

APPENDIX B9: sn̄aχ̄elqaxʷiyaʔ - VASEUX CREEK

Transect Locations



Figure B9-1: Location of EFN transects and hydrometric station along Vaseux Creek, near the confluence with Okanagan River

Transect Descriptions

Transect Name VAS10SCR2016

Install Date Aug 10, 2016

Lat./Long. 49.244288, -119.529280

Width (install) 8.80 m

Avg. width range 6.49m - 12.23 m



Looking upstream

Depth (install) 0.17 m

Avg. depth range 0.22m – 0.39 m



Looking downstream

Transect Name VAS20GL2016

Install Date Aug 10, 2016

Lat./Long. 49.244473, -119.529120

Width (install) 6.10 m

Avg. width range 6.49m - 12.23 m



Looking upstream

Depth (install) 0.26 m

Avg. depth range 0.22 – 0.39 m



Looking downstream

Transect Name VAS30SCR2016
Install Date Aug 10, 2016
Lat./Long. 49.244683, -119.528774
Width (install) 10.20 m
Avg. width range 6.49 - 12.23 m



Looking upstream

Depth (install) 0.18 m
Avg. depth range 0.22 – 0.39 m



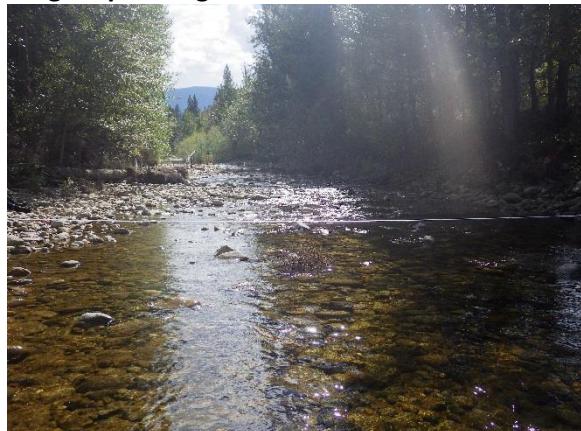
Looking downstream

Transect Name VAS40GL2016
Install Date Aug 10, 2016
Lat./Long. 49.244810, -119.528500
Width (install) 8.35 m
Avg. width range 6.49 - 12.23 m



Looking upstream

Depth (install) 0.28 m
Avg. depth range 0.22 – 0.39 m



Looking downstream

Discharge Records

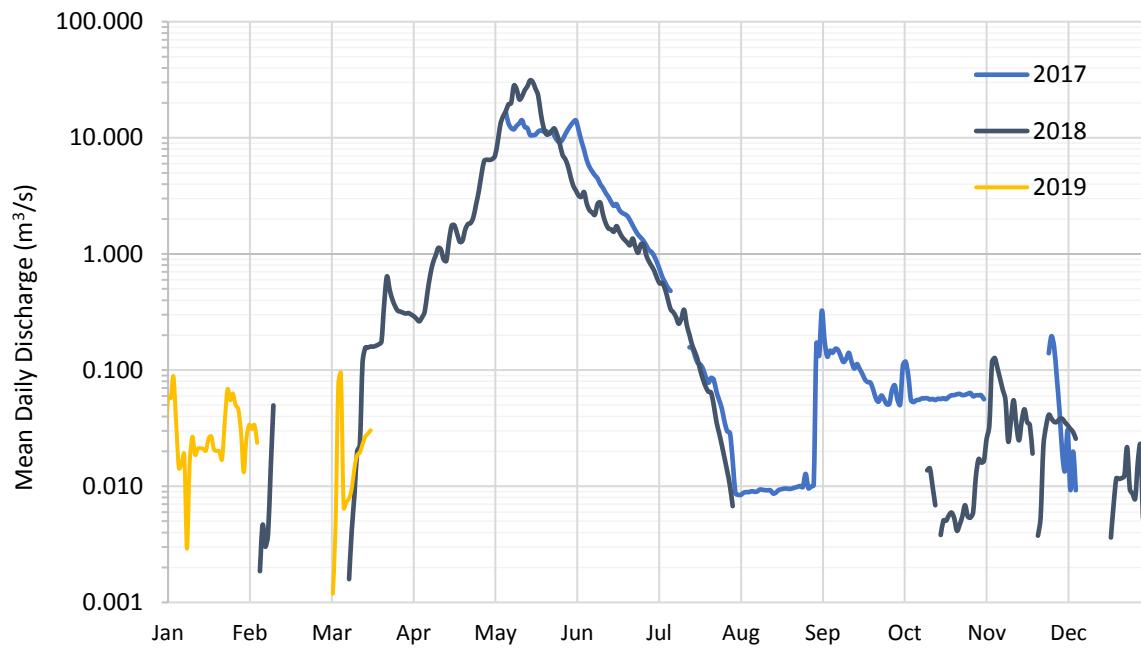


Figure B9-2: Mean daily discharge recorded at the Vaseux Hydrometric Station from 2017-2019

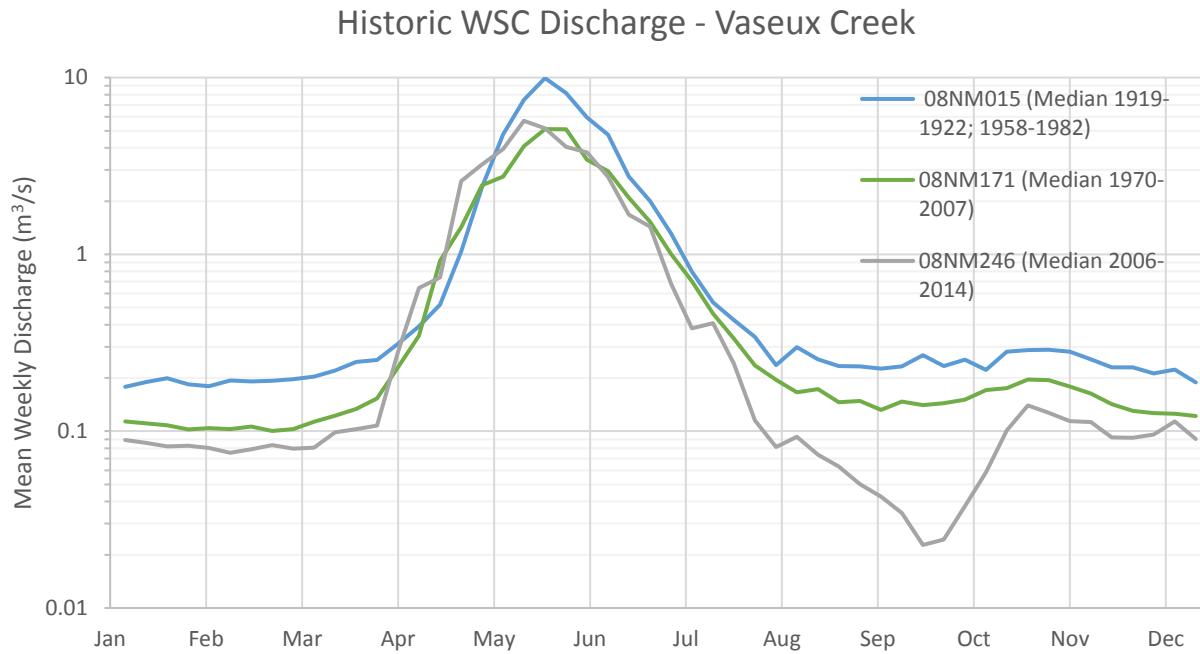


Figure B9-3: Historic discharge recorded at WSC stations 08NM015 (Vaseux Creek above Dutton Creek), 08NM171 (Vaseux Creek above Solco Creek), and 08NM246 (Vaseux Creek near the mouth)

Water Temperature Records



Figure B9-4: Daily maximum water temperatures recorded at the Vaseux Hydrometric Station from 2017 to 2019

Flow standards and periodicity – Okanagan Tennant analysis for Vaseux Creek

Week Ending	Life Stage/ Week	Rainbow				Steelhead				Over-wintering
		Spawning	Incubation	Rearing	Adult migration	Spawning	Incubation	Rearing	Juvenile migration	
Jan					20%					20%
Feb					20%					20%
Mar					20%					20%
1-Apr	13			20%		135%	135%	20%	20%	
8-Apr	14			20%		135%	135%	20%	20%	50%
15-Apr	15	135%		20%		135%	135%	20%	20%	50%
22-Apr	16	135%		20%		135%	135%	20%	20%	50%
29-Apr	17	135%		20%		135%	135%	20%	20%	50%
6-May	18	135%		20%	50%	135%	135%	20%	20%	50%
13-May	19	135%		20%	50%	135%	135%	20%	20%	50%
20-May	20	135%	40%	20%	50%	135%	135%	20%	20%	50%
27-May	21	135%	40%	20%	20%	135%	135%	20%	20%	50%
3-Jun	22	135%	40%	20%	20%	135%	135%	20%	20%	50%
10-Jun	23	135%	40%	20%	20%	135%	135%	20%	20%	50%
17-Jun	24	135%	40%	20%	20%	135%	135%	20%	20%	50%
24-Jun	25	135%	40%	20%	20%	135%	135%	20%	20%	
1-Jul	26	135%	40%	20%	20%			20%	20%	
8-Jul	27	135%	40%	20%	20%			20%	20%	
15-Jul	28			20%	20%	50%			20%	
22-Jul	29			20%	20%				20%	
29-Jul	30			20%	20%				20%	
5-Aug	31				20%				20%	
12-Aug	32				20%				20%	
19-Aug	33				20%				20%	
26-Aug	34				20%				20%	
2-Sep	35				20%				20%	
9-Sep	36				20%				20%	
16-Sep	37				20%				20%	
23-Sep	38				20%				20%	
30-Sep	39				20%				20%	
7-Oct	40				20%				20%	
14-Oct	41				20%				20%	
21-Oct	42				20%				20%	
28-Oct	43				20%				20%	
Nov						20%				20%
Dec						20%				20%

Flow standards and periodicity – Okanagan Tenant analysis for Vaseux Creek - Continued

Week Ending	Life Stage/ Week	Chinook (spring stock)				Sockeye		Ecological Flows		
		Chinook [summer] rearing	Spawning	Rearing	Incubation	Juvenile migration	Adult migration	Spawning	Incubation	Cottonwood ecosystem
Jan				20%		20%	20%			
Feb				20%		20%	20%			
Mar		20%		20%		20%	20%			
1-Apr	13	20%			20%				50%	<input checked="" type="checkbox"/>
8-Apr	14	20%			20%				50%	<input checked="" type="checkbox"/>
15-Apr	15	20%			20%	50%			50%	<input checked="" type="checkbox"/>
22-Apr	16	20%			20%	50%			50%	<input checked="" type="checkbox"/>
29-Apr	17	20%			20%	50%			50%	<input checked="" type="checkbox"/>
6-May	18				20%	50%			50%	<input checked="" type="checkbox"/>
13-May	19				20%	50%			50%	<input checked="" type="checkbox"/>
20-May	20				20%	50%			50%	870%
27-May	21				20%	50%				870%
3-Jun	22				20%	50%				<input checked="" type="checkbox"/>
10-Jun	23				20%	50%				<input checked="" type="checkbox"/>
17-Jun	24				20%	50%				<input checked="" type="checkbox"/>
24-Jun	25				20%	50%				100%
1-Jul	26		135%		20%		25%			100%
8-Jul	27		135%		20%		25%			100%
15-Jul	28		135%		20%		25%			100%
22-Jul	29		135%		20%		25%			100%
29-Jul	30		135%		20%		25%			100%
5-Aug	31		135%		20%		25%			
12-Aug	32		135%		20%		25%			
19-Aug	33		135%		20%		25%			
26-Aug	34		135%	135%	20%	20%				
2-Sep	35		135%	135%	20%	20%				
9-Sep	36		135%	135%	20%	20%				
16-Sep	37			135%	20%	20%		40%	20%	
23-Sep	38			135%	20%	20%		40%	20%	
30-Sep	39			135%	20%	20%		40%	20%	
7-Oct	40				20%	20%		40%	20%	
14-Oct	41				20%	20%		40%	20%	
21-Oct	42				20%	20%		40%	20%	
28-Oct	43				20%	20%		40%	20%	
Nov					20%		20%		20%	
Dec					20%		20%		20%	

EFNs and Critical Flows for Vaseux Creek

Week Ending	Okanagan Tenant EFN						WUW EFN (m³/s)			FINAL EFN		CRITICAL FLOWS (m³/s)			FINAL
	O Mykiss and Chinook rearing; insect production			%LTMAD			Value (m³/s)			Dominant Species / Life Stage					
	Nat. median weekly Q (m³/s)	Discharge m³/s	EFN based on flow standards (m³/s)	EFN - all factors (%LTMAD)											
Jan	20%	0.257	0.042	0.042	3%					0.042	overwintering egg incubation	0.064			0.064
Feb	20%	0.257	0.025	0.025	2%					0.025	overwintering egg incubation	0.064			0.064
Mar	20%	0.257	0.070	0.070	5%					0.070	overwintering egg incubation	0.064			0.064
1-Apr	135%	1.735	0.191	0.191	15%	0.150		1.500	1.500	0.191	ST spawning	0.064		0.191	0.191
8-Apr	135%	1.735	0.327	0.327	25%	0.150		1.500	1.500	0.327	ST spawning	0.064		0.327	0.327
15-Apr	135%	1.735	0.590	0.590	46%	0.150		1.500	1.500	0.590	ST spawning	0.064		0.477	0.477
22-Apr	135%	1.735	1.383	1.383	108%	0.150		1.500	1.500	1.383	ST spawning	0.064		0.477	0.477
29-Apr	135%	1.735	3.127	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
6-May	135%	1.735	3.616	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
13-May	135%	1.735	4.061	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
20-May	870%	11.180	6.297	6.297	490%	0.150		1.500	1.500	6.297	Ecosystem	0.064		0.477	0.477
27-May	870%	11.180	6.614	6.614	515%	0.150		1.500	1.500	6.614	Ecosystem	0.064		0.477	0.477
3-Jun	135%	1.735	4.997	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
10-Jun	135%	1.735	5.198	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
17-Jun	135%	1.735	4.516	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
24-Jun	135%	1.735	3.674	1.735	135%	0.150		1.500	1.500	1.500	ST spawning	0.064		0.477	0.477
1-Jul	135%	1.735	2.707	1.735	135%	0.150		1.500	1.500	1.500	RB Spawning	0.064	0.257	0.477	0.477
8-Jul	135%	1.735	1.601	1.601	125%	0.150		1.500	1.500	1.500	RB Spawning	0.064	0.257	0.477	0.477
15-Jul	135%	1.735	1.150	1.150	89%	0.150			0.150	1.150	RB/ST incubation	0.064	0.257		0.257
22-Jul	135%	1.735	0.618	0.618	48%	0.150			0.150	0.618	RB/ST incubation	0.064	0.257		0.257
29-Jul	135%	1.735	0.506	0.506	39%	0.150			0.150	0.506	RB/ST incubation	0.064	0.257		0.257
5-Aug	135%	1.735	0.313	0.313	24%	0.150			0.150	0.313	CH migration	0.064	0.257		0.257
12-Aug	135%	1.735	0.247	0.247	19%	0.150			0.150	0.257	CH migration	0.064	0.257		0.257
19-Aug	135%	1.735	0.149	0.149	12%	0.150			0.150	0.257	CH migration	0.064	0.257		0.257
26-Aug	135%	1.735	0.187	0.187	15%	0.150		0.200	0.200	0.200	CH spawning	0.064	0.129		0.129
2-Sep	135%	1.735	0.171	0.171	13%	0.150		0.200	0.200	0.200	CH spawning	0.064	0.129		0.129
9-Sep	135%	1.735	0.110	0.110	9%	0.150		0.200	0.200	0.200	CH spawning	0.064	0.129		0.129
16-Sep	135%	1.735	0.063	0.063	5%	0.150	0.150	0.200	0.200	0.200	CH spawning	0.064	0.129	0.129	0.129
23-Sep	135%	1.735	0.104	0.104	8%	0.150	0.150	0.200	0.200	0.200	CH spawning	0.064	0.129	0.129	0.129
30-Sep	135%	1.735	0.086	0.086	7%	0.150	0.150	0.200	0.200	0.200	CH spawning	0.064	0.129	0.129	0.129
7-Oct	40%	0.514	0.057	0.057	4%	0.150	0.150		0.150	0.150	SK spawning	0.064	0.129		0.129
14-Oct	40%	0.514	0.044	0.044	3%	0.150	0.150		0.150	0.150	SK spawning	0.064	0.129		0.129
21-Oct	40%	0.514	0.124	0.124	10%	0.150	0.150		0.150	0.150	SK spawning	0.064	0.129		0.129
28-Oct	40%	0.514	0.128	0.128	10%	0.150	0.150		0.150	0.150	SK spawning	0.064	0.129		0.129
Nov	20%	0.257	0.133	0.133	10%					0.133	overwintering egg incubation	0.064			0.064
Dec	20%	0.257	0.074	0.074	6%					0.074	overwintering egg incubation	0.064			0.064

Weighted Usable Width

Vaseux Creek O. Mykiss Parr Rearing WUUW

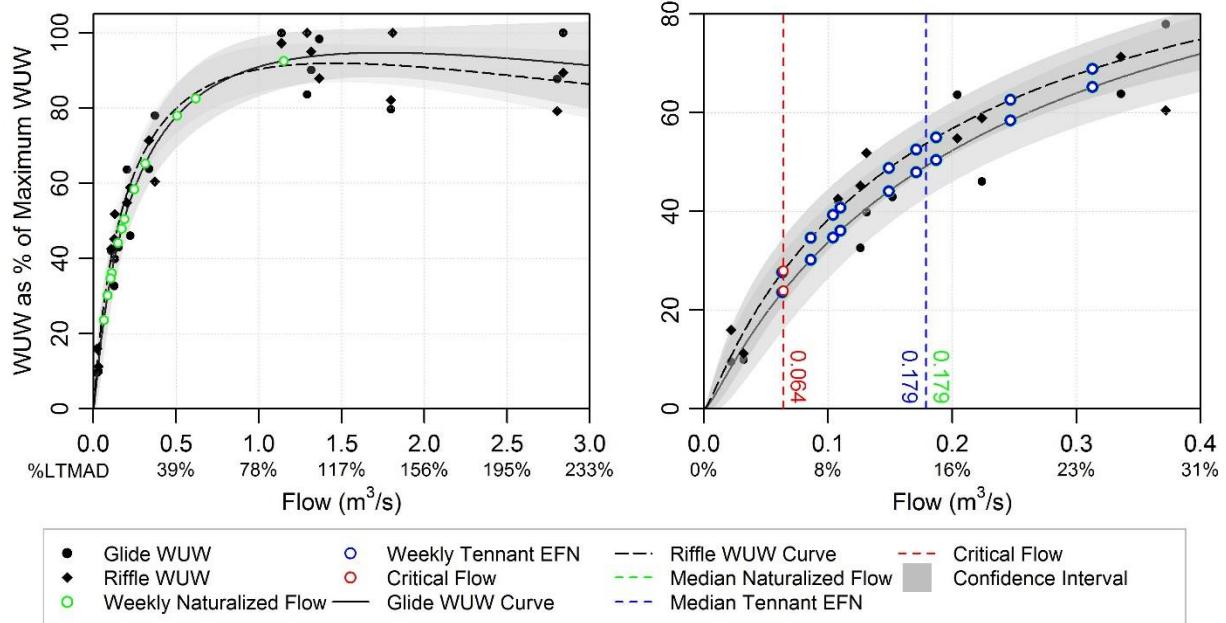


Figure B9-5: WUUW curves for Rainbow rearing in Vaseux Creek for all flows (left) and low flows (right)

Vaseux Creek Chinook Fry Rearing WUUW

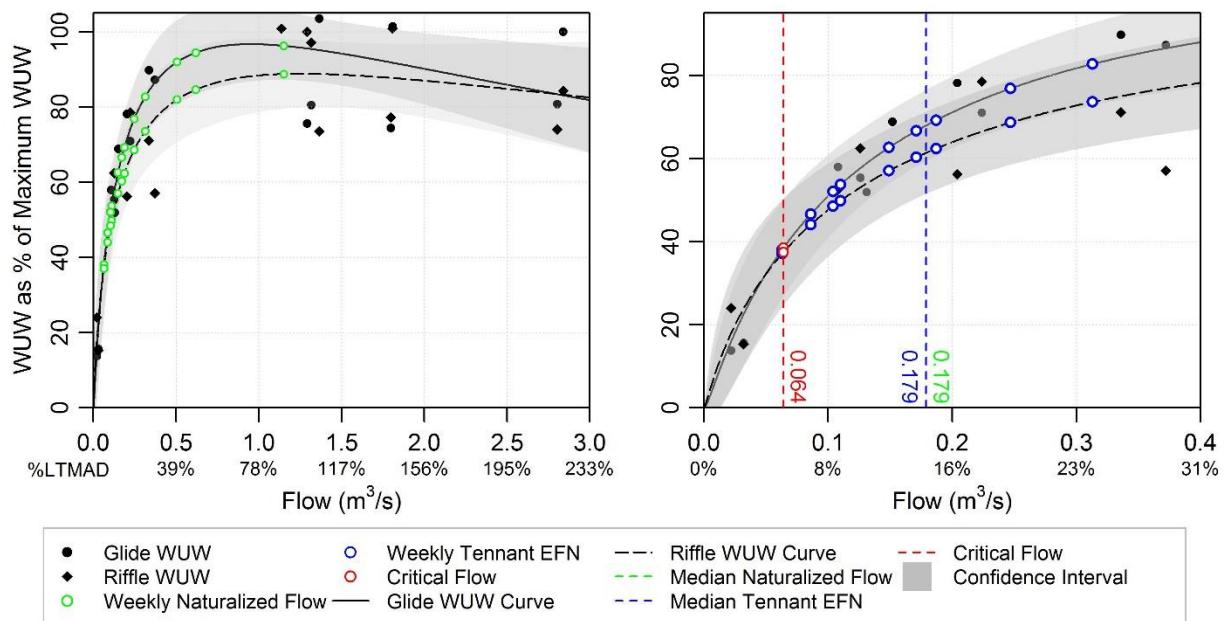


Figure B9-6: WUUW curves for Chinook fry rearing in Vaseux Creek for all flows (left) and low flows (right)

Vaseux Creek Insect Production WUW

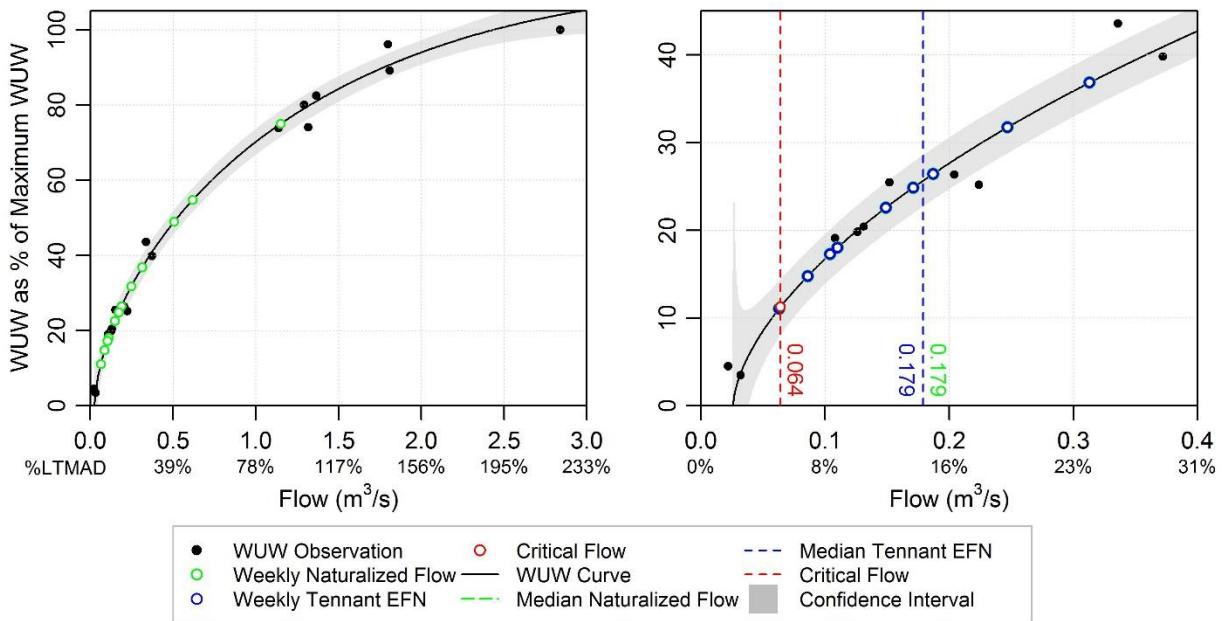


Figure B9-7: WUW curves for insect production in Vaseux Creek for all flows (left) and low flows (right)

Vaseux Creek Rainbow Spawning WUW

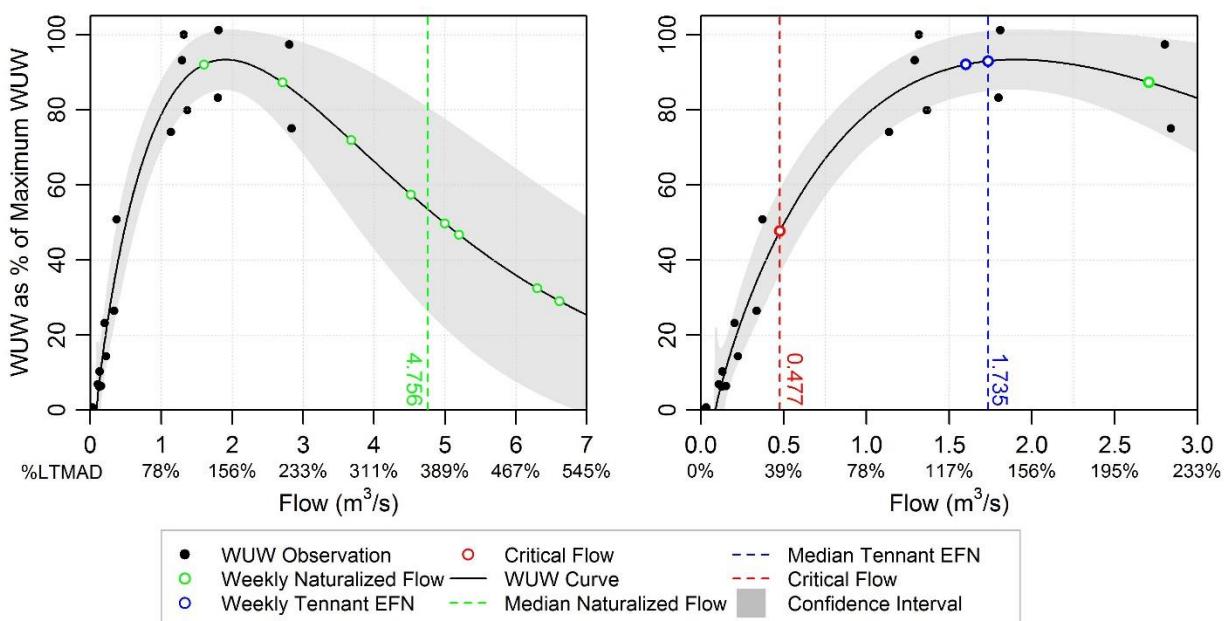
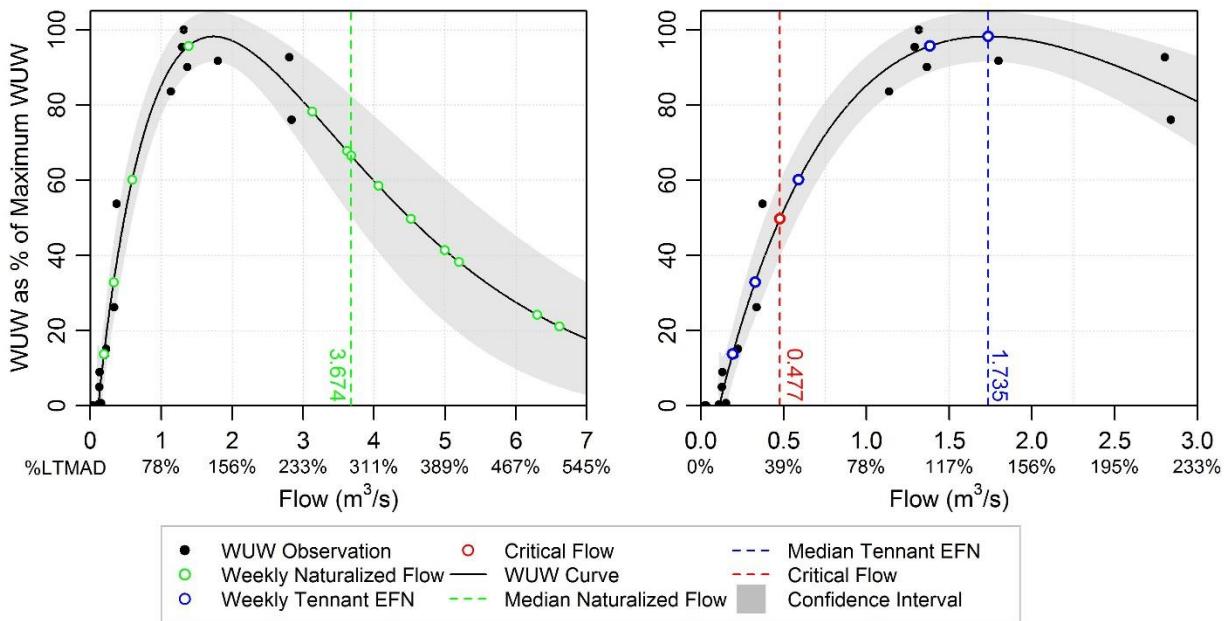
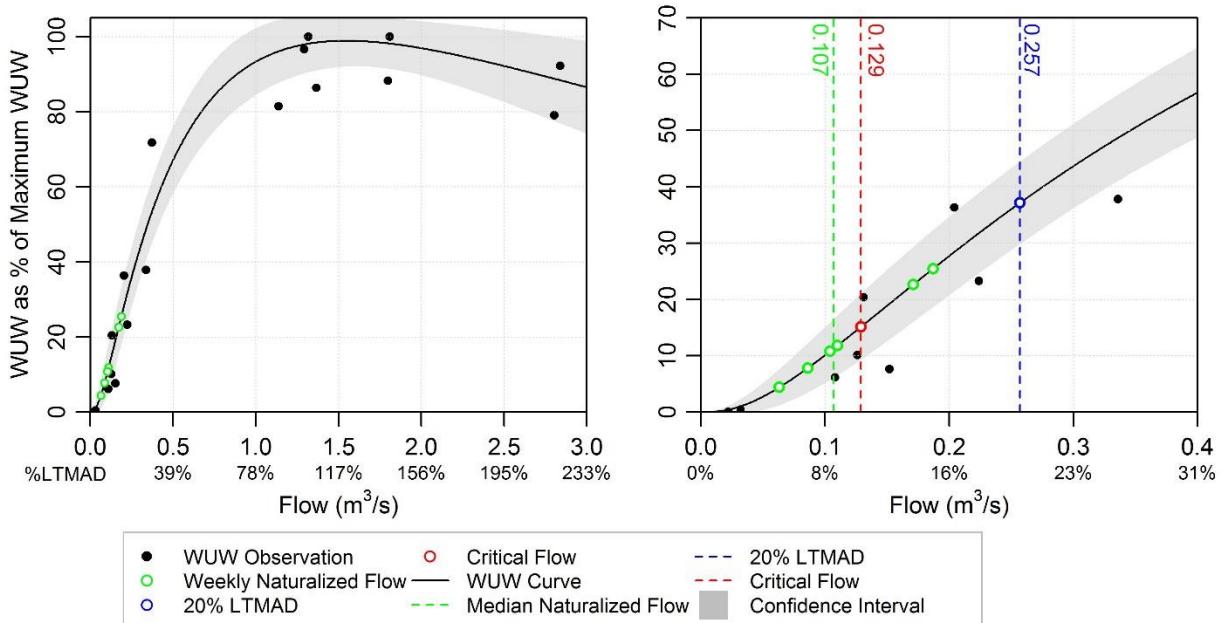


Figure B9-8: WUW curves for Rainbow spawning in Vaseux Creek for all flows (left) and low flows (right)

Vaseux Creek Steelhead Spawning WUW



Vaseux Creek Chinook Spawning WUW



Vaseux Creek Sockeye Spawning WUW

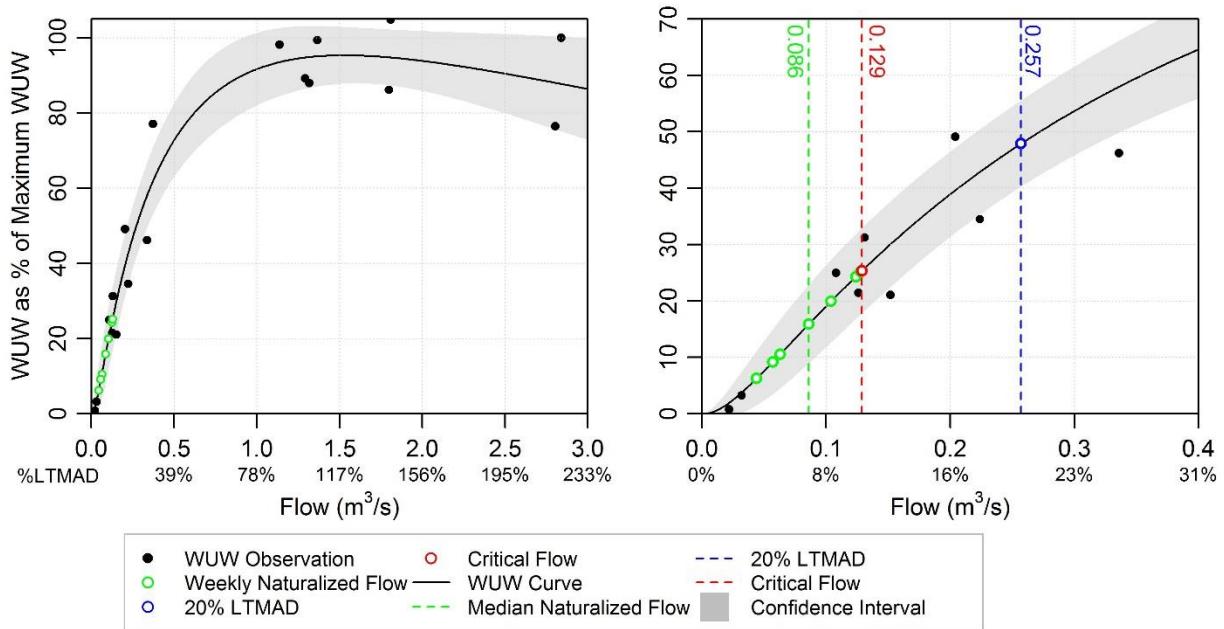


Figure B9-11: WUW curves Sockeye spawning in Vaseux Creek for all flows (left) and low flows (right)

Critical Flows

Table B9-1: Critical flow analysis for Vaseux Creek

Species / Life stage	Critical Flow Criteria	VA10SCR2016		VA30SCR2016		Average	
		(m³/s)	% LTMAD	(m³/s)	% LTMAD	(m³/s)	% LTMAD
	Naturalized LTMAD	1.29	100%	1.29	100%		
	Wetted width at 100% LTMAD (m)	9.63		11.18			
Insect production, Rainbow rearing & overwintering	60% of width at 100% LTMAD	0.032	2%	0.212	16%	0.122	9%
Chinook migration & spawning	> 25% of width at 100% LTMAD is $\geq 0.24\text{m}$ deep	1.31	102%	1.03	80%	1.17	91%
Rainbow, Steelhead & Sockeye spawning	> 25% of width at 100% LTMAD is $\geq 0.18\text{m}$ deep	0.524	41%	0.430	33%	0.477	37%

Table B9-2: Final critical flows for Vaseux Creek

Species/Life stage	Final Critical Flow (m³/s)	% LTMAD	Criteria used
Rainbow, Steelhead & Chinook rearing; insect production	0.064	5%	5% LTMAD
Steelhead spawning	0.477	37%	Naturalized median weekly flow; 0.18 m depth criterion
Rainbow spawning	0.477	37%	0.18m depth criterion
Chinook migration	0.257	20%	20% LTMAD
Chinook & Sockeye spawning	0.129	10%	10% LTMAD
Overwintering salmonids	0.064	5%	5% LTMAD

Table B9-3: 30 day naturalized low flows for Summer and Winter provided by Associated (2019)

	(m³/s)	% LTMAD
Summer (July 1 to September 30) Minimum		
Summer 1:2-year return period 30 Day Naturalized Low	0.042	3
Summer 1:5-year return period 30 Day Naturalized Low	0.008	1
Summer 1:10-year return period 30 Day Naturalized Low	0.003	0
Summer 1:20-year return period 30 Day Naturalized Low	0.002	0
Winter (November 1 to March 31) Minimum		
Winter 1:2-year return period 30 Day Naturalized Low	0.002	0
Winter 1:5-year return period 30 Day Naturalized Low	0.000	0
Winter 1:10-year return period 30 Day Naturalized Low	0.000	0
Winter 1:20-year return period 30 Day Naturalized Low	0.000	0

Percentile Flows for Vaseux Creek

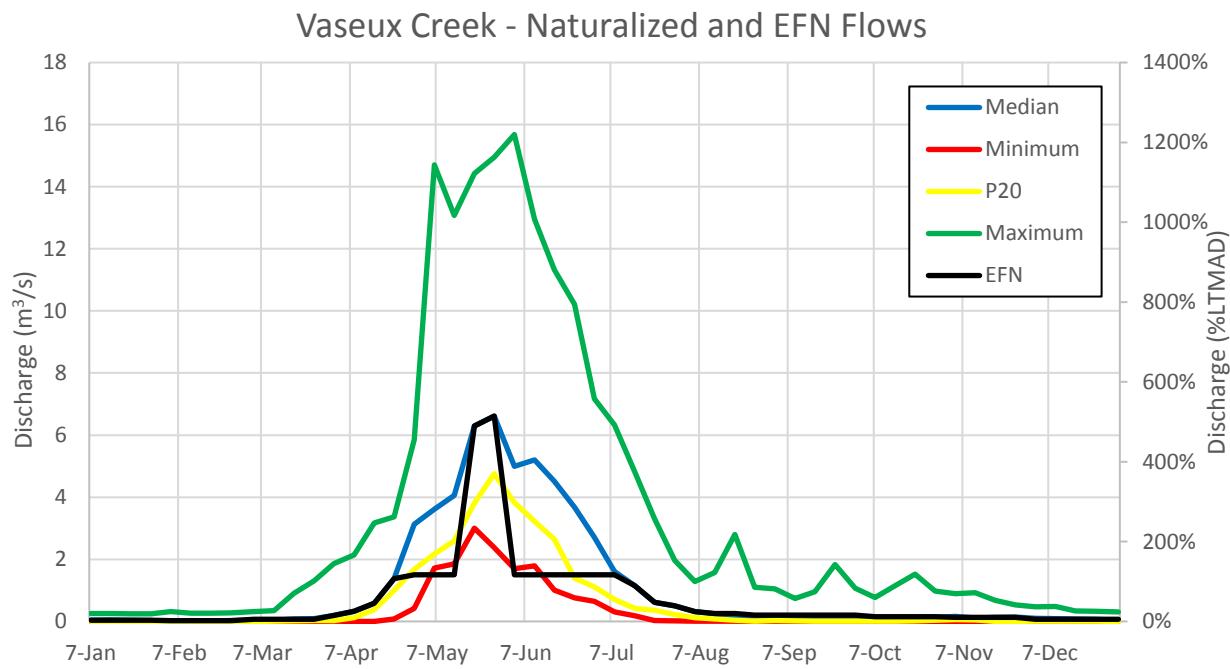


Figure B9-12: EFNs compared with naturalized flow percentiles for Vaseux Creek (Discharge & %LTMAD)

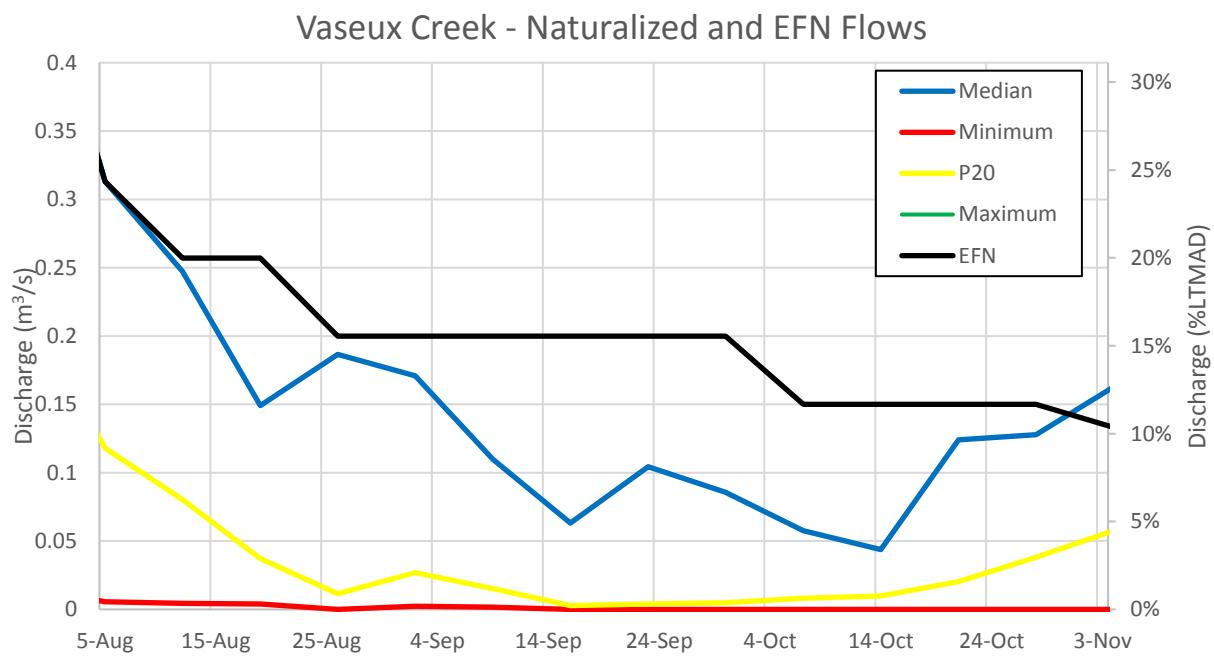


Figure B9-13: EFNs compared with naturalized flow percentiles for Vaseux Creek Aug-Nov (Discharge & %LTMAD)

Naturalized Percentile Flows for Vaseux Creek

NATURALIZED FLOW		as m³/s				as %LTMAD			
Week	Ending	Min	P20	Median	Max	Min	P20	Median	Max
01	7-Jan	0.000	0.000	0.042	0.259	0%	0%	3%	20%
02	14-Jan	0.000	0.000	0.048	0.253	0%	0%	4%	20%
03	21-Jan	0.000	0.000	0.035	0.246	0%	0%	3%	19%
04	28-Jan	0.000	0.000	0.026	0.246	0%	0%	2%	19%
05	4-Feb	0.000	0.000	0.002	0.320	0%	0%	0%	25%
06	11-Feb	0.000	0.000	0.030	0.268	0%	0%	2%	21%
07	18-Feb	0.000	0.000	0.023	0.270	0%	0%	2%	21%
08	25-Feb	0.000	0.000	0.027	0.280	0%	0%	2%	22%
09	4-Mar	0.000	0.000	0.034	0.317	0%	0%	3%	25%
10	11-Mar	0.000	0.012	0.037	0.351	0%	1%	3%	27%
11	18-Mar	0.000	0.014	0.082	0.907	0%	1%	6%	71%
12	25-Mar	0.000	0.024	0.095	1.310	0%	2%	7%	102%
13	1-Apr	0.006	0.030	0.191	1.860	0%	2%	15%	145%
14	8-Apr	0.000	0.124	0.327	2.145	0%	10%	25%	167%
15	15-Apr	0.000	0.375	0.590	3.168	0%	29%	46%	247%
16	22-Apr	0.079	1.000	1.383	3.369	6%	78%	108%	262%
17	29-Apr	0.417	1.675	3.127	5.849	32%	130%	243%	455%
18	6-May	1.718	2.168	3.616	14.704	134%	169%	281%	1144%
19	13-May	1.848	2.595	4.061	13.073	144%	202%	316%	1017%
20	20-May	3.005	3.807	6.297	14.430	234%	296%	490%	1123%
21	27-May	2.377	4.757	6.614	14.948	185%	370%	515%	1163%
22	3-Jun	1.701	3.827	4.997	15.681	132%	298%	389%	1220%
23	10-Jun	1.786	3.224	5.198	12.950	139%	251%	404%	1008%
24	17-Jun	1.007	2.646	4.516	11.320	78%	206%	351%	881%
25	24-Jun	0.765	1.400	3.674	10.213	59%	109%	286%	795%
26	1-Jul	0.646	1.109	2.707	7.173	50%	86%	211%	558%
27	8-Jul	0.306	0.705	1.601	6.328	24%	55%	125%	492%
28	15-Jul	0.184	0.416	1.150	4.819	14%	32%	89%	375%
29	22-Jul	0.027	0.361	0.618	3.310	2%	28%	48%	258%
30	29-Jul	0.016	0.223	0.506	1.970	1%	17%	39%	153%
31	5-Aug	0.006	0.118	0.313	1.284	0%	9%	24%	100%
32	12-Aug	0.004	0.080	0.247	1.576	0%	6%	19%	123%
33	19-Aug	0.004	0.037	0.149	2.798	0%	3%	12%	218%
34	26-Aug	0.000	0.011	0.187	1.105	0%	1%	15%	86%
35	2-Sep	0.002	0.027	0.171	1.044	0%	2%	13%	81%
36	9-Sep	0.002	0.015	0.110	0.742	0%	1%	9%	58%
37	16-Sep	0.000	0.003	0.063	0.952	0%	0%	5%	74%
38	23-Sep	0.000	0.004	0.104	1.834	0%	0%	8%	143%
39	30-Sep	0.000	0.005	0.086	1.071	0%	0%	7%	83%
40	7-Oct	0.000	0.008	0.057	0.771	0%	1%	4%	60%
41	14-Oct	0.000	0.010	0.044	1.156	0%	1%	3%	90%
42	21-Oct	0.000	0.020	0.124	1.525	0%	2%	10%	119%
43	28-Oct	0.000	0.038	0.128	0.980	0%	3%	10%	76%
44	4-Nov	0.000	0.058	0.163	0.895	0%	4%	13%	70%
45	11-Nov	0.000	0.050	0.115	0.927	0%	4%	9%	72%
46	18-Nov	0.000	0.000	0.127	0.673	0%	0%	10%	52%
47	25-Nov	0.000	0.000	0.140	0.529	0%	0%	11%	41%
48	2-Dec	0.000	0.005	0.102	0.467	0%	0%	8%	36%
49	9-Dec	0.000	0.012	0.086	0.478	0%	1%	7%	37%
50	16-Dec	0.000	0.006	0.080	0.333	0%	0%	6%	26%
51	23-Dec	0.000	0.005	0.071	0.331	0%	0%	5%	26%
52	31-Dec	0.000	0.002	0.041	0.308	0%	0%	3%	24%

Residual Percentile Flows for Vaseux Creek

RESIDUAL FLOW		as m³/s				as %LTMAD			
Week	Ending	Min	P20	Median	Max	Min	P20	Median	Max
01	7-Jan	0.000	0.000	0.037	0.255	0%	0%	3%	20%
02	14-Jan	0.000	0.000	0.043	0.249	0%	0%	3%	19%
03	21-Jan	0.000	0.000	0.031	0.241	0%	0%	2%	19%
04	28-Jan	0.000	0.000	0.022	0.241	0%	0%	2%	19%
05	4-Feb	0.000	0.000	0.002	0.315	0%	0%	0%	25%
06	11-Feb	0.000	0.000	0.025	0.264	0%	0%	2%	21%
07	18-Feb	0.000	0.000	0.019	0.265	0%	0%	1%	21%
08	25-Feb	0.000	0.000	0.023	0.276	0%	0%	2%	21%
09	4-Mar	0.000	0.000	0.030	0.313	0%	0%	2%	24%
10	11-Mar	0.000	0.012	0.033	0.347	0%	1%	3%	27%
11	18-Mar	0.000	0.014	0.082	0.907	0%	1%	6%	71%
12	25-Mar	0.000	0.020	0.090	1.310	0%	2%	7%	102%
13	1-Apr	0.000	0.018	0.177	1.836	0%	1%	14%	143%
14	8-Apr	0.000	0.113	0.316	2.114	0%	9%	25%	165%
15	15-Apr	0.000	0.364	0.567	3.095	0%	28%	44%	241%
16	22-Apr	0.063	0.952	1.342	3.276	5%	74%	104%	255%
17	29-Apr	0.411	1.627	3.061	5.714	32%	127%	238%	445%
18	6-May	1.683	2.103	3.536	14.523	131%	164%	275%	1130%
19	13-May	1.813	2.546	3.943	12.922	141%	198%	307%	1006%
20	20-May	2.893	3.666	6.182	14.270	225%	285%	481%	1110%
21	27-May	2.284	4.601	6.360	14.793	178%	358%	495%	1151%
22	3-Jun	1.624	3.666	4.887	15.510	126%	285%	380%	1207%
23	10-Jun	1.706	3.152	5.094	12.794	133%	245%	396%	996%
24	17-Jun	0.963	2.578	4.463	11.206	75%	201%	347%	872%
25	24-Jun	0.731	1.354	3.612	10.116	57%	105%	281%	787%
26	1-Jul	0.609	1.065	2.682	7.103	47%	83%	209%	553%
27	8-Jul	0.279	0.682	1.573	6.266	22%	53%	122%	488%
28	15-Jul	0.166	0.401	1.134	4.779	13%	31%	88%	372%
29	22-Jul	0.019	0.342	0.607	3.284	1%	27%	47%	256%
30	29-Jul	0.011	0.215	0.496	1.955	1%	17%	39%	152%
31	5-Aug	0.002	0.113	0.308	1.273	0%	9%	24%	99%
32	12-Aug	0.001	0.076	0.242	1.563	0%	6%	19%	122%
33	19-Aug	0.001	0.031	0.141	2.776	0%	2%	11%	216%
34	26-Aug	0.000	0.008	0.178	1.096	0%	1%	14%	85%
35	2-Sep	0.001	0.024	0.166	1.035	0%	2%	13%	81%
36	9-Sep	0.000	0.012	0.106	0.734	0%	1%	8%	57%
37	16-Sep	0.000	0.000	0.059	0.940	0%	0%	5%	73%
38	23-Sep	0.000	0.000	0.099	1.812	0%	0%	8%	141%
39	30-Sep	0.000	0.001	0.076	1.056	0%	0%	6%	82%
40	7-Oct	0.000	0.000	0.048	0.754	0%	0%	4%	59%
41	14-Oct	0.000	0.009	0.039	1.151	0%	1%	3%	90%
42	21-Oct	0.000	0.019	0.120	1.520	0%	2%	9%	118%
43	28-Oct	0.000	0.034	0.123	0.976	0%	3%	10%	76%
44	4-Nov	0.000	0.054	0.158	0.890	0%	4%	12%	69%
45	11-Nov	0.000	0.050	0.111	0.922	0%	4%	9%	72%
46	18-Nov	0.000	0.000	0.122	0.668	0%	0%	10%	52%
47	25-Nov	0.000	0.000	0.135	0.525	0%	0%	11%	41%
48	2-Dec	0.000	0.002	0.097	0.462	0%	0%	8%	36%
49	9-Dec	0.000	0.011	0.081	0.473	0%	1%	6%	37%
50	16-Dec	0.000	0.003	0.076	0.328	0%	0%	6%	26%
51	23-Dec	0.000	0.001	0.066	0.326	0%	0%	5%	25%
52	31-Dec	0.000	0.001	0.041	0.303	0%	0%	3%	24%

Maximum Licensed Percentile Flows for Vaseux Creek

MAX LICENSED FLOW		as m³/s				as %LTMAD			
Week	Ending	Min	P20	Median	Max	Min	P20	Median	Max
01	7-Jan	0.000	0.000	0.033	0.250	0%	0%	3%	19%
02	14-Jan	0.000	0.000	0.039	0.244	0%	0%	3%	19%
03	21-Jan	0.000	0.000	0.026	0.237	0%	0%	2%	18%
04	28-Jan	0.000	0.000	0.018	0.237	0%	0%	1%	18%
05	4-Feb	0.000	0.000	0.002	0.311	0%	0%	0%	24%
06	11-Feb	0.000	0.000	0.021	0.259	0%	0%	2%	20%
07	18-Feb	0.000	0.000	0.014	0.261	0%	0%	1%	20%
08	25-Feb	0.000	0.000	0.018	0.271	0%	0%	1%	21%
09	4-Mar	0.000	0.000	0.025	0.308	0%	0%	2%	24%
10	11-Mar	0.000	0.005	0.028	0.342	0%	0%	2%	27%
11	18-Mar	0.000	0.012	0.081	0.907	0%	1%	6%	71%
12	25-Mar	0.000	0.015	0.086	1.310	0%	1%	7%	102%
13	1-Apr	0.000	0.014	0.172	1.836	0%	1%	13%	143%
14	8-Apr	0.000	0.109	0.312	2.114	0%	8%	24%	165%
15	15-Apr	0.000	0.361	0.562	3.095	0%	28%	44%	241%
16	22-Apr	0.059	0.948	1.337	3.272	5%	74%	104%	255%
17	29-Apr	0.411	1.622	3.061	5.708	32%	126%	238%	444%
18	6-May	1.678	2.100	3.536	14.516	131%	163%	275%	1130%
19	13-May	1.807	2.540	3.943	12.915	141%	198%	307%	1005%
20	20-May	2.893	3.664	6.175	14.264	225%	285%	481%	1110%
21	27-May	2.284	4.591	6.360	14.787	178%	357%	495%	1151%
22	3-Jun	1.624	3.664	4.877	15.505	126%	285%	380%	1207%
23	10-Jun	1.706	3.141	5.084	12.778	133%	244%	396%	994%
24	17-Jun	0.963	2.562	4.451	11.195	75%	199%	346%	871%
25	24-Jun	0.731	1.342	3.600	10.108	57%	104%	280%	787%
26	1-Jul	0.609	1.062	2.682	7.096	47%	83%	209%	552%
27	8-Jul	0.279	0.679	1.560	6.253	22%	53%	121%	487%
28	15-Jul	0.166	0.390	1.115	4.766	13%	30%	87%	371%
29	22-Jul	0.019	0.339	0.591	3.267	1%	26%	46%	254%
30	29-Jul	0.011	0.202	0.483	1.937	1%	16%	38%	151%
31	5-Aug	0.002	0.101	0.294	1.257	0%	8%	23%	98%
32	12-Aug	0.001	0.065	0.232	1.548	0%	5%	18%	120%
33	19-Aug	0.001	0.030	0.133	2.763	0%	2%	10%	215%
34	26-Aug	0.000	0.008	0.172	1.085	0%	1%	13%	84%
35	2-Sep	0.001	0.022	0.162	1.026	0%	2%	13%	80%
36	9-Sep	0.000	0.012	0.103	0.729	0%	1%	8%	57%
37	16-Sep	0.000	0.000	0.056	0.939	0%	0%	4%	73%
38	23-Sep	0.000	0.000	0.098	1.811	0%	0%	8%	141%
39	30-Sep	0.000	0.001	0.075	1.055	0%	0%	6%	82%
40	7-Oct	0.000	0.000	0.043	0.749	0%	0%	3%	58%
41	14-Oct	0.000	0.004	0.035	1.146	0%	0%	3%	89%
42	21-Oct	0.000	0.019	0.115	1.516	0%	1%	9%	118%
43	28-Oct	0.000	0.029	0.119	0.971	0%	2%	9%	76%
44	4-Nov	0.000	0.050	0.154	0.886	0%	4%	12%	69%
45	11-Nov	0.000	0.050	0.106	0.918	0%	4%	8%	71%
46	18-Nov	0.000	0.000	0.118	0.664	0%	0%	9%	52%
47	25-Nov	0.000	0.000	0.131	0.520	0%	0%	10%	40%
48	2-Dec	0.000	0.000	0.093	0.458	0%	0%	7%	36%
49	9-Dec	0.000	0.010	0.077	0.469	0%	1%	6%	36%
50	16-Dec	0.000	0.000	0.071	0.324	0%	0%	6%	25%
51	23-Dec	0.000	0.000	0.062	0.322	0%	0%	5%	25%
52	31-Dec	0.000	0.000	0.041	0.299	0%	0%	3%	23%