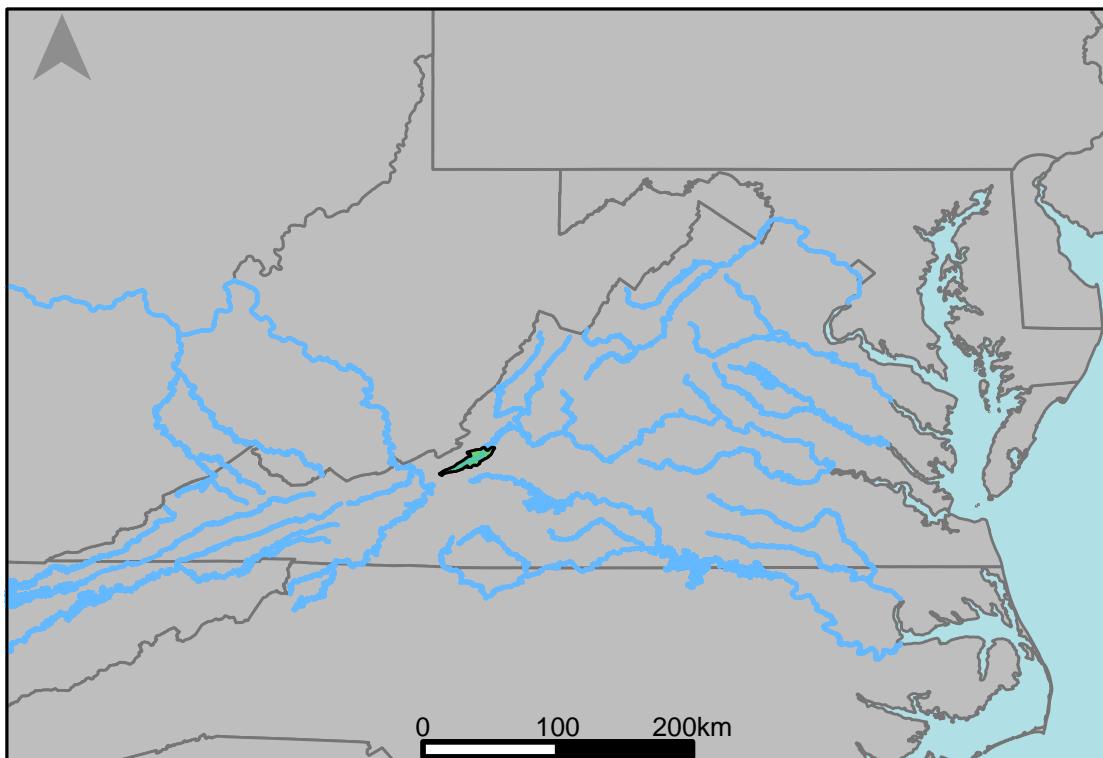


River Segment: JU1_7690_7490 - Scenario :
CFBASE30Y20180615 : VaHydro Run 116 vs. VAHydro
Run 117 (fixed channel length)



The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was 0%, with 0% of its rolling three month time spans above 20% difference.

Table 1: Monthly Low Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Jan. Low Flow	11.5	14.7	27.83
Feb. Low Flow	37.9	35.3	-6.86
Mar. Low Flow	66.4	68.3	2.86
Apr. Low Flow	83.3	87.5	5.04
May Low Flow	87.3	89.7	2.75
Jun. Low Flow	99.2	106	6.85
Jul. Low Flow	78.7	83.9	6.61
Aug. Low Flow	53.5	59.1	10.47
Sep. Low Flow	8.57	15.9	85.53
Oct. Low Flow	3.05	3.58	17.38
Nov. Low Flow	2.08	2.95	41.83
Dec. Low Flow	1.59	2.51	57.86

Table 2: Monthly Average Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Overall Mean Flow	130	130	0
Jan. Mean Flow	185	183	-1.08
Feb. Mean Flow	189	189	0
Mar. Mean Flow	233	231	-0.86
Apr. Mean Flow	191	194	1.57
May Mean Flow	144	145	0.69
Jun. Mean Flow	110	112	1.82
Jul. Mean Flow	55.7	56.4	1.26
Aug. Mean Flow	41.3	42	1.69
Sep. Mean Flow	83.2	81.6	-1.92
Oct. Mean Flow	69.3	69.7	0.58
Nov. Mean Flow	116	113	-2.59
Dec. Mean Flow	144	144	0

Table 3: Monthly High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Jan. High Flow	89.2	78.2	-12.33
Feb. High Flow	227	189	-16.74
Mar. High Flow	350	280	-20
Apr. High Flow	608	492	-19.08
May High Flow	409	364	-11
Jun. High Flow	760	614	-19.21
Jul. High Flow	420	431	2.62
Aug. High Flow	313	251	-19.81
Sep. High Flow	135	132	-2.22
Oct. High Flow	98.5	74.1	-24.77
Nov. High Flow	71.7	63	-12.13
Dec. High Flow	91.6	75.8	-17.25

Table 4: Period Low Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Min. 1 Day Min	0	0.01	Inf
Med. 1 Day Min	0.92	1.28	38.38
Min. 3 Day Min	0	0.01	Inf
Med. 3 Day Min	1.02	1.43	40.2
Min. 7 Day Min	0	0.01	670270.37
Med. 7 Day Min	1.3	1.87	43.85
Min. 30 Day Min	0.02	0.09	304.93
Med. 30 Day Min	7.1	7.48	5.35
Min. 90 Day Min	8.63	9.12	5.68
Med. 90 Day Min	22	22.3	1.36
7Q10	0.03	0.13	277.19
Year of 90-Day Min. Flow	1999	1999	0
Drought Year Mean	73.4	72.9	-0.68
Mean Baseflow	65.1	69.4	6.61

Table 5: Period High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Max. 1 Day Max	6230	4280	-31.3
Med. 1 Day Max	1730	1310	-24.28
Max. 3 Day Max	3000	2880	-4
Med. 3 Day Max	1000	979	-2.1
Max. 7 Day Max	1330	1290	-3.01
Med. 7 Day Max	693	677	-2.31
Max. 30 Day Max	718	715	-0.42
Med. 30 Day Max	313	312	-0.32
Max. 90 Day Max	480	479	-0.21
Med. 90 Day Max	224	223	-0.45

Table 6: Non-Exceedance Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
1% Non-Exceedance	0.13	0.41	213.08
5% Non-Exceedance	2.34	3.28	40.17
50% Non-Exceedance	82.1	84.1	2.44
95% Non-Exceedance	400	397	-0.75
99% Non-Exceedance	1070	950	-11.21
Sept. 10% Non-Exceedance	1.17	1.6	36.75

Fig. 1: Hydrograph

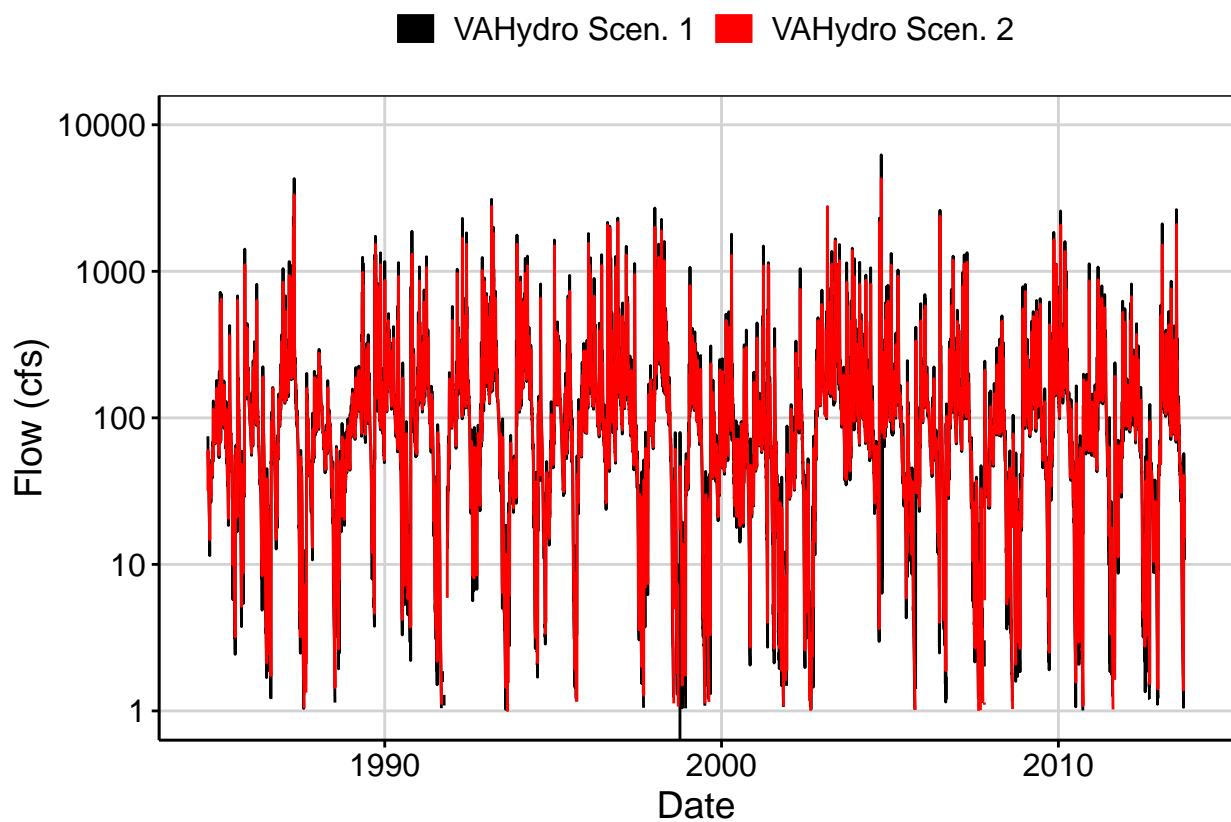


Fig. 2: Zoomed Hydrograph

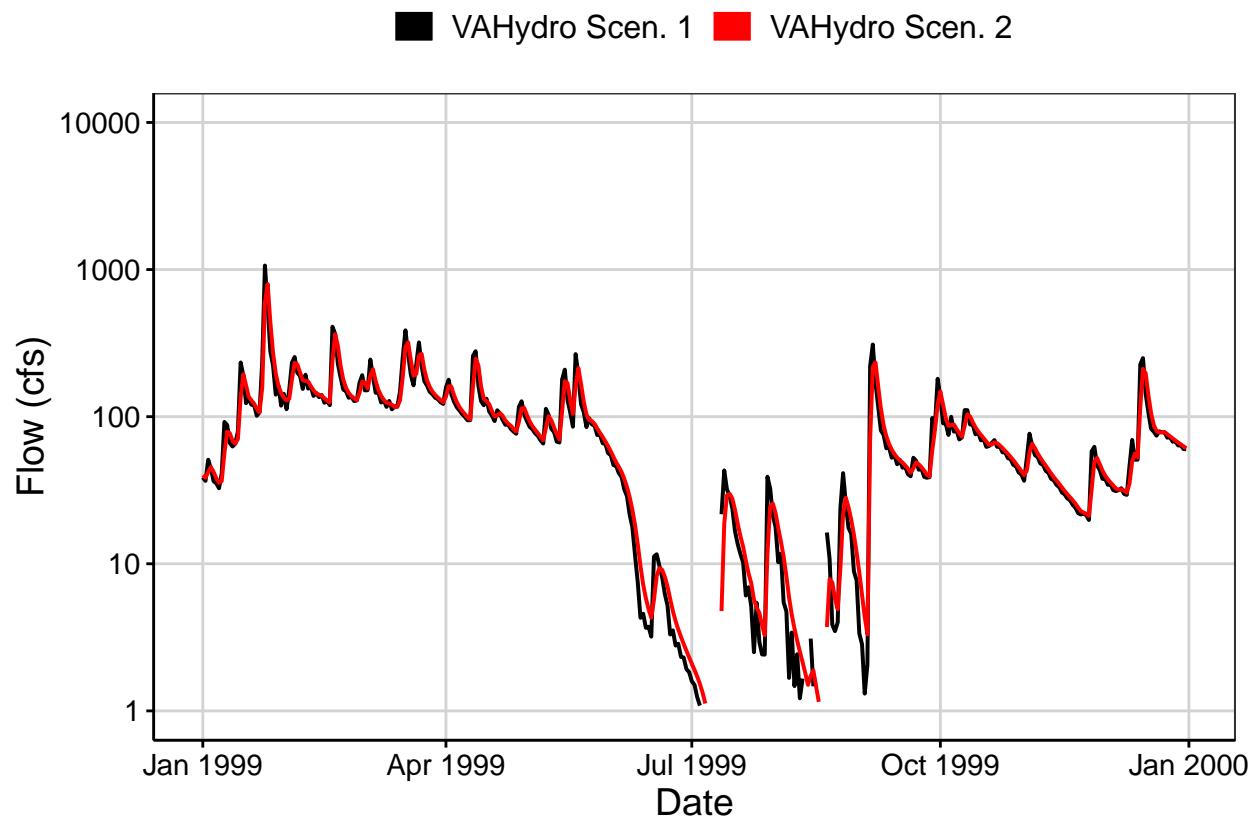


Fig. 3: Flow Exceedance

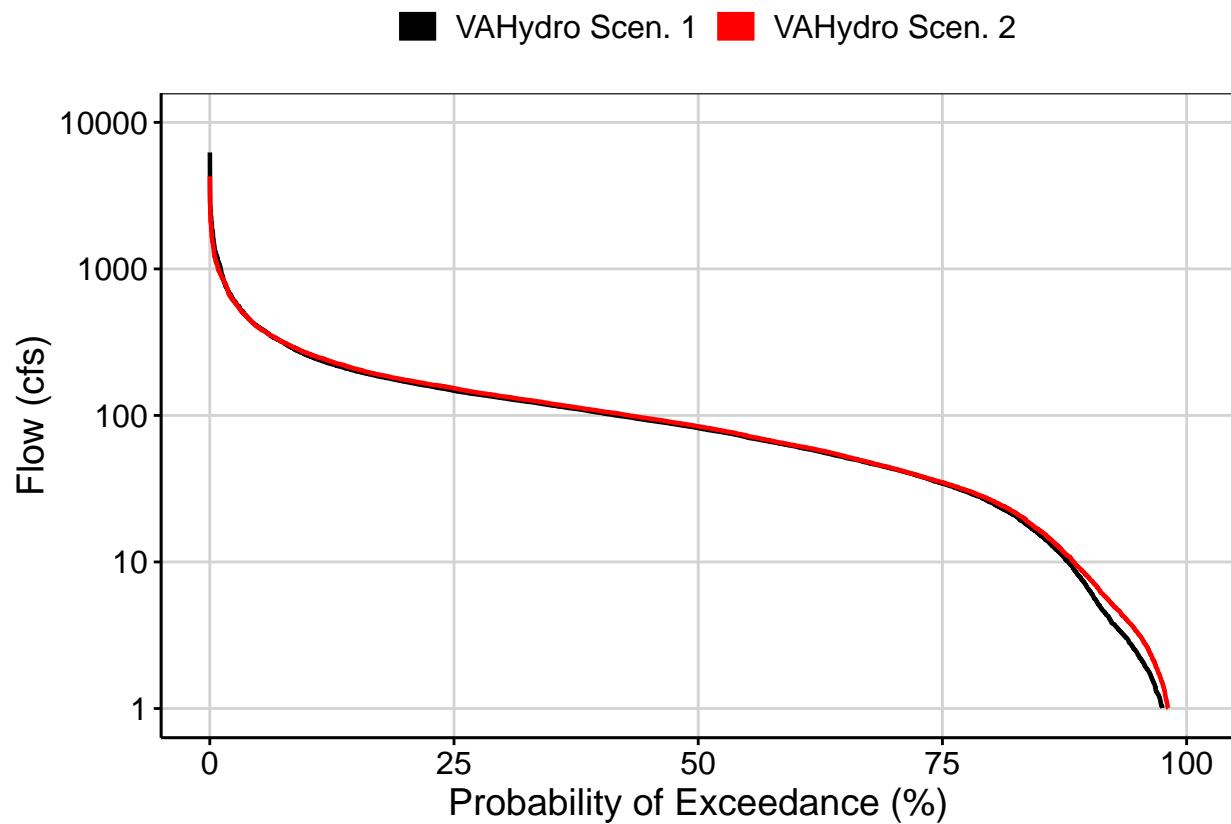


Fig. 4: Baseflow

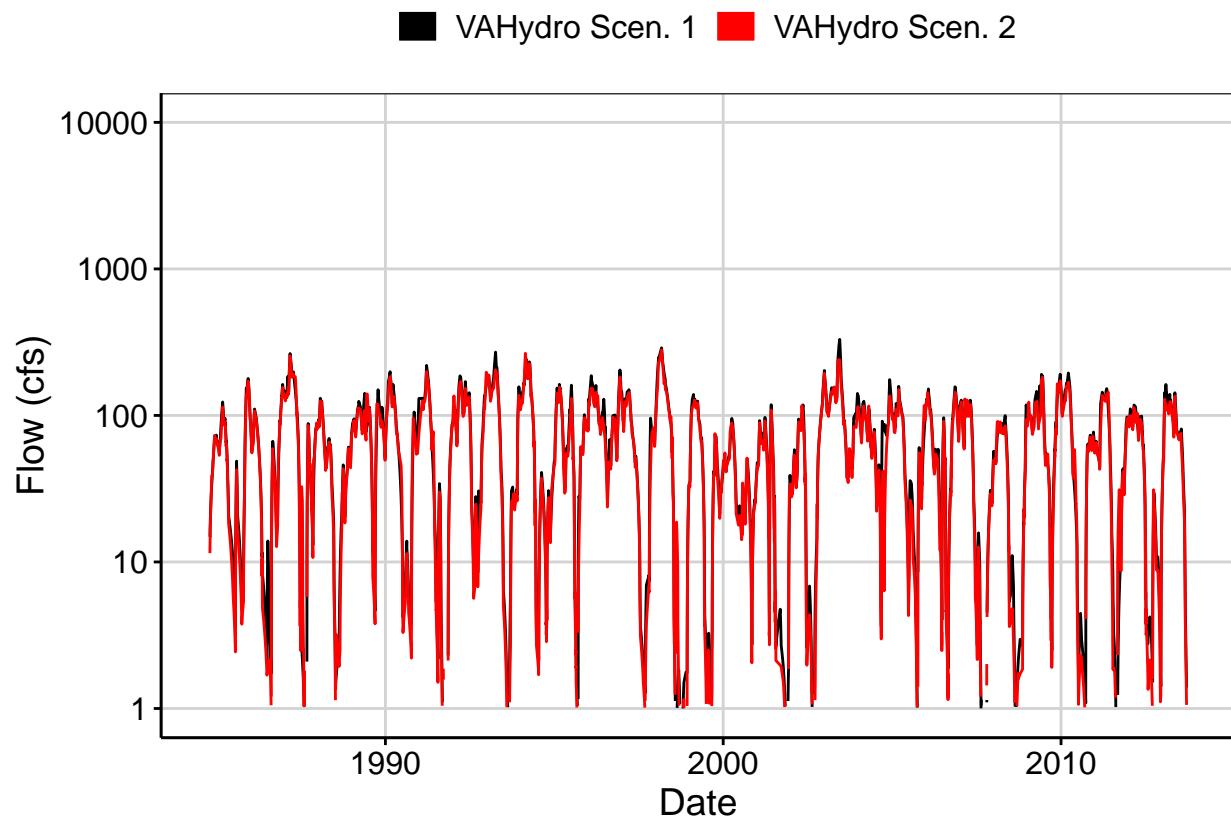


Fig. 5: Combined Baseflow

dro Scen. 1 Baseflow ■ VAHydro Scen. 1 Flow ■ VAHydro Scen. 2 Baseflow ■ V

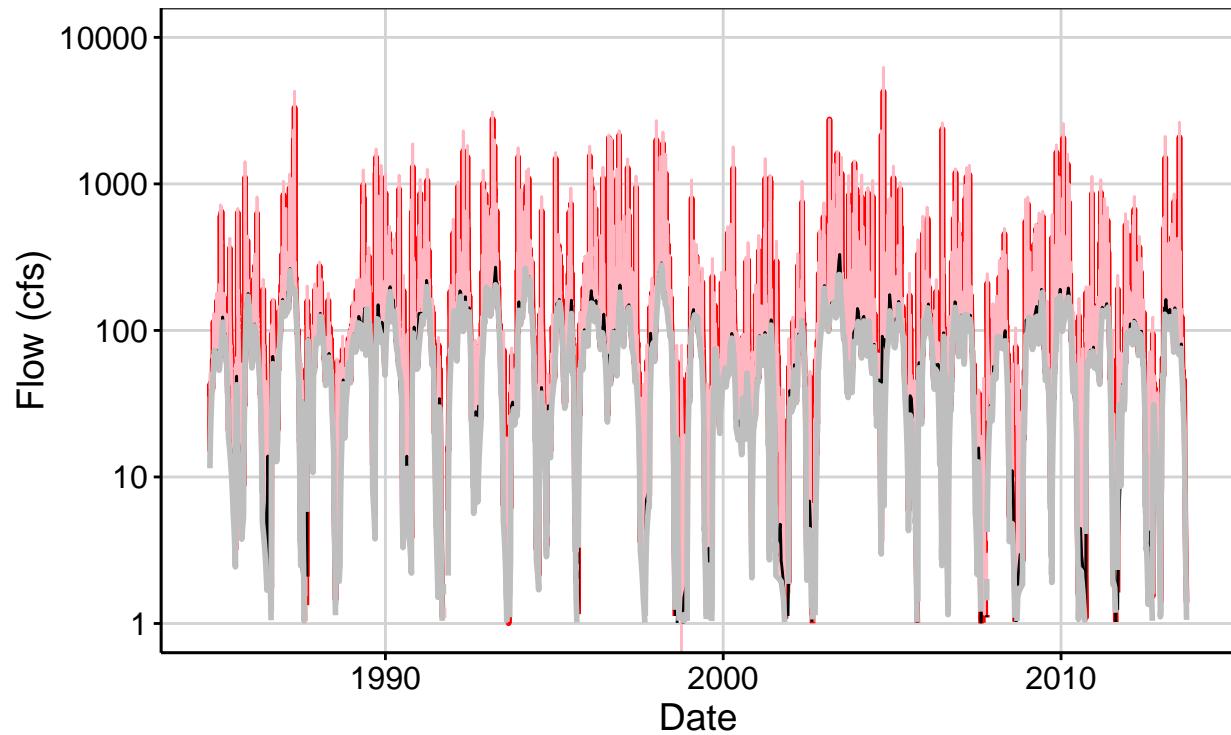


Fig. 6: Largest Difference Segment

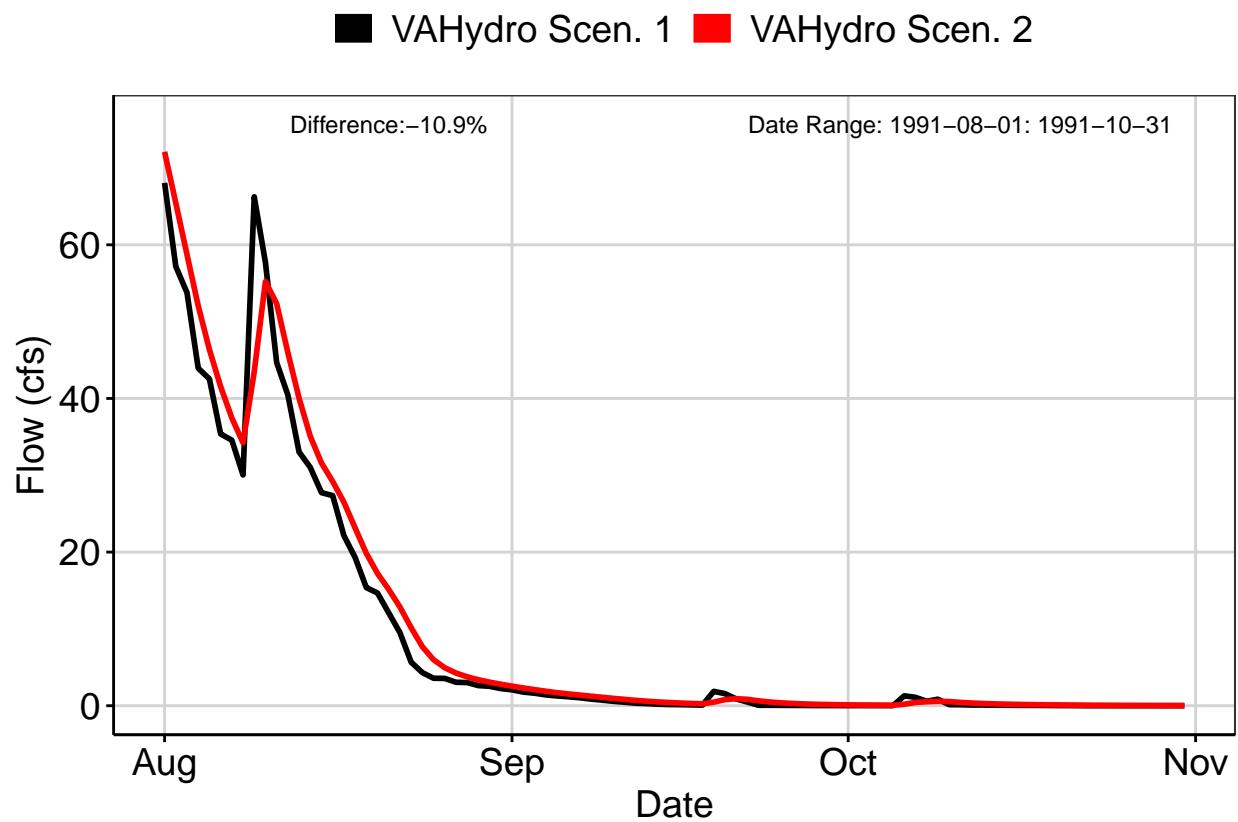


Fig. 7: Second Largest Difference Segment

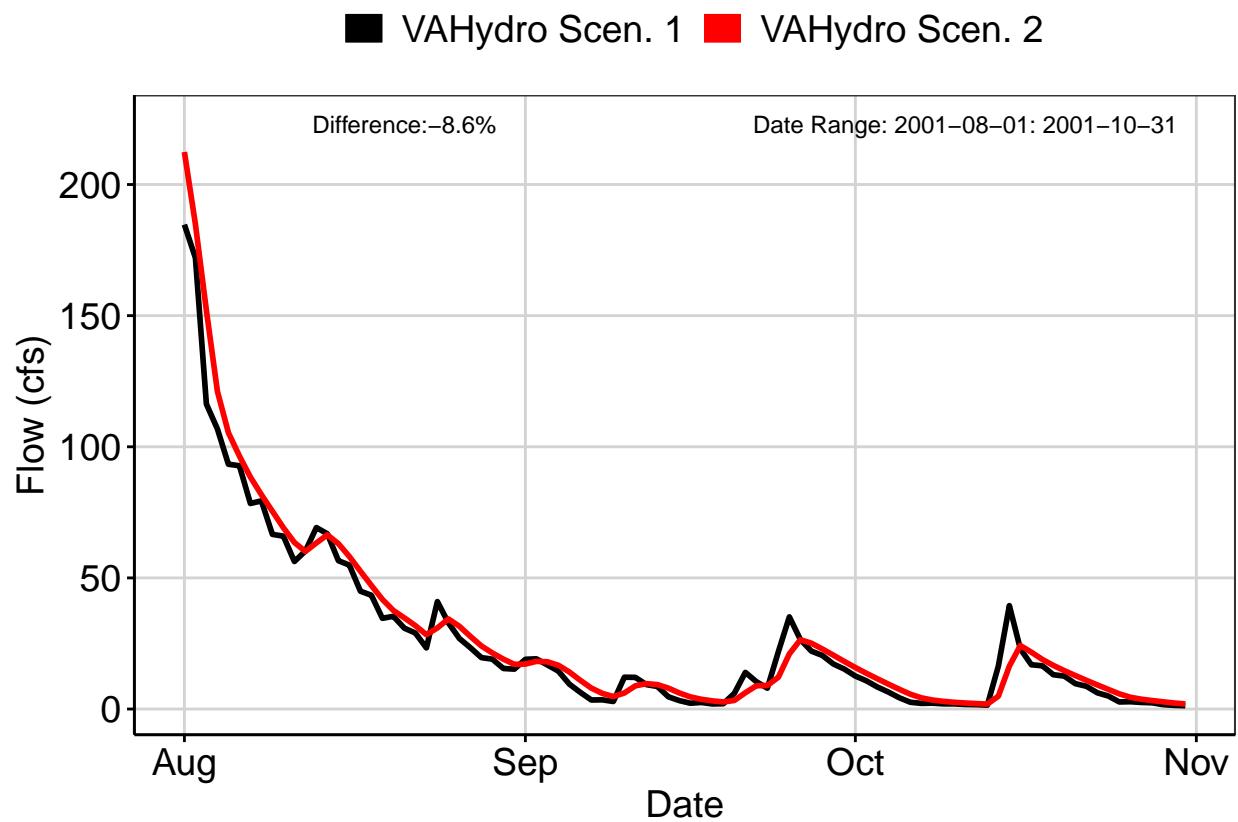


Fig. 8: Third Largest Difference Segment

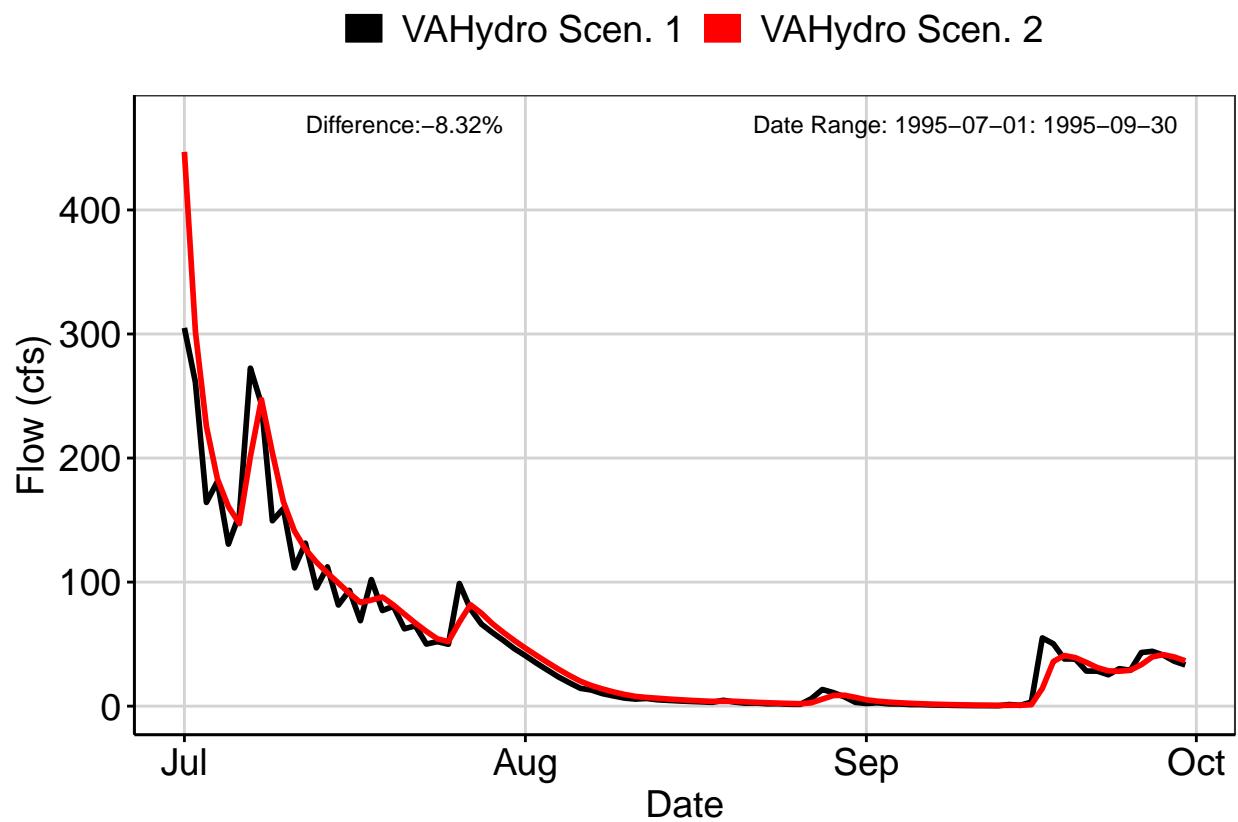


Fig. 9A: Residuals Plot

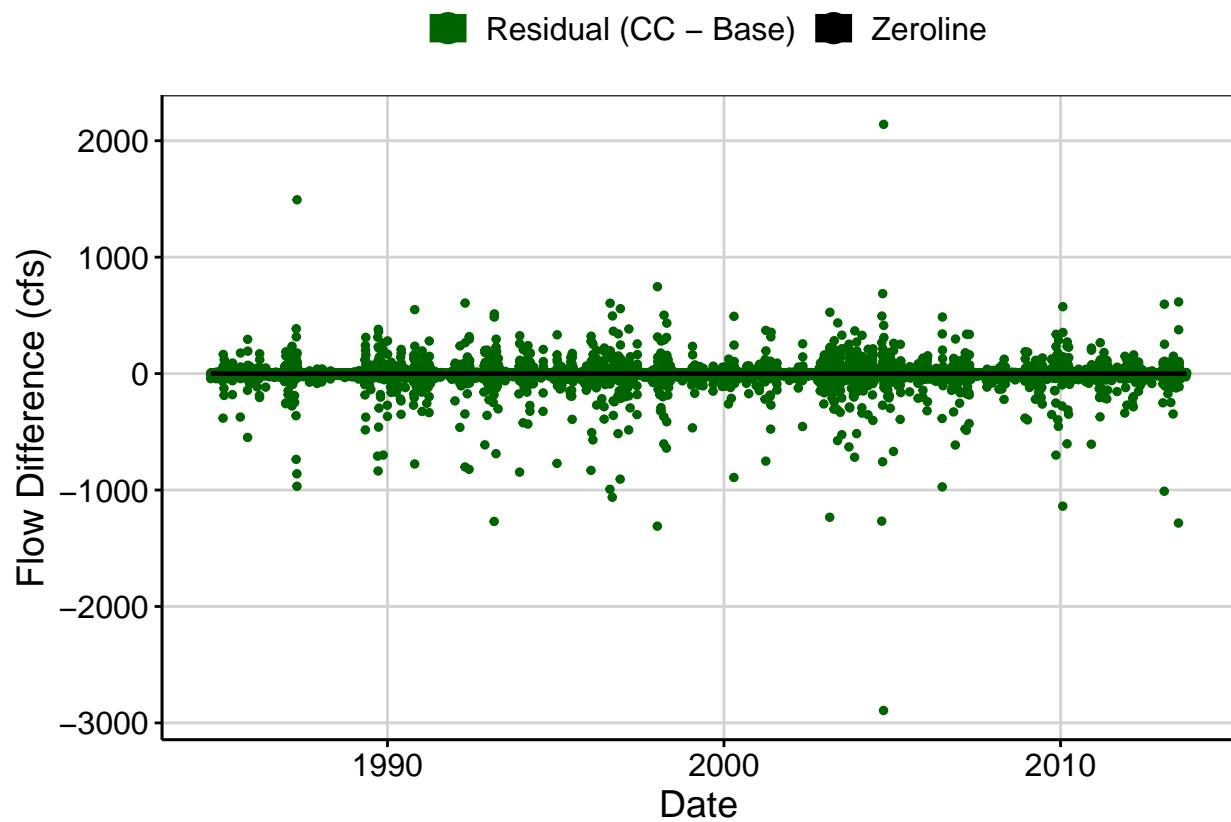


Fig. 9B: Area Weighted Residuals Plot

