
ParksCreek	Reach 2	2765.6	50y	8.86	196.95	198.2122		198.22	0.000239	0.34	43.1	52.4
ParksCreek	Reach 2	2765.6	100y	10.48	196.95	198.4016		198.41	0.00017	0.33	53.02	52.4
ParksCreek	Reach 2	2765.6	Timmins	29.97	196.95	198.9144		198.93	0.000365	0.62	79.89	52.4
ParksCreek	Reach 2	2765.6	2y Flow 100	2.61	196.95	197.7358		197.74	0.000334	0.24	18.14	52.4

ParksCreek	Reach 2	2705.1	2y	2.61	196.92	197.7151		197.72	0.000355	0.26	16.33	48.75
ParksCreek	Reach 2	2705.1	5y	4.3	196.92	197.8114		197.82	0.000461	0.33	21.05	49.22
ParksCreek	Reach 2	2705.1	10y	5.62	196.92	197.8823		197.89	0.000494	0.37	24.56	49.8
ParksCreek	Reach 2	2705.1	25y	7.43	196.92	198.0297		198.03	0.000381	0.38	31.9	49.8
ParksCreek	Reach 2	2705.1	50y	8.86	196.92	198.197		198.2	0.00026	0.36	40.23	49.8
ParksCreek	Reach 2	2705.1	100y	10.48	196.92	198.3908		198.39	0.000183	0.34	49.88	49.8
ParksCreek	Reach 2	2705.1	Timmins	29.97	196.92	198.8899		198.9	0.000406	0.66	74.74	49.8
ParksCreek	Reach 2	2705.1	2y Flow 100	2.61	196.92	197.7151		197.72	0.000355	0.26	16.33	48.75
ParksCreek	Reach 2	2666.2	2y	2.61	196.95	197.6952		197.7	0.000607	0.33	10.54	29.8
ParksCreek	Reach 2	2666.2	5y	4.3	196.95	197.7834		197.79	0.000831	0.44	13.19	30.52
ParksCreek	Reach 2	2666.2	10y	5.62	196.95	197.8509		197.86	0.00091	0.5	15.26	30.6
ParksCreek	Reach 2	2666.2	25y	7.43	196.95	198.004		198.01	0.000692	0.51	19.94	30.6

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	2666.2	50y	8.86	196.95	198.1782		198.19	0.000465	0.48	25.27	30.6
ParksCreek	Reach 2	2666.2	100y	10.48	196.95	198.3763		198.38	0.000329	0.46	31.33	30.6
ParksCreek	Reach 2	2666.2	Timmins	29.97	196.95	198.847		198.88	0.0008	0.91	45.74	30.6
ParksCreek	Reach 2	2666.2	2y Flow 100	2.61	196.95	197.6952		197.7	0.000607	0.33	10.54	29.8
ParksCreek	Reach 2	2556.9	2y	2.61	197.27	197.6794		197.68	0.000096	0.11	48.51	160.67
ParksCreek	Reach 2	2556.9	5y	4.3	197.27	197.7651		197.77	0.000119	0.14	62.34	162.11
ParksCreek	Reach 2	2556.9	10y	5.62	197.27	197.8327		197.83	0.000127	0.16	73.49	167.86
ParksCreek	Reach 2	2556.9	25y	7.43	197.27	197.9941		197.99	0.000084	0.16	101.52	179.63
ParksCreek	Reach 2	2556.9	50y	8.86	197.27	198.1744		198.17	0.000048	0.15	134.28	182.77
ParksCreek	Reach 2	2556.9	100y	10.48	197.27	198.3755		198.38	0.000031	0.14	171.16	184.25
ParksCreek	Reach 2	2556.9	Timmins	29.97	197.27	198.8554		198.86	0.000065	0.25	262.45	192.6

ParksCreek	Reach 2	2556.9	2y Flow 100	2.61	197.27	197.6794		197.68	0.000096	0.11	48.51	160.67
ParksCreek	Reach 2	2536.3	2y	2.61	197.32	197.6781		197.68	0.000038	0.06	80.37	254.52
ParksCreek	Reach 2	2536.3	5y	4.3	197.32	197.7634		197.76	0.000048	0.08	102.17	256.22
ParksCreek	Reach 2	2536.3	10y	5.62	197.32	197.831		197.83	0.000049	0.1	119.5	256.74
ParksCreek	Reach 2	2536.3	25y	7.43	197.32	197.9931		197.99	0.000032	0.1	161.24	258.67
ParksCreek	Reach 2	2536.3	50y	8.86	197.32	198.1738		198.17	0.00002	0.09	208.35	260.9
ParksCreek	Reach 2	2536.3	100y	10.48	197.32	198.3751		198.38	0.000013	0.09	260.87	260.9
ParksCreek	Reach 2	2536.3	Timmins	29.97	197.32	198.8548		198.86	0.000029	0.17	386.01	260.9
ParksCreek	Reach 2	2536.3	2y Flow 100	2.61	197.32	197.6781		197.68	0.000038	0.06	80.37	254.52
ParksCreek	Reach 2	2502.4	2y	2.61	197.27	197.677		197.68	0.000018	0.04	113.33	350.08
ParksCreek	Reach 2	2502.4	5y	4.3	197.27	197.7621		197.76	0.000023	0.06	143.23	352.44
ParksCreek	Reach 2	2502.4	10y	5.62	197.27	197.8296		197.83	0.000024	0.07	167.05	353.03
ParksCreek	Reach 2	2502.4	25y	7.43	197.27	197.9922		197.99	0.000016	0.07	224.54	354.21
ParksCreek	Reach 2	2502.4	50y	8.86	197.27	198.1733		198.17	0.00001	0.06	288.79	355.37
ParksCreek	Reach 2	2502.4	100y	10.48	197.27	198.3747		198.37	0.000007	0.06	360.68	358.2
ParksCreek	Reach 2	2502.4	Timmins	29.97	197.27	198.854		198.85	0.000015	0.12	532.36	358.2
ParksCreek	Reach 2	2502.4	2y Flow 100	2.61	197.27	197.677		197.68	0.000018	0.04	113.33	350.08
ParksCreek	Reach 2	2472.7	2y	2.61	197.18	197.6729		197.68	0.000379	0.25	16.56	55.25
ParksCreek	Reach 2	2472.7	5y	4.3	197.18	197.756		197.76	0.0005	0.33	21.29	57.64
ParksCreek	Reach 2	2472.7	10y	5.62	197.18	197.8226		197.83	0.000525	0.36	25.15	58.29
ParksCreek	Reach 2	2472.7	25y	7.43	197.18	197.9863		197.99	0.000347	0.35	34.8	59.44
ParksCreek	Reach 2	2472.7	50y	8.86	197.18	198.1688		198.17	0.000215	0.32	45.75	60.54
ParksCreek	Reach 2	2472.7	100y	10.48	197.18	198.3712		198.37	0.00015	0.29	58.41	65.43
ParksCreek	Reach 2	2472.7	Timmins	29.97	197.18	198.8421		198.85	0.000319	0.55	89.32	65.78
ParksCreek	Reach 2	2472.7	2y Flow 100	2.61	197.18	197.6729		197.68	0.000379	0.25	16.56	55.25

ParksCreek	Reach 2	2453.5	2y	2.61	197.16	197.6663		197.67	0.000527	0.26	16.03	53.8
ParksCreek	Reach 2	2453.5	5y	4.3	197.16	197.7476		197.75	0.000662	0.34	20.42	54.06
ParksCreek	Reach 2	2453.5	10y	5.62	197.16	197.814		197.82	0.000672	0.38	24.02	55.23
ParksCreek	Reach 2	2453.5	25y	7.43	197.16	197.9809		197.99	0.000415	0.36	33.45	57.38
ParksCreek	Reach 2	2453.5	50y	8.86	197.16	198.1656		198.17	0.000254	0.32	44.29	60.17
ParksCreek	Reach 2	2453.5	100y	10.48	197.16	198.369		198.37	0.000165	0.29	56.81	62.26
ParksCreek	Reach 2	2453.5	Timmins	29.97	197.16	198.8373		198.85	0.000347	0.56	86.5	64.27
ParksCreek	Reach 2	2453.5	2y Flow 100	2.61	197.16	197.6663		197.67	0.000527	0.26	16.03	53.8
ParksCreek	Reach 2	2430.4	2y	2.61	197.17	197.6544		197.66	0.000362	0.23	19.28	63.59
ParksCreek	Reach 2	2430.4	5y	4.3	197.17	197.7322		197.74	0.000484	0.3	24.25	63.95
ParksCreek	Reach 2	2430.4	10y	5.62	197.17	197.7983		197.8	0.0005	0.34	28.48	64.25
ParksCreek	Reach 2	2430.4	25y	7.43	197.17	197.9715		197.97	0.000305	0.31	40.14	69.13
ParksCreek	Reach 2	2430.4	50y	8.86	197.17	198.1601		198.16	0.00018	0.28	53.48	72.76
ParksCreek	Reach 2	2430.4	100y	10.48	197.17	198.3656		198.37	0.000118	0.26	68.74	76.98
ParksCreek	Reach 2	2430.4	Timmins	29.97	197.17	198.8309		198.84	0.000256	0.49	105.47	80.7
ParksCreek	Reach 2	2430.4	2y Flow 100	2.61	197.17	197.6544		197.66	0.000362	0.23	19.28	63.59

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	2397.7	2y	2.61	197.16	197.6376		197.64	0.000502	0.24	19.71	92.81
ParksCreek	Reach 2	2397.7	5y	4.3	197.16	197.7114		197.71	0.000565	0.29	26.63	94.12
ParksCreek	Reach 2	2397.7	10y	5.62	197.16	197.7783		197.78	0.000505	0.31	32.94	94.32
ParksCreek	Reach 2	2397.7	25y	7.43	197.16	197.9613		197.96	0.000236	0.26	50.24	94.77
ParksCreek	Reach 2	2397.7	50y	8.86	197.16	198.1546		198.16	0.000124	0.23	68.6	95.24
ParksCreek	Reach 2	2397.7	100y	10.48	197.16	198.3622		198.36	0.000077	0.21	89.01	105.27
ParksCreek	Reach 2	2397.7	Timmins	29.97	197.16	198.8248		198.83	0.000163	0.38	139.55	112.17
ParksCreek	Reach 2	2397.7	2y Flow 100	2.61	197.16	197.6376		197.64	0.000502	0.24	19.71	92.81

ParksCreek	Reach 2	2357	2y	2.61	197.24	197.6124		197.61	0.000648	0.26	21.77	117.46
ParksCreek	Reach 2	2357	5y	4.3	197.24	197.6837		197.69	0.000675	0.31	30.35	121.48
ParksCreek	Reach 2	2357	10y	5.62	197.24	197.7554		197.76	0.000528	0.31	39.06	121.9
ParksCreek	Reach 2	2357	25y	7.43	197.24	197.9518		197.95	0.000202	0.24	63.3	124.28
ParksCreek	Reach 2	2357	50y	8.86	197.24	198.1499		198.15	0.0001	0.2	88.09	125.81
ParksCreek	Reach 2	2357	100y	10.48	197.24	198.3595		198.36	0.00006	0.18	114.6	127.38
ParksCreek	Reach 2	2357	Timmins	29.97	197.24	198.8194		198.82	0.000129	0.33	174.67	133.87
ParksCreek	Reach 2	2357	2y Flow 100	2.61	197.24	197.6124		197.61	0.000648	0.26	21.77	117.46
ParksCreek	Reach 2	2319.7	2y	2.61	197.16	197.5876		197.59	0.000603	0.27	23.47	130.07
ParksCreek	Reach 2	2319.7	5y	4.3	197.16	197.658		197.66	0.000618	0.31	32.78	133.24
ParksCreek	Reach 2	2319.7	10y	5.62	197.16	197.7359		197.74	0.000457	0.3	43.18	133.68
ParksCreek	Reach 2	2319.7	25y	7.43	197.16	197.9447		197.95	0.000164	0.23	71.11	133.89
ParksCreek	Reach 2	2319.7	50y	8.86	197.16	198.1464		198.15	0.000082	0.19	98.15	134.4
ParksCreek	Reach 2	2319.7	100y	10.48	197.16	198.3573		198.36	0.000051	0.17	126.69	136.17
ParksCreek	Reach 2	2319.7	Timmins	29.97	197.16	198.8148		198.82	0.000114	0.31	189.95	140.67
ParksCreek	Reach 2	2319.7	2y Flow 100	2.61	197.16	197.5876		197.59	0.000603	0.27	23.47	130.07
ParksCreek	Reach 2	2284	2y	2.61	197.2	197.5685		197.57	0.000467	0.22	28.51	147.03
ParksCreek	Reach 2	2284	5y	4.3	197.2	197.6385		197.64	0.000482	0.25	38.9	149.9
ParksCreek	Reach 2	2284	10y	5.62	197.2	197.722		197.72	0.000339	0.24	51.51	152.07
ParksCreek	Reach 2	2284	25y	7.43	197.2	197.9399		197.94	0.000118	0.19	84.94	154.36
ParksCreek	Reach 2	2284	50y	8.86	197.2	198.144		198.14	0.00006	0.16	116.62	155.93
ParksCreek	Reach 2	2284	100y	10.48	197.2	198.3559		198.36	0.000037	0.14	149.83	157.64
ParksCreek	Reach 2	2284	Timmins	29.97	197.2	198.8116		198.81	0.000084	0.27	222.81	162.39
ParksCreek	Reach 2	2284	2y Flow 100	2.61	197.2	197.5685		197.57	0.000468	0.22	28.51	147.03
ParksCreek	Reach 2	2242.2	2y	2.61	197.15	197.557		197.56	0.000201	0.16	39.12	187.92

ParksCreek	Reach 2	2242.2	5y	4.3	197.15	197.6258		197.63	0.000232	0.19	52.25	193.4
ParksCreek	Reach 2	2242.2	10y	5.62	197.15	197.7129		197.71	0.000168	0.19	69.37	197.69
ParksCreek	Reach 2	2242.2	25y	7.43	197.15	197.9367		197.94	0.00006	0.15	114.18	201.15
ParksCreek	Reach 2	2242.2	50y	8.86	197.15	198.1424		198.14	0.000032	0.13	155.94	204.24
ParksCreek	Reach 2	2242.2	100y	10.48	197.15	198.3549		198.36	0.00002	0.12	199.88	211.43
ParksCreek	Reach 2	2242.2	Timmins	29.97	197.15	198.8095		198.81	0.000046	0.22	299.35	221.85
ParksCreek	Reach 2	2242.2	2y Flow 100	2.61	197.15	197.557		197.56	0.000201	0.16	39.11	187.92
ParksCreek	Reach 2	2200.1	2y	2.61	197.19	197.5488		197.55	0.000234	0.16	37.21	189.72
ParksCreek	Reach 2	2200.1	5y	4.3	197.19	197.6164		197.62	0.000264	0.19	50.35	197.92
ParksCreek	Reach 2	2200.1	10y	5.62	197.19	197.7064		197.71	0.000174	0.18	68.23	199.2
ParksCreek	Reach 2	2200.1	25y	7.43	197.19	197.9345		197.93	0.000058	0.14	113.8	200.42
ParksCreek	Reach 2	2200.1	50y	8.86	197.19	198.1412		198.14	0.00003	0.12	155.35	201.46
ParksCreek	Reach 2	2200.1	100y	10.48	197.19	198.3542		198.35	0.000019	0.11	198.34	202.3
ParksCreek	Reach 2	2200.1	Timmins	29.97	197.19	198.8077		198.81	0.000045	0.21	292.87	216.07
ParksCreek	Reach 2	2200.1	2y Flow 100	2.61	197.19	197.5488		197.55	0.000234	0.16	37.21	189.71
ParksCreek	Reach 2	2146.5	2y	2.61	197.18	197.5329		197.53	0.000483	0.22	22.03	107.21
ParksCreek	Reach 2	2146.5	5y	4.3	197.18	197.598		197.6	0.000563	0.27	29.13	110.29
ParksCreek	Reach 2	2146.5	10y	5.62	197.18	197.6942		197.7	0.000367	0.26	39.87	112.89
ParksCreek	Reach 2	2146.5	25y	7.43	197.18	197.9299		197.93	0.000127	0.21	68.01	122.73
ParksCreek	Reach 2	2146.5	50y	8.86	197.18	198.1387		198.14	0.000065	0.18	93.78	124.17

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	2146.5	100y	10.48	197.18	198.3525		198.35	0.000041	0.16	120.48	125.65
ParksCreek	Reach 2	2146.5	Timmins	29.97	197.18	198.8031		198.81	0.000098	0.32	177.94	129.33
ParksCreek	Reach 2	2146.5	2y Flow 100	2.61	197.18	197.5329		197.53	0.000483	0.22	22.02	107.2

ParksCreek	Reach 2	2091.9	2y	2.61	197.18	197.4996		197.5	0.000789	0.26	20.96	110.43
ParksCreek	Reach 2	2091.9	5y	4.3	197.18	197.5593		197.56	0.000914	0.32	27.62	112.64
ParksCreek	Reach 2	2091.9	10y	5.62	197.18	197.6716		197.67	0.00048	0.27	40.68	118.52
ParksCreek	Reach 2	2091.9	25y	7.43	197.18	197.9229		197.92	0.000139	0.21	71.08	123.62
ParksCreek	Reach 2	2091.9	50y	8.86	197.18	198.1351		198.14	0.000072	0.18	97.66	127.3
ParksCreek	Reach 2	2091.9	100y	10.48	197.18	198.3502		198.35	0.000045	0.17	125.22	129
ParksCreek	Reach 2	2091.9	Timmins	29.97	197.18	198.7977		198.8	0.000108	0.33	183.75	133.42
ParksCreek	Reach 2	2091.9	2y Flow 100	2.61	197.18	197.4996		197.5	0.00079	0.26	20.96	110.43
ParksCreek	Reach 2	2043.7	2y	2.61	197.16	197.3336	197.33	197.37	0.05231	1.19	4.47	59.54
ParksCreek	Reach 2	2043.7	5y	4.3	197.16	197.3623	197.36	197.41	0.056638	1.4	6.27	65.51
ParksCreek	Reach 2	2043.7	10y	5.62	197.16	197.6331		197.64	0.001163	0.37	29.46	102.14
ParksCreek	Reach 2	2043.7	25y	7.43	197.16	197.9132		197.91	0.000233	0.26	61.56	132.24
ParksCreek	Reach 2	2043.7	50y	8.86	197.16	198.1304		198.13	0.000108	0.22	91.63	144.21
ParksCreek	Reach 2	2043.7	100y	10.48	197.16	198.3474		198.35	0.000061	0.19	124.03	152.81
ParksCreek	Reach 2	2043.7	Timmins	29.97	197.16	198.7918		198.79	0.000125	0.35	194.32	163.42
ParksCreek	Reach 2	2043.7	2y Flow 100	2.61	197.16	197.3336	197.33	197.37	0.05231	1.19	4.47	59.54
ParksCreek	Reach 2	1998.6	2y	2.61	196.28	197.0166		197.02	0.000513	0.32	15.45	61.46
ParksCreek	Reach 2	1998.6	5y	4.3	196.28	197.3549		197.36	0.000124	0.22	43.48	104.44
ParksCreek	Reach 2	1998.6	10y	5.62	196.28	197.6289		197.63	0.000052	0.16	76.12	129.64
ParksCreek	Reach 2	1998.6	25y	7.43	196.28	197.9112		197.91	0.000031	0.15	118.24	164.88
ParksCreek	Reach 2	1998.6	50y	8.86	196.28	198.1291		198.13	0.000021	0.14	156.2	178.6
ParksCreek	Reach 2	1998.6	100y	10.48	196.28	198.3465		198.35	0.000016	0.13	195.52	183.4
ParksCreek	Reach 2	1998.6	Timmins	29.97	196.28	198.7897		198.79	0.000045	0.26	278.59	190.75
ParksCreek	Reach 2	1998.6	2y Flow 100	2.61	196.28	197.1974		197.2	0.000128	0.19	28.53	83.07
ParksCreek	Reach 2	1950.9	2y	2.61	196.17	197.0044		197.01	0.00018	0.24	24.48	75.78
ParksCreek	Reach 2	1950.9	5y	4.3	196.17	197.3516		197.35	0.000053	0.17	73.67	249.77

ParksCreek	Reach 2	1950.9	10y	5.62	196.17	197.6279		197.63	0.000018	0.12	150.13	291.34
ParksCreek	Reach 2	1950.9	25y	7.43	196.17	197.9107		197.91	0.00001	0.1	235.86	318.23
ParksCreek	Reach 2	1950.9	50y	8.86	196.17	198.1288		198.13	0.000006	0.09	306.45	328.09
ParksCreek	Reach 2	1950.9	100y	10.48	196.17	198.3463		198.35	0.000005	0.08	379.15	341.1
ParksCreek	Reach 2	1950.9	Timmins	29.97	196.17	198.7892		198.79	0.000015	0.16	542	381.06
ParksCreek	Reach 2	1950.9	2y Flow 100	2.61	196.17	197.1941		197.19	0.000051	0.15	42.06	137.48
ParksCreek	Reach 2	1912.6	2y	2.61	196.19	196.9969		197	0.000222	0.26	23.44	65.82
ParksCreek	Reach 2	1912.6	5y	4.3	196.19	197.3497		197.35	0.000054	0.17	83.26	260.83
ParksCreek	Reach 2	1912.6	10y	5.62	196.19	197.6272		197.63	0.000019	0.12	165.81	321.87
ParksCreek	Reach 2	1912.6	25y	7.43	196.19	197.9104		197.91	0.000009	0.1	264.96	372.09
ParksCreek	Reach 2	1912.6	50y	8.86	196.19	198.1286		198.13	0.000006	0.08	346.23	372.71
ParksCreek	Reach 2	1912.6	100y	10.48	196.19	198.3462		198.35	0.000004	0.07	427.43	373.76
ParksCreek	Reach 2	1912.6	Timmins	29.97	196.19	198.7888		198.79	0.000011	0.14	593.34	375.82
ParksCreek	Reach 2	1912.6	2y Flow 100	2.61	196.19	197.192		197.19	0.00006	0.16	45.61	211.11
ParksCreek	Reach 2	1872.5	2y	2.61	196.23	196.9835		196.99	0.000393	0.32	13.59	39.86
ParksCreek	Reach 2	1872.5	5y	4.3	196.23	197.3447		197.35	0.000143	0.26	33.51	74.88
ParksCreek	Reach 2	1872.5	10y	5.62	196.23	197.6248		197.63	0.00007	0.22	63.2	141.5
ParksCreek	Reach 2	1872.5	25y	7.43	196.23	197.909		197.91	0.000039	0.19	111.29	202.94
ParksCreek	Reach 2	1872.5	50y	8.86	196.23	198.1277		198.13	0.000025	0.17	163.5	276.47
ParksCreek	Reach 2	1872.5	100y	10.48	196.23	198.3456		198.35	0.000017	0.15	236.04	370.36
ParksCreek	Reach 2	1872.5	Timmins	29.97	196.23	198.7875		198.79	0.000035	0.25	402.71	378.79
ParksCreek	Reach 2	1872.5	2y Flow 100	2.61	196.23	197.1879		197.19	0.000119	0.21	23.51	56.04
ParksCreek	Reach 2	1859.7	2y	2.61	196.2	196.9809		196.98	0.000161	0.23	11.37	20.83

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)

ParksCreek	Reach 2	1859.7	5y	4.3	196.2	197.3428		197.35	0.000089	0.23	24.76	47.05
ParksCreek	Reach 2	1859.7	10y	5.62	196.2	197.623		197.63	0.000057	0.22	39.56	66.81
ParksCreek	Reach 2	1859.7	25y	7.43	196.2	197.9073		197.91	0.000042	0.21	66.61	185.54
ParksCreek	Reach 2	1859.7	50y	8.86	196.2	198.1267		198.13	0.000026	0.18	141.11	381.86
ParksCreek	Reach 2	1859.7	100y	10.48	196.2	198.3451		198.35	0.000015	0.15	224.64	384.92
ParksCreek	Reach 2	1859.7	Timmins	29.97	196.2	198.7867		198.79	0.000029	0.23	401.23	422.78
ParksCreek	Reach 2	1859.7	2y Flow 100	2.61	196.2	197.1867		197.19	0.000062	0.17	17.77	41.24
ParksCreek	Reach 2	1853.4	2y	2.61	196.2	196.9225	196.65	196.98	0.00337	1.02	2.55	9.72
ParksCreek	Reach 2	1853.4	5y	4.3	196.2	197.2796	196.78	197.34	0.002017	1.07	4.01	10.72
ParksCreek	Reach 2	1853.4	10y	5.62	196.2	197.5575	196.88	197.62	0.001498	1.09	5.15	32.63
ParksCreek	Reach 2	1853.4	25y	7.43	196.2	197.8297	197	197.9	0.001363	1.19	6.27	90.58
ParksCreek	Reach 2	1853.4	50y	8.86	196.2	198.0409	197.08	198.12	0.001258	1.24	7.14	290.9
ParksCreek	Reach 2	1853.4	100y	10.48	196.2	198.3431	197.17	198.35	0.000072	0.31	140.87	394.28
ParksCreek	Reach 2	1853.4	Timmins	29.97	196.2	198.7859	198.06	198.79	0.000055	0.3	360.52	450.53
ParksCreek	Reach 2	1853.4	2y Flow 100	2.61	196.2	197.1563	196.65	197.18	0.001164	0.74	3.51	10.3
ParksCreek	Reach 2	1846.2	Railway Emba	Culvert								
ParksCreek	Reach 2	1838.9	2y	2.61	196.08	196.7528	196.49	196.81	0.003818	1.05	2.49	5.78
ParksCreek	Reach 2	1838.9	5y	4.3	196.08	197.0037	196.63	197.08	0.003268	1.22	3.52	6.32
ParksCreek	Reach 2	1838.9	10y	5.62	196.08	197.2528	196.72	197.33	0.002386	1.24	4.54	6.85
ParksCreek	Reach 2	1838.9	25y	7.43	196.08	197.3873	196.84	197.5	0.002846	1.46	5.09	7.16
ParksCreek	Reach 2	1838.9	50y	8.86	196.08	197.4998	196.93	197.63	0.003028	1.6	5.55	7.44
ParksCreek	Reach 2	1838.9	100y	10.48	196.08	197.6418	197.02	197.79	0.00304	1.71	6.13	7.79
ParksCreek	Reach 2	1838.9	Timmins	29.97	196.08	197.9039	197.9	198.79	0.014509	4.16	7.21	147.47
ParksCreek	Reach 2	1838.9	2y Flow 100	2.61	196.08	197.0744	196.49	197.1	0.000924	0.69	3.8	6.47
ParksCreek	Reach 2	1829.4	2y	2.61	196	196.7901		196.79	0.000055	0.12	70.4	321.03
ParksCreek	Reach 2	1829.4	5y	4.3	196	197.0565		197.06	0.000014	0.07	164.83	381.58
ParksCreek	Reach 2	1829.4	10y	5.62	196	197.3073		197.31	0.000006	0.05	264.54	419.54
ParksCreek	Reach 2	1829.4	25y	7.43	196	197.463		197.46	0.000005	0.05	331.54	439.63

ParksCreek	Reach 2	1829.4	50y	8.86	196	197.5903		197.59	0.000005	0.05	388.06	448.28
ParksCreek	Reach 2	1829.4	100y	10.48	196	197.7457		197.75	0.000004	0.05	458.37	456.65
ParksCreek	Reach 2	1829.4	Timmins	29.97	196	198.1748		198.18	0.00001	0.11	667.74	560.42
ParksCreek	Reach 2	1829.4	2y Flow 100	2.61	196	197.091		197.09	0.000004	0.04	178.1	385.86
ParksCreek	Reach 2	1825.8	2y	2.61	195.97	196.7682	196.31	196.79	0.001037	0.62	4.21	9.44
ParksCreek	Reach 2	1825.8	5y	4.3	195.97	197.0245	196.43	197.05	0.001023	0.75	5.7	11.43
ParksCreek	Reach 2	1825.8	10y	5.62	195.97	197.2725	196.5	197.3	0.000822	0.79	7.15	14.89
ParksCreek	Reach 2	1825.8	25y	7.43	195.97	197.4143	196.6	197.46	0.000999	0.93	7.97	16.72
ParksCreek	Reach 2	1825.8	50y	8.86	195.97	197.5316	196.66	197.59	0.001078	1.02	8.66	18
ParksCreek	Reach 2	1825.8	100y	10.48	195.97	197.6776	196.74	197.74	0.001105	1.1	9.51	19.56
ParksCreek	Reach 2	1825.8	Timmins	29.97	195.97	198.1327	197.44	198.17	0.000988	0.98	84.14	360.65
ParksCreek	Reach 2	1825.8	2y Flow 100	2.61	195.97	197.0805	196.31	197.09	0.000313	0.43	6.03	12.02
ParksCreek	Reach 2	1819.5	Railway Emba	Culvert								
ParksCreek	Reach 2	1812.6	2y	2.61	195.9	196.7416	196.38	196.77	0.002507	0.78	3.36	6.33
ParksCreek	Reach 2	1812.6	5y	4.3	195.9	196.9791	196.53	197.02	0.002125	0.87	4.93	7.54
ParksCreek	Reach 2	1812.6	10y	5.62	195.9	197.1787	196.62	197.22	0.001614	0.89	6.29	10.71
ParksCreek	Reach 2	1812.6	25y	7.43	195.9	197.2394	196.73	197.3	0.002283	1.11	6.7	14.18
ParksCreek	Reach 2	1812.6	50y	8.86	195.9	197.2737	196.8	197.36	0.002894	1.28	6.93	15.11
ParksCreek	Reach 2	1812.6	100y	10.48	195.9	197.3034	196.88	197.41	0.003682	1.47	7.14	15.72
ParksCreek	Reach 2	1812.6	Timmins	29.97	195.9	197.603	197.51	198.15	0.013035	3.27	9.17	19.76
ParksCreek	Reach 2	1812.6	2y Flow 100	2.61	195.9	197.0626	196.38	197.07	0.000544	0.47	5.5	7.86
ParksCreek	Reach 2	1808.5	2y	2.61	195.89	196.7412		196.76	0.001751	0.63	6.79	50.23
ParksCreek	Reach 2	1808.5	5y	4.3	195.89	196.9991		197	0.000446	0.37	29.65	139.17

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	1808.5	10y	5.62	195.89	197.205		197.21	0.000109	0.21	91.44	410.98
ParksCreek	Reach 2	1808.5	25y	7.43	195.89	197.2812		197.28	0.000098	0.2	124.43	450.2
ParksCreek	Reach 2	1808.5	50y	8.86	195.89	197.3298		197.33	0.000094	0.2	146.56	459.29

ParksCreek	Reach 2	1808.5	100y	10.48	195.89	197.3782		197.38	0.00009	0.2	168.85	461.47
ParksCreek	Reach 2	1808.5	Timmins	29.97	195.89	197.9827		197.98	0.000036	0.18	473.3	544.05
ParksCreek	Reach 2	1808.5	2y Flow 100	2.61	195.89	197.0691		197.07	0.000089	0.18	43.47	262.47
ParksCreek	Reach 2	1769.5	2y	2.61	195.93	196.7216		196.72	0.00046	0.31	16.88	55.62
ParksCreek	Reach 2	1769.5	5y	4.3	195.93	196.9892		196.99	0.000222	0.27	35.29	98.26
ParksCreek	Reach 2	1769.5	10y	5.62	195.93	197.2014		197.2	0.00009	0.21	77.61	309.43
ParksCreek	Reach 2	1769.5	25y	7.43	195.93	197.2775		197.28	0.000096	0.22	101.9	323.99
ParksCreek	Reach 2	1769.5	50y	8.86	195.93	197.326		197.33	0.000097	0.23	117.64	324.46
ParksCreek	Reach 2	1769.5	100y	10.48	195.93	197.3744		197.38	0.000099	0.24	133.36	325.02
ParksCreek	Reach 2	1769.5	Timmins	29.97	195.93	197.9807		197.98	0.000057	0.25	342.48	373.43
ParksCreek	Reach 2	1769.5	2y Flow 100	2.61	195.93	197.067		197.07	0.000049	0.13	44.9	158.45
ParksCreek	Reach 2	1734.4	2y	2.61	195.85	196.7073		196.71	0.000341	0.29	13.96	41.63
ParksCreek	Reach 2	1734.4	5y	4.3	195.85	196.9814		196.98	0.000179	0.28	31.66	104.2
ParksCreek	Reach 2	1734.4	10y	5.62	195.85	197.1985		197.2	0.000071	0.2	87.35	346.06
ParksCreek	Reach 2	1734.4	25y	7.43	195.85	197.2746		197.28	0.000073	0.22	114.24	355.52
ParksCreek	Reach 2	1734.4	50y	8.86	195.85	197.3232		197.32	0.000074	0.22	131.53	356.25
ParksCreek	Reach 2	1734.4	100y	10.48	195.85	197.3715		197.37	0.000076	0.23	148.77	356.5
ParksCreek	Reach 2	1734.4	Timmins	29.97	195.85	197.9792		197.98	0.000045	0.24	365.83	357.82
ParksCreek	Reach 2	1734.4	2y Flow 100	2.61	195.85	197.0653		197.07	0.00004	0.14	46.06	250.32
ParksCreek	Reach 2	1698.5	2y	2.61	195.77	196.6961		196.7	0.000299	0.32	15.26	51.32
ParksCreek	Reach 2	1698.5	5y	4.3	195.77	196.9753		196.98	0.000175	0.31	34.87	108.55
ParksCreek	Reach 2	1698.5	10y	5.62	195.77	197.196		197.2	0.000077	0.23	90.98	325.56
ParksCreek	Reach 2	1698.5	25y	7.43	195.77	197.2722		197.27	0.000077	0.24	116.08	331.55
ParksCreek	Reach 2	1698.5	50y	8.86	195.77	197.3208		197.32	0.000079	0.25	132.26	334.77
ParksCreek	Reach 2	1698.5	100y	10.48	195.77	197.3691		197.37	0.000081	0.26	148.55	338.37
ParksCreek	Reach 2	1698.5	Timmins	29.97	195.77	197.9779		197.98	0.000049	0.26	360.14	350.74

ParksCreek	Reach 2	1698.5	2y Flow 100	2.61	195.77	197.0639		197.06	0.00004	0.16	50.17	263.87
ParksCreek	Reach 2	1673.1	2y	2.61	195.82	196.657		196.68	0.002589	0.68	4.22	13.02
ParksCreek	Reach 2	1673.1	5y	4.3	195.82	196.9585		196.97	0.000721	0.52	16.64	69.35
ParksCreek	Reach 2	1673.1	10y	5.62	195.82	197.1909		197.19	0.0002	0.33	57.95	278.04
ParksCreek	Reach 2	1673.1	25y	7.43	195.82	197.2676		197.27	0.000183	0.33	80.78	312
ParksCreek	Reach 2	1673.1	50y	8.86	195.82	197.3162		197.32	0.000179	0.34	96.28	323.31
ParksCreek	Reach 2	1673.1	100y	10.48	195.82	197.3646		197.37	0.000175	0.34	112.16	330.82
ParksCreek	Reach 2	1673.1	Timmins	29.97	195.82	197.9758		197.98	0.000069	0.29	330.38	364.79
ParksCreek	Reach 2	1673.1	2y Flow 100	2.61	195.82	197.0607		197.06	0.000129	0.24	27.71	168.63
ParksCreek	Reach 2	1670	2y	2.61	195.72	196.6587	196.16	196.67	0.000827	0.54	4.85	18.13
ParksCreek	Reach 2	1670	5y	4.3	195.72	196.9458	196.29	196.97	0.000708	0.63	6.86	55.08
ParksCreek	Reach 2	1670	10y	5.62	195.72	197.1678	196.37	197.19	0.000613	0.67	8.41	73.43
ParksCreek	Reach 2	1670	25y	7.43	195.72	197.2293	196.45	197.27	0.000908	0.84	8.84	76.25
ParksCreek	Reach 2	1670	50y	8.86	195.72	197.3093	196.51	197.32	0.000318	0.49	42.56	85.61
ParksCreek	Reach 2	1670	100y	10.48	195.72	197.3556	196.57	197.37	0.00038	0.55	46.73	94.57
ParksCreek	Reach 2	1670	Timmins	29.97	195.72	197.9678	197.2	197.98	0.000296	0.63	168.55	319.49
ParksCreek	Reach 2	1670	2y Flow 100	2.61	195.72	197.0558	196.16	197.06	0.000183	0.34	7.63	65.12
ParksCreek	Reach 2	1660.6	Ped. Bridge	Culvert								
ParksCreek	Reach 2	1647.8	2y	2.61	195.8	196.6178	196.18	196.64	0.001059	0.62	4.49	44.78
ParksCreek	Reach 2	1647.8	5y	4.3	195.8	196.8177	196.3	196.85	0.001236	0.79	5.83	92.49
ParksCreek	Reach 2	1647.8	10y	5.62	195.8	196.9375	196.37	196.98	0.001388	0.91	6.63	134.77
ParksCreek	Reach 2	1647.8	25y	7.43	195.8	197.0649	196.46	197.12	0.001634	1.07	7.49	167.01
ParksCreek	Reach 2	1647.8	50y	8.86	195.8	197.1446	196.52	197.21	0.001853	1.19	8.02	183.8

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	1647.8	100y	10.48	195.8	197.2757	196.59	197.28	0.000162	0.36	97.48	201.03
ParksCreek	Reach 2	1647.8	Timmins	29.97	195.8	197.9732	197.26	197.97	0.000083	0.34	289.09	371

ParksCreek	Reach 2	1647.8	2y Flow 100	2.61	195.8	197.0071	196.18	197.01	0.00024	0.39	7.1	149.82
ParksCreek	Reach 2	1641.3	2y	2.61	195.68	196.624		196.63	0.000467	0.36	16.75	72.32
ParksCreek	Reach 2	1641.3	5y	4.3	195.68	196.8341		196.84	0.000272	0.33	35.22	115.48
ParksCreek	Reach 2	1641.3	10y	5.62	195.68	196.9617		196.96	0.000202	0.31	52.48	150.93
ParksCreek	Reach 2	1641.3	25y	7.43	195.68	197.1005		197.1	0.000149	0.3	75.12	171.48
ParksCreek	Reach 2	1641.3	50y	8.86	195.68	197.1899		197.19	0.000127	0.29	91.25	192.56
ParksCreek	Reach 2	1641.3	100y	10.48	195.68	197.2754		197.28	0.000131	0.31	108.39	204.69
ParksCreek	Reach 2	1641.3	Timmins	29.97	195.68	197.9729		197.97	0.000073	0.31	301.68	381.62
ParksCreek	Reach 2	1641.3	2y Flow 100	2.61	195.68	197.0118		197.01	0.000032	0.13	60.26	161.89
ParksCreek	Reach 2	1596.5	2y	2.61	195.47	196.6144		196.62	0.000133	0.24	13.97	33.08
ParksCreek	Reach 2	1596.5	5y	4.3	195.47	196.8236		196.83	0.000148	0.3	21.47	41.21
ParksCreek	Reach 2	1596.5	10y	5.62	195.47	196.9503		196.96	0.000161	0.34	27.71	57.07
ParksCreek	Reach 2	1596.5	25y	7.43	195.47	197.0889		197.09	0.000168	0.37	36.55	70.16
ParksCreek	Reach 2	1596.5	50y	8.86	195.47	197.1779		197.18	0.000175	0.39	43.08	77.41
ParksCreek	Reach 2	1596.5	100y	10.48	195.47	197.262		197.27	0.000194	0.43	50.3	96.1
ParksCreek	Reach 2	1596.5	Timmins	29.97	195.47	197.9633		197.97	0.000149	0.49	213.67	381.32
ParksCreek	Reach 2	1596.5	2y Flow 100	2.61	195.47	197.0099		197.01	0.000028	0.14	31.28	63.22
ParksCreek	Reach 2	1548.1	2y	2.61	195.53	196.6011		196.61	0.00035	0.34	7.95	15.81
ParksCreek	Reach 2	1548.1	5y	4.3	195.53	196.8073		196.82	0.000373	0.42	11.79	22.29
ParksCreek	Reach 2	1548.1	10y	5.62	195.53	196.9321		196.94	0.00039	0.47	15.06	29.62
ParksCreek	Reach 2	1548.1	25y	7.43	195.53	197.0681		197.08	0.000415	0.53	19.94	41.46
ParksCreek	Reach 2	1548.1	50y	8.86	195.53	197.1555		197.17	0.000432	0.57	23.99	54.06
ParksCreek	Reach 2	1548.1	100y	10.48	195.53	197.238		197.25	0.000451	0.61	29.32	80.18
ParksCreek	Reach 2	1548.1	Timmins	29.97	195.53	197.9538		197.96	0.000192	0.53	217.68	430.31
ParksCreek	Reach 2	1548.1	2y Flow 100	2.61	195.53	197.0067		197.01	0.000064	0.2	17.54	36.49

ParksCreek	Reach 2	1493.8	2y	2.61	195.53	196.5943		196.6	0.00011	0.18	19.71	41.1
ParksCreek	Reach 2	1493.8	5y	4.3	195.53	196.8024		196.8	0.000102	0.21	28.95	47.79
ParksCreek	Reach 2	1493.8	10y	5.62	195.53	196.928		196.93	0.000104	0.24	35.11	50.51
ParksCreek	Reach 2	1493.8	25y	7.43	195.53	197.0645		197.07	0.000112	0.27	42.52	60.19
ParksCreek	Reach 2	1493.8	50y	8.86	195.53	197.152		197.16	0.000119	0.29	48.22	69.26
ParksCreek	Reach 2	1493.8	100y	10.48	195.53	197.2343		197.24	0.000128	0.32	54.47	82.41
ParksCreek	Reach 2	1493.8	Timmins	29.97	195.53	197.9463		197.95	0.000114	0.4	210.77	346.16
ParksCreek	Reach 2	1493.8	2y Flow 100	2.61	195.53	197.0061		197.01	0.000017	0.1	39.17	54.3
ParksCreek	Reach 2	1435.4	2y	2.61	195.51	196.5821		196.59	0.000244	0.29	11.58	24.23
ParksCreek	Reach 2	1435.4	5y	4.3	195.51	196.7891		196.79	0.000262	0.35	17.47	33.22
ParksCreek	Reach 2	1435.4	10y	5.62	195.51	196.9139		196.92	0.000272	0.38	22.42	46.79
ParksCreek	Reach 2	1435.4	25y	7.43	195.51	197.0493		197.06	0.000283	0.42	29.74	62.38
ParksCreek	Reach 2	1435.4	50y	8.86	195.51	197.1361		197.14	0.000294	0.45	36.41	102.52
ParksCreek	Reach 2	1435.4	100y	10.48	195.51	197.2182		197.23	0.000297	0.47	47.46	155.24
ParksCreek	Reach 2	1435.4	Timmins	29.97	195.51	197.9416		197.94	0.000093	0.29	318.07	473.09
ParksCreek	Reach 2	1435.4	2y Flow 100	2.61	195.51	197.0039		197	0.000041	0.16	27.04	56.28
ParksCreek	Reach 2	1393.1	2y	2.61	195.65	196.5578		196.57	0.000755	0.45	7.1	18.86
ParksCreek	Reach 2	1393.1	5y	4.3	195.65	196.7632		196.78	0.00068	0.51	11.81	29.32
ParksCreek	Reach 2	1393.1	10y	5.62	195.65	196.8865		196.9	0.000661	0.56	16.51	46.58
ParksCreek	Reach 2	1393.1	25y	7.43	195.65	197.0209		197.04	0.000634	0.6	23.82	65.41
ParksCreek	Reach 2	1393.1	50y	8.86	195.65	197.1079		197.12	0.000601	0.61	30.18	75.73
ParksCreek	Reach 2	1393.1	100y	10.48	195.65	197.1902		197.2	0.000571	0.63	36.78	85.28
ParksCreek	Reach 2	1393.1	Timmins	29.97	195.65	197.9282		197.93	0.000215	0.53	196.45	312.57
ParksCreek	Reach 2	1393.1	2y Flow 100	2.61	195.65	197.0001		197	0.000085	0.22	22.51	61.31
ParksCreek	Reach 2	1386.5	2y	2.61	195.55	196.5583	195.84	196.56	0.000233	0.32	8.28	10.66

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 2	1386.5	5y	4.3	195.55	196.7623	195.94	196.77	0.000305	0.43	10.37	11.79
ParksCreek	Reach 2	1386.5	10y	5.62	195.55	196.8842	196	196.9	0.00036	0.5	11.61	21.14
ParksCreek	Reach 2	1386.5	25y	7.43	195.55	197.0142	196.08	197.03	0.000442	0.59	12.93	29.82
ParksCreek	Reach 2	1386.5	50y	8.86	195.55	197.0959	196.13	197.12	0.000511	0.67	13.77	56.98
ParksCreek	Reach 2	1386.5	100y	10.48	195.55	197.1714	196.19	197.2	0.000598	0.75	14.54	89.81
ParksCreek	Reach 2	1386.5	Timmins	29.97	195.55	197.9196	196.72	197.93	0.000293	0.69	146.68	273.1
ParksCreek	Reach 2	1386.5	2y Flow 100	2.61	195.55	196.9993	195.84	197	0.000057	0.21	12.78	28.95
ParksCreek	Reach 2	1363	Marshall Ave.	Culvert								
ParksCreek	Reach 2	1343.3	2y	2.61	195.49	196.5561	195.91	196.56	0.000281	0.34	7.76	19.64
ParksCreek	Reach 2	1343.3	5y	4.3	195.49	196.7582	196.04	196.77	0.000353	0.44	9.83	26.25
ParksCreek	Reach 2	1343.3	10y	5.62	195.49	196.8784	196.09	196.89	0.00041	0.52	11.05	31.82
ParksCreek	Reach 2	1343.3	25y	7.43	195.49	197.0058	196.16	197.02	0.000497	0.61	12.35	36.12
ParksCreek	Reach 2	1343.3	50y	8.86	195.49	197.0852	196.21	197.11	0.000573	0.68	13.16	46.08
ParksCreek	Reach 2	1343.3	100y	10.48	195.49	197.1576	196.26	197.19	0.00067	0.77	13.9	62.69
ParksCreek	Reach 2	1343.3	Timmins	29.97	195.49	197.7567	196.76	197.87	0.001644	1.53	20.01	201.99
ParksCreek	Reach 2	1343.3	2y Flow 100	2.61	195.49	196.9983	195.91	197	0.000063	0.22	12.27	36.05
ParksCreek	Reach 2	1329.6	2y	2.61	195.48	196.5572		196.56	0.000097	0.2	21.75	65.1
ParksCreek	Reach 2	1329.6	5y	4.3	195.48	196.762		196.76	0.000096	0.22	37.57	85.84
ParksCreek	Reach 2	1329.6	10y	5.62	195.48	196.8844		196.89	0.000097	0.24	48.37	90.26
ParksCreek	Reach 2	1329.6	25y	7.43	195.48	197.0154		197.02	0.000096	0.26	60.89	105.34
ParksCreek	Reach 2	1329.6	50y	8.86	195.48	197.0979		197.1	0.000099	0.28	70.45	133.28
ParksCreek	Reach 2	1329.6	100y	10.48	195.48	197.1743		197.18	0.000104	0.3	81.39	152.49
ParksCreek	Reach 2	1329.6	Timmins	29.97	195.48	197.834		197.84	0.000108	0.4	216.92	278.5
ParksCreek	Reach 2	1329.6	2y Flow 100	2.61	195.48	196.9994		197	0.000013	0.09	59.23	103.44
ParksCreek	Reach 1	1262.8	2y	3.76	195.51	196.5492		196.55	0.00014	0.23	35.23	93.58
ParksCreek	Reach 1	1262.8	5y	6.15	195.51	196.7548		196.76	0.000123	0.25	57.15	114.82

ParksCreek	Reach 1	1262.8	10y	7.94	195.51	196.8774		196.88	0.000118	0.26	71.75	122.27
ParksCreek	Reach 1	1262.8	25y	10.35	195.51	197.0084		197.01	0.000118	0.28	88.29	132.04
ParksCreek	Reach 1	1262.8	50y	12.17	195.51	197.0908		197.09	0.000119	0.3	99.74	147.15
ParksCreek	Reach 1	1262.8	100y	14.03	195.51	197.167		197.17	0.000121	0.31	111.63	164.84
ParksCreek	Reach 1	1262.8	Timmins	44.97	195.51	197.8239		197.83	0.000177	0.49	281.59	321.62
ParksCreek	Reach 1	1262.8	2y Flow 100	3.76	195.51	196.9985		197	0.000016	0.1	86.99	131.21
ParksCreek	Reach 1	1197.7	2y	3.76	195.46	196.5415		196.54	0.000097	0.21	38.37	83.99
ParksCreek	Reach 1	1197.7	5y	6.15	195.46	196.7476		196.75	0.000093	0.24	56.19	88.94
ParksCreek	Reach 1	1197.7	10y	7.94	195.46	196.8702		196.87	0.000094	0.26	67.27	92.68
ParksCreek	Reach 1	1197.7	25y	10.35	195.46	197.0007		197	0.000102	0.29	79.75	97
ParksCreek	Reach 1	1197.7	50y	12.17	195.46	197.0828		197.09	0.000107	0.3	88.06	105.66
ParksCreek	Reach 1	1197.7	100y	14.03	195.46	197.1586		197.16	0.000112	0.32	96.36	113.24
ParksCreek	Reach 1	1197.7	Timmins	44.97	195.46	197.8068		197.81	0.000228	0.59	195.03	186.6
ParksCreek	Reach 1	1197.7	2y Flow 100	3.76	195.46	196.9975		197	0.000014	0.1	79.44	96.96
ParksCreek	Reach 1	1122.8	2y	3.76	195.5	196.536		196.54	0.000067	0.16	55.69	107.55
ParksCreek	Reach 1	1122.8	5y	6.15	195.5	196.7425		196.74	0.000063	0.17	78.02	108.99
ParksCreek	Reach 1	1122.8	10y	7.94	195.5	196.8651		196.87	0.000064	0.18	91.46	110.18
ParksCreek	Reach 1	1122.8	25y	10.35	195.5	196.9952		197	0.000069	0.2	105.98	114.14
ParksCreek	Reach 1	1122.8	50y	12.17	195.5	197.0771		197.08	0.000074	0.22	115.57	124.56
ParksCreek	Reach 1	1122.8	100y	14.03	195.5	197.1527		197.15	0.000078	0.24	125.89	148.14
ParksCreek	Reach 1	1122.8	Timmins	44.97	195.5	197.7955		197.8	0.000155	0.44	242.11	231.28
ParksCreek	Reach 1	1122.8	2y Flow 100	3.76	195.5	196.9967		197	0.000009	0.07	106.15	114.2
ParksCreek	Reach 1	1052.4	2y	3.76	195.5	196.5281		196.53	0.00011	0.24	31.07	58.16
ParksCreek	Reach 1	1052.4	5y	6.15	195.5	196.7339		196.74	0.000123	0.29	43.75	64.61
ParksCreek	Reach 1	1052.4	10y	7.94	195.5	196.8558		196.86	0.000131	0.32	51.76	66.97
ParksCreek	Reach 1	1052.4	25y	10.35	195.5	196.9846		196.99	0.00015	0.36	61.48	85.88

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 1	1052.4	50y	12.17	195.5	197.0656		197.07	0.00016	0.39	68.92	102.45
ParksCreek	Reach 1	1052.4	100y	14.03	195.5	197.1399		197.14	0.000178	0.42	77.87	136.18
ParksCreek	Reach 1	1052.4	Timmins	44.97	195.5	197.7744		197.78	0.000282	0.67	210.88	282.08
ParksCreek	Reach 1	1052.4	2y Flow 100	3.76	195.5	196.9954		197	0.000019	0.13	62.41	86.78
ParksCreek	Reach 1	972.6	2y	3.76	195.49	196.5169		196.52	0.00014	0.27	24.32	47.77
ParksCreek	Reach 1	972.6	5y	6.15	195.49	196.7211		196.72	0.000159	0.33	38.37	81.74
ParksCreek	Reach 1	972.6	10y	7.94	195.49	196.8426		196.85	0.000163	0.36	48.64	87.13
ParksCreek	Reach 1	972.6	25y	10.35	195.49	196.9703		196.97	0.000173	0.39	60.05	92.08
ParksCreek	Reach 1	972.6	50y	12.17	195.49	197.0505		197.06	0.000182	0.42	67.73	102.79
ParksCreek	Reach 1	972.6	100y	14.03	195.49	197.1235		197.13	0.000196	0.45	75.79	123.88
ParksCreek	Reach 1	972.6	Timmins	44.97	195.49	197.7469		197.76	0.000326	0.73	172.39	168.67
ParksCreek	Reach 1	972.6	2y Flow 100	3.76	195.49	196.9936		196.99	0.000021	0.14	62.21	93.55
ParksCreek	Reach 1	911.8	2y	3.76	195.48	196.5104		196.51	0.000098	0.22	32.12	55.82
ParksCreek	Reach 1	911.8	5y	6.15	195.48	196.7135		196.72	0.000117	0.28	44.55	69.61
ParksCreek	Reach 1	911.8	10y	7.94	195.48	196.8344		196.84	0.000125	0.31	53.48	80.34
ParksCreek	Reach 1	911.8	25y	10.35	195.48	196.9615		196.96	0.000138	0.35	65.25	105.89
ParksCreek	Reach 1	911.8	50y	12.17	195.48	197.0409		197.04	0.000149	0.38	74.67	135.75
ParksCreek	Reach 1	911.8	100y	14.03	195.48	197.1136		197.12	0.000155	0.4	85.38	157.39
ParksCreek	Reach 1	911.8	Timmins	44.97	195.48	197.7357		197.74	0.000195	0.56	272.24	353.73
ParksCreek	Reach 1	911.8	2y Flow 100	3.76	195.48	196.9925		196.99	0.000016	0.12	68.63	111.41
ParksCreek	Reach 1	870	2y	3.76	195.47	196.5052		196.51	0.000107	0.22	23.28	48.76
ParksCreek	Reach 1	870	5y	6.15	195.47	196.7074		196.71	0.000126	0.27	36.86	87.79
ParksCreek	Reach 1	870	10y	7.94	195.47	196.8281		196.83	0.000129	0.29	49.33	136.51

ParksCreek	Reach 1	870	25y	10.35	195.47	196.955		196.96	0.000132	0.31	73.8	250.3
ParksCreek	Reach 1	870	50y	12.17	195.47	197.035		197.04	0.000126	0.32	97.22	333.72
ParksCreek	Reach 1	870	100y	14.03	195.47	197.1077		197.11	0.000125	0.33	123.11	382.72
ParksCreek	Reach 1	870	Timmins	44.97	195.47	197.7327		197.73	0.000078	0.34	465.41	699.56
ParksCreek	Reach 1	870	2y Flow 100	3.76	195.47	196.9918		196.99	0.000015	0.11	83.74	289.71
ParksCreek	Reach 1	863.9	2y	3.76	195.08	196.5048	195.34	196.51	0.000049	0.21	18.17	51.66
ParksCreek	Reach 1	863.9	5y	6.15	195.08	196.7051	195.43	196.71	0.000083	0.29	20.86	95.09
ParksCreek	Reach 1	863.9	10y	7.94	195.08	196.8272	195.48	196.83	0.00008	0.28	48.68	200.19
ParksCreek	Reach 1	863.9	25y	10.35	195.08	196.9539	195.54	196.96	0.000088	0.31	74.73	325.34
ParksCreek	Reach 1	863.9	50y	12.17	195.08	197.0337	195.59	197.04	0.000087	0.32	94.24	387.86
ParksCreek	Reach 1	863.9	100y	14.03	195.08	197.1066	195.63	197.11	0.000086	0.32	112.47	416.84
ParksCreek	Reach 1	863.9	Timmins	44.97	195.08	197.7324	196.2	197.73	0.000058	0.31	501.96	713.59
ParksCreek	Reach 1	863.9	2y Flow 100	3.76	195.08	196.9917	195.34	196.99	0.00001	0.11	83.86	363.18
ParksCreek	Reach 1	852.6	Marshall Park	Culvert								
ParksCreek	Reach 1	839	2y	3.76	194.85	196.501	195.43	196.51	0.00016	0.3	12.63	30.47
ParksCreek	Reach 1	839	5y	6.15	194.85	196.6983	195.57	196.71	0.000245	0.4	15.21	68.99
ParksCreek	Reach 1	839	10y	7.94	194.85	196.8151	195.66	196.83	0.000295	0.47	16.77	94.85
ParksCreek	Reach 1	839	25y	10.35	194.85	196.9487	195.76	196.96	0.000236	0.42	39.26	182.11
ParksCreek	Reach 1	839	50y	12.17	194.85	197.0282	195.82	197.04	0.000242	0.45	49.06	300.08
ParksCreek	Reach 1	839	100y	14.03	194.85	197.1036	195.88	197.11	0.000186	0.41	96.89	394.85
ParksCreek	Reach 1	839	Timmins	44.97	194.85	197.7319	196.6	197.73	0.000082	0.34	513.62	805.57
ParksCreek	Reach 1	839	2y Flow 100	3.76	194.85	196.991	195.43	196.99	0.000027	0.15	44.17	247.52
ParksCreek	Reach 1	831.5	2y	3.76	195.48	196.5		196.5	0.000197	0.29	15.25	34.57
ParksCreek	Reach 1	831.5	5y	6.15	195.48	196.6983		196.7	0.00023	0.35	24.34	58.91
ParksCreek	Reach 1	831.5	10y	7.94	195.48	196.8164		196.82	0.000238	0.39	32.12	77.43
ParksCreek	Reach 1	831.5	25y	10.35	195.48	196.9471		196.96	0.00025	0.43	48.66	191.06
ParksCreek	Reach 1	831.5	50y	12.17	195.48	197.0273		197.03	0.000235	0.43	68.91	293.93
ParksCreek	Reach 1	831.5	100y	14.03	195.48	197.1013		197.11	0.000216	0.43	94.34	384.35

ParksCreek	Reach 1	831.5	Timmins	44.97	195.48	197.7313		197.73	0.000084	0.35	514.15	806.22

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 1	831.5	2y Flow 100	3.76	195.48	196.9908		196.99	0.000027	0.14	58.68	260.91
ParksCreek	Reach 1	770	2y	3.76	195.58	196.4776		196.49	0.000495	0.43	13.19	31.02
ParksCreek	Reach 1	770	5y	6.15	195.58	196.6734		196.68	0.0005	0.5	20.9	56.02
ParksCreek	Reach 1	770	10y	7.94	195.58	196.7906		196.8	0.000505	0.55	28.37	84.48
ParksCreek	Reach 1	770	25y	10.35	195.58	196.9228		196.93	0.00047	0.57	46.11	204.04
ParksCreek	Reach 1	770	50y	12.17	195.58	197.0061		197.02	0.00041	0.56	66.8	294.99
ParksCreek	Reach 1	770	100y	14.03	195.58	197.0832		197.09	0.000352	0.54	93.52	405.29
ParksCreek	Reach 1	770	Timmins	44.97	195.58	197.7258		197.73	0.000105	0.39	468.61	715.06
ParksCreek	Reach 1	770	2y Flow 100	3.76	195.58	196.9886		196.99	0.000043	0.18	61.8	276.5
ParksCreek	Reach 1	676.5	2y	3.76	195.5	196.453		196.46	0.000207	0.31	18.47	29.94
ParksCreek	Reach 1	676.5	5y	6.15	195.5	196.6457		196.65	0.000252	0.39	26.2	50.14
ParksCreek	Reach 1	676.5	10y	7.94	195.5	196.7618		196.77	0.00027	0.43	34.82	105.44
ParksCreek	Reach 1	676.5	25y	10.35	195.5	196.8951		196.9	0.000265	0.46	52.47	163.45
ParksCreek	Reach 1	676.5	50y	12.17	195.5	196.9787		196.99	0.000269	0.48	67.7	198.76
ParksCreek	Reach 1	676.5	100y	14.03	195.5	197.0568		197.06	0.000266	0.5	85.14	264.6
ParksCreek	Reach 1	676.5	Timmins	44.97	195.5	197.7139		197.72	0.000147	0.48	382.12	638.59
ParksCreek	Reach 1	676.5	2y Flow 100	3.76	195.5	196.986		196.99	0.000025	0.15	69.16	200.45
ParksCreek	Reach 1	618.9	2y	3.76	195.52	196.4326		196.44	0.000568	0.39	14.51	28.91
ParksCreek	Reach 1	618.9	5y	6.15	195.52	196.623		196.63	0.000549	0.46	21.15	51.53
ParksCreek	Reach 1	618.9	10y	7.94	195.52	196.7392		196.75	0.000517	0.5	28.78	71.87
ParksCreek	Reach 1	618.9	25y	10.35	195.52	196.8732		196.88	0.00048	0.53	39.27	91.47
ParksCreek	Reach 1	618.9	50y	12.17	195.52	196.9571		196.97	0.000461	0.54	47.73	114.46

ParksCreek	Reach 1	618.9	100y	14.03	195.52	197.0352		197.04	0.000456	0.57	58.79	183.29
ParksCreek	Reach 1	618.9	Timmins	44.97	195.52	197.7055		197.71	0.000167	0.47	381.72	643.29
ParksCreek	Reach 1	618.9	2y Flow 100	3.76	195.52	196.9841		196.98	0.000039	0.16	50.99	127.19
ParksCreek	Reach 1	564.5	2y	3.76	195.45	196.4081		196.41	0.000333	0.37	12.5	24.05
ParksCreek	Reach 1	564.5	5y	6.15	195.45	196.5948		196.6	0.00041	0.47	17.19	26.18
ParksCreek	Reach 1	564.5	10y	7.94	195.45	196.7085		196.72	0.000449	0.53	20.25	27.79
ParksCreek	Reach 1	564.5	25y	10.35	195.45	196.8387		196.85	0.000501	0.6	24.8	43.94
ParksCreek	Reach 1	564.5	50y	12.17	195.45	196.9202		196.94	0.000532	0.65	28.64	50.25
ParksCreek	Reach 1	564.5	100y	14.03	195.45	196.9961		197.02	0.000556	0.69	33.13	79.35
ParksCreek	Reach 1	564.5	Timmins	44.97	195.45	197.686		197.7	0.000315	0.68	264.71	542.52
ParksCreek	Reach 1	564.5	2y Flow 100	3.76	195.45	196.9811		196.98	0.000042	0.19	32.03	68.11
ParksCreek	Reach 1	524.8	2y	3.76	195.51	196.3783		196.39	0.001252	0.54	9.17	23
ParksCreek	Reach 1	524.8	5y	6.15	195.51	196.5636		196.58	0.001094	0.61	13.63	25.07
ParksCreek	Reach 1	524.8	10y	7.94	195.51	196.6764		196.69	0.001043	0.66	16.54	26.64
ParksCreek	Reach 1	524.8	25y	10.35	195.51	196.8013		196.83	0.001125	0.75	21.29	44.83
ParksCreek	Reach 1	524.8	50y	12.17	195.51	196.8833		196.91	0.001084	0.78	25.59	57.22
ParksCreek	Reach 1	524.8	100y	14.03	195.51	196.9602		196.99	0.001046	0.81	30.32	66.26
ParksCreek	Reach 1	524.8	Timmins	44.97	195.51	197.6578		197.68	0.000675	0.91	183.49	471.65
ParksCreek	Reach 1	524.8	2y Flow 100	3.76	195.51	196.9787		196.98	0.00007	0.21	31.57	68.62
ParksCreek	Reach 1	470.5	2y	3.76	195.48	196.3405		196.35	0.000511	0.42	9.76	17.67
ParksCreek	Reach 1	470.5	5y	6.15	195.48	196.5191		196.53	0.000707	0.53	14.24	30.45
ParksCreek	Reach 1	470.5	10y	7.94	195.48	196.6318		196.65	0.000748	0.57	18.01	40.17
ParksCreek	Reach 1	470.5	25y	10.35	195.48	196.758		196.78	0.000737	0.63	24.47	61.43
ParksCreek	Reach 1	470.5	50y	12.17	195.48	196.842		196.86	0.000715	0.65	30.19	74.36
ParksCreek	Reach 1	470.5	100y	14.03	195.48	196.9212		196.94	0.000685	0.67	36.6	87.76
ParksCreek	Reach 1	470.5	Timmins	44.97	195.48	197.6425		197.65	0.000322	0.64	275.45	722.64

ParksCreek	Reach 1	470.5	2y Flow 100	3.76	195.48	196.9765		196.98	0.00004	0.17	42.11	108.59
ParksCreek	Reach 1	464.5	2y	3.76	195.47	196.3367	195.81	196.35	0.000552	0.43	8.78	13.03
ParksCreek	Reach 1	464.5	5y	6.15	195.47	196.5126	195.9	196.53	0.0007	0.55	11.11	14.52
ParksCreek	Reach 1	464.5	10y	7.94	195.47	196.6221	195.96	196.64	0.000771	0.63	12.58	15.53

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 1	464.5	25y	10.35	195.47	196.7431	196.03	196.77	0.000876	0.73	14.2	18.29
ParksCreek	Reach 1	464.5	50y	12.17	195.47	196.8218	196.08	196.85	0.000954	0.8	15.25	31.12
ParksCreek	Reach 1	464.5	100y	14.03	195.47	196.8951	196.13	196.93	0.001029	0.86	16.23	57.59
ParksCreek	Reach 1	464.5	Timmins	44.97	195.47	197.6327	196.73	197.65	0.000481	0.78	225.96	702.42
ParksCreek	Reach 1	464.5	2y Flow 100	3.76	195.47	196.9751	195.81	196.98	0.000059	0.21	22.96	79.93
ParksCreek	Reach 1	458.5	Ped. Bridge	Bridge								
ParksCreek	Reach 1	454.2	2y	3.76	195.5	196.3293	195.86	196.34	0.000574	0.43	8.77	14.77
ParksCreek	Reach 1	454.2	5y	6.15	195.5	196.5026	195.94	196.52	0.0007	0.55	11.09	15.98
ParksCreek	Reach 1	454.2	10y	7.94	195.5	196.6102	196	196.63	0.000776	0.63	12.53	16.84
ParksCreek	Reach 1	454.2	25y	10.35	195.5	196.7285	196.06	196.76	0.000887	0.73	14.12	19.67
ParksCreek	Reach 1	454.2	50y	12.17	195.5	196.8051	196.11	196.84	0.000971	0.8	15.14	21.15
ParksCreek	Reach 1	454.2	100y	14.03	195.5	196.8763	196.15	196.92	0.001052	0.87	16.1	26.47
ParksCreek	Reach 1	454.2	Timmins	44.97	195.5	197.6303	196.72	197.64	0.000287	0.61	286.12	633.55
ParksCreek	Reach 1	454.2	2y Flow 100	3.76	195.5	196.9738	195.86	196.98	0.000058	0.22	17.4	66.12
ParksCreek	Reach 1	443.8	2y	3.76	195.5	196.3249		196.33	0.000476	0.4	10.28	21.21
ParksCreek	Reach 1	443.8	5y	6.15	195.5	196.4983		196.51	0.000585	0.5	14.11	23.28
ParksCreek	Reach 1	443.8	10y	7.94	195.5	196.6065		196.62	0.000648	0.56	16.74	25.41
ParksCreek	Reach 1	443.8	25y	10.35	195.5	196.7262		196.75	0.000708	0.63	19.89	27.11
ParksCreek	Reach 1	443.8	50y	12.17	195.5	196.804		196.83	0.000745	0.68	22.04	28.09
ParksCreek	Reach 1	443.8	100y	14.03	195.5	196.8765		196.9	0.000783	0.73	24.18	31.97
ParksCreek	Reach 1	443.8	Timmins	44.97	195.5	197.6277		197.64	0.000284	0.62	290.71	652.19

ParksCreek	Reach 1	443.8	2y Flow 100	3.76	195.5	196.9739		196.98	0.000043	0.18	28.46	71.15
ParksCreek	Reach 1	390.6	2y	3.76	195.47	196.2917		196.3	0.000666	0.47	8.54	16.9
ParksCreek	Reach 1	390.6	5y	6.15	195.47	196.4548		196.47	0.000854	0.61	11.85	24.69
ParksCreek	Reach 1	390.6	10y	7.94	195.47	196.5576		196.58	0.000971	0.68	14.93	34.96
ParksCreek	Reach 1	390.6	25y	10.35	195.47	196.6748		196.7	0.001001	0.74	20.41	66.06
ParksCreek	Reach 1	390.6	50y	12.17	195.47	196.755		196.78	0.000964	0.77	27.86	130.19
ParksCreek	Reach 1	390.6	100y	14.03	195.47	196.832		196.86	0.000903	0.78	40.05	181.13
ParksCreek	Reach 1	390.6	Timmins	44.97	195.47	197.6181		197.62	0.000202	0.53	321.47	637.38
ParksCreek	Reach 1	390.6	2y Flow 100	3.76	195.47	196.9725		196.97	0.00003	0.15	69.1	235.96
ParksCreek	Reach 1	345.3	2y	3.76	195.47	196.2569		196.27	0.000889	0.48	8.55	22.12
ParksCreek	Reach 1	345.3	5y	6.15	195.47	196.4151		196.43	0.000961	0.58	13.03	33
ParksCreek	Reach 1	345.3	10y	7.94	195.47	196.5162		196.54	0.00096	0.64	17.63	59.77
ParksCreek	Reach 1	345.3	25y	10.35	195.47	196.6383		196.66	0.00085	0.66	28.78	123.5
ParksCreek	Reach 1	345.3	50y	12.17	195.47	196.7234		196.74	0.000749	0.66	41.78	170.55
ParksCreek	Reach 1	345.3	100y	14.03	195.47	196.8079		196.82	0.000599	0.62	56.71	183.24
ParksCreek	Reach 1	345.3	Timmins	44.97	195.47	197.6122		197.62	0.000139	0.43	361.05	575.53
ParksCreek	Reach 1	345.3	2y Flow 100	3.76	195.47	196.9718		196.97	0.000018	0.12	89.3	232.29
ParksCreek	Reach 1	298.8	2y	3.76	195.47	196.2284		196.24	0.000519	0.4	9.97	22.2
ParksCreek	Reach 1	298.8	5y	6.15	195.47	196.3821		196.39	0.00063	0.51	14.8	45.27
ParksCreek	Reach 1	298.8	10y	7.94	195.47	196.4836		196.5	0.000638	0.56	20.56	76.05
ParksCreek	Reach 1	298.8	25y	10.35	195.47	196.6096		196.62	0.000574	0.58	34.46	135.37
ParksCreek	Reach 1	298.8	50y	12.17	195.47	196.6991		196.71	0.000495	0.57	48.16	178.46
ParksCreek	Reach 1	298.8	100y	14.03	195.47	196.7875		196.8	0.000415	0.55	67.15	248.67
ParksCreek	Reach 1	298.8	Timmins	44.97	195.47	197.609		197.61	0.000071	0.32	540.76	864.37
ParksCreek	Reach 1	298.8	2y Flow 100	3.76	195.47	196.9713		196.97	0.000011	0.1	128.06	453.71

ParksCreek	Reach 1	233.3	2y	3.76	195.48	196.1796		196.19	0.000914	0.5	9.78	48.48
ParksCreek	Reach 1	233.3	5y	6.15	195.48	196.3331		196.35	0.000863	0.57	17.95	57.65
ParksCreek	Reach 1	233.3	10y	7.94	195.48	196.4378		196.45	0.000796	0.6	24.97	75.66
ParksCreek	Reach 1	233.3	25y	10.35	195.48	196.5715		196.58	0.000649	0.59	35.6	85.71
ParksCreek	Reach 1	233.3	50y	12.17	195.48	196.6655		196.68	0.000572	0.59	44.61	109.3
ParksCreek	Reach 1	233.3	100y	14.03	195.48	196.7583		196.77	0.000497	0.59	57.76	174.22

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 1	233.3	Timmins	44.97	195.48	197.602		197.6	0.000127	0.43	417.3	725.6
ParksCreek	Reach 1	233.3	2y Flow 100	3.76	195.48	196.9704		196.97	0.000014	0.11	110.08	311.52
ParksCreek	Reach 1	181.2	2y	3.76	195.46	196.1473		196.16	0.000524	0.4	10.07	21.11
ParksCreek	Reach 1	181.2	5y	6.15	195.46	196.2952		196.31	0.000657	0.5	15.06	43.71
ParksCreek	Reach 1	181.2	10y	7.94	195.46	196.4009		196.41	0.000646	0.55	21.22	70.69
ParksCreek	Reach 1	181.2	25y	10.35	195.46	196.5399		196.55	0.000553	0.56	31.47	77.05
ParksCreek	Reach 1	181.2	50y	12.17	195.46	196.6372		196.65	0.000492	0.56	39.39	90.16
ParksCreek	Reach 1	181.2	100y	14.03	195.46	196.7309		196.74	0.000467	0.58	48.76	111.23
ParksCreek	Reach 1	181.2	Timmins	44.97	195.46	197.5947		197.6	0.000131	0.44	428.69	870.99
ParksCreek	Reach 1	181.2	2y Flow 100	3.76	195.46	196.9697		196.97	0.000012	0.11	90.73	255.65
ParksCreek	Reach 1	129.9	2y	3.76	195.44	196.1008		196.12	0.001145	0.55	6.84	12.44
ParksCreek	Reach 1	129.9	5y	6.15	195.44	196.2299		196.26	0.001566	0.73	8.51	13.47
ParksCreek	Reach 1	129.9	10y	7.94	195.44	196.3295		196.36	0.001682	0.82	9.89	14.34
ParksCreek	Reach 1	129.9	25y	10.35	195.44	196.4656		196.51	0.001701	0.9	11.94	15.87
ParksCreek	Reach 1	129.9	50y	12.17	195.44	196.5612		196.61	0.001694	0.95	13.52	17.21
ParksCreek	Reach 1	129.9	100y	14.03	195.44	196.6529		196.7	0.001648	1	15.15	18.5
ParksCreek	Reach 1	129.9	Timmins	44.97	195.44	197.586		197.59	0.000248	0.59	326.3	791.93
ParksCreek	Reach 1	129.9	2y Flow 100	3.76	195.44	196.9673		196.97	0.000042	0.19	37.35	213.21

ParksCreek	Reach 1	119.6	2y	3.76	194.49	196.0985	195.25	196.11	0.000345	0.45	8.38	10.75
ParksCreek	Reach 1	119.6	5y	6.15	194.49	196.2238	195.41	196.25	0.000632	0.66	9.38	11.38
ParksCreek	Reach 1	119.6	10y	7.94	194.49	196.3199	195.5	196.35	0.00081	0.78	10.15	11.92
ParksCreek	Reach 1	119.6	25y	10.35	194.49	196.4496	195.6	196.49	0.000996	0.92	11.19	12.69
ParksCreek	Reach 1	119.6	50y	12.17	194.49	196.5387	195.67	196.59	0.001121	1.02	11.9	13.22
ParksCreek	Reach 1	119.6	100y	14.03	194.49	196.6233	195.73	196.69	0.001239	1.12	12.58	13.71
ParksCreek	Reach 1	119.6	Timmins	44.97	194.49	197.5547	196.53	197.59	0.000734	1.01	159.19	789.6
ParksCreek	Reach 1	119.6	2y Flow 100	3.76	194.49	196.9653	195.25	196.97	0.000046	0.25	15.32	204.56
ParksCreek	Reach 1	103.4	Lakeshore Dr.	Culvert								
ParksCreek	Reach 1	88.4	2y	3.76	194.58	196.0951		196.1	0.000119	0.28	13.84	13.19
ParksCreek	Reach 1	88.4	5y	6.15	194.58	196.2143		196.22	0.000233	0.42	15.45	13.9
ParksCreek	Reach 1	88.4	10y	7.94	194.58	196.3043		196.32	0.000313	0.5	16.73	14.43
ParksCreek	Reach 1	88.4	25y	10.35	194.58	196.424		196.44	0.000406	0.6	18.5	15.16
ParksCreek	Reach 1	88.4	50y	12.17	194.58	196.5044		196.53	0.000472	0.67	19.75	15.94
ParksCreek	Reach 1	88.4	100y	14.03	194.58	196.5792		196.61	0.000537	0.73	20.96	16.54
ParksCreek	Reach 1	88.4	Timmins	44.97	194.58	197.5723		197.58	0.00023	0.63	320.22	788.46
ParksCreek	Reach 1	88.4	2y Flow 100	3.76	194.58	196.9629		196.96	0.00002	0.15	28.95	50.77
ParksCreek	Reach 1	76.1	2y	3.76	195.46	196.0849		196.1	0.000802	0.45	8.27	15.02
ParksCreek	Reach 1	76.1	5y	6.15	195.46	196.1973		196.22	0.001196	0.62	9.99	15.5
ParksCreek	Reach 1	76.1	10y	7.94	195.46	196.2839		196.31	0.001371	0.7	11.36	16.13
ParksCreek	Reach 1	76.1	25y	10.35	195.46	196.4013		196.43	0.001475	0.78	13.3	17.01
ParksCreek	Reach 1	76.1	50y	12.17	195.46	196.4806		196.52	0.001503	0.83	14.67	17.52
ParksCreek	Reach 1	76.1	100y	14.03	195.46	196.5544		196.59	0.001536	0.88	15.98	18.09
ParksCreek	Reach 1	76.1	Timmins	44.97	195.46	197.5711		197.58	0.000241	0.56	284.4	533.83
ParksCreek	Reach 1	76.1	2y Flow 100	3.76	195.46	196.9626		196.96	0.00003	0.15	37.73	151.74

ParksCreek	Reach 1	71.4	2y	3.76	195.45	196.0801	195.69	196.09	0.000768	0.47	7.95	16.44
ParksCreek	Reach 1	71.4	5y	6.15	195.45	196.1888	195.77	196.21	0.00117	0.65	9.4	16.79
ParksCreek	Reach 1	71.4	10y	7.94	195.45	196.2729	195.82	196.3	0.001336	0.75	10.53	17.02
ParksCreek	Reach 1	71.4	25y	10.35	195.45	196.3871	195.88	196.42	0.001446	0.86	12.06	17.34
ParksCreek	Reach 1	71.4	50y	12.17	195.45	196.4636	195.93	196.51	0.001524	0.93	13.09	17.56
ParksCreek	Reach 1	71.4	100y	14.03	195.45	196.5344	195.97	196.59	0.001603	1	14.03	17.79
ParksCreek	Reach 1	71.4	Timmins	44.97	195.45	197.5712	196.54	197.58	0.000187	0.5	313.57	525.83
ParksCreek	Reach 1	71.4	2y Flow 100	3.76	195.45	196.9617	195.69	196.96	0.000037	0.19	19.76	229.16

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
ParksCreek	Reach 1	66	Flow Gate	Bridge								
ParksCreek	Reach 1	59.7	2y	3.76	195.44	196.0536	195.7	196.07	0.000945	0.5	7.47	16.22
ParksCreek	Reach 1	59.7	5y	6.15	195.44	196.1411	195.77	196.17	0.00155	0.71	8.65	16.54
ParksCreek	Reach 1	59.7	10y	7.94	195.44	196.2121	195.82	196.25	0.001823	0.83	9.6	16.8
ParksCreek	Reach 1	59.7	25y	10.35	195.44	196.3124	195.89	196.36	0.002003	0.95	10.94	17.22
ParksCreek	Reach 1	59.7	50y	12.17	195.44	196.378	195.93	196.43	0.002141	1.03	11.82	17.48
ParksCreek	Reach 1	59.7	100y	14.03	195.44	196.4366	195.98	196.5	0.002296	1.11	12.61	17.72
ParksCreek	Reach 1	59.7	Timmins	44.97	195.44	196.905	196.54	197.19	0.006132	2.38	18.88	275.3
ParksCreek	Reach 1	59.7	2y Flow 100	3.76	195.44	196.9598	195.7	196.96	0.000038	0.19	19.62	324.55
ParksCreek	Reach 1	52.5	2y	3.76	195.45	196.045		196.06	0.001282	0.52	7.31	15.74
ParksCreek	Reach 1	52.5	5y	6.15	195.45	196.1285		196.15	0.002026	0.71	8.96	25.38
ParksCreek	Reach 1	52.5	10y	7.94	195.45	196.1997		196.23	0.002226	0.8	11	33.33
ParksCreek	Reach 1	52.5	25y	10.35	195.45	196.3049		196.34	0.002125	0.85	15.49	52.65
ParksCreek	Reach 1	52.5	50y	12.17	195.45	196.3756		196.41	0.002027	0.88	19.81	68.91
ParksCreek	Reach 1	52.5	100y	14.03	195.45	196.4409		196.48	0.001863	0.89	25.17	95.86

ParksCreek	Reach 1	52.5	Timmins	44.97	195.45	197.0848		197.1	0.000691	0.8	183.44	469.29
ParksCreek	Reach 1	52.5	2y Flow 100	3.76	195.45	196.9609		196.96	0.000009	0.09	128.17	397.79
ParksCreek	Reach 1	26.1	2y	3.76	195.47	195.98	195.75	196.01	0.002923	0.74	5.07	11.66
ParksCreek	Reach 1	26.1	5y	6.15	195.47	195.98	195.84	196.05	0.007797	1.21	5.07	11.66
ParksCreek	Reach 1	26.1	10y	7.94	195.47	195.98	195.9	196.1	0.012987	1.56	5.07	11.66
ParksCreek	Reach 1	26.1	25y	10.35	195.47	195.98	195.97	196.19	0.022089	2.04	5.07	11.66
ParksCreek	Reach 1	26.1	50y	12.17	195.47	196.0253	196.03	196.27	0.022359	2.17	5.61	11.81
ParksCreek	Reach 1	26.1	100y	14.03	195.47	196.0742	196.07	196.34	0.021831	2.27	6.19	11.97
ParksCreek	Reach 1	26.1	Timmins	44.97	195.47	196.8704	196.87	197.05	0.006434	2.1	51.51	223.06
ParksCreek	Reach 1	26.1	2y Flow 100	3.76	195.47	196.9599	195.75	196.96	0.000027	0.14	73.77	282.06
JessupsTrib	Reach 3	762.6	2y	0.08	200.86	200.9282	200.92	200.94	0.030636	0.55	0.14	2.96
JessupsTrib	Reach 3	762.6	5y	0.13	200.86	200.96		200.98	0.017646	0.55	0.24	3.45
JessupsTrib	Reach 3	762.6	10y	0.17	200.86	200.9768		200.99	0.015611	0.57	0.3	3.68
JessupsTrib	Reach 3	762.6	25y	5.4	200.86	201.4658		201.55	0.008783	1.46	6.87	27.65
JessupsTrib	Reach 3	762.6	50y	0.27	200.86	201.0146		201.03	0.01138	0.59	0.45	4.1
JessupsTrib	Reach 3	762.6	100y	0.31	200.86	201.0291		201.05	0.010487	0.6	0.51	4.25
JessupsTrib	Reach 3	762.6	Timmins	0.7	200.86	201.1177		201.15	0.009811	0.75	0.95	6.24
JessupsTrib	Reach 3	762.6	2y Flow 100	0.08	200.86	200.9282	200.92	200.94	0.030636	0.55	0.14	2.96
JessupsTrib	Reach 3	731.7	2y	0.08	200.3	200.4221	200.39	200.43	0.010193	0.44	0.18	2.27
JessupsTrib	Reach 3	731.7	5y	0.13	200.3	200.4401	200.41	200.46	0.015671	0.61	0.22	2.39
JessupsTrib	Reach 3	731.7	10y	0.17	200.3	200.4528	200.43	200.48	0.017912	0.7	0.25	2.48
JessupsTrib	Reach 3	731.7	25y	5.4	200.3	201.0063	201.01	201.17	0.017244	1.89	3.85	14.81
JessupsTrib	Reach 3	731.7	50y	0.27	200.3	200.469	200.46	200.51	0.027059	0.92	0.29	2.59
JessupsTrib	Reach 3	731.7	100y	0.31	200.3	200.4752	200.47	200.53	0.030702	1	0.31	2.63
JessupsTrib	Reach 3	731.7	Timmins	0.7	200.3	200.5556	200.56	200.64	0.031458	1.3	0.54	3.18
JessupsTrib	Reach 3	731.7	2y Flow 100	0.08	200.3	200.4221	200.39	200.43	0.010193	0.44	0.18	2.27

JessupsTrib	Reach 3	697.7	2y	0.08	200.28	200.3651		200.37	0.00089	0.12	1.21	25.62
JessupsTrib	Reach 3	697.7	5y	0.13	200.28	200.3877		200.39	0.000841	0.14	1.81	27.95
JessupsTrib	Reach 3	697.7	10y	0.17	200.28	200.4004		200.4	0.000881	0.16	2.18	30.22
JessupsTrib	Reach 3	697.7	25y	5.4	200.28	200.8054		200.82	0.001951	0.68	16.33	38.19
JessupsTrib	Reach 3	697.7	50y	0.27	200.28	200.4243		200.43	0.000897	0.18	2.92	31.47
JessupsTrib	Reach 3	697.7	100y	0.31	200.28	200.4328		200.43	0.000925	0.2	3.19	31.8
JessupsTrib	Reach 3	697.7	Timmins	0.7	200.28	200.4968		200.5	0.001048	0.27	5.25	32.49
JessupsTrib	Reach 3	697.7	2y Flow 100	0.08	200.28	200.3651		200.37	0.00089	0.12	1.21	25.62
JessupsTrib	Reach 3	675.5	2y	0.08	200.24	200.3558		200.36	0.000426	0.09	1.75	28.45
JessupsTrib	Reach 3	675.5	5y	0.13	200.24	200.3783		200.38	0.000496	0.12	2.4	29.99
JessupsTrib	Reach 3	675.5	10y	0.17	200.24	200.3903		200.39	0.00055	0.13	2.77	30.43

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsTrib	Reach 3	675.5	25y	5.4	200.24	200.7777		200.79	0.002136	0.67	15.92	36.04
JessupsTrib	Reach 3	675.5	50y	0.27	200.24	200.4136		200.41	0.000636	0.15	3.48	30.99
JessupsTrib	Reach 3	675.5	100y	0.31	200.24	200.4216		200.42	0.000682	0.17	3.73	31.13
JessupsTrib	Reach 3	675.5	Timmins	0.7	200.24	200.4829		200.48	0.000973	0.24	5.7	33.4
JessupsTrib	Reach 3	675.5	2y Flow 100	0.08	200.24	200.3558		200.36	0.000426	0.09	1.75	28.45
JessupsTrib	Reach 3	651.5	2y	0.08	200.27	200.3018	200.3	200.32	0.088425	0.63	0.18	7.67
JessupsTrib	Reach 3	651.5	5y	0.13	200.27	200.3152	200.32	200.33	0.065284	0.69	0.3	10.73
JessupsTrib	Reach 3	651.5	10y	0.17	200.27	200.3244	200.32	200.34	0.053239	0.71	0.42	13.45
JessupsTrib	Reach 3	651.5	25y	5.4	200.27	200.6494		200.68	0.009969	1.14	8.9	30.67
JessupsTrib	Reach 3	651.5	50y	0.27	200.27	200.3407	200.34	200.36	0.04472	0.78	0.67	17.52
JessupsTrib	Reach 3	651.5	100y	0.31	200.27	200.3462	200.35	200.37	0.041408	0.78	0.77	17.88
JessupsTrib	Reach 3	651.5	Timmins	0.7	200.27	200.3811	200.38	200.41	0.042232	0.95	1.44	22.08
JessupsTrib	Reach 3	651.5	2y Flow 100	0.08	200.27	200.3018	200.3	200.32	0.088425	0.63	0.18	7.67

JessupsTrib	Reach 3	619.2	2y	0.08	199.92	200.1137		200.11	0.000118	0.07	2.1	24.12
JessupsTrib	Reach 3	619.2	5y	0.13	199.92	200.144		200.14	0.000148	0.09	2.92	30.41
JessupsTrib	Reach 3	619.2	10y	0.17	199.92	200.1607		200.16	0.000168	0.1	3.44	31.7
JessupsTrib	Reach 3	619.2	25y	5.4	199.92	200.555		200.56	0.001346	0.61	18.8	42.11
JessupsTrib	Reach 3	619.2	50y	0.27	199.92	200.1907		200.19	0.000209	0.12	4.42	34.01
JessupsTrib	Reach 3	619.2	100y	0.31	199.92	200.2018		200.2	0.000225	0.13	4.8	34.86
JessupsTrib	Reach 3	619.2	Timmins	0.7	199.92	200.2914		200.29	0.000283	0.18	8.14	38.63
JessupsTrib	Reach 3	619.2	2y Flow 100	0.08	199.92	200.1137		200.11	0.000118	0.07	2.1	24.12
JessupsTrib	Reach 3	569.9	2y	0.08	199.91	200.1114		200.11	0.000033	0.04	4.07	59.39
JessupsTrib	Reach 3	569.9	5y	0.13	199.91	200.1412		200.14	0.000043	0.05	5.99	70.03
JessupsTrib	Reach 3	569.9	10y	0.17	199.91	200.1576		200.16	0.000048	0.06	7.17	74.09
JessupsTrib	Reach 3	569.9	25y	5.4	199.91	200.5387		200.54	0.000335	0.31	41.25	92.55
JessupsTrib	Reach 3	569.9	50y	0.27	199.91	200.187		200.19	0.000059	0.07	9.44	80.16
JessupsTrib	Reach 3	569.9	100y	0.31	199.91	200.1979		200.2	0.000062	0.08	10.32	82.46
JessupsTrib	Reach 3	569.9	Timmins	0.7	199.91	200.2872		200.29	0.000071	0.1	18.14	89.87
JessupsTrib	Reach 3	569.9	2y Flow 100	0.08	199.91	200.1114		200.11	0.000033	0.04	4.07	59.39
JessupsTrib	Reach 3	500.4	2y	0.08	199.95	200.108		200.11	0.000092	0.06	3.48	73.62
JessupsTrib	Reach 3	500.4	5y	0.13	199.95	200.1375		200.14	0.000089	0.07	6.16	103.22
JessupsTrib	Reach 3	500.4	10y	0.17	199.95	200.1538		200.15	0.000084	0.07	7.93	114.72
JessupsTrib	Reach 3	500.4	25y	5.4	199.95	200.5258		200.53	0.000196	0.2	62.44	152.46
JessupsTrib	Reach 3	500.4	50y	0.27	199.95	200.1831		200.18	0.000077	0.07	11.56	132.23
JessupsTrib	Reach 3	500.4	100y	0.31	199.95	200.1939		200.19	0.000076	0.07	13.02	137.16
JessupsTrib	Reach 3	500.4	Timmins	0.7	199.95	200.2838		200.28	0.000054	0.08	26.08	148.08
JessupsTrib	Reach 3	500.4	2y Flow 100	0.08	199.95	200.108		200.11	0.000092	0.06	3.48	73.62
JessupsTrib	Reach 3	420.5	2y	0.08	199.92	200.1064		200.11	0.000017	0.02	8.19	128.66
JessupsTrib	Reach 3	420.5	5y	0.13	199.92	200.136		200.14	0.000018	0.03	12.52	162.74

JessupsTrib	Reach 3	420.5	10y	0.17	199.92	200.1523		200.15	0.00002	0.03	15.34	182.23
JessupsTrib	Reach 3	420.5	25y	5.4	199.92	200.5227		200.52	0.000069	0.13	101.99	240.7
JessupsTrib	Reach 3	420.5	50y	0.27	199.92	200.1817		200.18	0.000021	0.04	21.09	211.84
JessupsTrib	Reach 3	420.5	100y	0.31	199.92	200.1925		200.19	0.000021	0.04	23.44	221.86
JessupsTrib	Reach 3	420.5	Timmins	0.7	199.92	200.2829		200.28	0.000017	0.04	44.57	237.71
JessupsTrib	Reach 3	420.5	2y Flow 100	0.08	199.92	200.1064		200.11	0.000017	0.02	8.19	128.66
JessupsTrib	Reach 3	348.5	2y	0.08	199.94	200.1061		200.11	0.000005	0.01	16.35	196.1
JessupsTrib	Reach 3	348.5	5y	0.13	199.94	200.1357		200.14	0.000005	0.01	22.55	221.31
JessupsTrib	Reach 3	348.5	10y	0.17	199.94	200.152		200.15	0.000006	0.02	26.23	229.94
JessupsTrib	Reach 3	348.5	25y	5.4	199.94	200.5206		200.52	0.000049	0.11	120	271.6
JessupsTrib	Reach 3	348.5	50y	0.27	199.94	200.1813		200.18	0.000007	0.02	33.09	238.53
JessupsTrib	Reach 3	348.5	100y	0.31	199.94	200.1921		200.19	0.000008	0.02	35.68	240.36
JessupsTrib	Reach 3	348.5	Timmins	0.7	199.94	200.2825		200.28	0.000009	0.03	57.82	249.85
JessupsTrib	Reach 3	348.5	2y Flow 100	0.08	199.94	200.1061		200.11	0.000005	0.01	16.35	196.1

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsTrib	Reach 3	294.4	2y	0.08	199.9	200.106		200.11	0.000003	0.01	17.7	174.31
JessupsTrib	Reach 3	294.4	5y	0.13	199.9	200.1355		200.14	0.000004	0.01	23.04	186.77
JessupsTrib	Reach 3	294.4	10y	0.17	199.9	200.1517		200.15	0.000004	0.02	26.1	190.49
JessupsTrib	Reach 3	294.4	25y	5.4	199.9	200.518		200.52	0.000062	0.13	98.57	199.54
JessupsTrib	Reach 3	294.4	50y	0.27	199.9	200.181		200.18	0.000006	0.02	31.71	193.92
JessupsTrib	Reach 3	294.4	100y	0.31	199.9	200.1917		200.19	0.000006	0.02	33.81	196.28
JessupsTrib	Reach 3	294.4	Timmins	0.7	199.9	200.2821		200.28	0.000009	0.03	51.65	197.87
JessupsTrib	Reach 3	294.4	2y Flow 100	0.08	199.9	200.106		200.11	0.000003	0.01	17.7	174.31
JessupsTrib	Reach 3	235.5	2y	0.08	199.98	200.1058		200.11	0.00001	0.02	11.12	131.74

JessupsTrib	Reach 3	235.5	5y	0.13	199.98	200.1353		200.14	0.000011	0.02	15.15	141.16
JessupsTrib	Reach 3	235.5	10y	0.17	199.98	200.1515		200.15	0.000013	0.02	17.48	145.85
JessupsTrib	Reach 3	235.5	25y	5.4	199.98	200.5154		200.52	0.000119	0.17	73.15	154.77
JessupsTrib	Reach 3	235.5	50y	0.27	199.98	200.1807		200.18	0.000015	0.03	21.78	148.99
JessupsTrib	Reach 3	235.5	100y	0.31	199.98	200.1914		200.19	0.000016	0.03	23.38	149.91
JessupsTrib	Reach 3	235.5	Timmins	0.7	199.98	200.2817		200.28	0.000019	0.04	37.13	153.44
JessupsTrib	Reach 3	235.5	2y Flow 100	0.08	199.98	200.1058		200.11	0.00001	0.02	11.12	131.74
JessupsTrib	Reach 3	176.5	2y	0.08	199.95	200.1043		200.1	0.000159	0.06	2.96	54.9
JessupsTrib	Reach 3	176.5	5y	0.13	199.95	200.1337		200.13	0.000141	0.07	4.78	70.32
JessupsTrib	Reach 3	176.5	10y	0.17	199.95	200.1497		200.15	0.000137	0.07	5.99	79.89
JessupsTrib	Reach 3	176.5	25y	5.4	199.95	200.5025		200.5	0.000478	0.32	38.75	95.93
JessupsTrib	Reach 3	176.5	50y	0.27	199.95	200.1788		200.18	0.000127	0.08	8.42	85.28
JessupsTrib	Reach 3	176.5	100y	0.31	199.95	200.1894		200.19	0.000129	0.08	9.33	86.34
JessupsTrib	Reach 3	176.5	Timmins	0.7	199.95	200.2796		200.28	0.000102	0.1	17.58	94.05
JessupsTrib	Reach 3	176.5	2y Flow 100	0.08	199.95	200.1043		200.1	0.000159	0.06	2.96	54.9
JessupsTrib	Reach 3	122.8	2y	0.08	200.03	200.098		200.1	0.00012	0.03	3.38	45.06
JessupsTrib	Reach 3	122.8	5y	0.13	200.03	200.1271		200.13	0.000134	0.04	4.86	55.32
JessupsTrib	Reach 3	122.8	10y	0.17	200.03	200.1432		200.14	0.000136	0.05	5.77	56.82
JessupsTrib	Reach 3	122.8	25y	5.4	200.03	200.4714		200.47	0.001011	0.42	26.82	66.12
JessupsTrib	Reach 3	122.8	50y	0.27	200.03	200.1724		200.17	0.000148	0.07	7.47	60.37
JessupsTrib	Reach 3	122.8	100y	0.31	200.03	200.1828		200.18	0.000157	0.07	8.11	62.39
JessupsTrib	Reach 3	122.8	Timmins	0.7	200.03	200.2741		200.27	0.000145	0.1	13.92	64.41
JessupsTrib	Reach 3	122.8	2y Flow 100	0.08	200.03	200.098		200.1	0.00012	0.03	3.38	45.06
JessupsTrib	Reach 3	73.6	2y	0.08	199.95	200.0894		200.09	0.000234	0.07	2	36.07
JessupsTrib	Reach 3	73.6	5y	0.13	199.95	200.1179		200.12	0.000238	0.08	3.23	50.2
JessupsTrib	Reach 3	73.6	10y	0.17	199.95	200.1337		200.13	0.000253	0.09	4.08	55.96

JessupsTrib	Reach 3	73.6	25y	5.4	199.95	200.3981		200.4	0.002019	0.57	20.05	61.48
JessupsTrib	Reach 3	73.6	50y	0.27	199.95	200.163		200.16	0.000229	0.1	5.78	59.23
JessupsTrib	Reach 3	73.6	100y	0.31	199.95	200.1733		200.17	0.000227	0.11	6.39	59.71
JessupsTrib	Reach 3	73.6	Timmins	0.7	199.95	200.2659		200.27	0.000175	0.13	11.98	60.64
JessupsTrib	Reach 3	73.6	2y Flow 100	0.08	199.95	200.0894		200.09	0.000234	0.07	2	36.07
JessupsTrib	Reach 3	18.3	2y	0.08	199.93	200.0838		200.08	0.00007	0.05	4.28	63.5
JessupsTrib	Reach 3	18.3	5y	0.13	199.93	200.1118		200.11	0.00008	0.05	6.21	72.62
JessupsTrib	Reach 3	18.3	10y	0.17	199.93	200.1275		200.13	0.000082	0.05	7.36	73.67
JessupsTrib	Reach 3	18.3	25y	5.4	199.93	200.2409	200.12	200.25	0.006748	0.75	15.88	75.63
JessupsTrib	Reach 3	18.3	50y	0.27	199.93	200.157		200.16	0.000085	0.06	9.55	74.76
JessupsTrib	Reach 3	18.3	100y	0.31	199.93	200.1672		200.17	0.000089	0.07	10.32	75.14
JessupsTrib	Reach 3	18.3	Timmins	0.7	199.93	200.2607		200.26	0.000085	0.09	17.37	75.73
JessupsTrib	Reach 3	18.3	2y Flow 100	0.08	199.93	200.0838		200.08	0.00007	0.05	4.28	63.5
JessupsCre	Reach 2	2384.2	2y	0.13	201.33	201.4326		201.43	0.000272	0.08	3.28	35.75
JessupsCre	Reach 2	2384.2	5y	0.23	201.33	201.4596		201.46	0.000347	0.11	4.25	36.19
JessupsCre	Reach 2	2384.2	10y	0.3	201.33	201.4767		201.48	0.000386	0.12	4.88	37.19
JessupsCre	Reach 2	2384.2	25y	0.4	201.33	201.4967		201.5	0.000429	0.14	5.63	38.03

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsCre	Reach 2	2384.2	50y	0.48	201.33	201.5097		201.51	0.000462	0.16	6.13	38.46
JessupsCre	Reach 2	2384.2	100y	0.55	201.33	201.5214		201.52	0.000507	0.17	6.58	38.82
JessupsCre	Reach 2	2384.2	Timmins	1.38	201.33	201.6088		201.61	0.00082	0.29	10.04	40.55
JessupsCre	Reach 2	2384.2	2y Flow 100	0.13	201.33	201.4326		201.43	0.000272	0.08	3.28	35.75
JessupsCre	Reach 2	2309	2y	0.13	201.33	201.3463	201.35	201.36	0.351034	0.67	0.33	28
JessupsCre	Reach 2	2309	5y	0.23	201.33	201.3552	201.36	201.37	0.182553	0.68	0.62	34.41

JessupsCre	Reach 2	2309	10y	0.3	201.33	201.3596	201.36	201.37	0.155746	0.73	0.78	35.3
JessupsCre	Reach 2	2309	25y	0.4	201.33	201.3641	201.36	201.38	0.150942	0.82	0.93	36.18
JessupsCre	Reach 2	2309	50y	0.48	201.33	201.372	201.36	201.39	0.103979	0.81	1.24	44.6
JessupsCre	Reach 2	2309	100y	0.55	201.33	201.3784	201.37	201.39	0.073652	0.77	1.53	45.3
JessupsCre	Reach 2	2309	Timmins	1.38	201.33	201.4357		201.44	0.018048	0.69	4.37	53.33
JessupsCre	Reach 2	2309	2y Flow 100	0.13	201.33	201.3463	201.35	201.36	0.351034	0.67	0.33	28
JessupsCre	Reach 2	2217.4	2y	0.13	200.88	200.9649		200.97	0.001243	0.15	1.83	32.44
JessupsCre	Reach 2	2217.4	5y	0.23	200.88	200.9916		200.99	0.001123	0.18	2.75	37.05
JessupsCre	Reach 2	2217.4	10y	0.3	200.88	201.0062	200.93	201.01	0.001149	0.2	3.31	39.43
JessupsCre	Reach 2	2217.4	25y	0.4	200.88	201.0229	200.94	201.02	0.001181	0.22	3.98	40.85
JessupsCre	Reach 2	2217.4	50y	0.48	200.88	201.0337	200.94	201.03	0.00122	0.23	4.42	41.07
JessupsCre	Reach 2	2217.4	100y	0.55	200.88	201.0442	200.95	201.05	0.001249	0.25	4.85	41.29
JessupsCre	Reach 2	2217.4	Timmins	1.38	200.88	201.1284	200.98	201.13	0.001448	0.35	8.41	43.24
JessupsCre	Reach 2	2217.4	2y Flow 100	0.13	200.88	200.9649		200.97	0.001243	0.15	1.83	32.44
JessupsCre	Reach 2	2143.9	2y	0.13	200.86	200.7222		200.72	0.038007		0.65	21.77
JessupsCre	Reach 2	2143.9	5y	0.23	200.86	200.7155	200.72	200.73	0.199769		0.52	19.57
JessupsCre	Reach 2	2143.9	10y	0.3	200.86	200.717	200.72	200.73	0.297182		0.55	20.07
JessupsCre	Reach 2	2143.9	25y	0.4	200.86	200.7239	200.72	200.74	0.294538		0.69	22.29
JessupsCre	Reach 2	2143.9	50y	0.48	200.86	200.7296	200.73	200.75	0.250429		0.82	24.07
JessupsCre	Reach 2	2143.9	100y	0.55	200.86	200.7333	200.73	200.75	0.248215		0.91	24.52
JessupsCre	Reach 2	2143.9	Timmins	1.38	200.86	200.7656	200.77	200.8	0.2023		1.76	27.71
JessupsCre	Reach 2	2143.9	2y Flow 100	0.13	200.86	200.7222		200.72	0.038007		0.65	21.77
JessupsCre	Reach 2	2015.8	2y	0.13	200.17	200.2701		200.27	0.001257	0.11	1.99	35.08
JessupsCre	Reach 2	2015.8	5y	0.23	200.17	200.3047		200.31	0.000884	0.13	3.5	53.98
JessupsCre	Reach 2	2015.8	10y	0.3	200.17	200.3241		200.32	0.000788	0.14	4.64	62.22
JessupsCre	Reach 2	2015.8	25y	0.4	200.17	200.3435		200.34	0.000709	0.15	5.88	65.46

JessupsCre	Reach 2	2015.8	50y	0.48	200.17	200.3573		200.36	0.000663	0.16	6.8	68.12
JessupsCre	Reach 2	2015.8	100y	0.55	200.17	200.3705		200.37	0.000623	0.16	7.72	70.08
JessupsCre	Reach 2	2015.8	Timmins	1.38	200.17	200.46		200.46	0.000615	0.23	14.71	89.35
JessupsCre	Reach 2	2015.8	2y Flow 100	0.13	200.17	200.2701		200.27	0.001257	0.11	1.99	35.08
JessupsCre	Reach 2	1956.2	2y	0.13	200.21	200.1913		200.19	0.001169		1.36	15.14
JessupsCre	Reach 2	1956.2	5y	0.23	200.21	200.2341		200.23	0.001338	0.04	2.18	25.22
JessupsCre	Reach 2	1956.2	10y	0.3	200.21	200.258		200.26	0.00133	0.06	2.9	34.43
JessupsCre	Reach 2	1956.2	25y	0.4	200.21	200.2853		200.29	0.001216	0.09	3.97	42.81
JessupsCre	Reach 2	1956.2	50y	0.48	200.21	200.3025		200.3	0.001139	0.11	4.73	45.58
JessupsCre	Reach 2	1956.2	100y	0.55	200.21	200.3181		200.32	0.001091	0.13	5.46	49.46
JessupsCre	Reach 2	1956.2	Timmins	1.38	200.21	200.4038		200.4	0.001263	0.25	10.78	86.59
JessupsCre	Reach 2	1956.2	2y Flow 100	0.13	200.21	200.1913		200.19	0.001169		1.36	15.14
JessupsCre	Reach 2	1885.3	2y	0.13	199.92	200.1712		200.17	0.000148	0.1	3.88	44.88
JessupsCre	Reach 2	1885.3	5y	0.23	199.92	200.2148		200.22	0.000134	0.11	6.18	62.98
JessupsCre	Reach 2	1885.3	10y	0.3	199.92	200.2388		200.24	0.000133	0.11	7.88	77.39
JessupsCre	Reach 2	1885.3	25y	0.4	199.92	200.2663		200.27	0.000132	0.12	10.18	90.35
JessupsCre	Reach 2	1885.3	50y	0.48	199.92	200.2831		200.28	0.000138	0.13	11.75	96.38
JessupsCre	Reach 2	1885.3	100y	0.55	199.92	200.2989		200.3	0.000137	0.13	13.31	100
JessupsCre	Reach 2	1885.3	Timmins	1.38	199.92	200.3715		200.37	0.000261	0.21	20.71	105.24
JessupsCre	Reach 2	1885.3	2y Flow 100	0.13	199.92	200.1712		200.17	0.000148	0.1	3.88	44.88

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsCre	Reach 2	1821.2	2y	0.13	199.99	200.171		200.17	0.000002	0.01	36.29	272.05
JessupsCre	Reach 2	1821.2	5y	0.23	199.99	200.2145		200.21	0.000002	0.01	48.31	278.2
JessupsCre	Reach 2	1821.2	10y	0.3	199.99	200.2385		200.24	0.000002	0.01	54.99	279.46

JessupsCre	Reach 2	1821.2	25y	0.4	199.99	200.266		200.27	0.000003	0.02	62.7	280.57
JessupsCre	Reach 2	1821.2	50y	0.48	199.99	200.2827		200.28	0.000003	0.02	67.39	281.04
JessupsCre	Reach 2	1821.2	100y	0.55	199.99	200.2984		200.3	0.000003	0.02	71.81	281.28
JessupsCre	Reach 2	1821.2	Timmins	1.38	199.99	200.3703		200.37	0.000009	0.04	92.06	282.1
JessupsCre	Reach 2	1821.2	2y Flow 100	0.13	199.99	200.171		200.17	0.000002	0.01	36.29	272.05
JessupsCre	Reach 2	1759	2y	0.13	200.07	200.1706		200.17	0.000026	0.02	11.71	141.99
JessupsCre	Reach 2	1759	5y	0.23	200.07	200.2141		200.21	0.000023	0.02	18.53	166.52
JessupsCre	Reach 2	1759	10y	0.3	200.07	200.2381		200.24	0.000022	0.02	22.62	173.59
JessupsCre	Reach 2	1759	25y	0.4	200.07	200.2655		200.27	0.000022	0.02	27.45	178.56
JessupsCre	Reach 2	1759	50y	0.48	200.07	200.2822		200.28	0.000022	0.03	30.44	179.8
JessupsCre	Reach 2	1759	100y	0.55	200.07	200.2978		200.3	0.000023	0.03	33.26	180.45
JessupsCre	Reach 2	1759	Timmins	1.38	200.07	200.3688		200.37	0.000048	0.06	46.13	181.89
JessupsCre	Reach 2	1759	2y Flow 100	0.13	200.07	200.1706		200.17	0.000026	0.02	11.71	141.99
JessupsCre	Reach 2	1693.8	2y	0.13	200.01	200.1694		200.17	0.000017	0.02	13.38	138.87
JessupsCre	Reach 2	1693.8	5y	0.23	200.01	200.213		200.21	0.000016	0.02	19.67	147.5
JessupsCre	Reach 2	1693.8	10y	0.3	200.01	200.237		200.24	0.000016	0.03	23.21	147.98
JessupsCre	Reach 2	1693.8	25y	0.4	200.01	200.2644		200.26	0.000016	0.03	27.28	149.03
JessupsCre	Reach 2	1693.8	50y	0.48	200.01	200.281		200.28	0.000018	0.03	29.76	150.09
JessupsCre	Reach 2	1693.8	100y	0.55	200.01	200.2966		200.3	0.000019	0.04	32.12	150.68
JessupsCre	Reach 2	1693.8	Timmins	1.38	200.01	200.3661		200.37	0.000046	0.07	42.72	153.68
JessupsCre	Reach 2	1693.8	2y Flow 100	0.13	200.01	200.1694		200.17	0.000017	0.02	13.38	138.87
JessupsCre	Reach 2	1647.5	2y	0.13	199.98	200.1687		200.17	0.000014	0.02	13.57	125.66
JessupsCre	Reach 2	1647.5	5y	0.23	199.98	200.2124		200.21	0.000014	0.03	19.21	132.2
JessupsCre	Reach 2	1647.5	10y	0.3	199.98	200.2363		200.24	0.000015	0.03	22.4	134.18
JessupsCre	Reach 2	1647.5	25y	0.4	199.98	200.2637		200.26	0.000016	0.03	26.1	136.03
JessupsCre	Reach 2	1647.5	50y	0.48	199.98	200.2802		200.28	0.000017	0.04	28.35	136.18

JessupsCre	Reach 2	1647.5	100y	0.55	199.98	200.2958		200.3	0.000019	0.04	30.48	136.3
JessupsCre	Reach 2	1647.5	Timmins	1.38	199.98	200.364		200.36	0.000048	0.08	39.78	136.83
JessupsCre	Reach 2	1647.5	2y Flow 100	0.13	199.98	200.1687		200.17	0.000014	0.02	13.57	125.66
JessupsCre	Reach 2	1598.6	2y	0.13	199.91	200.1677		200.17	0.000029	0.04	6.72	49.05
JessupsCre	Reach 2	1598.6	5y	0.23	199.91	200.2113		200.21	0.000037	0.05	8.94	52.41
JessupsCre	Reach 2	1598.6	10y	0.3	199.91	200.2351		200.24	0.000043	0.06	10.2	53.47
JessupsCre	Reach 2	1598.6	25y	0.4	199.91	200.2623		200.26	0.00005	0.07	11.67	54.47
JessupsCre	Reach 2	1598.6	50y	0.48	199.91	200.2787		200.28	0.000056	0.08	12.56	54.83
JessupsCre	Reach 2	1598.6	100y	0.55	199.91	200.2942		200.29	0.000062	0.08	13.41	55.16
JessupsCre	Reach 2	1598.6	Timmins	1.38	199.91	200.3593		200.36	0.000187	0.16	17.04	56.09
JessupsCre	Reach 2	1598.6	2y Flow 100	0.13	199.91	200.1677		200.17	0.000029	0.04	6.72	49.05
JessupsCre	Reach 2	1543.6	2y	0.13	199.91	200.1639		200.16	0.000255	0.11	1.7	17.76
JessupsCre	Reach 2	1543.6	5y	0.23	199.91	200.2064		200.21	0.000306	0.13	2.53	20.86
JessupsCre	Reach 2	1543.6	10y	0.3	199.91	200.2295		200.23	0.000347	0.16	3.03	22.99
JessupsCre	Reach 2	1543.6	25y	0.4	199.91	200.2559		200.26	0.000374	0.17	3.65	23.52
JessupsCre	Reach 2	1543.6	50y	0.48	199.91	200.2715		200.27	0.000406	0.19	4.02	23.83
JessupsCre	Reach 2	1543.6	100y	0.55	199.91	200.2862		200.29	0.00044	0.21	4.37	24.43
JessupsCre	Reach 2	1543.6	Timmins	1.38	199.91	200.3334		200.34	0.001448	0.42	5.63	27.5
JessupsCre	Reach 2	1543.6	2y Flow 100	0.13	199.91	200.1639		200.16	0.000255	0.11	1.7	17.76
JessupsCre	Reach 1	1508.4	2y	0.59	199.87	200.0088	200.01	200.03	0.028986	0.71	1.42	39.09
JessupsCre	Reach 1	1508.4	5y	0.99	199.87	200.0253	200.03	200.05	0.033952	0.87	2.15	48.42
JessupsCre	Reach 1	1508.4	10y	1.31	199.87	200.0394	200.04	200.07	0.030687	0.91	2.89	56.65
JessupsCre	Reach 1	1508.4	25y	1.73	199.87	200.0515	200.05	200.08	0.031818	1	3.64	68.99
JessupsCre	Reach 1	1508.4	50y	2.06	199.87	200.063	200.06	200.09	0.028822	1.01	4.49	80.03

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width

				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsCre	Reach 1	1508.4	100y	2.39	199.87	200.0717	200.07	200.1	0.027786	1.04	5.23	88.36
JessupsCre	Reach 1	1508.4	Timmins	6.3	199.87	200.2251		200.23	0.003757	0.64	27.64	181.21
JessupsCre	Reach 1	1508.4	2y Flow 100	0.59	199.87	200.0088	200.01	200.03	0.028986	0.71	1.42	39.09
JessupsCre	Reach 1	1503.3	2y	0.59	198.8	199.8649	199.06	199.87	0.000026	0.12	5.07	33.89
JessupsCre	Reach 1	1503.3	5y	0.99	198.8	199.8987	199.11	199.9	0.000066	0.19	5.26	34.32
JessupsCre	Reach 1	1503.3	10y	1.31	198.8	199.921	199.14	199.92	0.000107	0.24	5.38	34.6
JessupsCre	Reach 1	1503.3	25y	1.73	198.8	199.9475	199.17	199.95	0.000169	0.31	5.53	34.94
JessupsCre	Reach 1	1503.3	50y	2.06	198.8	199.9668	199.2	199.97	0.000226	0.37	5.64	35.18
JessupsCre	Reach 1	1503.3	100y	2.39	198.8	199.9847	199.22	199.99	0.000285	0.42	5.74	35.41
JessupsCre	Reach 1	1503.3	Timmins	6.3	198.8	200.1698	199.47	200.21	0.001142	0.93	6.78	40.04
JessupsCre	Reach 1	1503.3	2y Flow 100	0.59	198.8	199.8649	199.06	199.87	0.000026	0.12	5.07	33.89
JessupsCre	Reach 1	1487.7	Booth Rd.	Culvert								
JessupsCre	Reach 1	1474.7	2y	0.59	198.66	199.8647	198.79	199.87	0.000011	0.09	6.6	37.71
JessupsCre	Reach 1	1474.7	5y	0.99	198.66	199.8981	198.83	199.9	0.000028	0.15	6.79	37.9
JessupsCre	Reach 1	1474.7	10y	1.31	198.66	199.9197	198.86	199.92	0.000046	0.19	6.91	38.03
JessupsCre	Reach 1	1474.7	25y	1.73	198.66	199.9449	198.9	199.95	0.000075	0.24	7.05	38.18
JessupsCre	Reach 1	1474.7	50y	2.06	198.66	199.9629	198.93	199.97	0.000102	0.29	7.15	38.29
JessupsCre	Reach 1	1474.7	100y	2.39	198.66	199.9792	198.95	199.98	0.000132	0.33	7.24	38.38
JessupsCre	Reach 1	1474.7	Timmins	6.3	198.66	200.1143	199.19	200.15	0.000658	0.79	8	39.6
JessupsCre	Reach 1	1474.7	2y Flow 100	0.59	198.66	199.8647	198.79	199.87	0.000011	0.09	6.6	37.71
JessupsCre	Reach 1	1464.6	2y	0.59	200.01	199.8637		199.86	0.005791		4.33	65.99
JessupsCre	Reach 1	1464.6	5y	0.99	200.01	199.8972		199.9	0.004673		6.82	80.42
JessupsCre	Reach 1	1464.6	10y	1.31	200.01	199.9188		199.92	0.003997		8.62	86.23
JessupsCre	Reach 1	1464.6	25y	1.73	200.01	199.9441		199.95	0.003515		10.88	93.73
JessupsCre	Reach 1	1464.6	50y	2.06	200.01	199.9622		199.96	0.003205		12.66	101.91

JessupsCre	Reach 1	1464.6	100y	2.39	200.01	199.9788		199.98	0.002986		14.41	109.81
JessupsCre	Reach 1	1464.6	Timmins	6.3	200.01	200.1257		200.13	0.001799	0.14	36.37	199.25
JessupsCre	Reach 1	1464.6	2y Flow 100	0.59	200.01	199.8637		199.86	0.005791		4.33	65.99
JessupsCre	Reach 1	1379.4	2y	0.59	199.66	199.8281		199.83	0.00014	0.07	21.8	252.62
JessupsCre	Reach 1	1379.4	5y	0.99	199.66	199.8632		199.86	0.000137	0.08	30.95	267.76
JessupsCre	Reach 1	1379.4	10y	1.31	199.66	199.8857		199.89	0.000137	0.09	37.06	273.23
JessupsCre	Reach 1	1379.4	25y	1.73	199.66	199.9126		199.91	0.000133	0.09	44.46	277.64
JessupsCre	Reach 1	1379.4	50y	2.06	199.66	199.9315		199.93	0.000133	0.1	49.74	281.1
JessupsCre	Reach 1	1379.4	100y	2.39	199.66	199.9483		199.95	0.000133	0.1	54.5	285.29
JessupsCre	Reach 1	1379.4	Timmins	6.3	199.66	200.0961		200.1	0.000146	0.15	97.55	297.17
JessupsCre	Reach 1	1379.4	2y Flow 100	0.59	199.66	199.8281		199.83	0.00014	0.07	21.8	252.62
JessupsCre	Reach 1	1284.8	2y	0.59	199.66	199.8112		199.81	0.000241	0.09	15.05	151.9
JessupsCre	Reach 1	1284.8	5y	0.99	199.66	199.8462		199.85	0.000256	0.11	20.4	153.5
JessupsCre	Reach 1	1284.8	10y	1.31	199.66	199.8684		199.87	0.000268	0.12	23.81	153.77
JessupsCre	Reach 1	1284.8	25y	1.73	199.66	199.8954		199.9	0.000274	0.13	27.97	154.1
JessupsCre	Reach 1	1284.8	50y	2.06	199.66	199.9134		199.91	0.000286	0.15	30.74	154.32
JessupsCre	Reach 1	1284.8	100y	2.39	199.66	199.9299		199.93	0.000295	0.16	33.3	154.53
JessupsCre	Reach 1	1284.8	Timmins	6.3	199.66	200.0743		200.08	0.000377	0.24	55.92	157.61
JessupsCre	Reach 1	1284.8	2y Flow 100	0.59	199.66	199.8112		199.81	0.000241	0.09	15.05	151.9
JessupsCre	Reach 1	1193.8	2y	0.59	199.6	199.7893		199.79	0.000307	0.1	12.51	118.34
JessupsCre	Reach 1	1193.8	5y	0.99	199.6	199.8217		199.82	0.000363	0.13	16.37	119.68
JessupsCre	Reach 1	1193.8	10y	1.31	199.6	199.8419		199.84	0.000404	0.14	18.8	120.4
JessupsCre	Reach 1	1193.8	25y	1.73	199.6	199.8677		199.87	0.000431	0.16	21.94	122.9
JessupsCre	Reach 1	1193.8	50y	2.06	199.6	199.8842		199.88	0.00046	0.18	23.96	123.09
JessupsCre	Reach 1	1193.8	100y	2.39	199.6	199.8994		199.9	0.000481	0.19	25.83	123.29
JessupsCre	Reach 1	1193.8	Timmins	6.3	199.6	200.034		200.04	0.000653	0.31	42.56	125.32

JessupsCre	Reach 1	1193.8	2y Flow 100	0.59	199.6	199.7893		199.79	0.000307	0.1	12.51	118.34

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsCre	Reach 1	1122.9	2y	0.59	199.62	199.7092	199.69	199.71	0.025128	0.43	2.22	52.31
JessupsCre	Reach 1	1122.9	5y	0.99	199.62	199.703	199.7	199.72	0.116387	0.84	1.9	51.5
JessupsCre	Reach 1	1122.9	10y	1.31	199.62	199.7123	199.71	199.73	0.098488	0.89	2.38	52.62
JessupsCre	Reach 1	1122.9	25y	1.73	199.62	199.72	199.72	199.75	0.10125	1.01	2.8	53.29
JessupsCre	Reach 1	1122.9	50y	2.06	199.62	199.7272	199.73	199.76	0.094864	1.08	3.18	53.91
JessupsCre	Reach 1	1122.9	100y	2.39	199.62	199.7337	199.73	199.77	0.090352	1.13	3.53	54.49
JessupsCre	Reach 1	1122.9	Timmins	6.3	199.62	199.7972	199.8	199.86	0.065054	1.54	7.09	56.9
JessupsCre	Reach 1	1122.9	2y Flow 100	0.59	199.62	199.7091	199.69	199.71	0.025233	0.43	2.22	52.3
JessupsCre	Reach 1	1051.6	2y	0.59	198.66	198.7803		198.78	0.008442	0.27	3.81	72.34
JessupsCre	Reach 1	1051.6	5y	0.99	198.66	198.8171		198.82	0.004564	0.25	6.74	87.49
JessupsCre	Reach 1	1051.6	10y	1.31	198.66	198.8418		198.84	0.003482	0.25	9.04	98.89
JessupsCre	Reach 1	1051.6	25y	1.73	198.66	198.8688		198.87	0.002864	0.27	11.83	106.58
JessupsCre	Reach 1	1051.6	50y	2.06	198.66	198.8879		198.89	0.002473	0.27	13.89	108.22
JessupsCre	Reach 1	1051.6	100y	2.39	198.66	198.9043		198.91	0.002213	0.28	15.67	108.61
JessupsCre	Reach 1	1051.6	Timmins	6.3	198.66	199.0569		199.06	0.001373	0.38	32.7	113.5
JessupsCre	Reach 1	1051.6	2y Flow 100	0.59	198.66	198.7803		198.78	0.008416	0.27	3.81	72.36
JessupsCre	Reach 1	936.5	2y	0.59	198.49	198.6897		198.69	0.000313	0.12	11.35	101.67
JessupsCre	Reach 1	936.5	5y	0.99	198.49	198.7259		198.73	0.000368	0.15	15.04	102.55
JessupsCre	Reach 1	936.5	10y	1.31	198.49	198.7492		198.75	0.000403	0.17	17.45	103.79
JessupsCre	Reach 1	936.5	25y	1.73	198.49	198.776		198.78	0.000434	0.19	20.25	104.54
JessupsCre	Reach 1	936.5	50y	2.06	198.49	198.7963		198.8	0.000448	0.2	22.37	104.78
JessupsCre	Reach 1	936.5	100y	2.39	198.49	198.8132		198.81	0.000469	0.22	24.15	104.98
JessupsCre	Reach 1	936.5	Timmins	6.3	198.49	198.9642		198.97	0.00063	0.34	40.37	110.24

JessupsCre	Reach 1	936.5	2y Flow 100	0.59	198.49	198.6896		198.69	0.000313	0.12	11.35	101.66
JessupsCre	Reach 1	815.1	2y	0.59	198.51	198.5762		198.58	0.009384	0.34	3.35	64.1
JessupsCre	Reach 1	815.1	5y	0.99	198.51	198.5956		198.6	0.009441	0.42	4.6	64.7
JessupsCre	Reach 1	815.1	10y	1.31	198.51	198.6141		198.62	0.007745	0.44	5.8	65.2
JessupsCre	Reach 1	815.1	25y	1.73	198.51	198.6397		198.64	0.005865	0.45	7.48	66.21
JessupsCre	Reach 1	815.1	50y	2.06	198.51	198.6552		198.66	0.005507	0.47	8.52	67.14
JessupsCre	Reach 1	815.1	100y	2.39	198.51	198.6697		198.67	0.005204	0.49	9.49	67.78
JessupsCre	Reach 1	815.1	Timmins	6.3	198.51	198.7674		198.78	0.006475	0.77	16.35	72.5
JessupsCre	Reach 1	815.1	2y Flow 100	0.59	198.51	198.5904		198.59	0.004272	0.27	4.27	64.57
JessupsCre	Reach 1	692.4	2y	0.59	197.34	197.3778	197.3	197.38	0.016764	0.27	2.51	86.34
JessupsCre	Reach 1	692.4	5y	0.99	197.34	197.3965	197.38	197.4	0.01644	0.37	4.49	120.63
JessupsCre	Reach 1	692.4	10y	1.31	197.34	197.4007	197.39	197.41	0.022701	0.45	5.01	126.86
JessupsCre	Reach 1	692.4	25y	1.73	197.34	197.3987	197.39	197.41	0.043904	0.62	4.76	124.07
JessupsCre	Reach 1	692.4	50y	2.06	197.34	197.4013	197.4	197.42	0.054252	0.71	5.09	127.54
JessupsCre	Reach 1	692.4	100y	2.39	197.34	197.4026	197.4	197.42	0.067672	0.8	5.25	129.02
JessupsCre	Reach 1	692.4	Timmins	6.3	197.34	197.4572	197.43	197.47	0.041131	0.95	13.36	162.55
JessupsCre	Reach 1	692.4	2y Flow 100	0.59	197.34	197.3003	197.3	197.36	0.180043		0.53	4.35
JessupsCre	Reach 1	678.3	2y	0.59	196.86	196.7844		196.79	0.011522		3.31	62.23
JessupsCre	Reach 1	678.3	5y	0.99	196.86	196.8136		196.82	0.009519		5.3	74.89
JessupsCre	Reach 1	678.3	10y	1.31	196.86	196.8388		196.84	0.007032		7.41	90.23
JessupsCre	Reach 1	678.3	25y	1.73	196.86	196.8682		196.87	0.005025	0.04	10.23	104.1
JessupsCre	Reach 1	678.3	50y	2.06	196.86	196.8843		196.89	0.004486	0.09	11.99	115.26
JessupsCre	Reach 1	678.3	100y	2.39	196.86	196.899		196.9	0.004067	0.11	13.77	126.81
JessupsCre	Reach 1	678.3	Timmins	6.3	196.86	196.9901		196.99	0.004123	0.27	28.55	181.24
JessupsCre	Reach 1	678.3	2y Flow 100	0.59	196.86	196.9621		196.96	0.00006	0.02	23.58	173.26

JessupsCre	Reach 1	573.2	2y	0.59	196.4	196.5263		196.53	0.001592	0.22	5.6	63.27
JessupsCre	Reach 1	573.2	5y	0.99	196.4	196.5598		196.56	0.001705	0.27	7.85	72.39
JessupsCre	Reach 1	573.2	10y	1.31	196.4	196.5748		196.58	0.002103	0.33	8.98	78.16
JessupsCre	Reach 1	573.2	25y	1.73	196.4	196.586		196.59	0.002909	0.4	9.88	82.92

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsCre	Reach 1	573.2	50y	2.06	196.4	196.5956		196.6	0.003411	0.45	10.69	85.97
JessupsCre	Reach 1	573.2	100y	2.39	196.4	196.6026		196.61	0.00389	0.49	11.3	87.25
JessupsCre	Reach 1	573.2	Timmins	6.3	196.4	196.7464		196.75	0.00261	0.59	25.2	101.88
JessupsCre	Reach 1	573.2	2y Flow 100	0.59	196.4	196.9615		196.96	0.000003	0.03	49.96	124.15
JessupsCre	Reach 1	479.7	2y	0.59	196	196.17		196.19	0.0149	0.74	1.08	11.05
JessupsCre	Reach 1	479.7	5y	0.99	196	196.2375		196.25	0.010281	0.58	3.01	45.37
JessupsCre	Reach 1	479.7	10y	1.31	196	196.2758		196.28	0.005722	0.5	5.07	63.93
JessupsCre	Reach 1	479.7	25y	1.73	196	196.3244		196.33	0.002922	0.43	8.57	77.06
JessupsCre	Reach 1	479.7	50y	2.06	196	196.3547		196.36	0.002165	0.41	10.96	79.39
JessupsCre	Reach 1	479.7	100y	2.39	196	196.3826		196.39	0.001694	0.39	13.2	81.56
JessupsCre	Reach 1	479.7	Timmins	6.3	196	196.6605		196.66	0.000519	0.36	37.54	89.28
JessupsCre	Reach 1	479.7	2y Flow 100	0.59	196	196.9613		196.96	0.000001	0.02	65.35	100.86
JessupsCre	Reach 1	406.6	2y	0.59	195.88	196.1242		196.12	0.000361	0.14	7.96	48.42
JessupsCre	Reach 1	406.6	5y	0.99	195.88	196.1882		196.19	0.000372	0.16	11.49	61.23
JessupsCre	Reach 1	406.6	10y	1.31	195.88	196.2318		196.23	0.000355	0.17	14.29	68.68
JessupsCre	Reach 1	406.6	25y	1.73	195.88	196.2868		196.29	0.000347	0.19	18.18	72.66
JessupsCre	Reach 1	406.6	50y	2.06	195.88	196.3209		196.32	0.000329	0.2	20.67	73.24
JessupsCre	Reach 1	406.6	100y	2.39	195.88	196.3523		196.35	0.000315	0.21	23	75.97
JessupsCre	Reach 1	406.6	Timmins	6.3	195.88	196.6441		196.65	0.000241	0.28	49.97	106.8
JessupsCre	Reach 1	406.6	2y Flow 100	0.59	195.88	196.9613		196.96	0	0.02	83.84	106.8

JessupsCre	Reach 1	337.9	2y	0.59	195.81	196.0334		196.05	0.009831	0.57	1.03	8.72
JessupsCre	Reach 1	337.9	5y	0.99	195.81	196.0967		196.12	0.006872	0.62	1.59	9.12
JessupsCre	Reach 1	337.9	10y	1.31	195.81	196.1421		196.16	0.005739	0.65	2.01	9.4
JessupsCre	Reach 1	337.9	25y	1.73	195.81	196.1985		196.22	0.004736	0.68	2.55	9.76
JessupsCre	Reach 1	337.9	50y	2.06	195.81	196.235		196.26	0.004501	0.71	2.91	10.01
JessupsCre	Reach 1	337.9	100y	2.39	195.81	196.268		196.3	0.004379	0.73	3.25	10.34
JessupsCre	Reach 1	337.9	Timmins	6.3	195.81	196.5723		196.6	0.002591	0.82	11.24	44.41
JessupsCre	Reach 1	337.9	2y Flow 100	0.59	195.81	196.9612		196.96	0.000002	0.03	33.43	61.3
JessupsCre	Reach 1	272.7	2y	0.59	195.51	196.002		196	0.000211	0.17	4.56	17.08
JessupsCre	Reach 1	272.7	5y	0.99	195.51	196.0346		196.04	0.000443	0.25	5.13	17.59
JessupsCre	Reach 1	272.7	10y	1.31	195.51	196.0648		196.07	0.000595	0.3	5.67	18.04
JessupsCre	Reach 1	272.7	25y	1.73	195.51	196.1065		196.11	0.000787	0.35	6.46	21.26
JessupsCre	Reach 1	272.7	50y	2.06	195.51	196.14		196.15	0.000847	0.38	7.21	23.51
JessupsCre	Reach 1	272.7	100y	2.39	195.51	196.1715		196.18	0.000884	0.4	7.96	24.02
JessupsCre	Reach 1	272.7	Timmins	6.3	195.51	196.4893		196.5	0.00093	0.53	20.24	61.73
JessupsCre	Reach 1	272.7	2y Flow 100	0.59	195.51	196.9612		196.96	0.000001	0.02	57.68	90.09
JessupsCre	Reach 1	238.5	2y	0.59	195.51	195.9957		196	0.000163	0.16	3.75	10.2
JessupsCre	Reach 1	238.5	5y	0.99	195.51	196.0203		196.02	0.000377	0.25	4.01	10.31
JessupsCre	Reach 1	238.5	10y	1.31	195.51	196.0445		196.05	0.000545	0.31	4.26	10.41
JessupsCre	Reach 1	238.5	25y	1.73	195.51	196.0787		196.09	0.000737	0.37	4.61	10.56
JessupsCre	Reach 1	238.5	50y	2.06	195.51	196.1079		196.12	0.000862	0.42	4.93	10.7
JessupsCre	Reach 1	238.5	100y	2.39	195.51	196.1361		196.15	0.000965	0.46	5.23	10.86
JessupsCre	Reach 1	238.5	Timmins	6.3	195.51	196.4338		196.46	0.001594	0.69	9.62	29.31
JessupsCre	Reach 1	238.5	2y Flow 100	0.59	195.51	196.9611		196.96	0.000001	0.03	45.9	95.5
JessupsCre	Reach 1	222.8	2y	0.59	195.47	195.9945		196	0.000075	0.11	7.74	29.36

JessupsCre	Reach 1	222.8	5y	0.99	195.47	196.0177		196.02	0.000172	0.18	8.43	29.9
JessupsCre	Reach 1	222.8	10y	1.31	195.47	196.041		196.04	0.000246	0.22	9.13	30.34
JessupsCre	Reach 1	222.8	25y	1.73	195.47	196.0744		196.08	0.000326	0.26	10.15	30.9
JessupsCre	Reach 1	222.8	50y	2.06	195.47	196.1034		196.11	0.000373	0.29	11.05	31.39
JessupsCre	Reach 1	222.8	100y	2.39	195.47	196.1315		196.14	0.00041	0.31	11.94	31.91
JessupsCre	Reach 1	222.8	Timmins	6.3	195.47	196.4322		196.44	0.000549	0.45	23.68	44.29
JessupsCre	Reach 1	222.8	2y Flow 100	0.59	195.47	196.9611		196.96	0.000001	0.02	63.65	98

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)
JessupsCre	Reach 1	168.9	2y	0.59	195.47	195.9906		195.99	0.000071	0.11	5.36	14.18
JessupsCre	Reach 1	168.9	5y	0.99	195.47	196.0081		196.01	0.000175	0.18	5.61	14.68
JessupsCre	Reach 1	168.9	10y	1.31	195.47	196.0266		196.03	0.000268	0.22	5.89	15.04
JessupsCre	Reach 1	168.9	25y	1.73	195.47	196.054		196.06	0.000384	0.28	6.31	15.53
JessupsCre	Reach 1	168.9	50y	2.06	195.47	196.0791		196.08	0.000464	0.31	6.7	15.91
JessupsCre	Reach 1	168.9	100y	2.39	195.47	196.1039		196.11	0.000533	0.34	7.1	16.3
JessupsCre	Reach 1	168.9	Timmins	6.3	195.47	196.3912		196.4	0.000758	0.52	16.7	66.71
JessupsCre	Reach 1	168.9	2y Flow 100	0.59	195.47	196.9611		196.96	0	0.02	61.25	91.53
JessupsCre	Reach 1	122.1	2y	0.59	195.48	195.9851		195.99	0.000152	0.16	3.66	9.43
JessupsCre	Reach 1	122.1	5y	0.99	195.48	195.9941		196	0.000402	0.27	3.75	9.56
JessupsCre	Reach 1	122.1	10y	1.31	195.48	196.0042		196.01	0.000653	0.34	3.85	9.7
JessupsCre	Reach 1	122.1	25y	1.73	195.48	196.0205		196.03	0.001009	0.43	4.01	9.93
JessupsCre	Reach 1	122.1	50y	2.06	195.48	196.0364		196.05	0.001316	0.5	4.17	10.31
JessupsCre	Reach 1	122.1	100y	2.39	195.48	196.0532		196.07	0.001581	0.56	4.34	10.61
JessupsCre	Reach 1	122.1	Timmins	6.3	195.48	196.2993		196.34	0.002742	0.9	8.04	24.12
JessupsCre	Reach 1	122.1	2y Flow 100	0.59	195.48	196.9611		196.96	0.000001	0.03	50.55	98.3

JessupsCre	Reach 1	85.2	2y	0.59	195.1	195.9805		195.98	0.000106	0.16	3.68	6.84
JessupsCre	Reach 1	85.2	5y	0.99	195.1	195.9813		195.99	0.000297	0.27	3.69	6.84
JessupsCre	Reach 1	85.2	10y	1.31	195.1	195.9823		195.99	0.000517	0.35	3.69	6.85
JessupsCre	Reach 1	85.2	25y	1.73	195.1	195.984		196	0.000887	0.47	3.71	6.85
JessupsCre	Reach 1	85.2	50y	2.06	195.1	195.9858		196	0.001253	0.55	3.72	6.86
JessupsCre	Reach 1	85.2	100y	2.39	195.1	195.9878		196.01	0.001662	0.64	3.73	6.87
JessupsCre	Reach 1	85.2	Timmins	6.3	195.1	196.0547		196.17	0.00826	1.5	4.2	7.15
JessupsCre	Reach 1	85.2	2y Flow 100	0.59	195.1	196.961		196.96	0.000002	0.04	24.47	82.15
JessupsCre	Reach 1	80.6	2y	0.59	194.73	195.9806	195.09	195.98	0.000039	0.11	5.14	7.32
JessupsCre	Reach 1	80.6	5y	0.99	194.73	195.9818	195.16	195.98	0.00011	0.19	5.15	7.32
JessupsCre	Reach 1	80.6	10y	1.31	194.73	195.9831	195.21	195.99	0.000191	0.25	5.16	7.33
JessupsCre	Reach 1	80.6	25y	1.73	194.73	195.9855	195.26	195.99	0.000328	0.33	5.18	7.34
JessupsCre	Reach 1	80.6	50y	2.06	194.73	195.9878	195.3	196	0.000463	0.4	5.2	7.35
JessupsCre	Reach 1	80.6	100y	2.39	194.73	195.9905	195.34	196	0.000614	0.46	5.22	7.36
JessupsCre	Reach 1	80.6	Timmins	6.3	194.73	196.0711	195.64	196.13	0.003062	1.08	5.81	7.66
JessupsCre	Reach 1	80.6	2y Flow 100	0.59	194.73	196.9609	195.09	196.96	0.000002	0.05	12.8	79.34
JessupsCre	Reach 1	65	Lakeshore Dr.	Culvert								
JessupsCre	Reach 1	50.9	2y	0.59	194.86	195.9802	195.13	195.98	0.000025	0.1	5.96	8.45
JessupsCre	Reach 1	50.9	5y	0.99	194.86	195.9806	195.19	195.98	0.000072	0.17	5.97	8.45
JessupsCre	Reach 1	50.9	10y	1.31	194.86	195.981	195.23	195.98	0.000125	0.22	5.97	8.46
JessupsCre	Reach 1	50.9	25y	1.73	194.86	195.9818	195.27	195.99	0.000216	0.29	5.98	8.46
JessupsCre	Reach 1	50.9	50y	2.06	194.86	195.9825	195.3	195.99	0.000308	0.34	5.98	8.46
JessupsCre	Reach 1	50.9	100y	2.39	194.86	195.9833	195.32	195.99	0.000411	0.4	5.99	8.47
JessupsCre	Reach 1	50.9	Timmins	6.3	194.86	196.0059	195.57	196.06	0.002614	1.02	6.16	8.59
JessupsCre	Reach 1	50.9	2y Flow 100	0.59	194.86	196.9599	195.13	196.96	0.000002	0.04	13.69	70.35
JessupsCre	Reach 1	44.5	2y	0.59	194.87	195.98	195.19	195.98	0.000031	0.1	5.97	9.83
JessupsCre	Reach 1	44.5	5y	0.99	194.87	195.98	195.26	195.98	0.000088	0.17	5.97	9.83
JessupsCre	Reach 1	44.5	10y	1.31	194.87	195.98	195.31	195.98	0.000153	0.22	5.97	9.83
JessupsCre	Reach 1	44.5	25y	1.73	194.87	195.98	195.35	195.98	0.000265	0.3	5.97	9.83
JessupsCre	Reach 1	44.5	50y	2.06	194.87	195.98	195.38	195.99	0.000378	0.35	5.97	9.83

JessupsCre	Reach 1	44.5	100y	2.39	194.87	195.98	195.4	195.99	0.000507	0.41	5.97	9.83
JessupsCre	Reach 1	44.5	Timmins	6.3	194.87	195.98	195.65	196.04	0.003531	1.08	5.97	9.83
JessupsCre	Reach 1	44.5	2y Flow 100	0.59	194.87	196.9599	195.19	196.96	0.000001	0.03	29.18	90.48