

Appendix V5-6V

2017 Patch Outflow, Ogama Inflow, and Ogama Outflow
Fisheries Assessment – Hydraulic Modelling Results



Memorandum



Date: December 12, 2017

To: John Roberts, Vice President, Environmental Affairs, TMAC Resources Inc. (TMAC); Oliver Curran, Director, Environmental Affairs (TMAC)

From: Cameron Evans, E.I.T. (ERM); Ali Naghibi, PhD., P. Eng. (ERM)

Cc: Nicole Bishop (ERM)

Subject: **2017 Patch Outflow, Ogama Inflow, and Ogama Outflow Fisheries Assessment – Hydraulic Modelling Results**

1. INTRODUCTION

Water balance results in Appendix V5-1M and Appendix V5-1P of the EIS indicate reductions in lake level and stream flow due to infiltration into the underground mine workings. Five streams were modelled using Hydraulic Engineering Center, River Analysis System (HEC-RAS) one dimensional hydraulic models to assess the impact of the flow reduction on fish habitat. These streams are Patch Outflow, Ogama Inflow, Ogama Outflow, Doris Outflow, and Little Roberts Outflow.

Descriptions of the development, calibration and verification of the Patch Outflow, Ogama Inflow and Ogama Outflow models are described in this memo. The Doris Outflow and Little Roberts Outflow models were developed in 2015 for a previous flow reduction study and are described in Appendix V5-6R of the EIS. Model results of the flow reductions for all five models are presented in Appendix A of this memo.

Patch Outflow, Ogama Inflow and Ogama Outflow are marked on Figure 1.

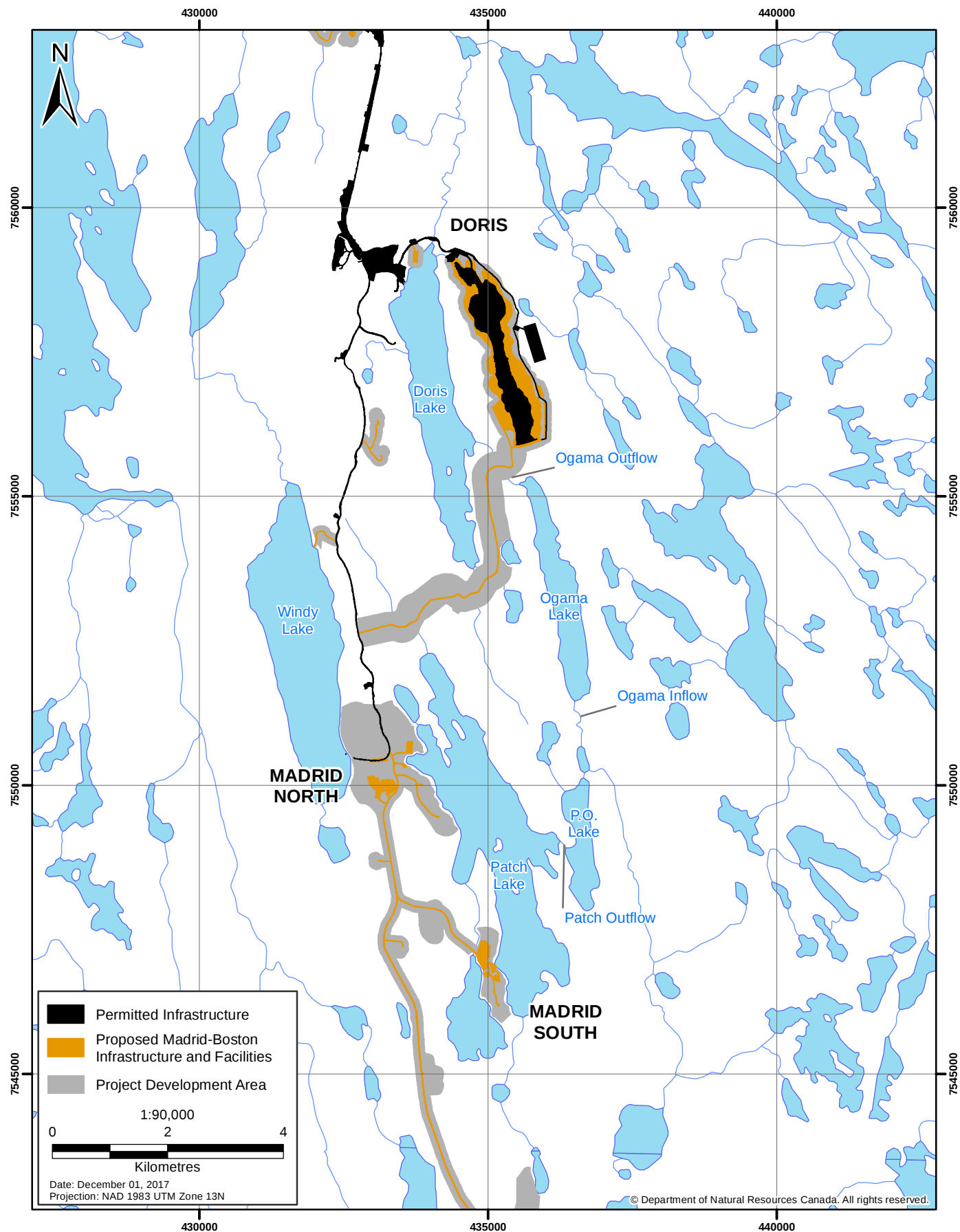
2. MODEL DEVELOPMENT

Individual HEC-RAS models were developed for Patch Outflow, Ogama Inflow and Ogama Outflow. Each model used surveyed channel geometry to build the model, and was calibrated and verified using water level and discharge measurements taken throughout the open water season in 2017.

2.1 Channel Geometry

Channel cross sections were surveyed throughout the length of each stream in September 2017, in order to capture both hydraulically important features (e.g., hydraulic controls) as well as important fish habitat. The surveys were tied to a local datum. Maps of the cross section locations for each stream are located in Appendix B.

Figure 1
Location of Modelled Channels



2.1.1 Patch Outflow

Patch Outflow is approximately 100 m long and is predominantly one long glide with some pools just upstream of PO Lake. There were 18 cross sections surveyed for Patch Outflow. The sides of the channel have significant weed growth, which restricts flow to the very center of the channel during summer.

2.1.2 Ogama Inflow

Ogama Inflow is approximately 1000 m long and is made up of narrow incised channels combined with wide pools. Several rocky riffles and cascades are present throughout the length of the stream. There were 64 cross sections surveyed on Ogama Inflow.

Some pools were too deep to cross and the geometry of the bottom of these pools was not surveyed. In these cases the pool was assumed to be the depth of the lowest survey point. This does not impact the hydraulic operation of the model (because the geometry of pool outlet was properly modelled), but could lead to an over estimation of the loss of pool habitat as a percent of depth or cross sectional area.

2.1.3 Ogama Outflow

Ogama Outflow is approximately 1300 m long with pools and several cascades located along its length. There is generally significant weed growth on the sides of the channel. The lower 400 m of Ogama Outflow is very flat and is comprised of pools of assorted sizes connected by well-defined channels. There were 67 cross sections surveyed on Ogama Outflow.

Some pools were too deep to cross and the geometry of the bottom of these pools was not surveyed. In these cases the pool was assumed to be the depth of the lowest survey point. This does not impact the hydraulic operation of the model (because the geometry of pool outlet was properly modelled), but could lead to an over estimation of the loss of pool habitat as a percent of depth or cross sectional area.

2.2 Calibration and Verification

The HEC-RAS models for Patch Outflow, Ogama Inflow and Ogama Outflow were all calibrated to water levels observed during the channel geometry surveys in September 2017. In order to facilitate model verification, three water level surveys were performed at key locations along the streams in June, July and August, and coupled with a discharge measurement taken on the same day. Calibration and verification error was calculated as the percent difference between observed and modelled channel depth. Details of the calibration and verification results are available in Appendix C, a summary is presented in Table 2.2-1.

2.2.1 Patch Outflow

The Patch Outflow model used 18 cross sections which had an average calibration error of 3%. All transects were calibrated to 7% error or less. Three verification cross sections were used with an average error of 11%. Some individual verification measurements had up to 26% error. The larger verification error is due in part to the way the verification measurements were taken.

Depths were measured directly in the channel, instead of the water surface being surveyed as was done for the other two streams, which introduces additional error in the measurement.

2.2.2 *Ogama Inflow*

The Ogama Inflow model used 64 cross sections which had an average calibration error of 4%. All cross sections, except two, were calibrated to 10% error or less. The two cross sections greater than 10% had a calibration error of 16% and 81%. These two cross sections are located in the middle of cascades, which violate the assumptions for a 1-D model and have variable water elevation across the cross section, which increases the error in surveying the water level. Model verification was performed using surveyed water levels at 14 locations with an average error of 6% and a maximum error of 23%.

2.2.3 *Ogama Outflow*

The Ogama Outflow model used 67 cross sections which had an average calibration error of 4%. All cross sections, except five, were calibrated to 10% error or less. The five cross sections with error greater than 10% were between 12% and 34%, and all occurred in cascades which violate the assumptions for a 1-D model and have variable water elevation across the cross section, which increases the error in surveying the water level. Model verification was performed using surveyed water levels at 11 locations with an average error of 5% and a maximum error of 14%.

Table 2.2-1. Model Calibration and Verification Summary for Patch Outflow, Ogama Inflow and Ogama Outflow

Stream Name	Number of Model Cross Sections	Average Calibration Error (% of Depth)	Number of Verification Locations	Average Verification Error (% of Depth)
Patch Outflow	18	3%	3	11%
Ogama Inflow	64	4%	14	6%
Ogama Outflow	67	4%	11	5%

3. MODELLED FLOWS

Modelled flow rates were based on the water balance predictions in appendices V5-1M and V5-1P of the FEIS. Flow reductions from both the Base Case and the High Groundwater Sensitivity Case were modelled. Average monthly flows for June and September were modelled, as the greatest flow reductions occurred during June, while the lowest flows occurred in September. Project-affected flows were modelled as the average during the Construction, Operations and Closure phases, as well as Post-Closure if the change was greater than 5% from baseline. Any change less than 5% is within the range of model uncertainty and is assumed to be the same as baseline. Flow rates modelled are presented in Tables 3-1 and 3-2 below. Results per cross section are located in Appendix A.

Table 3-1. Modelled Flow Rates for Base Case

Stream	Month	Flow Rate (m ³ /s)					
		Baseline	Greatest Flow Reduction of All Phases	Construction	Operation	Closure	Post-Closure
Patch Outflow	June	0.45	0.32	0.42	0.35	0.44	n/a
	Sept	0.10	0.08	0.10	0.09	0.10	n/a
Ogama Inflow	June	1.87	1.75	1.83	1.77	1.87	n/a
	Sept	0.33	0.31	0.32	0.31	0.33	n/a
Ogama Outflow	June	1.83	1.72	1.78	1.74	1.84	n/a
	Sept	0.29	0.27	0.29	0.28	0.29	n/a
Doris Creek	June	2.00	1.20	1.55	1.49	1.80	n/a
	Sept	0.35	0.28	0.30	0.29	0.32	n/a
Little Roberts Outflow	June	7.24	5.65	6.37	6.22	6.85	n/a
	Sept	1.18	1.05	1.07	1.06	1.13	n/a

Note: n/a indicates that flows were within 5% of baseline, and were therefore not modelled

Table 3-2. Modelled Flow Rates for High Groundwater Sensitivity

Stream	Month	Flow Rate (m ³ /s)					
		Baseline	Greatest Flow Reduction of All Phases	Construction	Operation	Closure	Post-Closure
Patch Outflow	June	2.00	1.07	1.54	1.38	1.76	1.92
	Sept	0.35	0.23	0.28	0.25	0.33	0.34
Ogama Inflow	June	7.24	5.38	6.30	5.99	6.78	n/a
	Sept	1.18	0.94	1.05	0.98	1.12	n/a
Ogama Outflow	June	1.87	1.54	1.78	1.60	1.83	n/a
	Sept	0.33	0.26	0.31	0.27	0.32	n/a
Doris Creek	June	1.83	1.54	1.74	1.58	1.79	n/a
	Sept	0.29	0.22	0.28	0.24	0.29	n/a
Little Roberts Outflow	June	0.45	0.11	0.37	0.17	0.40	n/a
	Sept	0.10	0.04	0.09	0.06	0.10	n/a

Note: n/a indicates that flows were within 5% of baseline, and were therefore not modelled

4. CLOSING

The modelling described in this memo was performed for the purpose of assessing the impact of reduced flows on fish habitat in Little Roberts Outflow, Doris Outflow, Ogama Outflow, Ogama Inflow, and Patch Outflow. The results included in this memo should not be used for purposes other than assessing the loss of fish habitat without prior discussion with ERM.

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– Appendix A –

Model Results

APPENDIX A. MODEL RESULTS

Table A-1. Patch Outflow Base Case Model Results

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
21	June Baseline	0.45	99	99.78	0.78	17.36	7.23	17.51
21	Jun Max Red	0.32	99	99.74	0.74	16.22	6.62	16.38
21	Jun Cons	0.42	99	99.77	0.77	17.11	7.1	17.27
21	Jun Op	0.35	99	99.75	0.75	16.37	6.69	16.52
21	Jun Clos	0.44	99	99.78	0.78	17.31	7.21	17.47
21	Sept Baseline	0.1	99	99.64	0.64	11.18	5.11	4.96
21	Sept Max Red	0.08	99	99.61	0.61	10.84	4.81	4.96
21	Sept Cons	0.1	99	99.63	0.63	11.12	5.08	4.96
21	Sept Op	0.09	99	99.62	0.62	10.92	4.9	4.96
21	Sept Clos	0.1	99	99.63	0.63	11.12	5.08	4.96
20	June Baseline	0.45	99.33	99.78	0.45	17.28	4.23	17.32
20	Jun Max Red	0.32	99.33	99.74	0.41	16.17	3.63	16.2
20	Jun Cons	0.42	99.33	99.77	0.44	17.04	4.09	17.07
20	Jun Op	0.35	99.33	99.74	0.42	16.31	3.7	16.34
20	Jun Clos	0.44	99.33	99.77	0.45	17.24	4.2	17.27
20	Sept Baseline	0.1	99.33	99.64	0.31	11.11	2.14	4.96
20	Sept Max Red	0.08	99.33	99.61	0.28	10.39	1.84	4.96
20	Sept Cons	0.1	99.33	99.63	0.3	11.02	2.11	4.96
20	Sept Op	0.09	99.33	99.62	0.29	10.6	1.93	4.96
20	Sept Clos	0.1	99.33	99.63	0.3	11.02	2.11	4.96
19	June Baseline	0.45	99.34	99.77	0.42	19.23	3.44	19.35
19	Jun Max Red	0.32	99.34	99.73	0.39	18.38	2.79	18.47
19	Jun Cons	0.42	99.34	99.76	0.41	19.03	3.29	19.15
19	Jun Op	0.35	99.34	99.74	0.39	18.47	2.85	18.56
19	Jun Clos	0.44	99.34	99.77	0.42	19.19	3.41	19.31
19	Sept Baseline	0.1	99.34	99.62	0.28	9.29	1.09	2.3
19	Sept Max Red	0.08	99.34	99.6	0.25	6.76	0.89	2.3
19	Sept Cons	0.1	99.34	99.62	0.28	8.87	1.07	2.3
19	Sept Op	0.09	99.34	99.61	0.26	7.02	0.95	2.3
19	Sept Clos	0.1	99.34	99.62	0.28	8.87	1.07	2.3
18	June Baseline	0.45	99.31	99.75	0.44	12.34	2.49	12.39
18	Jun Max Red	0.32	99.31	99.72	0.41	11.05	2.1	11.1
18	Jun Cons	0.42	99.31	99.75	0.44	12.03	2.39	12.08
18	Jun Op	0.35	99.31	99.72	0.41	11.12	2.13	11.18

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
18	Jun Clos	0.44	99.31	99.75	0.44	12.27	2.47	12.33
18	Sept Baseline	0.1	99.31	99.6	0.29	6.47	1.06	2.45
18	Sept Max Red	0.08	99.31	99.57	0.26	6.06	0.89	2.45
18	Sept Cons	0.1	99.31	99.6	0.29	6.43	1.04	2.45
18	Sept Op	0.09	99.31	99.58	0.27	6.19	0.94	2.45
18	Sept Clos	0.1	99.31	99.6	0.29	6.43	1.04	2.45
17	June Baseline	0.45	99.28	99.74	0.46	11.2	3.16	11.24
17	Jun Max Red	0.32	99.28	99.71	0.43	10.69	2.84	10.73
17	Jun Cons	0.42	99.28	99.73	0.45	11.07	3.08	11.11
17	Jun Op	0.35	99.28	99.71	0.43	10.69	2.84	10.74
17	Jun Clos	0.44	99.28	99.74	0.46	11.17	3.14	11.22
17	Sept Baseline	0.1	99.28	99.58	0.3	8.31	1.6	2.76
17	Sept Max Red	0.08	99.28	99.56	0.28	7.83	1.41	2.76
17	Sept Cons	0.1	99.28	99.58	0.3	8.27	1.58	2.76
17	Sept Op	0.09	99.28	99.56	0.28	7.98	1.47	2.76
17	Sept Clos	0.1	99.28	99.58	0.3	8.27	1.58	2.76
16	June Baseline	0.45	99.26	99.72	0.47	11	2.54	11.09
16	Jun Max Red	0.32	99.26	99.7	0.44	10.32	2.28	10.41
16	Jun Cons	0.42	99.26	99.72	0.46	10.81	2.46	10.9
16	Jun Op	0.35	99.26	99.7	0.44	10.25	2.25	10.34
16	Jun Clos	0.44	99.26	99.72	0.47	10.96	2.52	11.05
16	Sept Baseline	0.1	99.26	99.57	0.31	6.09	1.19	2.84
16	Sept Max Red	0.08	99.26	99.54	0.29	5.74	1.05	2.84
16	Sept Cons	0.1	99.26	99.56	0.31	6.03	1.17	2.84
16	Sept Op	0.09	99.26	99.55	0.29	5.84	1.09	2.84
16	Sept Clos	0.1	99.26	99.56	0.31	6.03	1.17	2.84
15	June Baseline	0.45	99.3	99.71	0.41	11.64	2.58	11.86
15	Jun Max Red	0.32	99.3	99.69	0.39	11.09	2.36	11.3
15	Jun Cons	0.42	99.3	99.7	0.4	11.45	2.5	11.67
15	Jun Op	0.35	99.3	99.68	0.39	10.95	2.31	11.17
15	Jun Clos	0.44	99.3	99.7	0.41	11.6	2.56	11.81
15	Sept Baseline	0.1	99.3	99.55	0.25	7.11	1.11	3.87
15	Sept Max Red	0.08	99.3	99.53	0.23	6.76	0.97	3.79
15	Sept Cons	0.1	99.3	99.55	0.25	7.08	1.1	3.86
15	Sept Op	0.09	99.3	99.54	0.24	6.87	1.01	3.82
15	Sept Clos	0.1	99.3	99.55	0.25	7.08	1.1	3.86
14	June Baseline	0.45	99.22	99.7	0.48	11.24	2.46	11.56
14	Jun Max Red	0.32	99.22	99.68	0.46	10.85	2.28	11.16
14	Jun Cons	0.42	99.22	99.69	0.47	11.09	2.39	11.4

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
14	Jun Op	0.35	99.22	99.67	0.45	10.69	2.21	11.01
14	Jun Clos	0.44	99.22	99.7	0.47	11.2	2.44	11.52
14	Sept Baseline	0.1	99.22	99.54	0.31	7.11	0.97	2.63
14	Sept Max Red	0.08	99.22	99.52	0.3	6.41	0.84	2.63
14	Sept Cons	0.1	99.22	99.53	0.31	7.04	0.96	2.63
14	Sept Op	0.09	99.22	99.52	0.3	6.62	0.88	2.63
14	Sept Clos	0.1	99.22	99.53	0.31	7.04	0.96	2.63
13	June Baseline	0.45	99.08	99.67	0.59	10.24	2.44	10.34
13	Jun Max Red	0.32	99.08	99.64	0.56	9.46	2.09	1.47
13	Jun Cons	0.42	99.08	99.67	0.59	10.13	2.39	10.23
13	Jun Op	0.35	99.08	99.66	0.57	9.88	2.27	9.98
13	Jun Clos	0.44	99.08	99.67	0.59	10.2	2.42	10.31
13	Sept Baseline	0.1	99.08	99.51	0.43	5.58	1.16	1.47
13	Sept Max Red	0.08	99.08	99.5	0.42	5.39	1.08	1.47
13	Sept Cons	0.1	99.08	99.51	0.43	5.56	1.15	1.47
13	Sept Op	0.09	99.08	99.5	0.42	5.45	1.1	1.47
13	Sept Clos	0.1	99.08	99.51	0.43	5.56	1.15	1.47
12	June Baseline	0.45	98.98	99.67	0.68	11.37	3.11	11.49
12	Jun Max Red	0.32	98.98	99.64	0.65	10.74	2.78	5.5
12	Jun Cons	0.42	98.98	99.66	0.68	11.25	3.06	11.37
12	Jun Op	0.35	98.98	99.65	0.67	10.99	2.94	11.11
12	Jun Clos	0.44	98.98	99.66	0.68	11.33	3.09	11.45
12	Sept Baseline	0.1	98.98	99.51	0.53	6.17	1.71	5.5
12	Sept Max Red	0.08	98.98	99.5	0.51	5.98	1.63	5.43
12	Sept Cons	0.1	98.98	99.51	0.53	6.12	1.71	5.5
12	Sept Op	0.09	98.98	99.5	0.52	6.02	1.66	5.45
12	Sept Clos	0.1	98.98	99.51	0.53	6.12	1.71	5.5
11	June Baseline	0.45	99.13	99.66	0.53	10.39	2.29	10.49
11	Jun Max Red	0.32	99.13	99.62	0.49	9.41	1.93	2.05
11	Jun Cons	0.42	99.13	99.65	0.52	10.26	2.24	10.36
11	Jun Op	0.35	99.13	99.64	0.5	9.72	2.06	2.05
11	Jun Clos	0.44	99.13	99.66	0.52	10.35	2.27	10.44
11	Sept Baseline	0.1	99.13	99.51	0.37	4.6	1.04	2.05
11	Sept Max Red	0.08	99.13	99.49	0.36	4.5	0.99	2.05
11	Sept Cons	0.1	99.13	99.51	0.37	4.59	1.04	2.05
11	Sept Op	0.09	99.13	99.5	0.36	4.53	1	2.05
11	Sept Clos	0.1	99.13	99.51	0.37	4.59	1.04	2.05
10	June Baseline	0.45	99.12	99.66	0.53	13.02	3.2	13.18
10	Jun Max Red	0.32	99.12	99.62	0.5	11.44	2.77	3.89

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HYDRAULIC MODELLING RESULTS

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10	Jun Cons	0.42	99.12	99.65	0.53	12.9	3.14	13.05
10	Jun Op	0.35	99.12	99.64	0.51	12.18	2.93	3.89
10	Jun Clos	0.44	99.12	99.65	0.53	12.98	3.18	13.13
10	Sept Baseline	0.1	99.12	99.51	0.38	6.07	1.79	3.89
10	Sept Max Red	0.08	99.12	99.49	0.37	6	1.72	3.89
10	Sept Cons	0.1	99.12	99.5	0.38	6.06	1.79	3.89
10	Sept Op	0.09	99.12	99.5	0.37	6.02	1.74	3.89
10	Sept Clos	0.1	99.12	99.5	0.38	6.06	1.79	3.89
9	June Baseline	0.45	98.88	99.64	0.76	16.23	5.22	1.49
9	Jun Max Red	0.32	98.88	99.61	0.73	15.61	4.77	1.49
9	Jun Cons	0.42	98.88	99.65	0.77	16.52	5.44	16.7
9	Jun Op	0.35	98.88	99.62	0.74	15.88	4.96	1.49
9	Jun Clos	0.44	98.88	99.63	0.76	16.2	5.2	1.49
9	Sept Baseline	0.1	98.88	99.5	0.63	10.1	3.44	1.49
9	Sept Max Red	0.08	98.88	99.49	0.62	9.87	3.33	1.49
9	Sept Cons	0.1	98.88	99.5	0.63	10.08	3.43	1.49
9	Sept Op	0.09	98.88	99.49	0.62	9.94	3.36	1.49
9	Sept Clos	0.1	98.88	99.5	0.63	10.08	3.43	1.49
8	June Baseline	0.45	99.13	99.62	0.49	10.43	2.36	2.66
8	Jun Max Red	0.32	99.13	99.58	0.45	8.83	1.99	2.66
8	Jun Cons	0.42	99.13	99.61	0.48	10.13	2.29	2.66
8	Jun Op	0.35	99.13	99.59	0.46	9.22	2.07	2.66
8	Jun Clos	0.44	99.13	99.62	0.49	10.38	2.35	2.66
8	Sept Baseline	0.1	99.13	99.5	0.36	5.8	1.39	2.66
8	Sept Max Red	0.08	99.13	99.49	0.35	5.7	1.33	2.66
8	Sept Cons	0.1	99.13	99.5	0.36	5.79	1.39	2.66
8	Sept Op	0.09	99.13	99.49	0.36	5.73	1.35	2.66
8	Sept Clos	0.1	99.13	99.5	0.36	5.79	1.39	2.66
7	June Baseline	0.45	98.99	99.61	0.62	5.25	2.22	3.47
7	Jun Max Red	0.32	98.99	99.58	0.58	4.94	2.03	3.47
7	Jun Cons	0.42	98.99	99.6	0.61	5.19	2.18	3.47
7	Jun Op	0.35	98.99	99.58	0.59	5.02	2.07	3.47
7	Jun Clos	0.44	98.99	99.61	0.62	5.24	2.21	3.47
7	Sept Baseline	0.1	98.99	99.5	0.5	4.33	1.67	3.47
7	Sept Max Red	0.08	98.99	99.49	0.49	4.31	1.63	3.47
7	Sept Cons	0.1	98.99	99.5	0.5	4.33	1.66	3.47
7	Sept Op	0.09	98.99	99.49	0.5	4.32	1.64	3.47
7	Sept Clos	0.1	98.99	99.5	0.5	4.33	1.66	3.47
6	June Baseline	0.45	98.89	99.59	0.71	8.86	2.57	1.5

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
6	Jun Max Red	0.32	98.89	99.56	0.68	7.71	2.34	1.5
6	Jun Cons	0.42	98.89	99.59	0.7	8.59	2.53	1.5
6	Jun Op	0.35	98.89	99.57	0.68	7.97	2.4	1.5
6	Jun Clos	0.44	98.89	99.59	0.7	8.81	2.57	1.5
6	Sept Baseline	0.1	98.89	99.5	0.61	5.21	1.9	1.5
6	Sept Max Red	0.08	98.89	99.49	0.6	5.15	1.85	1.5
6	Sept Cons	0.1	98.89	99.49	0.61	5.2	1.9	1.5
6	Sept Op	0.09	98.89	99.49	0.6	5.17	1.87	1.5
6	Sept Clos	0.1	98.89	99.49	0.61	5.2	1.9	1.5
5	June Baseline	0.45	98.93	99.6	0.67	28.8	12.9	17.46
5	Jun Max Red	0.32	98.93	99.57	0.64	26.41	12.03	17.46
5	Jun Cons	0.42	98.93	99.59	0.66	28.36	12.73	17.46
5	Jun Op	0.35	98.93	99.57	0.64	26.99	12.24	17.46
5	Jun Clos	0.44	98.93	99.6	0.67	28.73	12.87	17.46
5	Sept Baseline	0.1	98.93	99.5	0.56	21.11	10.33	17.46
5	Sept Max Red	0.08	98.93	99.49	0.56	21.04	10.14	17.46
5	Sept Cons	0.1	98.93	99.49	0.56	21.1	10.31	17.46
5	Sept Op	0.09	98.93	99.49	0.56	21.06	10.19	17.46
5	Sept Clos	0.1	98.93	99.49	0.56	21.1	10.31	17.46
4	June Baseline	0.45	99.06	99.6	0.54	24.72	11.09	24.82
4	Jun Max Red	0.32	99.06	99.57	0.51	24.35	10.33	24.44
4	Jun Cons	0.42	99.06	99.59	0.53	24.65	10.95	24.75
4	Jun Op	0.35	99.06	99.57	0.51	24.44	10.52	24.54
4	Jun Clos	0.44	99.06	99.6	0.54	24.71	11.07	24.81
4	Sept Baseline	0.1	99.06	99.5	0.44	23.28	8.63	23.36
4	Sept Max Red	0.08	99.06	99.49	0.43	22.8	8.42	22.88
4	Sept Cons	0.1	99.06	99.49	0.44	23.2	8.61	23.29
4	Sept Op	0.09	99.06	99.49	0.43	22.82	8.48	22.91
4	Sept Clos	0.1	99.06	99.49	0.44	23.2	8.61	23.29

Table A-2. Patch Cross Section High Groundwater Model Results

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
21	June Baseline	0.45	99	99.78	0.78	17.36	7.23	17.51
21	Jun Max Red	0.11	99	99.64	0.64	11.46	5.18	4.96
21	Jun Cons	0.37	99	99.75	0.75	16.57	6.8	16.73
21	Jun Op	0.17	99	99.7	0.7	14.9	5.95	4.96
21	Jun Clos	0.4	99	99.76	0.76	16.9	6.98	17.06
21	Sept Baseline	0.1	99	99.64	0.64	11.18	5.11	4.96

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
21	Sept Max Red	0.04	99	99.53	0.53	10.07	3.97	4.96
21	Sept Cons	0.09	99	99.62	0.62	10.95	4.93	4.96
21	Sept Op	0.06	99	99.56	0.56	10.4	4.32	4.96
21	Sept Clos	0.1	99	99.63	0.63	11.04	5.04	4.96
20	June Baseline	0.45	99.33	99.78	0.45	17.28	4.23	17.32
20	Jun Max Red	0.11	99.33	99.64	0.31	11.37	2.21	4.96
20	Jun Cons	0.37	99.33	99.75	0.42	16.51	3.81	16.54
20	Jun Op	0.17	99.33	99.7	0.37	14.85	2.96	4.96
20	Jun Clos	0.4	99.33	99.76	0.43	16.84	3.98	16.87
20	Sept Baseline	0.1	99.33	99.64	0.31	11.11	2.14	4.96
20	Sept Max Red	0.04	99.33	99.53	0.2	8.45	1.1	4.96
20	Sept Cons	0.09	99.33	99.62	0.29	10.67	1.96	4.96
20	Sept Op	0.06	99.33	99.56	0.23	9.27	1.4	4.96
20	Sept Clos	0.1	99.33	99.63	0.3	10.9	2.06	4.96
19	June Baseline	0.45	99.34	99.77	0.42	19.23	3.44	19.35
19	Jun Max Red	0.11	99.34	99.63	0.29	10.3	1.15	2.3
19	Jun Cons	0.37	99.34	99.74	0.4	18.62	2.97	18.72
19	Jun Op	0.17	99.34	99.69	0.35	17.36	2.04	17.41
19	Jun Clos	0.4	99.34	99.75	0.41	18.88	3.17	18.99
19	Sept Baseline	0.1	99.34	99.62	0.28	9.29	1.09	2.3
19	Sept Max Red	0.04	99.34	99.52	0.18	4.79	0.46	2.3
19	Sept Cons	0.09	99.34	99.61	0.26	7.11	0.97	2.3
19	Sept Op	0.06	99.34	99.55	0.21	5.42	0.62	2.3
19	Sept Clos	0.1	99.34	99.62	0.27	8.25	1.04	2.3
18	June Baseline	0.45	99.31	99.75	0.44	12.34	2.49	12.39
18	Jun Max Red	0.11	99.31	99.61	0.3	6.58	1.1	2.45
18	Jun Cons	0.37	99.31	99.73	0.42	11.36	2.19	11.41
18	Jun Op	0.17	99.31	99.68	0.37	9.34	1.66	2.45
18	Jun Clos	0.4	99.31	99.74	0.43	11.8	2.33	11.86
18	Sept Baseline	0.1	99.31	99.6	0.29	6.47	1.06	2.45
18	Sept Max Red	0.04	99.31	99.5	0.19	4.79	0.49	2.45
18	Sept Cons	0.09	99.31	99.58	0.27	6.23	0.96	2.45
18	Sept Op	0.06	99.31	99.53	0.22	5.33	0.65	2.45
18	Sept Clos	0.1	99.31	99.59	0.28	6.37	1.01	2.45
17	June Baseline	0.45	99.28	99.74	0.46	11.2	3.16	11.24
17	Jun Max Red	0.11	99.28	99.59	0.31	8.43	1.65	2.76
17	Jun Cons	0.37	99.28	99.71	0.44	10.78	2.9	10.83
17	Jun Op	0.17	99.28	99.65	0.37	9.71	2.26	2.76
17	Jun Clos	0.4	99.28	99.73	0.45	10.98	3.02	11.03

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
17	Sept Baseline	0.1	99.28	99.58	0.3	8.31	1.6	2.76
17	Sept Max Red	0.04	99.28	99.49	0.21	6.53	0.93	2.76
17	Sept Cons	0.09	99.28	99.57	0.29	8.03	1.49	2.76
17	Sept Op	0.06	99.28	99.52	0.24	7.06	1.12	2.76
17	Sept Clos	0.1	99.28	99.57	0.3	8.2	1.55	2.76
16	June Baseline	0.45	99.26	99.72	0.47	11	2.54	11.09
16	Jun Max Red	0.11	99.26	99.57	0.32	6.26	1.22	2.84
16	Jun Cons	0.37	99.26	99.7	0.44	10.39	2.3	10.48
16	Jun Op	0.17	99.26	99.63	0.38	8.25	1.67	2.84
16	Jun Clos	0.4	99.26	99.71	0.46	10.71	2.42	10.8
16	Sept Baseline	0.1	99.26	99.57	0.31	6.09	1.19	2.84
16	Sept Max Red	0.04	99.26	99.48	0.23	4.9	0.73	2.84
16	Sept Cons	0.09	99.26	99.55	0.3	5.87	1.11	2.84
16	Sept Op	0.06	99.26	99.51	0.25	5.25	0.86	2.84
16	Sept Clos	0.1	99.26	99.56	0.3	5.98	1.15	2.84
15	June Baseline	0.45	99.3	99.71	0.41	11.64	2.58	11.86
15	Jun Max Red	0.11	99.3	99.55	0.26	7.19	1.15	3.89
15	Jun Cons	0.37	99.3	99.69	0.39	11.06	2.35	11.27
15	Jun Op	0.17	99.3	99.61	0.32	9	1.62	4.08
15	Jun Clos	0.4	99.3	99.7	0.4	11.38	2.47	11.59
15	Sept Baseline	0.1	99.3	99.55	0.25	7.11	1.11	3.87
15	Sept Max Red	0.04	99.3	99.48	0.18	5.85	0.63	3.6
15	Sept Cons	0.09	99.3	99.54	0.24	6.9	1.03	3.82
15	Sept Op	0.06	99.3	99.5	0.2	6.22	0.76	3.68
15	Sept Clos	0.1	99.3	99.54	0.25	7.02	1.08	3.85
14	June Baseline	0.45	99.22	99.7	0.48	11.24	2.46	11.56
14	Jun Max Red	0.11	99.22	99.54	0.32	7.28	1	2.63
14	Jun Cons	0.37	99.22	99.68	0.46	10.77	2.24	11.08
14	Jun Op	0.17	99.22	99.6	0.37	8.77	1.44	2.63
14	Jun Clos	0.4	99.22	99.69	0.47	11.05	2.37	11.36
14	Sept Baseline	0.1	99.22	99.54	0.31	7.11	0.97	2.63
14	Sept Max Red	0.04	99.22	99.47	0.25	4.68	0.58	2.63
14	Sept Cons	0.09	99.22	99.52	0.3	6.69	0.89	2.63
14	Sept Op	0.06	99.22	99.49	0.27	5.36	0.67	2.63
14	Sept Clos	0.1	99.22	99.53	0.31	6.94	0.94	2.63
13	June Baseline	0.45	99.08	99.67	0.59	10.24	2.44	10.34
13	Jun Max Red	0.11	99.08	99.52	0.43	5.63	1.18	1.47
13	Jun Cons	0.37	99.08	99.66	0.58	9.9	2.28	10
13	Jun Op	0.17	99.08	99.56	0.47	6.75	1.43	1.47

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
13	Jun Clos	0.4	99.08	99.67	0.59	10.14	2.39	10.24
13	Sept Baseline	0.1	99.08	99.51	0.43	5.58	1.16	1.47
13	Sept Max Red	0.04	99.08	99.46	0.38	4.93	0.9	1.47
13	Sept Cons	0.09	99.08	99.5	0.42	5.47	1.11	1.47
13	Sept Op	0.06	99.08	99.48	0.4	5.11	0.97	1.47
13	Sept Clos	0.1	99.08	99.51	0.43	5.53	1.14	1.47
12	June Baseline	0.45	98.98	99.67	0.68	11.37	3.11	11.49
12	Jun Max Red	0.11	98.98	99.51	0.53	6.28	1.74	5.5
12	Jun Cons	0.37	98.98	99.65	0.67	11	2.95	11.12
12	Jun Op	0.17	98.98	99.55	0.57	7.73	2.02	5.5
12	Jun Clos	0.4	98.98	99.66	0.68	11.29	3.07	11.4
12	Sept Baseline	0.1	98.98	99.51	0.53	6.17	1.71	5.5
12	Sept Max Red	0.04	98.98	99.46	0.48	5.65	1.44	5.2
12	Sept Cons	0.09	98.98	99.5	0.52	6.03	1.67	5.46
12	Sept Op	0.06	98.98	99.48	0.49	5.78	1.51	5.29
12	Sept Clos	0.1	98.98	99.51	0.52	6.08	1.69	5.5
11	June Baseline	0.45	99.13	99.66	0.53	10.39	2.29	10.49
11	Jun Max Red	0.11	99.13	99.51	0.38	4.63	1.06	2.05
11	Jun Cons	0.37	99.13	99.65	0.51	9.99	2.15	10.09
11	Jun Op	0.17	99.13	99.55	0.41	7.73	1.28	2.05
11	Jun Clos	0.4	99.13	99.66	0.52	10.33	2.27	10.43
11	Sept Baseline	0.1	99.13	99.51	0.37	4.6	1.04	2.05
11	Sept Max Red	0.04	99.13	99.46	0.33	4.26	0.85	2.05
11	Sept Cons	0.09	99.13	99.5	0.37	4.54	1.01	2.05
11	Sept Op	0.06	99.13	99.48	0.34	4.36	0.9	2.05
11	Sept Clos	0.1	99.13	99.5	0.37	4.58	1.03	2.05
10	June Baseline	0.45	99.12	99.66	0.53	13.02	3.2	13.18
10	Jun Max Red	0.11	99.12	99.51	0.38	6.09	1.81	3.89
10	Jun Cons	0.37	99.12	99.64	0.52	12.59	3.03	12.74
10	Jun Op	0.17	99.12	99.55	0.42	7.42	2.05	3.89
10	Jun Clos	0.4	99.12	99.65	0.53	12.98	3.18	13.14
10	Sept Baseline	0.1	99.12	99.51	0.38	6.07	1.79	3.89
10	Sept Max Red	0.04	99.12	99.46	0.34	5.8	1.54	3.89
10	Sept Cons	0.09	99.12	99.5	0.37	6.03	1.75	3.89
10	Sept Op	0.06	99.12	99.47	0.35	5.88	1.61	3.89
10	Sept Clos	0.1	99.12	99.5	0.38	6.05	1.78	3.89
9	June Baseline	0.45	98.88	99.64	0.76	16.23	5.22	1.49
9	Jun Max Red	0.11	98.88	99.51	0.63	10.15	3.47	1.49
9	Jun Cons	0.37	98.88	99.63	0.75	16.07	5.1	1.49

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
9	Jun Op	0.17	98.88	99.54	0.66	10.68	3.82	1.49
9	Jun Clos	0.4	98.88	99.64	0.76	16.29	5.27	1.49
9	Sept Baseline	0.1	98.88	99.5	0.63	10.1	3.44	1.49
9	Sept Max Red	0.04	98.88	99.46	0.59	9.32	3.04	1.49
9	Sept Cons	0.09	98.88	99.5	0.62	9.96	3.37	1.49
9	Sept Op	0.06	98.88	99.47	0.6	9.53	3.16	1.49
9	Sept Clos	0.1	98.88	99.5	0.62	10.04	3.42	1.49
8	June Baseline	0.45	99.13	99.62	0.49	10.43	2.36	2.66
8	Jun Max Red	0.11	99.13	99.5	0.37	5.82	1.41	2.66
8	Jun Cons	0.37	99.13	99.6	0.46	9.49	2.14	2.66
8	Jun Op	0.17	99.13	99.53	0.39	6.65	1.58	2.66
8	Jun Clos	0.4	99.13	99.61	0.47	9.82	2.21	2.66
8	Sept Baseline	0.1	99.13	99.5	0.36	5.8	1.39	2.66
8	Sept Max Red	0.04	99.13	99.46	0.33	5.43	1.18	2.66
8	Sept Cons	0.09	99.13	99.49	0.36	5.74	1.36	2.66
8	Sept Op	0.06	99.13	99.47	0.34	5.54	1.25	2.66
8	Sept Clos	0.1	99.13	99.5	0.36	5.77	1.38	2.66
7	June Baseline	0.45	98.99	99.61	0.62	5.25	2.22	3.47
7	Jun Max Red	0.11	98.99	99.5	0.51	4.34	1.68	3.47
7	Jun Cons	0.37	98.99	99.59	0.6	5.07	2.11	3.47
7	Jun Op	0.17	98.99	99.53	0.53	4.53	1.8	3.47
7	Jun Clos	0.4	98.99	99.6	0.6	5.13	2.14	3.47
7	Sept Baseline	0.1	98.99	99.5	0.5	4.33	1.67	3.47
7	Sept Max Red	0.04	98.99	99.46	0.47	4.25	1.51	3.47
7	Sept Cons	0.09	98.99	99.49	0.5	4.32	1.64	3.47
7	Sept Op	0.06	98.99	99.47	0.48	4.27	1.56	3.47
7	Sept Clos	0.1	98.99	99.49	0.5	4.33	1.66	3.47
6	June Baseline	0.45	98.89	99.59	0.71	8.86	2.57	1.5
6	Jun Max Red	0.11	98.89	99.5	0.61	5.22	1.91	1.5
6	Jun Cons	0.37	98.89	99.58	0.69	8.16	2.44	1.5
6	Jun Op	0.17	98.89	99.52	0.63	6.11	2.05	1.5
6	Jun Clos	0.4	98.89	99.58	0.69	8.38	2.48	1.5
6	Sept Baseline	0.1	98.89	99.5	0.61	5.21	1.9	1.5
6	Sept Max Red	0.04	98.89	99.46	0.57	4.99	1.72	1.5
6	Sept Cons	0.09	98.89	99.49	0.6	5.17	1.87	1.5
6	Sept Op	0.06	98.89	99.47	0.58	5.06	1.78	1.5
6	Sept Clos	0.1	98.89	99.49	0.61	5.2	1.89	1.5
5	June Baseline	0.45	98.93	99.6	0.67	28.8	12.9	17.46
5	Jun Max Red	0.11	98.93	99.5	0.57	21.14	10.38	17.46

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
5	Jun Cons	0.37	98.93	99.58	0.65	27.41	12.39	17.46
5	Jun Op	0.17	98.93	99.52	0.59	22.96	10.93	17.46
5	Jun Clos	0.4	98.93	99.59	0.66	27.89	12.56	17.46
5	Sept Baseline	0.1	98.93	99.5	0.56	21.11	10.33	17.46
5	Sept Max Red	0.04	98.93	99.46	0.53	20.87	9.6	17.46
5	Sept Cons	0.09	98.93	99.49	0.56	21.07	10.21	17.46
5	Sept Op	0.06	98.93	99.47	0.54	20.94	9.82	17.46
5	Sept Clos	0.1	98.93	99.49	0.56	21.09	10.28	17.46
4	June Baseline	0.45	99.06	99.6	0.54	24.72	11.09	24.82
4	Jun Max Red	0.11	99.06	99.5	0.44	23.37	8.68	23.46
4	Jun Cons	0.37	99.06	99.58	0.52	24.5	10.65	24.6
4	Jun Op	0.17	99.06	99.52	0.46	23.81	9.27	23.9
4	Jun Clos	0.4	99.06	99.59	0.53	24.58	10.8	24.68
4	Sept Baseline	0.1	99.06	99.5	0.44	23.28	8.63	23.36
4	Sept Max Red	0.04	99.06	99.46	0.4	22.55	7.84	22.63
4	Sept Cons	0.09	99.06	99.49	0.43	22.84	8.5	22.92
4	Sept Op	0.06	99.06	99.47	0.41	22.65	8.09	22.74
4	Sept Clos	0.1	99.06	99.49	0.43	23.08	8.58	23.17

Table A-3. Ogama Inflow Base Case Model Results

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
65	June Baseline	1.87	148.2	149.05	0.85	60.46	22.44	60.52
65	Jun Max Red	1.75	148.2	149.03	0.83	59.7	21.31	59.76
65	Jun Cons	1.83	148.2	149.05	0.84	60.23	22.1	60.29
65	Jun Op	1.77	148.2	149.04	0.84	59.87	21.57	59.93
65	Jun Clos	1.87	148.2	149.05	0.85	60.48	22.47	60.54
65	Sept Baseline	0.33	148.2	148.69	0.49	27.17	4.54	27.22
65	Sept Max Red	0.31	148.2	148.68	0.48	25.22	4.28	25.27
65	Sept Cons	0.32	148.2	148.69	0.49	26.57	4.46	26.62
65	Sept Op	0.31	148.2	148.68	0.48	25.65	4.34	25.69
65	Sept Clos	0.33	148.2	148.69	0.49	27.17	4.54	27.22
64	June Baseline	1.87	148.28	149.02	0.75	39.13	10.9	39.27
64	Jun Max Red	1.75	148.28	149.01	0.73	37.67	10.15	37.82
64	Jun Cons	1.83	148.28	149.02	0.74	38.69	10.68	38.84
64	Jun Op	1.77	148.28	149.01	0.73	38	10.32	38.15
64	Jun Clos	1.87	148.28	149.02	0.75	39.16	10.92	39.31
64	Sept Baseline	0.33	148.28	148.64	0.36	10.42	1.38	10.55
64	Sept Max Red	0.31	148.28	148.63	0.35	9.67	1.28	9.8

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
64	Sept Cons	0.32	148.28	148.64	0.36	10.18	1.35	10.32
64	Sept Op	0.31	148.28	148.63	0.35	9.83	1.3	9.96
64	Sept Clos	0.33	148.28	148.64	0.36	10.42	1.38	10.55
63	June Baseline	1.87	148.02	148.96	0.94	17.31	5.88	17.66
63	Jun Max Red	1.75	148.02	148.94	0.92	16.73	5.54	17.07
63	Jun Cons	1.83	148.02	148.95	0.94	17.14	5.78	17.48
63	Jun Op	1.77	148.02	148.95	0.93	16.86	5.61	17.21
63	Jun Clos	1.87	148.02	148.96	0.94	17.33	5.89	17.67
63	Sept Baseline	0.33	148.02	148.56	0.54	5.68	1.3	6
63	Sept Max Red	0.31	148.02	148.55	0.53	5.38	1.24	5.69
63	Sept Cons	0.32	148.02	148.56	0.54	5.59	1.28	5.9
63	Sept Op	0.31	148.02	148.55	0.54	5.45	1.25	5.76
63	Sept Clos	0.33	148.02	148.56	0.54	5.68	1.3	6
62	June Baseline	1.87	148.09	148.91	0.81	14.65	4.8	15.06
62	Jun Max Red	1.75	148.09	148.89	0.79	14.15	4.52	14.56
62	Jun Cons	1.83	148.09	148.9	0.81	14.5	4.72	14.91
62	Jun Op	1.77	148.09	148.89	0.8	14.26	4.58	14.67
62	Jun Clos	1.87	148.09	148.91	0.81	14.67	4.81	15.08
62	Sept Baseline	0.33	148.09	148.51	0.42	4.85	0.98	5.22
62	Sept Max Red	0.31	148.09	148.5	0.41	4.65	0.94	5.03
62	Sept Cons	0.32	148.09	148.51	0.42	4.78	0.97	5.16
62	Sept Op	0.31	148.09	148.51	0.41	4.69	0.95	5.07
62	Sept Clos	0.33	148.09	148.51	0.42	4.85	0.98	5.22
61	June Baseline	1.87	148.04	148.77	0.72	10.22	3.5	10.92
61	Jun Max Red	1.75	148.04	148.75	0.7	9.89	3.29	10.59
61	Jun Cons	1.83	148.04	148.76	0.72	10.12	3.44	10.82
61	Jun Op	1.77	148.04	148.75	0.71	9.97	3.34	10.66
61	Jun Clos	1.87	148.04	148.77	0.72	10.23	3.5	10.93
61	Sept Baseline	0.33	148.04	148.38	0.34	4.02	0.75	4.67
61	Sept Max Red	0.31	148.04	148.37	0.33	3.87	0.72	4.52
61	Sept Cons	0.32	148.04	148.38	0.34	3.97	0.74	4.62
61	Sept Op	0.31	148.04	148.37	0.33	3.9	0.72	4.55
61	Sept Clos	0.33	148.04	148.38	0.34	4.02	0.75	4.67
60	June Baseline	1.87	147.83	148.61	0.78	11.17	4.03	11.45
60	Jun Max Red	1.75	147.83	148.58	0.76	10.74	3.77	11.01
60	Jun Cons	1.83	147.83	148.6	0.77	11.04	3.95	11.31
60	Jun Op	1.77	147.83	148.59	0.76	10.83	3.83	11.11
60	Jun Clos	1.87	147.83	148.61	0.78	11.18	4.03	11.46
60	Sept Baseline	0.33	147.83	148.15	0.32	3.94	0.71	4.15

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
60	Sept Max Red	0.31	147.83	148.14	0.31	3.78	0.67	3.98
60	Sept Cons	0.32	147.83	148.15	0.32	3.9	0.7	4.1
60	Sept Op	0.31	147.83	148.14	0.31	3.83	0.68	4.03
60	Sept Clos	0.33	147.83	148.15	0.32	3.94	0.71	4.15
59	June Baseline	1.87	147.6	148.55	0.94	14.45	5.59	14.98
59	Jun Max Red	1.75	147.6	148.52	0.92	13.93	5.24	14.46
59	Jun Cons	1.83	147.6	148.54	0.94	14.29	5.48	14.83
59	Jun Op	1.77	147.6	148.53	0.93	14.05	5.31	14.58
59	Jun Clos	1.87	147.6	148.55	0.95	14.46	5.6	14.99
59	Sept Baseline	0.33	147.6	148.05	0.45	4.29	0.98	4.77
59	Sept Max Red	0.31	147.6	148.04	0.44	4.03	0.92	4.51
59	Sept Cons	0.32	147.6	148.05	0.45	4.21	0.96	4.69
59	Sept Op	0.31	147.6	148.04	0.44	4.09	0.93	4.56
59	Sept Clos	0.33	147.6	148.05	0.45	4.29	0.98	4.77
58	June Baseline	1.87	147.15	148.54	1.39	15.85	9.25	16.19
58	Jun Max Red	1.75	147.15	148.51	1.36	15.3	8.86	15.64
58	Jun Cons	1.83	147.15	148.53	1.38	15.69	9.13	16.03
58	Jun Op	1.77	147.15	148.52	1.37	15.43	8.95	15.77
58	Jun Clos	1.87	147.15	148.54	1.39	15.86	9.26	16.21
58	Sept Baseline	0.33	147.15	148.05	0.9	7.54	3.85	7.8
58	Sept Max Red	0.31	147.15	148.04	0.89	7.39	3.76	7.65
58	Sept Cons	0.32	147.15	148.05	0.9	7.49	3.82	7.75
58	Sept Op	0.31	147.15	148.04	0.89	7.43	3.78	7.68
58	Sept Clos	0.33	147.15	148.05	0.9	7.54	3.85	7.8
57	June Baseline	1.87	147.57	148.53	0.97	13.14	7.78	13.69
57	Jun Max Red	1.75	147.57	148.51	0.94	12.92	7.46	13.47
57	Jun Cons	1.83	147.57	148.53	0.96	13.07	7.68	13.62
57	Jun Op	1.77	147.57	148.52	0.95	12.97	7.53	13.52
57	Jun Clos	1.87	147.57	148.54	0.97	13.14	7.79	13.69
57	Sept Baseline	0.33	147.57	148.05	0.48	8.92	2.41	9.35
57	Sept Max Red	0.31	147.57	148.04	0.47	8.81	2.3	9.24
57	Sept Cons	0.32	147.57	148.04	0.48	8.88	2.38	9.32
57	Sept Op	0.31	147.57	148.04	0.47	8.83	2.33	9.27
57	Sept Clos	0.33	147.57	148.05	0.48	8.92	2.41	9.35
56	June Baseline	1.87	147.33	148.52	1.19	16.37	7.52	16.76
56	Jun Max Red	1.75	147.33	148.5	1.16	15.81	7.13	16.21
56	Jun Cons	1.83	147.33	148.51	1.18	16.2	7.41	16.6
56	Jun Op	1.77	147.33	148.5	1.17	15.94	7.22	16.33
56	Jun Clos	1.87	147.33	148.52	1.19	16.38	7.53	16.78

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
56	Sept Baseline	0.33	147.33	148.04	0.71	5.77	2.27	6.12
56	Sept Max Red	0.31	147.33	148.03	0.7	5.64	2.2	5.98
56	Sept Cons	0.32	147.33	148.04	0.7	5.73	2.25	6.08
56	Sept Op	0.31	147.33	148.03	0.7	5.67	2.21	6.01
56	Sept Clos	0.33	147.33	148.04	0.71	5.77	2.27	6.12
55	June Baseline	1.87	147.52	148.49	0.97	14.43	5.99	14.79
55	Jun Max Red	1.75	147.52	148.46	0.94	14	5.64	14.35
55	Jun Cons	1.83	147.52	148.48	0.96	14.3	5.88	14.65
55	Jun Op	1.77	147.52	148.47	0.95	14.1	5.72	14.45
55	Jun Clos	1.87	147.52	148.49	0.97	14.45	6	14.8
55	Sept Baseline	0.33	147.52	148.01	0.49	5.96	1.14	6.26
55	Sept Max Red	0.31	147.52	148	0.48	5.73	1.07	6.03
55	Sept Cons	0.32	147.52	148.01	0.49	5.89	1.12	6.18
55	Sept Op	0.31	147.52	148	0.48	5.78	1.08	6.08
55	Sept Clos	0.33	147.52	148.01	0.49	5.96	1.14	6.26
54	June Baseline	1.87	147.32	148.48	1.16	14.23	7.48	14.62
54	Jun Max Red	1.75	147.32	148.46	1.14	13.86	7.14	14.24
54	Jun Cons	1.83	147.32	148.47	1.16	14.12	7.38	14.5
54	Jun Op	1.77	147.32	148.46	1.14	13.94	7.22	14.32
54	Jun Clos	1.87	147.32	148.48	1.16	14.24	7.49	14.63
54	Sept Baseline	0.33	147.32	148.01	0.69	6.9	2.48	7.21
54	Sept Max Red	0.31	147.32	148	0.68	6.7	2.39	7.01
54	Sept Cons	0.32	147.32	148	0.69	6.84	2.45	7.15
54	Sept Op	0.31	147.32	148	0.68	6.75	2.41	7.06
54	Sept Clos	0.33	147.32	148.01	0.69	6.9	2.48	7.21
53	June Baseline	1.87	147.15	148.47	1.32	20.2	12.82	20.55
53	Jun Max Red	1.75	147.15	148.45	1.3	19.74	12.34	20.09
53	Jun Cons	1.83	147.15	148.47	1.32	20.07	12.68	20.41
53	Jun Op	1.77	147.15	148.45	1.31	19.85	12.45	20.19
53	Jun Clos	1.87	147.15	148.47	1.32	20.21	12.84	20.56
53	Sept Baseline	0.33	147.15	148.01	0.86	11.27	5.47	11.57
53	Sept Max Red	0.31	147.15	147.99	0.84	11.03	5.33	11.33
53	Sept Cons	0.32	147.15	148	0.85	11.19	5.43	11.49
53	Sept Op	0.31	147.15	148	0.85	11.08	5.36	11.38
53	Sept Clos	0.33	147.15	148.01	0.86	11.27	5.47	11.57
52	June Baseline	1.87	147.31	148.47	1.16	24.96	12.04	25.47
52	Jun Max Red	1.75	147.31	148.44	1.14	24.43	11.45	24.93
52	Jun Cons	1.83	147.31	148.46	1.15	24.8	11.86	25.31
52	Jun Op	1.77	147.31	148.45	1.14	24.55	11.58	25.06

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
52	Jun Clos	1.87	147.31	148.47	1.16	24.97	12.05	25.48
52	Sept Baseline	0.33	147.31	148	0.7	15.13	2.82	15.58
52	Sept Max Red	0.31	147.31	147.99	0.68	14.82	2.63	15.28
52	Sept Cons	0.32	147.31	148	0.69	15.05	2.76	15.51
52	Sept Op	0.31	147.31	147.99	0.69	14.94	2.67	15.39
52	Sept Clos	0.33	147.31	148	0.7	15.13	2.82	15.58
51	June Baseline	1.87	147.31	148.45	1.15	18.88	8.81	19.22
51	Jun Max Red	1.75	147.31	148.43	1.12	18.44	8.36	18.77
51	Jun Cons	1.83	147.31	148.44	1.14	18.75	8.67	19.08
51	Jun Op	1.77	147.31	148.43	1.13	18.54	8.46	18.87
51	Jun Clos	1.87	147.31	148.45	1.15	18.89	8.82	19.23
51	Sept Baseline	0.33	147.31	147.99	0.69	11.49	1.98	11.73
51	Sept Max Red	0.31	147.31	147.98	0.67	11.35	1.84	11.59
51	Sept Cons	0.32	147.31	147.99	0.68	11.44	1.94	11.69
51	Sept Op	0.31	147.31	147.98	0.68	11.38	1.87	11.62
51	Sept Clos	0.33	147.31	147.99	0.69	11.49	1.98	11.73
50	June Baseline	1.87	147.49	148.43	0.94	17.12	8.57	17.57
50	Jun Max Red	1.75	147.49	148.41	0.91	16.95	8.16	17.39
50	Jun Cons	1.83	147.49	148.43	0.93	17.07	8.45	17.51
50	Jun Op	1.77	147.49	148.41	0.92	16.99	8.25	17.43
50	Jun Clos	1.87	147.49	148.43	0.94	17.12	8.58	17.57
50	Sept Baseline	0.33	147.49	147.94	0.45	8.32	1.23	8.63
50	Sept Max Red	0.31	147.49	147.93	0.43	7.31	1.12	7.61
50	Sept Cons	0.32	147.49	147.94	0.44	8.01	1.2	8.32
50	Sept Op	0.31	147.49	147.93	0.44	7.53	1.14	7.83
50	Sept Clos	0.33	147.49	147.94	0.45	8.32	1.23	8.63
49	June Baseline	1.87	146.89	148.42	1.53	18.31	13.95	18.65
49	Jun Max Red	1.75	146.89	148.4	1.51	17.96	13.52	18.3
49	Jun Cons	1.83	146.89	148.41	1.52	18.21	13.82	18.55
49	Jun Op	1.77	146.89	148.4	1.51	18.04	13.62	18.38
49	Jun Clos	1.87	146.89	148.42	1.53	18.32	13.96	18.66
49	Sept Baseline	0.33	146.89	147.92	1.04	10.96	6.7	11.22
49	Sept Max Red	0.31	146.89	147.91	1.02	10.75	6.55	11
49	Sept Cons	0.32	146.89	147.92	1.03	10.9	6.65	11.15
49	Sept Op	0.31	146.89	147.91	1.02	10.79	6.58	11.05
49	Sept Clos	0.33	146.89	147.92	1.04	10.96	6.7	11.22
48	June Baseline	1.87	146.61	148.42	1.81	24.26	26.45	24.8
48	Jun Max Red	1.75	146.61	148.39	1.79	23.9	25.88	24.44
48	Jun Cons	1.83	146.61	148.41	1.8	24.15	26.28	24.69

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
48	Jun Op	1.77	146.61	148.4	1.79	23.98	26	24.52
48	Jun Clos	1.87	146.61	148.42	1.81	24.27	26.46	24.81
48	Sept Baseline	0.33	146.61	147.92	1.32	16.75	16.33	17.22
48	Sept Max Red	0.31	146.61	147.91	1.3	16.53	16.09	17
48	Sept Cons	0.32	146.61	147.92	1.31	16.68	16.25	17.16
48	Sept Op	0.31	146.61	147.91	1.31	16.58	16.14	17.05
48	Sept Clos	0.33	146.61	147.92	1.32	16.75	16.33	17.22
47	June Baseline	1.87	147.13	148.41	1.28	12.62	8.48	13
47	Jun Max Red	1.75	147.13	148.39	1.26	12.37	8.19	12.74
47	Jun Cons	1.83	147.13	148.4	1.27	12.55	8.39	12.92
47	Jun Op	1.77	147.13	148.39	1.26	12.43	8.25	12.8
47	Jun Clos	1.87	147.13	148.41	1.28	12.63	8.49	13.01
47	Sept Baseline	0.33	147.13	147.92	0.79	7.28	3.62	7.54
47	Sept Max Red	0.31	147.13	147.91	0.78	7.12	3.52	7.38
47	Sept Cons	0.32	147.13	147.92	0.79	7.23	3.59	7.49
47	Sept Op	0.31	147.13	147.91	0.78	7.15	3.54	7.42
47	Sept Clos	0.33	147.13	147.92	0.79	7.28	3.62	7.54
46	June Baseline	1.87	147.12	148.41	1.29	20.24	12.64	20.46
46	Jun Max Red	1.75	147.12	148.38	1.27	19.8	12.18	20.01
46	Jun Cons	1.83	147.12	148.4	1.28	20.11	12.5	20.33
46	Jun Op	1.77	147.12	148.39	1.27	19.9	12.28	20.12
46	Jun Clos	1.87	147.12	148.41	1.29	20.26	12.65	20.47
46	Sept Baseline	0.33	147.12	147.92	0.8	10.85	5.1	11.02
46	Sept Max Red	0.31	147.12	147.91	0.79	10.57	4.95	10.74
46	Sept Cons	0.32	147.12	147.92	0.8	10.76	5.05	10.93
46	Sept Op	0.31	147.12	147.91	0.79	10.63	4.98	10.8
46	Sept Clos	0.33	147.12	147.92	0.8	10.85	5.1	11.02
45	June Baseline	1.87	146.72	148.41	1.69	43.18	50.11	43.44
45	Jun Max Red	1.75	146.72	148.38	1.67	42.79	49.12	43.06
45	Jun Cons	1.83	146.72	148.4	1.68	43.06	49.82	43.33
45	Jun Op	1.77	146.72	148.39	1.67	42.88	49.35	43.15
45	Jun Clos	1.87	146.72	148.41	1.69	43.19	50.14	43.45
45	Sept Baseline	0.33	146.72	147.92	1.2	35.12	31.15	35.29
45	Sept Max Red	0.31	146.72	147.91	1.19	34.88	30.65	35.05
45	Sept Cons	0.32	146.72	147.92	1.2	35.05	31	35.22
45	Sept Op	0.31	146.72	147.91	1.19	34.93	30.76	35.11
45	Sept Clos	0.33	146.72	147.92	1.2	35.12	31.15	35.29
44	June Baseline	1.87	147.19	148.4	1.22	29.89	19.34	30.16
44	Jun Max Red	1.75	147.19	148.38	1.2	29.26	18.66	29.53

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
44	Jun Cons	1.83	147.19	148.4	1.21	29.7	19.14	29.98
44	Jun Op	1.77	147.19	148.39	1.2	29.4	18.81	29.68
44	Jun Clos	1.87	147.19	148.41	1.22	29.9	19.35	30.18
44	Sept Baseline	0.33	147.19	147.92	0.74	16.71	8.08	16.86
44	Sept Max Red	0.31	147.19	147.91	0.72	16.33	7.85	16.47
44	Sept Cons	0.32	147.19	147.92	0.73	16.6	8.01	16.74
44	Sept Op	0.31	147.19	147.91	0.72	16.41	7.9	16.56
44	Sept Clos	0.33	147.19	147.92	0.74	16.71	8.08	16.86
43	June Baseline	1.87	147.01	148.4	1.39	28.09	19.31	28.35
43	Jun Max Red	1.75	147.01	148.38	1.37	27.47	18.68	27.74
43	Jun Cons	1.83	147.01	148.4	1.38	27.91	19.12	28.17
43	Jun Op	1.77	147.01	148.39	1.37	27.61	18.82	27.88
43	Jun Clos	1.87	147.01	148.4	1.39	28.11	19.33	28.37
43	Sept Baseline	0.33	147.01	147.92	0.91	15.06	8.91	15.28
43	Sept Max Red	0.31	147.01	147.91	0.89	14.67	8.7	14.9
43	Sept Cons	0.32	147.01	147.92	0.9	14.94	8.85	15.16
43	Sept Op	0.31	147.01	147.91	0.9	14.76	8.75	14.98
43	Sept Clos	0.33	147.01	147.92	0.91	15.06	8.91	15.28
42	June Baseline	1.87	146.75	148.4	1.65	26.47	17.36	26.78
42	Jun Max Red	1.75	146.75	148.38	1.63	25.84	16.77	26.14
42	Jun Cons	1.83	146.75	148.39	1.65	26.28	17.18	26.59
42	Jun Op	1.77	146.75	148.38	1.64	25.98	16.9	26.29
42	Jun Clos	1.87	146.75	148.4	1.65	26.48	17.37	26.79
42	Sept Baseline	0.33	146.75	147.92	1.18	13.06	7.91	13.33
42	Sept Max Red	0.31	146.75	147.91	1.16	12.67	7.73	12.93
42	Sept Cons	0.32	146.75	147.92	1.17	12.94	7.85	13.21
42	Sept Op	0.31	146.75	147.91	1.16	12.75	7.77	13.02
42	Sept Clos	0.33	146.75	147.92	1.18	13.06	7.91	13.33
41	June Baseline	1.87	147.1	148.39	1.29	20.6	10.34	20.88
41	Jun Max Red	1.75	147.1	148.37	1.27	20.02	9.89	20.31
41	Jun Cons	1.83	147.1	148.38	1.28	20.43	10.2	20.71
41	Jun Op	1.77	147.1	148.37	1.27	20.15	9.99	20.44
41	Jun Clos	1.87	147.1	148.39	1.29	20.61	10.35	20.9
41	Sept Baseline	0.33	147.1	147.92	0.82	8.35	3.5	8.6
41	Sept Max Red	0.31	147.1	147.91	0.8	7.98	3.39	8.23
41	Sept Cons	0.32	147.1	147.91	0.81	8.23	3.46	8.48
41	Sept Op	0.31	147.1	147.91	0.81	8.06	3.41	8.31
41	Sept Clos	0.33	147.1	147.92	0.82	8.35	3.5	8.6

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
40	June Baseline	1.87	147.43	148.38	0.95	31.91	11.87	32.34
40	Jun Max Red	1.75	147.43	148.36	0.93	30.84	11.18	31.28
40	Jun Cons	1.83	147.43	148.38	0.94	31.59	11.67	32.03
40	Jun Op	1.77	147.43	148.37	0.93	31.08	11.33	31.52
40	Jun Clos	1.87	147.43	148.38	0.95	31.93	11.89	32.37
40	Sept Baseline	0.33	147.43	147.91	0.48	9.32	2.18	9.73
40	Sept Max Red	0.31	147.43	147.9	0.47	8.65	2.05	9.06
40	Sept Cons	0.32	147.43	147.91	0.48	9.12	2.14	9.53
40	Sept Op	0.31	147.43	147.9	0.47	8.8	2.08	9.21
40	Sept Clos	0.33	147.43	147.91	0.48	9.32	2.18	9.73
39	June Baseline	1.87	147.35	148.35	1	32.55	11.04	32.99
39	Jun Max Red	1.75	147.35	148.33	0.98	31.34	10.32	31.79
39	Jun Cons	1.83	147.35	148.35	0.99	32.19	10.82	32.64
39	Jun Op	1.77	147.35	148.34	0.98	31.62	10.48	32.06
39	Jun Clos	1.87	147.35	148.35	1	32.58	11.06	33.02
39	Sept Baseline	0.33	147.35	147.87	0.51	7.31	1.5	7.72
39	Sept Max Red	0.31	147.35	147.85	0.5	6.84	1.4	7.24
39	Sept Cons	0.32	147.35	147.86	0.51	7.17	1.47	7.57
39	Sept Op	0.31	147.35	147.86	0.5	6.94	1.42	7.34
39	Sept Clos	0.33	147.35	147.87	0.51	7.31	1.5	7.72
38	June Baseline	1.87	147.29	148.29	1	24.01	8.4	24.39
38	Jun Max Red	1.75	147.29	148.27	0.98	22.97	7.83	23.34
38	Jun Cons	1.83	147.29	148.28	0.99	23.7	8.23	24.08
38	Jun Op	1.77	147.29	148.27	0.98	23.2	7.96	23.58
38	Jun Clos	1.87	147.29	148.29	1	24.04	8.41	24.42
38	Sept Baseline	0.33	147.29	147.77	0.48	4.96	1.5	5.3
38	Sept Max Red	0.31	147.29	147.75	0.47	4.68	1.43	5.02
38	Sept Cons	0.32	147.29	147.76	0.48	4.87	1.48	5.21
38	Sept Op	0.31	147.29	147.76	0.47	4.74	1.44	5.08
38	Sept Clos	0.33	147.29	147.77	0.48	4.96	1.5	5.3
37	June Baseline	1.87	147.16	148.26	1.1	28.22	10.55	28.91
37	Jun Max Red	1.75	147.16	148.24	1.08	27.12	9.87	27.8
37	Jun Cons	1.83	147.16	148.25	1.09	27.89	10.35	28.58
37	Jun Op	1.77	147.16	148.24	1.08	27.36	10.02	28.05
37	Jun Clos	1.87	147.16	148.26	1.1	28.25	10.57	28.94
37	Sept Baseline	0.33	147.16	147.73	0.58	6	1.85	6.66
37	Sept Max Red	0.31	147.16	147.72	0.56	5.67	1.77	6.33
37	Sept Cons	0.32	147.16	147.73	0.57	5.9	1.83	6.56
37	Sept Op	0.31	147.16	147.72	0.56	5.74	1.79	6.4
37	Sept Clos	0.33	147.16	147.73	0.58	6	1.85	6.66

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
36	June Baseline	1.87	146.82	148.24	1.43	16.68	9.42	17.1
36	Jun Max Red	1.75	146.82	148.22	1.4	16.22	9.02	16.64
36	Jun Cons	1.83	146.82	148.24	1.42	16.54	9.3	16.96
36	Jun Op	1.77	146.82	148.23	1.41	16.32	9.11	16.74
36	Jun Clos	1.87	146.82	148.25	1.43	16.69	9.43	17.11
36	Sept Baseline	0.33	146.82	147.73	0.91	6.9	3.3	7.26
36	Sept Max Red	0.31	146.82	147.71	0.89	6.63	3.2	6.99
36	Sept Cons	0.32	146.82	147.72	0.9	6.81	3.27	7.17
36	Sept Op	0.31	146.82	147.71	0.9	6.69	3.23	7.05
36	Sept Clos	0.33	146.82	147.73	0.91	6.9	3.3	7.26
35	June Baseline	1.87	147.28	148.22	0.94	20.34	7.62	20.58
35	Jun Max Red	1.75	147.28	148.2	0.92	19.53	7.13	19.77
35	Jun Cons	1.83	147.28	148.22	0.94	20.1	7.47	20.34
35	Jun Op	1.77	147.28	148.2	0.93	19.71	7.24	19.95
35	Jun Clos	1.87	147.28	148.22	0.95	20.36	7.63	20.6
35	Sept Baseline	0.33	147.28	147.71	0.43	5.2	1.41	5.4
35	Sept Max Red	0.31	147.28	147.7	0.42	4.94	1.34	5.13
35	Sept Cons	0.32	147.28	147.71	0.43	5.12	1.39	5.31
35	Sept Op	0.31	147.28	147.7	0.42	4.99	1.36	5.19
35	Sept Clos	0.33	147.28	147.71	0.43	5.2	1.41	5.4
34	June Baseline	1.87	147.03	148.2	1.17	15.1	8.1	15.36
34	Jun Max Red	1.75	147.03	148.18	1.15	14.71	7.74	14.96
34	Jun Cons	1.83	147.03	148.19	1.16	14.98	7.99	15.24
34	Jun Op	1.77	147.03	148.18	1.15	14.8	7.82	15.05
34	Jun Clos	1.87	147.03	148.2	1.17	15.11	8.11	15.37
34	Sept Baseline	0.33	147.03	147.69	0.66	6.88	2.54	7.07
34	Sept Max Red	0.31	147.03	147.68	0.65	6.65	2.45	6.85
34	Sept Cons	0.32	147.03	147.69	0.66	6.81	2.51	7
34	Sept Op	0.31	147.03	147.68	0.65	6.7	2.47	6.9
34	Sept Clos	0.33	147.03	147.69	0.66	6.88	2.54	7.07
33	June Baseline	1.87	146.45	148.2	1.75	23.58	24.75	23.91
33	Jun Max Red	1.75	146.45	148.18	1.73	23.34	24.19	23.66
33	Jun Cons	1.83	146.45	148.19	1.74	23.51	24.58	23.83
33	Jun Op	1.77	146.45	148.18	1.73	23.39	24.32	23.71
33	Jun Clos	1.87	146.45	148.2	1.75	23.59	24.76	23.91
33	Sept Baseline	0.33	146.45	147.69	1.25	18.42	14.15	18.65
33	Sept Max Red	0.31	146.45	147.68	1.23	18.28	13.9	18.5
33	Sept Cons	0.32	146.45	147.69	1.24	18.38	14.07	18.6
33	Sept Op	0.31	146.45	147.68	1.24	18.31	13.95	18.53
33	Sept Clos	0.33	146.45	147.69	1.25	18.42	14.15	18.65

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
32	June Baseline	1.87	146.97	148.19	1.23	17.71	9.1	17.96
32	Jun Max Red	1.75	146.97	148.17	1.2	17.21	8.68	17.45
32	Jun Cons	1.83	146.97	148.19	1.22	17.56	8.97	17.81
32	Jun Op	1.77	146.97	148.17	1.21	17.32	8.78	17.56
32	Jun Clos	1.87	146.97	148.19	1.23	17.72	9.11	17.97
32	Sept Baseline	0.33	146.97	147.69	0.73	7.16	2.92	7.35
32	Sept Max Red	0.31	146.97	147.68	0.71	6.94	2.83	7.13
32	Sept Cons	0.32	146.97	147.69	0.72	7.09	2.89	7.28
32	Sept Op	0.31	146.97	147.68	0.72	6.99	2.85	7.18
32	Sept Clos	0.33	146.97	147.69	0.73	7.16	2.92	7.35
31	June Baseline	1.87	146.71	148.18	1.47	21.03	13.22	21.4
31	Jun Max Red	1.75	146.71	148.16	1.45	20.51	12.74	20.88
31	Jun Cons	1.83	146.71	148.17	1.46	20.87	13.08	21.24
31	Jun Op	1.77	146.71	148.16	1.45	20.62	12.85	20.99
31	Jun Clos	1.87	146.71	148.18	1.47	21.04	13.24	21.41
31	Sept Baseline	0.33	146.71	147.69	0.98	9.97	5.6	10.29
31	Sept Max Red	0.31	146.71	147.68	0.96	9.67	5.47	9.99
31	Sept Cons	0.32	146.71	147.69	0.97	9.88	5.56	10.2
31	Sept Op	0.31	146.71	147.68	0.97	9.74	5.5	10.06
31	Sept Clos	0.33	146.71	147.69	0.98	9.97	5.6	10.29
30	June Baseline	1.87	146.93	148.17	1.23	15.96	8.93	16.43
30	Jun Max Red	1.75	146.93	148.15	1.21	15.55	8.58	16.02
30	Jun Cons	1.83	146.93	148.16	1.23	15.83	8.83	16.31
30	Jun Op	1.77	146.93	148.15	1.22	15.64	8.66	16.11
30	Jun Clos	1.87	146.93	148.17	1.24	15.97	8.94	16.44
30	Sept Baseline	0.33	146.93	147.69	0.75	7.22	3.34	7.54
30	Sept Max Red	0.31	146.93	147.67	0.74	6.98	3.25	7.29
30	Sept Cons	0.32	146.93	147.68	0.75	7.15	3.31	7.46
30	Sept Op	0.31	146.93	147.68	0.74	7.03	3.27	7.35
30	Sept Clos	0.33	146.93	147.69	0.75	7.22	3.34	7.54
29	June Baseline	1.87	147.34	148.15	0.81	12.17	5.54	12.56
29	Jun Max Red	1.75	147.34	148.13	0.79	11.87	5.28	12.25
29	Jun Cons	1.83	147.34	148.14	0.81	12.08	5.47	12.47
29	Jun Op	1.77	147.34	148.13	0.8	11.94	5.34	12.32
29	Jun Clos	1.87	147.34	148.15	0.82	12.18	5.55	12.57
29	Sept Baseline	0.33	147.34	147.68	0.34	5.51	1.35	5.78
29	Sept Max Red	0.31	147.34	147.66	0.33	5.32	1.28	5.59
29	Sept Cons	0.32	147.34	147.67	0.34	5.45	1.32	5.72
29	Sept Op	0.31	147.34	147.67	0.33	5.36	1.29	5.63
29	Sept Clos	0.33	147.34	147.68	0.34	5.51	1.35	5.78

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
28	June Baseline	1.87	147.01	148.14	1.13	13.44	7.87	14
28	Jun Max Red	1.75	147.01	148.12	1.11	13.13	7.58	13.69
28	Jun Cons	1.83	147.01	148.13	1.12	13.35	7.78	13.91
28	Jun Op	1.77	147.01	148.12	1.11	13.2	7.64	13.76
28	Jun Clos	1.87	147.01	148.14	1.13	13.45	7.87	14.01
28	Sept Baseline	0.33	147.01	147.67	0.66	6.6	3.15	7.08
28	Sept Max Red	0.31	147.01	147.66	0.65	6.41	3.07	6.88
28	Sept Cons	0.32	147.01	147.67	0.66	6.54	3.12	7.02
28	Sept Op	0.31	147.01	147.66	0.65	6.45	3.08	6.93
28	Sept Clos	0.33	147.01	147.67	0.66	6.6	3.15	7.08
27	June Baseline	1.87	147.23	148.11	0.87	12.91	5.98	13.5
27	Jun Max Red	1.75	147.23	148.09	0.85	12.59	5.72	13.17
27	Jun Cons	1.83	147.23	148.1	0.87	12.81	5.9	13.4
27	Jun Op	1.77	147.23	148.09	0.86	12.66	5.77	13.24
27	Jun Clos	1.87	147.23	148.11	0.87	12.91	5.98	13.5
27	Sept Baseline	0.33	147.23	147.66	0.42	5.91	1.73	6.28
27	Sept Max Red	0.31	147.23	147.64	0.41	5.71	1.66	6.07
27	Sept Cons	0.32	147.23	147.65	0.42	5.85	1.71	6.22
27	Sept Op	0.31	147.23	147.65	0.41	5.75	1.67	6.12
27	Sept Clos	0.33	147.23	147.66	0.42	5.91	1.73	6.28
26	June Baseline	1.87	147.09	148.06	0.97	15.29	6.45	15.52
26	Jun Max Red	1.75	147.09	148.04	0.95	14.87	6.16	15.1
26	Jun Cons	1.83	147.09	148.05	0.96	15.16	6.36	15.4
26	Jun Op	1.77	147.09	148.04	0.95	14.97	6.23	15.2
26	Jun Clos	1.87	147.09	148.06	0.97	15.3	6.46	15.53
26	Sept Baseline	0.33	147.09	147.63	0.54	5.9	1.9	6.09
26	Sept Max Red	0.31	147.09	147.62	0.53	5.63	1.83	5.82
26	Sept Cons	0.32	147.09	147.63	0.53	5.82	1.88	6.01
26	Sept Op	0.31	147.09	147.62	0.53	5.69	1.84	5.88
26	Sept Clos	0.33	147.09	147.63	0.54	5.9	1.9	6.09
25	June Baseline	1.87	146.9	148.02	1.13	25.85	11.1	26.42
25	Jun Max Red	1.75	146.9	148	1.11	25.61	10.64	26.18
25	Jun Cons	1.83	146.9	148.02	1.12	25.78	10.97	26.35
25	Jun Op	1.77	146.9	148.01	1.11	25.67	10.74	26.23
25	Jun Clos	1.87	146.9	148.02	1.13	25.86	11.11	26.42
25	Sept Baseline	0.33	146.9	147.61	0.72	8.87	2.84	9.36
25	Sept Max Red	0.31	146.9	147.6	0.7	8.07	2.74	8.56
25	Sept Cons	0.32	146.9	147.61	0.71	8.62	2.81	9.12
25	Sept Op	0.31	146.9	147.6	0.71	8.24	2.76	8.74
25	Sept Clos	0.33	146.9	147.61	0.72	8.87	2.84	9.36

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
24	June Baseline	1.87	146.94	148.01	1.07	21.82	10.58	22.19
24	Jun Max Red	1.75	146.94	147.99	1.05	21.27	10.21	21.64
24	Jun Cons	1.83	146.94	148	1.07	21.66	10.47	22.03
24	Jun Op	1.77	146.94	147.99	1.06	21.4	10.3	21.76
24	Jun Clos	1.87	146.94	148.01	1.07	21.83	10.59	22.2
24	Sept Baseline	0.33	146.94	147.61	0.67	9.15	4.43	9.44
24	Sept Max Red	0.31	146.94	147.6	0.66	8.78	4.32	9.07
24	Sept Cons	0.32	146.94	147.61	0.67	9.03	4.39	9.33
24	Sept Op	0.31	146.94	147.6	0.66	8.86	4.34	9.15
24	Sept Clos	0.33	146.94	147.61	0.67	9.15	4.43	9.44
23	June Baseline	1.87	147.09	147.99	0.9	63.09	15.75	63.3
23	Jun Max Red	1.75	147.09	147.97	0.88	62.89	14.67	63.08
23	Jun Cons	1.83	147.09	147.98	0.89	63.03	15.43	63.24
23	Jun Op	1.77	147.09	147.98	0.89	62.94	14.92	63.13
23	Jun Clos	1.87	147.09	147.99	0.9	63.1	15.77	63.31
23	Sept Baseline	0.33	147.09	147.6	0.51	6.87	2.24	7.02
23	Sept Max Red	0.31	147.09	147.59	0.5	6.72	2.17	6.87
23	Sept Cons	0.32	147.09	147.6	0.51	6.82	2.22	6.98
23	Sept Op	0.31	147.09	147.59	0.5	6.75	2.18	6.9
23	Sept Clos	0.33	147.09	147.6	0.51	6.87	2.24	7.02
22	June Baseline	1.87	146.54	147.99	1.45	28.56	22.28	28.87
22	Jun Max Red	1.75	146.54	147.97	1.43	28.19	21.8	28.49
22	Jun Cons	1.83	146.54	147.98	1.45	28.45	22.13	28.76
22	Jun Op	1.77	146.54	147.97	1.44	28.27	21.91	28.58
22	Jun Clos	1.87	146.54	147.99	1.45	28.57	22.29	28.88
22	Sept Baseline	0.33	146.54	147.6	1.06	19.95	12.87	20.18
22	Sept Max Red	0.31	146.54	147.59	1.05	19.71	12.65	19.93
22	Sept Cons	0.32	146.54	147.6	1.06	19.88	12.8	20.1
22	Sept Op	0.31	146.54	147.59	1.05	19.76	12.7	19.99
22	Sept Clos	0.33	146.54	147.6	1.06	19.95	12.87	20.18
21	June Baseline	1.87	146.97	147.98	1.01	24.4	8.85	25.32
21	Jun Max Red	1.75	146.97	147.96	0.99	23.71	8.45	24.63
21	Jun Cons	1.83	146.97	147.97	1	24.19	8.73	25.12
21	Jun Op	1.77	146.97	147.97	0.99	23.86	8.54	24.79
21	Jun Clos	1.87	146.97	147.98	1.01	24.42	8.86	25.34
21	Sept Baseline	0.33	146.97	147.6	0.63	8.37	2.6	9.27
21	Sept Max Red	0.31	146.97	147.59	0.61	7.91	2.51	8.81
21	Sept Cons	0.32	146.97	147.59	0.62	8.23	2.57	9.13
21	Sept Op	0.31	146.97	147.59	0.62	8.01	2.53	8.92
21	Sept Clos	0.33	146.97	147.6	0.63	8.37	2.6	9.27

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
20	June Baseline	1.87	147.04	147.95	0.9	28.04	7.71	28.52
20	Jun Max Red	1.75	147.04	147.93	0.89	26.94	7.27	27.42
20	Jun Cons	1.83	147.04	147.94	0.9	27.71	7.57	28.19
20	Jun Op	1.77	147.04	147.94	0.89	27.19	7.37	27.67
20	Jun Clos	1.87	147.04	147.95	0.9	28.06	7.72	28.54
20	Sept Baseline	0.33	147.04	147.58	0.54	5.52	1.98	5.93
20	Sept Max Red	0.31	147.04	147.57	0.53	5.32	1.92	5.72
20	Sept Cons	0.32	147.04	147.58	0.54	5.44	1.96	5.85
20	Sept Op	0.31	147.04	147.58	0.53	5.33	1.93	5.73
20	Sept Clos	0.33	147.04	147.58	0.54	5.52	1.98	5.93
19	June Baseline	1.87	147.01	147.92	0.92	36.62	9.17	36.98
19	Jun Max Red	1.75	147.01	147.91	0.9	35.21	8.6	35.56
19	Jun Cons	1.83	147.01	147.92	0.91	36.2	9	36.56
19	Jun Op	1.77	147.01	147.91	0.91	35.53	8.72	35.88
19	Jun Clos	1.87	147.01	147.92	0.92	36.66	9.19	37.01
19	Sept Baseline	0.33	147.01	147.57	0.56	5.4	1.73	5.74
19	Sept Max Red	0.31	147.01	147.56	0.55	5.27	1.68	5.61
19	Sept Cons	0.32	147.01	147.56	0.56	5.36	1.71	5.7
19	Sept Op	0.31	147.01	147.56	0.55	5.3	1.69	5.64
19	Sept Clos	0.33	147.01	147.57	0.56	5.4	1.73	5.74
18	June Baseline	1.87	147.08	147.9	0.82	37.1	10.71	37.7
18	Jun Max Red	1.75	147.08	147.88	0.8	36.01	10.11	36.62
18	Jun Cons	1.83	147.08	147.89	0.81	36.77	10.53	37.38
18	Jun Op	1.77	147.08	147.88	0.8	36.26	10.25	36.87
18	Jun Clos	1.87	147.08	147.9	0.82	37.12	10.73	37.73
18	Sept Baseline	0.33	147.08	147.51	0.43	10.25	1.37	10.76
18	Sept Max Red	0.31	147.08	147.5	0.42	9.52	1.27	10.03
18	Sept Cons	0.32	147.08	147.51	0.43	10.04	1.34	10.55
18	Sept Op	0.31	147.08	147.5	0.42	9.71	1.3	10.22
18	Sept Clos	0.33	147.08	147.51	0.43	10.25	1.37	10.76
17	June Baseline	1.87	147	147.86	0.86	23.01	4.74	23.59
17	Jun Max Red	1.75	147	147.84	0.84	21.3	4.36	21.88
17	Jun Cons	1.83	147	147.86	0.85	22.5	4.62	23.08
17	Jun Op	1.77	147	147.85	0.84	21.69	4.44	22.27
17	Jun Clos	1.87	147	147.86	0.86	23.05	4.75	23.63
17	Sept Baseline	0.33	147	147.44	0.43	2.95	0.82	3.35
17	Sept Max Red	0.31	147	147.42	0.42	2.76	0.78	3.15
17	Sept Cons	0.32	147	147.43	0.43	2.85	0.8	3.25
17	Sept Op	0.31	147	147.43	0.42	2.76	0.78	3.16
17	Sept Clos	0.33	147	147.44	0.43	2.95	0.82	3.35

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
16	June Baseline	1.87	146.93	147.83	0.9	17.51	4.29	18.38
16	Jun Max Red	1.75	146.93	147.81	0.88	16.52	4.01	17.4
16	Jun Cons	1.83	146.93	147.83	0.89	17.22	4.2	18.09
16	Jun Op	1.77	146.93	147.82	0.88	16.75	4.07	17.62
16	Jun Clos	1.87	146.93	147.83	0.9	17.53	4.3	18.41
16	Sept Baseline	0.33	146.93	147.42	0.48	2.57	1.03	3.3
16	Sept Max Red	0.31	146.93	147.41	0.47	2.31	0.99	3.03
16	Sept Cons	0.32	146.93	147.42	0.48	2.49	1.02	3.21
16	Sept Op	0.31	146.93	147.41	0.47	2.37	1	3.08
16	Sept Clos	0.33	146.93	147.42	0.48	2.57	1.03	3.3
15	June Baseline	1.87	146.85	147.82	0.96	20.97	6.06	21.62
15	Jun Max Red	1.75	146.85	147.8	0.95	20.22	5.73	20.87
15	Jun Cons	1.83	146.85	147.81	0.96	20.75	5.97	21.4
15	Jun Op	1.77	146.85	147.81	0.95	20.39	5.81	21.04
15	Jun Clos	1.87	146.85	147.82	0.96	20.99	6.07	21.64
15	Sept Baseline	0.33	146.85	147.41	0.56	3.83	1.34	4.45
15	Sept Max Red	0.31	146.85	147.4	0.54	3.54	1.28	4.15
15	Sept Cons	0.32	146.85	147.41	0.55	3.74	1.32	4.35
15	Sept Op	0.31	146.85	147.4	0.55	3.6	1.3	4.21
15	Sept Clos	0.33	146.85	147.41	0.56	3.83	1.34	4.45
14	June Baseline	1.87	146.81	滯 47.81	1	24.82	9.13	25.1
14	Jun Max Red	1.75	146.81	147.79	0.99	24.2	8.75	24.48
14	Jun Cons	1.83	146.81	147.81	1	24.64	9.02	24.92
14	Jun Op	1.77	146.81	147.8	0.99	24.34	8.83	24.62
14	Jun Clos	1.87	146.81	147.81	1	24.84	9.14	25.12
14	Sept Baseline	0.33	146.81	147.41	0.6	8.81	2.35	9.07
14	Sept Max Red	0.31	146.81	147.39	0.58	8.25	2.23	8.51
14	Sept Cons	0.32	146.81	147.4	0.59	8.64	2.31	8.9
14	Sept Op	0.31	146.81	147.4	0.59	8.37	2.25	8.63
14	Sept Clos	0.33	146.81	147.41	0.6	8.81	2.35	9.07
13	June Baseline	1.87	146.91	147.76	0.85	15.75	4.14	16.34
13	Jun Max Red	1.75	146.91	147.75	0.84	15.17	3.9	15.76
13	Jun Cons	1.83	146.91	147.76	0.85	15.58	4.07	16.16
13	Jun Op	1.77	146.91	147.75	0.84	15.3	3.96	15.89
13	Jun Clos	1.87	146.91	147.76	0.85	15.76	4.15	16.35
13	Sept Baseline	0.33	146.91	147.36	0.46	2.22	0.8	2.75
13	Sept Max Red	0.31	146.91	147.35	0.44	2.17	0.77	2.68
13	Sept Cons	0.32	146.91	147.36	0.45	2.2	0.79	2.73
13	Sept Op	0.31	146.91	147.35	0.44	2.18	0.78	2.7
13	Sept Clos	0.33	146.91	147.36	0.46	2.22	0.8	2.75

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
12	June Baseline	1.87	146.76	147.49	0.73	8.06	2.33	8.61
12	Jun Max Red	1.75	146.76	147.47	0.71	7.69	2.2	8.25
12	Jun Cons	1.83	146.76	147.48	0.72	7.95	2.29	8.5
12	Jun Op	1.77	146.76	147.48	0.72	7.78	2.23	8.33
12	Jun Clos	1.87	146.76	147.49	0.73	8.07	2.33	8.62
12	Sept Baseline	0.33	146.76	147.11	0.36	2.32	0.69	2.76
12	Sept Max Red	0.31	146.76	147.1	0.35	2.31	0.67	2.74
12	Sept Cons	0.32	146.76	147.11	0.35	2.32	0.69	2.76
12	Sept Op	0.31	146.76	147.11	0.35	2.32	0.67	2.75
12	Sept Clos	0.33	146.76	147.11	0.36	2.32	0.69	2.76
11	June Baseline	1.87	146.48	147.21	0.73	7.53	3.19	7.95
11	Jun Max Red	1.75	146.48	147.19	0.71	7.37	3.04	7.78
11	Jun Cons	1.83	146.48	147.2	0.72	7.48	3.15	7.9
11	Jun Op	1.77	146.48	147.19	0.71	7.41	3.08	7.82
11	Jun Clos	1.87	146.48	147.21	0.73	7.53	3.2	7.95
11	Sept Baseline	0.33	146.48	146.87	0.39	4.4	1.11	4.72
11	Sept Max Red	0.31	146.48	146.86	0.38	4.27	1.08	4.58
11	Sept Cons	0.32	146.48	146.87	0.39	4.36	1.1	4.68
11	Sept Op	0.31	146.48	146.86	0.38	4.3	1.08	4.61
11	Sept Clos	0.33	146.48	146.87	0.39	4.4	1.11	4.72
10	June Baseline	1.87	145.87	147.08	1.22	15.23	12.36	15.66
10	Jun Max Red	1.75	145.87	147.06	1.2	15.05	12.07	15.47
10	Jun Cons	1.83	145.87	147.08	1.21	15.18	12.28	15.6
10	Jun Op	1.77	145.87	147.07	1.2	15.09	12.14	15.51
10	Jun Clos	1.87	145.87	147.08	1.22	15.24	12.37	15.66
10	Sept Baseline	0.33	145.87	146.82	0.95	12.57	8.63	12.91
10	Sept Max Red	0.31	145.87	146.82	0.95	12.55	8.59	12.9
10	Sept Cons	0.32	145.87	146.82	0.95	12.56	8.62	12.91
10	Sept Op	0.31	145.87	146.82	0.95	12.56	8.6	12.9
10	Sept Clos	0.33	145.87	146.82	0.95	12.57	8.63	12.91
9	June Baseline	1.87	146.28	147.07	0.8	13.23	6.11	13.4
9	Jun Max Red	1.75	146.28	147.05	0.78	13.1	5.86	13.26
9	Jun Cons	1.83	146.28	147.07	0.79	13.19	6.03	13.35
9	Jun Op	1.77	146.28	147.06	0.78	13.13	5.91	13.29
9	Jun Clos	1.87	146.28	147.07	0.8	13.24	6.11	13.4
9	Sept Baseline	0.33	146.28	146.82	0.54	8.47	3.16	8.59
9	Sept Max Red	0.31	146.28	146.82	0.54	8.4	3.14	8.52
9	Sept Cons	0.32	146.28	146.82	0.54	8.45	3.16	8.57
9	Sept Op	0.31	146.28	146.82	0.54	8.41	3.14	8.53
9	Sept Clos	0.33	146.28	146.82	0.54	8.47	3.16	8.59

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
8	June Baseline	1.87	146.24	147.04	0.8	8.43	3.16	9.02
8	Jun Max Red	1.75	146.24	147.03	0.78	8.17	3.02	8.75
8	Jun Cons	1.83	146.24	147.04	0.79	8.35	3.12	8.94
8	Jun Op	1.77	146.24	147.03	0.78	8.22	3.05	8.81
8	Jun Clos	1.87	146.24	147.04	0.8	8.44	3.17	9.03
8	Sept Baseline	0.33	146.24	146.82	0.57	4.98	1.64	5.53
8	Sept Max Red	0.31	146.24	146.81	0.57	4.94	1.63	5.49
8	Sept Cons	0.32	146.24	146.81	0.57	4.96	1.64	5.52
8	Sept Op	0.31	146.24	146.81	0.57	4.95	1.63	5.5
8	Sept Clos	0.33	146.24	146.82	0.57	4.98	1.64	5.53
7	June Baseline	1.87	145.7	147.06	1.35	16.43	15.55	16.84
7	Jun Max Red	1.75	145.7	147.04	1.34	16.26	15.25	16.66
7	Jun Cons	1.83	145.7	147.05	1.35	16.38	15.46	16.79
7	Jun Op	1.77	145.7	147.04	1.34	16.3	15.32	16.7
7	Jun Clos	1.87	145.7	147.06	1.35	16.44	15.56	16.84
7	Sept Baseline	0.33	145.7	146.82	1.11	14.19	11.87	14.54
7	Sept Max Red	0.31	145.7	146.81	1.11	14.16	11.83	14.52
7	Sept Cons	0.32	145.7	146.82	1.11	14.18	11.86	14.53
7	Sept Op	0.31	145.7	146.81	1.11	14.17	11.84	14.52
7	Sept Clos	0.33	145.7	146.82	1.11	14.19	11.87	14.54
6	June Baseline	1.87	146.12	147.04	0.91	9.87	4.21	10.31
6	Jun Max Red	1.75	146.12	147.02	0.9	9.57	4.04	10.01
6	Jun Cons	1.83	146.12	147.03	0.91	9.78	4.16	10.22
6	Jun Op	1.77	146.12	147.02	0.9	9.63	4.08	10.07
6	Jun Clos	1.87	146.12	147.04	0.92	9.88	4.21	10.32
6	Sept Baseline	0.33	146.12	146.81	0.69	5.91	2.45	6.33
6	Sept Max Red	0.31	146.12	146.81	0.69	5.87	2.43	6.28
6	Sept Cons	0.32	146.12	146.81	0.69	5.9	2.44	6.31
6	Sept Op	0.31	146.12	146.81	0.69	5.88	2.43	6.29
6	Sept Clos	0.33	146.12	146.81	0.69	5.91	2.45	6.33
5	June Baseline	1.87	146.13	147.02	0.89	7.86	3.54	8.79
5	Jun Max Red	1.75	146.13	147	0.88	7.62	3.42	8.54
5	Jun Cons	1.83	146.13	147.01	0.89	7.79	3.5	8.71
5	Jun Op	1.77	146.13	147.01	0.88	7.67	3.44	8.59
5	Jun Clos	1.87	146.13	147.02	0.89	7.87	3.54	8.79
5	Sept Baseline	0.33	146.13	146.81	0.69	5.43	2.22	6.3
5	Sept Max Red	0.31	146.13	146.81	0.69	5.41	2.21	6.29
5	Sept Cons	0.32	146.13	146.81	0.69	5.43	2.22	6.3
5	Sept Op	0.31	146.13	146.81	0.69	5.42	2.21	6.29
5	Sept Clos	0.33	146.13	146.81	0.69	5.43	2.22	6.3

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
4	June Baseline	1.87	146.01	146.99	0.98	7.4	3.26	8.05
4	Jun Max Red	1.75	146.01	146.98	0.97	7.12	3.16	7.77
4	Jun Cons	1.83	146.01	146.99	0.98	7.31	3.23	7.96
4	Jun Op	1.77	146.01	146.98	0.97	7.17	3.18	7.82
4	Jun Clos	1.87	146.01	146.99	0.98	7.41	3.26	8.06
4	Sept Baseline	0.33	146.01	146.81	0.8	4.03	2.22	4.66
4	Sept Max Red	0.31	146.01	146.81	0.8	3.99	2.21	4.62
4	Sept Cons	0.32	146.01	146.81	0.8	4.02	2.22	4.65
4	Sept Op	0.31	146.01	146.81	0.8	4	2.21	4.63
4	Sept Clos	0.33	146.01	146.81	0.8	4.03	2.22	4.66
3	June Baseline	1.87	145.73	147.01	1.27	16.6	12.17	17.03
3	Jun Max Red	1.75	145.73	146.99	1.26	16.25	11.92	16.67
3	Jun Cons	1.83	145.73	147	1.27	16.49	12.1	16.92
3	Jun Op	1.77	145.73	146.99	1.26	16.32	11.98	16.75
3	Jun Clos	1.87	145.73	147.01	1.27	16.61	12.18	17.04
3	Sept Baseline	0.33	145.73	146.81	1.08	14.5	9.18	14.88
3	Sept Max Red	0.31	145.73	146.81	1.07	14.48	9.14	14.86
3	Sept Cons	0.32	145.73	146.81	1.08	14.49	9.17	14.88
3	Sept Op	0.31	145.73	146.81	1.08	14.48	9.15	14.87
3	Sept Clos	0.33	145.73	146.81	1.08	14.5	9.18	14.88
2	June Baseline	1.87	146.1	147	0.9	19.56	6.83	19.77
2	Jun Max Red	1.75	146.1	146.98	0.88	18.8	6.55	19.01
2	Jun Cons	1.83	146.1	146.99	0.89	19.33	6.75	19.54
2	Jun Op	1.77	146.1	146.99	0.88	18.97	6.61	19.18
2	Jun Clos	1.87	146.1	147	0.9	19.58	6.84	19.79
2	Sept Baseline	0.33	146.1	146.81	0.71	9.1	4.06	9.3
2	Sept Max Red	0.31	146.1	146.81	0.71	8.93	4.04	9.13
2	Sept Cons	0.32	146.1	146.81	0.71	9.05	4.06	9.24
2	Sept Op	0.31	146.1	146.81	0.71	8.96	4.05	9.16
2	Sept Clos	0.33	146.1	146.81	0.71	9.1	4.06	9.3

Table A-4. Ogama Inflow High Groundwater Model Results

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
65	June Baseline	1.87	148.2	149.05	0.85	60.46	22.44	60.52
65	Jun Max Red	1.54	148.2	149	0.8	58.37	19.37	58.43
65	Jun Cons	1.78	148.2	149.04	0.84	59.94	21.66	59.99
65	Jun Op	1.6	148.2	149.01	0.81	58.77	19.95	58.83
65	Jun Clos	1.83	148.2	149.05	0.84	60.2	22.06	60.26

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
65	Sept Baseline	0.33	148.2	148.69	0.49	27.17	4.54	27.22
65	Sept Max Red	0.26	148.2	148.65	0.45	19.6	3.66	19.64
65	Sept Cons	0.31	148.2	148.68	0.48	25.65	4.34	25.69
65	Sept Op	0.27	148.2	148.66	0.46	21.72	3.87	21.76
65	Sept Clos	0.32	148.2	148.69	0.49	26.87	4.5	26.92
64	June Baseline	1.87	148.28	149.02	0.75	39.13	10.9	39.27
64	Jun Max Red	1.54	148.28	148.97	0.69	35.11	8.91	35.26
64	Jun Cons	1.78	148.28	149.01	0.73	38.12	10.38	38.27
64	Jun Op	1.6	148.28	148.98	0.7	35.88	9.27	36.02
64	Jun Clos	1.83	148.28	149.02	0.74	38.64	10.65	38.78
64	Sept Baseline	0.33	148.28	148.64	0.36	10.42	1.38	10.55
64	Sept Max Red	0.26	148.28	148.6	0.32	7.52	1.03	7.65
64	Sept Cons	0.31	148.28	148.63	0.35	9.83	1.3	9.96
64	Sept Op	0.27	148.28	148.61	0.33	8.34	1.12	8.47
64	Sept Clos	0.32	148.28	148.64	0.36	10.3	1.36	10.43
63	June Baseline	1.87	148.02	148.96	0.94	17.31	5.88	17.66
63	Jun Max Red	1.54	148.02	148.91	0.89	15.7	4.97	16.04
63	Jun Cons	1.78	148.02	148.95	0.93	16.91	5.64	17.25
63	Jun Op	1.6	148.02	148.92	0.9	16.01	5.13	16.35
63	Jun Clos	1.83	148.02	148.95	0.94	17.12	5.76	17.46
63	Sept Baseline	0.33	148.02	148.56	0.54	5.68	1.3	6
63	Sept Max Red	0.26	148.02	148.52	0.5	4.54	1.1	4.85
63	Sept Cons	0.31	148.02	148.55	0.54	5.45	1.25	5.76
63	Sept Op	0.27	148.02	148.53	0.52	4.84	1.15	5.15
63	Sept Clos	0.32	148.02	148.56	0.54	5.64	1.29	5.95
62	June Baseline	1.87	148.09	148.91	0.81	14.65	4.8	15.06
62	Jun Max Red	1.54	148.09	148.85	0.76	13.26	4.03	13.67
62	Jun Cons	1.78	148.09	148.89	0.8	14.31	4.6	14.71
62	Jun Op	1.6	148.09	148.86	0.77	13.53	4.17	13.93
62	Jun Clos	1.83	148.09	148.9	0.81	14.48	4.71	14.89
62	Sept Baseline	0.33	148.09	148.51	0.42	4.85	0.98	5.22
62	Sept Max Red	0.26	148.09	148.48	0.39	4.1	0.82	4.48
62	Sept Cons	0.31	148.09	148.51	0.41	4.69	0.95	5.07
62	Sept Op	0.27	148.09	148.49	0.4	4.3	0.86	4.67
62	Sept Clos	0.32	148.09	148.51	0.42	4.81	0.98	5.19
61	June Baseline	1.87	148.04	148.77	0.72	10.22	3.5	10.92
61	Jun Max Red	1.54	148.04	148.71	0.67	9.31	2.94	10
61	Jun Cons	1.78	148.04	148.75	0.71	9.99	3.35	10.69
61	Jun Op	1.6	148.04	148.72	0.68	9.48	3.05	10.18

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
61	Jun Clos	1.83	148.04	148.76	0.72	10.11	3.43	10.81
61	Sept Baseline	0.33	148.04	148.38	0.34	4.02	0.75	4.67
61	Sept Max Red	0.26	148.04	148.35	0.3	3.47	0.62	4.11
61	Sept Cons	0.31	148.04	148.37	0.33	3.9	0.72	4.55
61	Sept Op	0.27	148.04	148.36	0.31	3.61	0.65	4.26
61	Sept Clos	0.32	148.04	148.38	0.34	4	0.75	4.65
60	June Baseline	1.87	147.83	148.61	0.78	11.17	4.03	11.45
60	Jun Max Red	1.54	147.83	148.54	0.71	9.97	3.34	10.23
60	Jun Cons	1.78	147.83	148.59	0.76	10.87	3.85	11.14
60	Jun Op	1.6	147.83	148.55	0.73	10.2	3.46	10.46
60	Jun Clos	1.83	147.83	148.6	0.77	11.02	3.94	11.3
60	Sept Baseline	0.33	147.83	148.15	0.32	3.94	0.71	4.15
60	Sept Max Red	0.26	147.83	148.11	0.28	2.65	0.57	2.85
60	Sept Cons	0.31	147.83	148.14	0.31	3.83	0.68	4.03
60	Sept Op	0.27	147.83	148.12	0.29	3.05	0.6	3.25
60	Sept Clos	0.32	147.83	148.15	0.32	3.92	0.71	4.12
59	June Baseline	1.87	147.6	148.55	0.94	14.45	5.59	14.98
59	Jun Max Red	1.54	147.6	148.48	0.88	13.02	4.64	13.54
59	Jun Cons	1.78	147.6	148.53	0.93	14.09	5.34	14.62
59	Jun Op	1.6	147.6	148.49	0.89	13.29	4.81	13.82
59	Jun Clos	1.83	147.6	148.54	0.94	14.27	5.47	14.8
59	Sept Baseline	0.33	147.6	148.05	0.45	4.29	0.98	4.77
59	Sept Max Red	0.26	147.6	148	0.4	3.26	0.79	3.74
59	Sept Cons	0.31	147.6	148.04	0.44	4.09	0.93	4.56
59	Sept Op	0.27	147.6	148.02	0.42	3.54	0.83	4.02
59	Sept Clos	0.32	147.6	148.05	0.45	4.25	0.97	4.73
58	June Baseline	1.87	147.15	148.54	1.39	15.85	9.25	16.19
58	Jun Max Red	1.54	147.15	148.47	1.32	14.33	8.21	14.67
58	Jun Cons	1.78	147.15	148.52	1.37	15.47	8.98	15.81
58	Jun Op	1.6	147.15	148.48	1.33	14.62	8.4	14.96
58	Jun Clos	1.83	147.15	148.53	1.38	15.66	9.11	16.01
58	Sept Baseline	0.33	147.15	148.05	0.9	7.54	3.85	7.8
58	Sept Max Red	0.26	147.15	148	0.85	6.98	3.49	7.22
58	Sept Cons	0.31	147.15	148.04	0.89	7.43	3.78	7.68
58	Sept Op	0.27	147.15	148.01	0.86	7.13	3.59	7.38
58	Sept Clos	0.32	147.15	148.05	0.9	7.52	3.84	7.77
57	June Baseline	1.87	147.57	148.53	0.97	13.14	7.78	13.69
57	Jun Max Red	1.54	147.57	148.47	0.9	12.54	6.9	13.08
57	Jun Cons	1.78	147.57	148.52	0.95	12.99	7.56	13.53

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
57	Jun Op	1.6	147.57	148.48	0.91	12.66	7.07	13.19
57	Jun Clos	1.83	147.57	148.53	0.96	13.06	7.67	13.61
57	Sept Baseline	0.33	147.57	148.05	0.48	8.92	2.41	9.35
57	Sept Max Red	0.26	147.57	148	0.43	8.48	1.98	8.91
57	Sept Cons	0.31	147.57	148.04	0.47	8.83	2.33	9.27
57	Sept Op	0.27	147.57	148.01	0.44	8.6	2.1	9.03
57	Sept Clos	0.32	147.57	148.05	0.48	8.9	2.4	9.34
56	June Baseline	1.87	147.33	148.52	1.19	16.37	7.52	16.76
56	Jun Max Red	1.54	147.33	148.45	1.12	14.84	6.47	15.23
56	Jun Cons	1.78	147.33	148.5	1.17	15.98	7.25	16.38
56	Jun Op	1.6	147.33	148.47	1.13	15.13	6.66	15.52
56	Jun Clos	1.83	147.33	148.51	1.18	16.18	7.39	16.57
56	Sept Baseline	0.33	147.33	148.04	0.71	5.77	2.27	6.12
56	Sept Max Red	0.26	147.33	147.99	0.66	5.24	2	5.58
56	Sept Cons	0.31	147.33	148.03	0.7	5.67	2.21	6.01
56	Sept Op	0.27	147.33	148.01	0.67	5.39	2.07	5.72
56	Sept Clos	0.32	147.33	148.04	0.71	5.75	2.26	6.1
55	June Baseline	1.87	147.52	148.49	0.97	14.43	5.99	14.79
55	Jun Max Red	1.54	147.52	148.42	0.9	13.23	5.05	13.57
55	Jun Cons	1.78	147.52	148.47	0.95	14.13	5.74	14.48
55	Jun Op	1.6	147.52	148.43	0.91	13.46	5.22	13.8
55	Jun Clos	1.83	147.52	148.48	0.96	14.29	5.87	14.64
55	Sept Baseline	0.33	147.52	148.01	0.49	5.96	1.14	6.26
55	Sept Max Red	0.26	147.52	147.96	0.44	5.04	0.86	5.33
55	Sept Cons	0.31	147.52	148	0.48	5.78	1.08	6.08
55	Sept Op	0.27	147.52	147.98	0.45	5.31	0.94	5.6
55	Sept Clos	0.32	147.52	148.01	0.49	5.92	1.13	6.22
54	June Baseline	1.87	147.32	148.48	1.16	14.23	7.48	14.62
54	Jun Max Red	1.54	147.32	148.41	1.1	13.19	6.56	13.56
54	Jun Cons	1.78	147.32	148.47	1.15	13.97	7.24	14.35
54	Jun Op	1.6	147.32	148.43	1.11	13.39	6.73	13.77
54	Jun Clos	1.83	147.32	148.47	1.15	14.11	7.36	14.49
54	Sept Baseline	0.33	147.32	148.01	0.69	6.9	2.48	7.21
54	Sept Max Red	0.26	147.32	147.96	0.64	6.07	2.15	6.37
54	Sept Cons	0.31	147.32	148	0.68	6.75	2.41	7.06
54	Sept Op	0.27	147.32	147.97	0.65	6.33	2.24	6.64
54	Sept Clos	0.32	147.32	148.01	0.69	6.87	2.47	7.18
53	June Baseline	1.87	147.15	148.47	1.32	20.2	12.82	20.55
53	Jun Max Red	1.54	147.15	148.41	1.26	18.93	11.52	19.27

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
53	Jun Cons	1.78	147.15	148.46	1.31	19.88	12.49	20.23
53	Jun Op	1.6	147.15	148.42	1.27	19.17	11.76	19.52
53	Jun Clos	1.83	147.15	148.46	1.32	20.05	12.66	20.39
53	Sept Baseline	0.33	147.15	148.01	0.86	11.27	5.47	11.57
53	Sept Max Red	0.26	147.15	147.96	0.81	10.11	4.93	10.41
53	Sept Cons	0.31	147.15	148	0.85	11.08	5.36	11.38
53	Sept Op	0.27	147.15	147.97	0.82	10.5	5.08	10.79
53	Sept Clos	0.32	147.15	148	0.85	11.23	5.45	11.53
52	June Baseline	1.87	147.31	148.47	1.16	24.96	12.04	25.47
52	Jun Max Red	1.54	147.31	148.4	1.09	23.5	10.44	24
52	Jun Cons	1.78	147.31	148.45	1.14	24.59	11.63	25.1
52	Jun Op	1.6	147.31	148.41	1.11	23.78	10.74	24.28
52	Jun Clos	1.83	147.31	148.46	1.15	24.78	11.84	25.29
52	Sept Baseline	0.33	147.31	148	0.7	15.13	2.82	15.58
52	Sept Max Red	0.26	147.31	147.95	0.65	9.73	2.17	10.18
52	Sept Cons	0.31	147.31	147.99	0.69	14.94	2.67	15.39
52	Sept Op	0.27	147.31	147.97	0.66	11.62	2.32	12.07
52	Sept Clos	0.32	147.31	148	0.7	15.09	2.79	15.55
51	June Baseline	1.87	147.31	148.45	1.15	18.88	8.81	19.22
51	Jun Max Red	1.54	147.31	148.39	1.08	17.66	7.61	18
51	Jun Cons	1.78	147.31	148.43	1.13	18.57	8.5	18.91
51	Jun Op	1.6	147.31	148.4	1.09	17.9	7.83	18.23
51	Jun Clos	1.83	147.31	148.44	1.14	18.73	8.66	19.07
51	Sept Baseline	0.33	147.31	147.99	0.69	11.49	1.98	11.73
51	Sept Max Red	0.26	147.31	147.94	0.64	6.06	1.5	6.29
51	Sept Cons	0.31	147.31	147.98	0.68	11.38	1.87	11.62
51	Sept Op	0.27	147.31	147.95	0.65	7.68	1.58	7.91
51	Sept Clos	0.32	147.31	147.99	0.68	11.46	1.96	11.71
50	June Baseline	1.87	147.49	148.43	0.94	17.12	8.57	17.57
50	Jun Max Red	1.54	147.49	148.37	0.87	16.65	7.45	17.08
50	Jun Cons	1.78	147.49	148.42	0.92	17	8.29	17.45
50	Jun Op	1.6	147.49	148.38	0.88	16.74	7.66	17.17
50	Jun Clos	1.83	147.49	148.43	0.93	17.06	8.43	17.51
50	Sept Baseline	0.33	147.49	147.94	0.45	8.32	1.23	8.63
50	Sept Max Red	0.26	147.49	147.89	0.39	4.45	0.89	4.74
50	Sept Cons	0.31	147.49	147.93	0.44	7.53	1.14	7.83
50	Sept Op	0.27	147.49	147.9	0.41	5.48	0.96	5.78
50	Sept Clos	0.32	147.49	147.94	0.44	8.17	1.21	8.48

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
49	June Baseline	1.87	146.89	148.42	1.53	18.31	13.95	18.65
49	Jun Max Red	1.54	146.89	148.35	1.47	17.34	12.78	17.67
49	Jun Cons	1.78	146.89	148.4	1.51	18.07	13.65	18.41
49	Jun Op	1.6	146.89	148.37	1.48	17.52	13	17.85
49	Jun Clos	1.83	146.89	148.41	1.52	18.2	13.8	18.53
49	Sept Baseline	0.33	146.89	147.92	1.04	10.96	6.7	11.22
49	Sept Max Red	0.26	146.89	147.87	0.98	10.15	6.12	10.4
49	Sept Cons	0.31	146.89	147.91	1.02	10.79	6.58	11.05
49	Sept Op	0.27	146.89	147.88	1	10.37	6.27	10.62
49	Sept Clos	0.32	146.89	147.92	1.03	10.93	6.68	11.19
48	June Baseline	1.87	146.61	148.42	1.81	24.26	26.45	24.8
48	Jun Max Red	1.54	146.61	148.35	1.74	23.26	24.89	23.79
48	Jun Cons	1.78	146.61	148.4	1.79	24.01	26.05	24.55
48	Jun Op	1.6	146.61	148.37	1.76	23.45	25.18	23.99
48	Jun Clos	1.83	146.61	148.41	1.8	24.14	26.25	24.68
48	Sept Baseline	0.33	146.61	147.92	1.32	16.75	16.33	17.22
48	Sept Max Red	0.26	146.61	147.87	1.26	15.91	15.43	16.38
48	Sept Cons	0.31	146.61	147.91	1.31	16.58	16.14	17.05
48	Sept Op	0.27	146.61	147.88	1.28	16.14	15.67	16.61
48	Sept Clos	0.32	146.61	147.92	1.31	16.71	16.29	17.19
47	June Baseline	1.87	147.13	148.41	1.28	12.62	8.48	13
47	Jun Max Red	1.54	147.13	148.35	1.22	11.92	7.69	12.28
47	Jun Cons	1.78	147.13	148.4	1.26	12.45	8.28	12.82
47	Jun Op	1.6	147.13	148.36	1.23	12.05	7.84	12.42
47	Jun Clos	1.83	147.13	148.4	1.27	12.54	8.38	12.91
47	Sept Baseline	0.33	147.13	147.92	0.79	7.28	3.62	7.54
47	Sept Max Red	0.26	147.13	147.87	0.74	6.68	3.24	6.93
47	Sept Cons	0.31	147.13	147.91	0.78	7.15	3.54	7.42
47	Sept Op	0.27	147.13	147.88	0.75	6.84	3.34	7.09
47	Sept Clos	0.32	147.13	147.92	0.79	7.25	3.61	7.52
46	June Baseline	1.87	147.12	148.41	1.29	20.24	12.64	20.46
46	Jun Max Red	1.54	147.12	148.34	1.22	19.01	11.38	19.22
46	Jun Cons	1.78	147.12	148.39	1.27	19.94	12.32	20.15
46	Jun Op	1.6	147.12	148.36	1.24	19.24	11.62	19.46
46	Jun Clos	1.83	147.12	148.4	1.28	20.09	12.48	20.31
46	Sept Baseline	0.33	147.12	147.92	0.8	10.85	5.1	11.02
46	Sept Max Red	0.26	147.12	147.87	0.75	9.79	4.54	9.96
46	Sept Cons	0.31	147.12	147.91	0.79	10.63	4.98	10.8
46	Sept Op	0.27	147.12	147.88	0.76	10.08	4.68	10.24
46	Sept Clos	0.32	147.12	147.92	0.8	10.81	5.08	10.97

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
45	June Baseline	1.87	146.72	148.41	1.69	43.18	50.11	43.44
45	Jun Max Red	1.54	146.72	148.34	1.62	42.12	47.39	42.37
45	Jun Cons	1.78	146.72	148.39	1.67	42.91	49.43	43.18
45	Jun Op	1.6	146.72	148.35	1.64	42.32	47.91	42.58
45	Jun Clos	1.83	146.72	148.4	1.68	43.05	49.78	43.31
45	Sept Baseline	0.33	146.72	147.92	1.2	35.12	31.15	35.29
45	Sept Max Red	0.26	146.72	147.87	1.15	34.21	29.26	34.38
45	Sept Cons	0.31	146.72	147.91	1.19	34.93	30.76	35.11
45	Sept Op	0.27	146.72	147.88	1.16	34.46	29.76	34.62
45	Sept Clos	0.32	146.72	147.92	1.2	35.08	31.07	35.26
44	June Baseline	1.87	147.19	148.4	1.22	29.89	19.34	30.16
44	Jun Max Red	1.54	147.19	148.34	1.16	28.15	17.5	28.42
44	Jun Cons	1.78	147.19	148.39	1.2	29.45	18.87	29.73
44	Jun Op	1.6	147.19	148.35	1.17	28.49	17.84	28.75
44	Jun Clos	1.83	147.19	148.4	1.21	29.67	19.11	29.95
44	Sept Baseline	0.33	147.19	147.92	0.74	16.71	8.08	16.86
44	Sept Max Red	0.26	147.19	147.87	0.68	15.23	7.21	15.37
44	Sept Cons	0.31	147.19	147.91	0.72	16.41	7.9	16.56
44	Sept Op	0.27	147.19	147.88	0.7	15.63	7.44	15.77
44	Sept Clos	0.32	147.19	147.92	0.73	16.65	8.05	16.8
43	June Baseline	1.87	147.01	148.4	1.39	28.09	19.31	28.35
43	Jun Max Red	1.54	147.01	148.34	1.33	26.38	17.59	26.64
43	Jun Cons	1.78	147.01	148.39	1.37	27.67	18.87	27.93
43	Jun Op	1.6	147.01	148.35	1.34	26.71	17.91	26.97
43	Jun Clos	1.83	147.01	148.4	1.38	27.88	19.09	28.15
43	Sept Baseline	0.33	147.01	147.92	0.91	15.06	8.91	15.28
43	Sept Max Red	0.26	147.01	147.87	0.85	13.59	8.13	13.81
43	Sept Cons	0.31	147.01	147.91	0.9	14.76	8.75	14.98
43	Sept Op	0.27	147.01	147.88	0.87	13.98	8.33	14.2
43	Sept Clos	0.32	147.01	147.92	0.91	15	8.88	15.22
42	June Baseline	1.87	146.75	148.4	1.65	26.47	17.36	26.78
42	Jun Max Red	1.54	146.75	148.34	1.59	24.71	15.76	25.02
42	Jun Cons	1.78	146.75	148.38	1.64	26.03	16.95	26.34
42	Jun Op	1.6	146.75	148.35	1.6	25.05	16.05	25.35
42	Jun Clos	1.83	146.75	148.39	1.65	26.25	17.16	26.56
42	Sept Baseline	0.33	146.75	147.92	1.18	13.06	7.91	13.33
42	Sept Max Red	0.26	146.75	147.87	1.12	11.54	7.24	11.81
42	Sept Cons	0.31	146.75	147.91	1.16	12.75	7.77	13.02
42	Sept Op	0.27	146.75	147.88	1.14	11.95	7.41	12.22
42	Sept Clos	0.32	146.75	147.92	1.17	13	7.88	13.27

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
41	June Baseline	1.87	147.1	148.39	1.29	20.6	10.34	20.88
41	Jun Max Red	1.54	147.1	148.33	1.23	19	9.12	19.28
41	Jun Cons	1.78	147.1	148.38	1.28	20.2	10.02	20.49
41	Jun Op	1.6	147.1	148.34	1.24	19.31	9.34	19.59
41	Jun Clos	1.83	147.1	148.38	1.28	20.4	10.18	20.69
41	Sept Baseline	0.33	147.1	147.92	0.82	8.35	3.5	8.6
41	Sept Max Red	0.26	147.1	147.87	0.77	6.95	3.09	7.2
41	Sept Cons	0.31	147.1	147.91	0.81	8.06	3.41	8.31
41	Sept Op	0.27	147.1	147.88	0.78	7.33	3.19	7.57
41	Sept Clos	0.32	147.1	147.92	0.82	8.29	3.48	8.54
40	June Baseline	1.87	147.43	148.38	0.95	31.91	11.87	32.34
40	Jun Max Red	1.54	147.43	148.32	0.89	28.96	10.01	29.39
40	Jun Cons	1.78	147.43	148.37	0.93	31.17	11.39	31.61
40	Jun Op	1.6	147.43	148.33	0.9	29.52	10.35	29.95
40	Jun Clos	1.83	147.43	148.38	0.94	31.55	11.64	31.98
40	Sept Baseline	0.33	147.43	147.91	0.48	9.32	2.18	9.73
40	Sept Max Red	0.26	147.43	147.86	0.43	6.76	1.75	7.17
40	Sept Cons	0.31	147.43	147.9	0.47	8.8	2.08	9.21
40	Sept Op	0.27	147.43	147.87	0.44	7.45	1.85	7.86
40	Sept Clos	0.32	147.43	147.91	0.48	9.22	2.16	9.63
39	June Baseline	1.87	147.35	148.35	1	32.55	11.04	32.99
39	Jun Max Red	1.54	147.35	148.29	0.94	29.2	9.1	29.64
39	Jun Cons	1.78	147.35	148.34	0.98	31.72	10.54	32.16
39	Jun Op	1.6	147.35	148.3	0.95	29.84	9.45	30.28
39	Jun Clos	1.83	147.35	148.35	0.99	32.14	10.79	32.59
39	Sept Baseline	0.33	147.35	147.87	0.51	7.31	1.5	7.72
39	Sept Max Red	0.26	147.35	147.81	0.46	5.52	1.15	5.9
39	Sept Cons	0.31	147.35	147.86	0.5	6.94	1.42	7.34
39	Sept Op	0.27	147.35	147.83	0.47	6	1.23	6.38
39	Sept Clos	0.32	147.35	147.86	0.51	7.24	1.48	7.65
38	June Baseline	1.87	147.29	148.29	1	24.01	8.4	24.39
38	Jun Max Red	1.54	147.29	148.22	0.93	21.1	6.88	21.48
38	Jun Cons	1.78	147.29	148.27	0.98	23.29	8	23.67
38	Jun Op	1.6	147.29	148.24	0.95	21.66	7.16	22.04
38	Jun Clos	1.83	147.29	148.28	0.99	23.66	8.2	24.04
38	Sept Baseline	0.33	147.29	147.77	0.48	4.96	1.5	5.3
38	Sept Max Red	0.26	147.29	147.71	0.42	3.89	1.25	4.22
38	Sept Cons	0.31	147.29	147.76	0.47	4.74	1.44	5.08
38	Sept Op	0.27	147.29	147.73	0.44	4.17	1.31	4.51
38	Sept Clos	0.32	147.29	147.77	0.48	4.92	1.49	5.26

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
37	June Baseline	1.87	147.16	148.26	1.1	28.22	10.55	28.91
37	Jun Max Red	1.54	147.16	148.19	1.03	25.15	8.72	25.83
37	Jun Cons	1.78	147.16	148.24	1.08	27.46	10.08	28.15
37	Jun Op	1.6	147.16	148.21	1.05	25.74	9.06	26.42
37	Jun Clos	1.83	147.16	148.25	1.09	27.85	10.32	28.54
37	Sept Baseline	0.33	147.16	147.73	0.58	6	1.85	6.66
37	Sept Max Red	0.26	147.16	147.68	0.52	4.74	1.56	5.4
37	Sept Cons	0.31	147.16	147.72	0.56	5.74	1.79	6.4
37	Sept Op	0.27	147.16	147.69	0.54	5.08	1.63	5.73
37	Sept Clos	0.32	147.16	147.73	0.57	5.95	1.84	6.61
36	June Baseline	1.87	146.82	148.24	1.43	16.68	9.42	17.1
36	Jun Max Red	1.54	146.82	148.18	1.36	15.4	8.33	15.81
36	Jun Cons	1.78	146.82	148.23	1.41	16.36	9.14	16.78
36	Jun Op	1.6	146.82	148.19	1.37	15.65	8.54	16.06
36	Jun Clos	1.83	146.82	148.24	1.42	16.52	9.28	16.94
36	Sept Baseline	0.33	146.82	147.73	0.91	6.9	3.3	7.26
36	Sept Max Red	0.26	146.82	147.67	0.85	5.89	2.96	6.24
36	Sept Cons	0.31	146.82	147.71	0.9	6.69	3.23	7.05
36	Sept Op	0.27	146.82	147.69	0.87	6.15	3.04	6.51
36	Sept Clos	0.32	146.82	147.72	0.91	6.86	3.29	7.22
35	June Baseline	1.87	147.28	148.22	0.94	20.34	7.62	20.58
35	Jun Max Red	1.54	147.28	148.16	0.88	18.1	6.32	18.33
35	Jun Cons	1.78	147.28	148.21	0.93	19.78	7.28	20.02
35	Jun Op	1.6	147.28	148.17	0.89	18.53	6.56	18.77
35	Jun Clos	1.83	147.28	148.22	0.94	20.06	7.45	20.31
35	Sept Baseline	0.33	147.28	147.71	0.43	5.2	1.41	5.4
35	Sept Max Red	0.26	147.28	147.66	0.38	4.26	1.17	4.45
35	Sept Cons	0.31	147.28	147.7	0.42	4.99	1.36	5.19
35	Sept Op	0.27	147.28	147.67	0.39	4.5	1.23	4.69
35	Sept Clos	0.32	147.28	147.71	0.43	5.16	1.4	5.36
34	June Baseline	1.87	147.03	148.2	1.17	15.1	8.1	15.36
34	Jun Max Red	1.54	147.03	148.13	1.1	14.01	7.13	14.27
34	Jun Cons	1.78	147.03	148.18	1.15	14.83	7.85	15.08
34	Jun Op	1.6	147.03	148.15	1.12	14.22	7.31	14.48
34	Jun Clos	1.83	147.03	148.19	1.16	14.97	7.98	15.22
34	Sept Baseline	0.33	147.03	147.69	0.66	6.88	2.54	7.07
34	Sept Max Red	0.26	147.03	147.64	0.61	6.04	2.21	6.23
34	Sept Cons	0.31	147.03	147.68	0.65	6.7	2.47	6.9
34	Sept Op	0.27	147.03	147.66	0.63	6.26	2.29	6.45
34	Sept Clos	0.32	147.03	147.69	0.66	6.84	2.53	7.04

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
33	June Baseline	1.87	146.45	148.2	1.75	23.58	24.75	23.91
33	Jun Max Red	1.54	146.45	148.13	1.69	22.9	23.21	23.21
33	Jun Cons	1.78	146.45	148.18	1.74	23.41	24.36	23.73
33	Jun Op	1.6	146.45	148.15	1.7	23.03	23.5	23.35
33	Jun Clos	1.83	146.45	148.19	1.74	23.5	24.56	23.82
33	Sept Baseline	0.33	146.45	147.69	1.25	18.42	14.15	18.65
33	Sept Max Red	0.26	146.45	147.64	1.2	17.89	13.21	18.11
33	Sept Cons	0.31	146.45	147.68	1.24	18.31	13.95	18.53
33	Sept Op	0.27	146.45	147.66	1.21	18.03	13.45	18.25
33	Sept Clos	0.32	146.45	147.69	1.24	18.4	14.11	18.62
32	June Baseline	1.87	146.97	148.19	1.23	17.71	9.1	17.96
32	Jun Max Red	1.54	146.97	148.13	1.16	16.31	7.98	16.55
32	Jun Cons	1.78	146.97	148.18	1.21	17.36	8.81	17.6
32	Jun Op	1.6	146.97	148.14	1.17	16.58	8.19	16.82
32	Jun Clos	1.83	146.97	148.18	1.22	17.54	8.96	17.79
32	Sept Baseline	0.33	146.97	147.69	0.73	7.16	2.92	7.35
32	Sept Max Red	0.26	146.97	147.64	0.68	6.34	2.57	6.52
32	Sept Cons	0.31	146.97	147.68	0.72	6.99	2.85	7.18
32	Sept Op	0.27	146.97	147.66	0.69	6.55	2.66	6.74
32	Sept Clos	0.32	146.97	147.69	0.73	7.13	2.91	7.32
31	June Baseline	1.87	146.71	148.18	1.47	21.03	13.22	21.4
31	Jun Max Red	1.54	146.71	148.12	1.4	19.58	11.92	19.95
31	Jun Cons	1.78	146.71	148.17	1.45	20.67	12.89	21.04
31	Jun Op	1.6	146.71	148.13	1.42	19.86	12.16	20.23
31	Jun Clos	1.83	146.71	148.17	1.46	20.85	13.06	21.22
31	Sept Baseline	0.33	146.71	147.69	0.98	9.97	5.6	10.29
31	Sept Max Red	0.26	146.71	147.64	0.93	8.83	5.12	9.15
31	Sept Cons	0.31	146.71	147.68	0.97	9.74	5.5	10.06
31	Sept Op	0.27	146.71	147.65	0.94	9.13	5.24	9.45
31	Sept Clos	0.32	146.71	147.69	0.97	9.92	5.58	10.25
30	June Baseline	1.87	146.93	148.17	1.23	15.96	8.93	16.43
30	Jun Max Red	1.54	146.93	148.11	1.17	14.82	7.97	15.28
30	Jun Cons	1.78	146.93	148.15	1.22	15.67	8.69	16.14
30	Jun Op	1.6	146.93	148.12	1.18	15.04	8.15	15.5
30	Jun Clos	1.83	146.93	148.16	1.23	15.82	8.81	16.29
30	Sept Baseline	0.33	146.93	147.69	0.75	7.22	3.34	7.54
30	Sept Max Red	0.26	146.93	147.64	0.7	6.31	3	6.61
30	Sept Cons	0.31	146.93	147.68	0.74	7.03	3.27	7.35
30	Sept Op	0.27	146.93	147.65	0.72	6.55	3.09	6.86
30	Sept Clos	0.32	146.93	147.69	0.75	7.18	3.33	7.5

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
29	June Baseline	1.87	147.34	148.15	0.81	12.17	5.54	12.56
29	Jun Max Red	1.54	147.34	148.09	0.75	11.32	4.83	11.69
29	Jun Cons	1.78	147.34	148.13	0.8	11.96	5.36	12.34
29	Jun Op	1.6	147.34	148.1	0.77	11.48	4.96	11.86
29	Jun Clos	1.83	147.34	148.14	0.81	12.07	5.45	12.45
29	Sept Baseline	0.33	147.34	147.68	0.34	5.51	1.35	5.78
29	Sept Max Red	0.26	147.34	147.63	0.29	4.8	1.09	5.06
29	Sept Cons	0.31	147.34	147.67	0.33	5.36	1.29	5.63
29	Sept Op	0.27	147.34	147.64	0.3	4.99	1.15	5.25
29	Sept Clos	0.32	147.34	147.67	0.34	5.48	1.34	5.75
28	June Baseline	1.87	147.01	148.14	1.13	13.44	7.87	14
28	Jun Max Red	1.54	147.01	148.08	1.07	12.57	7.08	13.12
28	Jun Cons	1.78	147.01	148.13	1.12	13.23	7.67	13.78
28	Jun Op	1.6	147.01	148.09	1.08	12.74	7.23	13.29
28	Jun Clos	1.83	147.01	148.13	1.12	13.34	7.77	13.9
28	Sept Baseline	0.33	147.01	147.67	0.66	6.6	3.15	7.08
28	Sept Max Red	0.26	147.01	147.62	0.61	5.87	2.84	6.34
28	Sept Cons	0.31	147.01	147.66	0.65	6.45	3.08	6.93
28	Sept Op	0.27	147.01	147.63	0.62	6.07	2.92	6.54
28	Sept Clos	0.32	147.01	147.67	0.66	6.57	3.14	7.05
27	June Baseline	1.87	147.23	148.11	0.87	12.91	5.98	13.5
27	Jun Max Red	1.54	147.23	148.05	0.82	12.03	5.27	12.59
27	Jun Cons	1.78	147.23	148.09	0.86	12.69	5.8	13.27
27	Jun Op	1.6	147.23	148.06	0.83	12.2	5.4	12.76
27	Jun Clos	1.83	147.23	148.1	0.86	12.8	5.89	13.39
27	Sept Baseline	0.33	147.23	147.66	0.42	5.91	1.73	6.28
27	Sept Max Red	0.26	147.23	147.61	0.37	5.15	1.46	5.5
27	Sept Cons	0.31	147.23	147.65	0.41	5.75	1.67	6.12
27	Sept Op	0.27	147.23	147.62	0.38	5.35	1.53	5.7
27	Sept Clos	0.32	147.23	147.65	0.42	5.88	1.72	6.25
26	June Baseline	1.87	147.09	148.06	0.97	15.29	6.45	15.52
26	Jun Max Red	1.54	147.09	148.01	0.92	14.13	5.67	14.36
26	Jun Cons	1.78	147.09	148.05	0.96	15	6.25	15.23
26	Jun Op	1.6	147.09	148.02	0.93	14.35	5.82	14.58
26	Jun Clos	1.83	147.09	148.05	0.96	15.15	6.35	15.38
26	Sept Baseline	0.33	147.09	147.63	0.54	5.9	1.9	6.09
26	Sept Max Red	0.26	147.09	147.58	0.49	4.86	1.64	5.05
26	Sept Cons	0.31	147.09	147.62	0.53	5.69	1.84	5.88
26	Sept Op	0.27	147.09	147.59	0.5	5.14	1.71	5.33
26	Sept Clos	0.32	147.09	147.63	0.54	5.86	1.89	6.05

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
25	June Baseline	1.87	146.9	148.02	1.13	25.85	11.1	26.42
25	Jun Max Red	1.54	146.9	147.97	1.08	25.19	9.82	25.74
25	Jun Cons	1.78	146.9	148.01	1.11	25.69	10.78	26.25
25	Jun Op	1.6	146.9	147.98	1.08	25.32	10.06	25.87
25	Jun Clos	1.83	146.9	148.02	1.12	25.77	10.95	26.34
25	Sept Baseline	0.33	146.9	147.61	0.72	8.87	2.84	9.36
25	Sept Max Red	0.26	146.9	147.57	0.67	5.8	2.51	6.3
25	Sept Cons	0.31	146.9	147.6	0.71	8.24	2.76	8.74
25	Sept Op	0.27	146.9	147.58	0.68	6.61	2.59	7.11
25	Sept Clos	0.32	146.9	147.61	0.71	8.75	2.83	9.24
24	June Baseline	1.87	146.94	148.01	1.07	21.82	10.58	22.19
24	Jun Max Red	1.54	146.94	147.96	1.02	20.29	9.57	20.64
24	Jun Cons	1.78	146.94	148	1.06	21.44	10.33	21.81
24	Jun Op	1.6	146.94	147.97	1.03	20.58	9.76	20.94
24	Jun Clos	1.83	146.94	148	1.07	21.64	10.46	22
24	Sept Baseline	0.33	146.94	147.61	0.67	9.15	4.43	9.44
24	Sept Max Red	0.26	146.94	147.57	0.63	8.27	4.05	8.55
24	Sept Cons	0.31	146.94	147.6	0.66	8.86	4.34	9.15
24	Sept Op	0.27	146.94	147.58	0.64	8.37	4.14	8.66
24	Sept Clos	0.32	146.94	147.61	0.67	9.09	4.41	9.38
23	June Baseline	1.87	147.09	147.99	0.9	63.09	15.75	63.3
23	Jun Max Red	1.54	147.09	147.94	0.85	59.82	12.77	60
23	Jun Cons	1.78	147.09	147.98	0.89	62.95	15.01	63.15
23	Jun Op	1.6	147.09	147.95	0.86	61.4	13.33	61.58
23	Jun Clos	1.83	147.09	147.98	0.89	63.03	15.39	63.23
23	Sept Baseline	0.33	147.09	147.6	0.51	6.87	2.24	7.02
23	Sept Max Red	0.26	147.09	147.56	0.47	6.29	1.96	6.43
23	Sept Cons	0.31	147.09	147.59	0.5	6.75	2.18	6.9
23	Sept Op	0.27	147.09	147.57	0.48	6.44	2.03	6.58
23	Sept Clos	0.32	147.09	147.6	0.51	6.85	2.23	7
22	June Baseline	1.87	146.54	147.99	1.45	28.56	22.28	28.87
22	Jun Max Red	1.54	146.54	147.94	1.4	27.51	20.95	27.81
22	Jun Cons	1.78	146.54	147.97	1.44	28.3	21.94	28.61
22	Jun Op	1.6	146.54	147.95	1.41	27.72	21.2	28.02
22	Jun Clos	1.83	146.54	147.98	1.44	28.44	22.12	28.74
22	Sept Baseline	0.33	146.54	147.6	1.06	19.95	12.87	20.18
22	Sept Max Red	0.26	146.54	147.56	1.02	18.92	12.04	19.14
22	Sept Cons	0.31	146.54	147.59	1.05	19.76	12.7	19.99
22	Sept Op	0.27	146.54	147.57	1.03	19.26	12.26	19.48
22	Sept Clos	0.32	146.54	147.6	1.06	19.92	12.84	20.14

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
21	June Baseline	1.87	146.97	147.98	1.01	24.4	8.85	25.32
21	Jun Max Red	1.54	146.97	147.93	0.96	22.46	7.77	23.38
21	Jun Cons	1.78	146.97	147.97	1	23.92	8.58	24.84
21	Jun Op	1.6	146.97	147.94	0.97	22.84	7.97	23.76
21	Jun Clos	1.83	146.97	147.97	1	24.17	8.72	25.09
21	Sept Baseline	0.33	146.97	147.6	0.63	8.37	2.6	9.27
21	Sept Max Red	0.26	146.97	147.55	0.58	6.6	2.29	7.51
21	Sept Cons	0.31	146.97	147.59	0.62	8.01	2.53	8.92
21	Sept Op	0.27	146.97	147.57	0.59	7.07	2.36	7.97
21	Sept Clos	0.32	146.97	147.59	0.62	8.3	2.59	9.2
20	June Baseline	1.87	147.04	147.95	0.9	28.04	7.71	28.52
20	Jun Max Red	1.54	147.04	147.9	0.86	24.98	6.52	25.46
20	Jun Cons	1.78	147.04	147.94	0.89	27.28	7.4	27.76
20	Jun Op	1.6	147.04	147.91	0.87	25.57	6.74	26.05
20	Jun Clos	1.83	147.04	147.94	0.9	27.67	7.56	28.15
20	Sept Baseline	0.33	147.04	147.58	0.54	5.52	1.98	5.93
20	Sept Max Red	0.26	147.04	147.54	0.5	5.27	1.76	5.63
20	Sept Cons	0.31	147.04	147.58	0.53	5.33	1.93	5.73
20	Sept Op	0.27	147.04	147.55	0.51	5.29	1.82	5.66
20	Sept Clos	0.32	147.04	147.58	0.54	5.48	1.97	5.89
19	June Baseline	1.87	147.01	147.92	0.92	36.62	9.17	36.98
19	Jun Max Red	1.54	147.01	147.88	0.87	32.66	7.62	33.02
19	Jun Cons	1.78	147.01	147.91	0.91	35.64	8.77	36
19	Jun Op	1.6	147.01	147.89	0.88	33.43	7.91	33.79
19	Jun Clos	1.83	147.01	147.92	0.91	36.15	8.98	36.5
19	Sept Baseline	0.33	147.01	147.57	0.56	5.4	1.73	5.74
19	Sept Max Red	0.26	147.01	147.53	0.52	4.91	1.53	5.24
19	Sept Cons	0.31	147.01	147.56	0.55	5.3	1.69	5.64
19	Sept Op	0.27	147.01	147.54	0.53	5.04	1.58	5.37
19	Sept Clos	0.32	147.01	147.57	0.56	5.38	1.72	5.72
18	June Baseline	1.87	147.08	147.9	0.82	37.1	10.71	37.7
18	Jun Max Red	1.54	147.08	147.85	0.77	34.06	9.08	34.66
18	Jun Cons	1.78	147.08	147.89	0.81	36.35	10.3	36.95
18	Jun Op	1.6	147.08	147.86	0.78	34.65	9.39	35.26
18	Jun Clos	1.83	147.08	147.89	0.81	36.73	10.51	37.34
18	Sept Baseline	0.33	147.08	147.51	0.43	10.25	1.37	10.76
18	Sept Max Red	0.26	147.08	147.47	0.39	7.97	1.01	8.43
18	Sept Cons	0.31	147.08	147.5	0.42	9.71	1.3	10.22
18	Sept Op	0.27	147.08	147.48	0.4	8.23	1.1	8.71
18	Sept Clos	0.32	147.08	147.51	0.43	10.14	1.36	10.66

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
17	June Baseline	1.87	147	147.86	0.86	23.01	4.74	23.59
17	Jun Max Red	1.54	147	147.81	0.81	18.23	3.74	18.81
17	Jun Cons	1.78	147	147.85	0.84	21.82	4.47	22.4
17	Jun Op	1.6	147	147.82	0.82	19.16	3.92	19.74
17	Jun Clos	1.83	147	147.86	0.85	22.44	4.61	23.02
17	Sept Baseline	0.33	147	147.44	0.43	2.95	0.82	3.35
17	Sept Max Red	0.26	147	147.38	0.38	2.74	0.67	3.06
17	Sept Cons	0.31	147	147.43	0.42	2.76	0.78	3.16
17	Sept Op	0.27	147	147.4	0.39	2.75	0.71	3.1
17	Sept Clos	0.32	147	147.44	0.43	2.9	0.81	3.3
16	June Baseline	1.87	146.93	147.83	0.9	17.51	4.29	18.38
16	Jun Max Red	1.54	146.93	147.79	0.85	14.75	3.55	15.62
16	Jun Cons	1.78	146.93	147.82	0.88	16.82	4.09	17.7
16	Jun Op	1.6	146.93	147.79	0.86	15.29	3.69	16.16
16	Jun Clos	1.83	146.93	147.83	0.89	17.18	4.19	18.05
16	Sept Baseline	0.33	146.93	147.42	0.48	2.57	1.03	3.3
16	Sept Max Red	0.26	146.93	147.37	0.43	2.22	0.9	2.88
16	Sept Cons	0.31	146.93	147.41	0.47	2.37	1	3.08
16	Sept Op	0.27	146.93	147.38	0.44	2.23	0.94	2.92
16	Sept Clos	0.32	146.93	147.42	0.48	2.53	1.02	3.25
15	June Baseline	1.87	146.85	147.82	0.96	20.97	6.06	21.62
15	Jun Max Red	1.54	146.85	147.77	0.92	18.88	5.17	19.52
15	Jun Cons	1.78	146.85	147.81	0.95	20.45	5.83	21.1
15	Jun Op	1.6	146.85	147.78	0.93	19.28	5.34	19.93
15	Jun Clos	1.83	146.85	147.81	0.96	20.72	5.95	21.37
15	Sept Baseline	0.33	146.85	147.41	0.56	3.83	1.34	4.45
15	Sept Max Red	0.26	146.85	147.36	0.5	3.02	1.16	3.62
15	Sept Cons	0.31	146.85	147.4	0.55	3.6	1.3	4.21
15	Sept Op	0.27	146.85	147.37	0.52	3.1	1.2	3.7
15	Sept Clos	0.32	146.85	147.41	0.55	3.79	1.33	4.4
14	June Baseline	1.87	146.81	147.81	1	24.82	9.13	25.1
14	Jun Max Red	1.54	146.81	147.77	0.96	23.08	8.08	23.36
14	Jun Cons	1.78	146.81	147.8	0.99	24.39	8.86	24.67
14	Jun Op	1.6	146.81	147.77	0.97	23.41	8.28	23.69
14	Jun Clos	1.83	146.81	147.81	1	24.61	9	24.89
14	Sept Baseline	0.33	146.81	147.41	0.6	8.81	2.35	9.07
14	Sept Max Red	0.26	146.81	147.35	0.54	6.68	1.93	6.93
14	Sept Cons	0.31	146.81	147.4	0.59	8.37	2.25	8.63
14	Sept Op	0.27	146.81	147.37	0.56	7.24	2.03	7.5
14	Sept Clos	0.32	146.81	147.4	0.6	8.72	2.33	8.98

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
13	June Baseline	1.87	146.91	147.76	0.85	15.75	4.14	16.34
13	Jun Max Red	1.54	146.91	147.72	0.81	14.13	3.5	14.72
13	Jun Cons	1.78	146.91	147.75	0.84	15.35	3.98	15.94
13	Jun Op	1.6	146.91	147.73	0.82	14.44	3.62	15.03
13	Jun Clos	1.83	146.91	147.76	0.85	15.55	4.06	16.14
13	Sept Baseline	0.33	146.91	147.36	0.46	2.22	0.8	2.75
13	Sept Max Red	0.26	146.91	147.31	0.41	2.02	0.7	2.51
13	Sept Cons	0.31	146.91	147.35	0.44	2.18	0.78	2.7
13	Sept Op	0.27	146.91	147.33	0.42	2.07	0.72	2.57
13	Sept Clos	0.32	146.91	147.36	0.45	2.21	0.8	2.74
12	June Baseline	1.87	146.76	147.49	0.73	8.06	2.33	8.61
12	Jun Max Red	1.54	146.76	147.44	0.68	7.04	1.99	7.59
12	Jun Cons	1.78	146.76	147.48	0.72	7.81	2.24	8.36
12	Jun Op	1.6	146.76	147.45	0.69	7.24	2.05	7.79
12	Jun Clos	1.83	146.76	147.48	0.72	7.93	2.29	8.49
12	Sept Baseline	0.33	146.76	147.11	0.36	2.32	0.69	2.76
12	Sept Max Red	0.26	146.76	147.08	0.32	2.29	0.6	2.68
12	Sept Cons	0.31	146.76	147.11	0.35	2.32	0.67	2.75
12	Sept Op	0.27	146.76	147.09	0.33	2.3	0.63	2.7
12	Sept Clos	0.32	146.76	147.11	0.35	2.32	0.69	2.76
11	June Baseline	1.87	146.48	147.21	0.73	7.53	3.19	7.95
11	Jun Max Red	1.54	146.48	147.15	0.67	7.1	2.79	7.5
11	Jun Cons	1.78	146.48	147.19	0.71	7.42	3.09	7.83
11	Jun Op	1.6	146.48	147.16	0.68	7.18	2.87	7.59
11	Jun Clos	1.83	146.48	147.2	0.72	7.48	3.14	7.89
11	Sept Baseline	0.33	146.48	146.87	0.39	4.4	1.11	4.72
11	Sept Max Red	0.26	146.48	146.84	0.37	3.91	1.01	4.23
11	Sept Cons	0.31	146.48	146.86	0.38	4.3	1.08	4.61
11	Sept Op	0.27	146.48	146.85	0.37	4.04	1.03	4.35
11	Sept Clos	0.32	146.48	146.87	0.39	4.38	1.1	4.7
10	June Baseline	1.87	145.87	147.08	1.22	15.23	12.36	15.66
10	Jun Max Red	1.54	145.87	147.03	1.16	14.79	11.58	15.2
10	Jun Cons	1.78	145.87	147.07	1.2	15.1	12.16	15.52
10	Jun Op	1.6	145.87	147.04	1.17	14.87	11.72	15.28
10	Jun Clos	1.83	145.87	147.08	1.21	15.17	12.26	15.59
10	Sept Baseline	0.33	145.87	146.82	0.95	12.57	8.63	12.91
10	Sept Max Red	0.26	145.87	146.81	0.94	12.52	8.49	12.86
10	Sept Cons	0.31	145.87	146.82	0.95	12.56	8.6	12.9
10	Sept Op	0.27	145.87	146.81	0.95	12.53	8.53	12.87
10	Sept Clos	0.32	145.87	146.82	0.95	12.56	8.62	12.91

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
9	June Baseline	1.87	146.28	147.07	0.8	13.23	6.11	13.4
9	Jun Max Red	1.54	146.28	147.02	0.75	12.87	5.44	13.02
9	Jun Cons	1.78	146.28	147.06	0.78	13.14	5.93	13.3
9	Jun Op	1.6	146.28	147.03	0.75	12.94	5.56	13.09
9	Jun Clos	1.83	146.28	147.07	0.79	13.19	6.02	13.35
9	Sept Baseline	0.33	146.28	146.82	0.54	8.47	3.16	8.59
9	Sept Max Red	0.26	146.28	146.81	0.53	8.27	3.08	8.39
9	Sept Cons	0.31	146.28	146.82	0.54	8.41	3.14	8.53
9	Sept Op	0.27	146.28	146.81	0.53	8.31	3.1	8.43
9	Sept Clos	0.32	146.28	146.82	0.54	8.46	3.16	8.58
8	June Baseline	1.87	146.24	147.04	0.8	8.43	3.16	9.02
8	Jun Max Red	1.54	146.24	147	0.75	7.71	2.78	8.3
8	Jun Cons	1.78	146.24	147.03	0.79	8.25	3.06	8.84
8	Jun Op	1.6	146.24	147	0.76	7.85	2.85	8.43
8	Jun Clos	1.83	146.24	147.04	0.79	8.34	3.11	8.93
8	Sept Baseline	0.33	146.24	146.82	0.57	4.98	1.64	5.53
8	Sept Max Red	0.26	146.24	146.81	0.56	4.84	1.59	5.4
8	Sept Cons	0.31	146.24	146.81	0.57	4.95	1.63	5.5
8	Sept Op	0.27	146.24	146.81	0.56	4.88	1.6	5.43
8	Sept Clos	0.32	146.24	146.81	0.57	4.97	1.64	5.53
7	June Baseline	1.87	145.7	147.06	1.35	16.43	15.55	16.84
7	Jun Max Red	1.54	145.7	147.01	1.3	15.97	14.75	16.37
7	Jun Cons	1.78	145.7	147.04	1.34	16.31	15.34	16.72
7	Jun Op	1.6	145.7	147.02	1.31	16.06	14.9	16.45
7	Jun Clos	1.83	145.7	147.05	1.35	16.37	15.45	16.78
7	Sept Baseline	0.33	145.7	146.82	1.11	14.19	11.87	14.54
7	Sept Max Red	0.26	145.7	146.81	1.1	14.1	11.73	14.45
7	Sept Cons	0.31	145.7	146.81	1.11	14.17	11.84	14.52
7	Sept Op	0.27	145.7	146.81	1.11	14.12	11.77	14.47
7	Sept Clos	0.32	145.7	146.82	1.11	14.18	11.87	14.54
6	June Baseline	1.87	146.12	147.04	0.91	9.87	4.21	10.31
6	Jun Max Red	1.54	146.12	146.99	0.87	9.06	3.77	9.49
6	Jun Cons	1.78	146.12	147.03	0.9	9.66	4.09	10.1
6	Jun Op	1.6	146.12	147	0.88	9.21	3.85	9.64
6	Jun Clos	1.83	146.12	147.03	0.91	9.77	4.15	10.21
6	Sept Baseline	0.33	146.12	146.81	0.69	5.91	2.45	6.33
6	Sept Max Red	0.26	146.12	146.81	0.68	5.75	2.39	6.16
6	Sept Cons	0.31	146.12	146.81	0.69	5.88	2.43	6.29
6	Sept Op	0.27	146.12	146.81	0.68	5.79	2.41	6.2
6	Sept Clos	0.32	146.12	146.81	0.69	5.91	2.44	6.32

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
5	June Baseline	1.87	146.13	147.02	0.89	7.86	3.54	8.79
5	Jun Max Red	1.54	146.13	146.98	0.85	7.21	3.22	8.12
5	Jun Cons	1.78	146.13	147.01	0.88	7.69	3.45	8.61
5	Jun Op	1.6	146.13	146.98	0.86	7.33	3.28	8.24
5	Jun Clos	1.83	146.13	147.01	0.89	7.78	3.5	8.7
5	Sept Baseline	0.33	146.13	146.81	0.69	5.43	2.22	6.3
5	Sept Max Red	0.26	146.13	146.8	0.68	5.38	2.18	6.25
5	Sept Cons	0.31	146.13	146.81	0.69	5.42	2.21	6.29
5	Sept Op	0.27	146.13	146.81	0.68	5.39	2.19	6.26
5	Sept Clos	0.32	146.13	146.81	0.69	5.43	2.22	6.3
4	June Baseline	1.87	146.01	146.99	0.98	7.4	3.26	8.05
4	Jun Max Red	1.54	146.01	146.96	0.94	6.68	3	7.33
4	Jun Cons	1.78	146.01	146.98	0.97	7.19	3.19	7.85
4	Jun Op	1.6	146.01	146.96	0.95	6.81	3.04	7.46
4	Jun Clos	1.83	146.01	146.99	0.98	7.29	3.22	7.94
4	Sept Baseline	0.33	146.01	146.81	0.8	4.03	2.22	4.66
4	Sept Max Red	0.26	146.01	146.8	0.79	3.88	2.19	4.51
4	Sept Cons	0.31	146.01	146.81	0.8	4	2.21	4.63
4	Sept Op	0.27	146.01	146.81	0.79	3.92	2.2	4.55
4	Sept Clos	0.32	146.01	146.81	0.8	4.02	2.22	4.66
3	June Baseline	1.87	145.73	147.01	1.27	16.6	12.17	17.03
3	Jun Max Red	1.54	145.73	146.97	1.23	15.86	11.52	16.28
3	Jun Cons	1.78	145.73	147	1.26	16.35	12	16.78
3	Jun Op	1.6	145.73	146.97	1.24	15.92	11.63	16.34
3	Jun Clos	1.83	145.73	147	1.27	16.48	12.09	16.9
3	Sept Baseline	0.33	145.73	146.81	1.08	14.5	9.18	14.88
3	Sept Max Red	0.26	145.73	146.8	1.07	14.43	9.06	14.81
3	Sept Cons	0.31	145.73	146.81	1.08	14.48	9.15	14.87
3	Sept Op	0.27	145.73	146.81	1.07	14.44	9.09	14.83
3	Sept Clos	0.32	145.73	146.81	1.08	14.5	9.17	14.88
2	June Baseline	1.87	146.1	147	0.9	19.56	6.83	19.77
2	Jun Max Red	1.54	146.1	146.96	0.86	17.54	6.11	17.74
2	Jun Cons	1.78	146.1	146.99	0.89	19.03	6.63	19.24
2	Jun Op	1.6	146.1	146.97	0.86	17.91	6.23	18.11
2	Jun Clos	1.83	146.1	146.99	0.89	19.3	6.73	19.51
2	Sept Baseline	0.33	146.1	146.81	0.71	9.1	4.06	9.3
2	Sept Max Red	0.26	146.1	146.8	0.7	8.53	3.99	8.73
2	Sept Cons	0.31	146.1	146.81	0.71	8.96	4.05	9.16
2	Sept Op	0.27	146.1	146.81	0.7	8.64	4.01	8.84
2	Sept Clos	0.32	146.1	146.81	0.71	9.07	4.06	9.27

Table A-5. Ogama Outflow Base Case Model Results

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
67	June Baseline	1.83	122.25	123.27	1.02	23.73	14.14	23.83
67	Jun Max Red	1.72	122.25	123.26	1.01	23.47	13.81	23.57
67	Jun Cons	1.78	122.25	123.27	1.02	23.61	13.99	23.71
67	Jun Op	1.74	122.25	123.26	1.01	23.51	13.85	23.61
67	Jun Clos	1.84	122.25	123.27	1.02	23.75	14.17	23.85
67	Sept Baseline	0.29	122.25	122.95	0.69	17.76	7.32	17.82
67	Sept Max Red	0.27	122.25	122.94	0.68	17.59	7.16	17.65
67	Sept Cons	0.29	122.25	122.94	0.69	17.72	7.28	17.78
67	Sept Op	0.28	122.25	122.94	0.69	17.63	7.2	17.69
67	Sept Clos	0.29	122.25	122.95	0.69	17.76	7.32	17.82
66	June Baseline	1.83	122.39	123.27	0.88	19.59	10.68	19.69
66	Jun Max Red	1.72	122.39	123.25	0.87	19.38	10.41	19.47
66	Jun Cons	1.78	122.39	123.26	0.87	19.49	10.56	19.59
66	Jun Op	1.74	122.39	123.26	0.87	19.4	10.45	19.5
66	Jun Clos	1.84	122.39	123.27	0.88	19.61	10.7	19.71
66	Sept Baseline	0.29	122.39	122.94	0.56	14.55	5.14	14.61
66	Sept Max Red	0.27	122.39	122.93	0.55	14.41	5.01	14.46
66	Sept Cons	0.29	122.39	122.94	0.55	14.52	5.11	14.58
66	Sept Op	0.28	122.39	122.94	0.55	14.44	5.04	14.5
66	Sept Clos	0.29	122.39	122.94	0.56	14.55	5.14	14.61
65	June Baseline	1.83	122.21	123.26	1.05	20.4	11.3	20.52
65	Jun Max Red	1.72	122.21	123.25	1.04	20.14	11.03	20.25
65	Jun Cons	1.78	122.21	123.26	1.04	20.28	11.18	20.4
65	Jun Op	1.74	122.21	123.25	1.04	20.17	11.06	20.29
65	Jun Clos	1.84	122.21	123.26	1.05	20.42	11.32	20.54
65	Sept Baseline	0.29	122.21	122.94	0.73	14.16	5.79	14.25
65	Sept Max Red	0.27	122.21	122.93	0.72	13.98	5.66	14.06
65	Sept Cons	0.29	122.21	122.94	0.73	14.12	5.76	14.2
65	Sept Op	0.28	122.21	122.94	0.72	14.02	5.7	14.11
65	Sept Clos	0.29	122.21	122.94	0.73	14.16	5.79	14.25
64	June Baseline	1.83	122.61	123.24	0.62	19.23	5.13	19.33
64	Jun Max Red	1.72	122.61	123.22	0.61	18.68	4.89	18.79
64	Jun Cons	1.78	122.61	123.23	0.62	18.99	5.02	19.09
64	Jun Op	1.74	122.61	123.22	0.61	18.76	4.92	18.86
64	Jun Clos	1.84	122.61	123.24	0.63	19.28	5.15	19.38
64	Sept Baseline	0.29	122.61	122.93	0.32	6.32	1.27	6.41
64	Sept Max Red	0.27	122.61	122.92	0.31	5.95	1.21	6.04
64	Sept Cons	0.29	122.61	122.93	0.32	6.24	1.25	6.32

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
64	Sept Op	0.28	122.61	122.93	0.32	6.04	1.23	6.13
64	Sept Clos	0.29	122.61	122.93	0.32	6.32	1.27	6.41
63	June Baseline	1.83	122.65	123.18	0.53	12.18	3.33	12.26
63	Jun Max Red	1.72	122.65	123.17	0.52	11.87	3.18	11.95
63	Jun Cons	1.78	122.65	123.18	0.52	12.04	3.26	12.12
63	Jun Op	1.74	122.65	123.17	0.52	11.91	3.2	11.99
63	Jun Clos	1.84	122.65	123.19	0.53	12.21	3.34	12.29
63	Sept Baseline	0.29	122.65	122.89	0.24	4.91	0.83	4.96
63	Sept Max Red	0.27	122.65	122.88	0.23	4.7	0.79	4.76
63	Sept Cons	0.29	122.65	122.89	0.23	4.86	0.82	4.91
63	Sept Op	0.28	122.65	122.89	0.23	4.75	0.8	4.8
63	Sept Clos	0.29	122.65	122.89	0.24	4.91	0.83	4.96
62	June Baseline	1.83	122.54	123.09	0.55	10.55	2.95	10.69
62	Jun Max Red	1.72	122.54	123.08	0.54	10.27	2.82	10.41
62	Jun Cons	1.78	122.54	123.09	0.55	10.43	2.89	10.56
62	Jun Op	1.74	122.54	123.08	0.54	10.31	2.84	10.45
62	Jun Clos	1.84	122.54	123.1	0.55	10.58	2.97	10.71
62	Sept Baseline	0.29	122.54	122.8	0.26	4.33	0.8	4.43
62	Sept Max Red	0.27	122.54	122.8	0.26	4.17	0.77	4.28
62	Sept Cons	0.29	122.54	122.8	0.26	4.29	0.8	4.4
62	Sept Op	0.28	122.54	122.8	0.26	4.21	0.78	4.31
62	Sept Clos	0.29	122.54	122.8	0.26	4.33	0.8	4.43
61	June Baseline	1.83	122.26	123.02	0.76	21.91	7.01	22.14
61	Jun Max Red	1.72	122.26	123	0.74	21.37	6.71	21.6
61	Jun Cons	1.78	122.26	123.01	0.75	21.67	6.88	21.9
61	Jun Op	1.74	122.26	123	0.75	21.44	6.75	21.68
61	Jun Clos	1.84	122.26	123.02	0.76	21.96	7.04	22.2
61	Sept Baseline	0.29	122.26	122.67	0.41	8.72	1.8	8.87
61	Sept Max Red	0.27	122.26	122.66	0.4	8.5	1.71	8.64
61	Sept Cons	0.29	122.26	122.67	0.41	8.67	1.78	8.82
61	Sept Op	0.28	122.26	122.66	0.4	8.55	1.73	8.7
61	Sept Clos	0.29	122.26	122.67	0.41	8.72	1.8	8.87
60	June Baseline	1.83	122.17	123	0.82	28.47	9.28	28.94
60	Jun Max Red	1.72	122.17	122.98	0.81	27.77	8.89	28.23
60	Jun Cons	1.78	122.17	122.99	0.82	28.16	9.11	28.62
60	Jun Op	1.74	122.17	122.99	0.81	27.86	8.95	28.33
60	Jun Clos	1.84	122.17	123	0.83	28.54	9.32	29.01
60	Sept Baseline	0.29	122.17	122.66	0.48	10.9	2.56	11.27
60	Sept Max Red	0.27	122.17	122.65	0.47	10.33	2.45	10.69

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
60	Sept Cons	0.29	122.17	122.65	0.48	10.77	2.54	11.13
60	Sept Op	0.28	122.17	122.65	0.48	10.47	2.47	10.83
60	Sept Clos	0.29	122.17	122.66	0.48	10.9	2.56	11.27
59	June Baseline	1.83	122.08	122.96	0.88	19.27	6.23	19.73
59	Jun Max Red	1.72	122.08	122.94	0.87	18.77	5.98	19.22
59	Jun Cons	1.78	122.08	122.95	0.88	19.05	6.12	19.5
59	Jun Op	1.74	122.08	122.95	0.87	18.84	6.01	19.29
59	Jun Clos	1.84	122.08	122.96	0.88	19.32	6.26	19.77
59	Sept Baseline	0.29	122.08	122.63	0.56	7.12	1.95	7.42
59	Sept Max Red	0.27	122.08	122.62	0.55	6.75	1.88	7.04
59	Sept Cons	0.29	122.08	122.63	0.55	7.03	1.93	7.33
59	Sept Op	0.28	122.08	122.63	0.55	6.84	1.9	7.13
59	Sept Clos	0.29	122.08	122.63	0.56	7.12	1.95	7.42
58	June Baseline	1.83	122.17	122.85	0.68	22.85	6.77	23.42
58	Jun Max Red	1.72	122.17	122.84	0.67	22.24	6.48	22.82
58	Jun Cons	1.78	122.17	122.85	0.67	22.58	6.64	23.15
58	Jun Op	1.74	122.17	122.84	0.67	22.32	6.52	22.9
58	Jun Clos	1.84	122.17	122.85	0.68	22.9	6.8	23.48
58	Sept Baseline	0.29	122.17	122.56	0.38	9.42	2.07	9.96
58	Sept Max Red	0.27	122.17	122.55	0.37	9.27	1.99	9.81
58	Sept Cons	0.29	122.17	122.55	0.38	9.38	2.05	9.92
58	Sept Op	0.28	122.17	122.55	0.38	9.3	2.01	9.84
58	Sept Clos	0.29	122.17	122.56	0.38	9.42	2.07	9.96
57	June Baseline	1.83	121.97	122.76	0.78	15.75	4.65	16.75
57	Jun Max Red	1.72	121.97	122.74	0.77	15.27	4.43	16.27
57	Jun Cons	1.78	121.97	122.75	0.78	15.54	4.55	16.54
57	Jun Op	1.74	121.97	122.74	0.77	15.33	4.46	16.33
57	Jun Clos	1.84	121.97	122.76	0.78	15.8	4.68	16.8
57	Sept Baseline	0.29	121.97	122.41	0.44	4.95	1.16	5.9
57	Sept Max Red	0.27	121.97	122.4	0.43	4.72	1.11	5.67
57	Sept Cons	0.29	121.97	122.41	0.44	4.89	1.15	5.85
57	Sept Op	0.28	121.97	122.41	0.43	4.77	1.13	5.72
57	Sept Clos	0.29	121.97	122.41	0.44	4.95	1.16	5.9
56	June Baseline	1.83	121.7	122.71	1.01	11.7	5.29	12.18
56	Jun Max Red	1.72	121.7	122.69	0.99	11.4	5.11	11.88
56	Jun Cons	1.78	121.7	122.7	1	11.57	5.21	12.05
56	Jun Op	1.74	121.7	122.7	1	11.44	5.13	11.92
56	Jun Clos	1.84	121.7	122.71	1.01	11.72	5.31	12.21
56	Sept Baseline	0.29	121.7	122.32	0.62	4.74	2.12	5.18

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
56	Sept Max Red	0.27	121.7	122.3	0.6	4.53	2.06	4.96
56	Sept Cons	0.29	121.7	122.31	0.61	4.7	2.11	5.14
56	Sept Op	0.28	121.7	122.31	0.61	4.58	2.08	5.02
56	Sept Clos	0.29	121.7	122.32	0.62	4.74	2.12	5.18
55	June Baseline	1.83	121.14	122.7	1.56	10.59	9.11	11.34
55	Jun Max Red	1.72	121.14	122.68	1.55	10.46	8.95	11.2
55	Jun Cons	1.78	121.14	122.69	1.56	10.53	9.04	11.27
55	Jun Op	1.74	121.14	122.69	1.55	10.48	8.97	11.22
55	Jun Clos	1.84	121.14	122.7	1.56	10.61	9.12	11.35
55	Sept Baseline	0.29	121.14	122.32	1.18	7.23	5.7	7.84
55	Sept Max Red	0.27	121.14	122.3	1.17	7.12	5.61	7.73
55	Sept Cons	0.29	121.14	122.31	1.18	7.2	5.67	7.82
55	Sept Op	0.28	121.14	122.31	1.17	7.14	5.63	7.76
55	Sept Clos	0.29	121.14	122.32	1.18	7.23	5.7	7.84
54	June Baseline	1.83	121.87	122.68	0.81	18.04	6.63	18.18
54	Jun Max Red	1.72	121.87	122.67	0.79	17.61	6.36	17.75
54	Jun Cons	1.78	121.87	122.68	0.8	17.85	6.51	17.99
54	Jun Op	1.74	121.87	122.67	0.8	17.67	6.4	17.8
54	Jun Clos	1.84	121.87	122.68	0.81	18.08	6.65	18.22
54	Sept Baseline	0.29	121.87	122.31	0.44	7.16	1.95	7.27
54	Sept Max Red	0.27	121.87	122.3	0.42	6.8	1.86	6.91
54	Sept Cons	0.29	121.87	122.31	0.43	7.07	1.93	7.19
54	Sept Op	0.28	121.87	122.3	0.43	6.89	1.88	7
54	Sept Clos	0.29	121.87	122.31	0.44	7.16	1.95	7.27
53	June Baseline	1.83	121.7	122.67	0.97	20.55	7.58	20.69
53	Jun Max Red	1.72	121.7	122.65	0.96	20.04	7.29	20.18
53	Jun Cons	1.78	121.7	122.66	0.96	20.32	7.45	20.46
53	Jun Op	1.74	121.7	122.66	0.96	20.11	7.33	20.25
53	Jun Clos	1.84	121.7	122.67	0.97	20.6	7.61	20.74
53	Sept Baseline	0.29	121.7	122.31	0.61	7.74	2.46	7.87
53	Sept Max Red	0.27	121.7	122.29	0.6	7.32	2.37	7.44
53	Sept Cons	0.29	121.7	122.3	0.61	7.65	2.44	7.77
53	Sept Op	0.28	121.7	122.3	0.6	7.42	2.39	7.55
53	Sept Clos	0.29	121.7	122.31	0.61	7.74	2.46	7.87
52	June Baseline	1.83	121.77	122.66	0.89	24.01	9.35	24.09
52	Jun Max Red	1.72	121.77	122.64	0.87	23.5	9.02	23.58
52	Jun Cons	1.78	121.77	122.65	0.88	23.78	9.21	23.86
52	Jun Op	1.74	121.77	122.64	0.88	23.57	9.07	23.65
52	Jun Clos	1.84	121.77	122.66	0.89	24.06	9.39	24.14

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
52	Sept Baseline	0.29	121.77	122.3	0.54	11.1	3.16	11.17
52	Sept Max Red	0.27	121.77	122.29	0.52	10.67	3.03	10.73
52	Sept Cons	0.29	121.77	122.3	0.53	11	3.13	11.07
52	Sept Op	0.28	121.77	122.29	0.53	10.78	3.06	10.84
52	Sept Clos	0.29	121.77	122.3	0.54	11.1	3.16	11.17
51	June Baseline	1.83	121.52	122.63	1.11	14.45	6.57	14.67
51	Jun Max Red	1.72	121.52	122.62	1.09	14.18	6.38	14.4
51	Jun Cons	1.78	121.52	122.63	1.1	14.33	6.48	14.55
51	Jun Op	1.74	121.52	122.62	1.1	14.22	6.41	14.44
51	Jun Clos	1.84	121.52	122.63	1.11	14.48	6.58	14.7
51	Sept Baseline	0.29	121.52	122.3	0.77	7.3	2.94	7.48
51	Sept Max Red	0.27	121.52	122.29	0.76	7.05	2.86	7.24
51	Sept Cons	0.29	121.52	122.3	0.77	7.24	2.92	7.43
51	Sept Op	0.28	121.52	122.29	0.77	7.11	2.88	7.3
51	Sept Clos	0.29	121.52	122.3	0.77	7.3	2.94	7.48
50	June Baseline	1.83	121.59	122.61	1.02	16.69	6.61	17.77
50	Jun Max Red	1.72	121.59	122.6	1.01	16.34	6.41	17.42
50	Jun Cons	1.78	121.59	122.61	1.02	16.53	6.52	17.61
50	Jun Op	1.74	121.59	122.6	1.01	16.38	6.44	17.47
50	Jun Clos	1.84	121.59	122.61	1.03	16.72	6.63	17.81
50	Sept Baseline	0.29	121.59	122.29	0.71	7.39	2.78	8.38
50	Sept Max Red	0.27	121.59	122.28	0.7	7.27	2.7	8.26
50	Sept Cons	0.29	121.59	122.29	0.7	7.36	2.76	8.35
50	Sept Op	0.28	121.59	122.28	0.7	7.3	2.72	8.29
50	Sept Clos	0.29	121.59	122.29	0.71	7.39	2.78	8.38
49	June Baseline	1.83	121.61	122.5	0.89	13.53	4.27	14.7
49	Jun Max Red	1.72	121.61	122.49	0.88	13.2	4.13	14.38
49	Jun Cons	1.78	121.61	122.5	0.89	13.38	4.21	14.56
49	Jun Op	1.74	121.61	122.49	0.88	13.25	4.15	14.42
49	Jun Clos	1.84	121.61	122.5	0.89	13.56	4.28	14.73
49	Sept Baseline	0.29	121.61	122.22	0.61	5.15	1.64	6.23
49	Sept Max Red	0.27	121.61	122.21	0.6	4.87	1.6	5.95
49	Sept Cons	0.29	121.61	122.22	0.61	5.09	1.63	6.17
49	Sept Op	0.28	121.61	122.21	0.6	4.94	1.61	6.02
49	Sept Clos	0.29	121.61	122.22	0.61	5.15	1.64	6.23
48	June Baseline	1.83	121.53	122.24	0.71	11.03	3.68	12.01
48	Jun Max Red	1.72	121.53	122.23	0.7	10.82	3.56	11.8
48	Jun Cons	1.78	121.53	122.24	0.71	10.94	3.63	11.92
48	Jun Op	1.74	121.53	122.23	0.7	10.85	3.58	11.83

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
48	Jun Clos	1.84	121.53	122.24	0.71	11.05	3.69	12.03
48	Sept Baseline	0.29	121.53	121.97	0.44	6.71	1.29	7.63
48	Sept Max Red	0.27	121.53	121.96	0.43	6.57	1.24	7.47
48	Sept Cons	0.29	121.53	121.97	0.43	6.68	1.28	7.59
48	Sept Op	0.28	121.53	121.96	0.43	6.59	1.25	7.5
48	Sept Clos	0.29	121.53	121.97	0.44	6.71	1.29	7.63
47	June Baseline	1.83	121.23	121.88	0.65	15.37	5.05	16.16
47	Jun Max Red	1.72	121.23	121.87	0.63	15.18	4.84	15.97
47	Jun Cons	1.78	121.23	121.88	0.64	15.29	4.96	16.08
47	Jun Op	1.74	121.23	121.87	0.64	15.21	4.87	16
47	Jun Clos	1.84	121.23	121.88	0.65	15.39	5.08	16.18
47	Sept Baseline	0.29	121.23	121.59	0.36	9.33	1.32	9.93
47	Sept Max Red	0.27	121.23	121.59	0.35	9.03	1.24	9.61
47	Sept Cons	0.29	121.23	121.59	0.36	9.26	1.3	9.86
47	Sept Op	0.28	121.23	121.59	0.35	9.1	1.26	9.69
47	Sept Clos	0.29	121.23	121.59	0.36	9.33	1.32	9.93
46	June Baseline	1.83	120.68	121.78	1.11	17.71	11.61	18.61
46	Jun Max Red	1.72	120.68	121.77	1.09	17.53	11.31	18.43
46	Jun Cons	1.78	120.68	121.78	1.1	17.63	11.48	18.53
46	Jun Op	1.74	120.68	121.77	1.09	17.56	11.35	18.46
46	Jun Clos	1.84	120.68	121.79	1.11	17.72	11.64	18.63
46	Sept Baseline	0.29	120.68	121.39	0.71	13.78	5.48	14.53
46	Sept Max Red	0.27	120.68	121.38	0.7	13.73	5.32	14.48
46	Sept Cons	0.29	120.68	121.39	0.71	13.76	5.44	14.52
46	Sept Op	0.28	120.68	121.38	0.71	13.74	5.36	14.49
46	Sept Clos	0.29	120.68	121.39	0.71	13.78	5.48	14.53
45	June Baseline	1.83	120.7	121.77	1.07	14.83	8.22	15.15
45	Jun Max Red	1.72	120.7	121.76	1.05	14.55	7.98	14.87
45	Jun Cons	1.78	120.7	121.77	1.06	14.71	8.12	15.02
45	Jun Op	1.74	120.7	121.76	1.05	14.59	8.01	14.91
45	Jun Clos	1.84	120.7	121.77	1.07	14.86	8.25	15.17
45	Sept Baseline	0.29	120.7	121.39	0.69	7.98	3.88	8.23
45	Sept Max Red	0.27	120.7	121.38	0.68	7.93	3.79	8.17
45	Sept Cons	0.29	120.7	121.39	0.68	7.97	3.86	8.22
45	Sept Op	0.28	120.7	121.38	0.68	7.94	3.81	8.18
45	Sept Clos	0.29	120.7	121.39	0.69	7.98	3.88	8.23
44	June Baseline	1.83	120.36	121.77	1.41	20.37	18.73	20.82
44	Jun Max Red	1.72	120.36	121.76	1.39	20.15	18.4	20.6
44	Jun Cons	1.78	120.36	121.77	1.4	20.27	18.58	20.72

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
44	Jun Op	1.74	120.36	121.76	1.39	20.18	18.44	20.63
44	Jun Clos	1.84	120.36	121.77	1.41	20.39	18.76	20.84
44	Sept Baseline	0.29	120.36	121.39	1.03	15.42	11.91	15.77
44	Sept Max Red	0.27	120.36	121.38	1.02	15.36	11.73	15.7
44	Sept Cons	0.29	120.36	121.39	1.02	15.41	11.87	15.76
44	Sept Op	0.28	120.36	121.38	1.02	15.37	11.78	15.72
44	Sept Clos	0.29	120.36	121.39	1.03	15.42	11.91	15.77
43	June Baseline	1.83	120.73	121.77	1.03	12.38	6.6	12.61
43	Jun Max Red	1.72	120.73	121.75	1.02	12.15	6.4	12.38
43	Jun Cons	1.78	120.73	121.76	1.03	12.28	6.51	12.51
43	Jun Op	1.74	120.73	121.75	1.02	12.18	6.43	12.41
43	Jun Clos	1.84	120.73	121.77	1.04	12.4	6.62	12.64
43	Sept Baseline	0.29	120.73	121.39	0.66	6.92	2.97	7.1
43	Sept Max Red	0.27	120.73	121.38	0.65	6.85	2.89	7.03
43	Sept Cons	0.29	120.73	121.39	0.66	6.91	2.95	7.08
43	Sept Op	0.28	120.73	121.38	0.65	6.87	2.91	7.04
43	Sept Clos	0.29	120.73	121.39	0.66	6.92	2.97	7.1
42	June Baseline	1.83	120.59	121.74	1.16	12.3	5.6	12.7
42	Jun Max Red	1.72	120.59	121.73	1.14	11.99	5.41	12.39
42	Jun Cons	1.78	120.59	121.74	1.15	12.16	5.52	12.56
42	Jun Op	1.74	120.59	121.73	1.14	12.04	5.44	12.43
42	Jun Clos	1.84	120.59	121.75	1.16	12.33	5.62	12.73
42	Sept Baseline	0.29	120.59	121.38	0.8	5.17	2.46	5.51
42	Sept Max Red	0.27	120.59	121.37	0.79	4.95	2.41	5.29
42	Sept Cons	0.29	120.59	121.38	0.8	5.12	2.45	5.46
42	Sept Op	0.28	120.59	121.38	0.79	5.01	2.42	5.35
42	Sept Clos	0.29	120.59	121.38	0.8	5.17	2.46	5.51
41	June Baseline	1.83	120.81	121.7	0.89	9.79	3.53	10.02
41	Jun Max Red	1.72	120.81	121.68	0.87	9.54	3.4	9.77
41	Jun Cons	1.78	120.81	121.69	0.88	9.68	3.47	9.91
41	Jun Op	1.74	120.81	121.69	0.87	9.57	3.42	9.8
41	Jun Clos	1.84	120.81	121.7	0.89	9.81	3.55	10.04
41	Sept Baseline	0.29	120.81	121.37	0.56	4.09	1.28	4.29
41	Sept Max Red	0.27	120.81	121.36	0.55	3.91	1.24	4.11
41	Sept Cons	0.29	120.81	121.37	0.56	4.05	1.27	4.24
41	Sept Op	0.28	120.81	121.37	0.55	3.96	1.25	4.15
41	Sept Clos	0.29	120.81	121.37	0.56	4.09	1.28	4.29
40	June Baseline	1.83	120.92	121.64	0.72	12.84	4.4	13.6
40	Jun Max Red	1.72	120.92	121.62	0.7	12.54	4.2	13.29

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
40	Jun Cons	1.78	120.92	121.63	0.71	12.71	4.31	13.46
40	Jun Op	1.74	120.92	121.62	0.7	12.58	4.23	13.33
40	Jun Clos	1.84	120.92	121.64	0.72	12.87	4.42	13.63
40	Sept Baseline	0.29	120.92	121.29	0.38	6.04	1.15	6.7
40	Sept Max Red	0.27	120.92	121.28	0.37	5.94	1.1	6.6
40	Sept Cons	0.29	120.92	121.29	0.37	6.01	1.14	6.68
40	Sept Op	0.28	120.92	121.29	0.37	5.97	1.11	6.63
40	Sept Clos	0.29	120.92	121.29	0.38	6.04	1.15	6.7
39	June Baseline	1.83	120.51	121.6	1.09	10.09	5.76	10.81
39	Jun Max Red	1.72	120.51	121.58	1.07	9.89	5.58	10.61
39	Jun Cons	1.78	120.51	121.59	1.08	10	5.68	10.72
39	Jun Op	1.74	120.51	121.58	1.07	9.92	5.6	10.64
39	Jun Clos	1.84	120.51	121.6	1.09	10.11	5.77	10.83
39	Sept Baseline	0.29	120.51	121.15	0.64	5.12	2.38	5.74
39	Sept Max Red	0.27	120.51	121.14	0.63	4.97	2.31	5.59
39	Sept Cons	0.29	120.51	121.15	0.64	5.09	2.36	5.71
39	Sept Op	0.28	120.51	121.14	0.63	5.01	2.33	5.63
39	Sept Clos	0.29	120.51	121.15	0.64	5.12	2.38	5.74
38	June Baseline	1.83	120.46	121.56	1.09	12.57	6.45	12.84
38	Jun Max Red	1.72	120.46	121.54	1.08	12.31	6.24	12.58
38	Jun Cons	1.78	120.46	121.55	1.09	12.46	6.35	12.73
38	Jun Op	1.74	120.46	121.54	1.08	12.35	6.27	12.62
38	Jun Clos	1.84	120.46	121.56	1.1	12.6	6.47	12.87
38	Sept Baseline	0.29	120.46	121.14	0.67	6.08	2.51	6.29
38	Sept Max Red	0.27	120.46	121.12	0.66	5.89	2.44	6.1
38	Sept Cons	0.29	120.46	121.13	0.67	6.04	2.5	6.25
38	Sept Op	0.28	120.46	121.13	0.66	5.94	2.46	6.15
38	Sept Clos	0.29	120.46	121.14	0.67	6.08	2.51	6.29
37	June Baseline	1.83	120.44	121.55	1.11	8.89	5.43	9.31
37	Jun Max Red	1.72	120.44	121.54	1.1	8.75	5.28	9.16
37	Jun Cons	1.78	120.44	121.55	1.11	8.83	5.37	9.25
37	Jun Op	1.74	120.44	121.54	1.1	8.77	5.3	9.18
37	Jun Clos	1.84	120.44	121.55	1.11	8.91	5.44	9.33
37	Sept Baseline	0.29	120.44	121.14	0.7	5.22	2.49	5.55
37	Sept Max Red	0.27	120.44	121.12	0.68	5.11	2.42	5.43
37	Sept Cons	0.29	120.44	121.13	0.69	5.2	2.47	5.52
37	Sept Op	0.28	120.44	121.13	0.69	5.14	2.44	5.46
37	Sept Clos	0.29	120.44	121.14	0.7	5.22	2.49	5.55
36	June Baseline	1.83	120.65	121.53	0.88	10.62	3.91	11.18

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
36	Jun Max Red	1.72	120.65	121.51	0.86	10.23	3.74	10.79
36	Jun Cons	1.78	120.65	121.52	0.87	10.45	3.84	11.01
36	Jun Op	1.74	120.65	121.51	0.86	10.28	3.76	10.84
36	Jun Clos	1.84	120.65	121.53	0.88	10.66	3.93	11.22
36	Sept Baseline	0.29	120.65	121.12	0.47	4.16	1.24	4.65
36	Sept Max Red	0.27	120.65	121.11	0.46	4.06	1.19	4.54
36	Sept Cons	0.29	120.65	121.12	0.47	4.14	1.22	4.62
36	Sept Op	0.28	120.65	121.11	0.46	4.09	1.2	4.57
36	Sept Clos	0.29	120.65	121.12	0.47	4.16	1.24	4.65
35	June Baseline	1.83	120.31	121.5	1.18	9.37	5.27	9.76
35	Jun Max Red	1.72	120.31	121.48	1.17	9.19	5.12	9.57
35	Jun Cons	1.78	120.31	121.49	1.18	9.29	5.2	9.68
35	Jun Op	1.74	120.31	121.48	1.17	9.21	5.14	9.6
35	Jun Clos	1.84	120.31	121.5	1.18	9.38	5.28	9.78
35	Sept Baseline	0.29	120.31	121.11	0.8	5.21	2.46	5.53
35	Sept Max Red	0.27	120.31	121.1	0.78	5.06	2.41	5.37
35	Sept Cons	0.29	120.31	121.11	0.79	5.18	2.45	5.49
35	Sept Op	0.28	120.31	121.1	0.79	5.1	2.42	5.41
35	Sept Clos	0.29	120.31	121.11	0.8	5.21	2.46	5.53
34	June Baseline	1.83	120.67	121.43	0.76	7.9	2.83	8.68
34	Jun Max Red	1.72	120.67	121.41	0.74	7.68	2.72	8.46
34	Jun Cons	1.78	120.67	121.42	0.75	7.8	2.78	8.58
34	Jun Op	1.74	120.67	121.41	0.74	7.71	2.74	8.49
34	Jun Clos	1.84	120.67	121.43	0.76	7.92	2.84	8.71
34	Sept Baseline	0.29	120.67	121.08	0.41	4.05	0.89	4.75
34	Sept Max Red	0.27	120.67	121.07	0.4	3.98	0.85	4.68
34	Sept Cons	0.29	120.67	121.07	0.41	4.03	0.88	4.73
34	Sept Op	0.28	120.67	121.07	0.4	4	0.86	4.7
34	Sept Clos	0.29	120.67	121.08	0.41	4.05	0.89	4.75
33	June Baseline	1.83	120.49	121.34	0.85	8.29	2.85	8.82
33	Jun Max Red	1.72	120.49	121.33	0.84	8.02	2.73	8.55
33	Jun Cons	1.78	120.49	121.34	0.85	8.17	2.8	8.7
33	Jun Op	1.74	120.49	121.33	0.84	8.06	2.75	8.59
33	Jun Clos	1.84	120.49	121.35	0.85	8.32	2.86	8.85
33	Sept Baseline	0.29	120.49	121.02	0.53	4.09	1.03	4.51
33	Sept Max Red	0.27	120.49	121.01	0.52	4.04	0.99	4.44
33	Sept Cons	0.29	120.49	121.02	0.53	4.08	1.02	4.49
33	Sept Op	0.28	120.49	121.01	0.52	4.05	1	4.46
33	Sept Clos	0.29	120.49	121.02	0.53	4.09	1.03	4.51

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
32	June Baseline	1.83	120.67	121.27	0.6	11.05	2.61	11.36
32	Jun Max Red	1.72	120.67	121.25	0.58	10.33	2.39	10.64
32	Jun Cons	1.78	120.67	121.26	0.6	10.73	2.51	11.04
32	Jun Op	1.74	120.67	121.26	0.59	10.42	2.42	10.73
32	Jun Clos	1.84	120.67	121.28	0.61	11.12	2.63	11.43
32	Sept Baseline	0.29	120.67	120.94	0.27	3.2	0.56	3.44
32	Sept Max Red	0.27	120.67	120.93	0.26	3.13	0.54	3.37
32	Sept Cons	0.29	120.67	120.94	0.27	3.18	0.56	3.42
32	Sept Op	0.28	120.67	120.93	0.27	3.15	0.55	3.39
32	Sept Clos	0.29	120.67	120.94	0.27	3.2	0.56	3.44
31	June Baseline	1.83	120.39	121.22	0.83	8.91	4.24	9.43
31	Jun Max Red	1.72	120.39	121.2	0.81	8.72	4.02	9.24
31	Jun Cons	1.78	120.39	121.21	0.82	8.83	4.14	9.35
31	Jun Op	1.74	120.39	121.2	0.81	8.75	4.05	9.26
31	Jun Clos	1.84	120.39	121.23	0.83	8.93	4.26	9.45
31	Sept Baseline	0.29	120.39	120.72	0.32	4.79	0.73	5.17
31	Sept Max Red	0.27	120.39	120.71	0.32	4.67	0.68	5.05
31	Sept Cons	0.29	120.39	120.71	0.32	4.76	0.72	5.14
31	Sept Op	0.28	120.39	120.71	0.32	4.7	0.69	5.07
31	Sept Clos	0.29	120.39	120.72	0.32	4.79	0.73	5.17
30	June Baseline	1.83	120.26	121.22	0.96	16.39	8.23	16.81
30	Jun Max Red	1.72	120.26	121.2	0.94	14.96	7.85	15.38
30	Jun Cons	1.78	120.26	121.21	0.95	15.76	8.06	16.18
30	Jun Op	1.74	120.26	121.2	0.94	15.15	7.9	15.57
30	Jun Clos	1.84	120.26	121.23	0.96	16.52	8.27	16.94
30	Sept Baseline	0.29	120.26	120.67	0.4	8.06	1.77	8.38
30	Sept Max Red	0.27	120.26	120.65	0.39	7.88	1.65	8.19
30	Sept Cons	0.29	120.26	120.66	0.4	8.02	1.74	8.33
30	Sept Op	0.28	120.26	120.66	0.39	7.92	1.68	8.23
30	Sept Clos	0.29	120.26	120.67	0.4	8.06	1.77	8.38
29	June Baseline	1.83	119.68	121.22	1.54	20.21	16.47	20.65
29	Jun Max Red	1.72	119.68	121.2	1.51	19.8	15.98	20.23
29	Jun Cons	1.78	119.68	121.21	1.53	20.03	16.25	20.46
29	Jun Op	1.74	119.68	121.2	1.52	19.85	16.04	20.29
29	Jun Clos	1.84	119.68	121.23	1.54	20.25	16.52	20.69
29	Sept Baseline	0.29	119.68	120.67	0.98	11.86	7.7	12.21
29	Sept Max Red	0.27	119.68	120.65	0.97	11.59	7.52	11.94
29	Sept Cons	0.29	119.68	120.66	0.98	11.8	7.66	12.15
29	Sept Op	0.28	119.68	120.65	0.97	11.66	7.56	12
29	Sept Clos	0.29	119.68	120.67	0.98	11.86	7.7	12.21

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
28	June Baseline	1.83	119.62	121.22	1.6	31.5	32.46	31.9
28	Jun Max Red	1.72	119.62	121.2	1.57	31.06	31.69	31.46
28	Jun Cons	1.78	119.62	121.21	1.59	31.3	32.12	31.71
28	Jun Op	1.74	119.62	121.2	1.58	31.11	31.79	31.52
28	Jun Clos	1.84	119.62	121.23	1.6	31.54	32.53	31.94
28	Sept Baseline	0.29	119.62	120.67	1.04	21.46	17.66	21.8
28	Sept Max Red	0.27	119.62	120.65	1.03	21.2	17.34	21.54
28	Sept Cons	0.29	119.62	120.66	1.04	21.4	17.59	21.74
28	Sept Op	0.28	119.62	120.65	1.03	21.25	17.42	21.59
28	Sept Clos	0.29	119.62	120.67	1.04	21.46	17.66	21.8
27	June Baseline	1.83	119.37	121.22	1.85	22.38	23.66	22.92
27	Jun Max Red	1.72	119.37	121.2	1.83	21.95	23.12	22.49
27	Jun Cons	1.78	119.37	121.21	1.84	22.19	23.42	22.73
27	Jun Op	1.74	119.37	121.2	1.83	22.01	23.19	22.54
27	Jun Clos	1.84	119.37	121.23	1.85	22.42	23.71	22.96
27	Sept Baseline	0.29	119.37	120.67	1.29	15.46	13.4	15.86
27	Sept Max Red	0.27	119.37	120.65	1.28	15.32	13.17	15.71
27	Sept Cons	0.29	119.37	120.66	1.29	15.43	13.35	15.82
27	Sept Op	0.28	119.37	120.65	1.28	15.36	13.22	15.75
27	Sept Clos	0.29	119.37	120.67	1.29	15.46	13.4	15.86
26	June Baseline	1.83	120.2	121.22	1.02	12.29	5.87	13.42
26	Jun Max Red	1.72	120.2	121.19	0.99	11.84	5.57	12.97
26	Jun Cons	1.78	120.2	121.21	1.01	12.09	5.73	13.22
26	Jun Op	1.74	120.2	121.2	1	11.9	5.61	13.03
26	Jun Clos	1.84	120.2	121.22	1.02	12.33	5.89	13.46
26	Sept Baseline	0.29	120.2	120.66	0.47	4.73	1.59	5.47
26	Sept Max Red	0.27	120.2	120.65	0.45	4.64	1.52	5.36
26	Sept Cons	0.29	120.2	120.66	0.46	4.71	1.57	5.44
26	Sept Op	0.28	120.2	120.65	0.45	4.66	1.54	5.38
26	Sept Clos	0.29	120.2	120.66	0.47	4.73	1.59	5.47
25	June Baseline	1.83	120.18	121.21	1.03	11.43	5.76	11.82
25	Jun Max Red	1.72	120.18	121.19	1.01	11.09	5.48	11.48
25	Jun Cons	1.78	120.18	121.2	1.02	11.28	5.63	11.67
25	Jun Op	1.74	120.18	121.19	1.01	11.14	5.52	11.53
25	Jun Clos	1.84	120.18	121.21	1.04	11.46	5.78	11.85
25	Sept Baseline	0.29	120.18	120.66	0.48	4.3	1.51	4.6
25	Sept Max Red	0.27	120.18	120.64	0.47	4.17	1.45	4.47
25	Sept Cons	0.29	120.18	120.66	0.48	4.27	1.49	4.57
25	Sept Op	0.28	120.18	120.65	0.47	4.2	1.46	4.5
25	Sept Clos	0.29	120.18	120.66	0.48	4.3	1.51	4.6

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
24	June Baseline	1.83	119.45	121.21	1.77	13.45	11.8	14.42
24	Jun Max Red	1.72	119.45	121.19	1.74	13.13	11.48	14.09
24	Jun Cons	1.78	119.45	121.2	1.76	13.31	11.66	14.27
24	Jun Op	1.74	119.45	121.19	1.74	13.17	11.52	14.13
24	Jun Clos	1.84	119.45	121.22	1.77	13.48	11.84	14.45
24	Sept Baseline	0.29	119.45	120.66	1.21	7.24	6.28	8.09
24	Sept Max Red	0.27	119.45	120.65	1.2	7.15	6.17	7.99
24	Sept Cons	0.29	119.45	120.66	1.21	7.22	6.25	8.07
24	Sept Op	0.28	119.45	120.65	1.2	7.17	6.2	8.01
24	Sept Clos	0.29	119.45	120.66	1.21	7.24	6.28	8.09
23	June Baseline	1.83	120.14	121.2	1.07	9.74	5.22	10.22
23	Jun Max Red	1.72	120.14	121.18	1.04	9.46	4.99	9.94
23	Jun Cons	1.78	120.14	121.19	1.05	9.62	5.12	10.1
23	Jun Op	1.74	120.14	121.18	1.04	9.49	5.02	9.97
23	Jun Clos	1.84	120.14	121.21	1.07	9.77	5.24	10.25
23	Sept Baseline	0.29	120.14	120.66	0.52	4.32	1.53	4.69
23	Sept Max Red	0.27	120.14	120.64	0.5	4.22	1.47	4.58
23	Sept Cons	0.29	120.14	120.65	0.52	4.3	1.52	4.66
23	Sept Op	0.28	120.14	120.65	0.51	4.25	1.48	4.6
23	Sept Clos	0.29	120.14	120.66	0.52	4.32	1.53	4.69
22	June Baseline	1.83	119.34	121.21	1.87	22.36	26.3	23.1
22	Jun Max Red	1.72	119.34	121.18	1.84	22.08	25.76	22.82
22	Jun Cons	1.78	119.34	121.2	1.86	22.23	26.06	22.98
22	Jun Op	1.74	119.34	121.19	1.85	22.11	25.83	22.86
22	Jun Clos	1.84	119.34	121.21	1.87	22.38	26.35	23.13
22	Sept Baseline	0.29	119.34	120.66	1.32	15.54	15.8	16.19
22	Sept Max Red	0.27	119.34	120.64	1.3	15.34	15.58	15.99
22	Sept Cons	0.29	119.34	120.65	1.31	15.49	15.75	16.14
22	Sept Op	0.28	119.34	120.65	1.31	15.39	15.63	16.03
22	Sept Clos	0.29	119.34	120.66	1.32	15.54	15.8	16.19
21	June Baseline	1.83	120	121.2	1.2	13.12	7.81	13.47
21	Jun Max Red	1.72	120	121.18	1.18	12.77	7.5	13.13
21	Jun Cons	1.78	120	121.19	1.19	12.97	7.67	13.32
21	Jun Op	1.74	120	121.18	1.18	12.82	7.54	13.17
21	Jun Clos	1.84	120	121.2	1.2	13.15	7.84	13.51
21	Sept Baseline	0.29	120	120.66	0.66	5.94	2.75	6.21
21	Sept Max Red	0.27	120	120.64	0.64	5.83	2.66	6.09
21	Sept Cons	0.29	120	120.65	0.65	5.91	2.73	6.18
21	Sept Op	0.28	120	120.65	0.64	5.85	2.68	6.12
21	Sept Clos	0.29	120	120.66	0.66	5.94	2.75	6.21

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
20	June Baseline	1.83	120.16	120.95	0.79	2.58	1	3.11
20	Jun Max Red	1.72	120.16	120.93	0.77	2.51	0.95	3.03
20	Jun Cons	1.78	120.16	120.94	0.78	2.55	0.97	3.08
20	Jun Op	1.74	120.16	120.93	0.77	2.52	0.95	3.04
20	Jun Clos	1.84	120.16	120.95	0.79	2.59	1	3.12
20	Sept Baseline	0.29	120.16	120.51	0.35	1.06	0.21	1.3
20	Sept Max Red	0.27	120.16	120.51	0.34	1.03	0.2	1.27
20	Sept Cons	0.29	120.16	120.51	0.35	1.05	0.21	1.29
20	Sept Op	0.28	120.16	120.51	0.35	1.04	0.2	1.28
20	Sept Clos	0.29	120.16	120.51	0.35	1.06	0.21	1.3
19	June Baseline	1.83	119.85	121	1.15	11.4	6.79	11.91
19	Jun Max Red	1.72	119.85	120.97	1.12	11.04	6.46	11.55
19	Jun Cons	1.78	119.85	120.99	1.13	11.24	6.64	11.75
19	Jun Op	1.74	119.85	120.97	1.12	11.09	6.51	11.6
19	Jun Clos	1.84	119.85	121	1.15	11.43	6.83	11.95
19	Sept Baseline	0.29	119.85	120.52	0.67	5.73	2.72	6.16
19	Sept Max Red	0.27	119.85	120.51	0.66	5.71	2.68	6.13
19	Sept Cons	0.29	119.85	120.52	0.67	5.73	2.71	6.15
19	Sept Op	0.28	119.85	120.52	0.66	5.71	2.69	6.14
19	Sept Clos	0.29	119.85	120.52	0.67	5.73	2.72	6.16
18	June Baseline	1.83	119.59	121	1.41	22.58	21.75	23.34
18	Jun Max Red	1.72	119.59	120.97	1.38	22.04	21.09	22.81
18	Jun Cons	1.78	119.59	120.99	1.4	22.34	21.45	23.1
18	Jun Op	1.74	119.59	120.98	1.38	22.11	21.18	22.88
18	Jun Clos	1.84	119.59	121	1.41	22.63	21.81	23.4
18	Sept Baseline	0.29	119.59	120.52	0.93	17.94	12.39	18.55
18	Sept Max Red	0.27	119.59	120.51	0.92	17.92	12.26	18.52
18	Sept Cons	0.29	119.59	120.52	0.93	17.94	12.35	18.54
18	Sept Op	0.28	119.59	120.52	0.93	17.93	12.29	18.53
18	Sept Clos	0.29	119.59	120.52	0.93	17.94	12.39	18.55
17	June Baseline	1.83	119.83	120.99	1.16	12.52	6.29	12.86
17	Jun Max Red	1.72	119.83	120.96	1.13	12.01	5.93	12.35
17	Jun Cons	1.78	119.83	120.98	1.14	12.29	6.13	12.63
17	Jun Op	1.74	119.83	120.97	1.13	12.08	5.98	12.42
17	Jun Clos	1.84	119.83	121	1.16	12.57	6.33	12.91
17	Sept Baseline	0.29	119.83	120.52	0.69	5.29	2.19	5.54
17	Sept Max Red	0.27	119.83	120.51	0.68	5.25	2.16	5.5
17	Sept Cons	0.29	119.83	120.52	0.68	5.28	2.19	5.53
17	Sept Op	0.28	119.83	120.52	0.68	5.26	2.17	5.51
17	Sept Clos	0.29	119.83	120.52	0.69	5.29	2.19	5.54

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
16	June Baseline	1.83	119.92	120.99	1.07	12.5	5.74	13.01
16	Jun Max Red	1.72	119.92	120.96	1.04	11.68	5.37	12.19
16	Jun Cons	1.78	119.92	120.97	1.06	12.13	5.57	12.64
16	Jun Op	1.74	119.92	120.96	1.05	11.79	5.42	12.3
16	Jun Clos	1.84	119.92	120.99	1.07	12.57	5.77	13.08
16	Sept Baseline	0.29	119.92	120.52	0.6	4.76	1.95	5.17
16	Sept Max Red	0.27	119.92	120.51	0.6	4.72	1.92	5.13
16	Sept Cons	0.29	119.92	120.52	0.6	4.75	1.94	5.16
16	Sept Op	0.28	119.92	120.51	0.6	4.73	1.92	5.14
16	Sept Clos	0.29	119.92	120.52	0.6	4.76	1.95	5.17
15	June Baseline	1.83	119.63	120.98	1.35	12.1	7.44	12.54
15	Jun Max Red	1.72	119.63	120.95	1.32	11.78	7.09	12.22
15	Jun Cons	1.78	119.63	120.97	1.34	11.96	7.28	12.39
15	Jun Op	1.74	119.63	120.96	1.32	11.83	7.13	12.26
15	Jun Clos	1.84	119.63	120.99	1.35	12.13	7.48	12.57
15	Sept Baseline	0.29	119.63	120.52	0.88	5.57	3.09	5.92
15	Sept Max Red	0.27	119.63	120.51	0.88	5.54	3.05	5.89
15	Sept Cons	0.29	119.63	120.52	0.88	5.56	3.08	5.91
15	Sept Op	0.28	119.63	120.51	0.88	5.55	3.06	5.9
15	Sept Clos	0.29	119.63	120.52	0.88	5.57	3.09	5.92
14	June Baseline	1.83	119.9	120.98	1.07	11.01	6.36	11.34
14	Jun Max Red	1.72	119.9	120.95	1.04	10.75	6.03	11.07
14	Jun Cons	1.78	119.9	120.96	1.06	10.9	6.21	11.22
14	Jun Op	1.74	119.9	120.95	1.05	10.79	6.07	11.1
14	Jun Clos	1.84	119.9	120.98	1.08	11.04	6.39	11.36
14	Sept Baseline	0.29	119.9	120.52	0.61	5.65	2.33	5.88
14	Sept Max Red	0.27	119.9	120.51	0.61	5.62	2.3	5.85
14	Sept Cons	0.29	119.9	120.51	0.61	5.64	2.33	5.87
14	Sept Op	0.28	119.9	120.51	0.61	5.63	2.31	5.86
14	Sept Clos	0.29	119.9	120.52	0.61	5.65	2.33	5.88
13	June Baseline	1.83	119.38	120.97	1.59	9.37	7.74	10.02
13	Jun Max Red	1.72	119.38	120.94	1.56	9.05	7.47	9.7
13	Jun Cons	1.78	119.38	120.96	1.58	9.23	7.62	9.88
13	Jun Op	1.74	119.38	120.95	1.56	9.09	7.5	9.74
13	Jun Clos	1.84	119.38	120.98	1.59	9.41	7.77	10.06
13	Sept Baseline	0.29	119.38	120.52	1.13	6.02	4.33	6.54
13	Sept Max Red	0.27	119.38	120.51	1.12	6	4.29	6.52
13	Sept Cons	0.29	119.38	120.51	1.13	6.02	4.32	6.53
13	Sept Op	0.28	119.38	120.51	1.13	6.01	4.3	6.52
13	Sept Clos	0.29	119.38	120.52	1.13	6.02	4.33	6.54

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
12	June Baseline	1.83	119.8	120.97	1.17	9.47	6.05	9.99
12	Jun Max Red	1.72	119.8	120.94	1.14	9.14	5.77	9.65
12	Jun Cons	1.78	119.8	120.95	1.16	9.32	5.92	9.84
12	Jun Op	1.74	119.8	120.94	1.14	9.19	5.81	9.7
12	Jun Clos	1.84	119.8	120.97	1.17	9.5	6.07	10.02
12	Sept Baseline	0.29	119.8	120.51	0.72	5.17	2.76	5.58
12	Sept Max Red	0.27	119.8	120.51	0.71	5.15	2.73	5.56
12	Sept Cons	0.29	119.8	120.51	0.71	5.17	2.75	5.58
12	Sept Op	0.28	119.8	120.51	0.71	5.15	2.74	5.57
12	Sept Clos	0.29	119.8	120.51	0.72	5.17	2.76	5.58
11	June Baseline	1.83	119.35	120.97	1.62	22.73	26.41	23.24
11	Jun Max Red	1.72	119.35	120.94	1.59	22.2	25.74	22.71
11	Jun Cons	1.78	119.35	120.96	1.61	22.49	26.11	23
11	Jun Op	1.74	119.35	120.95	1.6	22.27	25.83	22.78
11	Jun Clos	1.84	119.35	120.97	1.63	22.78	26.48	23.29
11	Sept Baseline	0.29	119.35	120.51	1.17	18.53	17.24	18.91
11	Sept Max Red	0.27	119.35	120.51	1.16	18.5	17.12	18.87
11	Sept Cons	0.29	119.35	120.51	1.16	18.53	17.21	18.9
11	Sept Op	0.28	119.35	120.51	1.16	18.5	17.15	18.88
11	Sept Clos	0.29	119.35	120.51	1.17	18.53	17.24	18.91
10	June Baseline	1.83	119.86	120.97	1.1	20.67	9.66	20.94
10	Jun Max Red	1.72	119.86	120.94	1.07	19.63	9.05	19.9
10	Jun Cons	1.78	119.86	120.95	1.09	20.2	9.38	20.47
10	Jun Op	1.74	119.86	120.94	1.08	19.77	9.13	20.04
10	Jun Clos	1.84	119.86	120.97	1.11	20.77	9.72	21.04
10	Sept Baseline	0.29	119.86	120.51	0.65	7.63	3.6	7.86
10	Sept Max Red	0.27	119.86	120.51	0.64	7.6	3.55	7.83
10	Sept Cons	0.29	119.86	120.51	0.65	7.63	3.59	7.86
10	Sept Op	0.28	119.86	120.51	0.65	7.61	3.56	7.84
10	Sept Clos	0.29	119.86	120.51	0.65	7.63	3.6	7.86
9	June Baseline	1.83	119.29	120.97	1.68	34.25	36.43	34.57
9	Jun Max Red	1.72	119.29	120.94	1.65	33.95	35.41	34.26
9	Jun Cons	1.78	119.29	120.96	1.66	34.12	35.97	34.43
9	Jun Op	1.74	119.29	120.94	1.65	33.99	35.55	34.3
9	Jun Clos	1.84	119.29	120.97	1.68	34.28	36.53	34.6
9	Sept Baseline	0.29	119.29	120.51	1.22	28.69	21.95	28.91
9	Sept Max Red	0.27	119.29	120.51	1.21	28.59	21.76	28.82
9	Sept Cons	0.29	119.29	120.51	1.22	28.66	21.9	28.89
9	Sept Op	0.28	119.29	120.51	1.22	28.61	21.81	28.84
9	Sept Clos	0.29	119.29	120.51	1.22	28.69	21.95	28.91

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
8	June Baseline	1.83	119.31	120.97	1.66	29.51	27.14	29.84
8	Jun Max Red	1.72	119.31	120.94	1.63	29.13	26.26	29.46
8	Jun Cons	1.78	119.31	120.96	1.65	29.34	26.74	29.67
8	Jun Op	1.74	119.31	120.94	1.63	29.18	26.38	29.51
8	Jun Clos	1.84	119.31	120.97	1.66	29.54	27.22	29.87
8	Sept Baseline	0.29	119.31	120.51	1.21	19.34	15.66	19.6
8	Sept Max Red	0.27	119.31	120.51	1.2	19.14	15.54	19.4
8	Sept Cons	0.29	119.31	120.51	1.2	19.29	15.64	19.55
8	Sept Op	0.28	119.31	120.51	1.2	19.19	15.57	19.45
8	Sept Clos	0.29	119.31	120.51	1.21	19.34	15.66	19.6
7	June Baseline	1.83	119.48	120.97	1.48	15.31	12.69	15.78
7	Jun Max Red	1.72	119.48	120.94	1.45	14.87	12.23	15.32
7	Jun Cons	1.78	119.48	120.95	1.47	15.11	12.48	15.57
7	Jun Op	1.74	119.48	120.94	1.46	14.93	12.29	15.38
7	Jun Clos	1.84	119.48	120.97	1.49	15.36	12.73	15.82
7	Sept Baseline	0.29	119.48	120.51	1.03	9.58	7.17	9.96
7	Sept Max Red	0.27	119.48	120.51	1.03	9.56	7.11	9.93
7	Sept Cons	0.29	119.48	120.51	1.03	9.58	7.15	9.95
7	Sept Op	0.28	119.48	120.51	1.03	9.56	7.12	9.93
7	Sept Clos	0.29	119.48	120.51	1.03	9.58	7.17	9.96
6	June Baseline	1.83	119.23	120.97	1.73	20.52	21.99	20.96
6	Jun Max Red	1.72	119.23	120.94	1.7	20.18	21.39	20.61
6	Jun Cons	1.78	119.23	120.95	1.72	20.37	21.72	20.8
6	Jun Op	1.74	119.23	120.94	1.71	20.23	21.47	20.66
6	Jun Clos	1.84	119.23	120.97	1.74	20.55	22.05	20.99
6	Sept Baseline	0.29	119.23	120.51	1.28	15.46	13.87	15.81
6	Sept Max Red	0.27	119.23	120.51	1.27	15.4	13.78	15.74
6	Sept Cons	0.29	119.23	120.51	1.28	15.44	13.85	15.79
6	Sept Op	0.28	119.23	120.51	1.28	15.41	13.8	15.76
6	Sept Clos	0.29	119.23	120.51	1.28	15.46	13.87	15.81
5	June Baseline	1.83	119.82	120.96	1.15	16.17	8.58	16.46
5	Jun Max Red	1.72	119.82	120.93	1.12	15.61	8.1	15.9
5	Jun Cons	1.78	119.82	120.95	1.13	15.92	8.36	16.2
5	Jun Op	1.74	119.82	120.94	1.12	15.69	8.17	15.97
5	Jun Clos	1.84	119.82	120.96	1.15	16.22	8.62	16.51
5	Sept Baseline	0.29	119.82	120.51	0.7	6.89	3.32	7.13
5	Sept Max Red	0.27	119.82	120.51	0.69	6.76	3.27	7
5	Sept Cons	0.29	119.82	120.51	0.7	6.86	3.3	7.1
5	Sept Op	0.28	119.82	120.51	0.69	6.79	3.28	7.03
5	Sept Clos	0.29	119.82	120.51	0.7	6.89	3.32	7.13

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
4	June Baseline	1.83	119.91	120.96	1.05	18.4	8.84	18.67
4	Jun Max Red	1.72	119.91	120.93	1.02	17.77	8.3	18.04
4	Jun Cons	1.78	119.91	120.94	1.04	18.12	8.59	18.38
4	Jun Op	1.74	119.91	120.93	1.03	17.85	8.37	18.12
4	Jun Clos	1.84	119.91	120.96	1.06	18.46	8.89	18.73
4	Sept Baseline	0.29	119.91	120.51	0.61	6.76	2.99	7
4	Sept Max Red	0.27	119.91	120.51	0.6	6.57	2.95	6.81
4	Sept Cons	0.29	119.91	120.51	0.61	6.72	2.98	6.95
4	Sept Op	0.28	119.91	120.51	0.6	6.62	2.96	6.85
4	Sept Clos	0.29	119.91	120.51	0.61	6.76	2.99	7
3	June Baseline	1.83	119.58	120.95	1.37	18.66	10.21	19.03
3	Jun Max Red	1.72	119.58	120.92	1.34	17.82	9.67	18.18
3	Jun Cons	1.78	119.58	120.94	1.36	18.28	9.96	18.65
3	Jun Op	1.74	119.58	120.93	1.35	17.93	9.74	18.3
3	Jun Clos	1.84	119.58	120.96	1.38	18.74	10.27	19.11
3	Sept Baseline	0.29	119.58	120.51	0.93	7.81	4.49	8.12
3	Sept Max Red	0.27	119.58	120.51	0.92	7.67	4.44	7.99
3	Sept Cons	0.29	119.58	120.51	0.93	7.77	4.47	8.09
3	Sept Op	0.28	119.58	120.51	0.93	7.7	4.45	8.02
3	Sept Clos	0.29	119.58	120.51	0.93	7.81	4.49	8.12
2	June Baseline	1.83	119.44	120.95	1.51	24.44	12.76	24.79
2	Jun Max Red	1.72	119.44	120.92	1.48	22.99	12.05	23.33
2	Jun Cons	1.78	119.44	120.94	1.5	23.79	12.43	24.13
2	Jun Op	1.74	119.44	120.93	1.49	23.18	12.14	23.53
2	Jun Clos	1.84	119.44	120.96	1.51	24.59	12.83	24.93
2	Sept Baseline	0.29	119.44	120.51	1.07	9.29	6.06	9.59
2	Sept Max Red	0.27	119.44	120.51	1.06	9.18	6.01	9.49
2	Sept Cons	0.29	119.44	120.51	1.07	9.26	6.05	9.57
2	Sept Op	0.28	119.44	120.51	1.07	9.21	6.02	9.51
2	Sept Clos	0.29	119.44	120.51	1.07	9.29	6.06	9.59
1	June Baseline	1.83	119	120.95	1.95	24.44	17.82	25.66
1	Jun Max Red	1.72	119	120.92	1.92	22.99	17.11	24.2
1	Jun Cons	1.78	119	120.94	1.94	23.79	17.5	25
1	Jun Op	1.74	119	120.93	1.93	23.18	17.2	24.4
1	Jun Clos	1.84	119	120.96	1.96	24.58	17.89	25.8
1	Sept Baseline	0.29	119	120.51	1.51	9.29	11.13	10.47
1	Sept Max Red	0.27	119	120.51	1.51	9.18	11.07	10.36
1	Sept Cons	0.29	119	120.51	1.51	9.26	11.11	10.44
1	Sept Op	0.28	119	120.51	1.51	9.21	11.08	10.38
1	Sept Clos	0.29	119	120.51	1.51	9.29	11.13	10.47

Table A-6. Ogama Outflow High Groundwater Model Results

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
67	June Baseline	1.83	122.25	123.27	1.02	23.73	14.14	23.83
67	Jun Max Red	1.54	122.25	123.23	0.98	23.01	13.22	23.11
67	Jun Cons	1.74	122.25	123.26	1.01	23.51	13.86	23.61
67	Jun Op	1.58	122.25	123.24	0.99	23.12	13.36	23.22
67	Jun Clos	1.79	122.25	123.27	1.02	23.65	14.04	23.75
67	Sept Baseline	0.29	122.25	122.95	0.69	17.76	7.32	17.82
67	Sept Max Red	0.22	122.25	122.91	0.66	17.14	6.73	17.2
67	Sept Cons	0.28	122.25	122.94	0.69	17.65	7.21	17.71
67	Sept Op	0.24	122.25	122.92	0.67	17.31	6.89	17.37
67	Sept Clos	0.29	122.25	122.94	0.69	17.73	7.29	17.79
66	June Baseline	1.83	122.39	123.27	0.88	19.59	10.68	19.69
66	Jun Max Red	1.54	122.39	123.23	0.84	18.99	9.93	19.08
66	Jun Cons	1.74	122.39	123.26	0.87	19.41	10.45	19.51
66	Jun Op	1.58	122.39	123.24	0.85	19.08	10.05	19.18
66	Jun Clos	1.79	122.39	123.26	0.88	19.52	10.6	19.62
66	Sept Baseline	0.29	122.39	122.94	0.56	14.55	5.14	14.61
66	Sept Max Red	0.22	122.39	122.91	0.52	14.03	4.66	14.08
66	Sept Cons	0.28	122.39	122.94	0.55	14.45	5.05	14.51
66	Sept Op	0.24	122.39	122.92	0.53	14.17	4.79	14.23
66	Sept Clos	0.29	122.39	122.94	0.55	14.52	5.12	14.58
65	June Baseline	1.83	122.21	123.26	1.05	20.4	11.3	20.52
65	Jun Max Red	1.54	122.21	123.22	1.01	19.66	10.54	19.78
65	Jun Cons	1.74	122.21	123.25	1.04	20.17	11.07	20.29
65	Jun Op	1.58	122.21	123.23	1.02	19.77	10.66	19.89
65	Jun Clos	1.79	122.21	123.26	1.04	20.32	11.22	20.44
65	Sept Baseline	0.29	122.21	122.94	0.73	14.16	5.79	14.25
65	Sept Max Red	0.22	122.21	122.91	0.7	13.51	5.33	13.59
65	Sept Cons	0.28	122.21	122.94	0.72	14.04	5.71	14.13
65	Sept Op	0.24	122.21	122.92	0.71	13.68	5.46	13.77
65	Sept Clos	0.29	122.21	122.94	0.73	14.13	5.77	14.21
64	June Baseline	1.83	122.61	123.24	0.62	19.23	5.13	19.33
64	Jun Max Red	1.54	122.61	123.2	0.59	17.69	4.46	17.79
64	Jun Cons	1.74	122.61	123.22	0.61	18.76	4.92	18.87
64	Jun Op	1.58	122.61	123.21	0.59	17.93	4.56	18.03
64	Jun Clos	1.79	122.61	123.23	0.62	19.06	5.05	19.16
64	Sept Baseline	0.29	122.61	122.93	0.32	6.32	1.27	6.41
64	Sept Max Red	0.22	122.61	122.9	0.29	5.1	1.09	5.19
64	Sept Cons	0.28	122.61	122.93	0.32	6.08	1.23	6.16

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
64	Sept Op	0.24	122.61	122.91	0.3	5.34	1.13	5.43
64	Sept Clos	0.29	122.61	122.93	0.32	6.25	1.26	6.34
63	June Baseline	1.83	122.65	123.18	0.53	12.18	3.33	12.26
63	Jun Max Red	1.54	122.65	123.15	0.49	11.3	2.91	11.37
63	Jun Cons	1.74	122.65	123.17	0.52	11.92	3.2	11.99
63	Jun Op	1.58	122.65	123.15	0.5	11.44	2.97	11.51
63	Jun Clos	1.79	122.65	123.18	0.53	12.09	3.28	12.16
63	Sept Baseline	0.29	122.65	122.89	0.24	4.91	0.83	4.96
63	Sept Max Red	0.22	122.65	122.86	0.21	4.38	0.69	4.43
63	Sept Cons	0.28	122.65	122.89	0.23	4.77	0.8	4.82
63	Sept Op	0.24	122.65	122.87	0.22	4.44	0.73	4.49
63	Sept Clos	0.29	122.65	122.89	0.24	4.87	0.82	4.92
62	June Baseline	1.83	122.54	123.09	0.55	10.55	2.95	10.69
62	Jun Max Red	1.54	122.54	123.06	0.52	9.77	2.59	9.9
62	Jun Cons	1.74	122.54	123.08	0.54	10.31	2.84	10.45
62	Jun Op	1.58	122.54	123.06	0.52	9.89	2.64	10.02
62	Jun Clos	1.79	122.54	123.09	0.55	10.47	2.91	10.6
62	Sept Baseline	0.29	122.54	122.8	0.26	4.33	0.8	4.43
62	Sept Max Red	0.22	122.54	122.78	0.24	3.88	0.7	3.98
62	Sept Cons	0.28	122.54	122.8	0.26	4.22	0.78	4.33
62	Sept Op	0.24	122.54	122.79	0.24	3.92	0.73	4.03
62	Sept Clos	0.29	122.54	122.8	0.26	4.3	0.8	4.4
61	June Baseline	1.83	122.26	123.02	0.76	21.91	7.01	22.14
61	Jun Max Red	1.54	122.26	122.98	0.72	20.38	6.19	20.61
61	Jun Cons	1.74	122.26	123	0.75	21.45	6.75	21.68
61	Jun Op	1.58	122.26	122.98	0.72	20.62	6.31	20.85
61	Jun Clos	1.79	122.26	123.01	0.75	21.75	6.92	21.98
61	Sept Baseline	0.29	122.26	122.67	0.41	8.72	1.8	8.87
61	Sept Max Red	0.22	122.26	122.63	0.37	7.92	1.48	8.04
61	Sept Cons	0.28	122.26	122.66	0.4	8.57	1.74	8.72
61	Sept Op	0.24	122.26	122.64	0.38	8.14	1.56	8.27
61	Sept Clos	0.29	122.26	122.67	0.41	8.68	1.78	8.83
60	June Baseline	1.83	122.17	123	0.82	28.47	9.28	28.94
60	Jun Max Red	1.54	122.17	122.96	0.79	26.49	8.22	26.94
60	Jun Cons	1.74	122.17	122.99	0.81	27.87	8.95	28.33
60	Jun Op	1.58	122.17	122.97	0.79	26.8	8.38	27.25
60	Jun Clos	1.79	122.17	122.99	0.82	28.26	9.16	28.72
60	Sept Baseline	0.29	122.17	122.66	0.48	10.9	2.56	11.27
60	Sept Max Red	0.22	122.17	122.62	0.45	9.25	2.18	9.61

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
60	Sept Cons	0.28	122.17	122.65	0.48	10.52	2.48	10.88
60	Sept Op	0.24	122.17	122.63	0.46	9.44	2.28	9.79
60	Sept Clos	0.29	122.17	122.65	0.48	10.79	2.54	11.16
59	June Baseline	1.83	122.08	122.96	0.88	19.27	6.23	19.73
59	Jun Max Red	1.54	122.08	122.92	0.84	17.86	5.53	18.29
59	Jun Cons	1.74	122.08	122.95	0.87	18.85	6.01	19.29
59	Jun Op	1.58	122.08	122.93	0.85	18.08	5.64	18.52
59	Jun Clos	1.79	122.08	122.95	0.88	19.12	6.15	19.57
59	Sept Baseline	0.29	122.08	122.63	0.56	7.12	1.95	7.42
59	Sept Max Red	0.22	122.08	122.6	0.52	6.37	1.72	6.65
59	Sept Cons	0.28	122.08	122.63	0.55	6.87	1.9	7.17
59	Sept Op	0.24	122.08	122.61	0.53	6.45	1.78	6.74
59	Sept Clos	0.29	122.08	122.63	0.55	7.05	1.93	7.35
58	June Baseline	1.83	122.17	122.85	0.68	22.85	6.77	23.42
58	Jun Max Red	1.54	122.17	122.82	0.64	21.16	5.98	21.73
58	Jun Cons	1.74	122.17	122.84	0.67	22.33	6.52	22.9
58	Jun Op	1.58	122.17	122.82	0.65	21.42	6.1	21.99
58	Jun Clos	1.79	122.17	122.85	0.67	22.66	6.68	23.24
58	Sept Baseline	0.29	122.17	122.56	0.38	9.42	2.07	9.96
58	Sept Max Red	0.22	122.17	122.53	0.35	9.16	1.79	9.68
58	Sept Cons	0.28	122.17	122.55	0.38	9.32	2.01	9.86
58	Sept Op	0.24	122.17	122.53	0.36	9.18	1.86	9.71
58	Sept Clos	0.29	122.17	122.55	0.38	9.39	2.05	9.93
57	June Baseline	1.83	121.97	122.76	0.78	15.75	4.65	16.75
57	Jun Max Red	1.54	121.97	122.72	0.74	14.38	4.03	15.38
57	Jun Cons	1.74	121.97	122.74	0.77	15.34	4.46	16.34
57	Jun Op	1.58	121.97	122.72	0.75	14.6	4.12	15.6
57	Jun Clos	1.79	121.97	122.75	0.78	15.6	4.58	16.61
57	Sept Baseline	0.29	121.97	122.41	0.44	4.95	1.16	5.9
57	Sept Max Red	0.22	121.97	122.38	0.4	4.39	1	5.27
57	Sept Cons	0.28	121.97	122.41	0.43	4.79	1.13	5.74
57	Sept Op	0.24	121.97	122.39	0.41	4.42	1.04	5.32
57	Sept Clos	0.29	121.97	122.41	0.44	4.9	1.15	5.86
56	June Baseline	1.83	121.7	122.71	1.01	11.7	5.29	12.18
56	Jun Max Red	1.54	121.7	122.66	0.97	10.86	4.79	11.34
56	Jun Cons	1.74	121.7	122.7	1	11.44	5.14	11.93
56	Jun Op	1.58	121.7	122.67	0.97	10.99	4.86	11.47
56	Jun Clos	1.79	121.7	122.7	1.01	11.61	5.24	12.09
56	Sept Baseline	0.29	121.7	122.32	0.62	4.74	2.12	5.18

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
56	Sept Max Red	0.22	121.7	122.27	0.57	4.12	1.92	4.54
56	Sept Cons	0.28	121.7	122.31	0.61	4.6	2.08	5.04
56	Sept Op	0.24	121.7	122.28	0.58	4.16	1.97	4.59
56	Sept Clos	0.29	121.7	122.31	0.62	4.71	2.11	5.14
55	June Baseline	1.83	121.14	122.7	1.56	10.59	9.11	11.34
55	Jun Max Red	1.54	121.14	122.66	1.52	10.21	8.66	10.94
55	Jun Cons	1.74	121.14	122.69	1.55	10.48	8.97	11.22
55	Jun Op	1.58	121.14	122.66	1.53	10.27	8.73	11
55	Jun Clos	1.79	121.14	122.69	1.56	10.55	9.06	11.29
55	Sept Baseline	0.29	121.14	122.32	1.18	7.23	5.7	7.84
55	Sept Max Red	0.22	121.14	122.27	1.13	6.85	5.38	7.45
55	Sept Cons	0.28	121.14	122.31	1.17	7.15	5.64	7.77
55	Sept Op	0.24	121.14	122.28	1.15	6.94	5.46	7.54
55	Sept Clos	0.29	121.14	122.31	1.18	7.21	5.68	7.82
54	June Baseline	1.83	121.87	122.68	0.81	18.04	6.63	18.18
54	Jun Max Red	1.54	121.87	122.64	0.77	16.82	5.9	16.95
54	Jun Cons	1.74	121.87	122.67	0.8	17.67	6.4	17.81
54	Jun Op	1.58	121.87	122.65	0.77	17.01	6.01	17.14
54	Jun Clos	1.79	121.87	122.68	0.8	17.91	6.55	18.05
54	Sept Baseline	0.29	121.87	122.31	0.44	7.16	1.95	7.27
54	Sept Max Red	0.22	121.87	122.27	0.39	6.04	1.66	6.15
54	Sept Cons	0.28	121.87	122.3	0.43	6.92	1.89	7.03
54	Sept Op	0.24	121.87	122.28	0.4	6.21	1.73	6.32
54	Sept Clos	0.29	121.87	122.31	0.43	7.09	1.93	7.2
53	June Baseline	1.83	121.7	122.67	0.97	20.55	7.58	20.69
53	Jun Max Red	1.54	121.7	122.63	0.93	19.11	6.78	19.25
53	Jun Cons	1.74	121.7	122.66	0.96	20.11	7.33	20.26
53	Jun Op	1.58	121.7	122.63	0.94	19.33	6.9	19.48
53	Jun Clos	1.79	121.7	122.66	0.97	20.4	7.49	20.54
53	Sept Baseline	0.29	121.7	122.31	0.61	7.74	2.46	7.87
53	Sept Max Red	0.22	121.7	122.26	0.56	6.36	2.16	6.48
53	Sept Cons	0.28	121.7	122.3	0.6	7.46	2.4	7.59
53	Sept Op	0.24	121.7	122.27	0.58	6.62	2.23	6.74
53	Sept Clos	0.29	121.7	122.3	0.61	7.66	2.44	7.79
52	June Baseline	1.83	121.77	122.66	0.89	24.01	9.35	24.09
52	Jun Max Red	1.54	121.77	122.62	0.85	22.56	8.43	22.65
52	Jun Cons	1.74	121.77	122.64	0.88	23.57	9.07	23.66
52	Jun Op	1.58	121.77	122.62	0.85	22.79	8.57	22.87
52	Jun Clos	1.79	121.77	122.65	0.88	23.85	9.25	23.94

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
52	Sept Baseline	0.29	121.77	122.3	0.54	11.1	3.16	11.17
52	Sept Max Red	0.22	121.77	122.26	0.49	9.75	2.71	9.81
52	Sept Cons	0.28	121.77	122.29	0.53	10.82	3.07	10.88
52	Sept Op	0.24	121.77	122.27	0.5	9.97	2.83	10.03
52	Sept Clos	0.29	121.77	122.3	0.53	11.02	3.13	11.09
51	June Baseline	1.83	121.52	122.63	1.11	14.45	6.57	14.67
51	Jun Max Red	1.54	121.52	122.59	1.07	13.67	6.06	13.89
51	Jun Cons	1.74	121.52	122.62	1.1	14.22	6.41	14.44
51	Jun Op	1.58	121.52	122.6	1.08	13.8	6.14	14.01
51	Jun Clos	1.79	121.52	122.63	1.1	14.37	6.51	14.59
51	Sept Baseline	0.29	121.52	122.3	0.77	7.3	2.94	7.48
51	Sept Max Red	0.22	121.52	122.26	0.73	6.45	2.66	6.63
51	Sept Cons	0.28	121.52	122.29	0.77	7.14	2.89	7.32
51	Sept Op	0.24	121.52	122.27	0.74	6.65	2.73	6.83
51	Sept Clos	0.29	121.52	122.3	0.77	7.25	2.93	7.44
50	June Baseline	1.83	121.59	122.61	1.02	16.69	6.61	17.77
50	Jun Max Red	1.54	121.59	122.58	0.99	15.69	6.06	16.77
50	Jun Cons	1.74	121.59	122.6	1.01	16.39	6.44	17.47
50	Jun Op	1.58	121.59	122.58	1	15.85	6.14	16.92
50	Jun Clos	1.79	121.59	122.61	1.02	16.58	6.55	17.67
50	Sept Baseline	0.29	121.59	122.29	0.71	7.39	2.78	8.38
50	Sept Max Red	0.22	121.59	122.25	0.67	6.95	2.49	7.93
50	Sept Cons	0.28	121.59	122.28	0.7	7.31	2.73	8.3
50	Sept Op	0.24	121.59	122.26	0.68	7.07	2.57	8.06
50	Sept Clos	0.29	121.59	122.29	0.7	7.36	2.77	8.36
49	June Baseline	1.83	121.61	122.5	0.89	13.53	4.27	14.7
49	Jun Max Red	1.54	121.61	122.47	0.86	12.62	3.87	13.78
49	Jun Cons	1.74	121.61	122.49	0.88	13.25	4.15	14.43
49	Jun Op	1.58	121.61	122.48	0.87	12.76	3.93	13.93
49	Jun Clos	1.79	121.61	122.5	0.89	13.43	4.23	14.61
49	Sept Baseline	0.29	121.61	122.22	0.61	5.15	1.64	6.23
49	Sept Max Red	0.22	121.61	122.19	0.58	4.55	1.48	5.61
49	Sept Cons	0.28	121.61	122.22	0.6	4.97	1.61	6.05
49	Sept Op	0.24	121.61	122.2	0.59	4.57	1.52	5.63
49	Sept Clos	0.29	121.61	122.22	0.61	5.1	1.63	6.18
48	June Baseline	1.83	121.53	122.24	0.71	11.03	3.68	12.01
48	Jun Max Red	1.54	121.53	122.21	0.68	10.44	3.36	11.41
48	Jun Cons	1.74	121.53	122.23	0.7	10.85	3.58	11.83
48	Jun Op	1.58	121.53	122.22	0.69	10.53	3.4	11.5

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
48	Jun Clos	1.79	121.53	122.24	0.71	10.97	3.64	11.95
48	Sept Baseline	0.29	121.53	121.97	0.44	6.71	1.29	7.63
48	Sept Max Red	0.22	121.53	121.94	0.41	6.34	1.09	7.19
48	Sept Cons	0.28	121.53	121.96	0.43	6.6	1.26	7.51
48	Sept Op	0.24	121.53	121.95	0.41	6.43	1.15	7.3
48	Sept Clos	0.29	121.53	121.97	0.44	6.69	1.28	7.6
47	June Baseline	1.83	121.23	121.88	0.65	15.37	5.05	16.16
47	Jun Max Red	1.54	121.23	121.84	0.61	14.84	4.46	15.62
47	Jun Cons	1.74	121.23	121.87	0.64	15.21	4.87	16
47	Jun Op	1.58	121.23	121.85	0.61	14.92	4.55	15.71
47	Jun Clos	1.79	121.23	121.88	0.64	15.31	4.99	16.11
47	Sept Baseline	0.29	121.23	121.59	0.36	9.33	1.32	9.93
47	Sept Max Red	0.22	121.23	121.57	0.33	8.25	1.07	8.78
47	Sept Cons	0.28	121.23	121.59	0.35	9.13	1.27	9.72
47	Sept Op	0.24	121.23	121.57	0.34	8.55	1.13	9.09
47	Sept Clos	0.29	121.23	121.59	0.36	9.28	1.3	9.87
46	June Baseline	1.83	120.68	121.78	1.11	17.71	11.61	18.61
46	Jun Max Red	1.54	120.68	121.74	1.06	17.22	10.78	18.11
46	Jun Cons	1.74	120.68	121.77	1.09	17.56	11.36	18.46
46	Jun Op	1.58	120.68	121.74	1.07	17.29	10.91	18.19
46	Jun Clos	1.79	120.68	121.78	1.1	17.65	11.52	18.56
46	Sept Baseline	0.29	120.68	121.39	0.71	13.78	5.48	14.53
46	Sept Max Red	0.22	120.68	121.35	0.67	13.62	4.91	14.35
46	Sept Cons	0.28	120.68	121.39	0.71	13.75	5.37	14.5
46	Sept Op	0.24	120.68	121.36	0.68	13.66	5.06	14.4
46	Sept Clos	0.29	120.68	121.39	0.71	13.77	5.45	14.52
45	June Baseline	1.83	120.7	121.77	1.07	14.83	8.22	15.15
45	Jun Max Red	1.54	120.7	121.73	1.02	14.06	7.55	14.36
45	Jun Cons	1.74	120.7	121.76	1.05	14.6	8.02	14.91
45	Jun Op	1.58	120.7	121.73	1.03	14.18	7.66	14.48
45	Jun Clos	1.79	120.7	121.77	1.06	14.75	8.15	15.06
45	Sept Baseline	0.29	120.7	121.39	0.69	7.98	3.88	8.23
45	Sept Max Red	0.22	120.7	121.35	0.65	7.78	3.56	8.01
45	Sept Cons	0.28	120.7	121.38	0.68	7.95	3.82	8.19
45	Sept Op	0.24	120.7	121.36	0.66	7.83	3.65	8.07
45	Sept Clos	0.29	120.7	121.39	0.68	7.97	3.87	8.22
44	June Baseline	1.83	120.36	121.77	1.41	20.37	18.73	20.82
44	Jun Max Red	1.54	120.36	121.73	1.36	19.76	17.8	20.2
44	Jun Cons	1.74	120.36	121.76	1.39	20.18	18.45	20.64

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
44	Jun Op	1.58	120.36	121.73	1.37	19.85	17.94	20.3
44	Jun Clos	1.79	120.36	121.77	1.4	20.3	18.63	20.76
44	Sept Baseline	0.29	120.36	121.39	1.03	15.42	11.91	15.77
44	Sept Max Red	0.22	120.36	121.35	0.99	15.19	11.29	15.52
44	Sept Cons	0.28	120.36	121.38	1.02	15.38	11.79	15.73
44	Sept Op	0.24	120.36	121.36	1	15.25	11.45	15.59
44	Sept Clos	0.29	120.36	121.39	1.02	15.41	11.87	15.76
43	June Baseline	1.83	120.73	121.77	1.03	12.38	6.6	12.61
43	Jun Max Red	1.54	120.73	121.72	0.99	11.72	6.05	11.95
43	Jun Cons	1.74	120.73	121.75	1.02	12.18	6.43	12.41
43	Jun Op	1.58	120.73	121.73	1	11.82	6.13	12.05
43	Jun Clos	1.79	120.73	121.76	1.03	12.31	6.54	12.54
43	Sept Baseline	0.29	120.73	121.39	0.66	6.92	2.97	7.1
43	Sept Max Red	0.22	120.73	121.35	0.62	6.66	2.69	6.82
43	Sept Cons	0.28	120.73	121.38	0.65	6.87	2.92	7.05
43	Sept Op	0.24	120.73	121.36	0.63	6.73	2.77	6.9
43	Sept Clos	0.29	120.73	121.39	0.66	6.91	2.95	7.09
42	June Baseline	1.83	120.59	121.74	1.16	12.3	5.6	12.7
42	Jun Max Red	1.54	120.59	121.7	1.11	11.44	5.08	11.83
42	Jun Cons	1.74	120.59	121.73	1.15	12.04	5.44	12.44
42	Jun Op	1.58	120.59	121.71	1.12	11.57	5.16	11.97
42	Jun Clos	1.79	120.59	121.74	1.15	12.21	5.54	12.61
42	Sept Baseline	0.29	120.59	121.38	0.8	5.17	2.46	5.51
42	Sept Max Red	0.22	120.59	121.35	0.76	4.59	2.27	4.92
42	Sept Cons	0.28	120.59	121.38	0.79	5.03	2.42	5.37
42	Sept Op	0.24	120.59	121.36	0.77	4.62	2.32	4.96
42	Sept Clos	0.29	120.59	121.38	0.8	5.13	2.45	5.47
41	June Baseline	1.83	120.81	121.7	0.89	9.79	3.53	10.02
41	Jun Max Red	1.54	120.81	121.66	0.85	9.09	3.16	9.32
41	Jun Cons	1.74	120.81	121.69	0.87	9.58	3.42	9.81
41	Jun Op	1.58	120.81	121.66	0.85	9.2	3.22	9.43
41	Jun Clos	1.79	120.81	121.69	0.88	9.71	3.49	9.94
41	Sept Baseline	0.29	120.81	121.37	0.56	4.09	1.28	4.29
41	Sept Max Red	0.22	120.81	121.34	0.53	3.55	1.15	3.74
41	Sept Cons	0.28	120.81	121.37	0.56	3.97	1.26	4.17
41	Sept Op	0.24	120.81	121.35	0.54	3.62	1.18	3.81
41	Sept Clos	0.29	120.81	121.37	0.56	4.06	1.28	4.25
40	June Baseline	1.83	120.92	121.64	0.72	12.84	4.4	13.6
40	Jun Max Red	1.54	120.92	121.59	0.67	11.99	3.86	12.74

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
40	Jun Cons	1.74	120.92	121.62	0.7	12.58	4.23	13.34
40	Jun Op	1.58	120.92	121.6	0.68	12.12	3.94	12.88
40	Jun Clos	1.79	120.92	121.63	0.71	12.75	4.34	13.51
40	Sept Baseline	0.29	120.92	121.29	0.38	6.04	1.15	6.7
40	Sept Max Red	0.22	120.92	121.26	0.34	5.68	0.96	6.31
40	Sept Cons	0.28	120.92	121.29	0.37	5.97	1.11	6.64
40	Sept Op	0.24	120.92	121.27	0.35	5.79	1.01	6.43
40	Sept Clos	0.29	120.92	121.29	0.37	6.02	1.14	6.69
39	June Baseline	1.83	120.51	121.6	1.09	10.09	5.76	10.81
39	Jun Max Red	1.54	120.51	121.55	1.04	9.53	5.27	10.24
39	Jun Cons	1.74	120.51	121.58	1.07	9.92	5.6	10.64
39	Jun Op	1.58	120.51	121.55	1.04	9.62	5.34	10.33
39	Jun Clos	1.79	120.51	121.59	1.08	10.03	5.7	10.75
39	Sept Baseline	0.29	120.51	121.15	0.64	5.12	2.38	5.74
39	Sept Max Red	0.22	120.51	121.1	0.59	4.63	2.14	5.24
39	Sept Cons	0.28	120.51	121.14	0.63	5.02	2.33	5.64
39	Sept Op	0.24	120.51	121.12	0.61	4.76	2.2	5.37
39	Sept Clos	0.29	120.51	121.15	0.64	5.09	2.36	5.72
38	June Baseline	1.83	120.46	121.56	1.09	12.57	6.45	12.84
38	Jun Max Red	1.54	120.46	121.51	1.05	11.84	5.87	12.1
38	Jun Cons	1.74	120.46	121.54	1.08	12.35	6.27	12.62
38	Jun Op	1.58	120.46	121.52	1.05	11.95	5.95	12.22
38	Jun Clos	1.79	120.46	121.55	1.09	12.49	6.38	12.76
38	Sept Baseline	0.29	120.46	121.14	0.67	6.08	2.51	6.29
38	Sept Max Red	0.22	120.46	121.09	0.63	5.39	2.26	5.6
38	Sept Cons	0.28	120.46	121.13	0.66	5.95	2.46	6.17
38	Sept Op	0.24	120.46	121.1	0.64	5.58	2.32	5.79
38	Sept Clos	0.29	120.46	121.13	0.67	6.05	2.5	6.26
37	June Baseline	1.83	120.44	121.55	1.11	8.89	5.43	9.31
37	Jun Max Red	1.54	120.44	121.51	1.07	8.48	5.02	8.89
37	Jun Cons	1.74	120.44	121.54	1.1	8.77	5.31	9.18
37	Jun Op	1.58	120.44	121.51	1.07	8.55	5.09	8.96
37	Jun Clos	1.79	120.44	121.55	1.11	8.85	5.39	9.27
37	Sept Baseline	0.29	120.44	121.14	0.7	5.22	2.49	5.55
37	Sept Max Red	0.22	120.44	121.09	0.65	4.83	2.26	5.14
37	Sept Cons	0.28	120.44	121.13	0.69	5.15	2.44	5.47
37	Sept Op	0.24	120.44	121.1	0.66	4.94	2.32	5.25
37	Sept Clos	0.29	120.44	121.13	0.69	5.2	2.48	5.52

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
36	June Baseline	1.83	120.65	121.53	0.88	10.62	3.91	11.18
36	Jun Max Red	1.54	120.65	121.48	0.83	9.52	3.45	10.08
36	Jun Cons	1.74	120.65	121.51	0.86	10.29	3.77	10.85
36	Jun Op	1.58	120.65	121.49	0.84	9.69	3.52	10.25
36	Jun Clos	1.79	120.65	121.52	0.87	10.5	3.86	11.06
36	Sept Baseline	0.29	120.65	121.12	0.47	4.16	1.24	4.65
36	Sept Max Red	0.22	120.65	121.08	0.43	3.82	1.07	4.29
36	Sept Cons	0.28	120.65	121.12	0.46	4.1	1.2	4.58
36	Sept Op	0.24	120.65	121.09	0.44	3.9	1.11	4.38
36	Sept Clos	0.29	120.65	121.12	0.47	4.14	1.23	4.63
35	June Baseline	1.83	120.31	121.5	1.18	9.37	5.27	9.76
35	Jun Max Red	1.54	120.31	121.45	1.14	8.86	4.86	9.24
35	Jun Cons	1.74	120.31	121.48	1.17	9.21	5.14	9.6
35	Jun Op	1.58	120.31	121.46	1.14	8.94	4.93	9.32
35	Jun Clos	1.79	120.31	121.49	1.18	9.31	5.22	9.7
35	Sept Baseline	0.29	120.31	121.11	0.8	5.21	2.46	5.53
35	Sept Max Red	0.22	120.31	121.07	0.75	4.71	2.26	5.02
35	Sept Cons	0.28	120.31	121.1	0.79	5.11	2.43	5.43
35	Sept Op	0.24	120.31	121.08	0.77	4.81	2.32	5.12
35	Sept Clos	0.29	120.31	121.11	0.79	5.19	2.45	5.5
34	June Baseline	1.83	120.67	121.43	0.76	7.9	2.83	8.68
34	Jun Max Red	1.54	120.67	121.39	0.72	7.28	2.53	8.06
34	Jun Cons	1.74	120.67	121.41	0.74	7.71	2.74	8.49
34	Jun Op	1.58	120.67	121.39	0.72	7.38	2.57	8.15
34	Jun Clos	1.79	120.67	121.42	0.75	7.83	2.8	8.62
34	Sept Baseline	0.29	120.67	121.08	0.41	4.05	0.89	4.75
34	Sept Max Red	0.22	120.67	121.04	0.37	3.76	0.74	4.43
34	Sept Cons	0.28	120.67	121.07	0.4	4	0.86	4.7
34	Sept Op	0.24	120.67	121.05	0.38	3.84	0.78	4.53
34	Sept Clos	0.29	120.67	121.07	0.41	4.03	0.88	4.74
33	June Baseline	1.83	120.49	121.34	0.85	8.29	2.85	8.82
33	Jun Max Red	1.54	120.49	121.31	0.81	7.55	2.54	8.09
33	Jun Cons	1.74	120.49	121.33	0.84	8.06	2.75	8.59
33	Jun Op	1.58	120.49	121.31	0.82	7.66	2.58	8.2
33	Jun Clos	1.79	120.49	121.34	0.85	8.21	2.82	8.74
33	Sept Baseline	0.29	120.49	121.02	0.53	4.09	1.03	4.51
33	Sept Max Red	0.22	120.49	120.99	0.5	3.88	0.89	4.25
33	Sept Cons	0.28	120.49	121.02	0.52	4.06	1	4.46
33	Sept Op	0.24	120.49	121	0.5	3.94	0.92	4.33
33	Sept Clos	0.29	120.49	121.02	0.53	4.08	1.02	4.5

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
32	June Baseline	1.83	120.67	121.27	0.6	11.05	2.61	11.36
32	Jun Max Red	1.54	120.67	121.22	0.55	9.15	2.05	9.45
32	Jun Cons	1.74	120.67	121.26	0.59	10.43	2.42	10.74
32	Jun Op	1.58	120.67	121.23	0.56	9.4	2.13	9.71
32	Jun Clos	1.79	120.67	121.27	0.6	10.83	2.54	11.14
32	Sept Baseline	0.29	120.67	120.94	0.27	3.2	0.56	3.44
32	Sept Max Red	0.22	120.67	120.91	0.24	2.96	0.47	3.18
32	Sept Cons	0.28	120.67	120.94	0.27	3.16	0.55	3.39
32	Sept Op	0.24	120.67	120.92	0.25	3.03	0.5	3.25
32	Sept Clos	0.29	120.67	120.94	0.27	3.19	0.56	3.43
31	June Baseline	1.83	120.39	121.22	0.83	8.91	4.24	9.43
31	Jun Max Red	1.54	120.39	121.16	0.77	8.38	3.66	8.88
31	Jun Cons	1.74	120.39	121.2	0.81	8.75	4.06	9.26
31	Jun Op	1.58	120.39	121.17	0.78	8.46	3.74	8.97
31	Jun Clos	1.79	120.39	121.22	0.83	8.86	4.17	9.37
31	Sept Baseline	0.29	120.39	120.72	0.32	4.79	0.73	5.17
31	Sept Max Red	0.22	120.39	120.68	0.29	4.37	0.58	4.73
31	Sept Cons	0.28	120.39	120.71	0.32	4.71	0.7	5.08
31	Sept Op	0.24	120.39	120.69	0.3	4.48	0.62	4.84
31	Sept Clos	0.29	120.39	120.71	0.32	4.77	0.72	5.14
30	June Baseline	1.83	120.26	121.22	0.96	16.39	8.23	16.81
30	Jun Max Red	1.54	120.26	121.16	0.89	14.17	7.21	14.58
30	Jun Cons	1.74	120.26	121.2	0.94	15.17	7.9	15.59
30	Jun Op	1.58	120.26	121.17	0.9	14.3	7.36	14.71
30	Jun Clos	1.79	120.26	121.22	0.95	15.96	8.11	16.38
30	Sept Baseline	0.29	120.26	120.67	0.4	8.06	1.77	8.38
30	Sept Max Red	0.22	120.26	120.61	0.35	7.41	1.36	7.71
30	Sept Cons	0.28	120.26	120.66	0.39	7.94	1.69	8.25
30	Sept Op	0.24	120.26	120.63	0.36	7.58	1.47	7.88
30	Sept Clos	0.29	120.26	120.66	0.4	8.03	1.75	8.34
29	June Baseline	1.83	119.68	121.22	1.54	20.21	16.47	20.65
29	Jun Max Red	1.54	119.68	121.16	1.47	19.06	15.13	19.49
29	Jun Cons	1.74	119.68	121.2	1.52	19.86	16.05	20.29
29	Jun Op	1.58	119.68	121.17	1.48	19.24	15.33	19.67
29	Jun Clos	1.79	119.68	121.22	1.53	20.09	16.32	20.52
29	Sept Baseline	0.29	119.68	120.67	0.98	11.86	7.7	12.21
29	Sept Max Red	0.22	119.68	120.61	0.93	10.92	7.09	11.26
29	Sept Cons	0.28	119.68	120.66	0.97	11.68	7.58	12.03
29	Sept Op	0.24	119.68	120.63	0.94	11.16	7.25	11.51
29	Sept Clos	0.29	119.68	120.66	0.98	11.81	7.66	12.16

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
28	June Baseline	1.83	119.62	121.22	1.6	31.5	32.46	31.9
28	Jun Max Red	1.54	119.62	121.16	1.53	30.27	30.34	30.66
28	Jun Cons	1.74	119.62	121.2	1.58	31.12	31.8	31.52
28	Jun Op	1.58	119.62	121.17	1.54	30.46	30.66	30.85
28	Jun Clos	1.79	119.62	121.22	1.59	31.36	32.23	31.77
28	Sept Baseline	0.29	119.62	120.67	1.04	21.46	17.66	21.8
28	Sept Max Red	0.22	119.62	120.61	0.99	20.61	16.55	20.94
28	Sept Cons	0.28	119.62	120.66	1.03	21.28	17.45	21.62
28	Sept Op	0.24	119.62	120.63	1	20.82	16.83	21.16
28	Sept Clos	0.29	119.62	120.66	1.04	21.41	17.6	21.75
27	June Baseline	1.83	119.37	121.22	1.85	22.38	23.66	22.92
27	Jun Max Red	1.54	119.37	121.16	1.78	21.17	22.17	21.7
27	Jun Cons	1.74	119.37	121.2	1.83	22.01	23.19	22.55
27	Jun Op	1.58	119.37	121.17	1.79	21.36	22.39	21.89
27	Jun Clos	1.79	119.37	121.22	1.84	22.25	23.5	22.79
27	Sept Baseline	0.29	119.37	120.67	1.29	15.46	13.4	15.86
27	Sept Max Red	0.22	119.37	120.61	1.24	14.97	12.59	15.35
27	Sept Cons	0.28	119.37	120.66	1.28	15.37	13.24	15.76
27	Sept Op	0.24	119.37	120.63	1.25	15.1	12.8	15.48
27	Sept Clos	0.29	119.37	120.66	1.29	15.44	13.36	15.83
26	June Baseline	1.83	120.2	121.22	1.02	12.29	5.87	13.42
26	Jun Max Red	1.54	120.2	121.15	0.95	11.04	5.07	12.16
26	Jun Cons	1.74	120.2	121.2	1	11.91	5.61	13.03
26	Jun Op	1.58	120.2	121.16	0.96	11.24	5.19	12.36
26	Jun Clos	1.79	120.2	121.21	1.01	12.16	5.78	13.28
26	Sept Baseline	0.29	120.2	120.66	0.47	4.73	1.59	5.47
26	Sept Max Red	0.22	120.2	120.61	0.41	4.4	1.35	5.06
26	Sept Cons	0.28	120.2	120.65	0.46	4.67	1.54	5.39
26	Sept Op	0.24	120.2	120.62	0.43	4.49	1.41	5.17
26	Sept Clos	0.29	120.2	120.66	0.46	4.72	1.58	5.45
25	June Baseline	1.83	120.18	121.21	1.03	11.43	5.76	11.82
25	Jun Max Red	1.54	120.18	121.14	0.97	10.5	5.01	10.88
25	Jun Cons	1.74	120.18	121.19	1.01	11.14	5.52	11.53
25	Jun Op	1.58	120.18	121.15	0.98	10.64	5.12	11.03
25	Jun Clos	1.79	120.18	121.2	1.03	11.33	5.67	11.72
25	Sept Baseline	0.29	120.18	120.66	0.48	4.3	1.51	4.6
25	Sept Max Red	0.22	120.18	120.61	0.43	3.84	1.3	4.13
25	Sept Cons	0.28	120.18	120.65	0.47	4.21	1.47	4.51
25	Sept Op	0.24	120.18	120.62	0.44	3.96	1.35	4.25
25	Sept Clos	0.29	120.18	120.66	0.48	4.28	1.5	4.58

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
24	June Baseline	1.83	119.45	121.21	1.77	13.45	11.8	14.42
24	Jun Max Red	1.54	119.45	121.15	1.7	12.54	10.92	13.49
24	Jun Cons	1.74	119.45	121.19	1.75	13.17	11.53	14.13
24	Jun Op	1.58	119.45	121.16	1.71	12.68	11.05	13.64
24	Jun Clos	1.79	119.45	121.21	1.76	13.36	11.71	14.32
24	Sept Baseline	0.29	119.45	120.66	1.21	7.24	6.28	8.09
24	Sept Max Red	0.22	119.45	120.61	1.16	6.91	5.91	7.74
24	Sept Cons	0.28	119.45	120.65	1.2	7.18	6.21	8.02
24	Sept Op	0.24	119.45	120.62	1.17	7	6	7.83
24	Sept Clos	0.29	119.45	120.66	1.21	7.23	6.26	8.07
23	June Baseline	1.83	120.14	121.2	1.07	9.74	5.22	10.22
23	Jun Max Red	1.54	120.14	121.14	1	8.95	4.59	9.42
23	Jun Cons	1.74	120.14	121.18	1.04	9.5	5.02	9.98
23	Jun Op	1.58	120.14	121.15	1.01	9.07	4.69	9.54
23	Jun Clos	1.79	120.14	121.2	1.06	9.66	5.15	10.14
23	Sept Baseline	0.29	120.14	120.66	0.52	4.32	1.53	4.69
23	Sept Max Red	0.22	120.14	120.61	0.47	3.96	1.32	4.31
23	Sept Cons	0.28	120.14	120.65	0.51	4.26	1.49	4.61
23	Sept Op	0.24	120.14	120.62	0.48	4.06	1.37	4.41
23	Sept Clos	0.29	120.14	120.65	0.52	4.31	1.52	4.67
22	June Baseline	1.83	119.34	121.21	1.87	22.36	26.3	23.1
22	Jun Max Red	1.54	119.34	121.14	1.8	21.57	24.81	22.31
22	Jun Cons	1.74	119.34	121.19	1.85	22.12	25.83	22.86
22	Jun Op	1.58	119.34	121.15	1.81	21.69	25.03	22.43
22	Jun Clos	1.79	119.34	121.2	1.86	22.27	26.13	23.02
22	Sept Baseline	0.29	119.34	120.66	1.32	15.54	15.8	16.19
22	Sept Max Red	0.22	119.34	120.61	1.27	14.83	15.01	15.47
22	Sept Cons	0.28	119.34	120.65	1.31	15.4	15.65	16.05
22	Sept Op	0.24	119.34	120.62	1.28	15.01	15.22	15.66
22	Sept Clos	0.29	119.34	120.65	1.31	15.5	15.76	16.15
21	June Baseline	1.83	120	121.2	1.2	13.12	7.81	13.47
21	Jun Max Red	1.54	120	121.14	1.13	12.16	6.96	12.5
21	Jun Cons	1.74	120	121.18	1.18	12.82	7.54	13.18
21	Jun Op	1.58	120	121.15	1.14	12.31	7.09	12.65
21	Jun Clos	1.79	120	121.2	1.19	13.02	7.72	13.37
21	Sept Baseline	0.29	120	120.66	0.66	5.94	2.75	6.21
21	Sept Max Red	0.22	120	120.6	0.6	5.54	2.45	5.79
21	Sept Cons	0.28	120	120.65	0.65	5.86	2.69	6.13
21	Sept Op	0.24	120	120.62	0.62	5.64	2.52	5.9
21	Sept Clos	0.29	120	120.65	0.65	5.92	2.73	6.19

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
20	June Baseline	1.83	120.16	120.95	0.79	2.58	1	3.11
20	Jun Max Red	1.54	120.16	120.9	0.73	2.38	0.86	2.88
20	Jun Cons	1.74	120.16	120.93	0.77	2.52	0.95	3.04
20	Jun Op	1.58	120.16	120.9	0.74	2.41	0.88	2.91
20	Jun Clos	1.79	120.16	120.95	0.79	2.56	0.98	3.09
20	Sept Baseline	0.29	120.16	120.51	0.35	1.06	0.21	1.3
20	Sept Max Red	0.22	120.16	120.49	0.33	1	0.19	1.23
20	Sept Cons	0.28	120.16	120.51	0.35	1.05	0.2	1.29
20	Sept Op	0.24	120.16	120.5	0.34	1.01	0.19	1.24
20	Sept Clos	0.29	120.16	120.51	0.35	1.05	0.21	1.29
19	June Baseline	1.83	119.85	121	1.15	11.4	6.79	11.91
19	Jun Max Red	1.54	119.85	120.92	1.06	10.42	5.91	10.93
19	Jun Cons	1.74	119.85	120.97	1.12	11.09	6.51	11.61
19	Jun Op	1.58	119.85	120.93	1.08	10.57	6.04	11.08
19	Jun Clos	1.79	119.85	120.99	1.14	11.29	6.69	11.8
19	Sept Baseline	0.29	119.85	120.52	0.67	5.73	2.72	6.16
19	Sept Max Red	0.22	119.85	120.5	0.64	5.66	2.58	6.07
19	Sept Cons	0.28	119.85	120.52	0.66	5.72	2.69	6.14
19	Sept Op	0.24	119.85	120.5	0.65	5.67	2.62	6.09
19	Sept Clos	0.29	119.85	120.52	0.67	5.73	2.71	6.15
18	June Baseline	1.83	119.59	121	1.41	22.58	21.75	23.34
18	Jun Max Red	1.54	119.59	120.92	1.33	21.15	19.97	21.9
18	Jun Cons	1.74	119.59	120.98	1.38	22.12	21.18	22.88
18	Jun Op	1.58	119.59	120.93	1.34	21.35	20.23	22.1
18	Jun Clos	1.79	119.59	120.99	1.4	22.41	21.54	23.18
18	Sept Baseline	0.29	119.59	120.52	0.93	17.94	12.39	18.55
18	Sept Max Red	0.22	119.59	120.5	0.91	17.87	11.95	18.46
18	Sept Cons	0.28	119.59	120.52	0.93	17.93	12.3	18.53
18	Sept Op	0.24	119.59	120.5	0.91	17.89	12.06	18.48
18	Sept Clos	0.29	119.59	120.52	0.93	17.94	12.36	18.54
17	June Baseline	1.83	119.83	120.99	1.16	12.52	6.29	12.86
17	Jun Max Red	1.54	119.83	120.91	1.08	11.11	5.33	11.44
17	Jun Cons	1.74	119.83	120.97	1.13	12.08	5.98	12.42
17	Jun Op	1.58	119.83	120.92	1.09	11.32	5.47	11.66
17	Jun Clos	1.79	119.83	120.98	1.15	12.36	6.18	12.7
17	Sept Baseline	0.29	119.83	120.52	0.69	5.29	2.19	5.54
17	Sept Max Red	0.22	119.83	120.5	0.66	5.16	2.07	5.4
17	Sept Cons	0.28	119.83	120.52	0.68	5.26	2.17	5.51
17	Sept Op	0.24	119.83	120.5	0.67	5.19	2.1	5.44
17	Sept Clos	0.29	119.83	120.52	0.68	5.28	2.19	5.53

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
16	June Baseline	1.83	119.92	120.99	1.07	12.5	5.74	13.01
16	Jun Max Red	1.54	119.92	120.91	0.99	10.36	4.8	10.86
16	Jun Cons	1.74	119.92	120.96	1.05	11.8	5.42	12.31
16	Jun Op	1.58	119.92	120.92	1	10.61	4.93	11.11
16	Jun Clos	1.79	119.92	120.98	1.06	12.25	5.62	12.75
16	Sept Baseline	0.29	119.92	120.52	0.6	4.76	1.95	5.17
16	Sept Max Red	0.22	119.92	120.5	0.58	4.65	1.84	5.04
16	Sept Cons	0.28	119.92	120.51	0.6	4.74	1.93	5.14
16	Sept Op	0.24	119.92	120.5	0.59	4.68	1.87	5.07
16	Sept Clos	0.29	119.92	120.52	0.6	4.75	1.94	5.16
15	June Baseline	1.83	119.63	120.98	1.35	12.1	7.44	12.54
15	Jun Max Red	1.54	119.63	120.9	1.27	11.23	6.49	11.66
15	Jun Cons	1.74	119.63	120.96	1.32	11.83	7.14	12.26
15	Jun Op	1.58	119.63	120.91	1.28	11.36	6.63	11.79
15	Jun Clos	1.79	119.63	120.97	1.34	12	7.33	12.44
15	Sept Baseline	0.29	119.63	120.52	0.88	5.57	3.09	5.92
15	Sept Max Red	0.22	119.63	120.49	0.86	5.48	2.96	5.82
15	Sept Cons	0.28	119.63	120.51	0.88	5.55	3.06	5.9
15	Sept Op	0.24	119.63	120.5	0.87	5.5	2.99	5.85
15	Sept Clos	0.29	119.63	120.52	0.88	5.57	3.08	5.92
14	June Baseline	1.83	119.9	120.98	1.07	11.01	6.36	11.34
14	Jun Max Red	1.54	119.9	120.9	0.99	10.3	5.48	10.6
14	Jun Cons	1.74	119.9	120.95	1.05	10.79	6.08	11.11
14	Jun Op	1.58	119.9	120.91	1.01	10.41	5.61	10.71
14	Jun Clos	1.79	119.9	120.97	1.07	10.93	6.26	11.26
14	Sept Baseline	0.29	119.9	120.52	0.61	5.65	2.33	5.88
14	Sept Max Red	0.22	119.9	120.49	0.59	5.56	2.21	5.78
14	Sept Cons	0.28	119.9	120.51	0.61	5.63	2.31	5.86
14	Sept Op	0.24	119.9	120.5	0.6	5.58	2.24	5.81
14	Sept Clos	0.29	119.9	120.51	0.61	5.64	2.33	5.88
13	June Baseline	1.83	119.38	120.97	1.59	9.37	7.74	10.02
13	Jun Max Red	1.54	119.38	120.89	1.51	8.49	7.01	9.13
13	Jun Cons	1.74	119.38	120.95	1.56	9.1	7.51	9.74
13	Jun Op	1.58	119.38	120.9	1.52	8.62	7.12	9.26
13	Jun Clos	1.79	119.38	120.96	1.58	9.28	7.66	9.92
13	Sept Baseline	0.29	119.38	120.52	1.13	6.02	4.33	6.54
13	Sept Max Red	0.22	119.38	120.49	1.11	5.96	4.2	6.46
13	Sept Cons	0.28	119.38	120.51	1.13	6.01	4.31	6.52
13	Sept Op	0.24	119.38	120.5	1.11	5.97	4.23	6.48
13	Sept Clos	0.29	119.38	120.51	1.13	6.02	4.32	6.54

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
12	June Baseline	1.83	119.8	120.97	1.17	9.47	6.05	9.99
12	Jun Max Red	1.54	119.8	120.89	1.09	8.57	5.31	9.08
12	Jun Cons	1.74	119.8	120.94	1.14	9.19	5.81	9.7
12	Jun Op	1.58	119.8	120.9	1.1	8.71	5.42	9.21
12	Jun Clos	1.79	119.8	120.96	1.16	9.37	5.96	9.89
12	Sept Baseline	0.29	119.8	120.51	0.72	5.17	2.76	5.58
12	Sept Max Red	0.22	119.8	120.49	0.69	5.1	2.65	5.5
12	Sept Cons	0.28	119.8	120.51	0.71	5.16	2.74	5.57
12	Sept Op	0.24	119.8	120.5	0.7	5.12	2.68	5.52
12	Sept Clos	0.29	119.8	120.51	0.71	5.17	2.76	5.58
11	June Baseline	1.83	119.35	120.97	1.62	22.73	26.41	23.24
11	Jun Max Red	1.54	119.35	120.89	1.54	21.29	24.62	21.79
11	Jun Cons	1.74	119.35	120.95	1.6	22.28	25.84	22.78
11	Jun Op	1.58	119.35	120.9	1.55	21.5	24.88	22
11	Jun Clos	1.79	119.35	120.96	1.61	22.57	26.21	23.08
11	Sept Baseline	0.29	119.35	120.51	1.17	18.53	17.24	18.91
11	Sept Max Red	0.22	119.35	120.49	1.14	18.4	16.84	18.77
11	Sept Cons	0.28	119.35	120.51	1.16	18.51	17.16	18.89
11	Sept Op	0.24	119.35	120.5	1.15	18.44	16.94	18.81
11	Sept Clos	0.29	119.35	120.51	1.16	18.53	17.21	18.91
10	June Baseline	1.83	119.86	120.97	1.1	20.67	9.66	20.94
10	Jun Max Red	1.54	119.86	120.89	1.02	17.84	8.08	18.1
10	Jun Cons	1.74	119.86	120.94	1.08	19.78	9.14	20.05
10	Jun Op	1.58	119.86	120.9	1.03	18.26	8.3	18.52
10	Jun Clos	1.79	119.86	120.96	1.09	20.35	9.47	20.62
10	Sept Baseline	0.29	119.86	120.51	0.65	7.63	3.6	7.86
10	Sept Max Red	0.22	119.86	120.49	0.63	7.52	3.43	7.75
10	Sept Cons	0.28	119.86	120.51	0.65	7.61	3.56	7.84
10	Sept Op	0.24	119.86	120.5	0.63	7.55	3.47	7.78
10	Sept Clos	0.29	119.86	120.51	0.65	7.63	3.59	7.86
9	June Baseline	1.83	119.29	120.97	1.68	34.25	36.43	34.57
9	Jun Max Red	1.54	119.29	120.89	1.59	33.43	33.67	33.73
9	Jun Cons	1.74	119.29	120.94	1.65	33.99	35.56	34.31
9	Jun Op	1.58	119.29	120.9	1.61	33.55	34.08	33.85
9	Jun Clos	1.79	119.29	120.96	1.67	34.16	36.12	34.47
9	Sept Baseline	0.29	119.29	120.51	1.22	28.69	21.95	28.91
9	Sept Max Red	0.22	119.29	120.49	1.2	28.39	21.33	28.61
9	Sept Cons	0.28	119.29	120.51	1.22	28.62	21.82	28.85
9	Sept Op	0.24	119.29	120.5	1.21	28.46	21.48	28.69
9	Sept Clos	0.29	119.29	120.51	1.22	28.66	21.91	28.89

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
8	June Baseline	1.83	119.31	120.97	1.66	29.51	27.14	29.84
8	Jun Max Red	1.54	119.31	120.89	1.58	28.49	24.77	28.8
8	Jun Cons	1.74	119.31	120.94	1.64	29.19	26.39	29.51
8	Jun Op	1.58	119.31	120.9	1.59	28.64	25.12	28.96
8	Jun Clos	1.79	119.31	120.96	1.65	29.39	26.87	29.72
8	Sept Baseline	0.29	119.31	120.51	1.21	19.34	15.66	19.6
8	Sept Max Red	0.22	119.31	120.49	1.18	18.94	15.25	19.2
8	Sept Cons	0.28	119.31	120.51	1.2	19.2	15.58	19.46
8	Sept Op	0.24	119.31	120.5	1.19	18.99	15.36	19.25
8	Sept Clos	0.29	119.31	120.51	1.21	19.3	15.64	19.56
7	June Baseline	1.83	119.48	120.97	1.48	15.31	12.69	15.78
7	Jun Max Red	1.54	119.48	120.88	1.4	14.09	11.49	14.54
7	Jun Cons	1.74	119.48	120.94	1.46	14.93	12.3	15.39
7	Jun Op	1.58	119.48	120.9	1.41	14.27	11.66	14.72
7	Jun Clos	1.79	119.48	120.96	1.47	15.18	12.55	15.64
7	Sept Baseline	0.29	119.48	120.51	1.03	9.58	7.17	9.96
7	Sept Max Red	0.22	119.48	120.49	1.01	9.49	6.96	9.86
7	Sept Cons	0.28	119.48	120.51	1.03	9.56	7.13	9.94
7	Sept Op	0.24	119.48	120.5	1.02	9.51	7.01	9.88
7	Sept Clos	0.29	119.48	120.51	1.03	9.58	7.16	9.95
6	June Baseline	1.83	119.23	120.97	1.73	20.52	21.99	20.96
6	Jun Max Red	1.54	119.23	120.88	1.65	19.59	20.36	20.01
6	Jun Cons	1.74	119.23	120.94	1.71	20.23	21.47	20.66
6	Jun Op	1.58	119.23	120.9	1.66	19.73	20.6	20.15
6	Jun Clos	1.79	119.23	120.96	1.72	20.42	21.81	20.85
6	Sept Baseline	0.29	119.23	120.51	1.28	15.46	13.87	15.81
6	Sept Max Red	0.22	119.23	120.49	1.26	15.3	13.55	15.64
6	Sept Cons	0.28	119.23	120.51	1.28	15.41	13.81	15.76
6	Sept Op	0.24	119.23	120.5	1.26	15.33	13.63	15.68
6	Sept Clos	0.29	119.23	120.51	1.28	15.44	13.86	15.79
5	June Baseline	1.83	119.82	120.96	1.15	16.17	8.58	16.46
5	Jun Max Red	1.54	119.82	120.88	1.07	14.66	7.32	14.94
5	Jun Cons	1.74	119.82	120.94	1.12	15.69	8.17	15.98
5	Jun Op	1.58	119.82	120.89	1.08	14.88	7.5	15.16
5	Jun Clos	1.79	119.82	120.95	1.14	16	8.43	16.29
5	Sept Baseline	0.29	119.82	120.51	0.7	6.89	3.32	7.13
5	Sept Max Red	0.22	119.82	120.49	0.68	6.64	3.17	6.88
5	Sept Cons	0.28	119.82	120.51	0.69	6.8	3.29	7.04
5	Sept Op	0.24	119.82	120.5	0.68	6.67	3.21	6.91
5	Sept Clos	0.29	119.82	120.51	0.7	6.86	3.31	7.11

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
4	June Baseline	1.83	119.91	120.96	1.05	18.4	8.84	18.67
4	Jun Max Red	1.54	119.91	120.88	0.97	16.68	7.41	16.94
4	Jun Cons	1.74	119.91	120.93	1.03	17.86	8.38	18.13
4	Jun Op	1.58	119.91	120.89	0.98	16.94	7.61	17.2
4	Jun Clos	1.79	119.91	120.95	1.04	18.21	8.67	18.48
4	Sept Baseline	0.29	119.91	120.51	0.61	6.76	2.99	7
4	Sept Max Red	0.22	119.91	120.49	0.59	6.39	2.86	6.62
4	Sept Cons	0.28	119.91	120.51	0.6	6.64	2.96	6.87
4	Sept Op	0.24	119.91	120.5	0.59	6.42	2.89	6.65
4	Sept Clos	0.29	119.91	120.51	0.61	6.73	2.98	6.96
3	June Baseline	1.83	119.58	120.95	1.37	18.66	10.21	19.03
3	Jun Max Red	1.54	119.58	120.87	1.29	16.36	8.78	16.72
3	Jun Cons	1.74	119.58	120.93	1.35	17.94	9.74	18.3
3	Jun Op	1.58	119.58	120.89	1.3	16.71	8.98	17.07
3	Jun Clos	1.79	119.58	120.95	1.36	18.4	10.04	18.77
3	Sept Baseline	0.29	119.58	120.51	0.93	7.81	4.49	8.12
3	Sept Max Red	0.22	119.58	120.49	0.91	7.42	4.33	7.73
3	Sept Cons	0.28	119.58	120.51	0.93	7.71	4.45	8.03
3	Sept Op	0.24	119.58	120.5	0.92	7.47	4.37	7.78
3	Sept Clos	0.29	119.58	120.51	0.93	7.78	4.48	8.1
2	June Baseline	1.83	119.44	120.95	1.51	24.44	12.76	24.79
2	Jun Max Red	1.54	119.44	120.87	1.43	20.48	10.93	20.82
2	Jun Cons	1.74	119.44	120.93	1.49	23.2	12.15	23.54
2	Jun Op	1.58	119.44	120.88	1.44	21.07	11.18	21.41
2	Jun Clos	1.79	119.44	120.94	1.5	24	12.54	24.34
2	Sept Baseline	0.29	119.44	120.51	1.07	9.29	6.06	9.59
2	Sept Max Red	0.22	119.44	120.49	1.05	8.95	5.88	9.26
2	Sept Cons	0.28	119.44	120.51	1.07	9.22	6.03	9.52
2	Sept Op	0.24	119.44	120.5	1.05	9.02	5.92	9.33
2	Sept Clos	0.29	119.44	120.51	1.07	9.27	6.05	9.57
1	June Baseline	1.83	119	120.95	1.95	24.44	17.82	25.66
1	Jun Max Red	1.54	119	120.87	1.87	20.48	15.99	21.69
1	Jun Cons	1.74	119	120.93	1.93	23.2	17.21	24.41
1	Jun Op	1.58	119	120.88	1.88	21.07	16.24	22.28
1	Jun Clos	1.79	119	120.94	1.94	24	17.6	25.21
1	Sept Baseline	0.29	119	120.51	1.51	9.29	11.13	10.47
1	Sept Max Red	0.22	119	120.49	1.49	8.96	10.94	10.13
1	Sept Cons	0.28	119	120.51	1.51	9.22	11.09	10.39
1	Sept Op	0.24	119	120.5	1.5	9.02	10.99	10.2
1	Sept Clos	0.29	119	120.51	1.51	9.27	11.11	10.45

Table A-7. Doris Creek Base Case Model Results

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
43	June Baseline	2	21.49	22.15	0.67	29.23	10.62	29.3
43	Jun Max Red	1.2	21.49	22.03	0.55	19.61	7.76	19.68
43	Jun Cons	1.55	21.49	22.09	0.6	23.64	8.96	23.71
43	Jun Op	1.49	21.49	22.08	0.6	22.85	8.76	22.92
43	Jun Clos	1.8	21.49	22.13	0.64	26.84	9.87	26.91
43	Sept Baseline	0.35	21.49	21.81	0.33	15.74	3.88	15.78
43	Sept Max Red	0.28	21.49	21.78	0.29	15.34	3.38	15.37
43	Sept Cons	0.3	21.49	21.79	0.3	15.42	3.48	15.45
43	Sept Op	0.29	21.49	21.78	0.3	15.37	3.42	15.4
43	Sept Clos	0.32	21.49	21.8	0.31	15.59	3.69	15.62
42	June Baseline	2	21.39	22.15	0.76	25.13	7.35	25.31
42	Jun Max Red	1.2	21.39	22.03	0.64	12.3	4.81	12.44
42	Jun Cons	1.55	21.39	22.09	0.7	24.72	5.8	24.87
42	Jun Op	1.49	21.39	22.08	0.69	24.67	5.58	24.81
42	Jun Clos	1.8	21.39	22.12	0.73	24.96	6.69	25.12
42	Sept Baseline	0.35	21.39	21.81	0.42	9.6	2.45	9.67
42	Sept Max Red	0.28	21.39	21.78	0.39	9.47	2.14	9.52
42	Sept Cons	0.3	21.39	21.78	0.4	9.49	2.2	9.55
42	Sept Op	0.29	21.39	21.78	0.39	9.48	2.16	9.54
42	Sept Clos	0.32	21.39	21.8	0.41	9.55	2.33	9.62
41	June Baseline	2	21.29	22.14	0.85	13	6.61	13.49
41	Jun Max Red	1.2	21.29	22.03	0.73	11.59	5.2	12.01
41	Jun Cons	1.55	21.29	22.08	0.79	11.99	5.86	12.44
41	Jun Op	1.49	21.29	22.07	0.78	11.91	5.75	12.36
41	Jun Clos	1.8	21.29	22.12	0.82	12.33	6.28	12.8
41	Sept Baseline	0.35	21.29	21.81	0.51	10.13	2.8	10.44
41	Sept Max Red	0.28	21.29	21.78	0.48	10.06	2.47	10.34
41	Sept Cons	0.3	21.29	21.78	0.49	10.07	2.53	10.36
41	Sept Op	0.29	21.29	21.78	0.48	10.06	2.49	10.35
41	Sept Clos	0.32	21.29	21.8	0.5	10.09	2.67	10.4
40	June Baseline	2	21.48	22.13	0.65	17.37	5.61	17.47
40	Jun Max Red	1.2	21.48	22.02	0.53	14.96	3.73	15.03
40	Jun Cons	1.55	21.48	22.07	0.59	15.29	4.58	15.38
40	Jun Op	1.49	21.48	22.06	0.58	15.24	4.45	15.32
40	Jun Clos	1.8	21.48	22.11	0.63	16.93	5.16	17.03
40	Sept Baseline	0.35	21.48	21.8	0.32	7.74	1.29	7.78
40	Sept Max Red	0.28	21.48	21.77	0.28	6.63	1.05	6.66
40	Sept Cons	0.3	21.48	21.77	0.29	6.85	1.1	6.88

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
40	Sept Op	0.29	21.48	21.77	0.29	6.72	1.07	6.76
40	Sept Clos	0.32	21.48	21.79	0.3	7.33	1.2	7.36
39	June Baseline	2	21.15	22.08	0.93	12.89	6.39	13.4
39	Jun Max Red	1.2	21.15	21.96	0.81	11.41	4.9	11.88
39	Jun Cons	1.55	21.15	22.02	0.87	11.94	5.61	12.43
39	Jun Op	1.49	21.15	22.01	0.86	11.83	5.5	12.33
39	Jun Clos	1.8	21.15	22.06	0.9	12.34	6.05	12.84
39	Sept Baseline	0.35	21.15	21.73	0.57	8.57	2.41	8.84
39	Sept Max Red	0.28	21.15	21.7	0.55	6.98	2.21	7.23
39	Sept Cons	0.3	21.15	21.71	0.55	7.29	2.25	7.54
39	Sept Op	0.29	21.15	21.7	0.55	7.11	2.22	7.36
39	Sept Clos	0.32	21.15	21.72	0.56	7.95	2.33	8.22
38	June Baseline	2	21.12	22.05	0.93	10.16	4.29	10.48
38	Jun Max Red	1.2	21.12	21.93	0.81	7.11	3.28	7.42
38	Jun Cons	1.55	21.12	21.99	0.87	8.42	3.73	8.74
38	Jun Op	1.49	21.12	21.98	0.86	8.11	3.66	8.43
38	Jun Clos	1.8	21.12	22.02	0.9	9.57	4.04	9.9
38	Sept Baseline	0.35	21.12	21.7	0.57	5.19	1.81	5.4
38	Sept Max Red	0.28	21.12	21.67	0.55	5.11	1.67	5.31
38	Sept Cons	0.3	21.12	21.68	0.55	5.13	1.7	5.32
38	Sept Op	0.29	21.12	21.67	0.55	5.12	1.68	5.31
38	Sept Clos	0.32	21.12	21.69	0.56	5.16	1.75	5.36
37	June Baseline	2	21.4	21.92	0.52	14.87	2.91	15.05
37	Jun Max Red	1.2	21.4	21.81	0.41	5.26	1.64	5.43
37	Jun Cons	1.55	21.4	21.86	0.46	13.41	2.14	13.58
37	Jun Op	1.49	21.4	21.86	0.46	13.21	2.03	13.38
37	Jun Clos	1.8	21.4	21.89	0.49	14.24	2.56	14.41
37	Sept Baseline	0.35	21.4	21.56	0.16	4.24	0.46	4.27
37	Sept Max Red	0.28	21.4	21.54	0.14	3.96	0.38	3.98
37	Sept Cons	0.3	21.4	21.54	0.14	4.01	0.4	4.03
37	Sept Op	0.29	21.4	21.54	0.14	3.98	0.39	4
37	Sept Clos	0.32	21.4	21.55	0.15	4.12	0.43	4.15
36	June Baseline	2	21.2	21.9	0.7	33.01	5.93	33.41
36	Jun Max Red	1.2	21.2	21.76	0.56	7.37	2	7.75
36	Jun Cons	1.55	21.2	21.83	0.63	31.9	3.5	32.28
36	Jun Op	1.49	21.2	21.82	0.62	31.51	3.15	31.89
36	Jun Clos	1.8	21.2	21.87	0.67	32.74	4.91	33.13
36	Sept Baseline	0.35	21.2	21.43	0.23	3.08	0.66	3.31
36	Sept Max Red	0.28	21.2	21.4	0.2	3.01	0.55	3.2

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
36	Sept Cons	0.3	21.2	21.4	0.2	3.03	0.57	3.22
36	Sept Op	0.29	21.2	21.4	0.2	3.02	0.56	3.21
36	Sept Clos	0.32	21.2	21.42	0.22	3.05	0.62	3.27
35	June Baseline	2	20.67	21.86	1.19	10.86	5.53	11.34
35	Jun Max Red	1.2	20.67	21.73	1.06	7.05	4.41	7.52
35	Jun Cons	1.55	20.67	21.8	1.12	8.32	4.89	8.8
35	Jun Op	1.49	20.67	21.79	1.11	8.11	4.81	8.59
35	Jun Clos	1.8	20.67	21.83	1.16	9.29	5.24	9.77
35	Sept Baseline	0.35	20.67	21.4	0.73	4.9	2.45	5.27
35	Sept Max Red	0.28	20.67	21.36	0.69	4.74	2.27	5.09
35	Sept Cons	0.3	20.67	21.37	0.7	4.77	2.31	5.12
35	Sept Op	0.29	20.67	21.37	0.7	4.76	2.29	5.1
35	Sept Clos	0.32	20.67	21.39	0.71	4.84	2.38	5.2
34	June Baseline	2	20.68	21.84	1.16	8.58	5.7	9.15
34	Jun Max Red	1.2	20.68	21.71	1.03	7.16	4.71	7.7
34	Jun Cons	1.55	20.68	21.77	1.09	7.82	5.17	8.37
34	Jun Op	1.49	20.68	21.77	1.09	7.71	5.09	8.27
34	Jun Clos	1.8	20.68	21.81	1.13	8.24	5.47	8.8
34	Sept Baseline	0.35	20.68	21.39	0.71	5.38	2.66	5.81
34	Sept Max Red	0.28	20.68	21.35	0.67	5.2	2.48	5.62
34	Sept Cons	0.3	20.68	21.36	0.68	5.24	2.51	5.65
34	Sept Op	0.29	20.68	21.35	0.67	5.22	2.49	5.63
34	Sept Clos	0.32	20.68	21.37	0.69	5.31	2.59	5.73
33	June Baseline	2	20.92	21.81	0.89	17.49	5.4	17.75
33	Jun Max Red	1.2	20.92	21.69	0.77	9.16	3.88	9.4
33	Jun Cons	1.55	20.92	21.75	0.83	10.2	4.45	10.45
33	Jun Op	1.49	20.92	21.74	0.82	10.02	4.36	10.27
33	Jun Clos	1.8	20.92	21.78	0.87	16.53	4.94	16.78
33	Sept Baseline	0.35	20.92	21.37	0.45	5.08	1.62	5.21
33	Sept Max Red	0.28	20.92	21.33	0.42	4.93	1.46	5.05
33	Sept Cons	0.3	20.92	21.34	0.42	4.96	1.49	5.08
33	Sept Op	0.29	20.92	21.34	0.42	4.95	1.47	5.06
33	Sept Clos	0.32	20.92	21.35	0.44	5.02	1.56	5.15
32	June Baseline	2	20.89	21.78	0.89	13.58	4.45	13.87
32	Jun Max Red	1.2	20.89	21.66	0.77	9.69	3.02	9.98
32	Jun Cons	1.55	20.89	21.72	0.83	11.8	3.66	12.08
32	Jun Op	1.49	20.89	21.71	0.82	11.55	3.56	11.84
32	Jun Clos	1.8	20.89	21.75	0.87	12.81	4.09	13.1
32	Sept Baseline	0.35	20.89	21.35	0.46	3.71	1.22	3.92

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
32	Sept Max Red	0.28	20.89	21.32	0.43	3.55	1.11	3.75
32	Sept Cons	0.3	20.89	21.33	0.44	3.58	1.13	3.79
32	Sept Op	0.29	20.89	21.32	0.44	3.56	1.12	3.77
32	Sept Clos	0.32	20.89	21.34	0.45	3.64	1.18	3.86
31	June Baseline	2	20.91	21.4	0.49	3.21	1.09	3.66
31	Jun Max Red	1.2	20.91	21.28	0.38	2.89	0.75	3.23
31	Jun Cons	1.55	20.91	21.33	0.42	2.94	0.89	3.34
31	Jun Op	1.49	20.91	21.32	0.42	2.93	0.87	3.32
31	Jun Clos	1.8	20.91	21.37	0.46	3.07	1	3.5
31	Sept Baseline	0.35	20.91	21.13	0.22	2.72	0.32	2.88
31	Sept Max Red	0.28	20.91	21.12	0.21	2.7	0.28	2.84
31	Sept Cons	0.3	20.91	21.12	0.21	2.7	0.29	2.85
31	Sept Op	0.29	20.91	21.12	0.21	2.7	0.28	2.84
31	Sept Clos	0.32	20.91	21.12	0.22	2.71	0.3	2.86
30	June Baseline	2	10.45	11.4	0.95	8.06	5.11	8.57
30	Jun Max Red	1.2	10.45	11.2	0.76	6.12	3.74	6.58
30	Jun Cons	1.55	10.45	11.3	0.86	6.79	4.38	7.28
30	Jun Op	1.49	10.45	11.29	0.84	6.69	4.28	7.18
30	Jun Clos	1.8	10.45	11.36	0.91	7.42	4.79	7.92
30	Sept Baseline	0.35	10.45	10.81	0.36	4.93	1.58	5.15
30	Sept Max Red	0.28	10.45	10.77	0.32	4.81	1.38	5
30	Sept Cons	0.3	10.45	10.78	0.33	4.84	1.43	5.04
30	Sept Op	0.29	10.45	10.77	0.33	4.82	1.4	5.02
30	Sept Clos	0.32	10.45	10.79	0.35	4.89	1.51	5.09
29	June Baseline	2	10.22	11.22	1	19.1	4.78	19.82
29	Jun Max Red	1.2	10.22	11.03	0.81	5.18	2.69	5.89
29	Jun Cons	1.55	10.22	11.13	0.91	10.24	3.38	10.95
29	Jun Op	1.49	10.22	11.11	0.89	9.08	3.25	9.79
29	Jun Clos	1.8	10.22	11.18	0.96	15.98	4.11	16.69
29	Sept Baseline	0.35	10.22	10.63	0.41	3.36	1.13	3.74
29	Sept Max Red	0.28	10.22	10.59	0.37	3.32	0.99	3.65
29	Sept Cons	0.3	10.22	10.6	0.38	3.33	1.02	3.67
29	Sept Op	0.29	10.22	10.59	0.37	3.32	1.01	3.66
29	Sept Clos	0.32	10.22	10.61	0.39	3.34	1.07	3.7
28	June Baseline	2	9.43	10.89	1.46	11.73	8.05	12.31
28	Jun Max Red	1.2	9.43	10.7	1.27	9.45	6.07	9.98
28	Jun Cons	1.55	9.43	10.79	1.37	10.52	7.01	11.08
28	Jun Op	1.49	9.43	10.78	1.35	10.36	6.88	10.92
28	Jun Clos	1.8	9.43	10.85	1.42	11.26	7.63	11.83

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
28	Sept Baseline	0.35	9.43	10.29	0.86	5.38	3.07	5.78
28	Sept Max Red	0.28	9.43	10.24	0.82	5.11	2.83	5.49
28	Sept Cons	0.3	9.43	10.25	0.83	5.15	2.88	5.53
28	Sept Op	0.29	9.43	10.25	0.82	5.13	2.85	5.51
28	Sept Clos	0.32	9.43	10.27	0.85	5.22	2.97	5.61
27	June Baseline	2	9.56	10.86	1.3	10.17	7.23	10.9
27	Jun Max Red	1.2	9.56	10.68	1.12	8.2	5.56	8.87
27	Jun Cons	1.55	9.56	10.77	1.21	9.17	6.36	9.87
27	Jun Op	1.49	9.56	10.76	1.2	9.04	6.25	9.74
27	Jun Clos	1.8	9.56	10.82	1.26	9.78	6.88	10.5
27	Sept Baseline	0.35	9.56	10.28	0.72	6	2.8	6.46
27	Sept Max Red	0.28	9.56	10.23	0.67	5.82	2.54	6.25
27	Sept Cons	0.3	9.56	10.24	0.68	5.86	2.59	6.29
27	Sept Op	0.29	9.56	10.24	0.68	5.84	2.56	6.27
27	Sept Clos	0.32	9.56	10.26	0.7	5.93	2.69	6.38
26	June Baseline	2	9.77	10.84	1.08	10.75	5.79	11.37
26	Jun Max Red	1.2	9.77	10.66	0.89	8.93	3.98	9.51
26	Jun Cons	1.55	9.77	10.75	0.99	10.05	4.86	10.64
26	Jun Op	1.49	9.77	10.74	0.97	9.9	4.74	10.49
26	Jun Clos	1.8	9.77	10.81	1.04	10.49	5.43	11.09
26	Sept Baseline	0.35	9.77	10.27	0.5	4.12	1.56	4.53
26	Sept Max Red	0.28	9.77	10.22	0.46	3.89	1.39	4.27
26	Sept Cons	0.3	9.77	10.23	0.47	3.92	1.43	4.3
26	Sept Op	0.29	9.77	10.23	0.46	3.9	1.41	4.28
26	Sept Clos	0.32	9.77	10.25	0.48	4.02	1.49	4.42
25	June Baseline	2	9.52	10.81	1.29	9.85	7.15	10.71
25	Jun Max Red	1.2	9.52	10.63	1.11	8.88	5.42	9.64
25	Jun Cons	1.55	9.52	10.73	1.2	9.5	6.29	10.31
25	Jun Op	1.49	9.52	10.71	1.19	9.46	6.18	10.26
25	Jun Clos	1.8	9.52	10.78	1.26	9.72	6.82	10.56
25	Sept Baseline	0.35	9.52	10.24	0.71	5.59	2.44	6.18
25	Sept Max Red	0.28	9.52	10.2	0.67	5.44	2.22	5.99
25	Sept Cons	0.3	9.52	10.2	0.68	5.47	2.26	6.03
25	Sept Op	0.29	9.52	10.2	0.68	5.45	2.24	6
25	Sept Clos	0.32	9.52	10.22	0.7	5.53	2.36	6.11
24	June Baseline	2	9.71	10.77	1.06	24.89	11.86	25.31
24	Jun Max Red	1.2	9.71	10.59	0.88	13.49	8.44	13.89
24	Jun Cons	1.55	9.71	10.69	0.98	19.64	10	20.05
24	Jun Op	1.49	9.71	10.68	0.97	18.97	9.8	19.38

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
24	Jun Clos	1.8	9.71	10.74	1.03	22.95	11.13	23.37
24	Sept Baseline	0.35	9.71	10.2	0.49	11.28	3.79	11.44
24	Sept Max Red	0.28	9.71	10.16	0.45	11.18	3.35	11.31
24	Sept Cons	0.3	9.71	10.17	0.46	11.2	3.43	11.34
24	Sept Op	0.29	9.71	10.17	0.46	11.19	3.38	11.32
24	Sept Clos	0.32	9.71	10.19	0.48	11.24	3.61	11.39
23	June Baseline	2	9.58	10.7	1.12	22.44	9.42	22.99
23	Jun Max Red	1.2	9.58	10.52	0.95	9.98	6.57	10.53
23	Jun Cons	1.55	9.58	10.62	1.04	17.04	7.88	17.59
23	Jun Op	1.49	9.58	10.61	1.03	16.38	7.72	16.93
23	Jun Clos	1.8	9.58	10.67	1.1	20.63	8.86	21.19
23	Sept Baseline	0.35	9.58	10.12	0.55	8.23	3	3.94
23	Sept Max Red	0.28	9.58	10.08	0.5	8.12	2.66	3.8
23	Sept Cons	0.3	9.58	10.09	0.51	8.14	2.73	3.83
23	Sept Op	0.29	9.58	10.08	0.51	8.13	2.69	3.82
23	Sept Clos	0.32	9.58	10.11	0.53	8.19	2.87	3.89
22	June Baseline	2	8.96	9.86	0.9	25.57	13.37	26.01
22	Jun Max Red	1.2	8.96	9.69	0.73	17.32	9.7	17.75
22	Jun Cons	1.55	8.96	9.8	0.83	21.97	11.78	22.41
22	Jun Op	1.49	8.96	9.79	0.82	21.55	11.57	21.99
22	Jun Clos	1.8	8.96	9.84	0.87	23.79	12.66	24.23
22	Sept Baseline	0.35	8.96	9.43	0.46	15.68	5.39	15.93
22	Sept Max Red	0.28	8.96	9.4	0.44	15.52	4.94	15.76
22	Sept Cons	0.3	8.96	9.41	0.44	15.55	5.03	15.79
22	Sept Op	0.29	8.96	9.4	0.44	15.54	4.99	15.78
22	Sept Clos	0.32	8.96	9.42	0.45	15.62	5.21	15.87
21	June Baseline	2	9.01	9.83	0.82	21.99	9.73	22.32
21	Jun Max Red	1.2	9.01	9.65	0.65	15.33	6.54	10.61
21	Jun Cons	1.55	9.01	9.77	0.76	19.28	8.42	19.61
21	Jun Op	1.49	9.01	9.76	0.75	18.85	8.25	19.18
21	Jun Clos	1.8	9.01	9.8	0.8	20.95	9.15	21.28
21	Sept Baseline	0.35	9.01	9.39	0.39	13.39	2.69	9.33
21	Sept Max Red	0.28	9.01	9.37	0.36	11.48	2.34	8.95
21	Sept Cons	0.3	9.01	9.37	0.37	11.87	2.41	9.22
21	Sept Op	0.29	9.01	9.37	0.36	11.71	2.38	9.15
21	Sept Clos	0.32	9.01	9.38	0.38	12.63	2.54	9.27
20	June Baseline	2	8.29	9.38	1.09	30.56	20.92	30.96
20	Jun Max Red	1.2	8.29	9.22	0.93	25.12	16.35	25.5
20	Jun Cons	1.55	8.29	9.31	1.01	28.57	18.59	28.95

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
20	Jun Op	1.49	8.29	9.29	1	28.3	18.25	28.68
20	Jun Clos	1.8	8.29	9.35	1.06	29.65	19.94	30.03
20	Sept Baseline	0.35	8.29	8.89	0.6	19.38	8.95	19.68
20	Sept Max Red	0.28	8.29	8.86	0.57	18.4	8.3	18.7
20	Sept Cons	0.3	8.29	8.86	0.57	18.43	8.43	18.73
20	Sept Op	0.29	8.29	8.86	0.57	18.42	8.35	18.71
20	Sept Clos	0.32	8.29	8.88	0.59	18.84	8.69	19.14
19	June Baseline	2	8.5	9.31	0.81	36.73	9.38	36.97
19	Jun Max Red	1.2	8.5	9.15	0.65	13.25	5.88	13.49
19	Jun Cons	1.55	8.5	9.24	0.74	18.67	7.15	18.91
19	Jun Op	1.49	8.5	9.22	0.73	17.76	6.95	18.01
19	Jun Clos	1.8	8.5	9.28	0.78	34.37	8.3	34.62
19	Sept Baseline	0.35	8.5	8.84	0.34	9.68	2.52	9.82
19	Sept Max Red	0.28	8.5	8.81	0.31	9.56	2.22	9.68
19	Sept Cons	0.3	8.5	8.82	0.32	9.58	2.28	9.71
19	Sept Op	0.29	8.5	8.81	0.31	9.57	2.24	9.69
19	Sept Clos	0.32	8.5	8.83	0.33	9.63	2.4	9.76
18.9	June Baseline	2	8.1	8.88	0.78	35.47	8.47	35.71
18.9	Jun Max Red	1.2	8.1	8.75	0.65	13.57	5.87	13.81
18.9	Jun Cons	1.55	8.1	8.82	0.72	17.62	6.93	17.86
18.9	Jun Op	1.49	8.1	8.81	0.71	16.96	6.76	17.19
18.9	Jun Clos	1.8	8.1	8.86	0.76	26.43	7.7	26.67
18.9	Sept Baseline	0.35	8.1	8.43	0.33	9.63	2.39	9.76
18.9	Sept Max Red	0.28	8.1	8.4	0.3	9.51	2.09	9.62
18.9	Sept Cons	0.3	8.1	8.4	0.3	9.53	2.15	9.65
18.9	Sept Op	0.29	8.1	8.4	0.3	9.52	2.11	9.63
18.9	Sept Clos	0.32	8.1	8.41	0.32	9.58	2.27	9.7
18	June Baseline	2	4.35	5.36	1.01	13.7	3.52	14.54
18	Jun Max Red	1.2	4.35	5.18	0.83	4.38	1.78	5.2
18	Jun Cons	1.55	4.35	5.26	0.91	9.87	2.32	10.7
18	Jun Op	1.49	4.35	5.25	0.9	9.31	2.19	10.15
18	Jun Clos	1.8	4.35	5.32	0.97	12.13	2.96	12.97
18	Sept Baseline	0.35	4.35	4.79	0.44	1.71	0.62	2.28
18	Sept Max Red	0.28	4.35	4.75	0.4	1.68	0.55	2.18
18	Sept Cons	0.3	4.35	4.75	0.41	1.68	0.56	2.2
18	Sept Op	0.29	4.35	4.75	0.4	1.68	0.56	2.19
18	Sept Clos	0.32	4.35	4.77	0.42	1.7	0.59	2.24
17	June Baseline	2	3.69	5.38	1.69	17.02	14.29	17.83
17	Jun Max Red	1.2	3.69	5.19	1.51	12.51	11.53	13.3

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
17	Jun Cons	1.55	3.69	5.28	1.6	15.05	12.74	15.84
17	Jun Op	1.49	3.69	5.27	1.58	14.76	12.53	15.56
17	Jun Clos	1.8	3.69	5.34	1.65	16.19	13.61	16.99
17	Sept Baseline	0.35	3.69	4.8	1.11	9.1	7.35	9.76
17	Sept Max Red	0.28	3.69	4.76	1.07	8.84	6.95	9.49
17	Sept Cons	0.3	3.69	4.76	1.08	8.89	7.03	9.54
17	Sept Op	0.29	3.69	4.76	1.07	8.86	6.98	9.51
17	Sept Clos	0.32	3.69	4.78	1.1	8.99	7.19	9.66
16	June Baseline	2	3.62	5.38	1.76	18.02	14.09	19.15
16	Jun Max Red	1.2	3.62	5.19	1.57	11.39	11.53	12.5
16	Jun Cons	1.55	3.62	5.28	1.66	13.29	12.6	14.42
16	Jun Op	1.49	3.62	5.27	1.65	12.96	12.42	14.09
16	Jun Clos	1.8	3.62	5.34	1.72	15.65	13.4	16.78
16	Sept Baseline	0.35	3.62	4.8	1.18	9.19	7.52	10.12
16	Sept Max Red	0.28	3.62	4.76	1.14	9	7.11	9.9
16	Sept Cons	0.3	3.62	4.76	1.14	9.03	7.18	9.94
16	Sept Op	0.29	3.62	4.76	1.14	9.01	7.14	9.91
16	Sept Clos	0.32	3.62	4.78	1.16	9.11	7.35	10.03
15	June Baseline	2	4.05	5.37	1.32	10.37	4.83	11.41
15	Jun Max Red	1.2	4.05	5.19	1.14	5.67	3.43	6.68
15	Jun Cons	1.55	4.05	5.27	1.23	7.31	3.98	8.34
15	Jun Op	1.49	4.05	5.26	1.21	6.88	3.89	7.9
15	Jun Clos	1.8	4.05	5.33	1.28	9.08	4.43	10.11
15	Sept Baseline	0.35	4.05	4.8	0.75	3.82	1.7	4.55
15	Sept Max Red	0.28	4.05	4.75	0.71	3.79	1.53	4.45
15	Sept Cons	0.3	4.05	4.76	0.71	3.79	1.56	4.47
15	Sept Op	0.29	4.05	4.76	0.71	3.79	1.55	4.46
15	Sept Clos	0.32	4.05	4.78	0.73	3.81	1.64	4.51
14	June Baseline	2	4.31	5.31	0.99	9.14	2.73	9.8
14	Jun Max Red	1.2	4.31	5.11	0.8	3.66	1.51	4.29
14	Jun Cons	1.55	4.31	5.2	0.89	6.26	1.94	6.9
14	Jun Op	1.49	4.31	5.19	0.88	5.85	1.86	6.49
14	Jun Clos	1.8	4.31	5.26	0.95	7.93	2.36	8.58
14	Sept Baseline	0.35	4.31	4.75	0.44	1.74	0.57	2.12
14	Sept Max Red	0.28	4.31	4.71	0.4	1.7	0.51	2.03
14	Sept Cons	0.3	4.31	4.72	0.4	1.7	0.52	2.04
14	Sept Op	0.29	4.31	4.71	0.4	1.7	0.51	2.03
14	Sept Clos	0.32	4.31	4.73	0.42	1.72	0.55	2.08

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
13	June Baseline	2	2.93	5.3	2.37	22.08	25.76	23.47
13	Jun Max Red	1.2	2.93	5.11	2.18	15.96	22.07	17.33
13	Jun Cons	1.55	2.93	5.2	2.27	18.99	23.65	20.37
13	Jun Op	1.49	2.93	5.19	2.26	18.56	23.38	19.94
13	Jun Clos	1.8	2.93	5.26	2.33	20.76	24.82	22.14
13	Sept Baseline	0.35	2.93	4.75	1.82	13.43	16.72	14.7
13	Sept Max Red	0.28	2.93	4.71	1.78	13.14	16.19	14.4
13	Sept Cons	0.3	2.93	4.71	1.78	13.19	16.29	14.45
13	Sept Op	0.29	2.93	4.71	1.78	13.16	16.23	14.42
13	Sept Clos	0.32	2.93	4.73	1.8	13.31	16.51	14.58
12	June Baseline	2	3.39	5.3	1.92	16.11	17.23	16.74
12	Jun Max Red	1.2	3.39	5.11	1.72	13.55	14.44	14.13
12	Jun Cons	1.55	3.39	5.2	1.81	14.21	15.69	14.82
12	Jun Op	1.49	3.39	5.18	1.8	14.1	15.49	14.7
12	Jun Clos	1.8	3.39	5.26	1.87	15.13	16.55	15.75
12	Sept Baseline	0.35	3.39	4.75	1.36	11.16	9.93	11.62
12	Sept Max Red	0.28	3.39	4.71	1.32	10.86	9.49	11.31
12	Sept Cons	0.3	3.39	4.71	1.33	10.92	9.57	11.37
12	Sept Op	0.29	3.39	4.71	1.32	10.89	9.53	11.34
12	Sept Clos	0.32	3.39	4.73	1.34	11.04	9.76	11.5
11	June Baseline	2	4.02	5.29	1.26	8.53	3.9	9.48
11	Jun Max Red	1.2	4.02	5.1	1.07	4.85	2.71	5.78
11	Jun Cons	1.55	4.02	5.19	1.16	6.04	3.18	6.98
11	Jun Op	1.49	4.02	5.17	1.15	5.8	3.1	6.74
11	Jun Clos	1.8	4.02	5.24	1.22	7.31	3.56	8.26
11	Sept Baseline	0.35	4.02	4.74	0.72	2.78	1.39	3.49
11	Sept Max Red	0.28	4.02	4.7	0.68	2.74	1.28	3.4
11	Sept Cons	0.3	4.02	4.71	0.69	2.75	1.3	3.42
11	Sept Op	0.29	4.02	4.71	0.68	2.74	1.29	3.41
11	Sept Clos	0.32	4.02	4.73	0.7	2.76	1.35	3.46
10	June Baseline	2	4.13	5.21	1.07	8.6	3.59	9.37
10	Jun Max Red	1.2	4.13	5.01	0.87	5.44	2.26	6.16
10	Jun Cons	1.55	4.13	5.1	0.97	6.32	2.79	7.09
10	Jun Op	1.49	4.13	5.09	0.95	6.09	2.7	6.85
10	Jun Clos	1.8	4.13	5.16	1.03	7.54	3.22	8.31
10	Sept Baseline	0.35	4.13	4.6	0.46	2.95	0.48	3.4
10	Sept Max Red	0.28	4.13	4.55	0.42	2.76	0.36	3.18
10	Sept Cons	0.3	4.13	4.56	0.43	2.8	0.38	3.22
10	Sept Op	0.29	4.13	4.56	0.42	2.78	0.37	3.2
10	Sept Clos	0.32	4.13	4.58	0.45	2.87	0.43	3.31

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
9	June Baseline	2	2.57	5.2	2.63	14.17	20.02	15.62
9	Jun Max Red	1.2	2.57	5	2.43	12.48	17.36	13.87
9	Jun Cons	1.55	2.57	5.1	2.52	13.12	18.57	14.54
9	Jun Op	1.49	2.57	5.08	2.51	13.02	18.37	14.43
9	Jun Clos	1.8	2.57	5.16	2.58	13.56	19.39	14.99
9	Sept Baseline	0.35	2.57	4.58	2.01	10.19	12.62	11.43
9	Sept Max Red	0.28	2.57	4.53	1.96	9.91	12.16	11.13
9	Sept Cons	0.3	2.57	4.54	1.97	9.97	12.25	11.19
9	Sept Op	0.29	2.57	4.54	1.97	9.93	12.2	11.16
9	Sept Clos	0.32	2.57	4.56	1.99	10.09	12.44	11.31
8	June Baseline	2	2.57	5.2	2.63	15.57	22.18	16.83
8	Jun Max Red	1.2	2.57	5	2.43	13.1	19.33	14.32
8	Jun Cons	1.55	2.57	5.09	2.53	13.98	20.59	15.23
8	Jun Op	1.49	2.57	5.08	2.51	13.8	20.39	15.05
8	Jun Clos	1.8	2.57	5.16	2.59	14.83	21.48	16.09
8	Sept Baseline	0.35	2.57	4.58	2.01	11	14.19	12.04
8	Sept Max Red	0.28	2.57	4.53	1.96	10.77	13.69	11.79
8	Sept Cons	0.3	2.57	4.54	1.97	10.82	13.78	11.84
8	Sept Op	0.29	2.57	4.54	1.97	10.79	13.73	11.81
8	Sept Clos	0.32	2.57	4.56	1.99	10.91	13.99	11.94
7	June Baseline	2	2.94	5.2	2.26	16.67	17.83	17.64
7	Jun Max Red	1.2	2.94	5	2.06	12.22	14.9	13.17
7	Jun Cons	1.55	2.94	5.09	2.16	14.56	16.15	15.53
7	Jun Op	1.49	2.94	5.08	2.14	14.19	15.94	15.15
7	Jun Clos	1.8	2.94	5.15	2.22	15.78	17.09	16.75
7	Sept Baseline	0.35	2.94	4.58	1.64	9.55	10.38	10.33
7	Sept Max Red	0.28	2.94	4.53	1.59	9.42	9.94	10.17
7	Sept Cons	0.3	2.94	4.54	1.6	9.45	10.03	10.2
7	Sept Op	0.29	2.94	4.53	1.6	9.43	9.98	10.18
7	Sept Clos	0.32	2.94	4.56	1.62	9.5	10.21	10.27
6	June Baseline	2	4.07	5.19	1.12	8.68	5.12	9.31
6	Jun Max Red	1.2	4.07	4.99	0.92	7.29	3.49	7.77
6	Jun Cons	1.55	4.07	5.08	1.01	8.19	4.22	8.7
6	Jun Op	1.49	4.07	5.07	1	8.13	4.1	8.62
6	Jun Clos	1.8	4.07	5.15	1.08	8.47	4.73	9.05
6	Sept Baseline	0.35	4.07	4.57	0.5	3.45	1.24	3.71
6	Sept Max Red	0.28	4.07	4.52	0.45	3.3	1.09	3.53
6	Sept Cons	0.3	4.07	4.53	0.46	3.33	1.12	3.57
6	Sept Op	0.29	4.07	4.53	0.46	3.31	1.1	3.55
6	Sept Clos	0.32	4.07	4.55	0.48	3.39	1.18	3.64

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
5	June Baseline	2	4	5.11	1.11	10.05	4.49	10.66
5	Jun Max Red	1.2	4	4.9	0.9	5.1	2.96	5.68
5	Jun Cons	1.55	4	5	1	7.05	3.54	7.65
5	Jun Op	1.49	4	4.98	0.98	6.7	3.44	7.3
5	Jun Clos	1.8	4	5.06	1.06	8.78	4.05	9.38
5	Sept Baseline	0.35	4	4.46	0.46	3.22	1.09	3.52
5	Sept Max Red	0.28	4	4.41	0.41	2.97	0.95	3.25
5	Sept Cons	0.3	4	4.42	0.42	3.02	0.97	3.3
5	Sept Op	0.29	4	4.42	0.42	2.99	0.96	3.27
5	Sept Clos	0.32	4	4.44	0.44	3.12	1.03	3.41
4	June Baseline	2	3.98	5.07	1.09	10.89	6.1	11.24
4	Jun Max Red	1.2	3.98	4.86	0.88	8.4	4.14	8.68
4	Jun Cons	1.55	3.98	4.96	0.98	9.07	5.03	9.38
4	Jun Op	1.49	3.98	4.94	0.96	8.99	4.88	9.29
4	Jun Clos	1.8	3.98	5.02	1.04	9.4	5.63	9.74
4	Sept Baseline	0.35	3.98	4.38	0.4	4	1.17	4.16
4	Sept Max Red	0.28	3.98	4.33	0.35	3.78	0.98	3.92
4	Sept Cons	0.3	3.98	4.34	0.36	3.82	1.02	3.96
4	Sept Op	0.29	3.98	4.34	0.36	3.8	1	3.94
4	Sept Clos	0.32	3.98	4.36	0.38	3.91	1.09	4.06
3	June Baseline	2	3.92	5.05	1.13	11.37	5.89	11.76
3	Jun Max Red	1.2	3.92	4.83	0.91	7.37	3.85	7.73
3	Jun Cons	1.55	3.92	4.93	1.01	9.32	4.7	9.69
3	Jun Op	1.49	3.92	4.91	1	8.96	4.55	9.33
3	Jun Clos	1.8	3.92	5	1.08	10.52	5.36	10.9
3	Sept Baseline	0.35	3.92	4.32	0.4	3.86	1.07	4.02
3	Sept Max Red	0.28	3.92	4.25	0.34	3.69	0.84	3.79
3	Sept Cons	0.3	3.92	4.27	0.35	3.73	0.89	3.83
3	Sept Op	0.29	3.92	4.26	0.34	3.71	0.86	3.81
3	Sept Clos	0.32	3.92	4.29	0.37	3.8	0.98	3.93
2	June Baseline	2	3.75	5.05	1.3	23.63	14.65	23.9
2	Jun Max Red	1.2	3.75	4.83	1.08	14.97	10.36	15.23
2	Jun Cons	1.55	3.75	4.93	1.18	19.21	12.15	19.48
2	Jun Op	1.49	3.75	4.92	1.17	18.62	11.84	18.89
2	Jun Clos	1.8	3.75	5	1.25	21.92	13.53	22.19
2	Sept Baseline	0.35	3.75	4.31	0.56	9.66	4.21	9.8
2	Sept Max Red	0.28	3.75	4.25	0.5	9.19	3.63	9.32
2	Sept Cons	0.3	3.75	4.27	0.52	9.28	3.74	9.41
2	Sept Op	0.29	3.75	4.26	0.51	9.23	3.68	9.36
2	Sept Clos	0.32	3.75	4.29	0.54	9.47	3.98	9.61

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
1	June Baseline	2	3.7	5.04	1.34	14.79	7.65	15.55
1	Jun Max Red	1.2	3.7	4.83	1.13	8.44	5.31	8.91
1	Jun Cons	1.55	3.7	4.93	1.23	9.97	6.26	10.59
1	Jun Op	1.49	3.7	4.91	1.21	9.72	6.1	10.32
1	Jun Clos	1.8	3.7	5	1.3	12.27	6.98	12.97
1	Sept Baseline	0.35	3.7	4.31	0.61	4.82	2.02	5.09
1	Sept Max Red	0.28	3.7	4.25	0.55	4.48	1.74	4.73
1	Sept Cons	0.3	3.7	4.26	0.56	4.55	1.79	4.8
1	Sept Op	0.29	3.7	4.26	0.56	4.51	1.76	4.75
1	Sept Clos	0.32	3.7	4.29	0.59	4.69	1.91	4.95

Table A-8. Doris Creek High Groundwater Model Results

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
43	June Baseline	2	21.49	22.15	0.67	29.23	10.62	29.3
43	Jun Max Red	1.07	21.49	22.01	0.52	19.07	7.24	19.13
43	Jun Cons	1.54	21.49	22.09	0.6	23.56	8.94	23.63
43	Jun Op	1.38	21.49	22.06	0.58	21.23	8.36	21.3
43	Jun Clos	1.76	21.49	22.12	0.64	26.41	9.74	26.48
43	Sept Baseline	0.35	21.49	21.81	0.33	15.74	3.88	15.78
43	Sept Max Red	0.23	21.49	21.75	0.26	14.98	2.93	15
43	Sept Cons	0.28	21.49	21.78	0.29	15.35	3.38	15.38
43	Sept Op	0.25	21.49	21.76	0.28	15.14	3.13	15.16
43	Sept Clos	0.33	21.49	21.8	0.32	15.63	3.74	15.66
42	June Baseline	2	21.39	22.15	0.76	25.13	7.35	25.31
42	Jun Max Red	1.07	21.39	22	0.62	11.94	4.49	12.07
42	Jun Cons	1.54	21.39	22.08	0.7	24.72	5.78	24.87
42	Jun Op	1.38	21.39	22.06	0.67	15.43	5.19	15.57
42	Jun Clos	1.76	21.39	22.12	0.73	24.93	6.57	25.09
42	Sept Baseline	0.35	21.39	21.81	0.42	9.6	2.45	9.67
42	Sept Max Red	0.23	21.39	21.75	0.36	8.82	1.87	8.87
42	Sept Cons	0.28	21.39	21.78	0.39	9.47	2.14	9.52
42	Sept Op	0.25	21.39	21.76	0.37	9.11	1.98	9.16
42	Sept Clos	0.33	21.39	21.8	0.41	9.56	2.36	9.63
41	June Baseline	2	21.29	22.14	0.85	13	6.61	13.49
41	Jun Max Red	1.07	21.29	22	0.71	11.48	4.9	11.88
41	Jun Cons	1.54	21.29	22.08	0.79	11.99	5.85	12.43
41	Jun Op	1.38	21.29	22.06	0.76	11.75	5.54	12.17
41	Jun Clos	1.76	21.29	22.11	0.82	12.28	6.23	12.75

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
41	Sept Baseline	0.35	21.29	21.81	0.51	10.13	2.8	10.44
41	Sept Max Red	0.23	21.29	21.75	0.45	10.01	2.17	10.26
41	Sept Cons	0.28	21.29	21.78	0.48	10.06	2.47	10.34
41	Sept Op	0.25	21.29	21.76	0.46	10.03	2.3	10.29
41	Sept Clos	0.33	21.29	21.8	0.5	10.1	2.7	10.4
40	June Baseline	2	21.48	22.13	0.65	17.37	5.61	17.47
40	Jun Max Red	1.07	21.48	21.99	0.51	14.32	3.34	14.38
40	Jun Cons	1.54	21.48	22.07	0.59	15.28	4.57	15.37
40	Jun Op	1.38	21.48	22.05	0.56	15.13	4.18	15.21
40	Jun Clos	1.76	21.48	22.1	0.62	16.85	5.08	16.95
40	Sept Baseline	0.35	21.48	21.8	0.32	7.74	1.29	7.78
40	Sept Max Red	0.23	21.48	21.74	0.25	5.64	0.87	5.67
40	Sept Cons	0.28	21.48	21.77	0.28	6.65	1.05	6.68
40	Sept Op	0.25	21.48	21.75	0.27	6.08	0.95	6.11
40	Sept Clos	0.33	21.48	21.79	0.31	7.43	1.22	7.46
39	June Baseline	2	21.15	22.08	0.93	12.89	6.39	13.4
39	Jun Max Red	1.07	21.15	21.93	0.78	11.28	4.56	11.72
39	Jun Cons	1.54	21.15	22.02	0.87	11.92	5.6	12.42
39	Jun Op	1.38	21.15	21.99	0.84	11.62	5.28	12.11
39	Jun Clos	1.76	21.15	22.05	0.9	12.29	5.99	12.79
39	Sept Baseline	0.35	21.15	21.73	0.57	8.57	2.41	8.84
39	Sept Max Red	0.23	21.15	21.68	0.52	6.54	2.03	6.77
39	Sept Cons	0.28	21.15	21.7	0.55	7	2.21	7.25
39	Sept Op	0.25	21.15	21.69	0.53	6.69	2.11	6.93
39	Sept Clos	0.33	21.15	21.72	0.57	8.1	2.35	8.36
38	June Baseline	2	21.12	22.05	0.93	10.16	4.29	10.48
38	Jun Max Red	1.07	21.12	21.9	0.78	6.96	3.07	7.26
38	Jun Cons	1.54	21.12	21.99	0.86	8.39	3.72	8.71
38	Jun Op	1.38	21.12	21.96	0.84	7.33	3.51	7.65
38	Jun Clos	1.76	21.12	22.02	0.9	9.47	4	9.79
38	Sept Baseline	0.35	21.12	21.7	0.57	5.19	1.81	5.4
38	Sept Max Red	0.23	21.12	21.64	0.52	5.04	1.54	5.21
38	Sept Cons	0.28	21.12	21.67	0.55	5.12	1.67	5.31
38	Sept Op	0.25	21.12	21.66	0.53	5.07	1.6	5.26
38	Sept Clos	0.33	21.12	21.69	0.57	5.17	1.76	5.37
37	June Baseline	2	21.4	21.92	0.52	14.87	2.91	15.05
37	Jun Max Red	1.07	21.4	21.78	0.38	5.13	1.47	5.28
37	Jun Cons	1.54	21.4	21.86	0.46	13.39	2.12	13.56
37	Jun Op	1.38	21.4	21.84	0.44	9.24	1.85	9.41

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
HYDRAULIC MODELLING RESULTS

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
37	Jun Clos	1.76	21.4	21.89	0.49	14.12	2.5	14.3
37	Sept Baseline	0.35	21.4	21.56	0.16	4.24	0.46	4.27
37	Sept Max Red	0.23	21.4	21.53	0.13	3.73	0.33	3.75
37	Sept Cons	0.28	21.4	21.54	0.14	3.96	0.39	3.98
37	Sept Op	0.25	21.4	21.53	0.13	3.83	0.35	3.85
37	Sept Clos	0.33	21.4	21.55	0.15	4.15	0.43	4.17
36	June Baseline	2	21.2	21.9	0.7	33.01	5.93	33.41
36	Jun Max Red	1.07	21.2	21.73	0.53	5.12	1.81	5.48
36	Jun Cons	1.54	21.2	21.83	0.63	31.86	3.46	32.24
36	Jun Op	1.38	21.2	21.8	0.6	21.85	2.51	22.23
36	Jun Clos	1.76	21.2	21.87	0.67	32.69	4.72	33.08
36	Sept Baseline	0.35	21.2	21.43	0.23	3.08	0.66	3.31
36	Sept Max Red	0.23	21.2	21.36	0.16	2.94	0.45	3.1
36	Sept Cons	0.28	21.2	21.4	0.2	3.01	0.55	3.21
36	Sept Op	0.25	21.2	21.38	0.18	2.98	0.5	3.15
36	Sept Clos	0.33	21.2	21.42	0.22	3.06	0.63	3.28
35	June Baseline	2	20.67	21.86	1.19	10.86	5.53	11.34
35	Jun Max Red	1.07	20.67	21.7	1.02	6.81	4.16	7.27
35	Jun Cons	1.54	20.67	21.79	1.12	8.3	4.89	8.78
35	Jun Op	1.38	20.67	21.77	1.09	7.67	4.65	8.15
35	Jun Clos	1.76	20.67	21.83	1.16	9.06	5.19	9.54
35	Sept Baseline	0.35	20.67	21.4	0.73	4.9	2.45	5.27
35	Sept Max Red	0.23	20.67	21.33	0.66	4.58	2.11	4.91
35	Sept Cons	0.28	20.67	21.37	0.69	4.75	2.28	5.09
35	Sept Op	0.25	20.67	21.35	0.67	4.66	2.18	5
35	Sept Clos	0.33	20.67	21.39	0.72	4.86	2.4	5.21
34	June Baseline	2	20.68	21.84	1.16	8.58	5.7	9.15
34	Jun Max Red	1.07	20.68	21.68	1	6.97	4.47	7.51
34	Jun Cons	1.54	20.68	21.77	1.09	7.81	5.16	8.36
34	Jun Op	1.38	20.68	21.75	1.07	7.5	4.94	8.05
34	Jun Clos	1.76	20.68	21.81	1.13	8.18	5.43	8.74
34	Sept Baseline	0.35	20.68	21.39	0.71	5.38	2.66	5.81
34	Sept Max Red	0.23	20.68	21.32	0.64	5.04	2.3	5.43
34	Sept Cons	0.28	20.68	21.35	0.67	5.21	2.48	5.62
34	Sept Op	0.25	20.68	21.33	0.65	5.11	2.38	5.52
34	Sept Clos	0.33	20.68	21.38	0.7	5.33	2.61	5.75
33	June Baseline	2	20.92	21.81	0.89	17.49	5.4	17.75
33	Jun Max Red	1.07	20.92	21.65	0.74	8.83	3.58	9.07
33	Jun Cons	1.54	20.92	21.75	0.83	10.18	4.44	10.43

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
33	Jun Op	1.38	20.92	21.72	0.8	9.62	4.17	9.87
33	Jun Clos	1.76	20.92	21.78	0.86	16.35	4.86	16.61
33	Sept Baseline	0.35	20.92	21.37	0.45	5.08	1.62	5.21
33	Sept Max Red	0.23	20.92	21.3	0.38	4.79	1.29	4.89
33	Sept Cons	0.28	20.92	21.33	0.42	4.94	1.46	5.05
33	Sept Op	0.25	20.92	21.32	0.4	4.85	1.37	4.96
33	Sept Clos	0.33	20.92	21.36	0.44	5.04	1.57	5.16
32	June Baseline	2	20.89	21.78	0.89	13.58	4.45	13.87
32	Jun Max Red	1.07	20.89	21.63	0.74	8.74	2.72	9.02
32	Jun Cons	1.54	20.89	21.72	0.83	11.77	3.65	12.06
32	Jun Op	1.38	20.89	21.69	0.8	10.88	3.34	11.17
32	Jun Clos	1.76	20.89	21.75	0.86	12.67	4.03	12.96
32	Sept Baseline	0.35	20.89	21.35	0.46	3.71	1.22	3.92
32	Sept Max Red	0.23	20.89	21.29	0.4	3.39	1	3.58
32	Sept Cons	0.28	20.89	21.32	0.43	3.55	1.11	3.75
32	Sept Op	0.25	20.89	21.3	0.42	3.46	1.05	3.66
32	Sept Clos	0.33	20.89	21.34	0.46	3.66	1.19	3.87
31	June Baseline	2	20.91	21.4	0.49	3.21	1.09	3.66
31	Jun Max Red	1.07	20.91	21.26	0.36	2.87	0.7	3.19
31	Jun Cons	1.54	20.91	21.33	0.42	2.94	0.89	3.34
31	Jun Op	1.38	20.91	21.31	0.4	2.92	0.82	3.29
31	Jun Clos	1.76	20.91	21.36	0.46	3.05	0.99	3.48
31	Sept Baseline	0.35	20.91	21.13	0.22	2.72	0.32	2.88
31	Sept Max Red	0.23	20.91	21.1	0.19	2.67	0.24	2.8
31	Sept Cons	0.28	20.91	21.12	0.21	2.7	0.28	2.84
31	Sept Op	0.25	20.91	21.11	0.2	2.68	0.26	2.82
31	Sept Clos	0.33	20.91	21.12	0.22	2.71	0.31	2.87
30	June Baseline	2	10.45	11.4	0.95	8.06	5.11	8.57
30	Jun Max Red	1.07	10.45	11.15	0.71	5.91	3.44	6.34
30	Jun Cons	1.54	10.45	11.3	0.85	6.78	4.36	7.27
30	Jun Op	1.38	10.45	11.25	0.81	6.48	4.07	6.95
30	Jun Clos	1.76	10.45	11.35	0.91	7.3	4.73	7.8
30	Sept Baseline	0.35	10.45	10.81	0.36	4.93	1.58	5.15
30	Sept Max Red	0.23	10.45	10.73	0.28	4.7	1.2	4.87
30	Sept Cons	0.28	10.45	10.77	0.32	4.82	1.39	5.01
30	Sept Op	0.25	10.45	10.75	0.3	4.75	1.29	4.93
30	Sept Clos	0.33	10.45	10.8	0.35	4.9	1.52	5.1

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
29	June Baseline	2	10.22	11.22	1	19.1	4.78	19.82
29	Jun Max Red	1.07	10.22	10.97	0.76	4.69	2.43	5.36
29	Jun Cons	1.54	10.22	11.12	0.9	10.1	3.37	10.81
29	Jun Op	1.38	10.22	11.08	0.86	7.02	3	7.73
29	Jun Clos	1.76	10.22	11.17	0.95	15.24	4	15.95
29	Sept Baseline	0.35	10.22	10.63	0.41	3.36	1.13	3.74
29	Sept Max Red	0.23	10.22	10.55	0.33	3.28	0.87	3.56
29	Sept Cons	0.28	10.22	10.59	0.37	3.32	1	3.65
29	Sept Op	0.25	10.22	10.57	0.35	3.3	0.93	3.6
29	Sept Clos	0.33	10.22	10.62	0.4	3.35	1.09	3.71
28	June Baseline	2	9.43	10.89	1.46	11.73	8.05	12.31
28	Jun Max Red	1.07	9.43	10.63	1.21	8.74	5.5	9.26
28	Jun Cons	1.54	9.43	10.79	1.37	10.51	7	11.06
28	Jun Op	1.38	9.43	10.75	1.33	10.08	6.62	10.63
28	Jun Clos	1.76	9.43	10.84	1.42	11.17	7.55	11.74
28	Sept Baseline	0.35	9.43	10.29	0.86	5.38	3.07	5.78
28	Sept Max Red	0.23	9.43	10.2	0.77	4.94	2.6	5.3
28	Sept Cons	0.28	9.43	10.25	0.82	5.12	2.83	5.49
28	Sept Op	0.25	9.43	10.22	0.79	5.02	2.71	5.39
28	Sept Clos	0.33	9.43	10.28	0.85	5.25	2.99	5.64
27	June Baseline	2	9.56	10.86	1.3	10.17	7.23	10.9
27	Jun Max Red	1.07	9.56	10.61	1.05	7.73	5.04	8.38
27	Jun Cons	1.54	9.56	10.77	1.21	9.16	6.35	9.86
27	Jun Op	1.38	9.56	10.73	1.17	8.76	6.03	9.45
27	Jun Clos	1.76	9.56	10.82	1.26	9.71	6.82	10.43
27	Sept Baseline	0.35	9.56	10.28	0.72	6	2.8	6.46
27	Sept Max Red	0.23	9.56	10.19	0.63	5.65	2.29	6.04
27	Sept Cons	0.28	9.56	10.23	0.67	5.82	2.54	6.25
27	Sept Op	0.25	9.56	10.21	0.65	5.73	2.41	6.14
27	Sept Clos	0.33	9.56	10.26	0.7	5.95	2.72	6.4
26	June Baseline	2	9.77	10.84	1.08	10.75	5.79	11.37
26	Jun Max Red	1.07	9.77	10.59	0.83	8.04	3.42	8.6
26	Jun Cons	1.54	9.77	10.75	0.99	10.03	4.85	10.62
26	Jun Op	1.38	9.77	10.72	0.95	9.61	4.5	10.2
26	Jun Clos	1.76	9.77	10.8	1.04	10.44	5.36	11.04
26	Sept Baseline	0.35	9.77	10.27	0.5	4.12	1.56	4.53
26	Sept Max Red	0.23	9.77	10.18	0.42	3.73	1.23	4.07
26	Sept Cons	0.28	9.77	10.22	0.46	3.89	1.4	4.27
26	Sept Op	0.25	9.77	10.2	0.43	3.8	1.31	4.16
26	Sept Clos	0.33	9.77	10.25	0.49	4.04	1.51	4.44

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
25	June Baseline	2	9.52	10.81	1.29	9.85	7.15	10.71
25	Jun Max Red	1.07	9.52	10.56	1.03	8.49	4.79	9.21
25	Jun Cons	1.54	9.52	10.73	1.2	9.5	6.28	10.3
25	Jun Op	1.38	9.52	10.69	1.17	9.31	5.96	10.1
25	Jun Clos	1.76	9.52	10.78	1.25	9.7	6.76	10.53
25	Sept Baseline	0.35	9.52	10.24	0.71	5.59	2.44	6.18
25	Sept Max Red	0.23	9.52	10.16	0.63	5.28	2.01	5.8
25	Sept Cons	0.28	9.52	10.2	0.67	5.44	2.22	5.99
25	Sept Op	0.25	9.52	10.18	0.65	5.35	2.1	5.89
25	Sept Clos	0.33	9.52	10.23	0.7	5.54	2.38	6.12
24	June Baseline	2	9.71	10.77	1.06	24.89	11.86	25.31
24	Jun Max Red	1.07	9.71	10.52	0.81	12.34	7.46	12.71
24	Jun Cons	1.54	9.71	10.69	0.98	19.58	9.98	19.98
24	Jun Op	1.38	9.71	10.65	0.94	17.59	9.39	18
24	Jun Clos	1.76	9.71	10.73	1.02	22.61	11	23.03
24	Sept Baseline	0.35	9.71	10.2	0.49	11.28	3.79	11.44
24	Sept Max Red	0.23	9.71	10.12	0.41	11.09	2.92	11.19
24	Sept Cons	0.28	9.71	10.16	0.45	11.18	3.35	11.32
24	Sept Op	0.25	9.71	10.14	0.43	11.13	3.12	11.25
24	Sept Clos	0.33	9.71	10.19	0.48	11.25	3.65	11.4
23	June Baseline	2	9.58	10.7	1.12	22.44	9.42	22.99
23	Jun Max Red	1.07	9.58	10.44	0.86	9.35	5.73	5.26
23	Jun Cons	1.54	9.58	10.62	1.04	16.97	7.86	17.52
23	Jun Op	1.38	9.58	10.59	1.01	15.01	7.42	15.56
23	Jun Clos	1.76	9.58	10.67	1.09	20.32	8.76	20.87
23	Sept Baseline	0.35	9.58	10.12	0.55	8.23	3	3.94
23	Sept Max Red	0.23	9.58	10.04	0.46	8.02	2.34	3.67
23	Sept Cons	0.28	9.58	10.08	0.5	8.12	2.67	3.81
23	Sept Op	0.25	9.58	10.06	0.48	8.07	2.49	3.73
23	Sept Clos	0.33	9.58	10.11	0.53	8.2	2.9	3.9
22	June Baseline	2	8.96	9.86	0.9	25.57	13.37	26.01
22	Jun Max Red	1.07	8.96	9.66	0.69	16.94	9.11	17.35
22	Jun Cons	1.54	8.96	9.8	0.83	21.93	11.76	22.37
22	Jun Op	1.38	8.96	9.77	0.8	20.68	11.16	21.12
22	Jun Clos	1.76	8.96	9.83	0.87	23.47	12.54	23.91
22	Sept Baseline	0.35	8.96	9.43	0.46	15.68	5.39	15.93
22	Sept Max Red	0.23	8.96	9.37	0.41	15.24	4.47	15.46
22	Sept Cons	0.28	8.96	9.4	0.44	15.52	4.95	15.76
22	Sept Op	0.25	8.96	9.38	0.42	15.41	4.67	15.63
22	Sept Clos	0.33	8.96	9.42	0.46	15.63	5.25	15.88

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
21	June Baseline	2	9.01	9.83	0.82	21.99	9.73	22.32
21	Jun Max Red	1.07	9.01	9.62	0.61	15.18	6.01	10.44
21	Jun Cons	1.54	9.01	9.77	0.76	19.24	8.4	19.57
21	Jun Op	1.38	9.01	9.74	0.73	17.97	7.91	18.29
21	Jun Clos	1.76	9.01	9.8	0.79	20.74	9.05	21.06
21	Sept Baseline	0.35	9.01	9.39	0.39	13.39	2.69	9.33
21	Sept Max Red	0.23	9.01	9.34	0.33	10.72	2.03	8.38
21	Sept Cons	0.28	9.01	9.37	0.36	11.53	2.35	8.99
21	Sept Op	0.25	9.01	9.35	0.34	10.96	2.16	8.54
21	Sept Clos	0.33	9.01	9.38	0.38	12.81	2.58	9.28
20	June Baseline	2	8.29	9.38	1.09	30.56	20.92	30.96
20	Jun Max Red	1.07	8.29	9.18	0.88	23.94	15.22	24.31
20	Jun Cons	1.54	8.29	9.3	1.01	28.54	18.55	28.92
20	Jun Op	1.38	8.29	9.27	0.98	27.73	17.58	28.12
20	Jun Clos	1.76	8.29	9.35	1.05	29.5	19.76	29.89
20	Sept Baseline	0.35	8.29	8.89	0.6	19.38	8.95	19.68
20	Sept Max Red	0.23	8.29	8.82	0.53	18.28	7.69	18.54
20	Sept Cons	0.28	8.29	8.86	0.57	18.41	8.31	18.7
20	Sept Op	0.25	8.29	8.84	0.55	18.34	7.97	18.61
20	Sept Clos	0.33	8.29	8.88	0.59	18.96	8.75	19.27
19	June Baseline	2	8.5	9.31	0.81	36.73	9.38	36.97
19	Jun Max Red	1.07	8.5	9.11	0.61	12.07	5.28	12.3
19	Jun Cons	1.54	8.5	9.23	0.74	18.58	7.13	18.82
19	Jun Op	1.38	8.5	9.2	0.7	15.89	6.56	16.13
19	Jun Clos	1.76	8.5	9.27	0.77	32.3	8.11	32.54
19	Sept Baseline	0.35	8.5	8.84	0.34	9.68	2.52	9.82
19	Sept Max Red	0.23	8.5	8.78	0.28	9.45	1.93	9.55
19	Sept Cons	0.28	8.5	8.81	0.31	9.56	2.22	9.68
19	Sept Op	0.25	8.5	8.79	0.29	9.5	2.06	9.61
19	Sept Clos	0.33	8.5	8.83	0.33	9.64	2.42	9.78
18.9	June Baseline	2	8.1	8.88	0.78	35.47	8.47	35.71
18.9	Jun Max Red	1.07	8.1	8.7	0.61	12.25	5.27	12.48
18.9	Jun Cons	1.54	8.1	8.82	0.72	17.55	6.91	17.79
18.9	Jun Op	1.38	8.1	8.79	0.69	15.55	6.43	15.79
18.9	Jun Clos	1.76	8.1	8.85	0.75	24.69	7.58	24.93
18.9	Sept Baseline	0.35	8.1	8.43	0.33	9.63	2.39	9.76
18.9	Sept Max Red	0.23	8.1	8.37	0.27	9.39	1.81	9.49
18.9	Sept Cons	0.28	8.1	8.4	0.3	9.51	2.09	9.62
18.9	Sept Op	0.25	8.1	8.38	0.28	9.45	1.93	9.55
18.9	Sept Clos	0.33	8.1	8.42	0.32	9.59	2.3	9.72

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
18	June Baseline	2	4.35	5.36	1.01	13.7	3.52	14.54
18	Jun Max Red	1.07	4.35	5.13	0.78	4.02	1.59	4.83
18	Jun Cons	1.54	4.35	5.26	0.91	9.81	2.31	10.65
18	Jun Op	1.38	4.35	5.22	0.87	5.5	2	6.33
18	Jun Clos	1.76	4.35	5.31	0.96	11.85	2.87	12.68
18	Sept Baseline	0.35	4.35	4.79	0.44	1.71	0.62	2.28
18	Sept Max Red	0.23	4.35	4.71	0.36	1.64	0.48	2.1
18	Sept Cons	0.28	4.35	4.75	0.4	1.68	0.55	2.18
18	Sept Op	0.25	4.35	4.72	0.38	1.66	0.51	2.14
18	Sept Clos	0.33	4.35	4.78	0.43	1.7	0.6	2.25
17	June Baseline	2	3.69	5.38	1.69	17.02	14.29	17.83
17	Jun Max Red	1.07	3.69	5.15	1.46	12.02	10.98	12.8
17	Jun Cons	1.54	3.69	5.28	1.59	15.02	12.72	15.81
17	Jun Op	1.38	3.69	5.24	1.55	13.74	12.13	14.53
17	Jun Clos	1.76	3.69	5.33	1.64	16.04	13.49	16.84
17	Sept Baseline	0.35	3.69	4.8	1.11	9.1	7.35	9.76
17	Sept Max Red	0.23	3.69	4.71	1.03	8.6	6.58	9.24
17	Sept Cons	0.28	3.69	4.76	1.07	8.84	6.95	9.5
17	Sept Op	0.25	3.69	4.73	1.05	8.71	6.75	9.35
17	Sept Clos	0.33	3.69	4.79	1.1	9.02	7.23	9.68
16	June Baseline	2	3.62	5.38	1.76	18.02	14.09	19.15
16	Jun Max Red	1.07	3.62	5.15	1.53	11.1	11.02	12.19
16	Jun Cons	1.54	3.62	5.28	1.66	13.26	12.58	14.38
16	Jun Op	1.38	3.62	5.24	1.62	12.29	12.07	13.41
16	Jun Clos	1.76	3.62	5.33	1.71	15.17	13.28	16.3
16	Sept Baseline	0.35	3.62	4.8	1.18	9.19	7.52	10.12
16	Sept Max Red	0.23	3.62	4.71	1.09	8.89	6.73	9.76
16	Sept Cons	0.28	3.62	4.76	1.14	9	7.11	9.9
16	Sept Op	0.25	3.62	4.73	1.11	8.93	6.9	9.82
16	Sept Clos	0.33	3.62	4.79	1.17	9.13	7.39	10.05
15	June Baseline	2	4.05	5.37	1.32	10.37	4.83	11.41
15	Jun Max Red	1.07	4.05	5.14	1.1	5.34	3.19	6.34
15	Jun Cons	1.54	4.05	5.27	1.22	7.27	3.97	8.3
15	Jun Op	1.38	4.05	5.23	1.19	6.38	3.71	7.4
15	Jun Clos	1.76	4.05	5.32	1.27	8.84	4.37	9.87
15	Sept Baseline	0.35	4.05	4.8	0.75	3.82	1.7	4.55
15	Sept Max Red	0.23	4.05	4.71	0.66	3.75	1.38	4.36
15	Sept Cons	0.28	4.05	4.75	0.71	3.79	1.53	4.46
15	Sept Op	0.25	4.05	4.73	0.68	3.77	1.45	4.41
15	Sept Clos	0.33	4.05	4.78	0.74	3.81	1.65	4.52

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
14	June Baseline	2	4.31	5.31	0.99	9.14	2.73	9.8
14	Jun Max Red	1.07	4.31	5.07	0.76	3.38	1.35	3.99
14	Jun Cons	1.54	4.31	5.2	0.89	6.22	1.93	6.86
14	Jun Op	1.38	4.31	5.16	0.85	5.12	1.7	5.75
14	Jun Clos	1.76	4.31	5.25	0.94	7.7	2.3	8.35
14	Sept Baseline	0.35	4.31	4.75	0.44	1.74	0.57	2.12
14	Sept Max Red	0.23	4.31	4.67	0.36	1.66	0.45	1.95
14	Sept Cons	0.28	4.31	4.71	0.4	1.7	0.51	2.03
14	Sept Op	0.25	4.31	4.69	0.38	1.68	0.47	1.98
14	Sept Clos	0.33	4.31	4.74	0.42	1.73	0.55	2.09
13	June Baseline	2	2.93	5.3	2.37	22.08	25.76	23.47
13	Jun Max Red	1.07	2.93	5.07	2.14	15.59	21.37	16.95
13	Jun Cons	1.54	2.93	5.2	2.27	18.94	23.62	20.33
13	Jun Op	1.38	2.93	5.16	2.23	17.65	22.86	19.03
13	Jun Clos	1.76	2.93	5.25	2.32	20.52	24.65	21.9
13	Sept Baseline	0.35	2.93	4.75	1.82	13.43	16.72	14.7
13	Sept Max Red	0.23	2.93	4.67	1.74	12.92	15.72	14.17
13	Sept Cons	0.28	2.93	4.71	1.78	13.14	16.19	14.4
13	Sept Op	0.25	2.93	4.69	1.76	13.02	15.93	14.27
13	Sept Clos	0.33	2.93	4.73	1.8	13.34	16.55	14.6
12	June Baseline	2	3.39	5.3	1.92	16.11	17.23	16.74
12	Jun Max Red	1.07	3.39	5.06	1.68	13.28	13.84	13.84
12	Jun Cons	1.54	3.39	5.2	1.81	14.2	15.67	14.81
12	Jun Op	1.38	3.39	5.16	1.77	13.87	15.08	14.47
12	Jun Clos	1.76	3.39	5.25	1.86	14.95	16.43	15.57
12	Sept Baseline	0.35	3.39	4.75	1.36	11.16	9.93	11.62
12	Sept Max Red	0.23	3.39	4.67	1.28	10.63	9.11	11.07
12	Sept Cons	0.28	3.39	4.71	1.32	10.87	9.5	11.32
12	Sept Op	0.25	3.39	4.69	1.3	10.72	9.28	11.17
12	Sept Clos	0.33	3.39	4.73	1.35	11.07	9.8	11.53
11	June Baseline	2	4.02	5.29	1.26	8.53	3.9	9.48
11	Jun Max Red	1.07	4.02	5.05	1.03	4.6	2.5	5.51
11	Jun Cons	1.54	4.02	5.18	1.16	6.01	3.17	6.95
11	Jun Op	1.38	4.02	5.14	1.12	5.43	2.94	6.37
11	Jun Clos	1.76	4.02	5.24	1.21	7.09	3.51	8.04
11	Sept Baseline	0.35	4.02	4.74	0.72	2.78	1.39	3.49
11	Sept Max Red	0.23	4.02	4.67	0.64	2.71	1.19	3.32
11	Sept Cons	0.28	4.02	4.7	0.68	2.74	1.29	3.4
11	Sept Op	0.25	4.02	4.68	0.66	2.72	1.23	3.36
11	Sept Clos	0.33	4.02	4.73	0.71	2.77	1.36	3.46

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
10	June Baseline	2	4.13	5.21	1.07	8.6	3.59	9.37
10	Jun Max Red	1.07	4.13	4.96	0.82	5.28	1.99	5.96
10	Jun Cons	1.54	4.13	5.1	0.97	6.3	2.79	7.06
10	Jun Op	1.38	4.13	5.06	0.92	5.61	2.53	6.37
10	Jun Clos	1.76	4.13	5.15	1.02	7.34	3.15	8.11
10	Sept Baseline	0.35	4.13	4.6	0.46	2.95	0.48	3.4
10	Sept Max Red	0.23	4.13	4.52	0.39	2.63	0.27	3.01
10	Sept Cons	0.28	4.13	4.56	0.42	2.77	0.36	3.18
10	Sept Op	0.25	4.13	4.53	0.4	2.68	0.3	3.08
10	Sept Clos	0.33	4.13	4.58	0.45	2.88	0.44	3.33
9	June Baseline	2	2.57	5.2	2.63	14.17	20.02	15.62
9	Jun Max Red	1.07	2.57	4.95	2.38	12.16	16.74	13.53
9	Jun Cons	1.54	2.57	5.09	2.52	13.11	18.55	14.53
9	Jun Op	1.38	2.57	5.05	2.48	12.81	17.98	14.21
9	Jun Clos	1.76	2.57	5.15	2.58	13.5	19.27	14.93
9	Sept Baseline	0.35	2.57	4.58	2.01	10.19	12.62	11.43
9	Sept Max Red	0.23	2.57	4.49	1.92	9.63	11.74	10.84
9	Sept Cons	0.28	2.57	4.54	1.96	9.92	12.17	11.14
9	Sept Op	0.25	2.57	4.51	1.94	9.76	11.93	10.97
9	Sept Clos	0.33	2.57	4.57	1.99	10.11	12.48	11.34
8	June Baseline	2	2.57	5.2	2.63	15.57	22.18	16.83
8	Jun Max Red	1.07	2.57	4.95	2.38	12.94	18.68	14.13
8	Jun Cons	1.54	2.57	5.09	2.52	13.97	20.57	15.22
8	Jun Op	1.38	2.57	5.05	2.48	13.45	19.97	14.69
8	Jun Clos	1.76	2.57	5.15	2.58	14.7	21.36	15.96
8	Sept Baseline	0.35	2.57	4.58	2.01	11	14.19	12.04
8	Sept Max Red	0.23	2.57	4.49	1.92	10.56	13.23	11.56
8	Sept Cons	0.28	2.57	4.53	1.97	10.78	13.7	11.79
8	Sept Op	0.25	2.57	4.51	1.94	10.66	13.44	11.66
8	Sept Clos	0.33	2.57	4.56	2	10.93	14.03	11.96
7	June Baseline	2	2.94	5.2	2.26	16.67	17.83	17.64
7	Jun Max Red	1.07	2.94	4.95	2.01	11.89	14.29	12.82
7	Jun Cons	1.54	2.94	5.09	2.15	14.52	16.13	15.49
7	Jun Op	1.38	2.94	5.05	2.11	13.43	15.52	14.39
7	Jun Clos	1.76	2.94	5.15	2.21	15.62	16.96	16.59
7	Sept Baseline	0.35	2.94	4.58	1.64	9.55	10.38	10.33
7	Sept Max Red	0.23	2.94	4.49	1.55	9.3	9.53	10.02
7	Sept Cons	0.28	2.94	4.53	1.59	9.42	9.95	10.17
7	Sept Op	0.25	2.94	4.51	1.57	9.36	9.72	10.09
7	Sept Clos	0.33	2.94	4.56	1.63	9.51	10.25	10.28

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
6	June Baseline	2	4.07	5.19	1.12	8.68	5.12	9.31
6	Jun Max Red	1.07	4.07	4.94	0.87	7	3.13	7.46
6	Jun Cons	1.54	4.07	5.08	1.01	8.19	4.2	8.7
6	Jun Op	1.38	4.07	5.04	0.97	7.8	3.86	8.29
6	Jun Clos	1.76	4.07	5.14	1.07	8.44	4.66	9.01
6	Sept Baseline	0.35	4.07	4.57	0.5	3.45	1.24	3.71
6	Sept Max Red	0.23	4.07	4.48	0.41	3.15	0.95	3.36
6	Sept Cons	0.28	4.07	4.52	0.45	3.3	1.09	3.54
6	Sept Op	0.25	4.07	4.5	0.43	3.22	1.01	3.44
6	Sept Clos	0.33	4.07	4.56	0.49	3.4	1.19	3.66
5	June Baseline	2	4	5.11	1.11	10.05	4.49	10.66
5	Jun Max Red	1.07	4	4.84	0.84	4.9	2.69	5.44
5	Jun Cons	1.54	4	4.99	1	7.01	3.53	7.61
5	Jun Op	1.38	4	4.95	0.95	6.05	3.24	6.65
5	Jun Clos	1.76	4	5.05	1.05	8.55	3.97	9.15
5	Sept Baseline	0.35	4	4.46	0.46	3.22	1.09	3.52
5	Sept Max Red	0.23	4	4.37	0.37	2.85	0.83	3.1
5	Sept Cons	0.28	4	4.41	0.41	2.97	0.95	3.26
5	Sept Op	0.25	4	4.39	0.39	2.88	0.88	3.15
5	Sept Clos	0.33	4	4.44	0.44	3.14	1.04	3.43
4	June Baseline	2	3.98	5.07	1.09	10.89	6.1	11.24
4	Jun Max Red	1.07	3.98	4.8	0.82	7.99	3.66	8.25
4	Jun Cons	1.54	3.98	4.95	0.98	9.06	5.01	9.37
4	Jun Op	1.38	3.98	4.91	0.93	8.77	4.59	9.06
4	Jun Clos	1.76	3.98	5.01	1.03	9.36	5.55	9.69
4	Sept Baseline	0.35	3.98	4.38	0.4	4	1.17	4.16
4	Sept Max Red	0.23	3.98	4.29	0.31	3.59	0.83	3.7
4	Sept Cons	0.28	3.98	4.33	0.35	3.79	0.99	3.92
4	Sept Op	0.25	3.98	4.31	0.33	3.67	0.9	3.8
4	Sept Clos	0.33	3.98	4.36	0.39	3.93	1.11	4.09
3	June Baseline	2	3.92	5.05	1.13	11.37	5.89	11.76
3	Jun Max Red	1.07	3.92	4.77	0.85	6.88	3.41	7.22
3	Jun Cons	1.54	3.92	4.93	1.01	9.28	4.68	9.66
3	Jun Op	1.38	3.92	4.88	0.96	8.24	4.26	8.61
3	Jun Clos	1.76	3.92	4.99	1.07	10.36	5.27	10.74
3	Sept Baseline	0.35	3.92	4.32	0.4	3.86	1.07	4.02
3	Sept Max Red	0.23	3.92	4.2	0.28	3.39	0.64	3.46
3	Sept Cons	0.28	3.92	4.26	0.34	3.7	0.84	3.79
3	Sept Op	0.25	3.92	4.22	0.31	3.54	0.73	3.62
3	Sept Clos	0.33	3.92	4.3	0.38	3.81	1	3.95

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
2	June Baseline	2	3.75	5.05	1.3	23.63	14.65	23.9
2	Jun Max Red	1.07	3.75	4.77	1.02	13.99	9.48	14.24
2	Jun Cons	1.54	3.75	4.93	1.18	19.15	12.12	19.42
2	Jun Op	1.38	3.75	4.88	1.13	17.43	11.24	17.69
2	Jun Clos	1.76	3.75	4.99	1.24	21.61	13.34	21.88
2	Sept Baseline	0.35	3.75	4.31	0.56	9.66	4.21	9.8
2	Sept Max Red	0.23	3.75	4.19	0.45	8.75	3.11	8.86
2	Sept Cons	0.28	3.75	4.25	0.5	9.2	3.64	9.33
2	Sept Op	0.25	3.75	4.22	0.47	8.95	3.34	9.07
2	Sept Clos	0.33	3.75	4.3	0.55	9.52	4.03	9.66
1	June Baseline	2	3.7	5.04	1.34	14.79	7.65	15.55
1	Jun Max Red	1.07	3.7	4.77	1.07	7.82	4.82	8.24
1	Jun Cons	1.54	3.7	4.93	1.23	9.94	6.25	10.56
1	Jun Op	1.38	3.7	4.88	1.18	9.22	5.79	9.77
1	Jun Clos	1.76	3.7	4.99	1.29	11.81	6.88	12.5
1	Sept Baseline	0.35	3.7	4.31	0.61	4.82	2.02	5.09
1	Sept Max Red	0.23	3.7	4.19	0.49	4.22	1.48	4.44
1	Sept Cons	0.28	3.7	4.25	0.55	4.49	1.74	4.73
1	Sept Op	0.25	3.7	4.22	0.52	4.34	1.6	4.57
1	Sept Clos	0.33	3.7	4.29	0.59	4.72	1.93	4.98

Table A-9. Little Roberts Outflow Base Case Model Results

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
15	June Baseline	7.24	4.16	5.3	1.14	38.93	19.36	39.22
15	Jun Max Red	5.65	4.16	5.18	1.02	31.48	15.27	31.77
15	Jun Cons	6.37	4.16	5.23	1.08	35.02	17.08	35.31
15	Jun Op	6.22	4.16	5.22	1.07	34.31	16.7	34.6
15	Jun Clos	6.85	4.16	5.27	1.11	37.27	18.34	37.56
15	Sept Baseline	1.18	4.16	4.64	0.49	12.92	5.11	13.12
15	Sept Max Red	1.05	4.16	4.62	0.46	12.84	4.8	13.02
15	Sept Cons	1.07	4.16	4.62	0.47	12.85	4.84	13.03
15	Sept Op	1.06	4.16	4.62	0.46	12.85	4.82	13.03
15	Sept Clos	1.13	4.16	4.63	0.48	12.89	5	13.08
14	June Baseline	7.24	4.06	5.27	1.22	43.61	22.37	43.9
14	Jun Max Red	5.65	4.06	5.16	1.1	36.53	17.67	36.82
14	Jun Cons	6.37	4.06	5.21	1.16	39.93	19.77	40.22
14	Jun Op	6.22	4.06	5.2	1.14	39.28	19.34	39.57
14	Jun Clos	6.85	4.06	5.25	1.19	42.01	21.21	42.3

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
14	Sept Baseline	1.18	4.06	4.63	0.57	13.31	5.93	13.55
14	Sept Max Red	1.05	4.06	4.6	0.54	13.17	5.62	13.39
14	Sept Cons	1.07	4.06	4.6	0.55	13.18	5.66	13.41
14	Sept Op	1.06	4.06	4.6	0.55	13.18	5.64	13.4
14	Sept Clos	1.13	4.06	4.62	0.56	13.26	5.82	13.49
13	June Baseline	7.24	4.17	5.27	1.09	43.77	19.79	44.09
13	Jun Max Red	5.65	4.17	5.15	0.98	35.65	15.11	35.97
13	Jun Cons	6.37	4.17	5.2	1.03	39.46	17.19	39.79
13	Jun Op	6.22	4.17	5.19	1.02	38.71	16.76	39.03
13	Jun Clos	6.85	4.17	5.24	1.07	41.9	18.63	42.22
13	Sept Baseline	1.18	4.17	4.62	0.45	12.17	4.26	12.4
13	Sept Max Red	1.05	4.17	4.59	0.42	12.04	3.98	12.27
13	Sept Cons	1.07	4.17	4.6	0.43	12.05	4.01	12.28
13	Sept Op	1.06	4.17	4.59	0.42	12.05	3.99	12.28
13	Sept Clos	1.13	4.17	4.61	0.44	12.11	4.16	12.35
12	June Baseline	7.24	4.07	5.26	1.19	22.81	15.37	23.57
12	Jun Max Red	5.65	4.07	5.14	1.08	21.54	12.78	22.18
12	Jun Cons	6.37	4.07	5.2	1.13	22.13	13.98	22.83
12	Jun Op	6.22	4.07	5.19	1.12	22.02	13.74	22.7
12	Jun Clos	6.85	4.07	5.23	1.17	22.51	14.77	23.25
12	Sept Baseline	1.18	4.07	4.61	0.54	11.69	3.76	12
12	Sept Max Red	1.05	4.07	4.59	0.52	11.57	3.49	11.87
12	Sept Cons	1.07	4.07	4.59	0.52	11.58	3.52	11.88
12	Sept Op	1.06	4.07	4.59	0.52	11.58	3.5	11.87
12	Sept Clos	1.13	4.07	4.6	0.53	11.63	3.66	11.94
11	June Baseline	7.24	3.79	5.25	1.47	19.83	15.05	20.43
11	Jun Max Red	5.65	3.79	5.14	1.35	17.96	12.86	18.54
11	Jun Cons	6.37	3.79	5.19	1.41	18.84	13.87	19.43
11	Jun Op	6.22	3.79	5.18	1.4	18.66	13.66	19.25
11	Jun Clos	6.85	3.79	5.23	1.44	19.4	14.53	19.99
11	Sept Baseline	1.18	3.79	4.61	0.82	9.58	5.5	10.03
11	Sept Max Red	1.05	3.79	4.59	0.8	9.47	5.28	9.9
11	Sept Cons	1.07	3.79	4.59	0.8	9.48	5.31	9.92
11	Sept Op	1.06	3.79	4.59	0.8	9.47	5.29	9.91
11	Sept Clos	1.13	3.79	4.6	0.81	9.54	5.42	9.99
10	June Baseline	7.24	3.91	5.25	1.34	37.18	18.96	37.74
10	Jun Max Red	5.65	3.91	5.13	1.23	31.71	14.91	32.27
10	Jun Cons	6.37	3.91	5.19	1.28	34.28	16.73	34.84
10	Jun Op	6.22	3.91	5.18	1.27	33.77	16.36	34.33

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
10	Jun Clos	6.85	3.91	5.23	1.32	35.92	17.97	36.48
10	Sept Baseline	1.18	3.91	4.61	0.7	10.23	4.74	10.64
10	Sept Max Red	1.05	3.91	4.58	0.67	10.15	4.51	10.56
10	Sept Cons	1.07	3.91	4.59	0.68	10.16	4.53	10.57
10	Sept Op	1.06	3.91	4.58	0.67	10.16	4.52	10.56
10	Sept Clos	1.13	3.91	4.6	0.69	10.2	4.66	10.61
9	June Baseline	7.24	3.87	5.24	1.38	32.01	18.27	32.39
9	Jun Max Red	5.65	3.87	5.13	1.26	28.19	14.74	28.54
9	Jun Cons	6.37	3.87	5.18	1.32	29.99	16.34	30.35
9	Jun Op	6.22	3.87	5.17	1.3	29.63	16.02	29.99
9	Jun Clos	6.85	3.87	5.22	1.35	31.13	17.42	31.51
9	Sept Baseline	1.18	3.87	4.6	0.73	9.72	5.08	9.96
9	Sept Max Red	1.05	3.87	4.58	0.71	9.6	4.86	9.83
9	Sept Cons	1.07	3.87	4.58	0.71	9.61	4.89	9.84
9	Sept Op	1.06	3.87	4.58	0.71	9.6	4.87	9.84
9	Sept Clos	1.13	3.87	4.59	0.73	9.67	5	9.91
8	June Baseline	7.24	4.01	5.25	1.24	35.53	19.72	35.98
8	Jun Max Red	5.65	4.01	5.13	1.12	32.93	15.62	33.32
8	Jun Cons	6.37	4.01	5.18	1.17	34.99	17.5	35.38
8	Jun Op	6.22	4.01	5.17	1.16	34.58	17.12	34.97
8	Jun Clos	6.85	4.01	5.22	1.21	35.4	18.76	35.83
8	Sept Baseline	1.18	4.01	4.6	0.59	10.68	4.36	10.98
8	Sept Max Red	1.05	4.01	4.58	0.57	10.49	4.12	10.79
8	Sept Cons	1.07	4.01	4.58	0.57	10.52	4.15	10.81
8	Sept Op	1.06	4.01	4.58	0.57	10.5	4.13	10.8
8	Sept Clos	1.13	4.01	4.59	0.58	10.61	4.27	10.91
7	June Baseline	7.24	3.7	5.23	1.53	36.25	22.9	36.65
7	Jun Max Red	5.65	3.7	5.11	1.41	34.37	18.66	34.75
7	Jun Cons	6.37	3.7	5.17	1.47	35.42	20.63	35.81
7	Jun Op	6.22	3.7	5.16	1.46	35.28	20.24	35.66
7	Jun Clos	6.85	3.7	5.21	1.5	35.89	21.91	36.29
7	Sept Baseline	1.18	3.7	4.58	0.88	12.41	7.59	12.71
7	Sept Max Red	1.05	3.7	4.56	0.86	11.82	7.32	12.12
7	Sept Cons	1.07	3.7	4.56	0.86	11.9	7.35	12.19
7	Sept Op	1.06	3.7	4.56	0.86	11.86	7.33	12.15
7	Sept Clos	1.13	3.7	4.58	0.87	12.2	7.49	12.49
6.8	June Baseline	7.24	3.4	5.23	1.83	36.19	25.36	36.75
6.8	Jun Max Red	5.65	3.4	5.11	1.71	33.99	21.1	34.53
6.8	Jun Cons	6.37	3.4	5.17	1.77	35.36	23.08	35.91

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
6.8	Jun Op	6.22	3.4	5.15	1.75	35.21	22.68	35.76
6.8	Jun Clos	6.85	3.4	5.2	1.8	35.83	24.36	36.38
6.8	Sept Baseline	1.18	3.4	4.56	1.16	11.84	9.84	12.3
6.8	Sept Max Red	1.05	3.4	4.54	1.14	11.21	9.57	11.66
6.8	Sept Cons	1.07	3.4	4.54	1.14	11.28	9.6	11.74
6.8	Sept Op	1.06	3.4	4.54	1.14	11.24	9.58	11.69
6.8	Sept Clos	1.13	3.4	4.55	1.15	11.61	9.74	12.06
6.4	June Baseline	7.24	3.4	5.22	1.82	36.08	25.01	36.64
6.4	Jun Max Red	5.65	3.4	5.1	1.7	33.34	20.74	33.88
6.4	Jun Cons	6.37	3.4	5.16	1.76	35.24	22.72	35.79
6.4	Jun Op	6.22	3.4	5.14	1.74	35.09	22.32	35.64
6.4	Jun Clos	6.85	3.4	5.19	1.79	35.71	24.02	36.27
6.4	Sept Baseline	1.18	3.4	4.55	1.15	11.54	9.71	11.99
6.4	Sept Max Red	1.05	3.4	4.53	1.13	11	9.45	11.45
6.4	Sept Cons	1.07	3.4	4.53	1.13	11.01	9.48	11.46
6.4	Sept Op	1.06	3.4	4.53	1.13	11.01	9.47	11.46
6.4	Sept Clos	1.13	3.4	4.54	1.14	11.32	9.61	11.77
6	June Baseline	7.24	3.81	5.22	1.41	34.94	25.68	35.48
6	Jun Max Red	5.65	3.81	5.1	1.29	33.17	21.55	33.69
6	Jun Cons	6.37	3.81	5.16	1.34	34	23.47	34.53
6	Jun Op	6.22	3.81	5.15	1.33	33.84	23.08	34.36
6	Jun Clos	6.85	3.81	5.19	1.38	34.53	24.71	35.07
6	Sept Baseline	1.18	3.81	4.55	0.74	16.73	8.85	17.07
6	Sept Max Red	1.05	3.81	4.53	0.71	16.67	8.46	16.99
6	Sept Cons	1.07	3.81	4.53	0.72	16.68	8.51	17
6	Sept Op	1.06	3.81	4.53	0.71	16.67	8.48	16.99
6	Sept Clos	1.13	3.81	4.54	0.73	16.71	8.7	17.04
5	June Baseline	7.24	3.97	5.21	1.25	25.19	17.46	25.65
5	Jun Max Red	5.65	3.97	5.09	1.12	23.47	14.53	23.91
5	Jun Cons	6.37	3.97	5.15	1.18	24.28	15.88	24.73
5	Jun Op	6.22	3.97	5.14	1.17	24.12	15.61	24.57
5	Jun Clos	6.85	3.97	5.19	1.22	24.8	16.77	25.26
5	Sept Baseline	1.18	3.97	4.55	0.58	12.18	4.82	12.47
5	Sept Max Red	1.05	3.97	4.52	0.55	12.1	4.54	12.38
5	Sept Cons	1.07	3.97	4.53	0.56	12.11	4.57	12.39
5	Sept Op	1.06	3.97	4.52	0.56	12.11	4.56	12.39
5	Sept Clos	1.13	3.97	4.54	0.57	12.15	4.72	12.44
4	June Baseline	7.24	3.92	5.18	1.26	20.74	13.63	21.28
4	Jun Max Red	5.65	3.92	5.06	1.14	18.74	11.27	19.25

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
4	Jun Cons	6.37	3.92	5.11	1.2	19.69	12.35	20.22
4	Jun Op	6.22	3.92	5.1	1.18	19.5	12.13	20.03
4	Jun Clos	6.85	3.92	5.15	1.23	20.29	13.07	20.83
4	Sept Baseline	1.18	3.92	4.5	0.58	12.18	3.1	12.45
4	Sept Max Red	1.05	3.92	4.47	0.55	12.11	2.81	12.36
4	Sept Cons	1.07	3.92	4.47	0.56	12.12	2.84	12.37
4	Sept Op	1.06	3.92	4.47	0.56	12.12	2.82	12.37
4	Sept Clos	1.13	3.92	4.49	0.57	12.15	3	12.42
3	June Baseline	7.24	3.7	5.11	1.41	20.55	15.92	21.31
3	Jun Max Red	5.65	3.7	4.99	1.29	19.38	13.56	20.13
3	Jun Cons	6.37	3.7	5.04	1.35	19.93	14.66	20.69
3	Jun Op	6.22	3.7	5.03	1.34	19.82	14.44	20.57
3	Jun Clos	6.85	3.7	5.08	1.38	20.28	15.37	21.04
3	Sept Baseline	1.18	3.7	4.41	0.71	9.27	5	9.84
3	Sept Max Red	1.05	3.7	4.38	0.68	9.24	4.72	9.78
3	Sept Cons	1.07	3.7	4.38	0.68	9.25	4.76	9.79
3	Sept Op	1.06	3.7	4.38	0.68	9.25	4.74	9.78
3	Sept Clos	1.13	3.7	4.4	0.7	9.26	4.9	9.82
2	June Baseline	7.24	3.67	4.92	1.25	20.35	13.13	20.91
2	Jun Max Red	5.65	3.67	4.81	1.14	19.04	10.97	19.58
2	Jun Cons	6.37	3.67	4.86	1.19	19.9	11.97	20.44
2	Jun Op	6.22	3.67	4.85	1.18	19.78	11.77	20.31
2	Jun Clos	6.85	3.67	4.89	1.22	20.16	12.62	20.71
2	Sept Baseline	1.18	3.67	4.28	0.61	9.61	3.95	6.89
2	Sept Max Red	1.05	3.67	4.25	0.58	9.58	3.7	6.83
2	Sept Cons	1.07	3.67	4.25	0.59	9.59	3.73	6.84
2	Sept Op	1.06	3.67	4.25	0.58	9.59	3.72	6.83
2	Sept Clos	1.13	3.67	4.27	0.6	9.6	3.86	6.87
1	June Baseline	7.24	2.65	3.97	1.31	16.83	10.89	17.55
1	Jun Max Red	5.65	2.65	3.85	1.2	15.67	8.96	16.33
1	Jun Cons	6.37	2.65	3.9	1.25	16.36	9.86	17.05
1	Jun Op	6.22	2.65	3.89	1.24	16.25	9.68	16.94
1	Jun Clos	6.85	2.65	3.94	1.29	16.7	10.45	17.4
1	Sept Baseline	1.18	2.65	3.26	0.61	7.29	2.97	7.7
1	Sept Max Red	1.05	2.65	3.24	0.58	7.26	2.77	7.64
1	Sept Cons	1.07	2.65	3.24	0.59	7.26	2.79	7.65
1	Sept Op	1.06	2.65	3.24	0.58	7.26	2.78	7.64
1	Sept Clos	1.13	2.65	3.25	0.6	7.28	2.89	7.68

Table A-10. Little Roberts Outflow High Groundwater Model Results

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
15	June Baseline	7.24	4.16	5.3	1.14	38.93	19.36	39.22
15	Jun Max Red	5.38	4.16	5.16	1	30.06	14.59	30.35
15	Jun Cons	6.3	4.16	5.23	1.07	34.71	16.91	35
15	Jun Op	5.99	4.16	5.21	1.05	33.19	16.12	33.48
15	Jun Clos	6.78	4.16	5.26	1.11	36.96	18.16	37.25
15	Sept Baseline	1.18	4.16	4.64	0.49	12.92	5.11	13.12
15	Sept Max Red	0.94	4.16	4.6	0.44	12.77	4.52	12.94
15	Sept Cons	1.05	4.16	4.62	0.46	12.84	4.78	13.02
15	Sept Op	0.98	4.16	4.6	0.45	12.79	4.61	12.96
15	Sept Clos	1.12	4.16	4.63	0.48	12.89	4.97	13.07
14	June Baseline	7.24	4.06	5.27	1.22	43.61	22.37	43.9
14	Jun Max Red	5.38	4.06	5.14	1.08	35.1	16.88	35.39
14	Jun Cons	6.3	4.06	5.21	1.15	39.64	19.58	39.93
14	Jun Op	5.99	4.06	5.18	1.13	38.24	18.66	38.53
14	Jun Clos	6.78	4.06	5.24	1.19	41.72	21	42.01
14	Sept Baseline	1.18	4.06	4.63	0.57	13.31	5.93	13.55
14	Sept Max Red	0.94	4.06	4.58	0.52	13.04	5.34	13.26
14	Sept Cons	1.05	4.06	4.6	0.54	13.16	5.6	13.38
14	Sept Op	0.98	4.06	4.59	0.53	13.08	5.43	13.3
14	Sept Clos	1.12	4.06	4.61	0.56	13.25	5.79	13.48
13	June Baseline	7.24	4.17	5.27	1.09	43.77	19.79	44.09
13	Jun Max Red	5.38	4.17	5.13	0.95	34.15	14.33	34.47
13	Jun Cons	6.3	4.17	5.2	1.03	39.13	17	39.45
13	Jun Op	5.99	4.17	5.17	1	37.5	16.09	37.82
13	Jun Clos	6.78	4.17	5.23	1.06	41.56	18.42	41.88
13	Sept Baseline	1.18	4.17	4.62	0.45	12.17	4.26	12.41
13	Sept Max Red	0.94	4.17	4.57	0.4	11.94	3.73	12.16
13	Sept Cons	1.05	4.17	4.59	0.42	12.03	3.96	12.26
13	Sept Op	0.98	4.17	4.58	0.41	11.97	3.81	12.19
13	Sept Clos	1.12	4.17	4.61	0.44	12.1	4.14	12.34
12	June Baseline	7.24	4.07	5.26	1.19	22.81	15.37	23.57
12	Jun Max Red	5.38	4.07	5.12	1.05	21.3	12.31	21.92
12	Jun Cons	6.3	4.07	5.19	1.13	22.08	13.88	22.78
12	Jun Op	5.99	4.07	5.17	1.1	21.83	13.36	22.5
12	Jun Clos	6.78	4.07	5.23	1.16	22.46	14.65	23.19
12	Sept Baseline	1.18	4.07	4.61	0.54	11.69	3.76	12
12	Sept Max Red	0.94	4.07	4.57	0.5	11.48	3.25	11.77
12	Sept Cons	1.05	4.07	4.58	0.52	11.56	3.47	11.86

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
12	Sept Op	0.98	4.07	4.57	0.51	11.51	3.33	11.8
12	Sept Clos	1.12	4.07	4.6	0.53	11.63	3.64	11.93
11	June Baseline	7.24	3.79	5.25	1.47	19.83	15.05	20.43
11	Jun Max Red	5.38	3.79	5.12	1.33	17.6	12.48	18.18
11	Jun Cons	6.3	3.79	5.19	1.4	18.76	13.78	19.35
11	Jun Op	5.99	3.79	5.16	1.38	18.38	13.34	18.97
11	Jun Clos	6.78	3.79	5.22	1.44	19.32	14.43	19.91
11	Sept Baseline	1.18	3.79	4.61	0.82	9.58	5.5	10.03
11	Sept Max Red	0.94	3.79	4.56	0.78	9.38	5.09	9.81
11	Sept Cons	1.05	3.79	4.58	0.8	9.46	5.27	9.9
11	Sept Op	0.98	3.79	4.57	0.79	9.4	5.15	9.83
11	Sept Clos	1.12	3.79	4.6	0.81	9.53	5.4	9.98
10	June Baseline	7.24	3.91	5.25	1.34	37.18	18.96	37.74
10	Jun Max Red	5.38	3.91	5.11	1.2	30.68	14.22	31.24
10	Jun Cons	6.3	3.91	5.19	1.28	34.05	16.57	34.62
10	Jun Op	5.99	3.91	5.16	1.25	32.96	15.78	33.52
10	Jun Clos	6.78	3.91	5.22	1.31	35.69	17.79	36.25
10	Sept Baseline	1.18	3.91	4.61	0.7	10.23	4.74	10.64
10	Sept Max Red	0.94	3.91	4.56	0.65	10.1	4.3	10.49
10	Sept Cons	1.05	3.91	4.58	0.67	10.15	4.49	10.55
10	Sept Op	0.98	3.91	4.57	0.66	10.11	4.37	10.5
10	Sept Clos	1.12	3.91	4.6	0.69	10.19	4.64	10.6
9	June Baseline	7.24	3.87	5.24	1.38	32.01	18.27	32.39
9	Jun Max Red	5.38	3.87	5.11	1.24	27.47	14.13	27.82
9	Jun Cons	6.3	3.87	5.18	1.31	29.83	16.2	30.19
9	Jun Op	5.99	3.87	5.15	1.29	29.06	15.51	29.42
9	Jun Clos	6.78	3.87	5.21	1.35	30.97	17.27	31.34
9	Sept Baseline	1.18	3.87	4.6	0.73	9.72	5.08	9.96
9	Sept Max Red	0.94	3.87	4.56	0.69	9.5	4.67	9.72
9	Sept Cons	1.05	3.87	4.58	0.71	9.59	4.85	9.82
9	Sept Op	0.98	3.87	4.56	0.7	9.53	4.73	9.75
9	Sept Clos	1.12	3.87	4.59	0.72	9.66	4.98	9.9
8	June Baseline	7.24	4.01	5.25	1.24	35.53	19.72	35.98
8	Jun Max Red	5.38	4.01	5.1	1.09	32.11	14.9	32.49
8	Jun Cons	6.3	4.01	5.18	1.17	34.81	17.34	35.2
8	Jun Op	5.99	4.01	5.15	1.14	33.93	16.52	34.32
8	Jun Clos	6.78	4.01	5.21	1.2	35.38	18.58	35.8
8	Sept Baseline	1.18	4.01	4.6	0.59	10.68	4.36	10.98
8	Sept Max Red	0.94	4.01	4.56	0.55	10.39	3.92	10.67

2017 PATCH OUTFLOW, OGAMA INFLOW, AND OGAMA OUTFLOW FISHERIES ASSESSMENT -
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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m²)	W.P. Total (m)
8	Sept Cons	1.05	4.01	4.57	0.57	10.49	4.11	10.78
8	Sept Op	0.98	4.01	4.56	0.55	10.42	3.98	10.71
8	Sept Clos	1.12	4.01	4.59	0.58	10.6	4.25	10.89
7	June Baseline	7.24	3.7	5.23	1.53	36.25	22.9	36.65
7	Jun Max Red	5.38	3.7	5.09	1.39	32.85	17.91	33.22
7	Jun Cons	6.3	3.7	5.17	1.46	35.36	20.46	35.75
7	Jun Op	5.99	3.7	5.14	1.44	35.05	19.61	35.43
7	Jun Clos	6.78	3.7	5.2	1.5	35.83	21.73	36.22
7	Sept Baseline	1.18	3.7	4.58	0.88	12.42	7.59	12.71
7	Sept Max Red	0.94	3.7	4.54	0.84	11.32	7.1	11.61
7	Sept Cons	1.05	3.7	4.56	0.86	11.8	7.31	12.09
7	Sept Op	0.98	3.7	4.55	0.85	11.48	7.17	11.77
7	Sept Clos	1.12	3.7	4.57	0.87	12.15	7.47	12.44
6.8	June Baseline	7.24	3.4	5.23	1.83	36.19	25.36	36.75
6.8	Jun Max Red	5.38	3.4	5.09	1.69	32.45	20.34	32.99
6.8	Jun Cons	6.3	3.4	5.16	1.76	35.29	22.9	35.84
6.8	Jun Op	5.99	3.4	5.14	1.74	34.98	22.05	35.52
6.8	Jun Clos	6.78	3.4	5.2	1.8	35.76	24.18	36.32
6.8	Sept Baseline	1.18	3.4	4.56	1.16	11.85	9.85	12.3
6.8	Sept Max Red	0.94	3.4	4.51	1.11	10.97	9.33	11.41
6.8	Sept Cons	1.05	3.4	4.53	1.13	11.18	9.55	11.63
6.8	Sept Op	0.98	3.4	4.52	1.12	11	9.41	11.44
6.8	Sept Clos	1.12	3.4	4.55	1.15	11.56	9.72	12.01
6.4	June Baseline	7.24	3.4	5.22	1.82	36.08	25.01	36.64
6.4	Jun Max Red	5.38	3.4	5.08	1.68	31.81	20	32.35
6.4	Jun Cons	6.3	3.4	5.15	1.75	35.17	22.55	35.72
6.4	Jun Op	5.99	3.4	5.13	1.73	34.85	21.69	35.4
6.4	Jun Clos	6.78	3.4	5.19	1.79	35.65	23.83	36.2
6.4	Sept Baseline	1.18	3.4	4.55	1.15	11.54	9.71	12
6.4	Sept Max Red	0.94	3.4	4.51	1.11	10.92	9.23	11.35
6.4	Sept Cons	1.05	3.4	4.52	1.12	11	9.44	11.44
6.4	Sept Op	0.98	3.4	4.51	1.11	10.94	9.3	11.39
6.4	Sept Clos	1.12	3.4	4.54	1.14	11.27	9.59	11.72
6	June Baseline	7.24	3.81	5.22	1.41	34.94	25.68	35.48
6	Jun Max Red	5.38	3.81	5.08	1.26	32.83	20.8	33.35
6	Jun Cons	6.3	3.81	5.15	1.34	33.93	23.3	34.46
6	Jun Op	5.99	3.81	5.13	1.31	33.57	22.47	34.09
6	Jun Clos	6.78	3.81	5.19	1.38	34.46	24.54	34.99
6	Sept Baseline	1.18	3.81	4.55	0.74	16.73	8.85	17.07

Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
6	Sept Max Red	0.94	3.81	4.51	0.69	16.61	8.12	16.92
6	Sept Cons	1.05	3.81	4.53	0.71	16.67	8.44	16.98
6	Sept Op	0.98	3.81	4.51	0.7	16.63	8.23	16.94
6	Sept Clos	1.12	3.81	4.54	0.73	16.71	8.67	17.03
5	June Baseline	7.24	3.97	5.21	1.25	25.19	17.46	25.65
5	Jun Max Red	5.38	3.97	5.07	1.1	23.15	14	23.59
5	Jun Cons	6.3	3.97	5.14	1.18	24.21	15.76	24.66
5	Jun Op	5.99	3.97	5.12	1.15	23.87	15.18	24.31
5	Jun Clos	6.78	3.97	5.18	1.21	24.72	16.64	25.18
5	Sept Baseline	1.18	3.97	4.55	0.58	12.18	4.82	12.47
5	Sept Max Red	0.94	3.97	4.5	0.53	12.03	4.3	12.3
5	Sept Cons	1.05	3.97	4.52	0.55	12.1	4.53	12.38
5	Sept Op	0.98	3.97	4.51	0.54	12.06	4.38	12.33
5	Sept Clos	1.12	3.97	4.54	0.57	12.14	4.69	12.43
4	June Baseline	7.24	3.92	5.18	1.26	20.74	13.63	21.28
4	Jun Max Red	5.38	3.92	5.03	1.12	18.36	10.85	18.86
4	Jun Cons	6.3	3.92	5.11	1.19	19.61	12.26	20.13
4	Jun Op	5.99	3.92	5.08	1.17	19.2	11.79	19.72
4	Jun Clos	6.78	3.92	5.14	1.23	20.21	12.97	20.75
4	Sept Baseline	1.18	3.92	4.5	0.58	12.18	3.11	12.45
4	Sept Max Red	0.94	3.92	4.45	0.53	12.05	2.54	12.29
4	Sept Cons	1.05	3.92	4.47	0.55	12.11	2.79	12.36
4	Sept Op	0.98	3.92	4.46	0.54	12.07	2.63	12.31
4	Sept Clos	1.12	3.92	4.48	0.57	12.15	2.97	12.41
3	June Baseline	7.24	3.7	5.11	1.41	20.55	15.92	21.31
3	Jun Max Red	5.38	3.7	4.97	1.27	19.17	13.13	19.91
3	Jun Cons	6.3	3.7	5.04	1.34	19.89	14.56	20.64
3	Jun Op	5.99	3.7	5.02	1.32	19.65	14.09	20.4
3	Jun Clos	6.78	3.7	5.07	1.38	20.23	15.27	20.99
3	Sept Baseline	1.18	3.7	4.41	0.71	9.27	5	9.84
3	Sept Max Red	0.94	3.7	4.35	0.65	9.22	4.46	9.72
3	Sept Cons	1.05	3.7	4.37	0.68	9.24	4.71	9.77
3	Sept Op	0.98	3.7	4.36	0.66	9.23	4.55	9.74
3	Sept Clos	1.12	3.7	4.39	0.7	9.26	4.88	9.81
2	June Baseline	7.24	3.67	4.92	1.25	20.35	13.13	20.91
2	Jun Max Red	5.38	3.67	4.79	1.12	18.68	10.58	19.2
2	Jun Cons	6.3	3.67	4.85	1.19	19.87	11.88	20.41
2	Jun Op	5.99	3.67	4.83	1.16	19.49	11.45	20.02
2	Jun Clos	6.78	3.67	4.89	1.22	20.12	12.53	20.67

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Cross Section	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Max Chl Dpth (m)	Top Width (m)	Area (m ²)	W.P. Total (m)
2	Sept Baseline	1.18	3.67	4.28	0.61	9.61	3.95	6.89
2	Sept Max Red	0.94	3.67	4.23	0.56	9.56	3.48	6.77
2	Sept Cons	1.05	3.67	4.25	0.58	9.58	3.69	6.83
2	Sept Op	0.98	3.67	4.24	0.57	9.57	3.55	6.79
2	Sept Clos	1.12	3.67	4.27	0.6	9.6	3.84	6.86
1	June Baseline	7.24	2.65	3.97	1.31	16.83	10.89	17.55
1	Jun Max Red	5.38	2.65	3.83	1.17	14.66	8.6	15.32
1	Jun Cons	6.3	2.65	3.9	1.25	16.31	9.78	17
1	Jun Op	5.99	2.65	3.88	1.22	16.08	9.39	16.76
1	Jun Clos	6.78	2.65	3.94	1.28	16.66	10.37	17.35
1	Sept Baseline	1.18	2.65	3.26	0.61	7.29	2.97	7.7
1	Sept Max Red	0.94	2.65	3.21	0.56	7.23	2.58	7.58
1	Sept Cons	1.05	2.65	3.23	0.58	7.26	2.76	7.63
1	Sept Op	0.98	2.65	3.22	0.57	7.24	2.64	7.6
1	Sept Clos	1.12	2.65	3.25	0.6	7.28	2.88	7.67

– Appendix B –

Location of Surveyed Cross Sections

Figure B-1
Cross Section Locations on Ogama Outflow

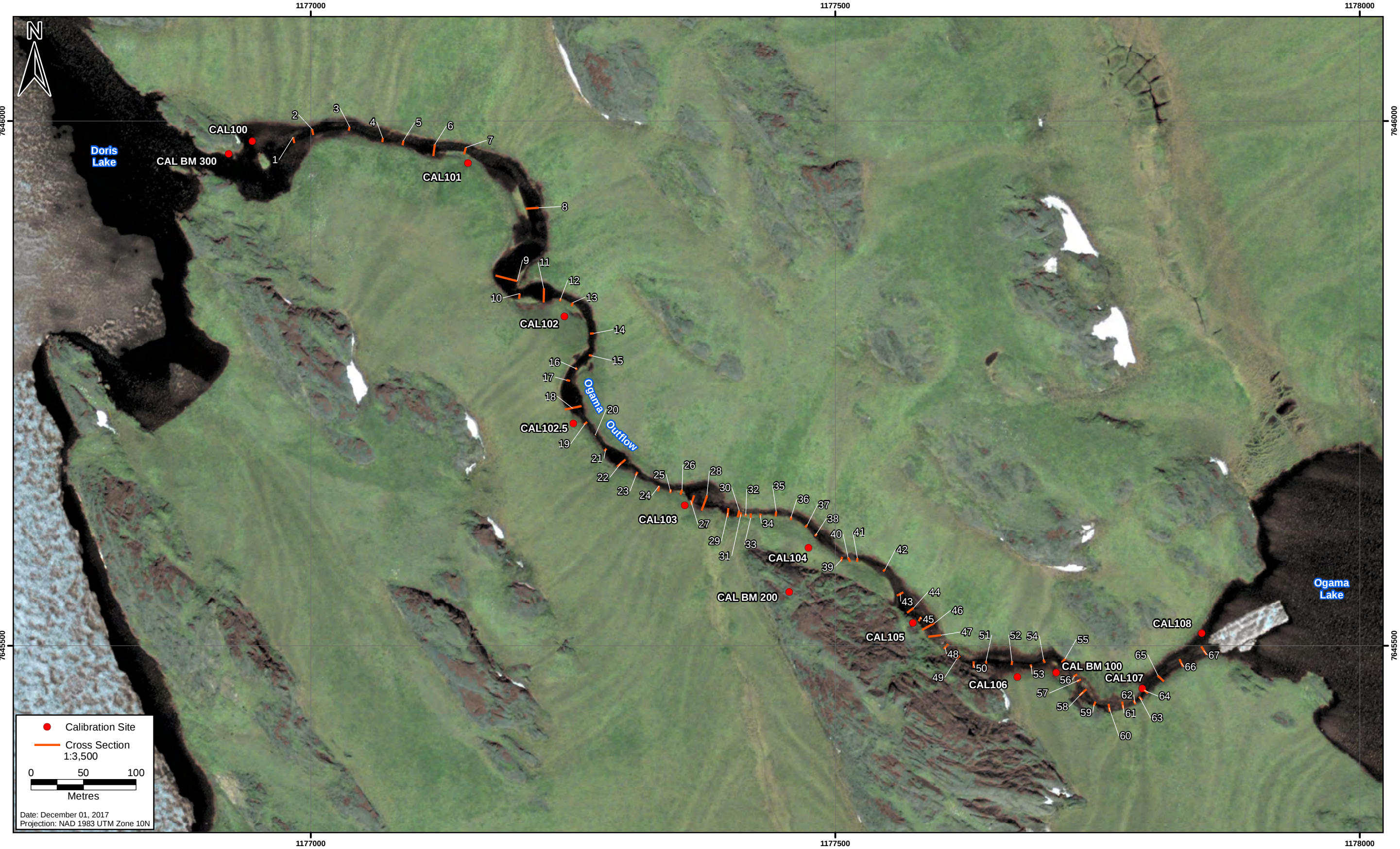


Figure B-2
Cross Section Locations on Ogama Inflow

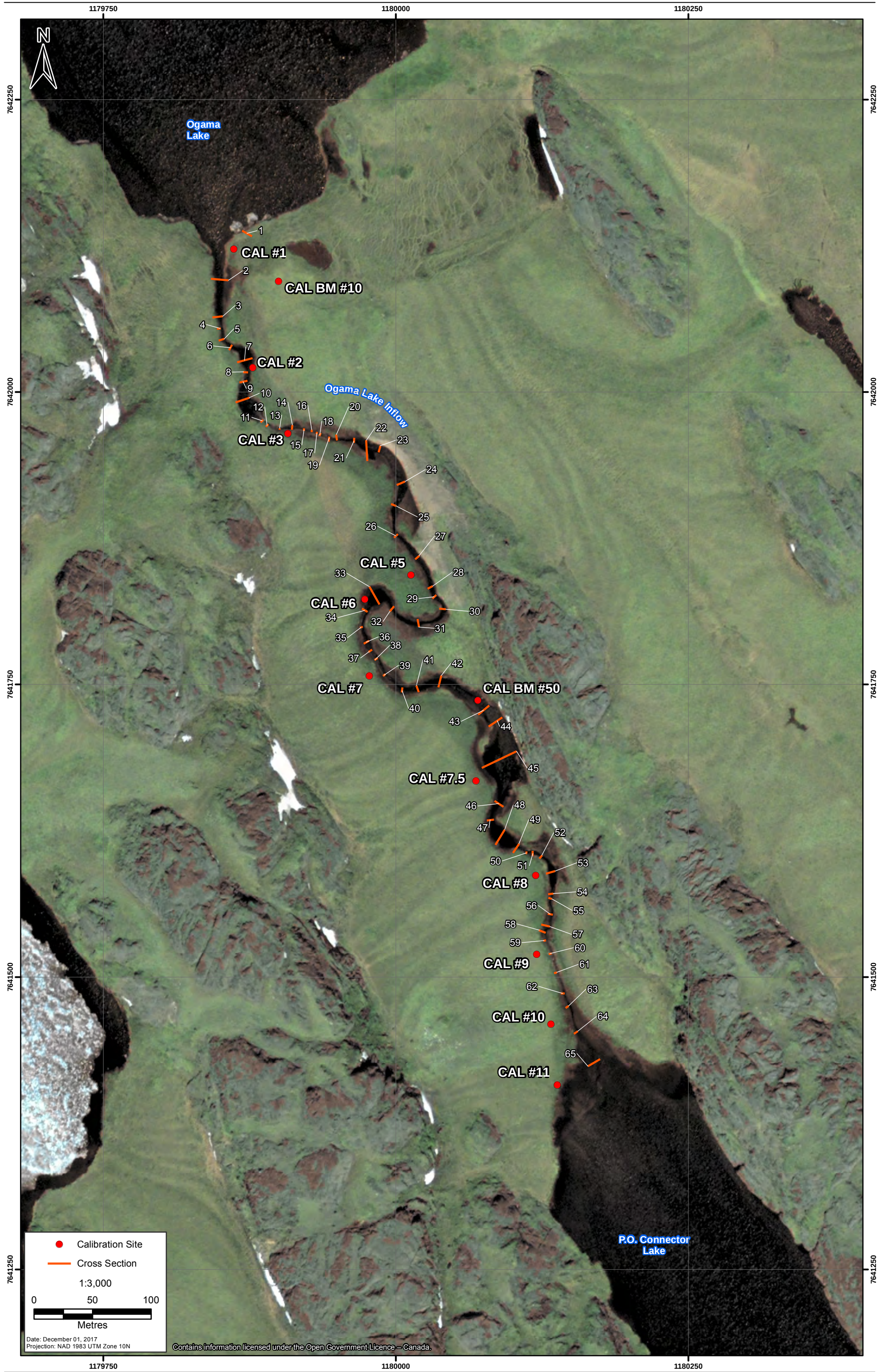
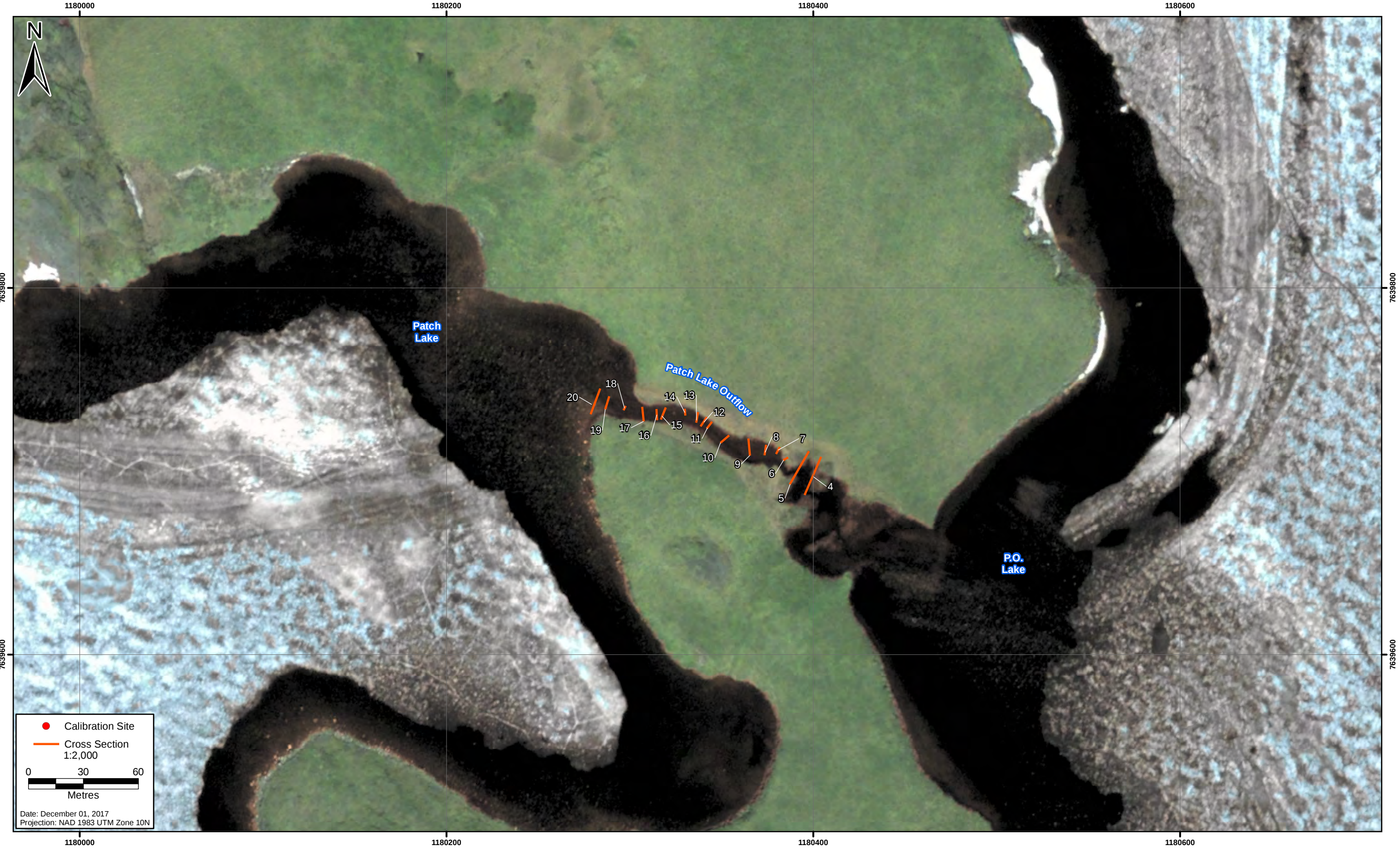


Figure B-3
Cross Section Locations on Patch Outflow



– Appendix C –

Calibration and Verification Results

APPENDIX C. CALIBRATION AND VERIFICATION RESULTS

Table C-1. Calibration Results for Patch Outflow

Cross Section	Surveyed Water Level (m)	Channel Bottom (m)	Modeled Elevation (m)	Modeled Depth (m)	Error (%)
4	99.49	99.06	99.49	0.43	0%
5	99.50	98.93	99.49	0.56	1%
6	99.50	98.89	99.49	0.60	1%
7	99.51	98.99	99.50	0.51	1%
8	99.51	99.13	99.50	0.37	2%
9	99.52	98.88	99.50	0.62	3%
10	99.52	99.12	99.50	0.38	6%
11	99.52	99.13	99.51	0.38	4%
12	99.53	98.98	99.51	0.53	3%
13	99.53	99.08	99.51	0.43	4%
14	99.54	99.22	99.53	0.31	2%
15	99.57	99.30	99.55	0.25	7%
16	99.56	99.26	99.56	0.30	1%
17	99.58	99.28	99.58	0.30	1%
18	99.60	99.31	99.60	0.29	2%
19	99.64	99.34	99.62	0.28	6%
20	99.64	99.33	99.63	0.30	4%
21	99.64	99.00	99.63	0.63	2%

Table C-2. Validation Results for Patch Outflow

Cross Section	Profile	Q Total (m ³ /s)	Channel Bottom (m)	Modeled Water Level (m)	Modeled Depth (m)	Measured Depth (m)	Accuracy (%)
18	June Validation	0.80	99.31	99.85	0.54	0.68	21%
18	July Validation	0.10	99.31	99.59	0.28	0.38	26%
18	August Validation	0.06	99.31	99.54	0.23	0.20	15%
15	June Validation	0.80	99.30	99.79	0.49	0.46	7%
15	July Validation	0.10	99.30	99.54	0.24	0.24	0%
15	August Validation	0.06	99.30	99.50	0.20	0.20	0%
13	June Validation	0.80	99.08	99.75	0.67	0.56	20%
13	July Validation	0.10	99.08	99.51	0.43	0.48	10%
13	August Validation	0.06	99.08	99.48	0.40	0.39	3%

Table C-3. Calibration Results for Ogama Inflow

Cross Section	Surveyed Water Level (m)	Channel Bottom (m)	Modeled Elevation (m)	Modeled Depth (m)	Error (%)
65	148.62	148.20	148.62	0.42	1%
64	148.60	148.28	148.57	0.29	10%
63	148.48	148.02	148.49	0.47	2%
62	148.46	148.09	148.44	0.35	6%
61	148.31	148.04	148.32	0.28	5%
60	148.11	147.83	148.07	0.24	16%
59	147.97	147.60	147.96	0.36	3%
58	147.97	147.15	147.95	0.80	2%
57	147.96	147.57	147.95	0.38	4%
56	147.94	147.33	147.95	0.62	2%
55	147.93	147.52	147.92	0.40	2%
54	147.92	147.32	147.91	0.59	1%
53	147.92	147.15	147.91	0.76	1%
52	147.91	147.31	147.91	0.60	0%
51	147.90	147.31	147.90	0.59	0%
50	147.87	147.49	147.84	0.35	7%
49	147.84	146.89	147.82	0.93	2%
48	147.84	146.61	147.82	1.21	1%
47	147.84	147.13	147.82	0.69	2%
46	147.83	147.12	147.82	0.70	1%
45	147.83	146.72	147.82	1.10	1%
44	147.84	147.19	147.82	0.63	2%
43	147.83	147.01	147.82	0.81	1%
42	147.83	146.75	147.82	1.07	1%
41	147.83	147.10	147.82	0.72	1%
40	147.82	147.43	147.81	0.38	2%
39	147.76	147.35	147.76	0.41	1%
38	147.70	147.29	147.66	0.37	10%
37	147.65	147.16	147.63	0.47	4%
36	147.64	146.82	147.62	0.80	3%
35	147.63	147.28	147.61	0.33	6%
34	147.61	147.03	147.60	0.57	2%
33	147.61	146.45	147.60	1.15	1%
32	147.61	146.97	147.60	0.63	2%
31	147.61	146.71	147.59	0.88	2%
30	147.61	146.93	147.59	0.66	3%
29	147.59	147.34	147.58	0.24	6%
28	147.59	147.01	147.58	0.57	2%

Cross Section	Surveyed Water Level (m)	Channel Bottom (m)	Modeled Elevation (m)	Modeled Depth (m)	Error (%)
27	147.57	147.23	147.56	0.33	3%
26	147.58	147.09	147.54	0.45	8%
25	147.55	146.90	147.53	0.63	4%
24	147.54	146.94	147.53	0.59	1%
23	147.53	147.09	147.52	0.43	2%
22	147.53	146.54	147.52	0.98	1%
21	147.53	146.97	147.51	0.54	4%
20	147.52	147.04	147.51	0.47	3%
19	147.50	147.01	147.49	0.48	2%
18	147.43	147.08	147.43	0.35	1%
17	147.36	147.00	147.34	0.34	5%
16	147.32	146.93	147.32	0.39	0%
15	147.31	146.85	147.31	0.46	0%
14	147.29	146.81	147.31	0.50	3%
13	147.28	146.91	147.27	0.36	2%
12	147.27	146.76	147.04	0.28	81%
11	146.82	146.48	146.83	0.35	2%
10	146.82	145.87	146.80	0.93	2%
9	146.81	146.28	146.80	0.52	2%
8	146.78	146.24	146.80	0.56	4%
7	146.77	145.70	146.80	1.10	3%
6	146.78	146.12	146.80	0.68	3%
5	146.78	146.13	146.80	0.67	4%
4	146.79	146.01	146.80	0.79	1%
3	146.79	145.73	146.80	1.07	1%
2	146.78	146.10	146.80	0.70	2%

Table C-4. Validation Results for Ogama Inflow

Cross Section	Profile	Q Total (m³/s)	Channel Bottom (m)	Modeled Water Level (m)	Modeled Depth (m)	Surveyed Water Level (m)	Error (%)
2	June Validation	1.66	146.10	146.97	0.87	146.97	0%
2	July Validation	0.13	146.10	146.64	0.54	146.64	0%
2	August Validation	0.15	146.10	146.66	0.56	146.66	0%
7	June Validation	1.66	145.70	147.02	1.32	147.09	5%
7	July Validation	0.13	145.70	146.65	0.95	146.65	0%
7	August Validation	0.15	145.70	146.66	0.96	146.66	0%

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Cross Section	Profile	Q Total (m³/s)	Channel Bottom (m)	Modeled Water Level (m)	Modeled Depth (m)	Surveyed Water Level (m)	Error (%)
14	June Validation	1.66	146.81	147.78	0.97	147.64	15%
14	July Validation	0.13	146.81	147.22	0.41	147.17	13%
14	August Validation	0.15	146.81	147.25	0.44	147.20	11%
21	June Validation	1.66	146.97	147.95	0.98	n/a	n/a
21	July Validation	0.13	146.97	147.45	0.48	147.40	10%
21	August Validation	0.15	146.97	147.47	0.50	147.42	10%
22	June Validation	1.66	146.54	147.96	1.42	147.82	10%
22	July Validation	0.13	146.54	147.45	0.91	147.39	6%
22	August Validation	0.15	146.54	147.47	0.93	147.42	6%
27	June Validation	0.21	147.23	147.56	0.33	147.57	3%
27	July Validation	1.66	147.23	148.07	0.84	148.00	9%
27	August Validation	0.13	147.23	147.49	0.26	147.49	1%
27	August Cal	0.15	147.23	147.51	0.28	147.48	10%
33	June Validation	1.66	146.45	148.16	1.71	148.09	4%
33	July Validation	0.13	146.45	147.52	1.07	147.50	2%
33	August Validation	0.15	146.45	147.54	1.09	147.51	3%
38	June Validation	1.66	147.29	148.25	0.96	148.16	9%
38	July Validation	0.13	147.29	147.58	0.29	147.65	23%
38	August Validation	0.15	147.29	147.61	0.32	147.60	2%
44	June Validation	1.66	147.19	148.37	1.18	n/a	n/a
44	July Validation	0.13	147.19	147.73	0.54	147.79	11%
44	August Validation	0.15	147.19	147.76	0.57	147.75	2%
45	June Validation	1.66	146.72	148.37	1.65	148.34	2%
45	July Validation	0.13	146.72	147.73	1.01	147.78	5%
45	August Validation	0.15	146.72	147.76	1.04	147.75	1%
52	June Validation	1.66	147.31	148.42	1.11	148.39	3%
52	July Validation	0.13	147.31	147.82	0.51	147.85	5%
52	August Validation	0.15	147.31	147.85	0.54	147.83	4%
59	June Validation	1.66	147.60	148.50	0.90	148.46	5%
59	July Validation	0.13	147.60	147.88	0.28	147.88	0%
59	August Validation	0.15	147.60	147.90	0.30	147.88	7%
63	June Validation	1.66	148.02	148.93	0.91	148.84	10%
63	July Validation	0.13	148.02	148.42	0.40	148.38	11%
63	August Validation	0.15	148.02	148.44	0.42	148.38	14%
65	June Validation	1.66	148.20	149.02	0.82	148.99	4%
65	July Validation	0.13	148.20	148.56	0.36	148.62	17%
65	August Validation	0.15	148.20	148.58	0.38	148.58	1%

Table C-5. Calibration Results for Ogama Outflow

Cross Section	Surveyed Water Level (m)	Channel Bottom (m)	Modeled Elevation (m)	Modeled Depth (m)	Error (%)
1	119.00	120.49	1.49	120.49	0%
2	119.44	120.49	1.05	120.49	0%
3	119.58	120.49	0.91	120.50	1%
4	119.91	120.49	0.58	120.50	2%
5	119.82	120.49	0.67	120.50	2%
6	119.23	120.49	1.26	120.51	1%
7	119.48	120.49	1.01	120.51	2%
8	119.31	120.49	1.18	120.51	1%
9	119.29	120.49	1.20	120.51	2%
10	119.86	120.49	0.63	120.52	4%
11	119.35	120.49	1.14	120.52	3%
12	119.80	120.49	0.69	120.52	5%
13	119.38	120.49	1.11	120.53	3%
14	119.90	120.49	0.59	120.52	6%
15	119.63	120.49	0.86	120.53	5%
16	119.92	120.49	0.57	120.53	7%
17	119.83	120.50	0.67	120.54	6%
18	119.59	120.50	0.91	120.54	5%
19	119.85	120.50	0.65	120.54	6%
20	120.16	120.49	0.33	120.56	21%
21	120.00	120.60	0.60	120.58	3%
22	119.34	120.60	1.26	120.58	2%
23	120.14	120.60	0.46	120.58	4%
24	119.45	120.61	1.16	120.59	1%
25	120.18	120.60	0.42	120.59	3%
26	120.20	120.61	0.41	120.60	3%
27	119.37	120.61	1.24	120.60	1%
28	119.62	120.61	0.99	120.60	1%
29	119.68	120.61	0.93	120.60	1%
30	120.26	120.61	0.35	120.59	6%
31	120.39	120.68	0.29	120.67	4%
32	120.67	120.91	0.24	120.94	12%
33	120.49	120.99	0.50	120.99	0%
34	120.67	121.04	0.37	121.03	2%
35	120.31	121.07	0.76	121.07	0%
36	120.65	121.08	0.43	121.08	1%
37	120.44	121.09	0.65	121.09	0%
38	120.46	121.09	0.63	121.09	0%

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Cross Section	Surveyed Water Level (m)	Channel Bottom (m)	Modeled Elevation (m)	Modeled Depth (m)	Error (%)
39	120.51	121.10	0.59	121.10	1%
40	120.92	121.26	0.34	121.31	15%
41	120.81	121.34	0.53	121.34	1%
42	120.59	121.34	0.75	121.36	2%
43	120.73	121.35	0.62	121.39	7%
44	120.36	121.35	0.99	121.40	5%
45	120.70	121.35	0.65	121.40	8%
46	120.68	121.35	0.67	121.41	9%
47	121.23	121.56	0.33	121.67	34%
48	121.53	121.94	0.41	121.97	8%
49	121.61	122.19	0.58	122.20	1%
50	121.59	122.25	0.66	122.25	1%
51	121.52	122.25	0.73	122.26	1%
52	121.77	122.26	0.49	122.27	2%
53	121.70	122.26	0.56	122.27	1%
54	121.87	122.26	0.39	122.28	4%
55	121.14	122.27	1.13	122.27	0%
56	121.70	122.27	0.57	122.28	3%
57	121.97	122.38	0.41	122.41	6%
58	122.17	122.52	0.35	122.54	6%
59	122.08	122.60	0.52	122.62	3%
60	122.17	122.62	0.45	122.63	2%
61	122.26	122.63	0.37	122.72	24%
62	122.54	122.78	0.24	122.79	2%
63	122.65	122.86	0.21	122.87	7%
64	122.61	122.90	0.29	122.90	1%
65	122.21	122.91	0.70	122.91	0%
66	122.39	122.91	0.52	122.91	1%
67	122.25	122.91	0.66	122.90	1%

Table C-6. Validation Results for Ogama Outflow

Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Depth (m)	Cal Surveys (m)	Error (%)
1	June Validation	1.89	119	120.97	1.97	120.972	0%
1	July Validation	0.12	119	120.44	1.44	120.437	0%
1	August Validation	0.09	119	120.38	1.38	120.414	2%
5	June Validation	1.89	119.82	120.98	1.16	120.993	1%
5	July Validation	0.12	119.82	120.44	0.62	120.439	0%
5	August Validation	0.09	119.82	120.38	0.56	120.416	6%

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Cross Section	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Depth (m)	Cal Surveys (m)	Error (%)
13	June Validation	1.89	119.38	120.99	1.61	121.100	7%
13	July Validation	0.12	119.38	120.44	1.06	120.447	1%
13	August Validation	0.09	119.38	120.39	1.01	120.418	3%
17	June Validation	1.89	119.83	121.01	1.18	n/a	n/a
17	July Validation	0.12	119.83	120.44	0.61	120.463	4%
17	August Validation	0.09	119.83	120.39	0.56	120.433	8%
18	June Validation	1.89	119.59	121.02	1.43	121.126	7%
18	July Validation	0.12	119.59	120.44	0.85	120.462	3%
18	August Validation	0.09	119.59	120.39	0.8	120.431	5%
27	June Validation	1.89	119.37	121.24	1.87	121.307	4%
27	July Validation	0.12	119.37	120.51	1.14	120.552	4%
27	August Validation	0.09	119.37	120.48	1.11	120.499	2%
38	June Validation	1.89	120.46	121.57	1.11	121.696	11%
38	July Validation	0.12	120.46	121	0.54	121.045	8%
38	August Validation	0.09	120.46	120.97	0.51	120.993	4%
44	June Validation	1.89	120.36	121.78	1.42	121.928	10%
44	July Validation	0.12	120.36	121.27	0.91	121.398	14%
44	August Validation	0.09	120.36	121.25	0.89	121.366	13%
53	June Validation	1.89	121.7	122.68	0.98	122.709	3%
53	July Validation	0.12	121.7	122.18	0.48	122.215	7%
53	August Validation	0.09	121.7	122.15	0.45	122.195	10%
65	June Validation	1.89	122.21	123.27	1.06	123.252	2%
65	July Validation	0.12	122.21	122.84	0.63	122.865	4%
65	August Validation	0.09	122.21	122.82	0.61	122.858	6%
67	June Validation	1.89	122.25	123.28	1.03	123.273	1%
67	July Validation	0.12	122.25	122.84	0.59	122.847	1%
67	August Validation	0.09	122.25	122.82	0.57	122.854	6%