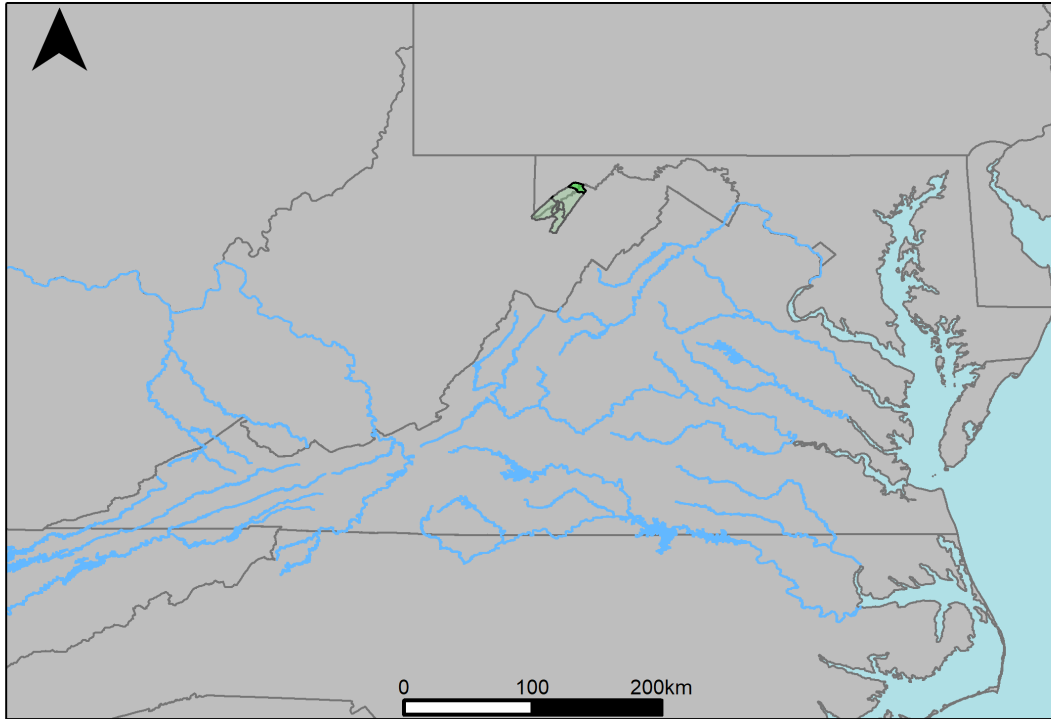


River Segment: PU3_4450_4440 - VaHydro Run 120
(Base) vs. VAHydro Run 121 (CC)



The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was 3.24544%, with 2.22% 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	122	122	0
Feb. Low Flow	302	302	0
Mar. Low Flow	311	312	0.32
Apr. Low Flow	319	339	6.27
May Low Flow	338	364	7.69
Jun. Low Flow	405	441	8.89
Jul. Low Flow	347	345	-0.58
Aug. Low Flow	268	268	0
Sep. Low Flow	164	164	0
Oct. Low Flow	150	150	0
Nov. Low Flow	115	115	0
Dec. Low Flow	143	143	0

Table 2: Monthly Average Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Overall Mean Flow	493	509	3.25
Jan. Mean Flow	576	611	6.08
Feb. Mean Flow	633	704	11.22
Mar. Mean Flow	850	872	2.59
Apr. Mean Flow	704	688	-2.27
May Mean Flow	553	568	2.71
Jun. Mean Flow	402	409	1.74
Jul. Mean Flow	358	358	0
Aug. Mean Flow	306	308	0.65
Sep. Mean Flow	298	300	0.67
Oct. Mean Flow	276	274	-0.72
Nov. Mean Flow	448	460	2.68
Dec. Mean Flow	522	567	8.62

Table 3: Monthly High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Jan. High Flow	304	304	0
Feb. High Flow	523	542	3.63
Mar. High Flow	748	914	22.19
Apr. High Flow	1040	1030	-0.96
May High Flow	948	1010	6.54
Jun. High Flow	1410	1470	4.26
Jul. High Flow	978	1060	8.38
Aug. High Flow	925	951	2.81
Sep. High Flow	685	679	-0.88
Oct. High Flow	531	526	-0.94
Nov. High Flow	408	408	0
Dec. High Flow	307	307	0

Table 4: Period Low Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Min. 1 Day Min	1.15	1.15	0
Med. 1 Day Min	35.3	35	-0.85
Min. 3 Day Min	1.3	1.3	0
Med. 3 Day Min	40.6	41.1	1.23
Min. 7 Day Min	1.76	1.76	0
Med. 7 Day Min	50.3	48.9	-2.78
Min. 30 Day Min	16.8	16.2	-3.57
Med. 30 Day Min	126	126	0
Min. 90 Day Min	83.5	83.7	0.24
Med. 90 Day Min	245	253	3.27
7Q10	10.2	9.53	-6.57
Year of 90-Day Min. Flow	1991	1991	0
Drought Year Mean	466	480	3
Mean Baseflow	336	348	3.57

Table 5: Period High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Max. 1 Day Max	8830	8840	0.11
Med. 1 Day Max	1740	1820	4.6
Max. 3 Day Max	8240	8260	0.24
Med. 3 Day Max	1660	1740	4.82
Max. 7 Day Max	5860	5870	0.17
Med. 7 Day Max	1430	1480	3.5
Max. 30 Day Max	2380	2390	0.42
Med. 30 Day Max	999	1000	0.1
Max. 90 Day Max	1430	1420	-0.7
Med. 90 Day Max	725	748	3.17

Table 6: Non-Exceedance Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
1% Non-Exceedance	33.2	33.3	0.3
5% Non-Exceedance	99.5	99.3	-0.2
50% Non-Exceedance	353	368	4.25
95% Non-Exceedance	1260	1330	5.56
99% Non-Exceedance	1940	2000	3.09
Sept. 10% Non-Exceedance	55	54.9	-0.18

Fig. 1: Hydrograph

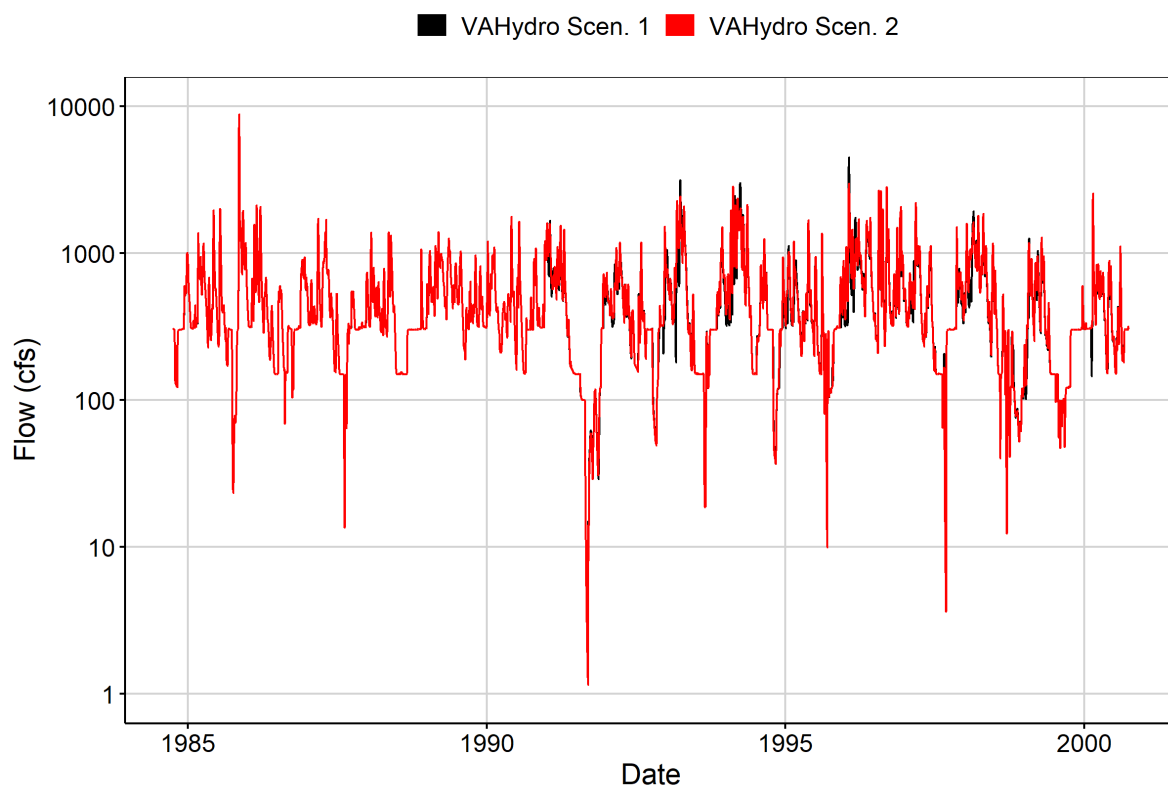


Fig. 2: Zoomed Hydrograph

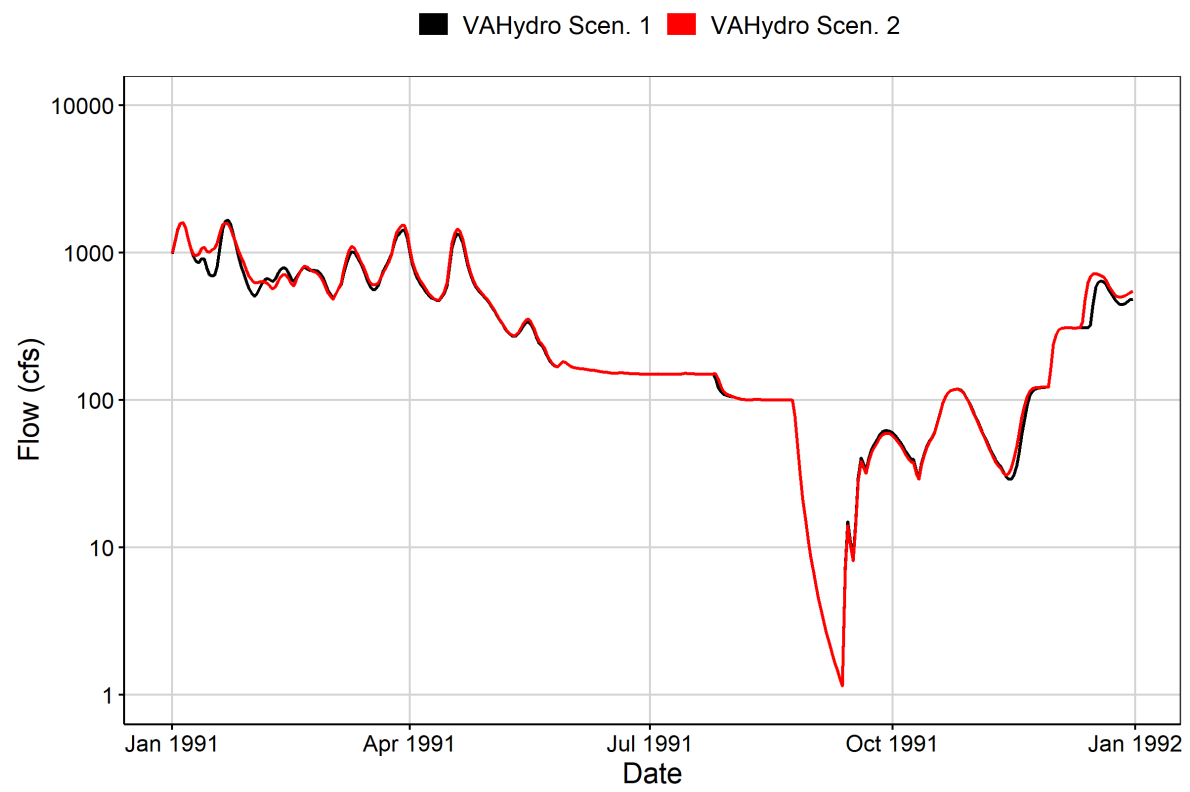


Fig. 3: Flow Exceedance

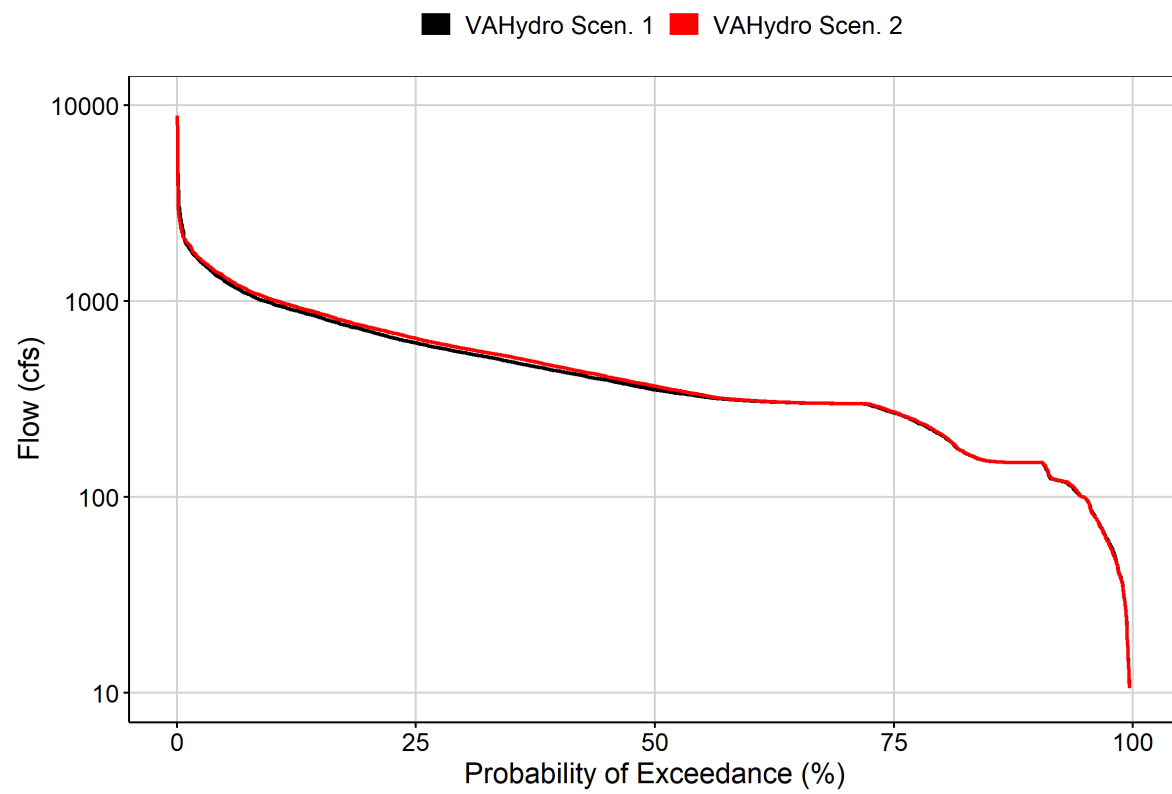


Fig. 4: Baseflow

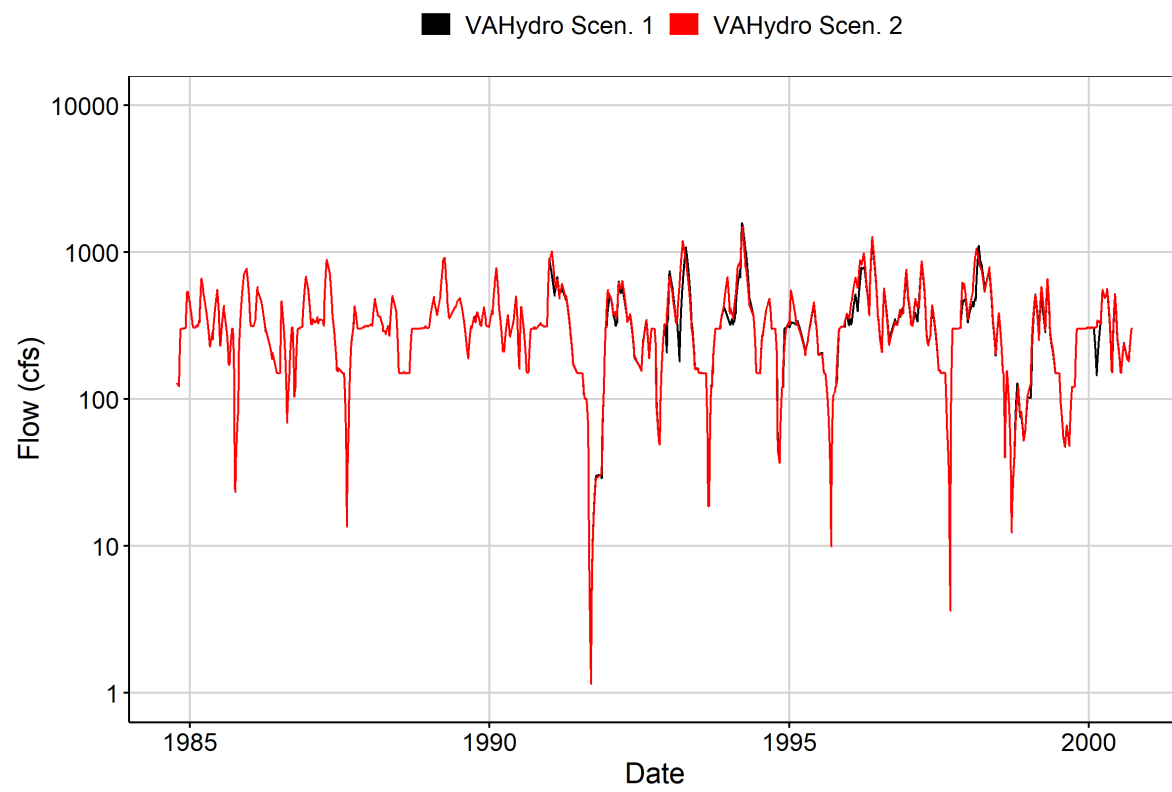


Fig. 5: Combined Baseflow

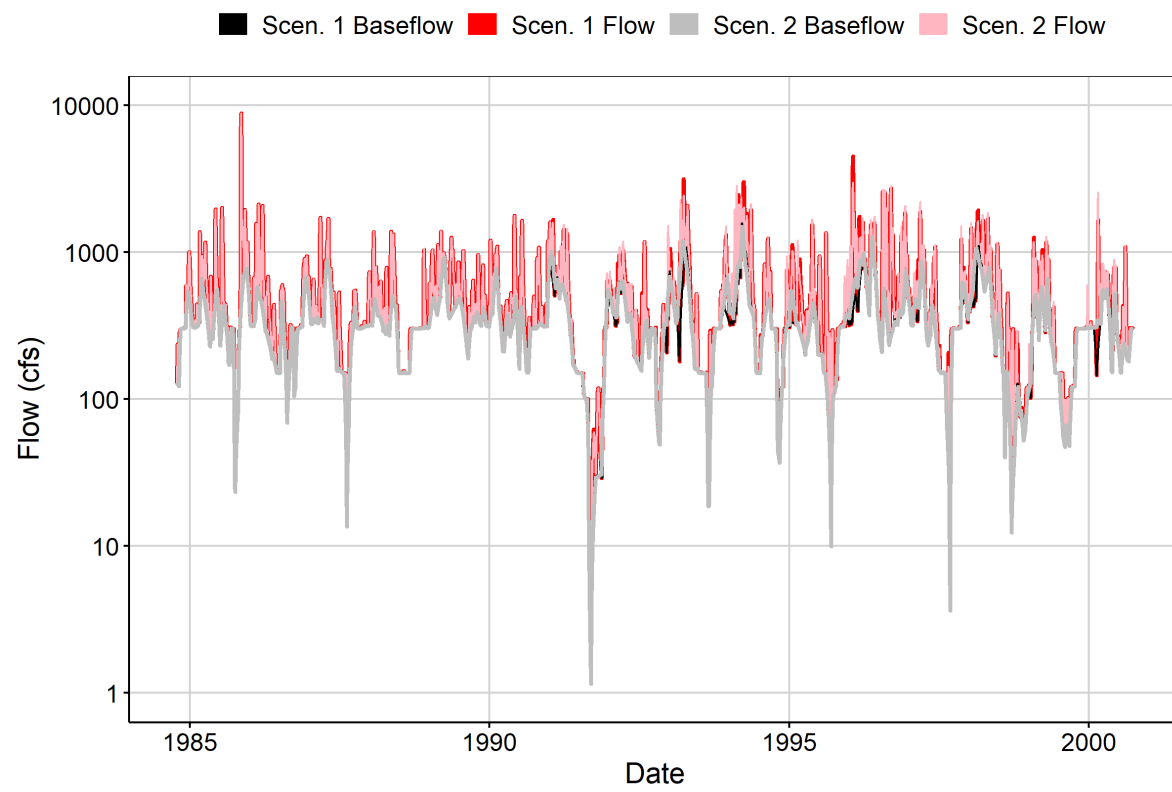


Fig. 6: Largest Difference Segment

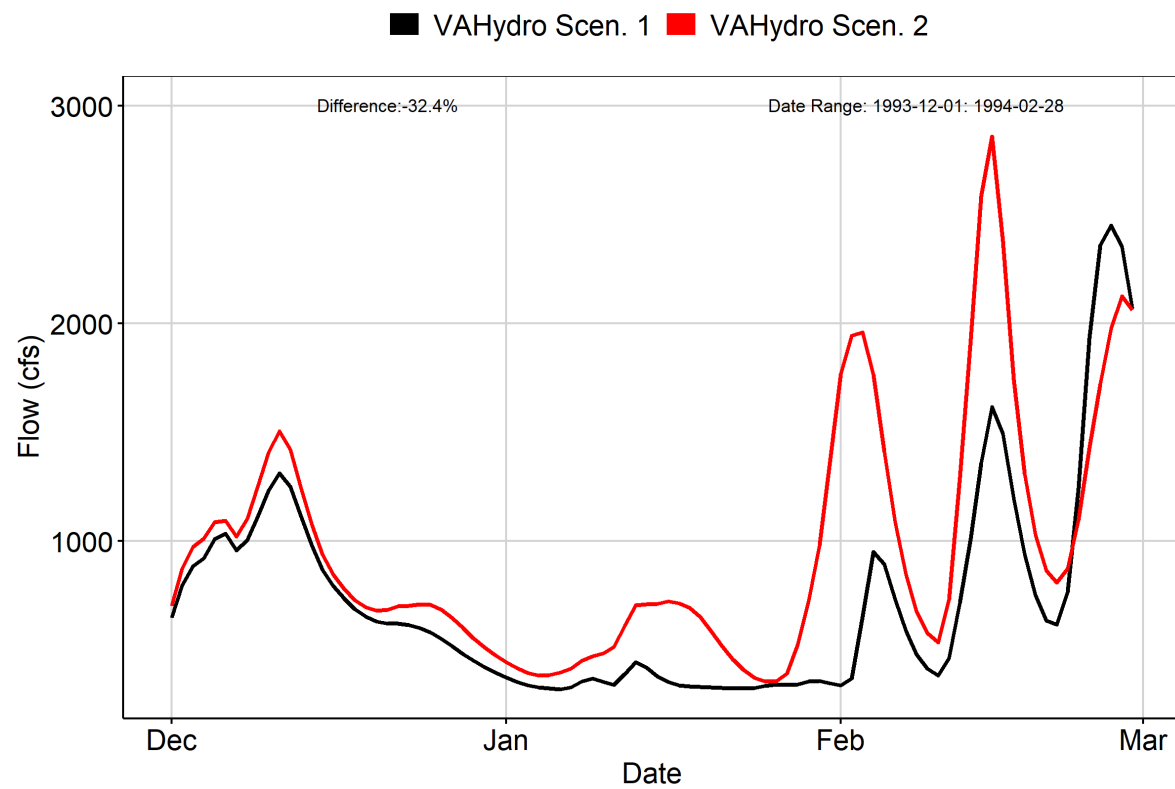


Fig. 7: Second Largest Difference Segment

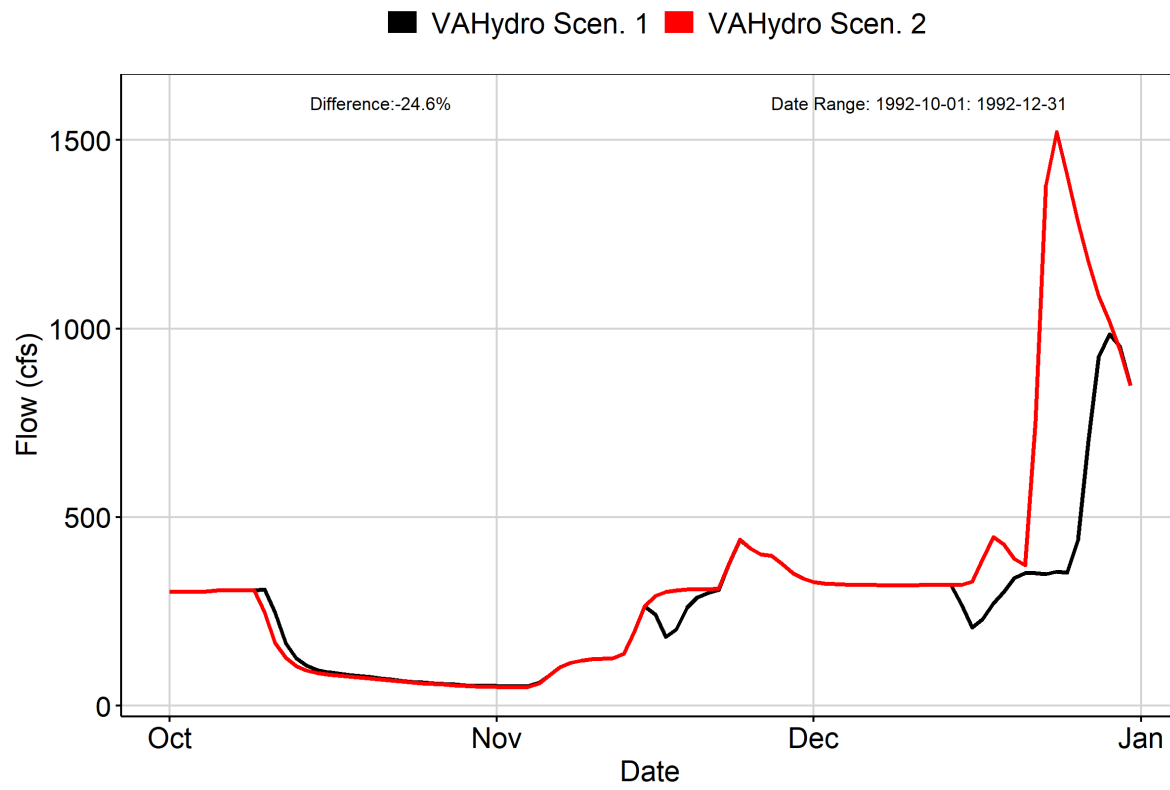


Fig. 8: Third Largest Difference Segment

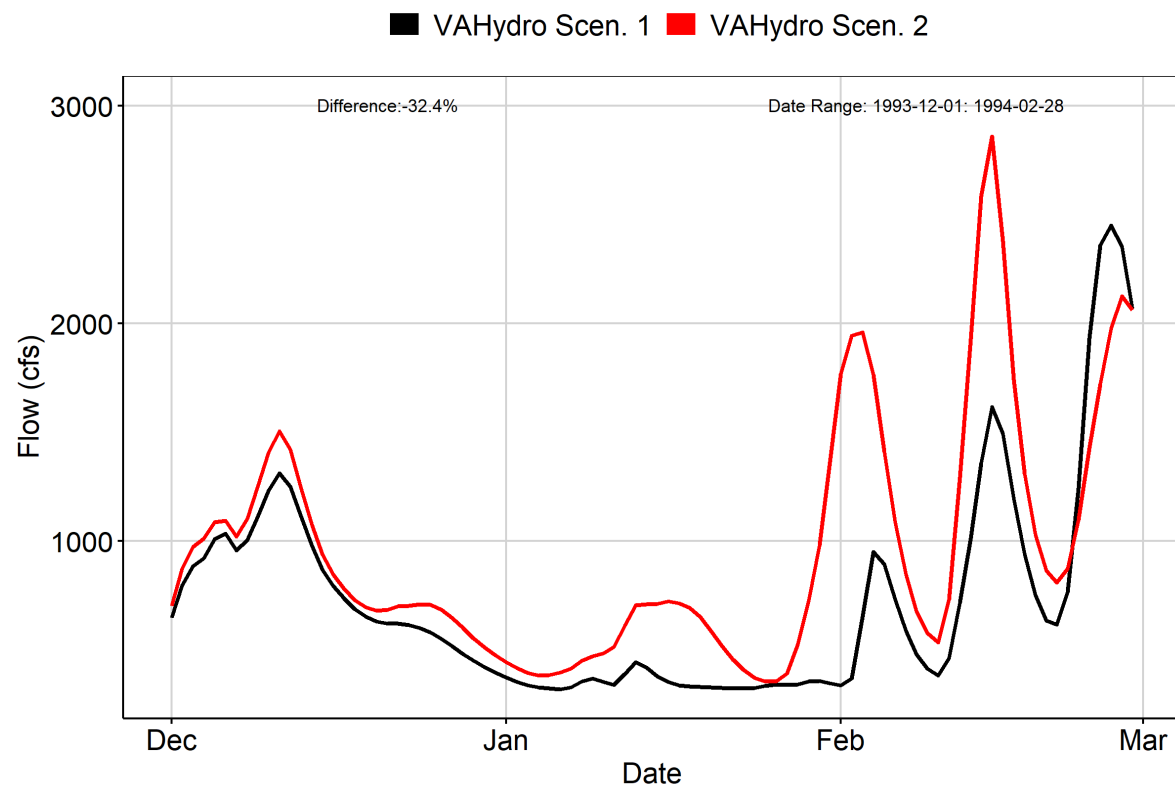


Fig. 9A: Residuals Plot

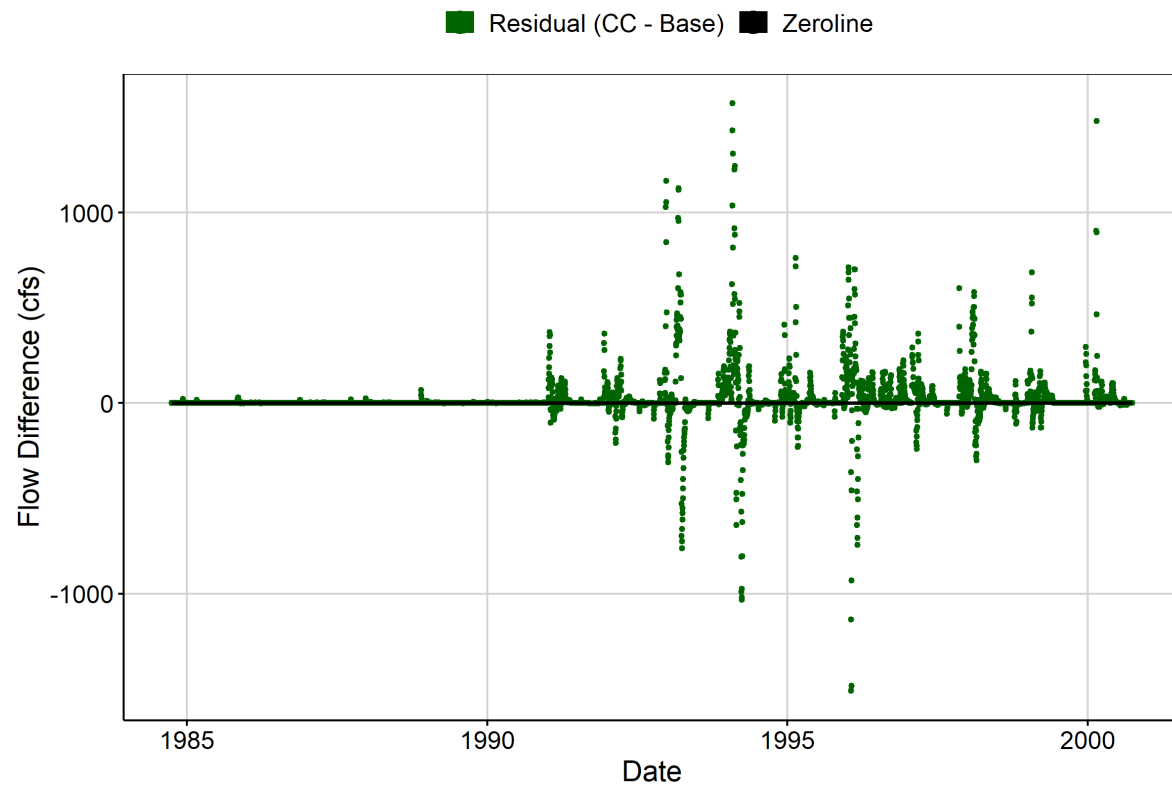


Fig. 9B: Area Weighted Residuals Plot

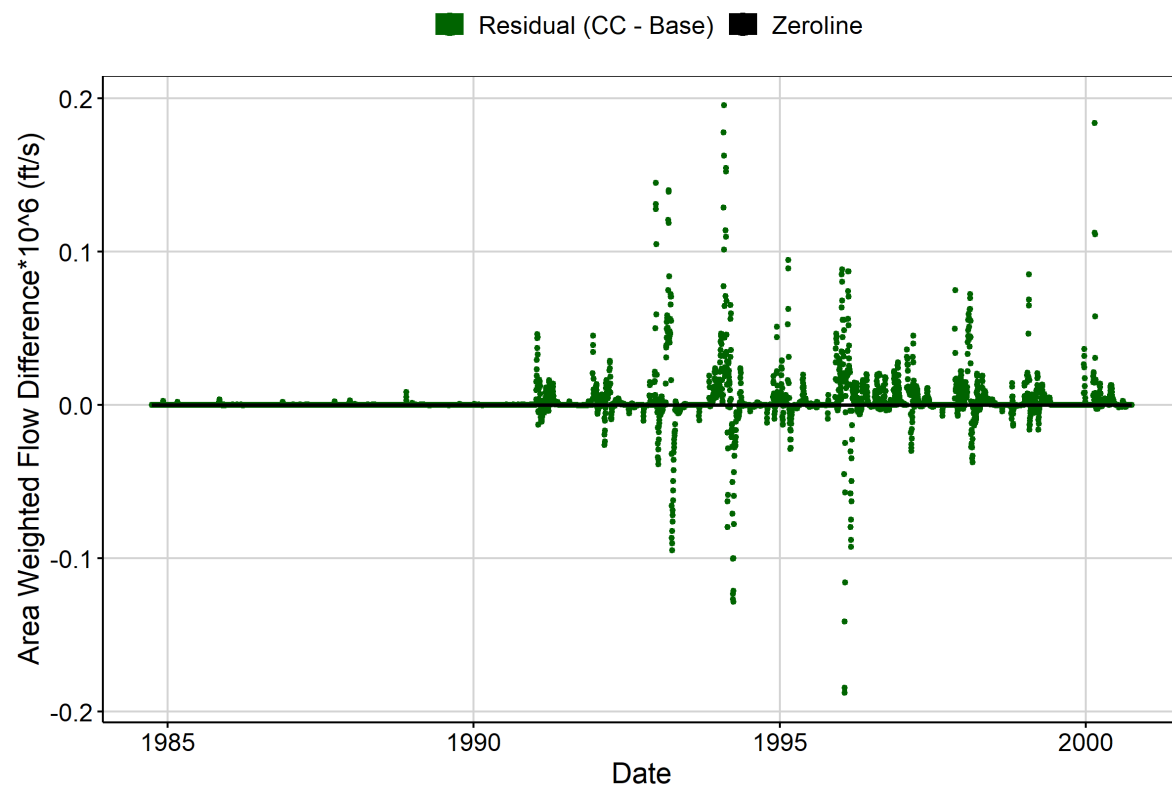


Fig. 10: VA Hydro Scen. 1 Runit Values (Outliers Excluded)

