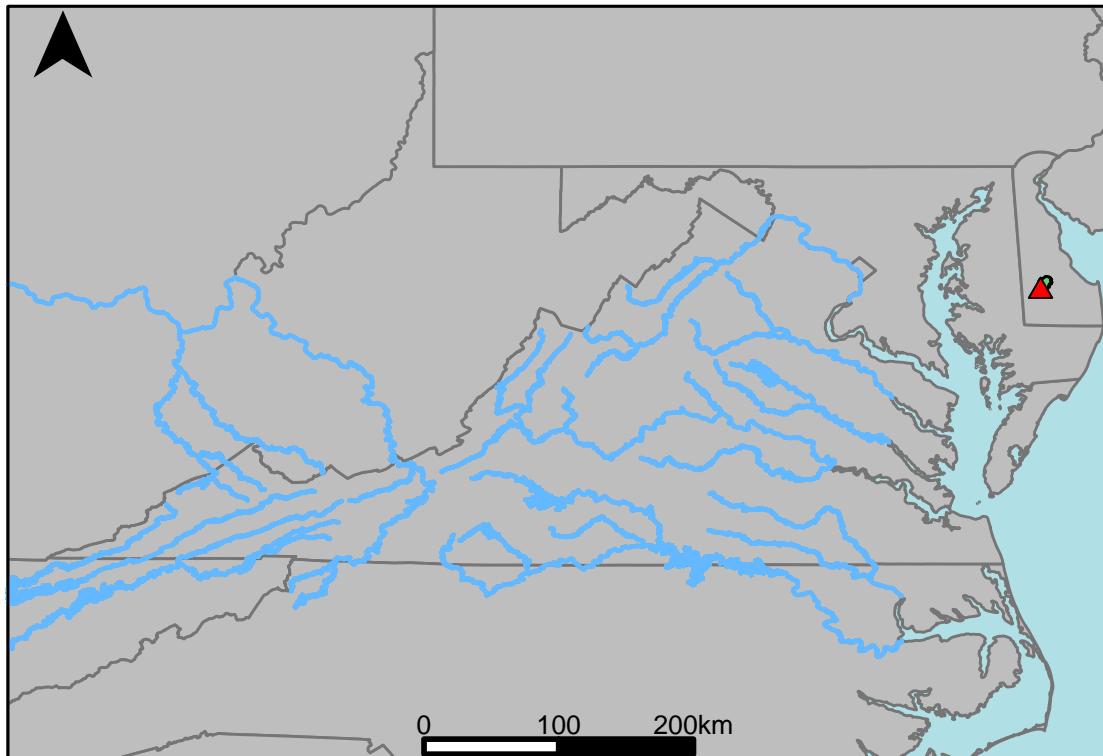


Appendix ##: River Segment: EL0\_4561\_4562 -  
Scenario 1: CFBASE30Y20180615 vs. Scenario 2:  
CBASE1808L55CY55R45P50R45P50Y



This river segment follows part of the flow of the Nanticoke River near Bridgeville, DE. Gage 01487000 is located in Sussex County, VA (Lat 38° 43'42", Long 75° 33'42.7") approximately 2.5 miles southeast of Bridgeville, DE. Drainage area is 75.4 sq. miles. This gage started taking data in 1943 and is still taking data currently. There are no significant anthropogenic alterations in this area that would affect the flow conditions. The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was 6.49038%, with 4.44% of its rolling three month time spans above 20% difference.

**Table 1: Monthly Low Flows**

	Base 2018	Climate Change	Pct. Difference
Jan. Low Flow	9.07	9.16	0.99
Feb. Low Flow	18	18.1	0.56
Mar. Low Flow	24.7	25	1.21
Apr. Low Flow	28.4	29	2.11
May Low Flow	38.7	38.3	-1.03
Jun. Low Flow	38.2	38.6	1.05
Jul. Low Flow	38.4	37.8	-1.56
Aug. Low Flow	30.4	30.6	0.66
Sep. Low Flow	17.6	17.4	-1.14
Oct. Low Flow	7.88	7.24	-8.12
Nov. Low Flow	9.09	9.01	-0.88
Dec. Low Flow	9.3	9.69	4.19

**Table 2: Monthly Average Flows**

	Base 2018	Climate Change	Pct. Difference
Overall Mean Flow	41.6	44.3	6.49
Jan. Mean Flow	57.2	62.1	8.57
Feb. Mean Flow	63	67.6	7.3
Mar. Mean Flow	74.2	76.9	3.64
Apr. Mean Flow	58.8	60.1	2.21
May Mean Flow	47	49.6	5.53
Jun. Mean Flow	29.5	29.9	1.36
Jul. Mean Flow	21.7	22.9	5.53
Aug. Mean Flow	25.9	28.7	10.81
Sep. Mean Flow	26.6	28.2	6.02
Oct. Mean Flow	25.8	27.7	7.36
Nov. Mean Flow	29.4	32.5	10.54
Dec. Mean Flow	40.9	46	12.47

**Table 3: Monthly High Flows**

	Base 2018	Climate Change	Pct. Difference
Jan. High Flow	40.2	47.8	18.9
Feb. High Flow	50.3	64.1	27.4
Mar. High Flow	59.2	70.5	19.1
Apr. High Flow	124	150	21
May High Flow	86.2	110	27.6
Jun. High Flow	163	184	12.9
Jul. High Flow	95	107	12.6
Aug. High Flow	91.4	118	29.1
Sep. High Flow	40.4	46.8	15.8
Oct. High Flow	27.8	35	25.9
Nov. High Flow	45.5	57.2	25.7
Dec. High Flow	35.1	49	39.6

**Table 4: Period Low Flows**

	Base 2018	Climate Change	Pct. Difference
Min. 1 Day Min	1.17	0.99	-15.04
Med. 1 Day Min	4.8	4.76	-0.83
Min. 3 Day Min	1.25	1.07	-14.4
Med. 3 Day Min	5	5.01	0.2
Min. 7 Day Min	1.44	1.24	-13.89
Med. 7 Day Min	5.43	5.56	2.39
Min. 30 Day Min	2.35	2.58	9.79
Med. 30 Day Min	8.41	8.8	4.64
Min. 90 Day Min	5.32	5.61	5.45
Med. 90 Day Min	12.5	13.8	10.4
7Q10	2	2.01	0.5
Year of 90-Day Min. Flow	1987	1987	0
Drought Year Mean	37.9	39.1	3.17
Mean Baseflow	29.6	29.6	0

**Table 5: Period High Flows**

	Base 2018	Climate Change	Pct. Difference
Max. 1 Day Max	912	1080	18.42
Med. 1 Day Max	296	368	24.32
Max. 3 Day Max	556	647	16.37
Med. 3 Day Max	213	245	15.02
Max. 7 Day Max	315	357	13.33
Med. 7 Day Max	163	169	3.68
Max. 30 Day Max	207	228	10.14
Med. 30 Day Max	95.8	99.5	3.86
Max. 90 Day Max	133	142	6.77
Med. 90 Day Max	69.6	73.6	5.75

**Table 6: Non-Exceedance Flows**

	Base 2018	Climate Change	Pct. Difference
1% Non-Exceedance	2.61	2.82	8.05
5% Non-Exceedance	5.29	5.4	2.08
50% Non-Exceedance	34	35.3	3.82
95% Non-Exceedance	100	109	9
99% Non-Exceedance	190	210	10.53
Sept. 10% Non-Exceedance	3.69	3.92	6.23

**Fig. 1: Hydrograph**

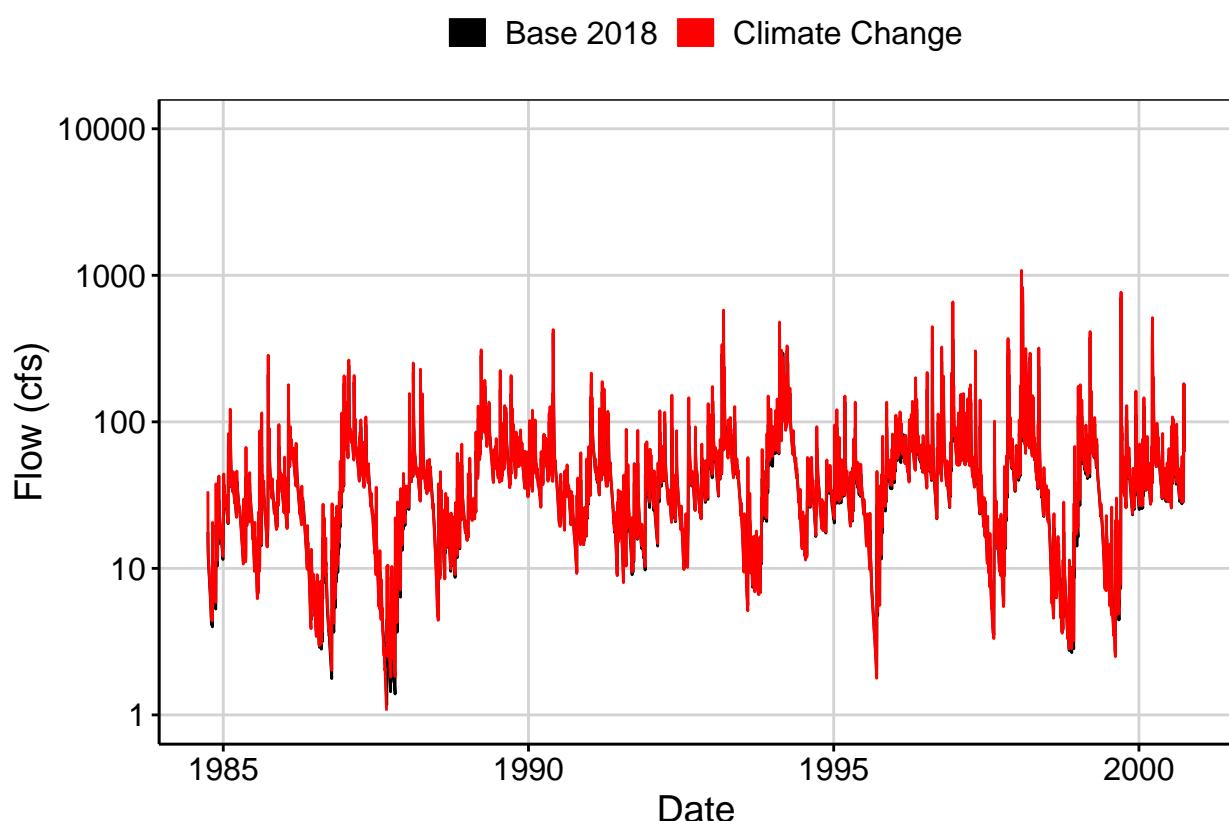


Fig. 2: Zoomed Hydrograph

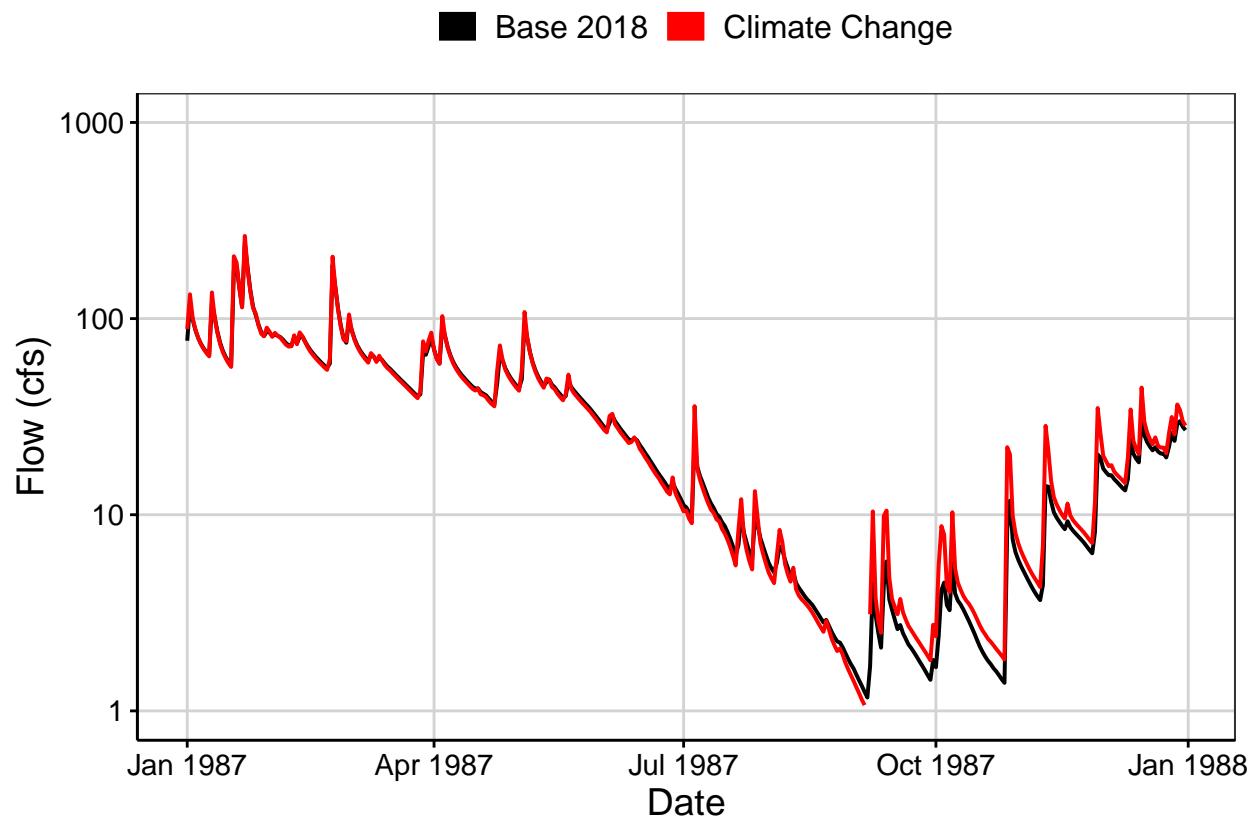


Fig. 3: Flow Exceedance

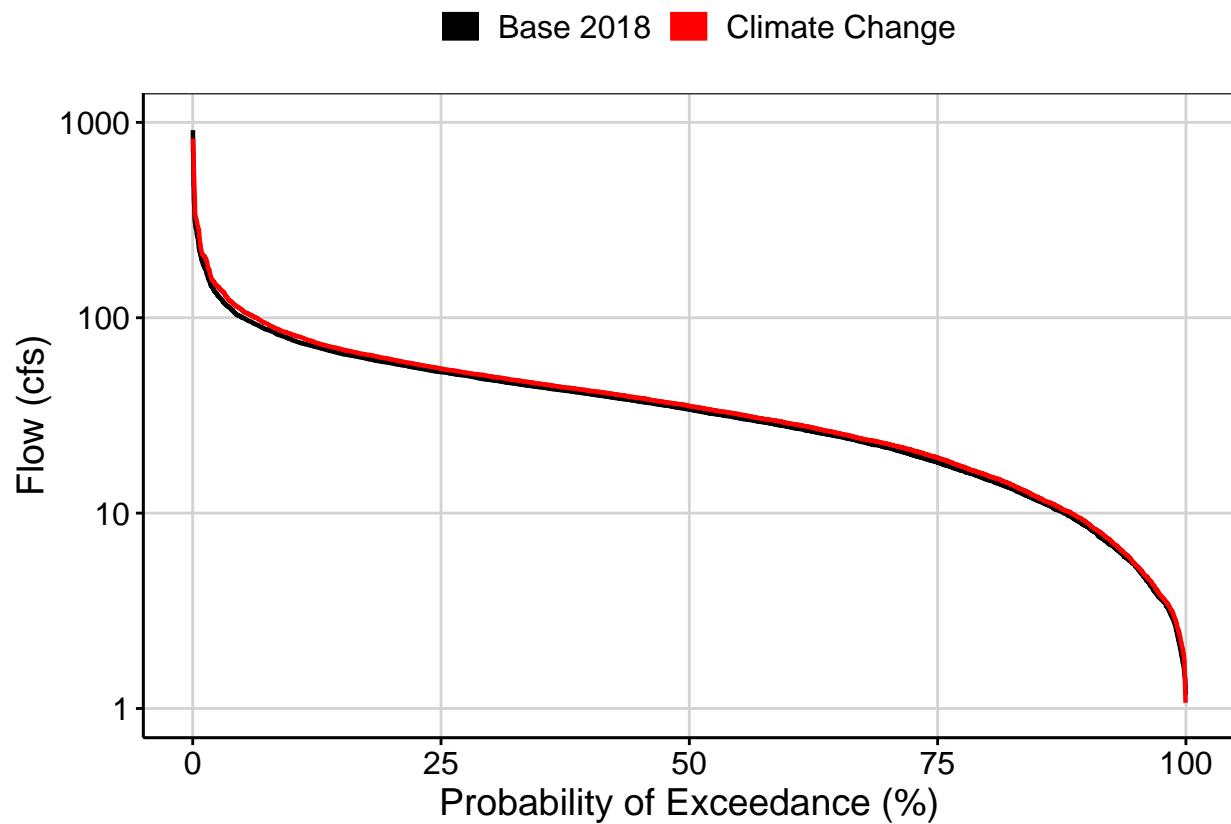
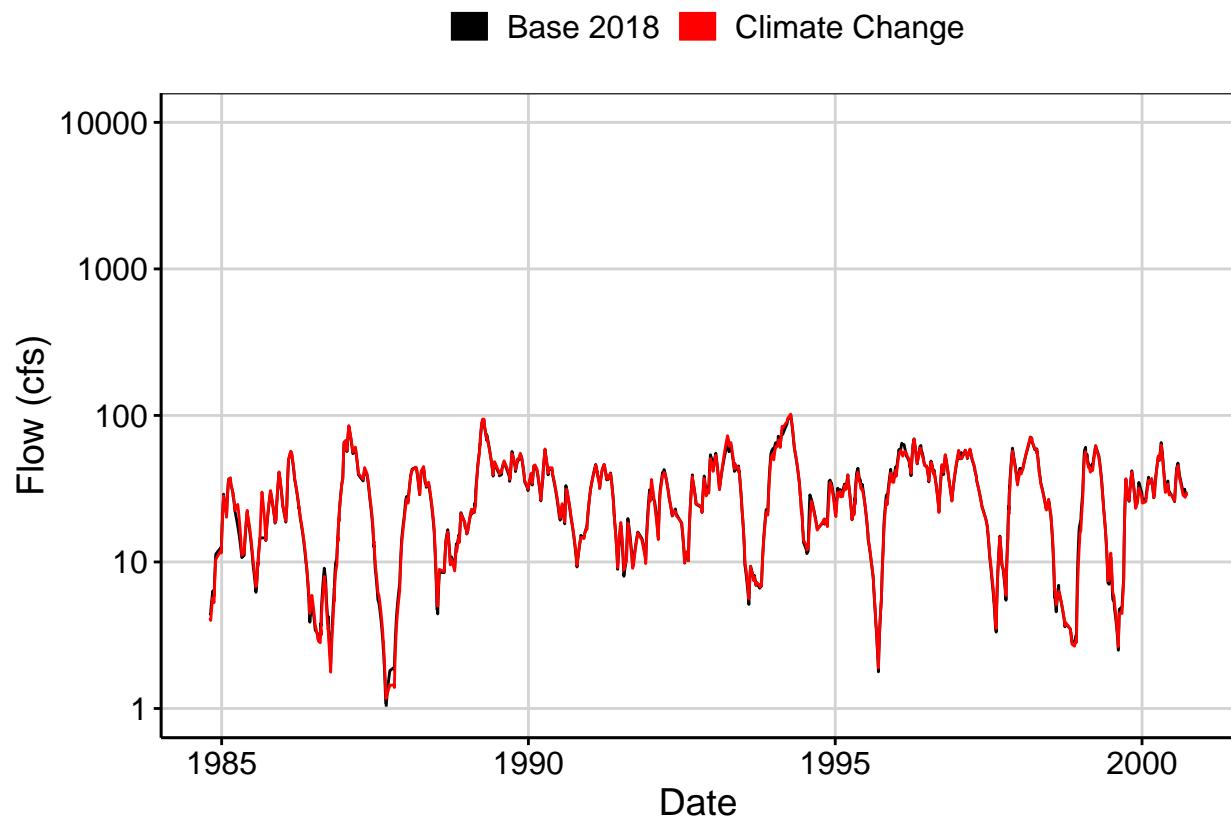


Fig. 4: Baseflow



**Fig. 5: Combined Baseflow**

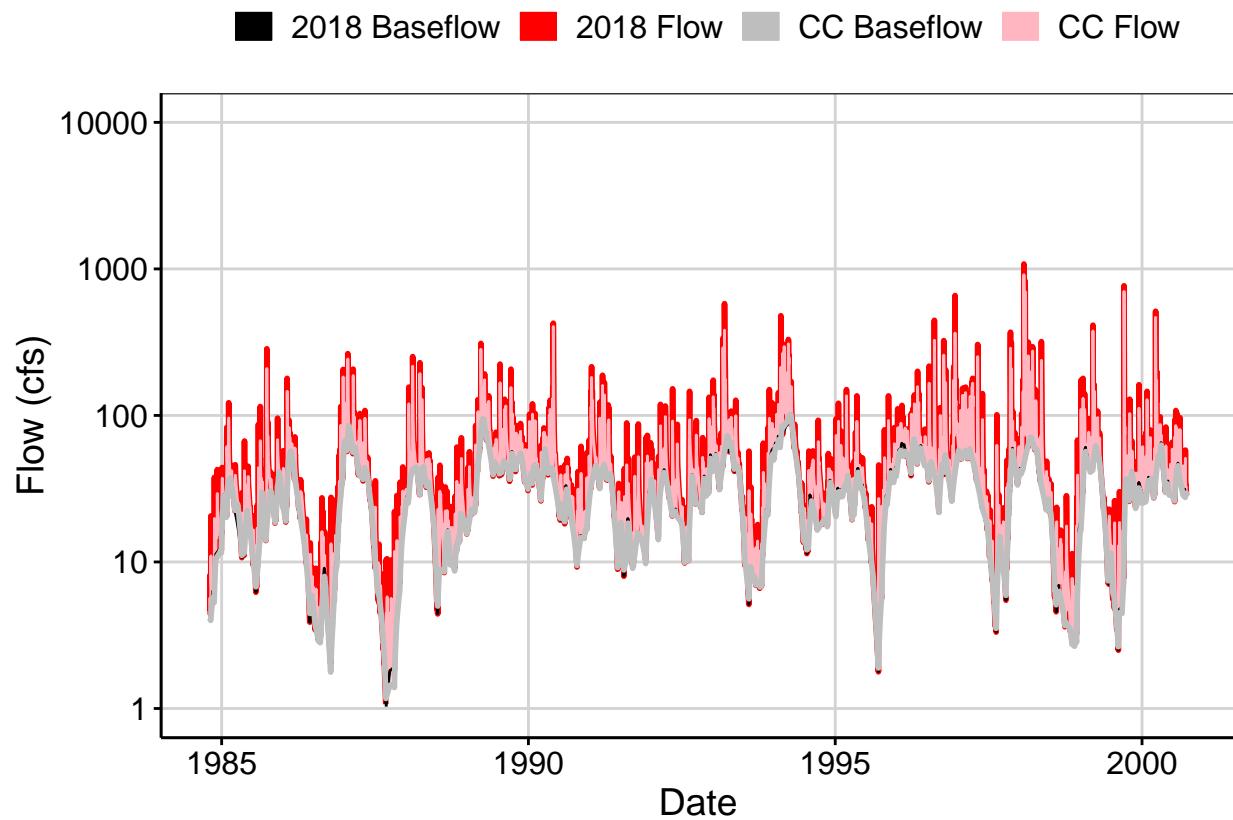


Fig. 6: Largest Difference Segment

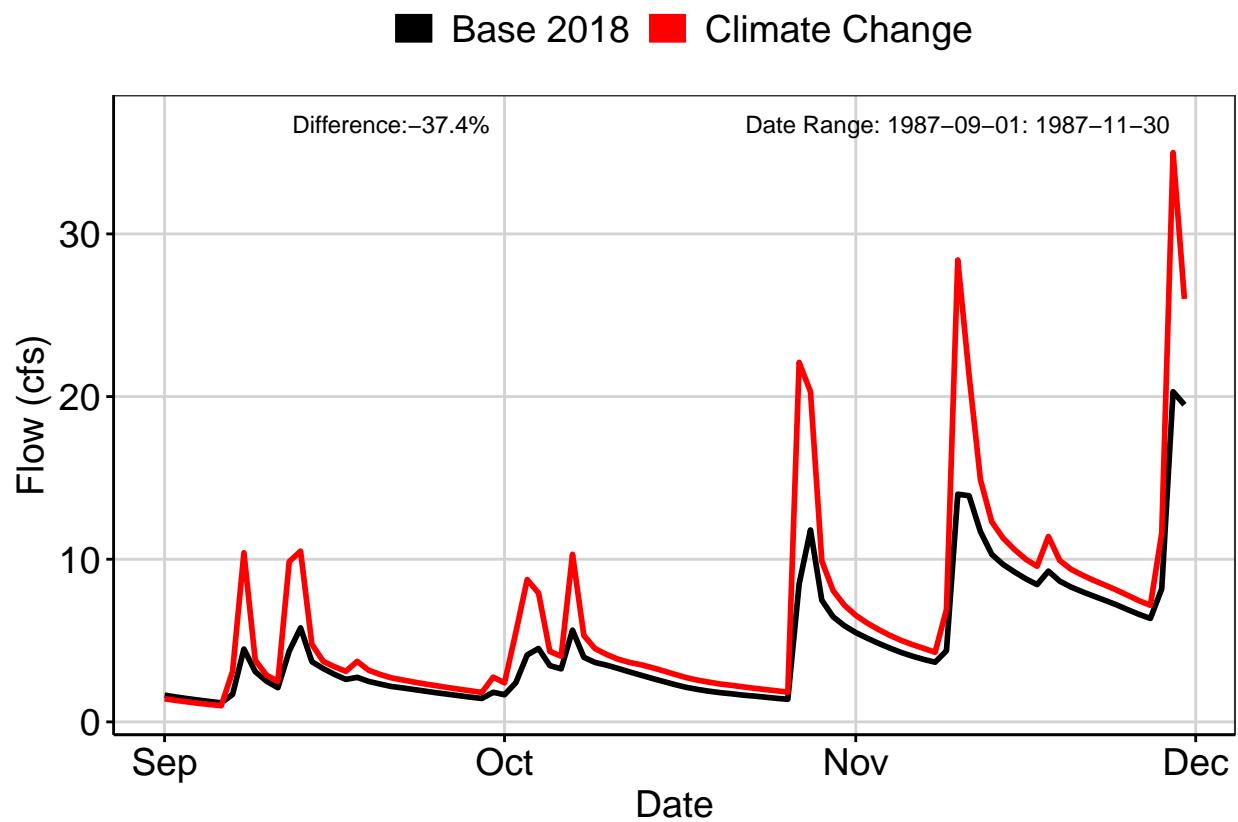


Fig. 7: Second Largest Difference Segment

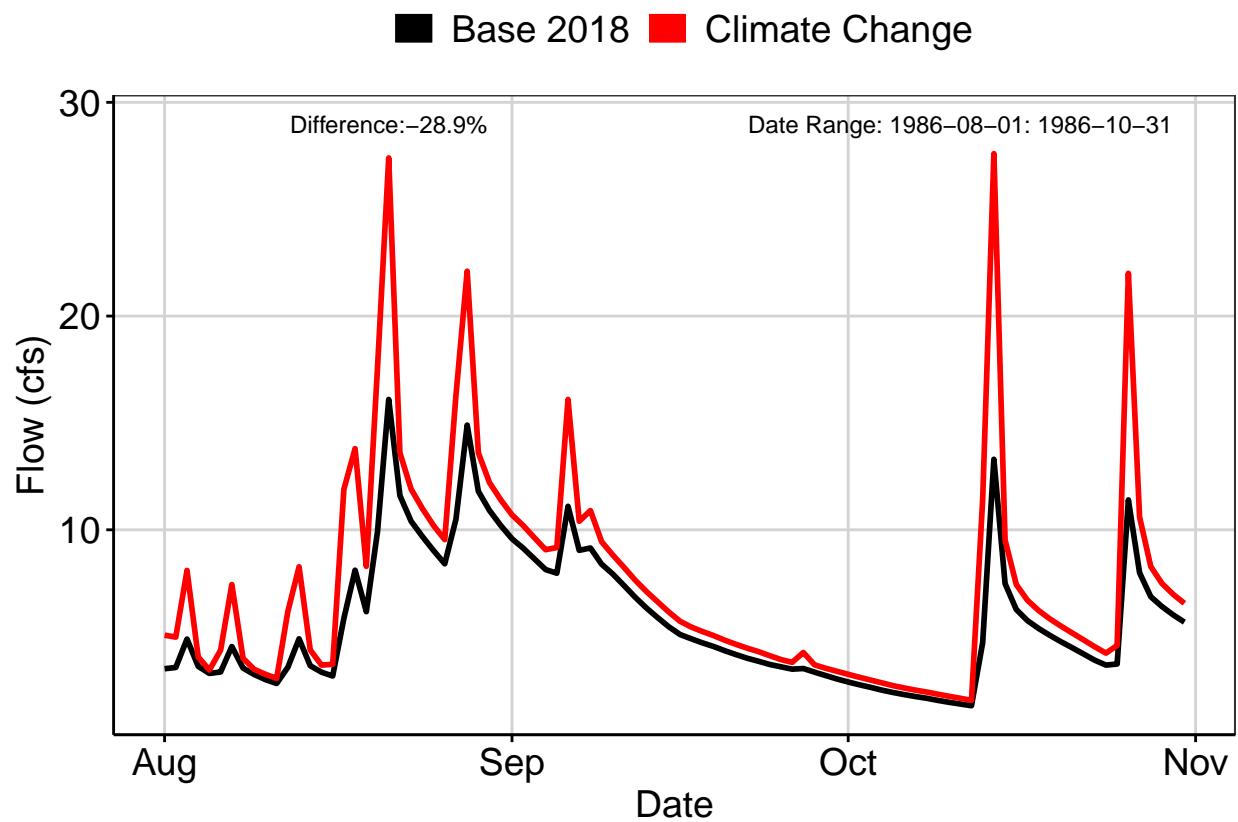


Fig. 8: Third Largest Difference Segment

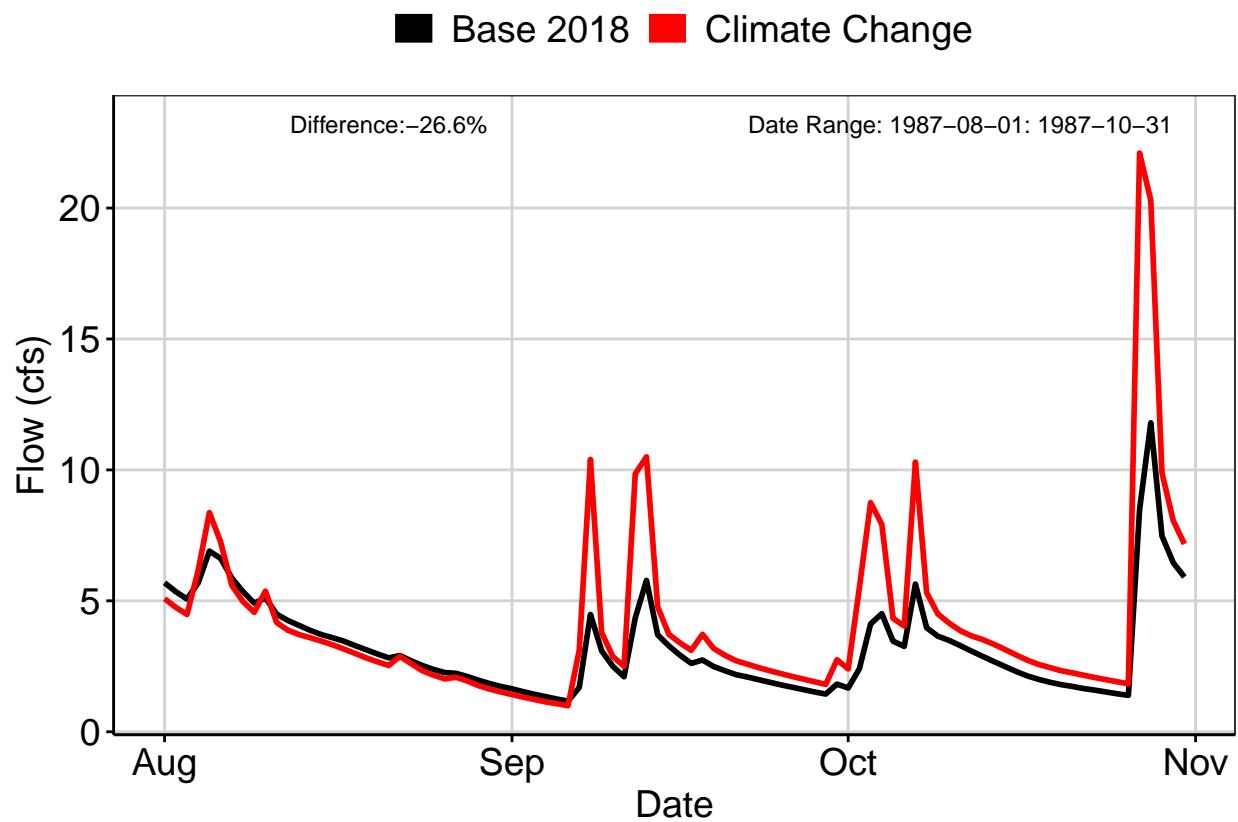


Fig. 9A: Residuals Plot

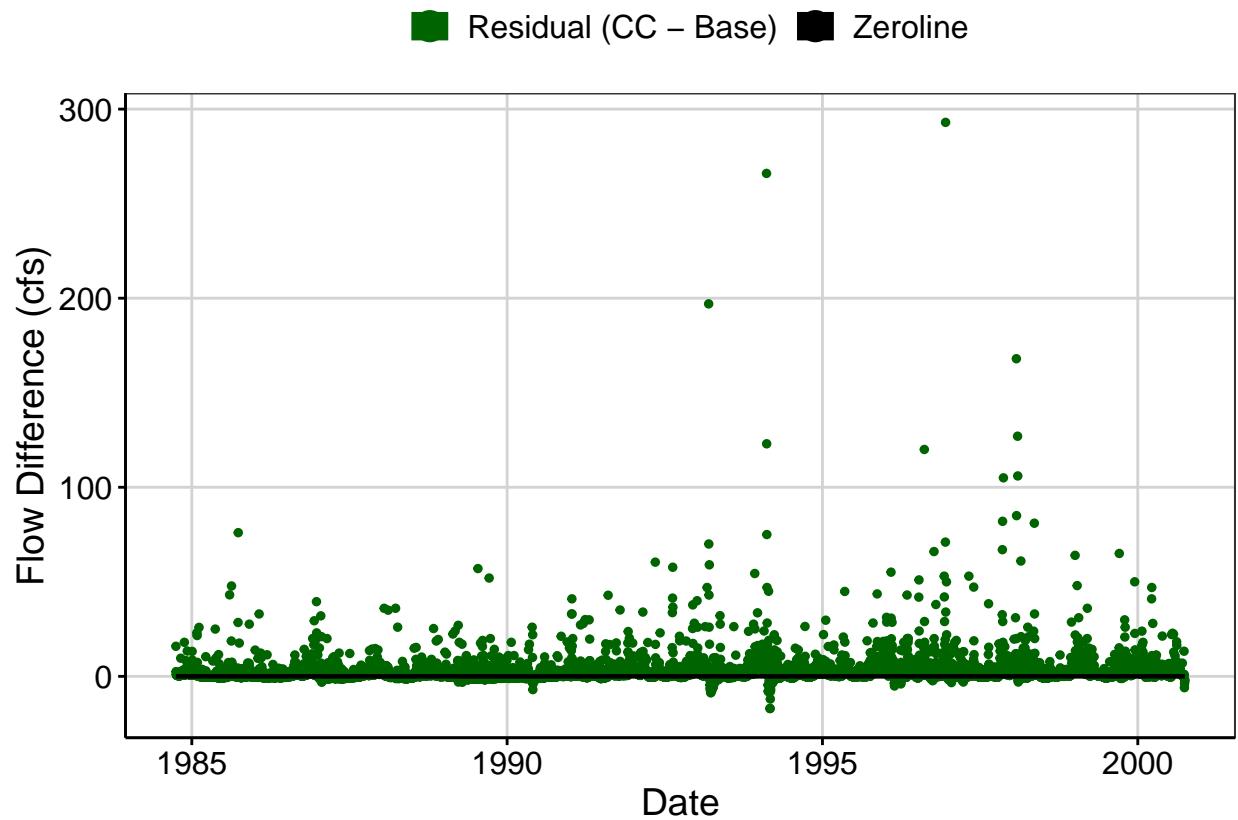


Fig. 9B: Area Weighted Residuals Plot

