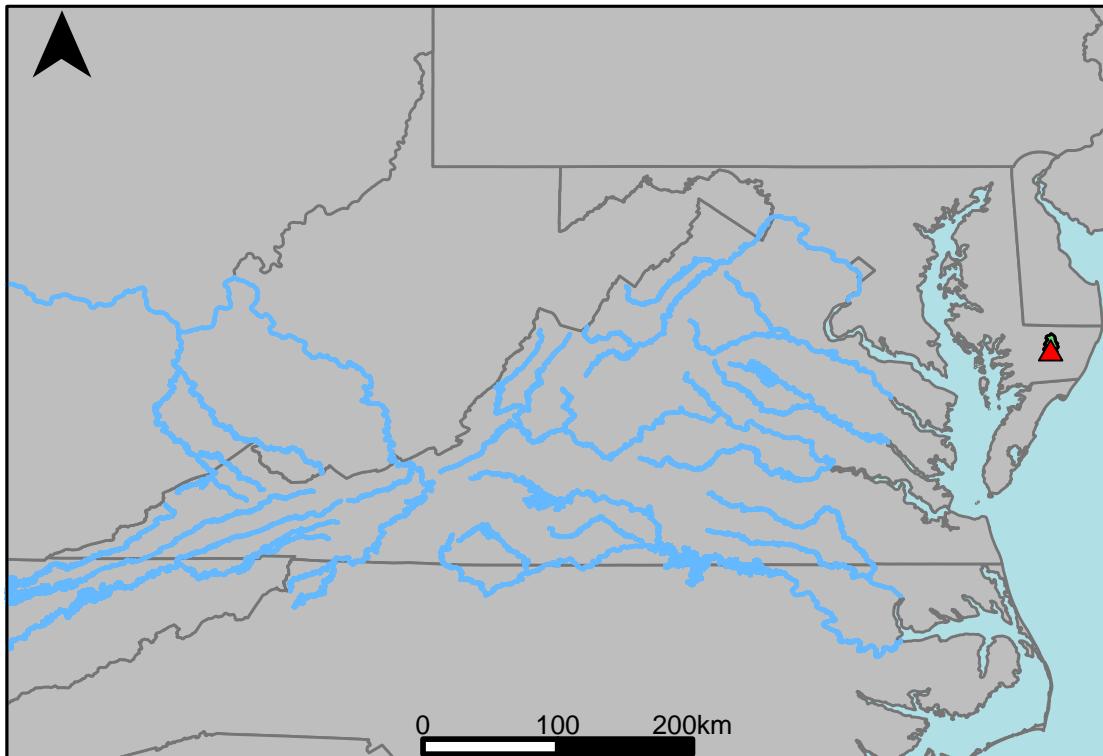


Appendix ##: River Segment: EL1_5430_0001 -
Scenario 1: CFBASE30Y20180615 vs. Scenario 2:
CBASE1808L55CY55R45P50R45P50Y



This river segment follows part of the flow of Nassawango Creek near Snow Hill, MD. Gage 01485500 is located in Worcester County, MD (Lat 38°13'44.1", Long 75°28'17.2") approximately 5.5 miles northwest of Snow Hill. Drainage area is 44.9 sq. miles. This gage started taking data in 1949 and has been taking data periodically until now. There is a U.S. Geological Survey satellite data-collection platform at station. The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was 4.72727%, with 2.22% of its rolling three month time spans above 20% difference.

Table 1: Monthly Low Flows

	Base 2018	Climate Change	Pct. Difference
Jan. Low Flow	3.14	3.12	-0.64
Feb. Low Flow	10.1	10.2	0.99
Mar. Low Flow	17.2	18	4.65
Apr. Low Flow	31.9	32.2	0.94
May Low Flow	39.4	39.5	0.25
Jun. Low Flow	32.8	31.6	-3.66
Jul. Low Flow	26	26.1	0.38
Aug. Low Flow	12.8	13.1	2.34
Sep. Low Flow	5.62	5.28	-6.05
Oct. Low Flow	1.38	1.31	-5.07
Nov. Low Flow	2.2	2.32	5.45
Dec. Low Flow	2.25	2.38	5.78

Table 2: Monthly Average Flows

	Base 2018	Climate Change	Pct. Difference
Overall Mean Flow	55	57.6	4.73
Jan. Mean Flow	96.1	102	6.14
Feb. Mean Flow	101	106	4.95
Mar. Mean Flow	121	122	0.83
Apr. Mean Flow	68.9	70.9	2.9
May Mean Flow	47.1	49.9	5.94
Jun. Mean Flow	20.3	20.2	-0.49
Jul. Mean Flow	21.7	23.2	6.91
Aug. Mean Flow	30.8	33.6	9.09
Sep. Mean Flow	30	30.3	1
Oct. Mean Flow	30.5	32.8	7.54
Nov. Mean Flow	35.2	37.8	7.39
Dec. Mean Flow	59.3	65.4	10.29

Table 3: Monthly High Flows

	Base 2018	Climate Change	Pct. Difference
Jan. High Flow	65.2	73.8	13.19
Feb. High Flow	86.9	94.6	8.86
Mar. High Flow	112	132	17.86
Apr. High Flow	306	341	11.44
May High Flow	245	243	-0.82
Jun. High Flow	374	384	2.67
Jul. High Flow	182	208	14.29
Aug. High Flow	118	137	16.1
Sep. High Flow	49.6	50.6	2.02
Oct. High Flow	25.2	31.4	24.6
Nov. High Flow	47	61	29.79
Dec. High Flow	40.2	46.4	15.42

Table 4: Period Low Flows

	Base 2018	Climate Change	Pct. Difference
Min. 1 Day Min	0.03	0.03	-0.32
Med. 1 Day Min	0.67	0.62	-7.8
Min. 3 Day Min	0.03	0.03	0
Med. 3 Day Min	0.8	0.75	-5.75
Min. 7 Day Min	0.03	0.04	2.34
Med. 7 Day Min	1.03	0.98	-4.85
Min. 30 Day Min	0.19	0.21	8.38
Med. 30 Day Min	3.33	3.58	7.51
Min. 90 Day Min	1.54	1.64	6.49
Med. 90 Day Min	9.49	10.1	6.43
7Q10	0.09	0.09	-5.73
Year of 90-Day Min. Flow	1986	1986	0
Drought Year Mean	32.1	32.6	1.56
Mean Baseflow	23	23	0

Table 5: Period High Flows

	Base 2018	Climate Change	Pct. Difference
Max. 1 Day Max	1350	1420	5.19
Med. 1 Day Max	752	746	-0.8
Max. 3 Day Max	1190	1260	5.88
Med. 3 Day Max	557	563	1.08
Max. 7 Day Max	676	729	7.84
Med. 7 Day Max	364	377	3.57
Max. 30 Day Max	399	432	8.27
Med. 30 Day Max	165	173	4.85
Max. 90 Day Max	229	244	6.55
Med. 90 Day Max	106	106	0

Table 6: Non-Exceedance Flows

	Base 2018	Climate Change	Pct. Difference
1% Non-Exceedance	0.34	0.32	-6.8
5% Non-Exceedance	1.21	1.2	-0.83
50% Non-Exceedance	29	30	3.45
95% Non-Exceedance	188	197	4.79
99% Non-Exceedance	534	566	5.99
Sept. 10% Non-Exceedance	1.43	1.43	0

Fig. 1: Hydrograph

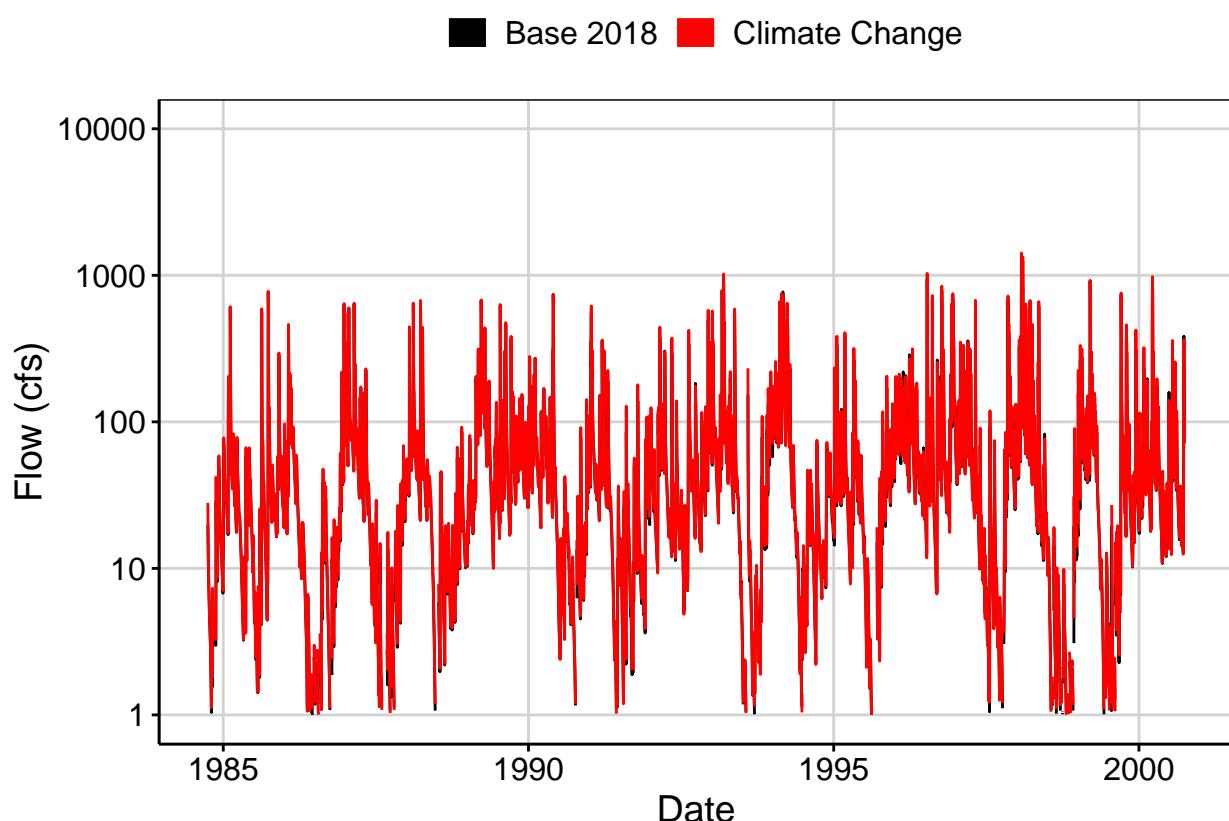


Fig. 2: Zoomed Hydrograph

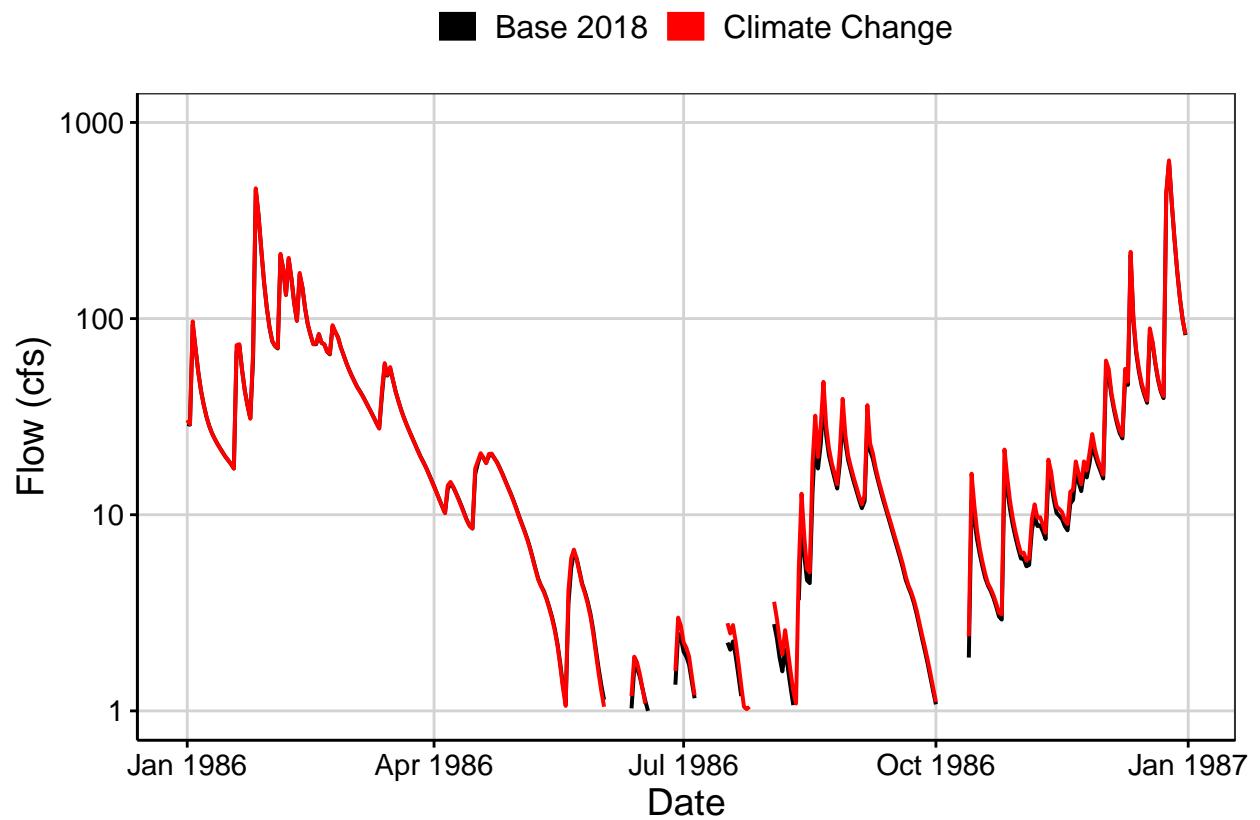


Fig. 3: Flow Exceedance

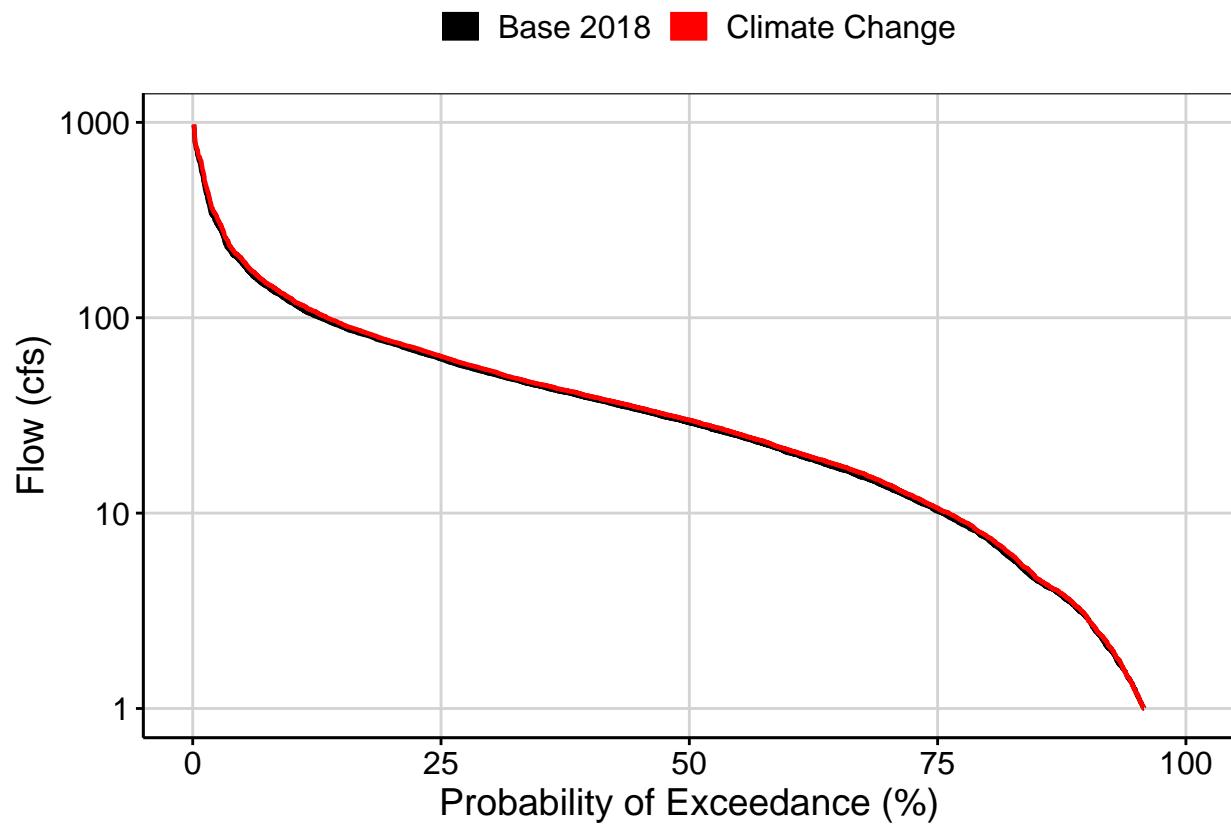


Fig. 4: Baseflow

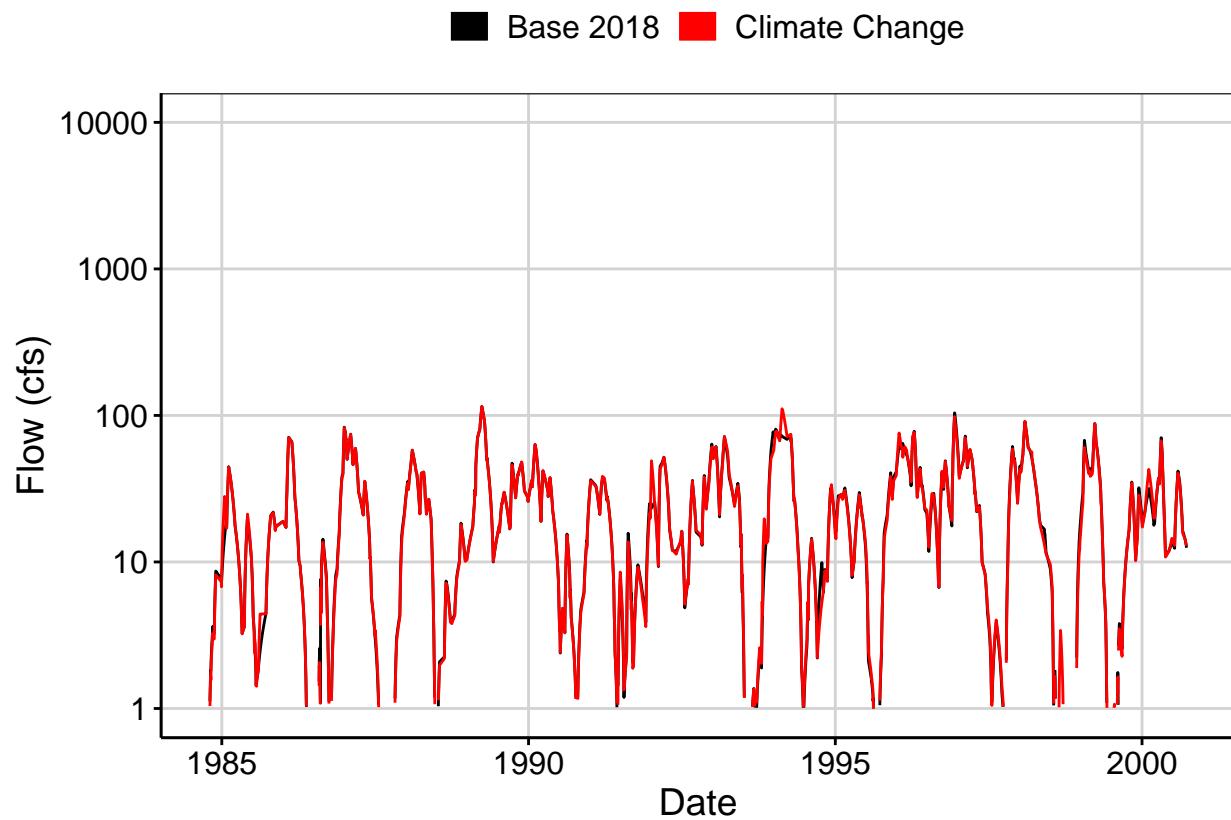


Fig. 5: Combined Baseflow

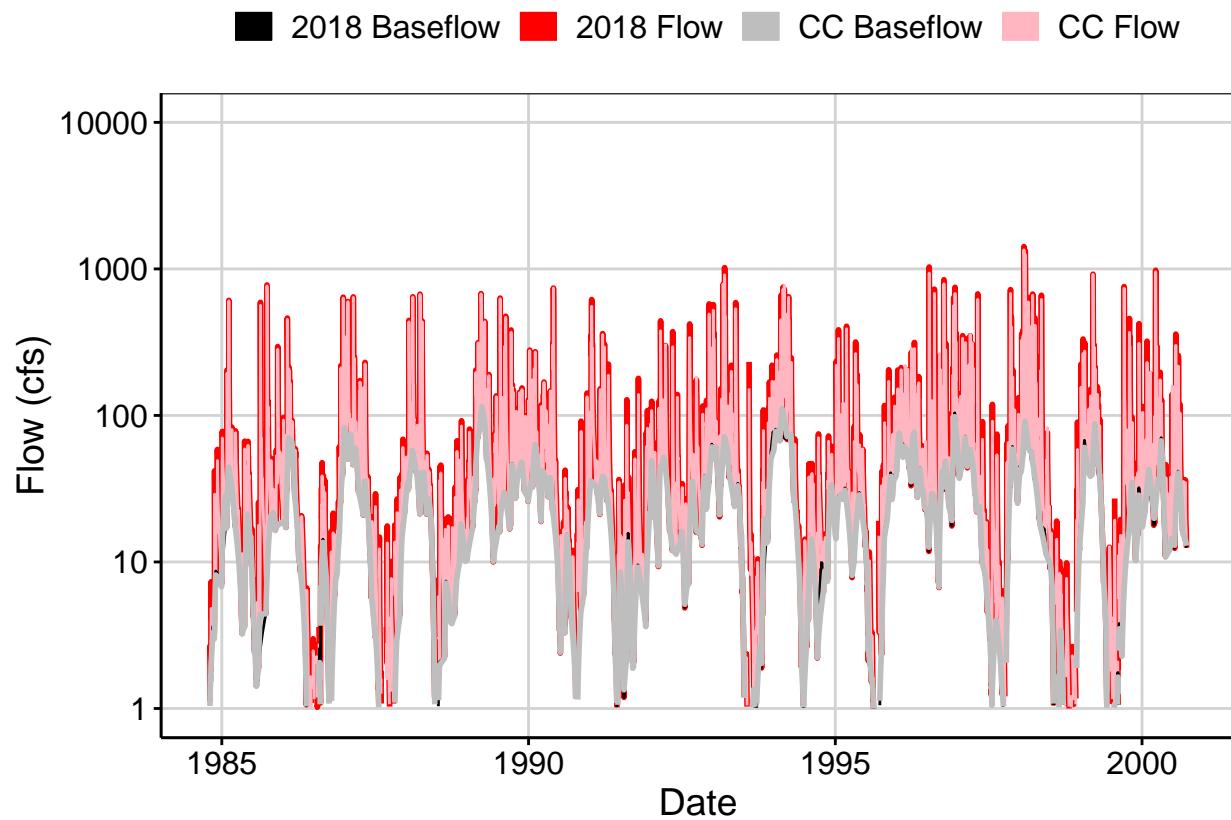


Fig. 6: Largest Difference Segment

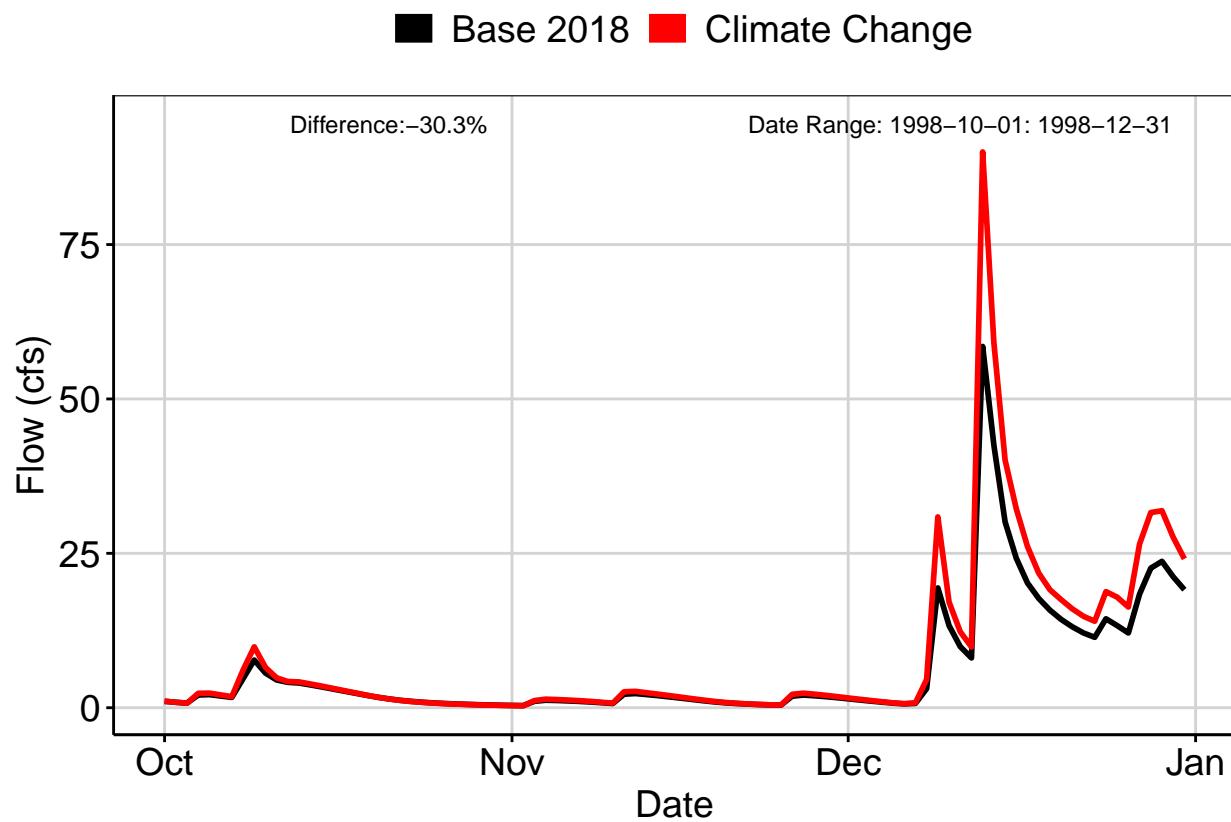


Fig. 7: Second Largest Difference Segment

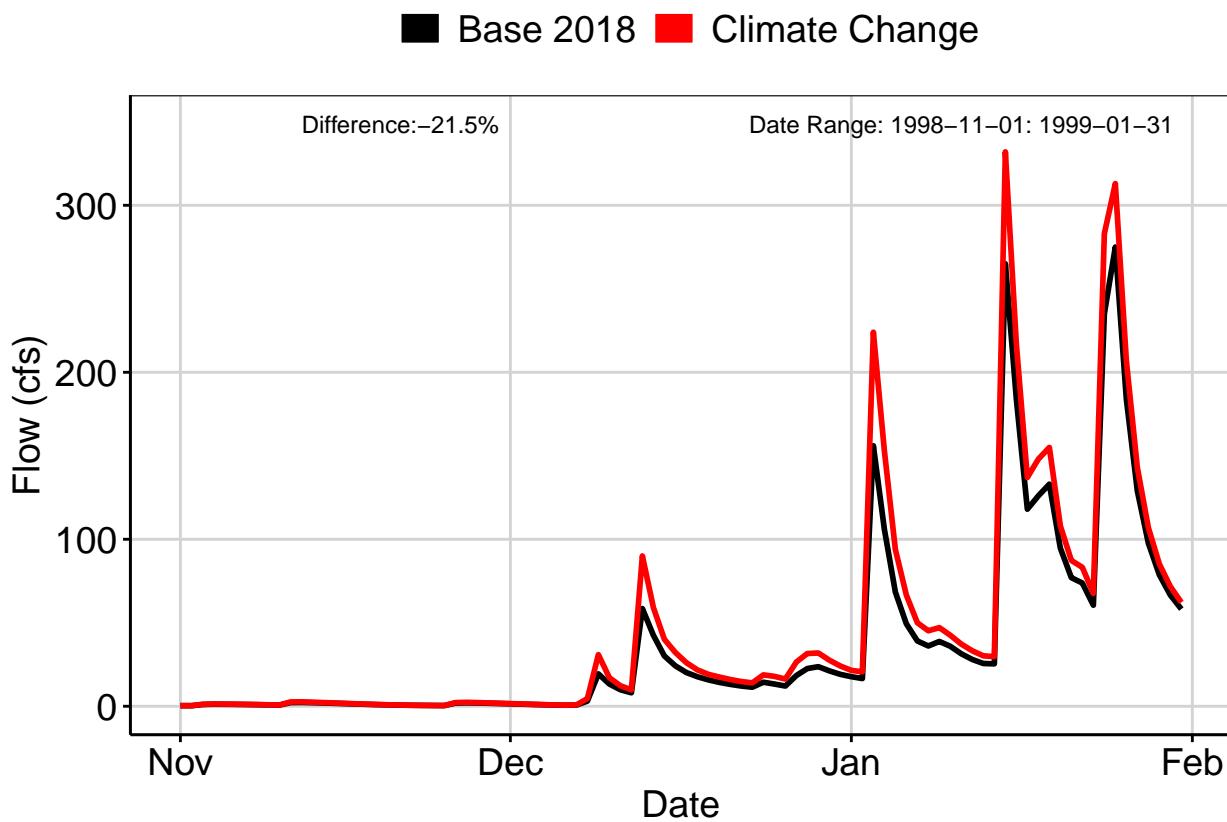


Fig. 8: Third Largest Difference Segment

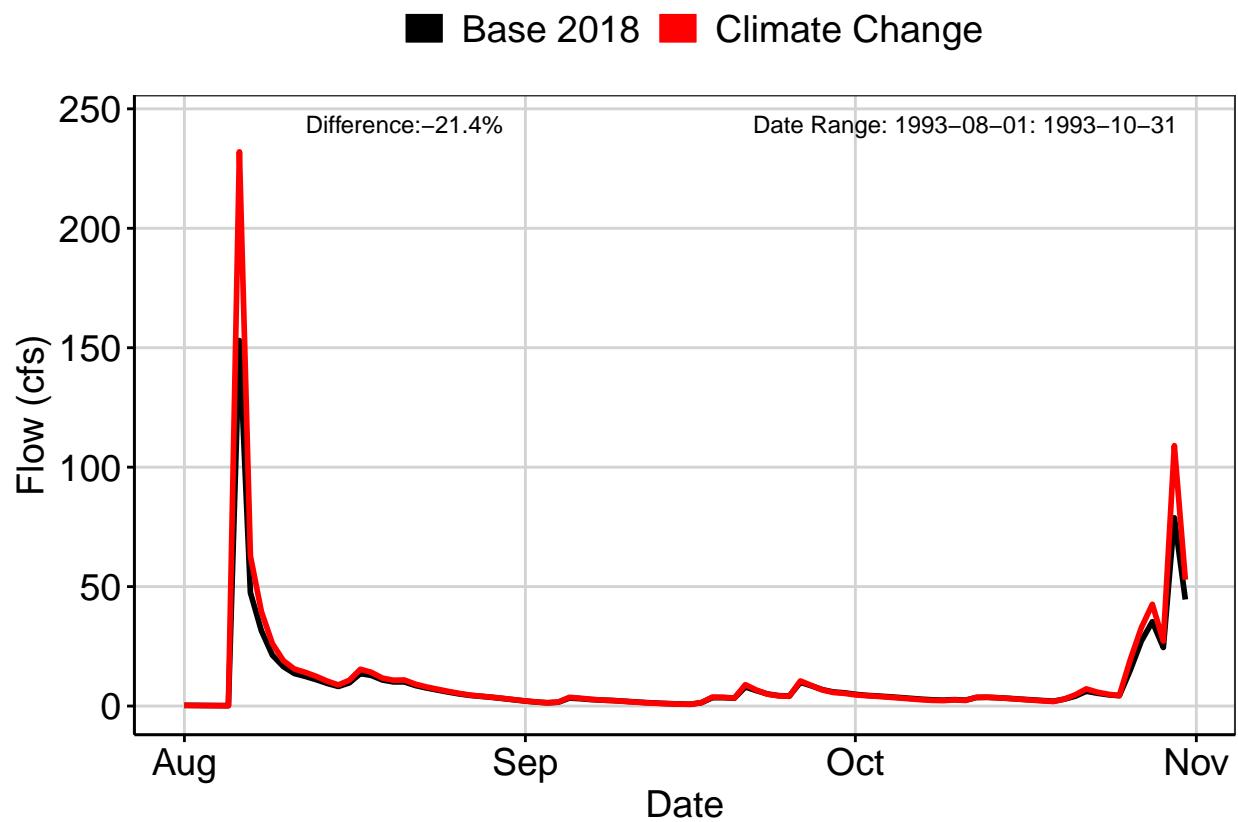


Fig. 9A: Residuals Plot

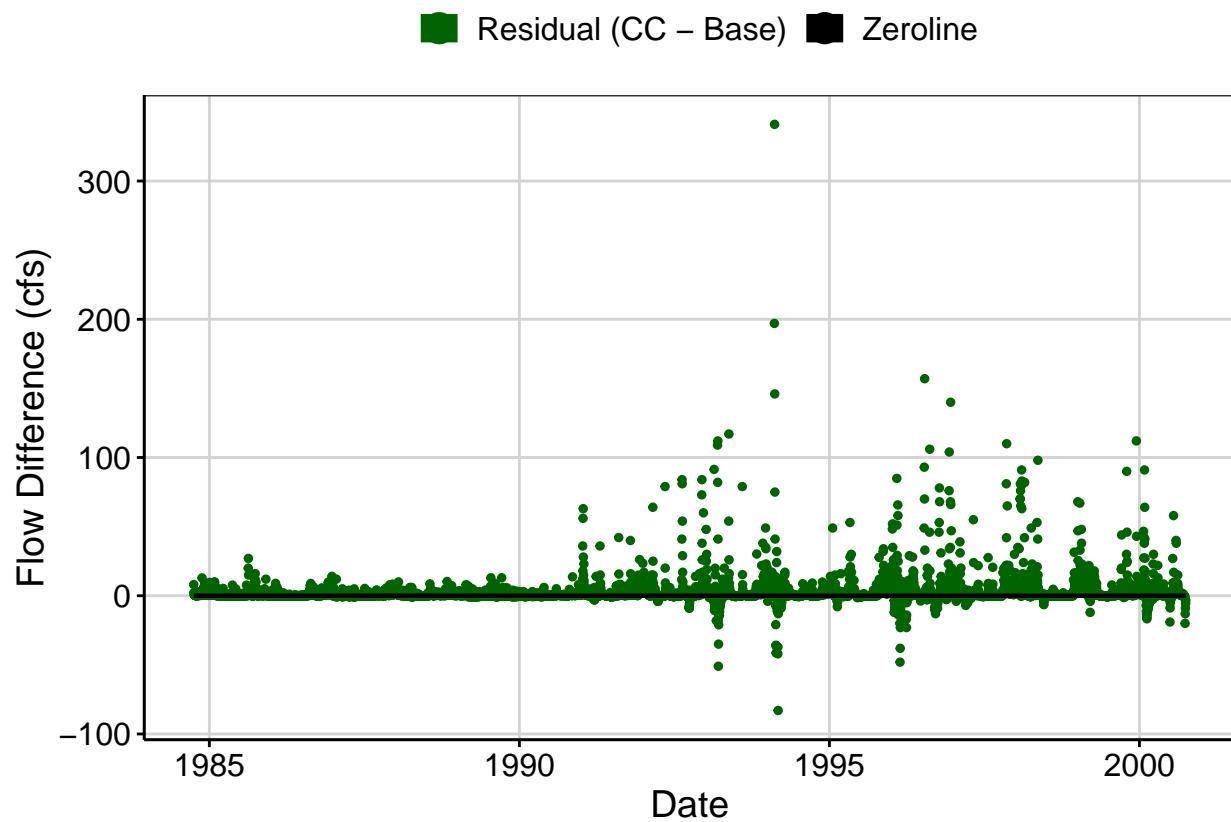


Fig. 9B: Area Weighted Residuals Plot

