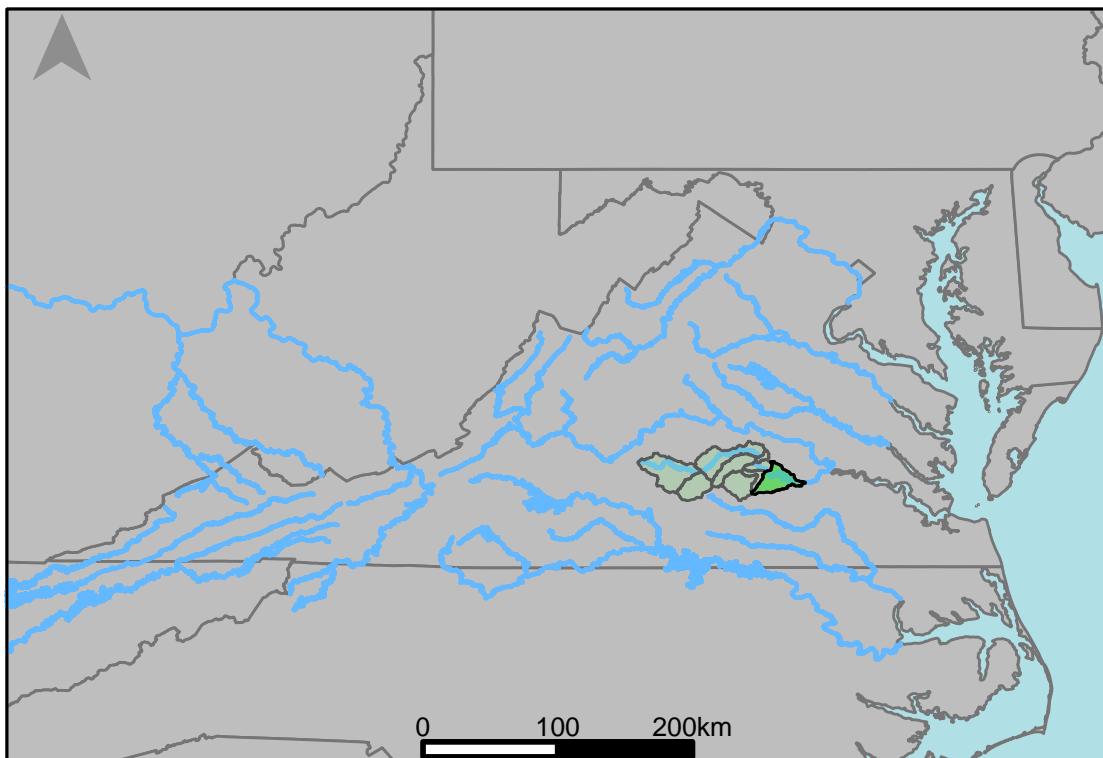


River Segment: JA5\_7480\_0001 - Scenario :  
CFBASE30Y20180615 : VaHydro Run 120 (Base)  
vs. VAHydro Run 121 (CC)



The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was 6.42202%, with 3.33% 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	136	153	12.5
Feb. Low Flow	203	220	8.37
Mar. Low Flow	424	464	9.43
Apr. Low Flow	718	735	2.37
May Low Flow	950	975	2.63
Jun. Low Flow	948	982	3.59
Jul. Low Flow	653	663	1.53
Aug. Low Flow	430	449	4.42
Sep. Low Flow	236	241	2.12
Oct. Low Flow	143	147	2.8
Nov. Low Flow	130	135	3.85
Dec. Low Flow	115	117	1.74

**Table 2: Monthly Average Flows**

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Overall Mean Flow	1090	1160	6.42
Jan. Mean Flow	1630	1770	8.59
Feb. Mean Flow	2070	2210	6.76
Mar. Mean Flow	2380	2460	3.36
Apr. Mean Flow	1750	1830	4.57
May Mean Flow	1070	1130	5.61
Jun. Mean Flow	598	619	3.51
Jul. Mean Flow	334	356	6.59
Aug. Mean Flow	333	364	9.31
Sep. Mean Flow	484	557	15.08
Oct. Mean Flow	569	632	11.07
Nov. Mean Flow	766	831	8.49
Dec. Mean Flow	1150	1270	10.43

**Table 3: Monthly High Flows**

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Jan. High Flow	632	735	16.3
Feb. High Flow	953	1030	8.08
Mar. High Flow	1480	1720	16.22
Apr. High Flow	3220	3270	1.55
May High Flow	3000	3310	10.33
Jun. High Flow	3550	3690	3.94
Jul. High Flow	3190	3700	15.99
Aug. High Flow	1970	2210	12.18
Sep. High Flow	712	743	4.35
Oct. High Flow	426	450	5.63
Nov. High Flow	548	616	12.41
Dec. High Flow	457	476	4.16

**Table 4: Period Low Flows**

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Min. 1 Day Min	33	35.1	6.36
Med. 1 Day Min	87.9	89.7	2.05
Min. 3 Day Min	34	36.2	6.47
Med. 3 Day Min	89.6	94.6	5.58
Min. 7 Day Min	36.2	38.6	6.63
Med. 7 Day Min	99.3	102	2.72
Min. 30 Day Min	48.5	50.5	4.12
Med. 30 Day Min	123	132	7.32
Min. 90 Day Min	85.9	92.4	7.57
Med. 90 Day Min	242	253	4.55
7Q10	54.2	56.3	3.87
Year of 90-Day Min. Flow	1999	1999	0
Drought Year Mean	607	713	17.46
Mean Baseflow	607	634	4.45

**Table 5: Period High Flows**

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Max. 1 Day Max	19200	20400	6.25
Med. 1 Day Max	8100	8760	8.15
Max. 3 Day Max	17300	18400	6.36
Med. 3 Day Max	7610	8180	7.49
Max. 7 Day Max	12800	13500	5.47
Med. 7 Day Max	6150	6420	4.39
Max. 30 Day Max	7480	8190	9.49
Med. 30 Day Max	2920	3080	5.48
Max. 90 Day Max	5580	6030	8.06
Med. 90 Day Max	2000	2030	1.5

**Table 6: Non-Exceedance Flows**

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
1% Non-Exceedance	59.4	61.6	3.7
5% Non-Exceedance	98.8	103	4.25
50% Non-Exceedance	637	675	5.97
95% Non-Exceedance	3600	3850	6.94
99% Non-Exceedance	7820	8430	7.8
Sept. 10% Non-Exceedance	91.9	95.9	4.35

**Fig. 1: Hydrograph**

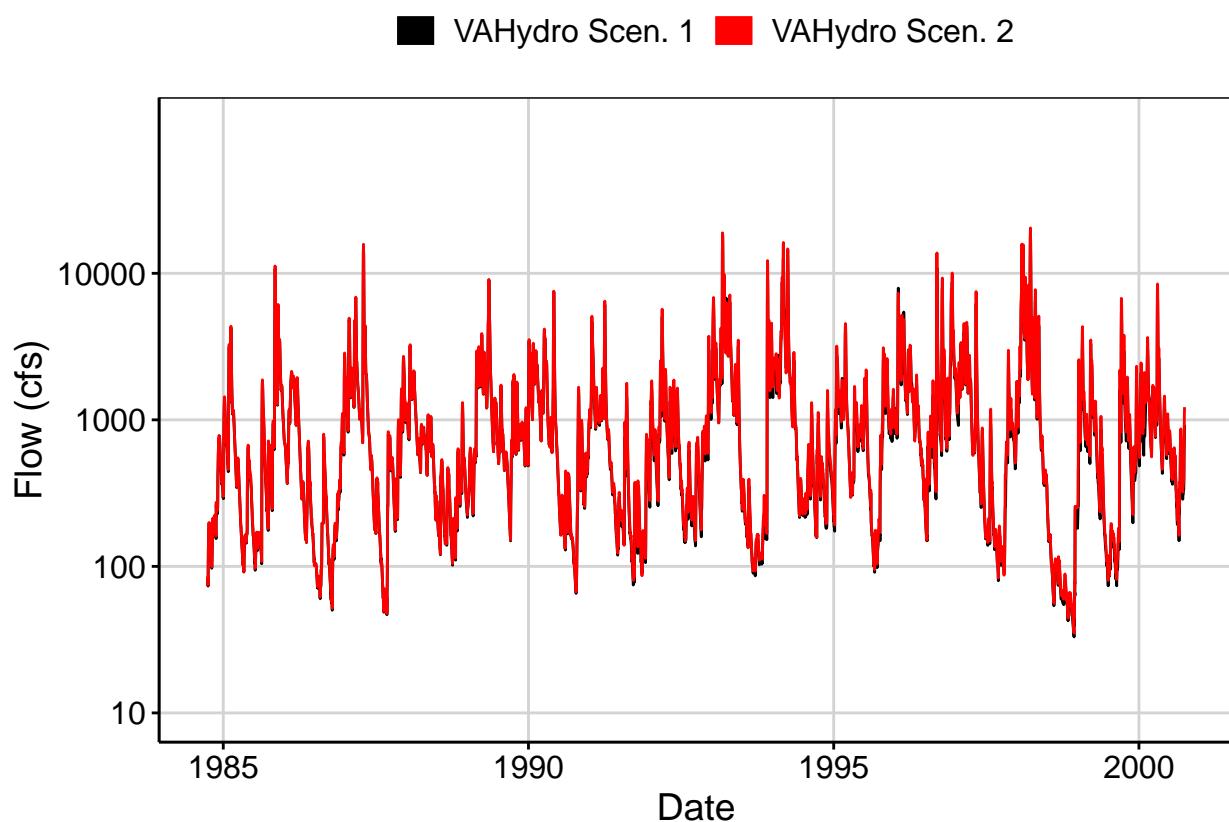


Fig. 2: Zoomed Hydrograph

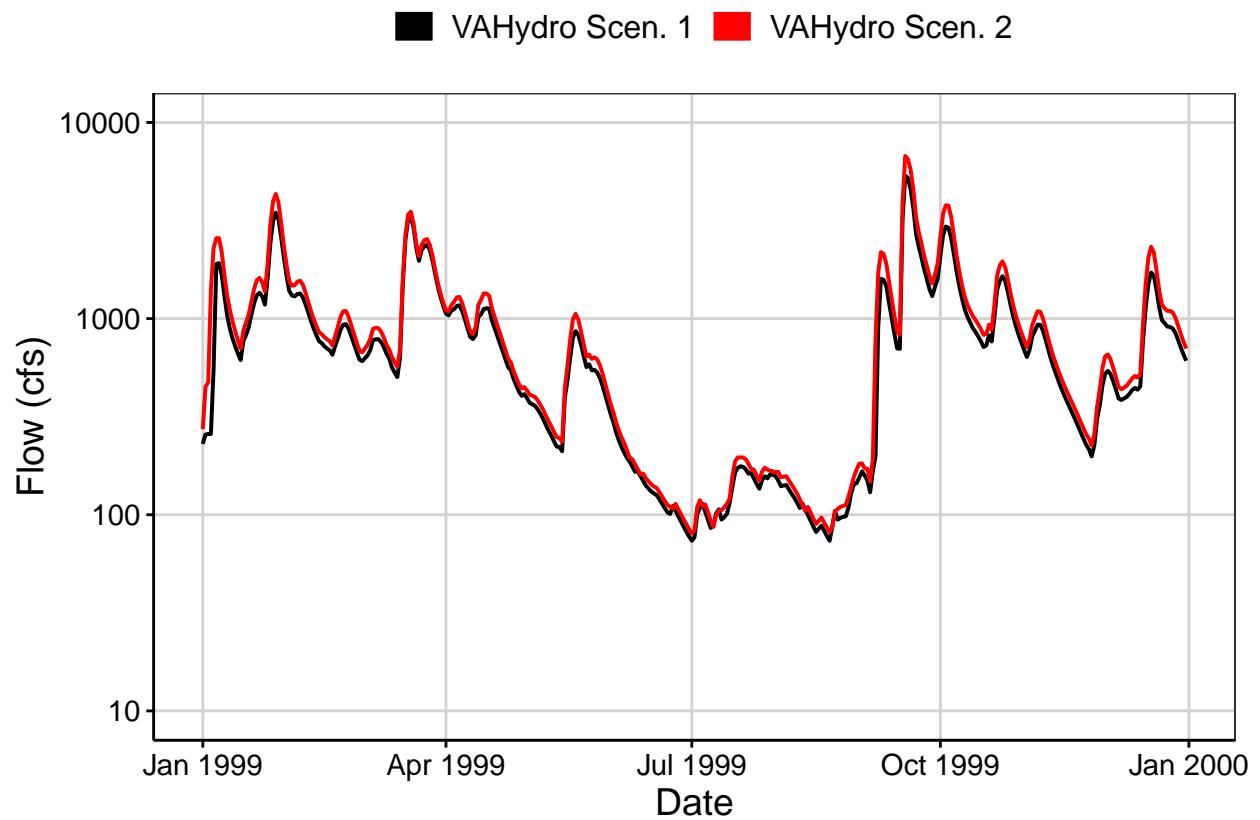


Fig. 3: Flow Exceedance

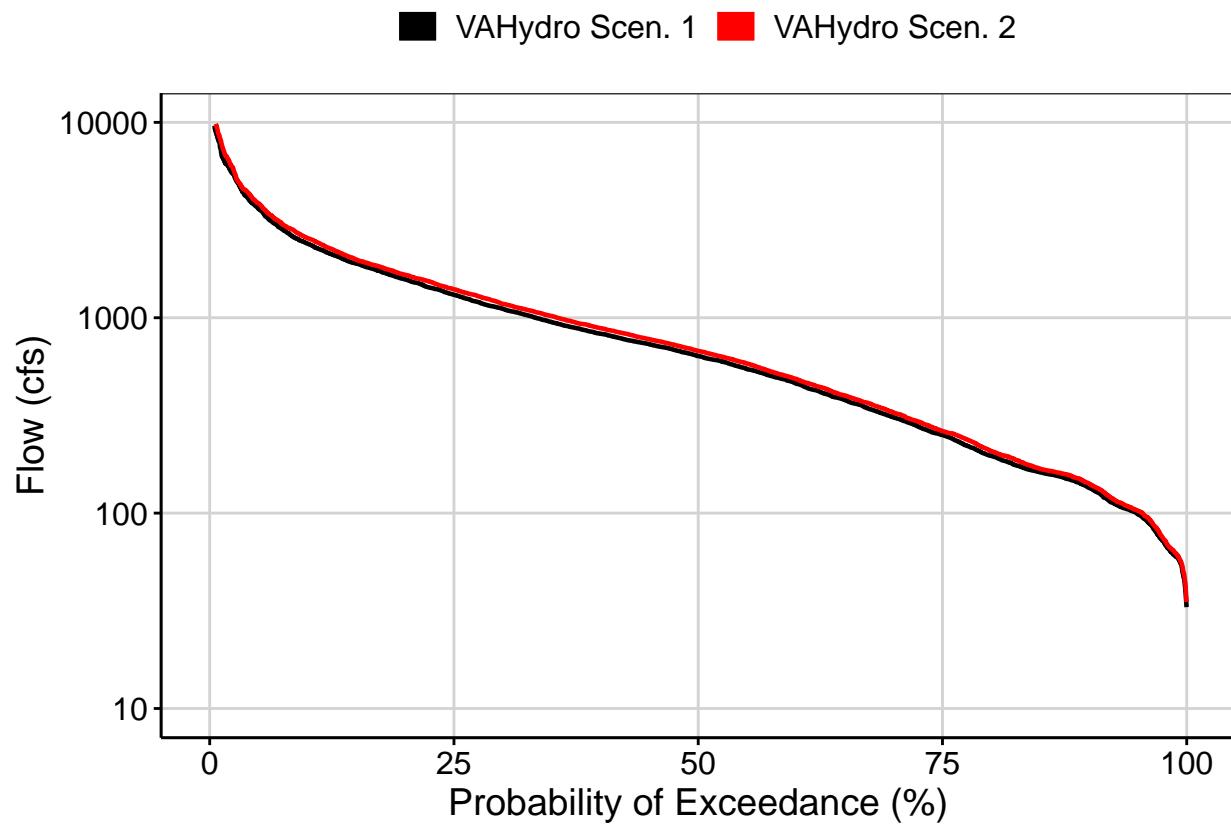
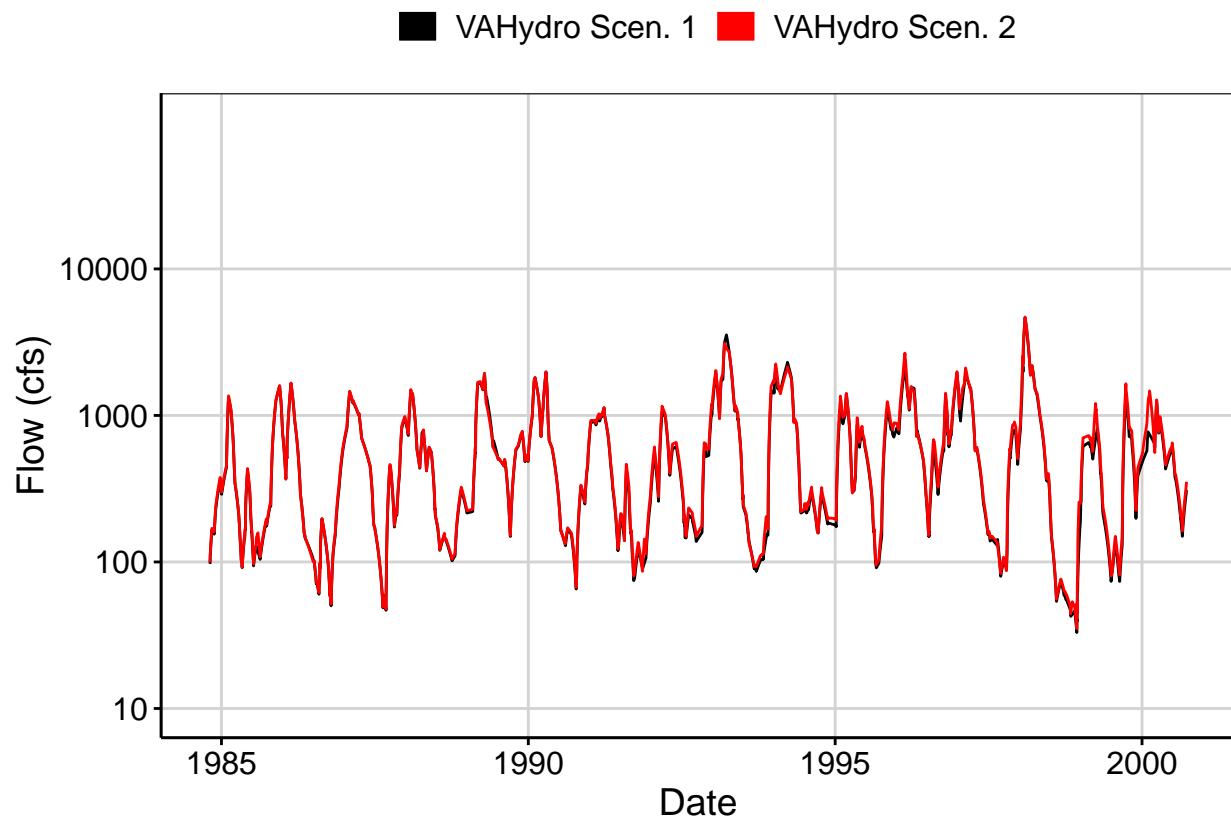


Fig. 4: Baseflow



**Fig. 5: Combined Baseflow**

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

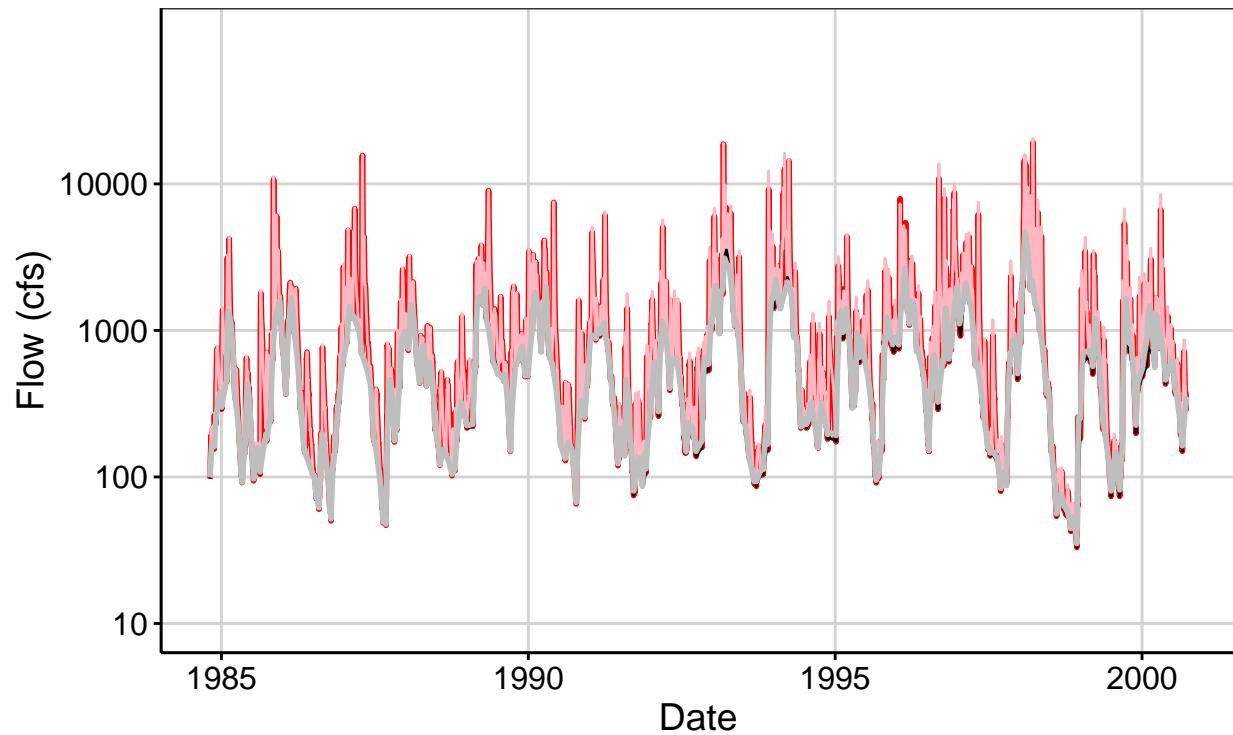


Fig. 6: Largest Difference Segment

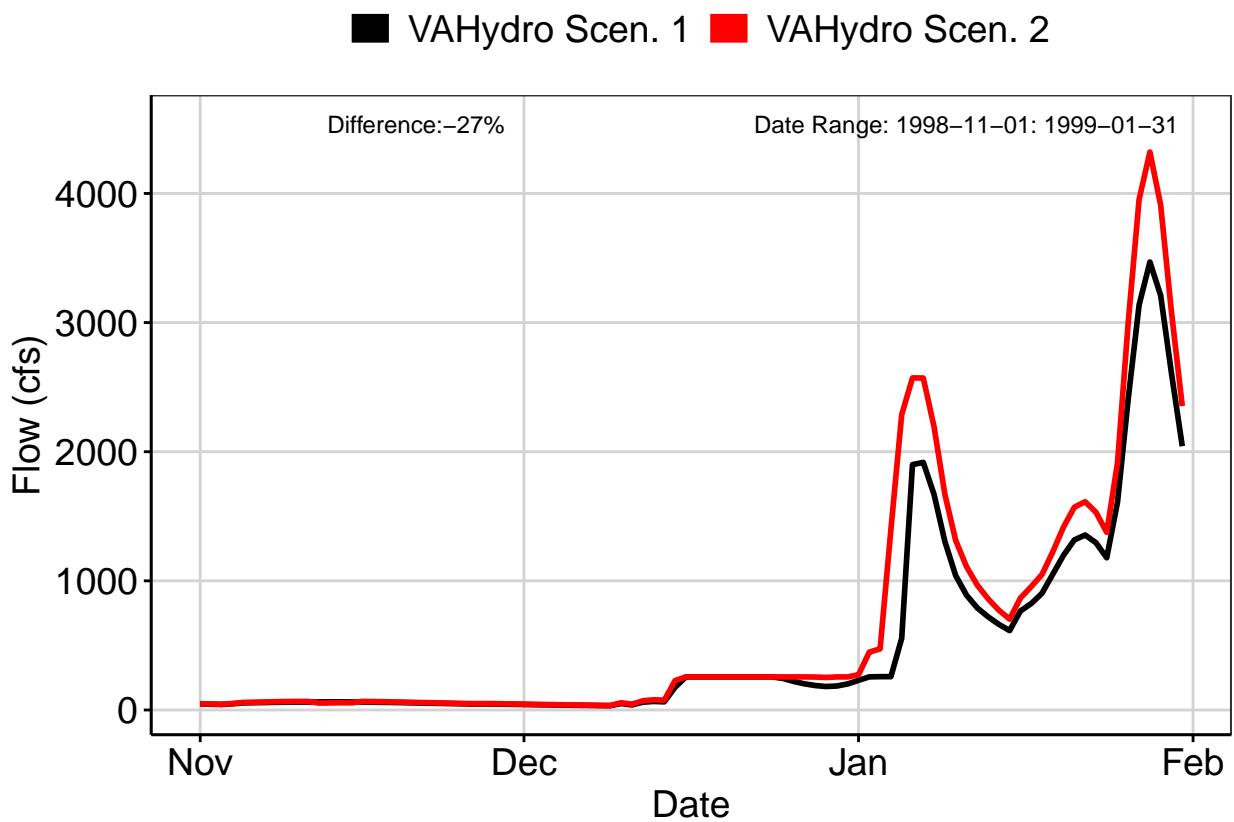


Fig. 7: Second Largest Difference Segment

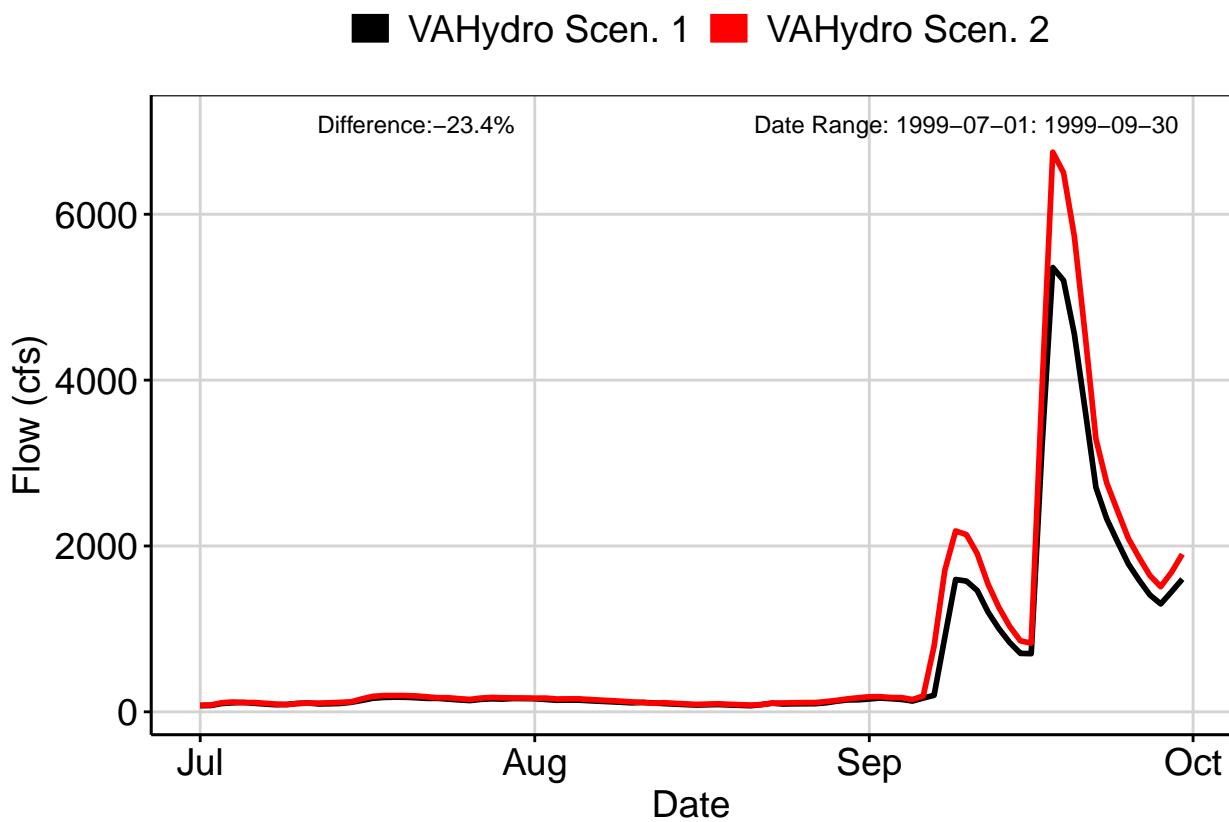


Fig. 8: Third Largest Difference Segment

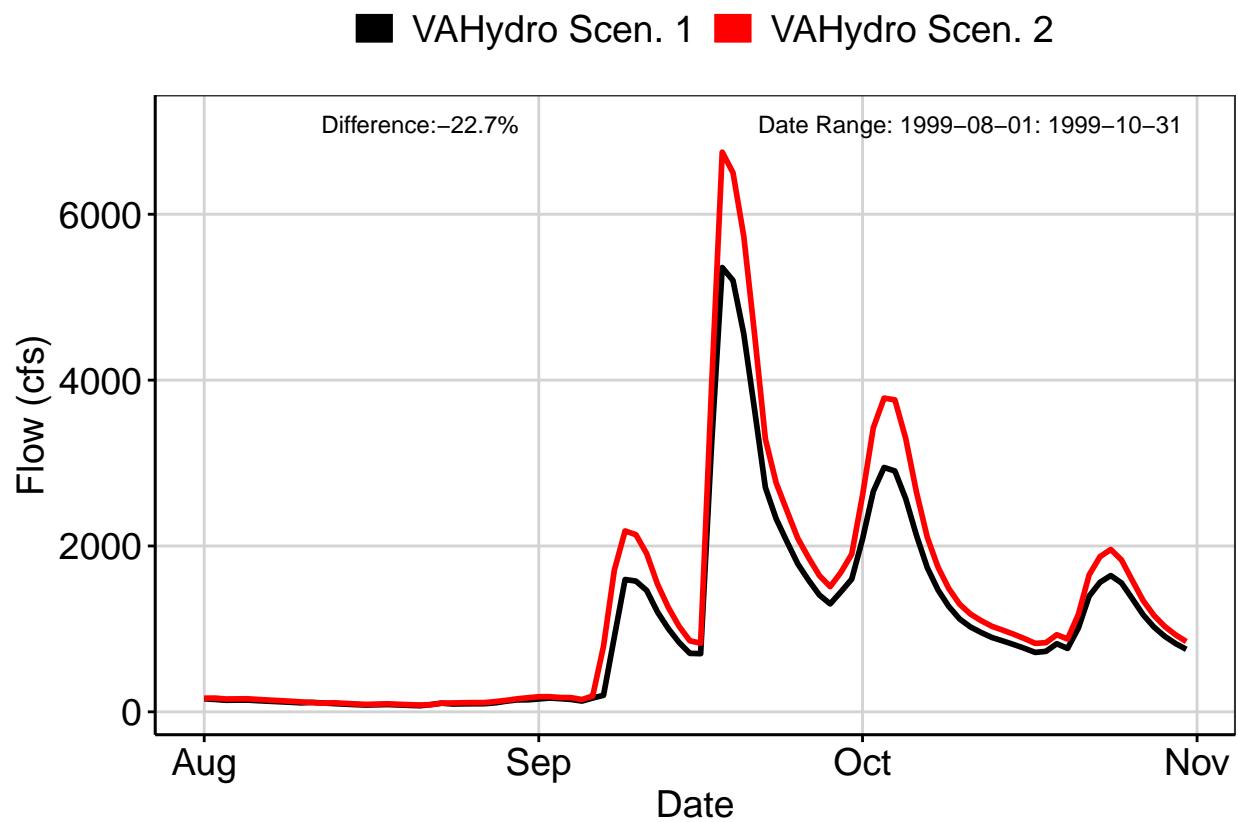


Fig. 9A: Residuals Plot

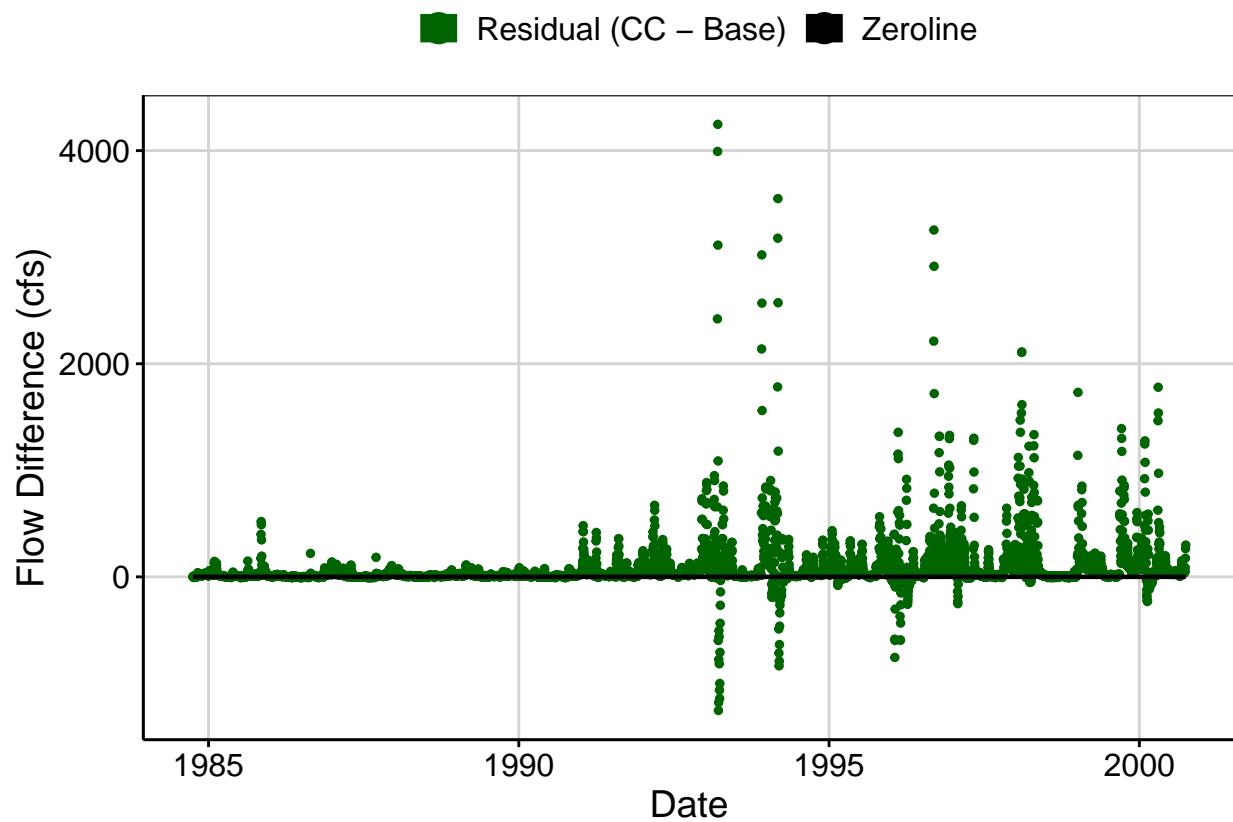


Fig. 9B: Area Weighted Residuals Plot

