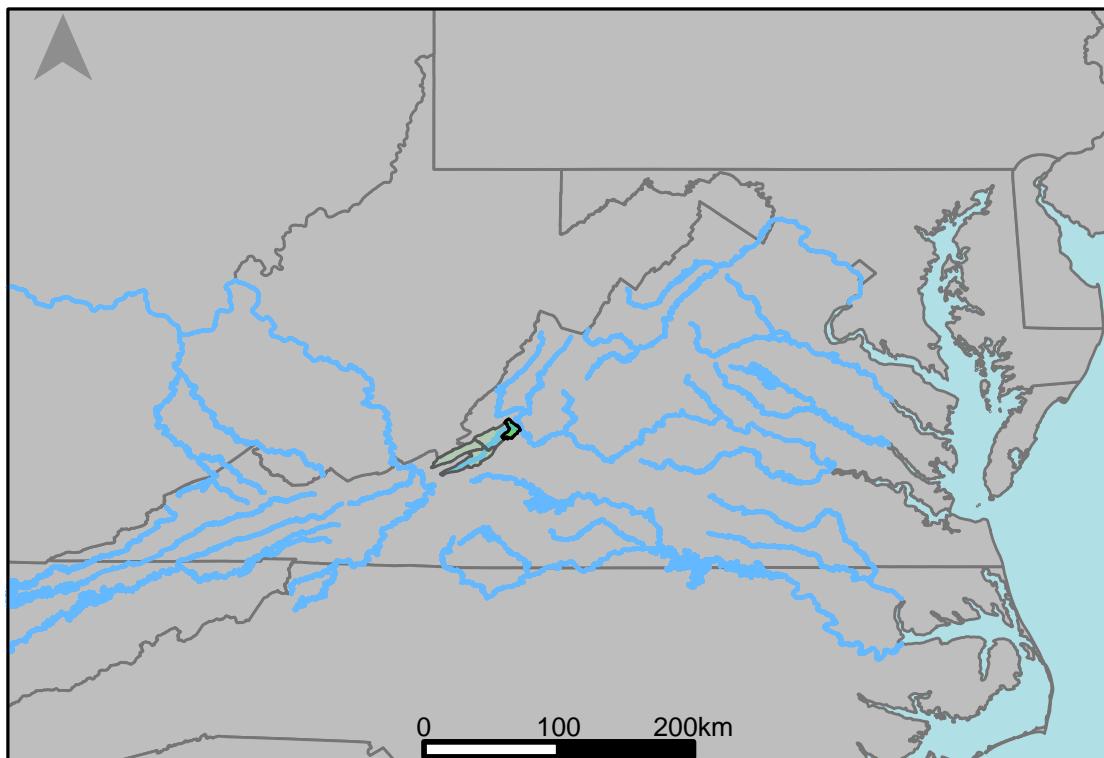


River Segment: JU3_7400_7510 - Scenario :
CFBASE30Y20180615 : VaHydro Run 120 (Phase 6
Base) vs. VAHydro Run 119 (Phase 5 Base)



The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was -3.05011%, with 18.8% 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	83.6	76.9	-8.01
Feb. Low Flow	136	115	-15.44
Mar. Low Flow	267	237	-11.24
Apr. Low Flow	289	279	-3.46
May Low Flow	345	370	7.25
Jun. Low Flow	396	398	0.51
Jul. Low Flow	302	256	-15.23
Aug. Low Flow	225	189	-16
Sep. Low Flow	111	121	9.01
Oct. Low Flow	37.2	30.6	-17.74
Nov. Low Flow	60.9	50	-17.9
Dec. Low Flow	39.4	33	-16.24

Table 2: Monthly Average Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Overall Mean Flow	459	445	-3.05
Jan. Mean Flow	612	598	-2.29
Feb. Mean Flow	676	750	10.95
Mar. Mean Flow	784	753	-3.95
Apr. Mean Flow	694	621	-10.52
May Mean Flow	503	495	-1.59
Jun. Mean Flow	406	379	-6.65
Jul. Mean Flow	194	173	-10.82
Aug. Mean Flow	183	167	-8.74
Sep. Mean Flow	342	316	-7.6
Oct. Mean Flow	261	264	1.15
Nov. Mean Flow	381	397	4.2
Dec. Mean Flow	489	445	-9

Table 3: Monthly High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Jan. High Flow	221	221	0
Feb. High Flow	478	462	-3.35
Mar. High Flow	696	595	-14.51
Apr. High Flow	1270	1090	-14.17
May High Flow	1020	1030	0.98
Jun. High Flow	1670	1430	-14.37
Jul. High Flow	1550	1530	-1.29
Aug. High Flow	894	1010	12.98
Sep. High Flow	412	560	35.92
Oct. High Flow	239	212	-11.3
Nov. High Flow	222	242	9.01
Dec. High Flow	229	290	26.64

Table 4: Period Low Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Min. 1 Day Min	3.19	0.52	-83.86
Med. 1 Day Min	21.1	13.5	-36.02
Min. 3 Day Min	3.29	0.53	-83.77
Med. 3 Day Min	22.4	14	-37.5
Min. 7 Day Min	3.51	0.58	-83.53
Med. 7 Day Min	24.7	17	-31.17
Min. 30 Day Min	5.33	1.08	-79.74
Med. 30 Day Min	43.4	34.4	-20.74
Min. 90 Day Min	44.7	48.8	9.17
Med. 90 Day Min	132	115	-12.88
7Q10	8.19	3.52	-57.02
Year of 90-Day Min. Flow	2002	1999	-0.15
Drought Year Mean	165	266	61.21
Mean Baseflow	267	252	-5.62

Table 5: Period High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Max. 1 Day Max	11800	13000	10.17
Med. 1 Day Max	3580	3960	10.61
Max. 3 Day Max	8300	9070	9.28
Med. 3 Day Max	2970	2950	-0.67
Max. 7 Day Max	3980	4720	18.59
Med. 7 Day Max	2230	2030	-8.97
Max. 30 Day Max	2350	2330	-0.85
Med. 30 Day Max	1170	1140	-2.56
Max. 90 Day Max	1580	1560	-1.27
Med. 90 Day Max	751	730	-2.8

Table 6: Non-Exceedance Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
1% Non-Exceedance	11.5	7.48	-34.96
5% Non-Exceedance	30.9	27	-12.62
50% Non-Exceedance	308	291	-5.52
95% Non-Exceedance	1400	1360	-2.86
99% Non-Exceedance	2870	2860	-0.35
Sept. 10% Non-Exceedance	20.7	17.6	-14.98

Fig. 1: Hydrograph

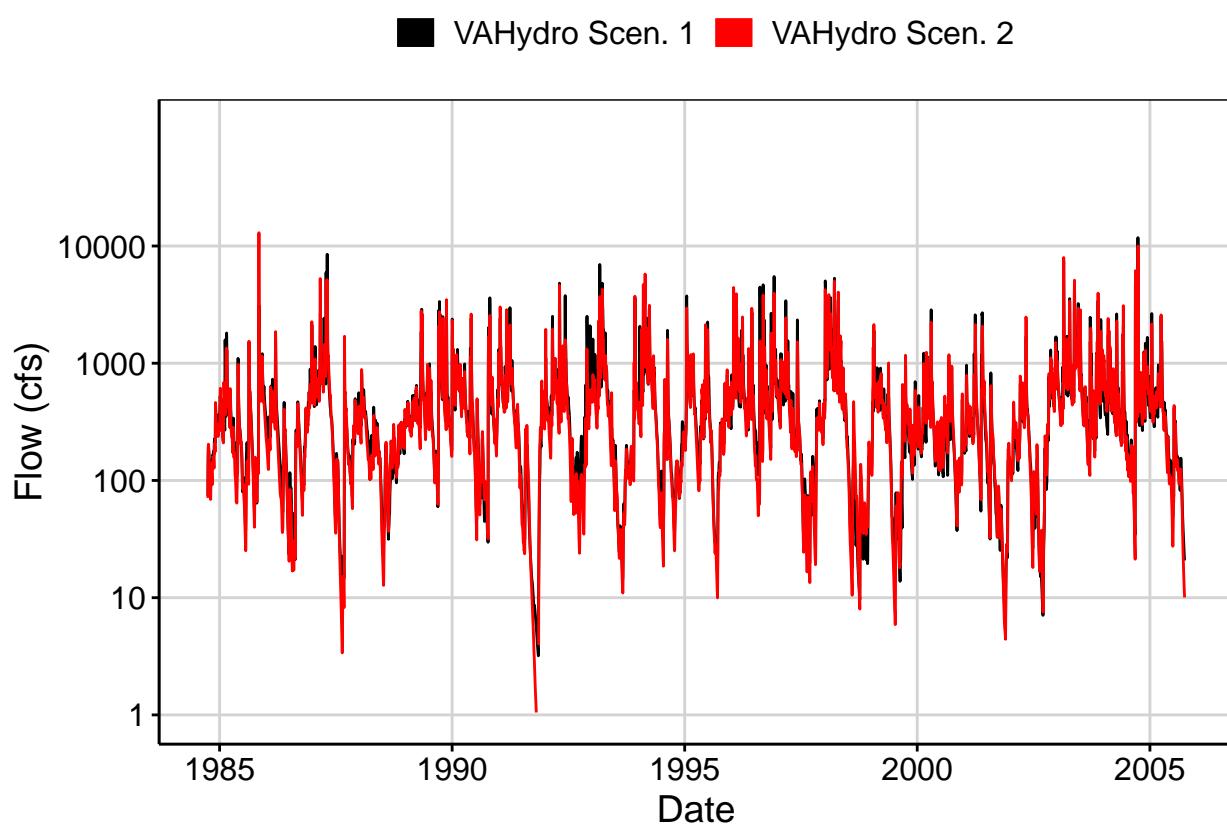


Fig. 2: Zoomed Hydrograph

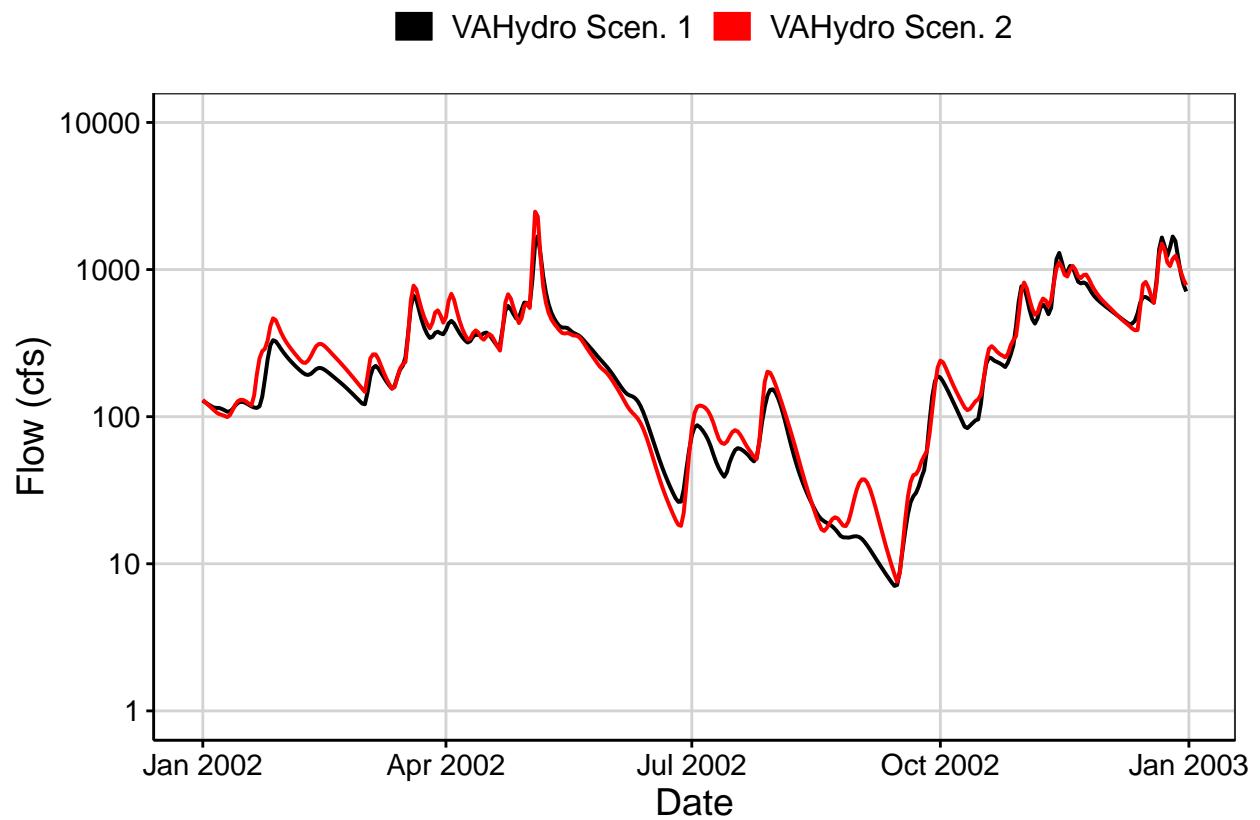


Fig. 3: Flow Exceedance

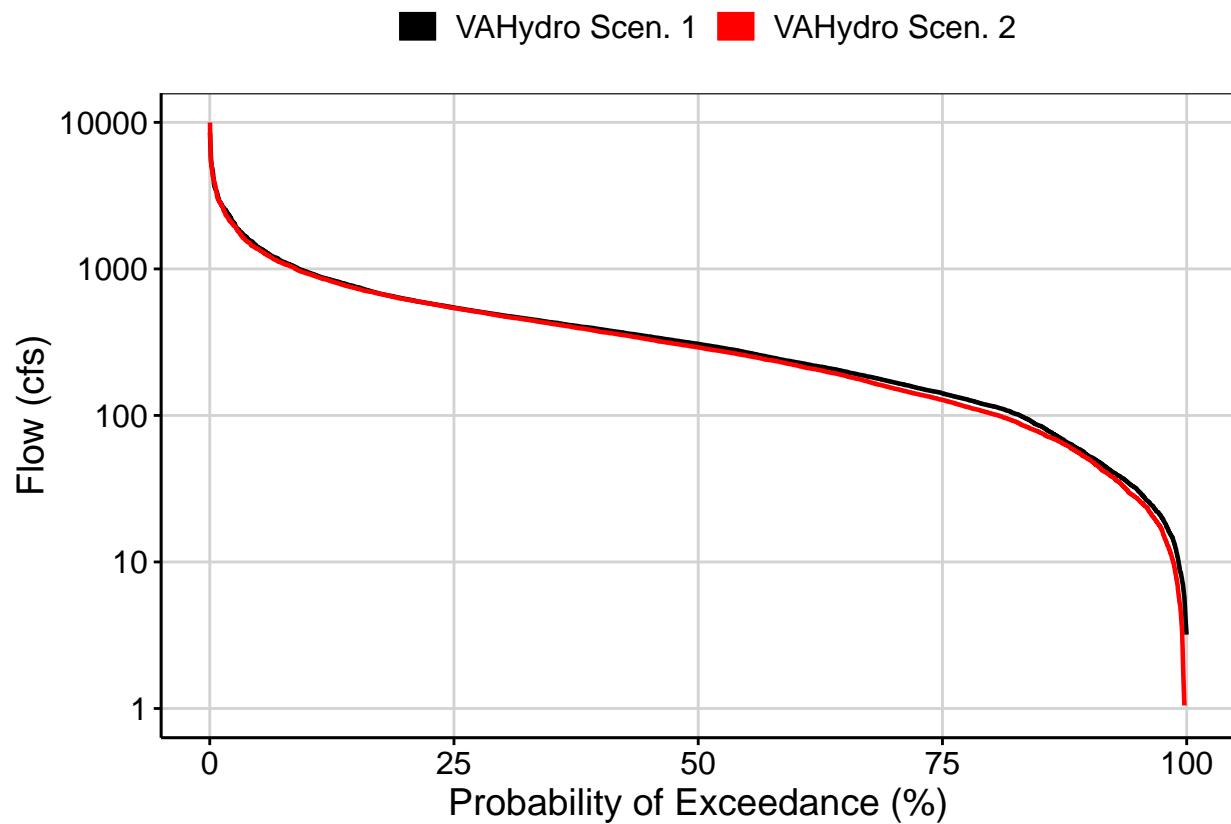


Fig. 4: Baseflow

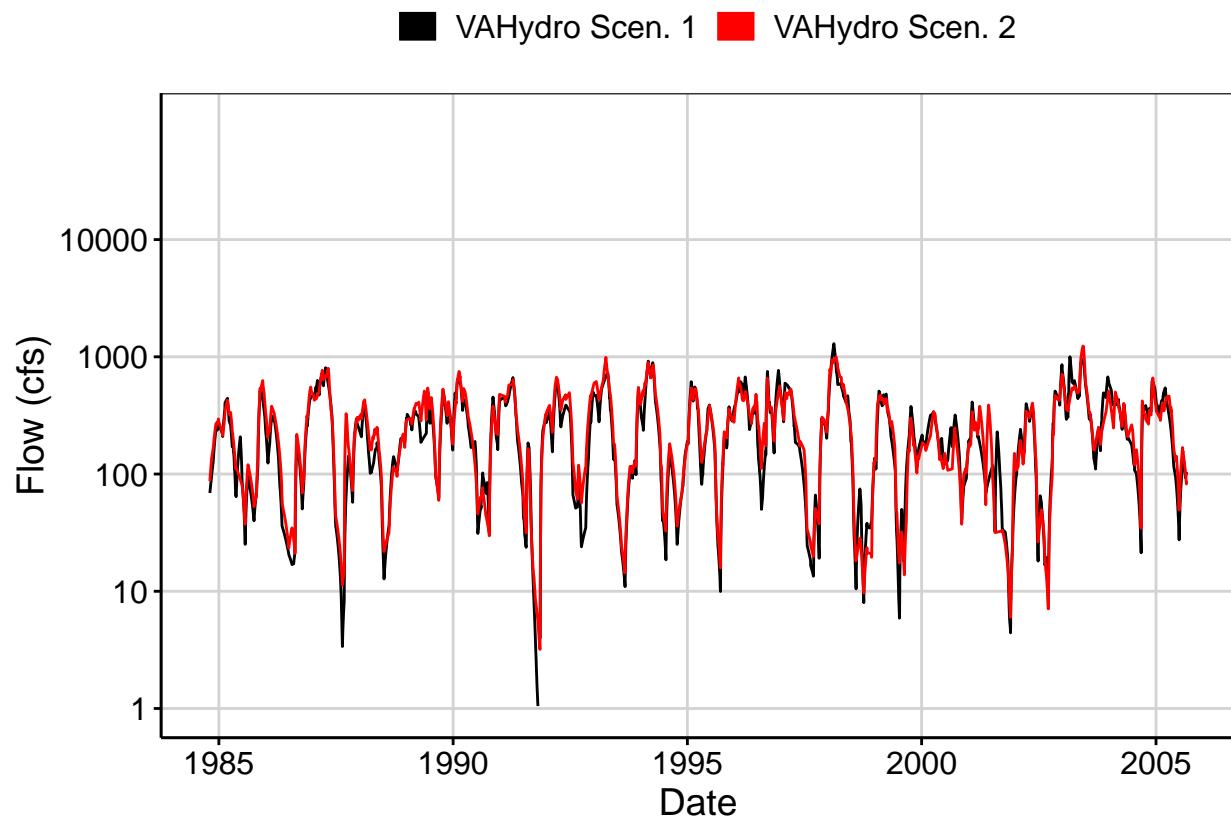


Fig. 5: Combined Baseflow

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

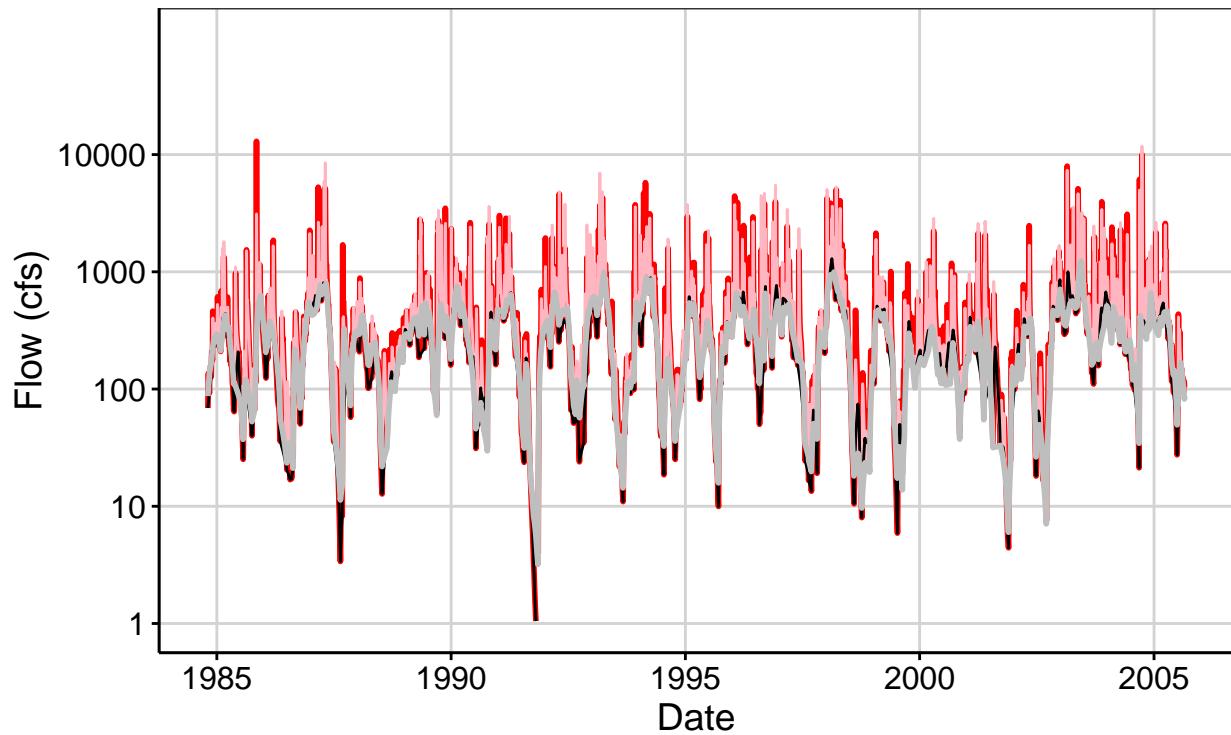


Fig. 6: Largest Difference Segment

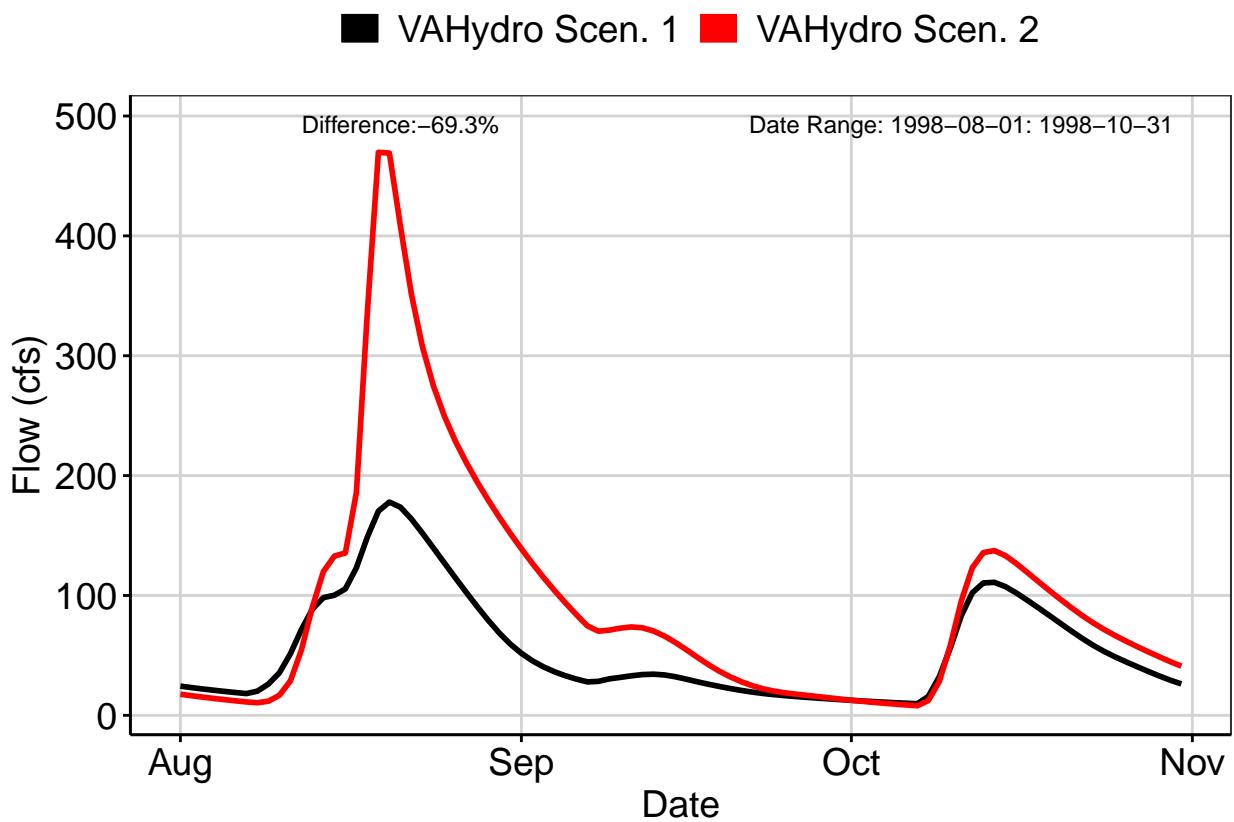


Fig. 7: Second Largest Difference Segment

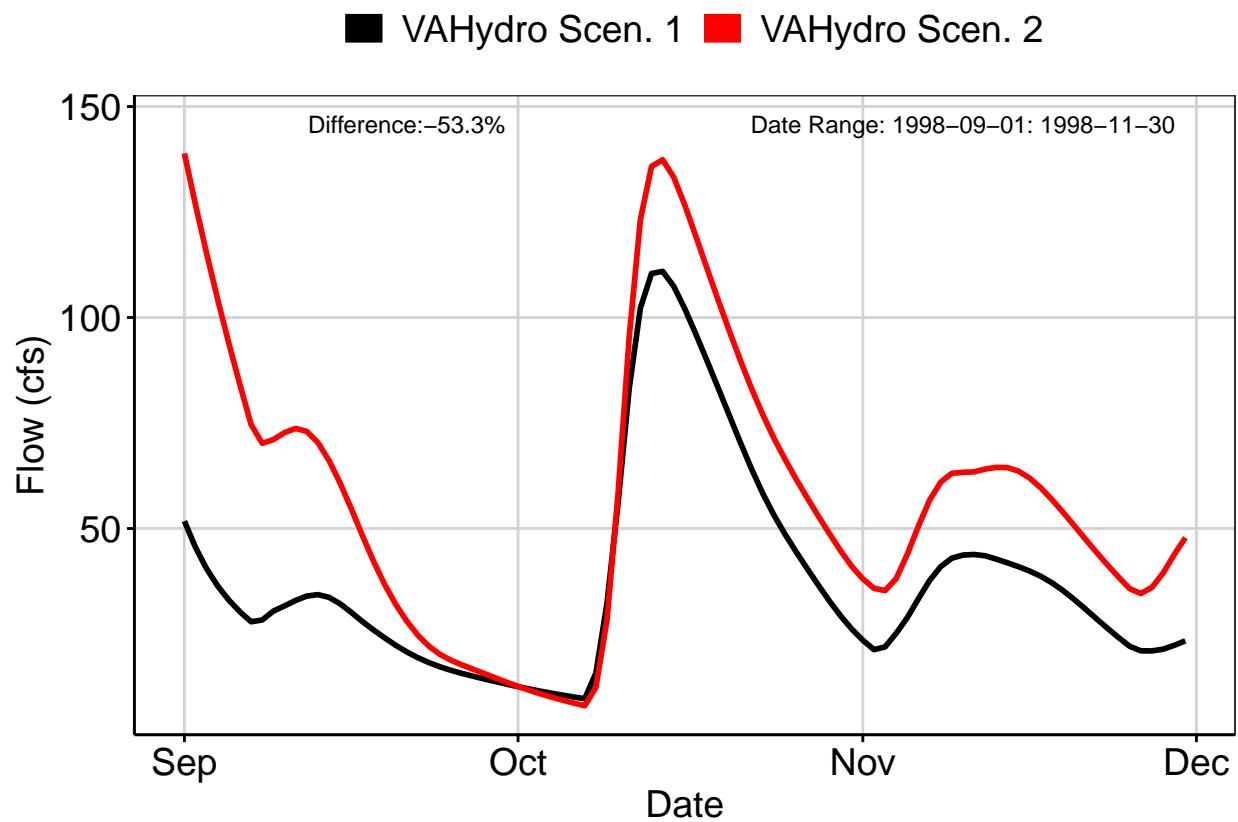


Fig. 8: Third Largest Difference Segment

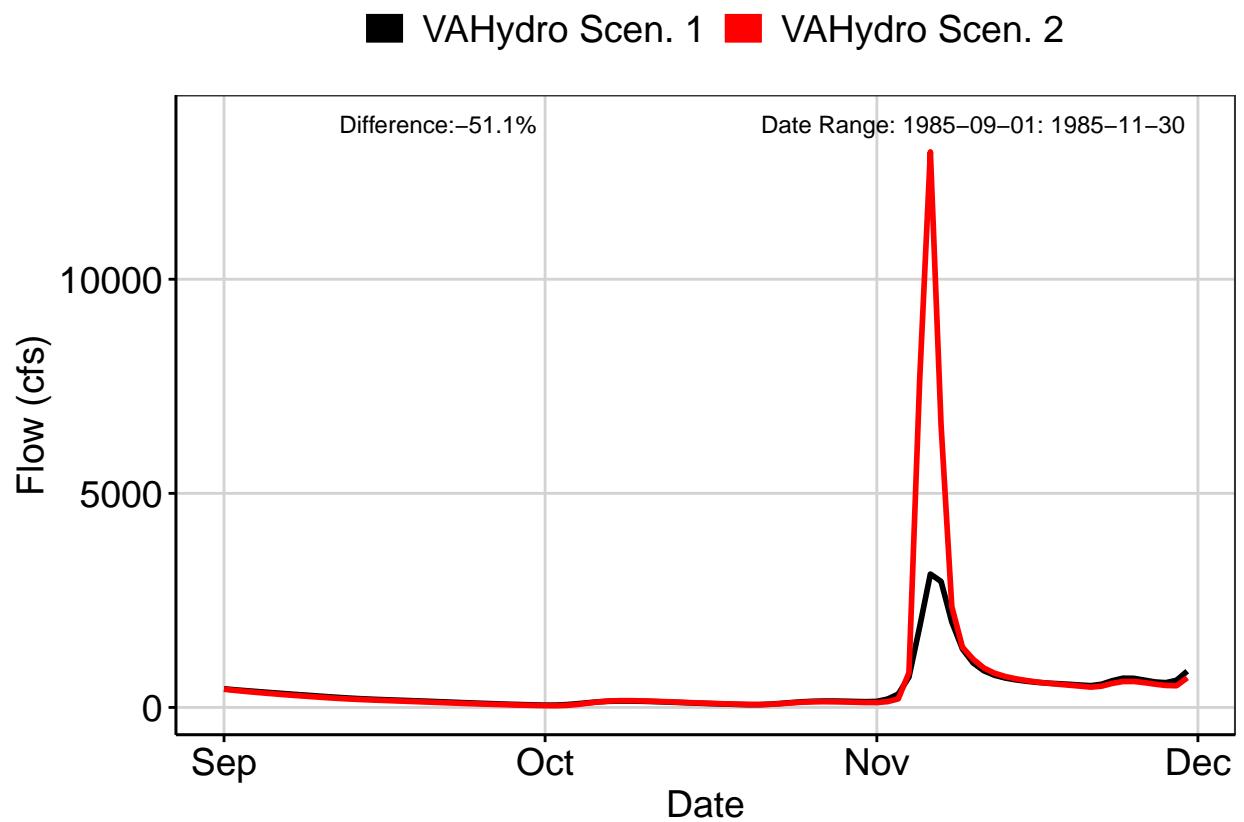


Fig. 9A: Residuals Plot

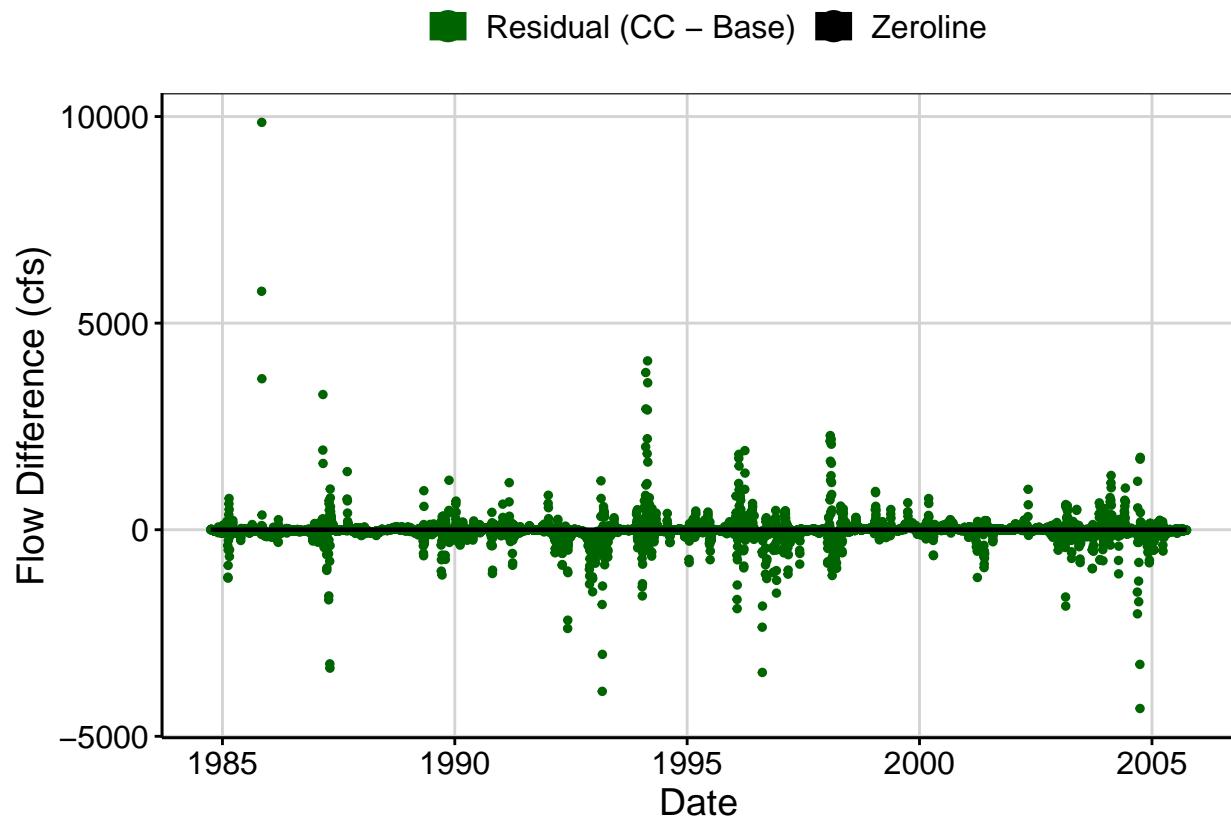


Fig. 9B: Area Weighted Residuals Plot

